

# Appendices

Appendix 1. Long-Term Vision Netgraph

Appendix 2. Capital Projects

Appendix 2.1. Capital Projects – Near, Mid, and Long- term Capital Projects

Appendix 2.2. Capital Projects – Grade Separation Projects

Appendix 2.3. Capital Projects – Fleet Projects

Appendix 2.4. Capital Projects – Section 130 Projects

Appendix 3. Rail Network Inventory

Appendix 3.1. Description and Inventory

Appendix 3.2. California Intercity & Long-Distance Passenger Rail Station Inventory

Appendix 4. Passenger Planning Strategy

Station Design

Service-Led Planning: Methodology and Process

Land Use and Housing

Outreach and Coordination Summary

Appendix 5. Rail Funding

Appendix 5.1. Key Rail Funding

Appendix 5.2. Additional Funding Sources

Appendix 6. Safety

Appendix 7. Passenger Operations and Finance

Appendix 7.1. Amtrak Salaries and Expenditures

Appendix 7.2. Farebox Recovery Ratios

Appendix 7.3. On Time Performance

Appendix 7.4. Historic Ridership by Station

Appendix 7.5. Passenger Miles Traveled

Appendix 7.6. Intercity Ridership

Appendix 7.7. Regional Ridership

Appendix 8. Freight Data

Appendix 9. Statewide Market Viability Assessment

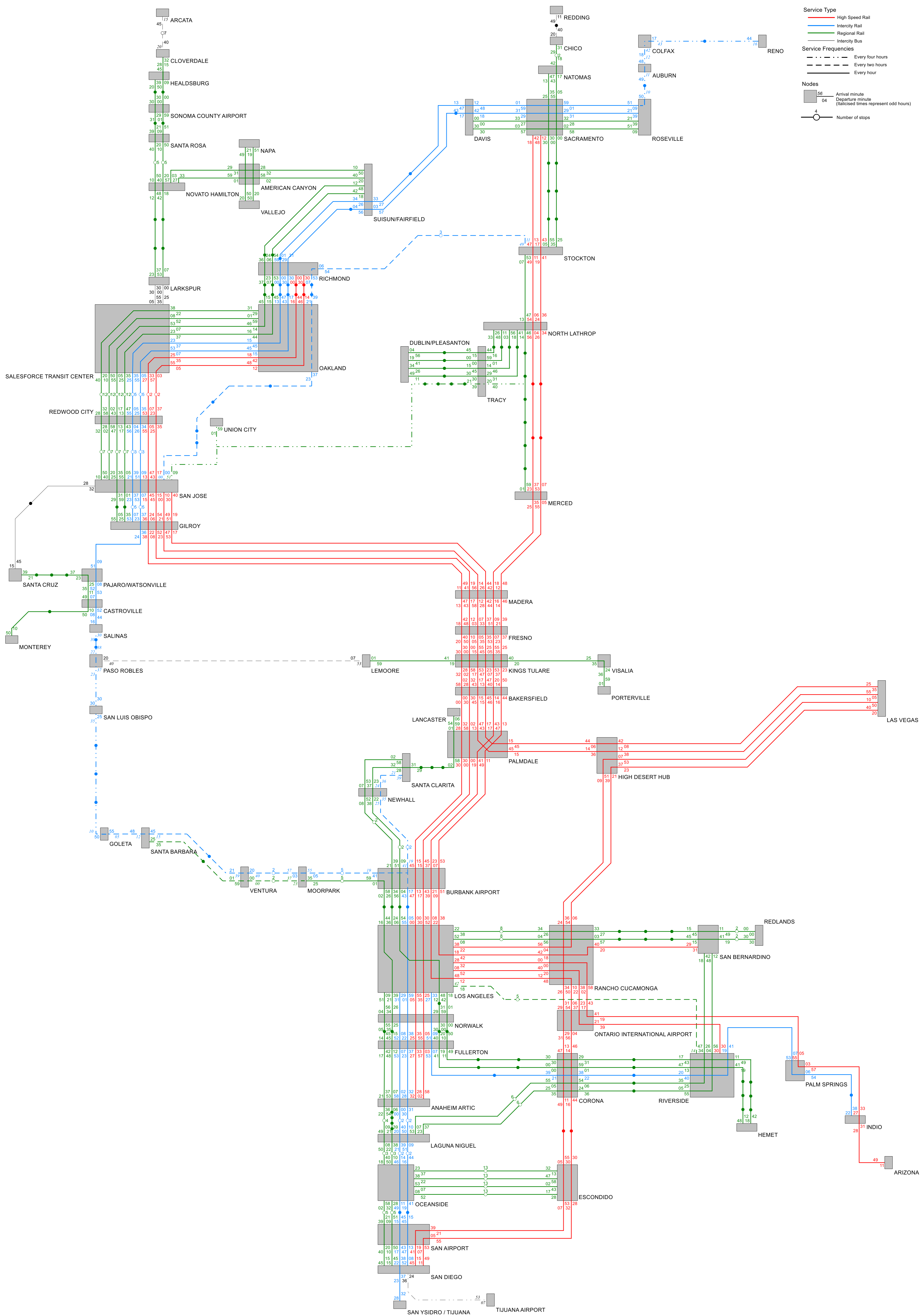
Appendix 10. Governance

Appendix 10.1. State Policy Guidance

Appendix 10.2. STRACNET

Appendix 11. FRA Final State Rail Plan Guidance

# Appendix 1. Long-Term Vision Netgraph



**Service Type**

- High Speed Rail
- Intercity Rail
- Regional Rail
- Intercity Bus

**Service Frequencies**

- Every four hours
- Every two hours
- Every hour

**Nodes**

- 56 Arrival minute
- 04 Departure minute (italicised times represent odd hours)
- 4 Number of stops

ARCATA  
CLOVERDALE  
HEALDSBURG  
SONOMA COUNTY AIRPORT  
SANTA ROSA  
NOVATO HAMILTON  
VALLEJO  
LARKSPUR

REDDING  
CHICO  
NATOMAS  
DAVIS  
SACRAMENTO  
ROSEVILLE  
STOCKTON

SALESFORCE TRANSIT CENTER  
REDWOOD CITY  
SAN JOSE  
GILROY

DUBLIN/PLEASANTON  
TRACY  
NORTH LATHROP  
MERCED

SANTA CRUZ  
CASTROVILLE  
SALINAS  
MONTEREY

MADERA  
FRESNO  
KINGS TULARE  
BAKERSFIELD

PASO ROBLES  
SAN LUIS OBISPO  
GOLETA  
SANTA BARBARA

LEMOORE  
LANCASTER  
SANTA CLARITA  
NEWHALL

BURBANK AIRPORT  
PALMDALE  
SANTA BERNARDINO  
RANCHO CUCAMONGA  
LOS ANGELES

NORWALK  
FULLERTON  
ANAHEIM ARTIC  
LAGUNA NIGUEL  
CORONA  
RIVERSIDE  
ONTARIO INTERNATIONAL AIRPORT

OCEANSIDE  
SAN AIRPORT  
SAN DIEGO  
ESCONDIDO  
HEMET  
PALM SPRINGS  
INDIO  
ARIZONA

SAN YSIDRO / TIJUANA  
TIJUANA AIRPORT

LAS VEGAS

REDLANDS

SAN BERNARDINO

RANCHO CUCAMONGA

LOS ANGELES

NORWALK

FULLERTON

ANAHEIM ARTIC

LAGUNA NIGUEL

CORONA

RIVERSIDE

ONTARIO INTERNATIONAL AIRPORT

OCEANSIDE

SAN AIRPORT

SAN DIEGO

ESCONDIDO

HEMET

PALM SPRINGS

INDIO

ARIZONA

# Appendix 2. Capital Projects

## **APPENDIX 2.1. CAPITAL PROJECTS – GENERAL CAPITAL PROJECTS**

**Near-Term**

**Mid-Term**

**Long-Term**

## **APPENDIX 2.2. CAPITAL PROJECTS – Grade Separation Projects**

## **APPENDIX 2.3. CAPITAL PROJECTS – Fleet Projects**

## **APPENDIX 2.4. CAPITAL PROJECTS – Section 130 Projects**

**Capital Program Cost Summary by Planning Horizon / Project Type**

<b>Horizon/Project Type</b>	<b>Cost</b>
Near Term	\$ 18,900,000,000
Mid Term	\$ 48,500,000,000
Long Term	\$ 235,900,000,000
Grade Separations	\$ 3,200,000,000
Fleet	\$ 1,200,000,000

Time Horizon	Project Name	Description	Lead Agency	Cost
Near Term	Brightline West - High Desert Hub to Rancho Cucamonga	Construction of a high-speed rail guideway in the median of Interstate 15 from the High Desert Hub in the Victor Valley to Rancho Cucamonga. (In coordination with Caltrans District 8)	Brightline West	\$ 12,000,000,000
Near Term	SWIFT Long Beach Harbor Improvements -- Rail components only	Construction of SWIFT Long Beach Harbor Improvement rail components, which include the Pier B On-Dock Rail Support Facility	Port of Long Beach	\$ 1,574,000,000
Near Term	Port of Stockton Rail Infrastructure Improvements for Sustainable Exports Project (RIISE)	The RIISE project supports building new infrastructure to enhance rail capacity, accommodate increased freight tonnage and train frequencies, mitigate potential service disruptions, and reduce long-term repair and maintenance costs. PFIP will fund elements of this project including a replacement of the San Joaquin River rail bridge; expansion of the Port's long lead track to two tracks; and procurement of a zero-emission electric railcar mover.	Port of Stockton	\$ 371,223,580
Near Term	Coastal Rail Infrastructure Resiliency	Infrastructure improvements near San Clemente to stabilize track bed. These improvements include sand nourishment, rock reinforcement, overtop protection.	OCTA	\$ 313,243,000
Near Term	Valley Rail Initial Service (Ceres / Midtown to SJC)	Construction of various Infrastructure projects (track upgrades, stations, support facilities) for initial Valley Rail service from Ceres / Midtown to San Jose. Account for initial frequency to Ceres and service expansion from Stockton to Sacramento.	SJRRRC	\$ 311,394,000
Near Term	Antelope Valley Projects	Construction of multiple track and terminal projects in the Antelope Valley. These projects include the construction of a double track near Balboa, construction of a double track near Canyon, and construction of improvements to the Lancaster Terminal.	SCRRA	\$ 302,900,000
Near Term	Stockton Diamond	Construction of a rail to rail grade separation between UPRR and BNSF in Stockton California. This project will result in a major increase in network fluidity in the San Joaquin Valley, the elimination of freight interference between both Class I railroads, and an overall reduction of freight interference with vehicles and pedestrians in the corridor. Installation of crossovers south of the UPRR Stockton yard to increase network fluidity during and after the construction of the Stockton Wye. Restores and improves the connection between the UPRR Fresno and Oakland Subdivisions to the Port of Stockton.	Multiple Agencies	\$ 301,553,000
Near Term	Brighton to Roxford	Construction of a double track from Brighton to Roxford on the Antelope Valley Line, which will include new and upgraded traffic and pedestrian crossings, improving safety and regional rail service.	LA Metro	\$ 300,000,000
Near-Term	SMART Extension: Windsor to Healdsburg Depot, with pathway	Capital improvements to existing infrastructure to enable extended SMART service north from Windsor to Healdsburg, including Healdsburg station development and infrastructure to Healdsburg north.	SMART	\$ 269,000,000
Near Term	San Dieguito Double Track and Platform (Del Mar Fairgrounds Special Events Platform)	Construction of 2.1 miles of second main track and San Dieguito bridge replacement from north of CP Valley (MP 242.2) to CP Del Mar (MP 243.9). This project includes construction of a special event platform at the Del Mar Fairgrounds.	SANDAG	\$ 230,800,000
Near Term	Container Terminal Support Facility (Port of Los Angeles and Port of Long Beach)	Construction of an 80-acre container terminal support facility to provide chassis staging/storage to serve POLA/POLB, as well as Rail (Alameda Corridor terminus) Highway grade separation for unimpeded access to the chassis facility.	POLA	\$ 200,000,000
Near Term	Del Mar Tunnel - 2 PE/ENV	Preliminary Engineering, environmental clearance, and public outreach for the Del Mar Tunnel.	SANDAG	\$ 152,000,000
Near Term	High Desert Corridor Operational Efficiency	Construction of two 22,500-ft staging tracks and a third main track to extend the existing triple track by 11 miles on the BNSF Cajon Subdivision in San Bernardino County between railroad control points (CP) Martinez and CP Thorn (roughly from the top of Cajon Pass one mile east of the Hesperia City Limits, through Hesperia, to 1/3 mile north of Bear Valley Road in the City of Victorville). This project will increase operational efficiency and throughput by allowing phasing, queuing and expanded passing opportunities.	Caltrans	\$ 150,467,000
Near Term	Eastbrook to Shell Double Track	Construction of 0.8 miles of new double track railroad near Harbor Drive (CP Eastbrook, MP 225.2) to south of Surfdrider Way (CP Shell, MP 226.0) both in the City of Oceanside and replacement of NCTD bridge at MP 225.4 with a new double track bridge spanning San Luis Rey River.	SANDAG	\$ 134,200,000
Near Term	North Lathrop Station	Construction of a North Lathrop Station (infill on existing line) as a part if the Valley Rail Program that would serve the Altmont Corridor Express (ACE)	SJRRRC	\$ 119,790,000
Near Term	Batiquitos Lagoon Double Track Project	Construction of .75 miles of second mainline rail track from Avenida Encinas in Carlsbad to La Costa Avenue in Encinitas across the Batiquitos Lagoon. This project also includes replacing a wooden trestle bridge with a modern, double-track concrete rail bridge.	SANDAG	\$ 117,800,000
Near Term	Merced County Inland Port	Construction of enhancements to the Castle Commerce Center in Merced County, including through expansion of the railway to a new staging and container laydown area to support cross-docking and processing.	Merced Inland Port	\$ 115,674,000
Near Term	Modesto Station (UPRR Sub)	Construction of new Valley Rail Station: Modesto Station. This project will support the ACE Extension along the UP Fresno Subdivision between Stockton and Merced.	SJRRRC	\$ 112,100,000
Near Term	Ventura and Santa Barbara County Siding Extensions and Double Track	Construction of siding and track extensions and double tracking between Ventura and Santa Barbara County.	LOSSAN	\$ 100,000,000
Near Term	Orange County Maintenance Facility	Construction of a new maintenance facility in Irvine, required prior to increasing services on OC and IE-OC Lines.	OCTA	\$ 100,000,000
Near Term	Del Mar Bluffs Phase 5	Implementation of slope stability improvements at 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.	SANDAG	\$ 99,600,000
Near Term	Simi Valley Double Track & Platform Expansion	Construction of a double track from MP 436.65 to CP Santa Susana to allow at-speed meets at MP 437.4. This project will also add a 2nd platform at Simi Valley station to allow boarding from both tracks to enable 30 minute service.	SCRRA	\$ 88,967,000

Time Horizon	Project Name	Description	Lead Agency	Cost
Near Term	LOSSAN Corridor Hardening	The LOSSAN Corridor Hardening project focuses on improving areas affected experiencing slumping and erosion due to surface water runoff in Santa Barbara and Ventura Counties. Key project elements include: - Hollister Ranch Repairs: Infrastructure enhancements to address significant bluff erosion and the failure of old rock buttresses. - Ortega Hill Bluff Repair - El Capitan Bluff and Pipe Repair: Repairs aimed at addressing a broken pipe, filling scour holes, and stabilizing slopes above seawalls at El Capitan in Santa Barbara County. - Rincon Point Slope Repairs: Improvements targeting significant erosion areas above the track and toe erosion at the base of the slope. - Honda Siding Stabilization: Rehabilitation of a 1.37-mile siding north of the Honda Bridge to increase regional capacity. - Honda Bluff Repair: Design and construction efforts to address significant damage to the Honda bluffs.	LOSSAN	\$ 85,767,000
Near Term	Sacramento Valley Station (SVS) - Light Rail Integration	Realignment of SacRT light rail to create easier multi-modal transfers at Sacramento Valley Station by bringing the Gold Line platform and tracks closer to the intercity rail platforms.	Multiple Agencies	\$ 82,940,000
Near Term	Salinas Rail Service Extension	Track and signal improvements on the track segment between Gilroy and Salinas to enable regional rail service extension to Salinas. Construction of a train layover facility connected to the Coast Mainline. This project includes a new train crew base building and storage shed, fencing, lighting, and a new platform.	TAMC	\$ 81,000,000
Near Term	Coast Sub PTC	Implementation of positive train control from Alameda to Monterey County on the Coast Subdivision.	Caltrans	\$ 72,000,000
Near Term	Guadalupe River Bridge Replacement	Replacement of the Guadalupe River Bridge in San Jose to improve reliability of Caltrain and ACE operations.	Caltrain	\$ 63,300,000
Near Term	Facilitating and Accelerating Service Transformations (FAST) on the Central Coast Program	Provides coordinated improvements along the Coast Line between Monterey and Santa Barbara Counties. The King City Multi Modal Transportation Center will establish a new rail station in downtown King City, including railroad siding upgrades and a staging area for National Guard service members connecting between the rail station and Fort Hunter Liggett by bus. Crossover and siding improvements near San Luis Obispo and Paso Robles stations will improve train reliability and operational flexibility for increased train service along the Central Coast. Finally, the Ortega Siding will be built between Santa Barbara and Carpinteria, enabling a seventh Pacific Surfliner roundtrip and improving overall corridor efficiency for both freight and passenger rail.	Multiple Agencies	\$ 63,000,000
Near Term	Cañada Honda Creek Bridge Replacement & Leesdale Siding Extension	- Construction of a replacement bridge over the Cañada Honda Creek (north of Gaviota Beach, near Vandenberg AFB). This bridge replacement is Project 26 in the Caltrans reports for Proposition 1B Bond Program. Due to delays related to the Environmental Document Phase, the schedule for Construction allocation has been extended to Fiscal Year 2023-24. - Partial construction of Leesdale siding between CO402 at MP 409.1 and CP O406 at 405.6. When combined with a second platform at Oxnard station, this project will enable 30-minute passenger frequencies to Oxnard.	LOSSAN	\$ 56,000,000
Near Term	Irvine Station Improvements	The Irvine Station improvements include a 4th Main Track expansion between west of Milepost (MP) 184.0 and east of CP Bake, MP 186.9, with two center island platforms.	OCTA	\$ 54,151,000
Near Term	El Monte Station Ped Improvements and Siding Extension	Construction of El Monte Station pedestrian improvements to eliminate hold out rule and allow meets mid-platform. This project will extend the platform westward and extend the siding track west toward the flyover, as well as upgrade to a higher speed switch and add new signaling.	SCRRA	\$ 51,796,000
Near Term	Mead Valley Station Development	Construction of a new station and mobility hub in Mead Valley on the 91/Perris Valley Line at Cajalco Expressway/Ramona Expressway, just west of Interstate 215. This station will function as a transit hub, improving local access to both freight and passenger rail services.	RCTC	\$ 50,500,000
Near Term	King City Station	Construction of a new station in King City to provide an additional local stop on the Coast subdivision for immediate use by the Coast Starlight and longer-term use by intercity trains along the coast. The initial project is a platform with the longer-term project being led by the city to develop a multimodal station.	King City	\$ 47,011,805
Near Term	Rancho Siding Extension from MP 39.2 to CP Archibald	Construction of a 1-mile siding extension west toward MP 39.2 and speed increase upon approach to Rancho Cucamonga station to enable 30-min service.	SCRRA	\$ 46,581,000
Near Term	San Luis Obispo Layover Facility	Construction of a new and expanded layover facility in San Luis Obispo that will enable additional Pacific Surfliner service. The project will facilitate the maintenance of equipment mid-route and at route terminus.	LOSSAN	\$ 40,500,000
Near Term	San Juan Creek Bridge replacement	Replacement of the 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 disruption to passenger and freight.	OCTA	\$ 38,333,000
Near Term	Hobart Lead Tracks Development	The Hobart Intermodal Facility Improvement Project in Los Angeles enhances the existing facility by increasing efficiency along the freight corridor. The project aims to improve yard capacity and efficiency, facilitate better train movement and staging, boost the throughput of freight and passenger trains, and plan for future upgrades to fully separate freight and passenger operations within the yards.	Caltrans	\$ 37,000,000
Near Term	Serra Siding Extension / CP Songs to San Mateo Creek	To enhance reliability and flexibility at the meeting point between Los Angeles and San Diego, two options are being considered for this project: Option 1 (Serra Siding Extension) - Construction of an extension to the Serra Siding. The project will reduce the bottleneck at San Clemente and enables 2 trains per hour and direction to operate. Includes extensions both to the north and south. Option 2 (CP Songs to San Mateo Creek) - Construction of a second main track between the county line (Project is located entirely within San Diego County) at MP 207.4 and MP 208.2. The limits of the project include the structures across San Mateo Creek, Br 207.6 and the bridge across the wetland, Br. 207.8.	OCTA	\$ 36,918,000
Near Term	San Joaquin Corridor 2nd Platforms	Construction of an additional platform at both the Modesto and Turlock-Denair Amtrak Stations.	Caltrans	\$ 36,400,000

Time Horizon	Project Name	Description	Lead Agency	Cost
Near Term	Madera Station Relocation	Relocation of the existing Madera San Joaquins Station, which is nearly three miles north of Madera. A location near Avenue 12 will better meet regional goals of improving ridership and connectivity.	SJPPA	\$ 35,585,000
Near Term	San Onofre-Pulgas Phase 2	Construction of a 1.6 mile segment of second main track (MP216.5 to MP 218.1) and bridges at MP 217.3 and MP 218.0.	SANDAG	\$ 35,530,000
Near-Term	Placentia Station Platform	Construction of additional station platform	OCTA	\$ 35,000,000
Near Term	Ortega Siding	Construction of a new siding track, approximately located 3 miles north of the City of Carpinteria, to support service expansion and enhancement goals for the Pacific Surfliner. Once completed, this project will also enable the addition of a 7th round trip between Goleta and San Diego.	Caltrans	\$ 33,178,000
Near Term	Chatsworth Station & Signal Improvements	Infrastructure improvements on approach to Chatsworth station to increase speeds and allow meets at platform without loss of time.	SCRRA	\$ 25,158,000
Near Term	Perris South Station and Layover Track Expansion	Construction of a new track and second platform at the Perris South Station along with a fourth layover track at the maintenance facility.	RCTC	\$ 25,000,000
Near Term	Goleta Station Project	Construction of a new multi-modal train station next to the existing Amtrak platform on South La Patera Lane. This 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 potential future additional train storage that will support increased commuter rail needs.	City of Goleta	\$ 19,000,000
Near Term	BNSF Escalator improvements	East Escalator Siding Project	SJPPA	\$ 18,158,000
Near Term	Camarillo Station Grade Separated Pedestrian Crossing	Construction of a grade separated pedestrian crossing over the UPRR tracks in the Camarillo Station area, improving pedestrian access and ADA compliance between station platforms and parking areas.	City of Camarillo	\$ 18,000,000
Near Term	LOSSAN Corridor Quiet Zones	To reduce noise around 20 at-grade rail crossings for nearby residents and businesses, infrastructure improvements will be made to enable quiet zones throughout the LOSSAN rail corridor (excluding Laurel Street, Coast Boulevard and Chesterfield Drive).	SANDAG	\$ 16,660,000
Near Term	Coastal Rail Corridor Relocation Study	Study to analyze and propose solutions to various coastal issues in southern Orange County. Focuses on 11-mile segment from San Juan Capistrano to San Onofre and another 7-mile segment between Dana Point and San Clemente. This near-term effort may extend to mid-term and advances the project through the Environmental and Preliminary Engineering Phase.	OCTA	\$ 15,000,000
Near Term	Petaluma North Station	Construction of a Petaluma North Station to serve an extension of the Sonoma-Marin Area Rail Transit (SMART) corridor service to North Petaluma.	SMART	\$ 14,100,000
Near Term	Goleta Layover Facility	Construction of an expansion to the layover facility at Goleta. The current layover facility is 725 feet and can only accommodate one train for servicing. This project would construct an additional layover servicing area that would allow for additional trainsets to layover and receive turnaround servicing.	LOSSAN	\$ 14,100,000
Near Term	San Onofre Bridges	Replacement of three timber trestle railway bridges at MP 207.6, 207.8 and 209.9.	SANDAG	\$ 13,641,000
Near Term	Agnew Siding	Construction of a half-mile siding along a stretch of single track served by ACE and Capital Corridor services. The project provides additional flexibility by allowing trains to meet without having to make complex backing moves to use the existing siding. This will enable enhanced special event service at Levi Stadium and will reduce delays for regularly scheduled rail service.	CCJPA	\$ 12,508,000
Near Term	Commerce Flyover Development	Project development to construct a two-track flyover (grade-separated rail bridge) on a rail corridor segment just east of downtown Los Angeles on the BNSF San Bernardino Subdivision (Commerce Corridor). The project will construct improvements to separate two tracks to serve passenger rail service from the other main tracks, lead tracks, and staging tracks that serve the freight rail within this segment of the corridor.	Caltrans	\$ 12,000,000
Near Term	Ventura Subdivision Track and Structures Rehabilitation Project	Construction of improvements to existing track and structures along the Ventura Subdivision at various locations in Burbank, Moorpark, and Simi Valley within the Counties of Los Angeles and Ventura. This includes the replacement of one highway-rail crossing, eight turnouts, 5,574 timber ties, the upgrade of 4,057 additional timber ties to concrete ties, 4,050 track fasteners, 9,974 feet of rail, four culvert replacements, four culvert rehabilitations, and the rehabilitation of Tunnel 26.	SCRRA	\$ 11,108,000
Near Term	Watsonville/Pajaro Station - Environmental	Environmental Assessment funding for Pajaro Station improvements to accommodate through service on the Pacific coast and connections to Santa Cruz.	TAMC	\$ 11,000,000
Near Term	The Newark-Albrae Siding Connection Project	Construction to connect two sidings to create a second main track. The connected sidings would permit double track operation between Fremont and just north of the Alviso Wetlands, increasing overall capacity. This project connects with previous improvements implemented by the Capitol Corridor Joint Power Authority and will benefit both ACE and Capital Corridor services	SJRRRC	\$ 9,800,000
Near Term	Marengo Siding Extension	Construction of a 1-mile extension to the existing Marengo Siding east toward CSULA.	Caltrans	\$ 9,675,000
Near Term	Oakley Station	Design and construct a new station and platform in the Oakley Civic Center on the San Joaquins route between Oakland and Stockton. This station is five miles from the existing Antioch/Pittsburg Station and will serve the communities of Oakley and Brentwood.	SJPPA	\$ 8,623,119
Near Term	San Joaquin Street Station Layover Track	Construct layover track, reconfigure parking lot, and install street lighting along San Joaquin Street. This project is needed to provide a layover track.	SJPPA	\$ 7,000,000
Near Term	Port of San Diego Balanced Freight Project National City	Construction of a rail connector and storage track as a part of San Diego's Balanced Freight project in national City as a part of the broader National City Bayfront Projects Initiative.	Port of San Diego	\$ 6,700,000
Near Term	Santa Clara Interlocking	Improve operational flexibility and reliability between San José and Newark by adding a new track-switching location for passenger and freight train. Project includes upgrades such as new signaling systems, track realignment, and enhancements to interlocking control mechanisms.	CCJPA	\$ 6,394,000
Near Term	Sacramento Valley Station (SVS) Transit Center - Northside Access	Expansion of the existing emergency egress stairway to enable regular station access to the portion of the Railyards development north of the Sacramento Valley Station (SVS).	CCJPA	\$ 6,014,000



Time Horizon	Project Name	Description	Lead Agency	Cost
Near Term	Fremont Platform Extension	400-foot platform extension at Fremont station to accommodate longer 10-car trains for the ACE service.	SJRRC	\$ 5,770,000
Near Term	Orcutt Road Left Hand Crossover	Create a universal crossover near San Luis Obispo Station, providing the operational flexibility to run additional trains and introduce a more regular passenger rail service along the Central Coast.	Caltrans	\$ 5,000,000
Near Term	Signal Respacing: Avery to Songs (reliability improvement)	Signal Respacing. Adds intermediate signal pairs and associated crossing work at control points Avery to SONGS.	SCRRA	\$ 5,000,000
Near Term	SVS Rail Western Access	Connect the active transportation network around SVS with the growing Railyards District by extending Bercut Drive to meet the SVS Westside Tunnel path. The Bercut Drive extension will include bicycle and pedestrian infrastructure and layover facilities for SacRT buses.	City of Sacramento	\$ 4,865,000
Near Term	BNSF Projects – Empire Crossover	Construction of a crossover to improve reliability and allow trains along the San Joaquins route to switch from one main track to the other, providing more opportunities to avoid delay due to interference from other train traffic.	SJJPA	\$ 4,814,000
Near Term	Devonshire Street Crossing Improvements Project	Construction of improvements to the Devonshire Street at-grade crossing on the SCRRA Ventura Subdivision (MP445.17). These improvements will increase safety and bring the crossing up to the latest's SCRRA standards.	SCRRA	\$ 4,272,000
Near Term	Sorrento Valley Blvd Safety Improvements	Construction of near-side signals between Sorrento Valley station and Sorrento Valley Blvd to reduce conflicts with heavy traffic congestion.	SANDAG	\$ 3,980,000
Near Term	Robert J. Cabral Station Expansion (Stockton)	Construction of improved Cabral Station, including security enhancements and ADA compliant sidewalks.	Multiple Agencies	\$ 3,900,000
Near Term	Tunnel 25 Rehab	Rehabilitation of Tunnel 25 in the Antelope Valley Line in the City of Santa Clarita and portions of unincorporated Los Angeles County. The 6,976 ft tunnel was originally built in 1876 and requires major rehabilitation work every 25-30 years due to its length and elevation.	SCRRA	\$ 1,602,000

Time Horizon	Project Name	Description	Lead Agency	Cost
Mid Term	Capitol Corridor -Sacramento to Roseville Third Track Service Expansion (Phase 1)	Infrastructure improvements to enable two additional daily roundtrips on the existing passenger rail corridor between Sacramento and Roseville for a total of three round trips per day between Roseville and Sacramento.	CCJPA	\$ 214,000,000
Mid Term	Sacramento Valley Station (SVS) - Regional Bus and Mobility Hub	Construction of a two-level transit center surrounding the intercity rail station at Sacramento Valley Station. key for connecting transit to the intercity and regional network at SVS - highway system connections	Multiple Agencies	\$ 139,885,000
Mid Term	Davis Station Platform Replacement and Track Improvements	Construction of a new or improved station to eliminate danger from passengers crossing active main line track to reach their train. This project will provide ADA accessible 8 inch above top rail platform for both main tracks and eliminate holdout rule to improve freight train operation and corridor fluidity.	CCJPA	\$ 40,000,000
Mid Term	SMART Healdsburg to Cloverdale Extension, with pathway	Reconstruction to maximize public benefit of currently unusable publicly-owned infrastructure. Project will facilitate the reduction of emissions, increased transit ridership, support of freight rail investments, improved access to high-speed internet for public institutions, and enables the City of Healdsburg and the City of Cloverdale to consider land use changes that could be made with the introduction of high quality transit service.	SMART	\$ 312,000,000
Mid Term	Martinez Intercity Rail Turn Around Facility Project	Construction of turn tracks at the existing Martinez station to allow SJJPA trains to turn back at Martinez and for passengers to efficiently transfer between SJJPA and CCJPA trains. This would open slots on the UPRR Martinez Subdivision between Martinez and Oakland for 5 additional CCJPA round trips (total of 20).	Multiple Agencies	\$ 62,500,000
Mid Term	South Bay Connect Travel Time Savings	Construction of infrastructure improvements on Coast Subdivision for improved travel times between San Jose and Oakland. This project includes track and right-of-way improvements and the introduction of optimized rail schedules that better use capacity available under existing and enhanced railroad agreements across all intercity and regional rail service providers.	CCJPA	\$ 198,463,000
Mid Term	The Portal (formerly the DTX San Francisco Downtown Extension)	Extension of existing Caltrain and future HSR track from the existing 4th and King Caltrain terminal to the existing vaults below the Salesforce Transit Center.	TJPA	\$ 8,200,000,000
Mid Term	Valley Link Dublin/Pleasanton to Mountain House	Infrastructure upgrades to enable the Initial Valley Link Service from Dublin/Pleasanton in Alameda County to Mountain House Community in San Joaquin County.	Valley Link	\$ 1,868,911,000
Mid Term	Valley Rail Service Northern Expansion	Station and track improvements between Natomas and Stockton	SJRRC	\$ 380,000,000
Mid Term	Valley Rail Service Southern Expansion	Construction of track improvements that would enable extension of Altmont Corridor Express (ACE) service to Merced.	SJRRC	\$ 600,000,000
Mid Term	Merced Intermodal Track Connection (MITC)	Construction of an intermodal track connection in Merced. This project provides capacity for eleven additional daily roundtrips on the existing passenger rail corridor, and one new or improved station, as well as allows reliable connections between ACE/San Joaquins and California High Speed Rail.	SJJPA	\$ 320,000,000
Mid Term	California High Speed Rail Initial Operating Segment	Construction and implementation of the Initial Operating Segment of high speed rail (Phase 1). This project will also develop interim connection (prior to implementation of high speed rail Phase 2) between existing service and high speed rail Phase 1.	CHSRA	\$ 33,800,000,000
Mid Term	Madera HSR Station	Construction of a new high-speed rail station at Madera Avenue 12 as part of the Merced to Bakersfield segment. This project will involve relocating the existing Madera Amtrak station and implementing significant upgrades, including new platforms, tracks, a bus depot, and other essential facilities.	Caltrans	\$ 134,000,000
Mid Term	Signal Respacing: Lancaster to McGinley	Signal respacing project to add intermediate signal pairs between the City of Lancaster and CP McGinley (MP 15.6). This project will enable greater capacity on the line.	SCRRA	\$ 14,835,000

Time Horizon	Project Name	Description	Lead Agency	Cost
Mid Term	Carpinteria Station Double Track and Second Platform	Construction of a second ADA compliant platform and shelter, as well as refurbishment of the existing platform and shelter. The project also includes the addition of a pedestrian underpass that will allow passengers to access the new platform safely. Also included will be the construction of a second set of tracks and two power switches to allow train operation on both platforms.	LOSSAN	\$ 32,000,000
Mid Term	Link US Phase A	Construction of run-through tracks at Los Angeles Union Station, converting it from a stub-end terminal station. This will vastly improve the throughput capacity of the station.	LA Metro	\$ 1,600,000,000
Mid Term	Rialto Station to CP Rancho Double Track	Construction of a second track from Rialto station to CP Rancho. (reliability improvement)	SCRRA	\$ 76,705,000
Mid Term	CP Lilac to Rialto Station Double Track	Construction of a double track from CP Lilac to Rialto station and a 2nd platform at Rialto. This project supports 30-minute service on the San Bernardino Line.	SCRRA	\$ 24,831,000
Mid Term	Riverside Downtown Track & Platform Improvements	Construction of a center platform, additional tracks, pedestrian bridge and parking on south side of the Riverside-Downtown Station to improve capacity for increased frequencies.	RCTC	\$ 25,000,000
Mid Term	Perris Valley Line Second Main Track from New CP to CP Nuevo	Installation of a new control point (CP) in conjunction with the Moreno Valley/March Field Station project and upgrade of second track to support passenger service between CP Eastridge and CP Nuevo.	RCTC	\$ 40,000,000
Mid Term	South Perris Layover Facility Buildout	Construction to expand capacity at South Perris Layover Facility to accommodate 12 consists; 10 daily consists, plus up to 2 spares. Project will add full daily servicing capabilities.	RCTC	\$ 25,000,000
Mid Term	Orange County Maintenance Facility - Full Buildout	Construction of a new maintenance facility in Irvine.	OCTA	\$ 153,200,000
Mid Term	Orange - Olive Junction Improvements and Wye	The existing Orange-Olive wye 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 wye. Existing ties will be replaced with concrete ties. New control points will be installed. Grade crossings will need to be upgraded to meet quiet zone requirements. A drainage system that includes grading and new catch basins may be necessary pending further preliminary investigation.	Multiple Agencies	\$ 32,635,000
Mid Term	Songs Siding Extension	Construction of a 1.55-mile extension to the Songs Siding including two new bridges.	SANDAG	\$ 53,322,000
Mid Term	Sorrento Valley Crossover	Construction of a universal crossover near Sorrento Valley Station.	SANDAG	\$ 5,240,000
Mid Term	Eastbrook to Shell Double Track (San Luis Rey River Bridge)	Construction of a 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).	SANDAG	\$ 84,693,701
Mid Term	San Diego Convention Center Station	Construction of a new station at San Diego Convention Center. TBD regular revenue service or special event only.	NCTD	\$ 52,920,000
Mid Term	San Diego County Layover and Maintenance Facility (Phase I)	Project will design and construct a new and larger layover and maintenance facility for the Pacific Surfliner in San Diego County. Full build-out will support up to three additional trains for service on existing passenger rail corridor and construct two additional stations on existing route. Phase I will provide for a more secure and safe location to maintain the fleet, which is currently maintained each night at the San Diego station, which is open to the public. Proposed location for facility is along right-of-way owned by BNSF and improvements will be required to the existing track infrastructure allowing for faster and more frequent service on the line, which serves the Port of San Diego. Phase I includes land acquisition, construction of track connections, facilities to service one train at a time, and design for the full build-out.	LOSSAN	\$ 30,000,000

Time Horizon	Project Name	Description	Lead Agency	Cost
Long Term	Seasonal Reno Service	The Seasonal Reno Service project focuses on enhancing the existing train service between the San Francisco Bay Area and Reno. Planned improvements may include upgrades to tracks and stations to better accommodate both passenger and freight operations, with detailed announcements expected in the later phase.	Multiple Agencies	\$ 100,000,000
Long Term	HSR Sacramento	Blended HSR service from Merced to Sacramento, including electrification	Multiple Agencies	\$ 10,000,000,000
Long Term	Sonoma / Marin - Napa / Solano County Connection	Capital improvements to enable the expansion of service east-west from Novato to Suisun, connecting service to the California intercity passenger rail network allows run-through trains at Solano Hub, serving Novato, Sacramento, and Vallejo with Intercity/regional equipment.	Multiple Agencies	\$ 1,500,000,000
Long Term	Sac-OAK-SF-SJ Mega Corridor	Mega corridor modernization, sea level rise mitigation, and expansion to create a direct, standard gauge, electrified rail corridor connecting Roseville - Sacramento - Richmond - Oakland - San Francisco - San Jose. Inclusive of: <ul style="list-style-type: none"> <li>- Phase II Roseville Ext</li> <li>- East Bay Grade Separation (Jack London)</li> <li>- 30 minute Roseville service</li> <li>- Carquinez Crossing</li> <li>- Sac to Richmond upgrades and electrification</li> <li>- Main line transbay crossing</li> <li>- Western SF service extension</li> <li>- New West Oakland BART / Main Line rail hub</li> <li>- Coliseum</li> <li>- Electrification</li> </ul>	Multiple Agencies	\$ 57,000,000,000
Long Term	Union City Hub	Infrastructure improvements to enable Valley Rail/ACE connecting service to Union City/BART, including track improvements, layover track, and station expansion at Union City/BART, which will create the Tri-City Mid Term Hub Station.	SJRRC	\$ 200,000,000
Long Term	CA HSR Full Phase 1	Construction of the 520-mile high-speed rail line to connect San Francisco to Los Angeles and Anaheim via the Central Valley.	CHSRA	\$ 100,000,000,000
Long Term	Valley Rail North: Butte County	The Valley Rail project focuses on enhancing passenger rail service between the San Joaquin Valley, Sacramento, and the Bay Area. Key elements include: <ul style="list-style-type: none"> <li>- North Valley Rail Expansion - Chico: The element involves the construction of a layover facility in Chico to support North Valley Rail Service. Four new stations will be constructed along the route connecting Chico and Sacramento: Plumas Lake, Marysville/Yuba City, Gridley, and Chico. The Natomas Station will also be converted from a Valley Rail terminus station to a North Valley Rail through-service station. Trackwork at the five stations are also included.</li> <li>- Valley Rail North - Pleasant Grove Siding Extension: Siding extension north of the Valley Rail project bounds to allow up to four (4) daily regional rail trips between Natomas and Stockton. The improvements include extending the siding tracks for 1.7 miles, constructing 3 new bridges, and upgrading track turnouts.</li> </ul>	Multiple Agencies	\$ 300,000,000
Long Term	Valley Link Mountain House to North Lathrop	Incremental cost for Valley Link project to provide service from Mountain House Community to North Lathrop transfer station.	Valley Link	\$ 742,400,000
Long Term	Santa Cruz County Branch Rail Line	Implementation of zero emission passenger rail on the Santa Cruz Branch Line from Santa Cruz to Pajaro (excludes PAVED).	SCCRTC	\$ 458,000,000
Long Term	Watsonville/Pajaro Station	Construction of a new rail platform at Watsonville/Pajaro Station, as well as automobile and bike parking.	TAMC	\$ 80,000,000
Long Term	Castroville - Monterey Infrastructure Improvements	Construction of track, signal, and structure upgrades as a part of the larger Monterey Regional service.	TAMC	\$ 222,700,000
Long Term	Castroville Station	Construction of a new Castroville Station to serve as a connection point for passengers coming from the Monterey Peninsula to board new passenger rail service on the Coast mainline tracks between Salinas and the San Francisco Bay Area.	TAMC	\$ 27,200,000
Long Term	Monterey County Sidings (Salinas - SLO)	Construction of 3 sidings between Salinas and SLO to accommodate growth on the Central Coast.	Caltrans	\$ 50,000,000
Long Term	Salinas Service Enhancement (Phase 2)	Construction of infrastructure improvements to enable hourly intercity service Gilroy to Salinas which include the conversion to double track for siding (4 miles total).	Caltrans	\$ 58,000,000
Long Term	Northern Central Coast Maintenance Facility	Construction of a Northern Central Coast facility for the Santa Cruz, Monterey Regional and Intercity trains terminating/serving Salinas.	TAMC	\$ 43,300,000
Long Term	Soledad Station	Construction of a new Soledad Station to provide an additional local stop on the Coast subdivision for immediate use by the Coast Starlight and longer-term use by intercity trains along the coast.	TAMC	\$ 27,200,000
Long Term	King City Station - Phase 2	Full build out of the Multimodal Transportation Center at the King City Station which, in addition to the phase 1 improvements, will include an enhanced station, parking, and bus stop reconfiguration to allow for seamless integration between services.	King City	\$ 18,000,000
Long Term	Lemoore-Porterville Regional Rail	Construction of corridor improvements including four new stations, a maintenance facility, signal upgrades, and a connection to HSR to enable Lemoore to Porterville LCL service.	Multiple Agencies	\$ 1,258,000,000
Long Term	Central Coast Layover Facility Phase II	Construction of a new and expanded layover facility in San Luis Obispo to allow overnight storage and servicing of Pacific Surfliner equipment. Main infrastructure components also include new storage and serving tracks as well as operations and maintenance buildings. The facility will support 3 additional trains on the existing passenger rail corridor.	LOSSAN	\$ 50,000,000

Time Horizon	Project Name	Description	Lead Agency	Cost
Long Term	High Desert Corridor High-Speed Rail Project	Construction of a 54-mile high-speed rail segment in the High Desert to connect the planned CHSRA high-speed rail station in Palmdale with the Brightline high-speed rail station in Apple Valley/Victor Valley (High Desert Hub). Once Brightline, CHSRA phase one, and High Desert Corridor (HDC) are complete, passenger rail customers will be able to travel across the high-desert, to and from the greater Los Angeles Area, and to Las Vegas and Northern California in a coordinated system.	Multiple Agencies	\$ 4,300,000,000
Long Term	Palmdale to Lancaster Double Track and Station Reconfiguration	Construction of a second track between Palmdale and Lancaster stations. This project includes one crossover between stations. Project to be designed and delivered in coordination with California High Speed Rail Full Phase One.	SCRRA	\$ 128,167,000
Long Term	Double Track between CP Saugus and CP Hood	Construction of a double track between CP Canyon (Newhall siding) and CP Hood (Canyon) to allow 15-minute service between LA and Santa Clarita.	SCRRA	\$ 43,898,000
Long Term	Goleta to East Ventura Double Track	Construction of a double track between Goleta and East Ventura.	LOSSAN	\$ 112,000,000
Long Term	New Siding Between Tunnels 27 and 28. (MP 443.8-443.24)	Construction of a new siding between Tunnels 27 and 28 as part of the rail infrastructure improvement program from Metrolink. This siding will enhance operational efficiency and serve as a critical connection point for travelers on the Ventura County Line.	SCRRA	\$ 39,332,000
Long Term	Link US Phase B	Phase B of Link US includes 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 LAUS, and a total of up to four run-through tracks.	LA Metro	\$ 2,597,000,000
Long Term	HSR Inland Empire	Phased improvements and electrification from San Bernardino to Los Angeles to enable blended regional and high speed services between LAUS and San Bernardino.	Multiple Agencies	\$ 7,682,000,000
Long Term	Coachella Valley Rail	Construction of a third main track for 77.5 miles from Colton to Coachella with additional passing sidings, five new stations, improvements to the existing Palm Springs station, and a new light maintenance facility.	Multiple Agencies	\$ 1,572,435,000
Long Term	AZ Service Extension	Arizona high speed rail extension from Coachella to Phoenix. The project also includes the construction of a new third rail track designed to enhance both freight and passenger rail services in the region.	Multiple Agencies	\$ 15,334,278,000
Long Term	New Commerce Intermodal Facility	Project is a component of the Improvements between LA and Fullerton that will expand the BNSF Commerce IMF, including purchase of additional right of way and utility relocation needed to provide space for the I-710 to I-5 Rail Flyover Project as part of BNSF investment plans for the facility.	Multiple Agencies	\$ 184,250,000
Long Term	Hobart-Commerce Intermodal Facility (IMF) Leads	Construction of extended lead tracks at the Intermodal Facility in the Los Angeles area between Commerce and Hobart at the BNSF rail yard.	Multiple Agencies	\$ 1,163,000,000
Long Term	Moreno Valley/March Field Station & Track Upgrades	Construction of a new platform and pedestrian overpass at Moreno Valley/March Field Station. This project would rehab 2nd track from CP Eastridge to new CP at MP 10.4, and add new signal system, including the Moreno Valley siding, to enable hourly service on the Metrolink 91 line.	SCRRA	\$ 32,000,000
Long Term	HSR improvements from LA to Anaheim	Construction of 2 HSR tracks from LA to Fullerton to Anaheim plus additional improvements (3 tracks) for Metrolink and Freight along blended/electrified double track, and additional platforms at ARTIC.	CHSRA	\$ 2,918,000,000
Long Term	Perris to Hemet/ San Jacinto Rail Extension	Upgrade 17 miles of track to passenger standards including construction of sidings, signals, PTC and up to 6 new stations.	RCTC	\$ 550,000,000
Long Term	South Perris Light Maintenance Facility (Environmental, Design, Property)	Increase capacity at South Perris maintenance facility to accommodate 12 consists; 10 daily consists, plus up to 2 spares. Adds full daily servicing capabilities.	RCTC	\$ 83,700,000
Long Term	Del Mar Tunnel - 3 FD/CON	This project aims to relocate 1.7 miles of train tracks from the eroding Del Mar bluffs into an underground tunnel as part of the LOSSAN Rail Realignment initiative. Three alternatives are being considered, with the favored option starting at a north portal near the Solana Beach Fairgrounds, passing under the San Dieguito Lagoon, and ending at a south portal near Interstate 5.	SANDAG	\$ 3,500,000,000
Long Term	Stuart Mesa Maintenance Facility Capacity Enhancement	Increase capacity of Stuart Mesa Maintenance Facility located on Camp Pendleton Marine Corp Base.	NCTD	\$ 47,000,000
Long Term	Camp Pendleton Station	Construction of new station/platform on Camp Pendleton adjacent to the Stuart Mesa Maintenance Facility.	NCTD	\$ 46,400,000
Long Term	Carlsbad Village Double Track	Construction of 1.0 mile of second main track from CP Longboard (MP 228.4) to CP Carl (MP 229.5) in Carlsbad. Includes new bridge over Buena Vista Lagoon.	LOSSAN	\$ 62,200,000
Long Term	La Costa to Swami Double Track	Construction of 2.9 miles of double track in the City of Encinitas from CP La Costa (MP 235.1) to CP Swami (MP 238.0). (Note that this project may be split at CP Moonlight located north of Encinitas Blvd).	SANDAG	\$ 87,000,000
Long Term	Moonlight-Swami Double Track (Lead A)	Construction of a 0.8-mile-long segment of second main track from CP Moonlight (MP 237.2) to CP Swami (MP 238.0). This project includes construction of a single-track bridge across Encinitas Boulevard, crossing improvements at D and E streets, station and parking area modifications at Encinitas Station (to accommodate the new second track), modifications to the existing bus terminal facility, grade separated pedestrian crossing with inter-track fencing, and construction of associated site improvements.	SANDAG	\$ 50,930,000
Long Term	La Costa to Moonlight Double Track	Construction of 2.1 miles of double track in the City of Encinitas from CP La Costa (MP 235.1) to CP Moonlight (237.2).	SANDAG	\$ 40,240,000
Long Term	Miramar Tunnel	Construction of the Miramar Tunnel approximately 4.8 miles long, featuring a 2.5-mile underground section, as part of the LOSSAN Corridor improvements. The tunnel will help address topographical challenges, allowing for increased speeds and safety for both freight and passenger service.	SANDAG	\$ 2,600,000,000
Long Term	HSR San Diego	Construction of High Speed Rail corridor between Rancho Cucamonga and San Diego in the I-15 Corridor.	Multiple Agencies	\$ 20,500,000,000

Time Horizon	Project Name	Description	Lead Agency	Cost
Long Term	San Diego County Layover and Maintenance Facility (Full Build Out)	Building on the Phase I relocation of the maintenance facility, the full build out will support up to three additional trains for service on existing passenger rail corridor. Two additional stations served on existing route. Proposed location for facility is along right-of-way owned by BNSF and improvements will be required to the existing track infrastructure to allow faster and more frequent service on the line, which serves the Port of San Diego.	LOSSAN	\$ 113,420,000

**Program Cost for Grade Separation Projects**

Time Horizon	Project Name	Description	Lead Agency	Cost
Mid Term	County Road 32A Crossing Relocation Project	Construction of a grade separation to improve the safety of the existing grade crossing of Country Road 32A and the UPRR Martinez Subdivision east of Davis. The current rail line carries 19 freight and 20 passenger trains daily, and the existing crossing's geometry creates safety and operational challenges.	County of Yolo	\$ 45,500,000
Mid Term	7th Street Grade Separation Project	Construction of a grade separation at 7th Street in Alameda County to eliminate interactions between trains and roadway users, improve goods movement reliability, ease traffic congestion, and reduce environmental impacts.	ACTC	\$ 378,000,000
Mid Term	Alameda Countywide Rail Safety Enhancement Program - Phase A	Grade crossing improvement program that prioritizes 56 targeted areas of the total 133 grade crossing locations in Alameda County. Phase A locations are short-term investments in pedestrian safety enhancements at 28 grade crossing locations and two frequent trespassing sites in Alameda County prioritized by rail volumes, daily automobile traffic, equity impact, and proximity to schools. 26 of the Phase A locations are located on the Martinez, Niles, and Oakland subdivisions on the Richmond to San Jose (via East Bay) sub-corridor. Two of the projects are in Livermore on the Oakland Subdivision served by ACE trains on the Altamont Corridor.	ACTC	\$ 75,201,000
Near Term	Burlingame Broadway Grade Separation Project	Construction of a grade separation of Broadway in Burlingame to reduce local traffic congestion and train horn noise, and eliminate the current hold-out rule in which only one train is allowed at the station at a time. This project also includes a new Broadway Station with updated amenities to better serve the community.	PCJPB	\$ 316,400,000
Near Term	Churchill Grade Separation	Construction of a grade separation at Churchill Avenue in Palo Alto. This will improve safety and reliability for the Caltrain corridor.	City of Palo Alto	\$ 54,300,000
Mid Term	Charleston and Meadow Grade Separations	Construction of a grade separations along the Caltrain corridor in the City of Palo Alto at W Charleston Rd. and W Meadow Dr.	City of Palo Alto	\$ 310,000,000
Near Term	Castro St / Rengstorff Ave Grade Separations Project	Construction of two grade separations at Castro Street in Downtown Mountain View and at Rengstorff Avenue. This project will improve safety for pedestrian and bicycle crossings and provide a better connection to Central Expressway. This project also addresses the expected growth from expanded Caltrain and light rail service, and the eventual development of the California High Speed Rail.	City of Mountain View	\$ 397,715,000
Near Term	Roadway Grade Separations: McKinley Ave and Blackstone Ave	Construction of grade separations at the diagonal railroad crossing at the corner of McKinley Avenue and Blackstone Avenue in Fresno. This project is located on the San Joaquins corridor (BNSF).	City of Fresno	\$ 151,900,000
Near Term	Rice Avenue Grade Separation	Construction of a grade separation on Rice Avenue to improve safety.	City of Oxnard	\$ 132,500,000
Near Term	Etiwanda Avenue Grade Separation	Construction of a grade separation at Etiwanda Ave, in the City of Rancho Cucamonga to improve safety and operational reliability.	City of Rancho Cucamonga	\$ 130,150,000
Near Term	Montebello Boulevard Grade Separation	Construction of a grade separation at Montebello Boulevard, which includes a roadway overpass to carry Olympic Boulevard over Montebello Boulevard.	LA Metro	\$ 220,000,000
Near Term	Fullerton Road Grade Separation	Construction of a grade separation in City of Industry at Fullerton Road.	City of Industry	\$ 152,400,000
Near Term	Turnbull Canyon Road Grade Separation Project	Construction of a grade separation at Turnbull Canyon Road on the Alameda Corridor-East. This separation will include a two-lane roadway overpass to carry vehicles over the railroad tracks and a separate pedestrian bridge for bicyclists and pedestrians.	SGVCoG	\$ 98,000,000
Near Term	Third Street Grade Separation Project	Construction of a new four-lane underpass to replace the existing at-grade crossing along the BNSF San Bernardino Subdivision near the Third Street intersection with Commerce Street in Riverside. Commerce St will also be realigned.	City of Riverside	\$ 74,000,000
Near Term	Jackson Street Grade Separation	Construction of a grade separation in the City of Riverside at Jackson Street.	City of Riverside	\$ 15,000,000
Near Term	Mary Street Grade Separation	Construction of a grade separation in Riverside County at Mary Street.	Riverside County	\$ 38,000,000
Near Term	Madison Street Grade Separation	Construction of a grade separation in the City of Riverside at Madison Street.	City of Riverside	\$ 38,000,000
Near Term	Rosecrans Marquardt Grade Separations	Construction of the Rosecrans Marquardt Grade Separation	LA Metro	\$ 15,046,000
Long Term	Norwalk Blvd/Los Nietos Road Grade Separations	Construction of grade separations at Norwalk Blvd and Los Nietos Road in the City of Santa Fe Springs to improve safety and operational reliability for passenger, freight, and HSR trains.	LA Metro	\$ 129,140,000
Near Term	Doran Street Grade Separation	Construction of a grade separation at Doran Street to eliminate the at grade rail crossing of the highly trafficked passenger and freight rail corridor between Los Angeles Union Station and the City of Burbank.	LA Metro	\$ 58,300,000
Mid Term	Hargrave Street Grade Separation Project	Construction of a grade separation at Hargrave Street through construction of a rail bridge and road undercrossing that will separate rail and street traffic. This project also includes the widening of Hargrave Street from Plaza Street to the I-10 underpass, including the installation of pedestrian sidewalks and bicycle lanes, as well as modifications to the entrance and exit ramps along I-10 to meet new street elevations of Hargrave Street.	City of Banning	\$ 75,000,000

**Program Cost for Grade Separation Projects**

<b>Time Horizon</b>	<b>Project Name</b>	<b>Description</b>	<b>Lead Agency</b>	<b>Cost</b>
Near Term	Port of Los Angeles Rail Mainline/Wilmington Community & Waterfront Pedestrian Grade Separation Bridge	Construction of a pedestrian bridge to connect the Wilmington community to POLA's Wilmington Waterfront area and Banning's Landing Community Center. Currently, two freight mainline tracks in the POLA bifurcate the Wilmington Waterfront with the Wilmington community itself. This project will provide a dedicated pedestrian/cycling bridge over these freight rail tracks and connect to the State designated California Coast Trail.	Port of Los Angeles	\$ 57,910,000
Near Term	California Avenue/UP and Pennsylvania Avenue	Construction of a grade separation in City of Beaumont at California Avenue and Pennsylvania Avenue.	City of Beaumont	\$ 38,200,000
Mid Term	Santa Ana Blvd. Grade Separation Project	Construction of a grade separation at Santa Ana Boulevard under the Metrolink Orange Subdivision, which is used by BNSF Railway in addition to Metrolink and Amtrak services. This project will also include bikeway and pedestrian improvements in the project area.	City of Santa Ana	\$ 81,020,000
Long Term	Leucadia Blvd Grade Separation	Construction of a grade separation at Leucadia Blvd.	NCTD	\$ 119,250,000



### Program Cost for Fleet Projects

Time Horizon	Project Name	Lead Agency	Cost
Near Term	Caltrain BEMU Demonstration	Caltrain	\$ 80,000,000
Near Term	Caltrain EMUs	Caltrain	\$ 423,538,000
Near Term	Redlands ZEMU	SBCTA	\$ 53,214,000
Near Term	Caltrans Bi-Level Equipment Refurbishment	Caltrans	\$ 235,000,000
Near Term	Port of Long Beach ZE Locomotives	Port of Long Beach	\$ 60,000,000
Near Term	ZEMU Procurement	Caltrans	\$ 207,000,000
Near Term	Intercity Rail and Bus R&D	CalSTA	\$ 20,000,000
Near Term	Intercity Rail and Bus Vehicle Procurement	CalSTA	\$ 70,000,000
Near Term	SNR Hydrogen Conversion	SNR	\$ 19,561,000
Near Term	LA Metro ZEMU Pilot	LA Metro	\$ 10,000,000

## APPENDIX 2.4

## CAPITAL PROJECTS – SECTION 130 PROJECTS



#	FED ID#	Grade Crossing Name	Contract Party	Alloc Year	Phase	Location Code	Advantage ID	Contract No.	Contract Start Date	Contract End Date	District	County	City	Railroad	PUC # (RR PUC ID)	DOT # (RR FED ID)
<b>DISTRICT 2</b>																
1	N/A	Eastside Road	Local Agency	Pending	N/A	5068	N/A	N/A	Pending	Pending	2	Shasta	Redding	N/A	001C-255.00-C / SHA-1024	750505B
	130R302	Eastside Road	Railroad	2023-2024	PE	5068	0223000174	50RR302	10/26/23	12/31/26	2	Shasta	Redding	Union Pacific Railroad (UPRR)	001C-255.00-C / SHA-1024	750505B
<b>DISTRICT 3</b>																
2	7500279	Keys Road	Local Agency	2019-2020	PE	5918	0320000201	50LP279	11/01/20	12/31/24	3	Sutter	Unincorporated	N/A	004-153.90 / SUT-1026	834917Y
	7500279	Keys Road	Railroad	2019-2020	PE	5918	0320000201	50RR279	11/01/20	12/31/24	3	Sutter	Unincorporated	Union Pacific Railroad (UPRR)	004-153.90 / SUT-1026	834917Y
3	130L292	W. Sacramento Ave	Local Agency	2021-2022	PE	5027	0323000013	50LP292	08/09/22	12/31/24	3	Butte	Chico	N/A	001C-185.00 / BUT-1121	753404A
	130R292	W. Sacramento Ave	Railroad	2021-2022	PE	5037	0323000012	50RR292	08/09/22	06/30/26	3	Butte	Chico	Union Pacific Railroad (UPRR)	001C-185.00 / BUT-1121	753404A
<b>DISTRICT 4</b>																
4	7500228	105th Avenue	Railroad	2014-2015	CON	5012	0015150313	75LX261	06/18/15	12/31/24	4	Alameda	Oakland	Union Pacific Railroad	001D-13.70	749725A
	7500272	105th Avenue	Local Agency	2017-2018	CON	5012	0019000303	75LX340	07/01/19	12/31/24	4	Alameda	Oakland	N/A	001D-13.70	749725A
5	7500226	29th Avenue	Railroad	2014-2015	CON	5012	0015150311	75LX257	06/18/15	12/31/24	4	Alameda	Oakland	Union Pacific Railroad (UPRR)	001D-9.50	749621T
	7500270	29th Avenue	Local Agency	2017-2018	CON	5012	0019000301	75LX338	07/01/19	12/31/24	4	Alameda	Oakland	N/A	001D-9.50	749621T
6	7500227	85th Avenue	Railroad	2014-2015	CON	5012	0015150312	75LX259	06/18/15	12/31/24	4	Alameda	Oakland	Union Pacific Railroad (UPRR)	001D-12.60	749723L
	7500271	85th Avenue	Local Agency	2017-2018	CON	5012	0019000302	75LX339	07/01/19	12/31/24	4	Alameda	Oakland	N/A	001D-12.60	749723L
7	7500267	Churchill Avenue	Local Agency	2018-2019	CON	5100	0018000154	75LX335	07/01/19	12/31/24	4	Santa Clara	Palo Alto	N/A	105E-31.00/SCL-1191	754998E
	7500267	Churchill Avenue	Railroad	2018-2019	CON	5100	0018000154	75LX334	07/01/19	12/31/24	4	Santa Clara	Palo Alto	CALTRAIN (JPBX)	105E-31.00/SCL-1191	754998E
8	7500282	Harbour & Wright	Local Agency	2019-2020	PE	5137	0421000023	50LP282	Pending	12/31/25	4	Contra Costa	Richmond	N/A	002K-1.55/ CC-1286	015342U
	7500282	Harbour & Wright	Railroad	2019-2020	PE	5137	0421000023	50LR282	Pending	12/31/25	4	Contra Costa	Richmond	BNSF Railway	002K-1.55/ CC-1286	015342U
9	7500281	4th Avenue	Local Agency	2019-2020	PE	5102	0421000022	50LP281	10/01/20	06/03/25	4	San Mateo	San Mateo	N/A	105E-17.87/SM-1073	754903U
	7500281	4th Avenue	Railroad	2019-2020	PE	5102	0421000022	50LR281	10/01/20	06/03/25	4	San Mateo	San Mateo	CALTRAIN (JPBX)	105E-17.87/SM-1073	754903U
10	7500280	5th Avenue	Local Agency	2019-2020	PE	5102	0420000270	50LP280	10/01/20	06/03/25	4	San Mateo	San Mateo	N/A	10SE-17.93/ SM-1074	754904B
	7500280	5th Avenue	Railroad	2019-2020	PE	5102	0420000270	50LR281	10/01/20	06/03/25	4	San Mateo	San Mateo	CALTRAIN (JPBX)	10SE-17.93/ SM-1074	754904B
11	7500265	Agnew Road	Local Agency	2017-2018	CON	5019	0018000017	75LX332	11/22/17	06/30/24	4	Santa Clara	Santa Clara	N/A	001L-41.60/SCL-1231	749965G
	7500265	Agnew Road	Railroad	2017-2018	CON	5019	0018000017	75LX331	11/22/17	06/30/24	4	Santa Clara	Santa Clara	Union Pacific Railroad (UPRR)	001L-41.60/SCL-1231	749965G
12	130L296	Market Ave	Local Agency	2021-2022	PE	5928	0423000039	50LP296	08/17/22	12/31/24	4	Contra Costa	Unincorporated	N/A	001A-13.60 / CC-1164	751692P
	130R296	Market Ave	Railroad	2021-2022	PE	5928	0423000040	50RR296	08/17/22	06/30/26	4	Contra Costa	Unincorporated	Union Pacific Railroad (UPRR)	001A-13.60 / CC-1164	751692P
13	130L298	Charleston Road	Local Agency	2022-2023	PE	5100	0423000278	50LP298	06/23/23	06/30/26	4	Santa Clara	City of Palo Alto	N/A	105E-33.19 / SCL-1195	755011Y
	130R298	Charleston Road	Railroad	2022-2023	PE	5100	0423000279	50RR298	06/23/23	06/30/26	4	Santa Clara	City of Palo Alto	CALTRAIN (JPBX)	105E-33.19 / SCL-1195	755011Y
14	130L299	High Street	Local Agency	2022-2023	PE	6480	0423000280	50LP299	07/11/23	12/31/26	4	Alameda	Oakland	N/A	001D-10.40 / ALA-1484	749712Y
	130R299	High Street	Railroad	2022-2023	PE	6480	0423000281	50RR299	07/11/23	12/31/27	4	Alameda	Oakland	Union Pacific Railroad (UPRR)	001D-10.40 / ALA-1484	749712Y
15	130L300	H Street	Local Agency	2022-2023	PE	6480	0423000282	50LP300	06/14/23	12/31/26	4	Alameda	Oakland	N/A	001D-26.40 / ALA-1543	749780A
	130R300	H Street	Railroad	2022-2023	PE	6480	0423000283	50RR300	06/16/23	12/31/27	4	Alameda	Oakland	Union Pacific Railroad (UPRR)	001D-26.40 / ALA-1543	749780A
16	130L301	Tennyson Road	Local Agency	2022-2023	PE	6480	0423000284	50LP301	07/06/23	12/31/25	4	Alameda	Oakland	N/A	001D-23.00 / ALA-1505	749774W
	130R301	Tennyson Road	Railroad	2022-2023	PE	6480	0423000285	50RR301	06/27/23	12/31/27	4	Alameda	Oakland	Union Pacific Railroad (UPRR)	001D-23.00 / ALA-1505	749774W
17	130L304	Cutting Boulevard	Local Agency	2022-2023	PE	5137	0424000043	50LP304	08/17/23	06/30/26	4	Contra Costa	Richmond	N/A	001A-10.80 / CC-1168	751678U
	130R304	Cutting Boulevard	Railroad	2022-2023	PE	5137	0424000042	50RR304	09/08/23	12/31/27	4	Contra Costa	Richmond	Union Pacific Railroad (UPRR)	001A-10.80 / CC-1168	751678U
<b>DISTRICT 5</b>																
18	7500291	Foothill Boulevard	Local Agency	2020-2021	PE	5016	0200000002	50LP291	12/11/20	12/31/24	5	San Luis Obispo	San Luis Obispo	N/A	001 E-247.15 / SLO-1022	745352P
	7500291	Foothill Boulevard	Railroad	2020-2021	PE	5016	0018000154	50RR291	12/11/20	12/31/24	5	San Luis Obispo	San Luis Obispo	Union Pacific Railroad (UPRR)	001 E-247.15 / SLO-1022	745352P
<b>DISTRICT 6</b>																
	7500283	Manning Ave	Local Agency	2020-2021	PE	5173	0621000019	50LP283	12/22/20	06/30/24	6	Fresno	Fowler	N/A	001B-217.20 / FRE-1021	756867H



#	FED ID#	Grade Crossing Name	Contract Party	Alloc Year	Phase	Location Code	Advantage ID	Contract No.	Contract Start Date	Contract End Date	District	County	City	Railroad	PUC # (RR PUC ID)	DOT # (RR FED ID)
19	7500283	Manning Ave	Railroad	2020-2021	PE	5173	0621000019	50RR283	12/22/20	06/30/24	6	Fresno	Fowler	Union Pacific Railroad (UPRR)	001B-217.20 / FRE-1021	756867H
20	7500268	Avenue 336	Local Agency	2019-2020	CON	5946	0019000290	75LX337	10/11/19	12/31/24	6	Tulare	Unincorporated	N/A	103BC-248.10 / TUL-1160	756762U
	7500268	Avenue 336	Railroad	2019-2020	CON	5946	0019000290	75LX336	11/11/19	06/30/24	6	Tulare	Unincorporated	San Joaquin Valley Railroad (SJVR), Genesee & Wyoming Inc.	103BC-248.10 / TUL-1160	756762U
21	130L293	Shields Avenue	Local Agency	2021-2022	PE	7510	0623000019	50LP293	08/02/22	12/31/24	6	Fresno	Fresno	N/A	002-1001.30 / FRE-1146	028580A
	130R293	Shields Avenue	Railroad	2021-2022	PE	7510	0623000018	50RR293	08/02/22	06/30/26	6	Fresno	Fresno	Union Pacific Railroad (UPRR)	002-1001.30 / FRE-1146	028580A
<b>DISTRICT 7</b>																
22	7500258	Stimson Avenue	Local Agency	2016-2017	CON	5342	0017000245	75LX320	02/28/19	06/30/24	7	Los Angeles	City of Industry	N/A	003-18.30 / LA-2546	810871U
	7500258	Stimson Avenue	Railroad	2016-2017	CON	5342	0017000245	75LX319	10/26/18	06/30/24	7	Los Angeles	City of Industry	Union Pacific Railroad (UPRR)	003-18.30 / LA-2546	810871U
23	7500287	Avenue J	Local Agency	2019-2020	PE	5419	0721000027	50LP287	11/01/20	12/31/25	7	Los Angeles	Lancaster	N/A	001B.406.10	750641B
	7500287	Avenue J	JPA Railroad	2019-2020	PE	5419	0721000027	50LR287	11/01/20	12/31/25	7	Los Angeles	Lancaster	MetroLink (SCRRA)	001B.406.10	750641B
	7500287	Avenue J	Railroad	2019-2020	PE	5419	0721000027	50RR287	11/01/20	12/31/25	7	Los Angeles	Lancaster	Union Pacific Railroad (UPRR)	001B.406.10	750641B
24	7500276	Avenue K	Local Agency	2019-2020	PE	5419	0720000254	50LP276	10/01/20	06/03/25	7	Los Angeles	Lancaster	N/A	001B-407.10, 101VY-75.04 / LA-1128	750608B
	7500276	Avenue K	JPA Railroad	2019-2020	PE	5419	0720000254	50LR276	10/01/20	06/03/25	7	Los Angeles	Lancaster	MetroLink (SCRRA)	001B-407.10, 101VY-75.04 / LA-1128	750608B
	7500276	Avenue K	Railroad	2019-2020	PE	5419	0720000254	50RR276	10/01/20	06/03/25	7	Los Angeles	Lancaster	Union Pacific Railroad (UPRR)	001B-407.10, 101VY-75.04 / LA-1128	750608B
25	7500277	Avenue M	Local Agency	2019-2020	PE	5419	0720000253	50LP277	10/01/20	06/03/25	7	Los Angeles	Lancaster	N/A	001B-409.10 / 101VY-73.02 / LA-1227	750642H
	7500277	Avenue M	JPA Railroad	2019-2020	PE	5419	0720000253	50LR277	10/01/20	06/03/25	7	Los Angeles	Lancaster	MetroLink (SCRRA)	001B-409.10 / 101VY-73.02 / LA-1227	750642H
	7500277	Avenue M	Railroad	2019-2020	PE	5419	0720000253	50RR277	10/01/20	06/03/25	7	Los Angeles	Lancaster	Union Pacific Railroad (UPRR)	001B-409.10 / 101VY-73.02 / LA-1227	750642H
26	7500252	Slater Avenue	Local Agency	2016-2017	CON	5006	0017000246	75LX308	07/19/17	06/30/22	7	Los Angeles	Los Angeles	N/A	001BBG-491.50 / LA-1435	760558C
	7500252	Slater Avenue	Railroad	2016-2017	CON	5006	0017000246	75LX307	07/19/17	06/30/22	7	Los Angeles	Los Angeles	Union Pacific Railroad (UPRR)	001BBG-491.50 / LA-1435	760558C
27	7500285	Avenue P	Local Agency	2019-2020	PE	6303	0721000025	50LP285	11/01/20	12/31/25	7	Los Angeles	Palmdale	N/A	001B-412.20, 101VY-69.95 / LA-1217	75285A
	7500285	Avenue P	JPA Railroad	2019-2020	PE	6303	0721000025	50LR285	11/01/20	12/31/25	7	Los Angeles	Palmdale	MetroLink (SCRRA)	001B-412.20, 101VY-69.95 / LA-1217	75285A
	7500285	Avenue P	Railroad	2019-2020	PE	6303	0721000025	50RR285	11/01/20	12/31/25	7	Los Angeles	Palmdale	Union Pacific Railroad (UPRR)	001B-412.20, 101VY-69.95 / LA-1217	75285A
28	7500286	San Antonio Ave	Local Agency	2019-2020	PE	6303	0721000024	50LP286	11/01/20	12/31/24	7	L.A.	Pomona	N/A	0018-515.20 / 003-32.80 / LA-1242	746932J
	7500286	San Antonio Ave	Railroad	2019-2020	PE	6303	0721000024	50RR286	11/01/20	12/31/24	7	L.A.	Pomona	Union Pacific Railroad (UPRR)	0018-515.20 / 003-32.80 / LA-1242	746932J
29	7500290	Las Posas & SR34	Local Agency	2019-2020	PE	5952	0720000040	50LP290	10/01/20	06/30/25	7	Ventura	Unincorporated	N/A	001E-410.45 / VEN1070	745870K
	7500290	Las Posas & SR34	Railroad	2019-2020	PE	5952	0720000040	50RR290	10/01/20	06/30/25	7	Ventura	Unincorporated	Union Pacific Railroad (UPRR)	001E-410.45 / VEN1070	745870K
30	130L297	Avenue R	Local Agency	2021-2022	PE	5378	0723000007	50LP297	08/11/26	12/31/25	7	L.A.	Palmdale	N/A	001B-414.20, 101VY-67.92 / LA-1290, DOT	750602K
	130X297	Avenue R	JPA Railroad	2021-2022	PE	5378	0723000012	50LR297	08/11/26	06/30/26	7	L.A.	Palmdale	MetroLink (SCRRA)	001B-414.20, 101VY-67.92 / LA-1290, DOT	750602K
	130R297	Avenue R	Railroad	2021-2022	PE	5378	0723000013	50RR297	08/11/22	06/30/26	7	L.A.	Palmdale	Union Pacific Railroad (UPRR)	001B-414.20, 101VY-67.92 / LA-1290, DOT	750602K
31	130L3003	District Boulevard	Local Agency	2022-2023	PE	5139	0723000155	50LP303	06/26/23	12/31/25	7	L.A.	Vernon	N/A	003A-3.90 / LA-2566, DOT	81092T
	130R303	District Boulevard	Railroad	2022-2023	PE	5139	023000156	50RR303	09/12/23	12/31/27	7	L.A.	Vernon	Union Pacific Railroad (UPRR)	003A-3.90 / LA-2566, DOT	81092T
32	N/A	Newhall Avenue	Local Agency	N/A	N/A	5450	N/A	N/A	Pending	Pending	7	L.A.	Santa Clarita	N/A	101VY-29.61 / LA-3280	746018X
	N/A	Newhall Avenue	Railroad	N/A	N/A	5450	N/A	N/A	Pending	Pending	7	L.A.	Santa Clarita	Union Pacific Railroad (UPRR)	101VY-29.61 / LA-3280	746018X
<b>DISTRICT 8</b>																



#	FED ID#	Grade Crossing Name	Contract Party	Alloc Year	Phase	Location Code	Advantage ID	Contract No.	Contract Start Date	Contract End Date	District	County	City	Railroad	PUC # (RR PUC ID)	DOT # (RR FED ID)
33	7500288	San Gorgonio Ave	Local Agency	2019-2020	PE	5214	0821000010	50LP288	10/01/20	12/31/24	8	Riverside	Banning	N/A	001B-568.20/ RIV-1003	760694C
	7500288	San Gorgonio Ave	Railroad	2019-2020	PE	5214	0821000010	50RR288	10/01/20	06/30/25	8	Riverside	Banning	Union Pacific Railroad (UPRR)	001B-568.20/ RIV-1003	760694C
34	130L294	Campus Avenue	Local Agency	2021-2022	PE	5092	0823000006	50LP294	08/04/22	12/30/24	8	San Bernardino	Ontario	N/A	003-38.30   SBD-1454	810907A
	130R294	Campus Avenue	Railroad	2021-2022	PE	5092	0823000008	50RR294	08/04/22	06/30/26	8	San Bernardino	Ontario	Union Pacific Railroad (UPRR)	003-38.30   SBD-1454	810907A
35	130L295	Radio Road	Local Agency	2021-2022	PE	5104	0823000007	50LP295	08/04/22	21/31/2024	8	Riverside	Corona	N/A	002B-22.80 / RIV-1134	026521R
	130R295	Radio Road	Railroad	2021-2022	PE	5104	0823000009	50RR295	08/04/22	06/30/26	8	Riverside	Corona	BNSF Railway	002B-22.80 / RIV-1134	026521R
<b>DISTRICT 10</b>																
36	7500289	West Lane	Local Agency	2020-2021	PE	5008	1021000019	50LP289	08/01/21	06/30/25	10	San Joaquin	Stockton	N/A	001BEL-82.14 / SJ-1099	752897L
	7500289	West Lane	Railroad	2020-2021	PE	5008	1021000019	50RR289	08/01/21	06/30/25	10	San Joaquin	Stockton	Union Pacific Railroad (UPRR)	001BEL-82.14 / SJ-1099	752897L
37	7500273	Olive Street	Local Agency	2018-2019	CON	5173	0019000409	75LX343	11/01/19	06/30/24	10	Merced	Unincorporated	BNSF Railway	002-1066.50/ MER-1089	028708T
38	7500278	Winton Way	Local Agency	2019-2020	CON	5939	0019000407	75LX352	11/01/19	06/30/25	10	Merced	Unincorporated	N/A	002-1065.30 / MER-1086	028706E
	7500278	Winton Way	Railroad	2019-2020	CON	5939	0019000407	75LX353	11/01/19	06/30/25	10	Merced	Unincorporated	BNSF Railway	002-1065.30 / MER-1086	028706E
39	N/A	Daubenberger	Local Agency	Pending	N/A	5938	N/A	N/A	Pending	Pending	10	Stanislaus	Unincorporated	N/A	001B-128.40	752838J
	N/A	Daubenberger	Railroad	Pending	N/A	5938	N/A	N/A	Pending	Pending	10	Stanislaus	Unincorporated	Union Pacific Railroad (UPRR)	001B-128.40	752838J
<b>HEADQUARTERS</b>																
40	7500211	CPUC Database	State Agency	2013-2014	PE	6216	0013000264	75LX235	05/15/13	06/30/24	HQ	Sacramento	Sacramento	N/A	N/A	N/A

**Disclaimer**  
Protection of Data from Discovery Admission into Evidence

23 U.S.C. 148(h)(4) states "Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section[HSIP], shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports, surveys, schedules, lists, or other data."

23 U.S.C. 409 states "Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data."

# Appendix 3. Rail Network Inventory

## APPENDIX 3.1. DESCRIPTION AND INVENTORY

## PASSENGER RAIL STATION INVENTORY

### Description and Inventory

This inventory includes the following data points:

- Annual Ridership
- Service frequency for each station by type of service and route
- Station location type (urban, suburban, rural/small community, park and ride, airport)
- Local transit, intercity bus, commuter rail, local rail, and future High Speed Rail connectivity
- Parking availability (vehicle and bicycle)
- Walk and Bike Scores (from Walkscore.com)

### Long-Distance Services

Expanding and improving an integrated statewide rail system requires coordination between service providers, as well as between service providers and local governments. This section summarizes existing passenger rail service providers in California, with a detailed explanation of the three categories of passenger rail services operating in California today: 1. Intercity passenger rail services; 2. Commuter rail services in metropolitan regions or between adjacent regions; and 3. Urban passenger rail transit systems serving metropolitan areas. Intercity passenger rail provides transportation between metropolitan areas, to rural areas, and to points beyond California’s borders.

California’s intercity rail services can be divided into two groups: Amtrak long-distance routes, which are funded by Amtrak and serve both California and interstate markets; and State-supported routes that serve California travel markets.

**Table 1.1: Multi-State Amtrak long-distance passenger routes serving California**

\*Ridership totals are based on Federal Fiscal Years

Name	Description	Route	*Ridership
California Zephyr	Emeryville-Sacramento - Reno-Denver-Chicago	The California Zephyr provides daily round trip regional service in the Emeryville-Sacramento-Reno corridor. With stops in Truckee, Salk Lake City, Denver Omaha, and Chicago.	2021: 184,667 2022: 290,424 2023: 328,458

Coast Starlight	Los Angeles-Oakland-Sacramento-Portland-Seattle	The Coast Starlight daily round trip is the second most popular long-distance train in the Amtrak system and is the only rail serving the Pacific Northwest.	2021: 189,593 2022: 352,727 2023: 338,017
Sunset Limited	Los Angeles-San Antonio-New Orleans	The Sunset Limited operates 3 days per week and is the only rail serving Palm Springs.	2021: 57,562 2022: 73,904 2023: 77,288
Southwest Chief	Los Angeles-Albuquerque-Kansas City-Chicago	The southwest Chief is a daily round trip service and is the only rail serving Los Angeles and Victorville, Barstow and Needles to the East.	2021: 135,901 2022: 223,654 2023: 253,838

**Intercity State-Supported Passenger Routes in California** Intercity passenger rail provides transportation between metropolitan areas, to rural areas, and to points beyond California’s borders. Amtrak operates all intercity rail services in the state.

A JPA is a special entity consisting of two or more government agencies jointly exercising power over a shared service. JPAs have proven useful in scaling the provision of rail service across governmental geographies, while maintaining the benefits of local knowledge of the market being served. Three JPAs have been established in California to organize and manage intercity passenger rail service across jurisdictional and geographic boundaries; they are described in the sections below. The State funds the services and provides oversight, including overall planning, coordinating, and budgeting, to ensure that the State-supported rail and Thruway bus system are integrated internally and with the rest of the commuter and planned HSR Systems, as well as the transit systems—with the goal of a statewide integrated and seamless system. Appendix A describes State-supported intercity passenger rail agency roles and responsibilities. Capitol Corridor Joint Powers Authority.

**Table 1.2: Joint Powers Authority Services**



Name	Description	Route	Ridership
CCJPA	The CCJPA was the first agency that took over administration of intercity operations from Caltrans under the provisions of SB 457.	150-mile route between Auburn and San Jose (Placer, Sacramento, Yolo, Solano, Contra Costa, San Francisco, Alameda, and Santa Clara Counties).	FY 2018: 1,706,849 FY 2019: 1,777,136 FY 2020: 503,616 FY 2021: 354,373 FY 2022: 704,365 FY 2023: 921,105
SJJPA	The SJJPA took over management and administration of the San Joaquins service from the State on July 1, 2015, under the provisions of an ITA between the State and SJJPA, pursuant to AB 1779 (2012).	343-mile route between 11 counties: Sacramento, Contra Costa, Alameda, San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and Kern.	FY 2018: 1,090,200 FY 2019: 1,076,454 FY 2020: 794,634 FY 2021: 392,538 FY 2022: 656,469 FY 2023: 828,352
LOSSAN	Effective July 1, 2015, administrative and oversight responsibility passed from Caltrans to the LOSSAN JPA under the provisions of an ITA between the State and LOSSAN that was completed pursuant to the provisions of SB 1225 (2012).	351-mile route between 6 counties: San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Diego.	FY 2018: 2,998,296 FY 2019: 2,777,822 FY 2020: 2,075,229 FY 2021: 596,251 FY 2022: 1,469,800 FY 2023: 1,542,198

CCJPA provided 30 weekday trains between Sacramento and Oakland and 14 daily trains between Oakland and San Jose between August 2012 through the start of the pandemic in March of 2020. In March 2020, CCJPA reduced train service to 5 round trips. This increased to 8 round trips on weekdays and 5 on weekends in June of 2020. In June of 2021, service frequency increased to 11 round trips on weekdays and 9 round trips on weekends. By October of 2022, weekend service was fully restored to pre-COVID service levels of 11 round trips. Weekday service was increased to 12 round trips. CCJPA had plans to return to pre-pandemic train service levels. For fiscal years FY 2023-24 and FY 2024-25, CCJPA proposed the following operating plans:

- Sacramento – Oakland: 15 weekday round-trip /11 weekend round-trip trains
- Oakland – San Jose: 7 round-trip trains
- Sacramento – Roseville: 1 round-trip train
- Roseville – Auburn: 1 round-trip train

SJJPA started with two daily round trips between Oakland and Bakersfield in 1979-80 with annual ridership totaling approximately 123,000. Ridership steadily increased over time, reaching a peak in FY 2013-14 with over 1.2 million passengers. Since that time ridership slightly decreased and held steady. When the COVID-19 Pandemic started SJJPA staff directed Amtrak to reduce San Joaquins service from 7 daily round trips to 4 as well as reduce Thruway bus service. In FY 2020-21 and FY 2021-22, ridership slowly recovered and reached peak recovery in October 2022 by recovering 86% of ridership. SJJPA continues to progress in ridership return month-over-month with a forecasted recovery of 84% for FY 2023.

At the beginning of FY 2019-20, Amtrak operated 13 daily Pacific Surfliner roundtrips between San Diego and Los Angeles. Of those trips, 5 daily roundtrips extended north to San Barbara and Goleta, with 2 roundtrips extending to San Luis Obispo. As with CCJPA and SJJPA, because of the COVID-19 Pandemic, the Pacific Surfliner also saw a reduction in service and connecting thruway bus service. In 2020, service was cut to just 6 roundtrips. In FY 2020-21, as travel restrictions were eased, additional roundtrips were restored. Currently, the Pacific Surfliner is operating 10 roundtrips between San Diego and Los Angeles and 4 between Los Angeles and Goleta, with 2 trains extending to San Luis Obispo.

*Amtrak Thruway Bus Network*

An extensive network of dedicated Amtrak Thruway buses supports intercity passenger rail by providing dedicated connecting service with guaranteed seating to markets without direct passenger rail service. Caltrans is completing a “California Intercity Bus Study” which will recommend strategies and improvements to further integrate the statewide rail and transit network.

<b>Capitol Corridor Thruway Bus Route Ridership – FFY 2022</b>		
<b>Thruway Bus Route</b>		<b>Ridership</b>
Route 3	(Sacramento – Marysville – Chico – Redding)	2,227
Route 20	(Sacramento – Roseville – Colfax – Reno)	30,697
Route 21	(Oakland – San Jose – Santa Barbara)	31,444
Route 35	(Martinez – Vallejo – Napa – Santa Rosa – Eureka)	6,132
Route 99	(San Francisco – Emeryville)	74,267
<b>Total Ridership</b>		<b>144,767</b>

<b>San Joaquin Thruway Bus Route Ridership – FFY 2022</b>		
<b>Thruway Bus Route</b>		<b>Ridership</b>
Route 1	(Fresno/Bakersfield – Los Angeles – Santa Ana – Oceanside – San Diego)	223,678
Route 3	(Stockton – Sacramento – Chico – Redding)	129,519
Route 6	(Stockton – San Jose – Santa Cruz)	23,275
Route 7	(Martinez – Napa – Santa Rosa – Arcata)	32,207
Route 10	(Santa Barbara – Bakersfield – Barstow – Las Vegas)	31,550
Route 15a/15b	(Merced – Yosemite National Park) (Fresno – Yosemite National Park)	4,621
Route 18	(Visalia – Hanford – San Luis Obispo – Santa Maria)	10,650

Route 19	(Bakersfield – Pasadena – Riverside – San Bernardino)	34,397
Route 56	(San Jose – Stockton)	4,672
Route 99	(Oakland – Emeryville – San Francisco)	42,027
536,596	<b>Total Ridership</b>	<b>536,596</b>

Pacific Surfliner Thruway Bus Route Ridership – FFY 2022		
Thruway Bus Route		Ridership
Route 4	(Los Angeles – Santa Barbara – Goleta)	6,365
Route 17	(Santa Barbara – San Luis Obispo – Oakland)	51,698
Route 39	(Fullerton – Palm Springs – Coachella Valley)	15,236
	<b>Total Ridership</b>	<b>73,299</b>

**Table 1.4: Commuter Rail Service Providers**

Name	Description	Route	Ridership
Caltrain	Caltrain operates 7 days a week on 77 miles of track owned by PCJPB. The system has a mixture of local, limited, and express trains.	The route operates from San Francisco through the San Francisco Peninsula to San Jose and Gilroy.	2018: 19,088,504 2019: 18,179,876 2020: 14,067,904 2021: 1,263,084 2022: 4,054,829 2023: 7,012,116
Altamont Corridor Express (ACE)	ACE operates on weekdays on 85 miles of track owned by UPRR and PCJPB.	The route operates from Stockton to San Jose via Livermore and Fremont.	2018: 1,398,954 2019: 1,506,183 2020: 1,061,990 2021: 160,007 2022: 321,752 2023: 474,498
Metrolink	Metrolink operates on weekdays on 534 route-miles in the regional system.	The route offers a large network of commuter rail between Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties.	2018: 14,190,870 2019: 12,824,059 2020: 9,357,013 2021: 2,102,196 2022: 3,754,556 2023: 4,662,629

COASTER	COASTER commuter trains offer service on 41 route-miles.	The route operates along the San Diego County coastline, from Oceanside to San Diego, via Carlsbad, Encinitas, and Solana Beach.	2018: 1,433,125 2019: 1,408,677 2020: 944,109 2021: 162,707 2022: 588,409 2023: 813,207
SMART	SMART's initial segment runs 43 miles.	The route operates from Sonoma County Airport in Santa Rosa, south to San Rafael Transit Center.	2018: 636,029 2019: 716,847 2020: 567,103 2021: 122,849 2022: 354,328 2023: 640,099

Source: FTA National Transit Database Agency Profiles

### Urban passenger rail transit systems serving metropolitan areas

Urban rail systems provide passenger service within a metropolitan area. Urban rail service exists in a number of different forms for varying purposes, and includes high-capacity, high-speed heavy-rail transit service. Connections to commuter and intercity rail systems provide convenient access for passengers traveling long distances with rail.

### Table 1.5: California Transportation Facilities

California's freight rail network supports the operations of industries throughout the state and links California with domestic, interregional, and international markets. Our freight rail system is comprised of two Class I railroads: BNSF and Union Pacific, and 26 short line railroads that connect to rail yards, warehousing, and distribution centers throughout the state. The rail network covers over 6,500 miles of track across 29 different railroads.

Freight Rail Route Mileage	
Freight: Class I Railroads	5,418
Freight: Class III Railroads	1,317
Freight: Switching Terminals	275
Passenger Rail Route Mileage	
Long-Distance	887
Intercity Passenger Rail	1,663
Commuter and Regional Rail	830
Urban Mass Transit Rail	382
Highway/Roadway	
Highway/Roadway Mileage	175,818
Airports	

Commercial Service Airports	28
General Aviation Airports	215
Special Use Airports	68
<b>Ports</b>	
Seaports (Inland and Coastal)	12
International Ports of Entry	6

## Station Area Planning

### Customer Amenities

Pull basic statistics from station inventory for intercity stations:

% of stations with bathrooms, WiFi, staff, etc.

Access to local transit (from station inventory)

Bike parking/sharing

### Access and Land-Use

Population and Job density of station areas (from inventory)

Accessibility isochrones: How far can you walk/bike from the station given network constraints (from station inventory)

Station Area Land Use (not currently available, but could easily add if comprehensive data is available)

Station area bicycle network data (currently using Open Street Map)

Bicycle and pedestrian safety data

Points of Interest (rough estimate available from Open Street Map)

## Sources

Inventory data was manually collected from a number of sources including:

## Notes

**"Inventory of intercity and commuter passenger stations including:**

- **Service frequency for each station, by type of service and route.**
- **Station location type (i.e., urban, suburban, rural/small community, park & ride, airport).**
- **Local transit and intercity bus connections, parking availability, and assessment of non-motorized transportation access including bicycle parking facilities."**

## **APPENDIX 3.2. CALIFORNIA INTERCITY & LONG-DISTANCE PASSENGER RAIL STATION INVENTORY**



Station Name	Code	Ridership FY 2023	Services	Total Car Parking Spaces	Total Bike Parking	Regional Service	Thruway Bus	Local Transit
Anaheim	ANA	129,231	Pacific Surfliner	500	24	Yes	Yes	Yes
Antioch-Pittsburg	ACA	27,985	San Joaquins		0	No	No	Yes
Auburn	ARN	10,905	Capitol Corridor	7	18	No	Yes	Yes
Bakersfield	BFD	658,266	San Joaquins	206	24	No	Yes	Yes
Barstow	BAR	3,855	Amtrak Long Distance	97	0	No	Yes	No
Berkeley	BKY	77,341	Capitol Corridor	359	28	No	No	Yes
Burbank	BBK	7,152	Pacific Surfliner	458	12	Yes	Yes	Yes
Burbank Airport - South	BUR	46,470	Pacific Surfliner	40	0	Yes	Yes	Yes
Camarillo	CML	40,346	Pacific Surfliner	406	2	Yes	Yes	Yes
Carpinteria	CPN	20,980	Pacific Surfliner	120	8	No	Yes	Yes
Chatsworth	CWT	38,353	Pacific Surfliner	826	42	Yes	Yes	Yes
Chico	CIC	25,250	Amtrak Long Distance	15	6	No	Yes	Yes
Colfax	COX	5,214	Amtrak Long Distance	36	6	No	Yes	Yes
Corcoran	COC	17,915	San Joaquins	90	0	No	No	Yes
Davis	DAV	223,609	Capitol Corridor, Amtrak Long Distance	140	223	No	Yes	Yes
Dunsmuir	DUN	3,507	Amtrak Long Distance	38	0	No	No	Yes
Emeryville	EMY	471,695	Capitol Corridor, San Joaquins, Amtrak	125	20	No	Yes	Yes
Fairfield-Vacaville	FFV	51,360	Capitol Corridor	144	24	No	No	Yes
Fremont-Centerville	FMT	29,124	Capitol Corridor	170	14	Yes	Yes	Yes
Fresno	FNO	278,603	San Joaquins	112	3	No	Yes	Yes
Fullerton	FUL	160,622	Pacific Surfliner, Amtrak Long Distance	1330	24	Yes	Yes	Yes
Glendale	GDL	471,695	Pacific Surfliner	443	2	Yes	Yes	Yes
Goleta	GTA	40,094	Pacific Surfliner	27	26	No	No	No
Grover Beach	GVB	17,602	Pacific Surfliner	26	2	No	Yes	Yes
Guadalupe	GUA	10,099	Pacific Surfliner	28	0	No	No	Yes
Hanford	HNF	128,786	San Joaquins	46	0	No	Yes	Yes
Hayward	HAY	27,477	Capitol Corridor	73	4	No	No	Yes
Irvine	IRV	353,971	Pacific Surfliner	1,650	27	Yes	Yes	Yes
Lodi	LOD	5,145	San Joaquins	45	4	No	Yes	Yes
Los Angeles	LAX	1,000,243	Pacific Surfliner, Amtrak Long Distance	2,200	200	Yes	Yes	Yes
Madera	MDR	23,438	San Joaquins	32	0	No	No	No
Martinez	MTZ	242,645	Capitol Corridor, San Joaquins, Amtrak	142	15	No	Yes	Yes
Merced	MCD	120,583	San Joaquins	50	0	No	Yes	Yes
Modesto	MOD	89,101	San Joaquins	72	0	No	No	Yes
Moorpark	MPK	23,091	Pacific Surfliner	278	0	Yes	Yes	Yes
Needles	NDL	5,826	Amtrak Long Distance	65	0	No	No	Yes
Northridge	NRG	12,610	Pacific Surfliner	270	14	Yes	Yes	Yes
Oakland Coliseum	OAC	27,940	Capitol Corridor	37	20	No	No	Yes
Oakland Jack London	OKJ	199,354	Capitol Corridor, San Joaquins, Amtrak	1,237	12	No	Yes	Yes
Oceanside	OSD	257,767	Pacific Surfliner	1,285	38	Yes	Yes	Yes



Station Name	Code	Ridership FY 2023	Services	Total Car Parking Spaces	Total Bike Parking	Regional Service	Thruway Bus	Local Transit
Ontario	ONA	11,675	Amtrak Long Distance	35	0	No	Yes	Yes
Oxnard	OXN	81,236	Pacific Surfliner	113	23	Yes	Yes	Yes
Palm Springs	PSN	1,687	Amtrak Long Distance	40	0	No	No	No
Paso Robles	PRB	14,301	Amtrak Long Distance	17	0	No	Yes	Yes
Pomona - Downtown	POS	1,315	Amtrak Long Distance	700	30	Yes	No	Yes
Redding	RDD	7,008	Amtrak Long Distance	16	0	No	Yes	Yes
Richmond	RIC	154,239	Capitol Corridor, San Joaquins, Amtrak	20	60	No	No	Yes
Riverside - Downtown	RIV	24,163	Amtrak Long Distance	1,140	20	Yes	Yes	Yes
Rocklin	RLN	9,653	Capitol Corridor	93	5	No	Yes	No
Roseville	RSV	34,747	Capitol Corridor, Amtrak Long Distance	78	9	No	Yes	Yes
Sacramento Valley	SAC	740,697	Capitol Corridor, San Joaquins, Amtrak	285	59	No	Yes	Yes
Salinas	SNS	31,962	Amtrak Long Distance	105	0	No	Yes	Yes
San Bernardino	SNB	16,403	Amtrak Long Distance	787	8	Yes	Yes	Yes
San Clemente Pier	SNP	5,110	Pacific Surfliner	146	0	Yes	No	Yes
San Diego - Old Town	OLT	151,928	Pacific Surfliner	412	32	Yes	No	Yes
San Diego - Santa Fe Depot	SAN	274,987	Pacific Surfliner		8	Yes	Yes	Yes
San Jose-Diridon	SJC	202,760	Capitol Corridor, Amtrak Long Distance	783	50	Yes	Yes	Yes
San Juan Capistrano	SNC	74,995	Pacific Surfliner	187	0	Yes	Yes	No
San Luis Obispo	SLO	109,784	Pacific Surfliner, Amtrak Long Distance	50	4	No	Yes	Yes
Santa Ana	SNA	72,613	Pacific Surfliner	591	24	Yes	Yes	Yes
Santa Barbara	SBA	325,490	Pacific Surfliner, Amtrak Long Distance	50	8	No	Yes	Yes
Santa Clara	SCC	28,238	Capitol Corridor	256	61	Yes	No	Yes
Santa Clara Great America	GAC	65,006	Capitol Corridor	183	52	Yes	Yes	Yes
Simi Valley	SIM	29,971	Pacific Surfliner	576	4	Yes	Yes	Yes
Solana Beach	SOL	89,369	Pacific Surfliner		17	Yes	Yes	Yes
Stockton-Downtown	SKT	11,714	San Joaquins	40	0	Yes	Yes	Yes
Stockton-San Joaquin	SKN	399,001	San Joaquins	24	0	No	Yes	Yes
Suisun-Fairfield	SUI	50,427	Capitol Corridor	263	13	No	No	Yes
Lompoc-Surf	LPS	8,089	Pacific Surfliner	40	0	No	No	No
Truckee	TRU	15,588	Amtrak Long Distance	48	3	No	Yes	Yes
Turlock-Denair	TRK	26,347	San Joaquins	48	0	No	No	No
Van Nuys	VNC	63,035	Pacific Surfliner	364	0	Yes	Yes	Yes
Ventura	VEC	62,284	Pacific Surfliner	20	0	No	Yes	No
Victorville	VRV	5,352	Amtrak Long Distance	46	0	No	Yes	No
Wasco	WAC	25,830	San Joaquins	35	0	No	No	Yes



# Appendix 4. Passenger Planning Strategy

## STATION DESIGN

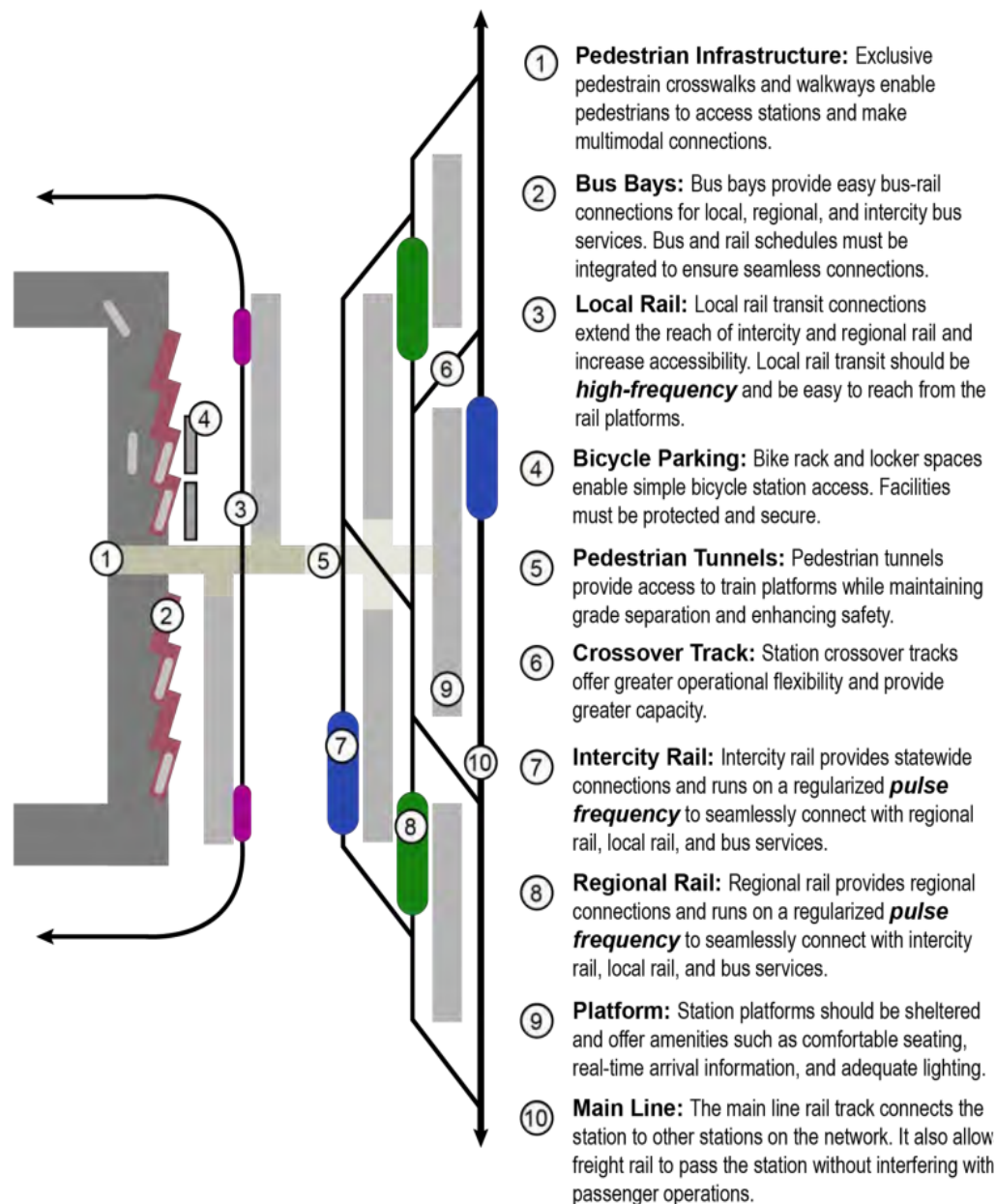


Exhibit 3.1: Diagram of “Pulsed” Service and Station Integration

## CALTRANS' SERVICE LED STRATEGIC PLANNING: METHODOLOGY & PROCESS

Since 2015, Caltrans has been developing its 'Service-Led Planning Methodology', identifying the processes and technical resources required to support the methodology, and iterating refinement in practice with stakeholders. The result is a standardized process and set of expectations for Caltrans to structure planning exercises and technical analysis both internally and with stakeholders.

Going forward, Caltrans will expect stakeholders to utilize Service-Led Strategic Planning to develop service plans and identify capital investment needs. Grant awards, phased implementation priorities, and strategic recommendations will require articulation of a given service improvement or infrastructure investment utilizing the methodology. Caltrans' Division of Rail will provide resources, training, and ongoing engagement with stakeholders to implement the Service-led Strategic Planning methodology.

Service planning, as opposed to infrastructure planning or operations planning, is primarily



concerned with provision of the transit service itself; what markets are served, how frequent that service is, what connections are provided, how much capacity is offered, and what trip times can be delivered. Service-led planning focuses on the customer, rather than on the operator or on the infrastructure developer. Only once a transit service concept is developed is it appropriate to design operations, analyze technology or equipment capable of delivering operations, or identify infrastructure necessary to support operations.

Service-led planning empowers planners to understand required operational changes and infrastructure investment and articulate tradeoffs in terms of their relative utility for customers. This process provides the necessary context to large scale projects and offers a clear, documentable, and reproducible reference for funding applications, stakeholder coordination, and project

development progress.

The Service-Led Planning Methodology utilizes technical tools appropriate to the resources and timelines required to develop analysis, operating plans, and recommendations to further implementation planning and strategic decision making. Typical outputs include stringline diagrams, which identify technical service slots and corridor-level capacity constraints. Outputs also include, timetables, which detail customer-facing schedules containing easy-to-access information about trip times, frequencies, and connection times. Netgraphs are another output used to demonstrate broader network connectivity and integration of the operating plans for each route.

Though Caltrans' Service-Led Planning methodology is a technical planning process that occurs between Caltrans and Agency partners, it is designed to be customer-centric, fully transparent, and reproducible. The repeating and predictable schedules in California's passenger network will serve all Californians without catering too much to the needs of one interest group over another. By focusing on enhancing the existing network and adding value to local transit services, Caltrans minimizes displacement and the unnecessary re-building of infrastructure. Caltrans documents and provides consistent inputs and a clear structure for partners to work to develop meaningful results.

The service-led planning methodology process produces clear understanding of opportunities, constraints, trade-offs, and implications for improving service within a network. Caltrans documents, outputs, and coordinates strategic recommendations. This process is intended to empower agencies to advance strategic planning, enhance stakeholder coordination, and implement service improvements.

### **Step 1 – Initiating Analysis**

Planning exercises can be initiated either by Caltrans, an operating or funding agency, or other stakeholders. Relevant questions for analysis can be identified from goals in the Rail Plan for implementing service improvements through the phased implementation strategy or generated by local advocacy or service goals.

Once the decision to begin a planning exercise is taken, Caltrans and relevant stakeholder agencies will need to coordinate to confirm shared assumptions and technical parameters.

### **Step 2 – A Single Source of Truth**

Caltrans has developed a statewide infrastructure model. This model contains current and future infrastructure assumptions and technical service slots identified across various planning and service delivery scenarios. Caltrans will continue to refine and update this database over time such that it always represents the State's latest understanding of infrastructure availability, service and operating parameters, and technical service slots.

Caltrans will provide stakeholders with a local, study area specific copy of the database and service slot assumptions from which to perform technical planning analysis. These resources will be provided as part of a 'Planning Kit' at the outset of an analysis exercise. Utilizing the Planning Kit is crucial to ensure multi-stakeholder planning work carries similar assumptions and constraints into analysis, as a shared foundation for recommendations.

### **Step 3 – Deploying the Service Led Strategic Planning Methodology**

The methodology itself works through four discrete phases of (1) identifying and confirming planning parameters for service goals, operations, and infrastructure considerations, (2) performing initial concept design to develop service concepts that achieve service goals in various ways, (3) concept refinement, where operational tradeoffs analyses, market analysis, and high-level feasibility are layered into an increasingly robust understanding and recommendations for service delivery, and (4) structuring those recommendations into a phased implementation strategy that aligns to expectations for market maturation, funding capacity, and project delivery.

## **Step 4 – Capturing Recommendations**

Crucially, resulting recommendations must be transparent, reproducible, and documented. It must be clear how any given recommendations are the result of a given set of goals, parameters, assumptions, refinement, and phasing strategy. Those recommendations can be documented and included in Caltrans' broader understanding of integrated service planning and technical analysis guiding State strategy and investments.

Recommendations are presented in a service-focused, operator-agnostic format. Customers, communities, and members of the public are engaged in these specific service planning outputs—as well as the rest of the Rail Plan, during the public outreach phase.

## Land Use and Housing

Housing, transportation, and land use decisions are codependent; location and availability of housing determines how people travel, how much they spend on transportation, and what mode they use. California faces a critical housing shortage which creates compounding affordability issues. The housing shortage has caused a rapid increase in housing costs, which disproportionately impacts California's most vulnerable populations.

Homelessness in California is growing at an alarming rate, with nearly 150,000 unhoused people in 2019. Housing shortages, especially in urban regions, has also led to residents moving further from jobs, goods, and services, and relying more heavily on cars as the main form of travel.

The status quo is not enough to support this growing economy and meet its robust economic and environmental future needs. Residents and workers in California's growing megaregions face mounting vehicle congestion and long commute times due to pressures on the housing market and the aging transportation infrastructure. Rail has a unique effect among transport modes, in that its structure of networked nodes (organized around rail stations and connection points) and its spatial efficiency (moving more people and goods using less physical space) result in efficient land use. A connected network, specifically, the synergy

between a modern, statewide rail network, will catalyze more compact land use patterns, the combined effect of which will be even greater reductions in GHG<sup>1</sup> emissions.

This effect has key benefits, both for the transportation system and the environment, because concentrated development around stations spares rural land and open space from the pressures of urban development. Less energy and travel time are needed to transport people and goods. Integrating rail systems with multimodal transportation and land use planning that minimizes sprawl offers residents, workers, and tourists more travel choices and better access to jobs, retail, entertainment, recreational facilities, and open spaces.

---

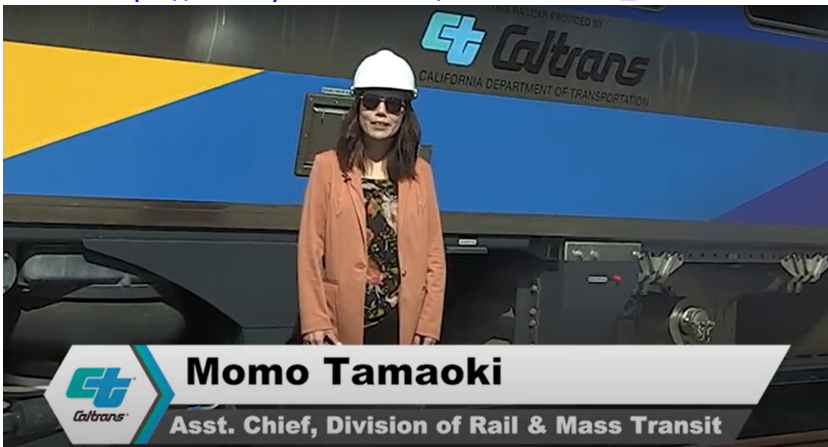
<sup>1</sup> Greenhouse gas

# OUTREACH AND COORDINATION SUMMARY

## OUTREACH EFFORTS

Over than 100 initial and update Rail Plan Presentations were given to transportation agencies, passenger rail operators, freight railroads, industry forums, and stakeholder groups to advertise about the development of the State Rail Plan

- The Administrative Draft was released in early 2022 for comment by partner agencies.
- Three Equity/Priority Community Workshops were held in August 2021 (see attached)
- To advertise the release of the public draft,
  - a FactSheet was created and posted on the Caltrans website (also attached to this memo): <https://dot.ca.gov/-/media/dot-media/programs/rail-mass-transportation/documents/california-state-rail-plan/20230406a-srpfactsheet-a11y.pdf>
  - Caltrans External Communications Branch at Planning and Modal Project Management Division assisted with Facebook and X (twitter) posts on the Caltrans HQ and Local District Pages.
- Movie: [https://www.youtube.com/watch?v=J1n\\_925ESsE&t=220s](https://www.youtube.com/watch?v=J1n_925ESsE&t=220s)



- The Public Draft was released in March 2023 and public comments were accepted for 90 days. An online public workshop was also held during this time.

## RESPONSE

### Agency and passenger rail operators

43 Comment letters were received from Agency and Passenger Railroad Operators.

### Freight Railroads

4 Comment letters were received from freight railroads. One was from a class I railroad and the other three were from short-line railroads.

### Members of the public

600 public comments, including 45 comment letters or e-mails

A summary of the Equity Priority Workshops and a Q&A document generated after the comments in the Public workshop are attached.

## **Advocacy and non-profit groups**

Eight comment letters were received from advocacy/outreach organizations.

Response to Comments

Comments received from various agencies described were considered and included during the development of this plan.

## **CALTRANS HEADQUARTERS AND LOCAL CALTRANS DISTRICT OUTREACH**

### **Local District Coordination**

Talking points documents were developed for and shared with all 12 Caltrans Local Districts in 2022

6 Comment letters were received from local Caltrans Districts.

### **CTP 2050 Coordination**

CTP 2050 Coordination CTP 2050 is a statutorily required long-range policy plan that provides a collective vision and a set of goals, policies, and recommendations to help guide transportation decisions and investments. CTP 2050 is an umbrella plan and sets a policy framework to organize and guide the development of each subsequent modal plan, including the Rail Plan. The CTP does not contain projects, but policies and strategies required to close the gap between what the regional transportation plans (RTP) aim to achieve and how much more is required to meet 2050 goals.

CTP 2050 provides a unifying and foundational policy framework for making effective, transparent, and transformational transportation decisions, addresses the varied transportation needs of urban, suburban, rural, and Tribal communities; and emphasizes implementation and identifies a timeline, roles, and responsibilities for each plan recommendation.

As the Rail Plan is mode-specific, it supports CTP 2050 goals, providing specificity as relates to the rail network. Each of the key Rail Plan Network Principles, discussed in more detail in this chapter, offer a pragmatic and reproducible planning approach that achieves the Rail Plan Vision as well as directly advances the CTP 2050 goals.



# EQUITY PRIORITY COMMUNITY WORKSHOPS

August 16 & 18, 2021

**DRAFT**  
**9/21/21**

---

## S U M M A R Y R E P O R T

---

### **INTRODUCTION**

On August 16th and August 18th, 2021, Caltrans Department of Rail and Mass Transportation conducted three workshops focused on equity priority communities and the 2022 California State Rail Plan (Rail Plan). The purpose of these workshops was to provide the background, purpose, and process for the Rail Plan, analyze the state of the rail system today and the projected growth, discuss the public involvement process, and to collect public input and perspectives on the current system, especially as it relates to impacts and benefits to equity priority communities across California. The workshops were organized into three regional groups, Northern, Central, and Southern California, to address regional needs. This report summarizes the proceedings of the workshop, discussions and questions from the public, and comments on the Rail Plan.

### **BACKGROUND**

Caltrans is currently developing the 2022 California State Rail Plan, which establishes a long-term vision for an integrated, cohesive statewide rail system that offers efficient passenger and freight service, supports California's economy, and helps achieve critical climate goals. The Rail Plan establishes a strategic vision for prioritizing state investment in the passenger and freight rail network statewide and provides a framework for coordination between planning partners, rail operators, host railroads, and the State to develop a rail network with a strategic vision in mind. The Rail Plan aims to create an integrated statewide network, provide a seamless experience for travelers, develop a strategy for freight rail infrastructure, support federal data collection requirement, establish a web-based resource for policy guidance, collaborate effectively with public and private partners, and ensure all Californians receive the system's benefits.

The 2022 State Rail Plan is an update to the existing 2018 Rail Plan and will aim to enhance rail service in the public interest and serve as a basis for federal and state rail investments in passenger and freight rail projects. More specifically, the 2022 Rail Plan seeks to revise the statewide vision by incorporating outputs from network integration activities and local/regional studies, advise priorities for state investment by updating

operating and capital investments, and devising implementation strategies to coordinate across funding and operating agencies.

The regional workshops provided an opportunity in the community engagement process to inform the public of the Rail Plan and to collect input on the needs of equity priority communities. The outcomes of the workshops will assist the project team in developing and refining the 2022 Rail Plan update.

### MEETING FORMAT

The three regional workshops occurred on August 16th and August 18th, 2021, via the Zoom Web Conferencing client. The workshops were organized into three regional groupings - Northern, Central, and Southern California - to facilitate focused discussions on specific areas and subjects that were better represented at the regional level.

Project team members from the Caltrans Department of Rail and Mass Transportation conducted the workshops with facilitation and recording support from MIG, Inc. Each workshop began with welcoming remarks, an overview of the workshop format, and a brief presentation that covered the purpose, background and schedule of the project. The majority of the ninety (90) minutes of time available during each workshop was spent engaging the participants and collecting input and responses to the discussion questions. Participant input and comments are summarized in this report.

### SUMMARY OF DISCUSSIONS

Following is a summary of comments and questions that were provided by participants from the three regional workshops. Rail Plan project team members provided responses to questions or comments when possible as identified in *italicized sub-bullets*.

#### **Question 1. How does passenger rail transit contribute to equity in quality of life? How could it be more effective doing so?**

- Reasonable rail service is not accessible to many low-income Californians, yet the state invests significantly in bus service for rail passengers.
  - *In addition to the RailPplan, the state has a bus specific effort, the California intercity bus study that is underway right now. Caltrans is planning to bring it out for review and stakeholder outreach this fall, going to address intercity bus services throughout the state, and the idea is to create a unified bus network, take advantage of funding.*
- It would be helpful to think through what role the state could play in protecting people, especially Black and Latino households, from displacement.
- Go through order/phasing in where grade separations should occur - will bring multi-modal improvements and safety to overburdened communities.
- Increased access in walkable neighborhoods allows more trips to happen without a car - especially day trips.

- Stabilizing passenger-rail accessible neighborhoods through state-support community land banks/land trusts is valuable and would help ensure transit is accessible.
- Frequent headways - train delays or cancellations can cause major delays
  - *Yes, absolutely. Time is money, thank you for that consideration.*
- Increased community driven safety requirements at rail stops
- Community hired safety monitors
  - *This is another good example of how we can be more thoughtful and creative regarding safety.*
- Partnership of community resources at rail stops - open outside "business hours"
  - *Yes, utilities, adult and youth, support and care, we need to think about how our infrastructure can better support these communities.*
- Not segmenting communities already experience adverse health impacts from transportation
- Increased community designed sound barriers
- Reasonable fares and efficient trains can provide a reasonable alternative to car travel
  - *Yes, as opposed to sitting on a freeway, the integration is really important to make those local connections to destinations.*
- Consider how rail can connect people to job centers
- One issue is local connections once arrived at destination stops - integration work is vital
- Look into establishing connections between freight rail and passenger lines

**Question 2. How could equitable fare policy meaningfully contribute to equity priority communities?**

- Fare integration and fare equity in the Bay Area - One challenge has been "how can we make agencies whole through funding sources"
- Fare policy decisions are primarily made at the regional/local level
- Equitable fare policy would streamline use of EDD or SNAP cards in the EMV system.
- That is a component of the "equity" portion of Cal-ITP a one-stop shop for eligibility verification as a first step could help integrate other social benefits
- Recent interest in free transit (mostly inner-city) how could free or reduced cost fares integrate to the rail plan?
- We will be looking at further identifying current and potential funding sources to address free or reduced fares.
- Transportation operations should be funded better so that fares could be cheaper than driving - even free for those who qualify
- Fare and affordable policy
  - *Yes this is important, we acknowledge historically the greatest barrier of the rail system is equity and priority communities*

**Question 3. How could the growth in freight rail service avoid or reduce impacts to equity priority communities?**

- Freight rail service will impact valley communities, such as delivering products by rail instead of truck. It will lower emissions impact as well, the communities there will no longer have to suffer from that either.
- Have the class 1's or shortline Freight Railroads been involved in the discussion to date - input would be valuable into how to streamline freight vs passenger
  - *A parallel study that is wrapping up: the Shortline Rail Implementation Plan. That is focused on hearing from class 1 shortline railroad, such as issues they run into; we are using these reviews to form the state rail plan. We value the input from our shortline partners.*
- Freight rail service will definitely impact the equity priorities communities - less trucks going through the communities
- Increase ratio of freight shipped by rail vs. highways
  - *Yes, this is a good example of integrated freight level planning.*
- Increase use of short line railroads to shift freight from highway to rail
  - *Yes, there is some infrastructure there that will increase in value to your community. Thank you for your comment.*
- Continue to develop clean freight rail technologies, such as hydrogen locomotives

**Question 4. What are opportunities for ongoing and meaningful engagement of equity priority communities in long-term rail planning?**

- 2022 CA State Rail Plan does not have priority on a google search- not very equitable
  - *Yes, this can make it difficult for the public to find. We can work towards trying to make this a better connection online so it is accessible to people.*
- Working through local transit agencies - access to existing transit users
  - *This is a good point, people often take the bus or other methods, so we need to continue to elevate these relationships through equity engagement*
- Providing funding for those targeted rail station local connections
- Improving relations with freight carriers
  - *Yes, this planning process very much involves collaborating with not only passenger rail but with freight rail partners*
- 2018 SRP shows up before 2022 Plan - consider linking to the '22 Plan on the 2018 website
- Priority communities are often taking the bus/local light rail already - find out what they want to see in long-term
- Consult with local air districts and their Community Air Protection Program (AB617) staff
  - *Communities experience their impacts from rail and other transit methods*

- When exploring equity questions work with Caltrans newly established Office of Equity to align priorities
- Spanish language workshops
- Go through order/phasing in which grade separations should occur - will bring multi-modal improvements and safety to overburdened communities
- Fact checking and integration of rail planning and messaging into other important messages to these communities
- RTPAs and MPOs are organized under the North State Super Region - NSRR could provide feedback on engagement

### **Additional Comments**

Questions and comments unrelated to the discussion questions can be found here.

- Are these all operating today for passenger?
  - *The map includes both existing and proposed routes*
- Santa Cruz County is not planning to abandon or ripe up our line - re: railbanking in Santa Cruz Branch Line
  - *At a high level, designed a network that meets interregional goal and connectivity between regions, sometimes not always identical prioritization as regional transit agencies. We work with them closely, this is an example of local preference is rail in the corridor, but this will be a public vote in a couple years. For right now this is still a significant corridor for statewide rail plan.*
- How are you addressing potential funding from federal infrastructure legislation?
  - *Funding opportunities are listed as well as upcoming and existing projects*
- Would love to follow-up re best ways to continue forward with the best data
- Are you including replacement of the bridge across the Carquinez Strait in your planning? Timeline? If not, why?
  - *Yes we are, looking at different alternatives. If we are building out to 2050 frequency levels, we can't have bottlenecks. We are in the process of discussing an alternative analysis that will better shift the region. There is still big policy questions, the timeline is in the long term planning horizon, probably won't be in the next 10 years.*
- What is the state SLR impact on Santa Barbara and Santa Cruz - is that being addressed?
  - *We address SLR in the plan, as well as other factors as well such as resiliency. We have been working with the coastal commission, looking at their plans to implement and making sure we are in alignment with those.*
- A first priority should address state investment in the Amtrak throughway bus service that is limited to all rail passengers
- In addition to the SRP, the state also has a bus specific effort which is currently underway.
- The way rail efficiency is measured is not effective - should look at utilization of the constraint corridors

- *When we try to quantify metrics for rail, the number of people passing depends on frequency of trains and how many move through the corridor at any given time and the capacity of vehicles and connectivity. In the short-term investments, we can make service improvements without a lot of capital costs by better managing and utilizing the railroad. We are looking at person through and other metrics. When the public draft goes public, you can put in more technical questions as well.*
- Santa Cruz Branch line is being abandoned by the train operator because there is no freight nor is passenger rail affordable
- The local preference was for rail in this corridor - it is still considered an important corridor at this time
- Why would State Rail Plan include the Santa Cruz Branch line when the local agency is moving forward with abandonment and removal of tracks?
- State or federal funding opportunities for upgrading at grade crossings or quiet zones?
  - *Yes there are funding opportunities, there are some specific to freight, section 130 is specific to grade crossing. We will consider this comment for further study.*
- Will the plan include discussion on technologies and clean locomotives?
  - *Yes, this will be discussed in the next rail plan. we have information on the zero emission vehicle or battery electric locomotives, we are going to continue to work closely with the air resources board.*
- Where can we implement quiet zones along rail lines? If not identified can we initiate a study on this?
- Quiet zones are primarily developed during the environmental review process and at the local level - this can definitely be something we look at
- How are you framing up the equity analysis? -can mean different things to different people
  - *This can mean different things to different people. This could be lowering emissions, lack of access, there are many angles to equity and many definitions. These inputs from you about how equity priority communities are defined are important for us to hear.*
- Paris Valley Line quiet zone as an example of Southern California
  - *A lot of these quiet zones get developed during the environmental process and communicate with the community regarding sounds is part of that process at the local level.*
- When exploring equity questions work with Caltrans newly established Office of Equity to align priorities
  - *Yes, this project has been in touch with that office. This workshop and the rail team does want to better collaborate with the office for the rail plan. This is more important now than ever moving forward to implement these equity topics.*

- Orange County has a few quiet zones established already. Some funded through Prop 116 Program.
- Mixed use residential development around industrial zoned areas could be considered if noise could be addressed.
- Look into providing funding for community rail crossing improvements that would allow quiet zones to be established.
- DRC is assisting Caltrans Equity office to identify what equity means for everyone - close to identifying an agreed upon definition.
  - *Yes, we are working together and in a good place where people can start agreeing on definitions, policies, plans and utilizing these tools we're working on to address transit and equity.*
- Are grade separations being considered as part of the plan?
  - *Yes, putting more of an emphasis on this in the 2022 SRP.*
- Speaking from a local transit district perspective, we often feel like the "equity" definition is elusive when it comes to funding.
- Will the plan include financing, or be financially constrained in some fashion?
  - *We have a project list included, looking at our capital project cost and development, we are going through this currently and starting to get into with our partners. we are working into getting capital costs for these projects, it is a delicate process.*
- Project list is included in the plan - working to identify capital costs associated with each, but the process is ongoing.
- Capital and time spent on rail compared to local transit can feel inequitable.
- There should be closer development to industrial sites, find a way to get noise out of the way. have a rail development that benefits freight and people, lots of warehouse workers have to drive far to get to their destination.
  - *Yes definitely, we need to think about how to connect the freight rail system and think of strategic connections that can help reduce travel and get people to their jobs more efficiently. This is a great example of integrated planning.*



# CALIFORNIA STATE RAIL PLAN OVERVIEW

The California State Rail Plan (Rail Plan) affirms the State's Vision for an integrated rail and transit network that delivers on California's ambitious economic, environmental, and equity goals. In line with California Transportation Plan 2050 (CTP 2050) and the Climate Action Plan for Transportation Infrastructure (CAPTI), an integrated rail network, built on the backbone of future high-speed rail corridors, supports economic growth, improves environmental outcomes, and increases equity by providing the seamless mobility Californians need and shifts travel demand to zero-emission, high-capacity transport that supports efficient, sustainable land use. Regional implementation planning and project delivery build on the Rail Plan, as communities realize improved service, develop regional networks, and set land use recommendations that leverage enhanced connectivity.

The Rail Plan proposes a unified statewide network that aligns needs for passenger and freight service and connects passenger rail to other modes. The network will capture an increasing share of passenger and freight travel by rail to support economic, environmental, and equity goals.

The Rail Plan designs a future statewide network that serves the origin and destination points of over 46 million future trips. To achieve CARB's goal of a 20% VMT reduction requires increasing mode share to 14% over 65 million daily passengers. Investments identified in the Rail Plan provide for the capacity to serve high ridership volumes with zero-emission rail service and without highway expansion.

## IMPLEMENTATION HIGHLIGHTS

### NEAR-TERM PLAN (5 Year)

- » Integrate ticketing and fare coordination across statewide network
- » Integrate state rail and intercity bus systems to run on a consistent pulse schedule
- » Initial run-through tracks complete at LA Union Station
- » Increase service between Los Angeles and Riverside (via Fullerton), Merced and Sacramento, Roseville and the Bay Area
- » New Service to Las Vegas, Healdsburg between Gilroy and Salinas, and along the California High-Speed Rail Initial Operating Segment

### MID-TERM PLAN (10 Year)

- » State rolling stock procurements are 100% zero-emission vehicles
- » New transportation hub at Inland City
- » Increased rail frequencies on the Central Coast and statewide
- » New Service to Coachella Valley, Chico, Santa Cruz, and Cloverdale
- » Phase one of California high-speed service is complete. Additional high-speed connections between Palmdale, Apple Valley, and Rancho Cucamonga

### LONG TERM PLAN (2050)

- » Trips between California's urbanized areas can be completed most efficiently by our rail and transit network
- » Second Transbay crossing is complete.
- » Phase two of California high-speed rail service is complete, extending to San Diego and Sacramento
- » New service between Lemoore and Porterville, and to Monterey, Redding, Phoenix, Reno, and Tijuana Airport





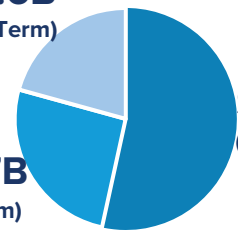
# 2023 Rail Plan Capital



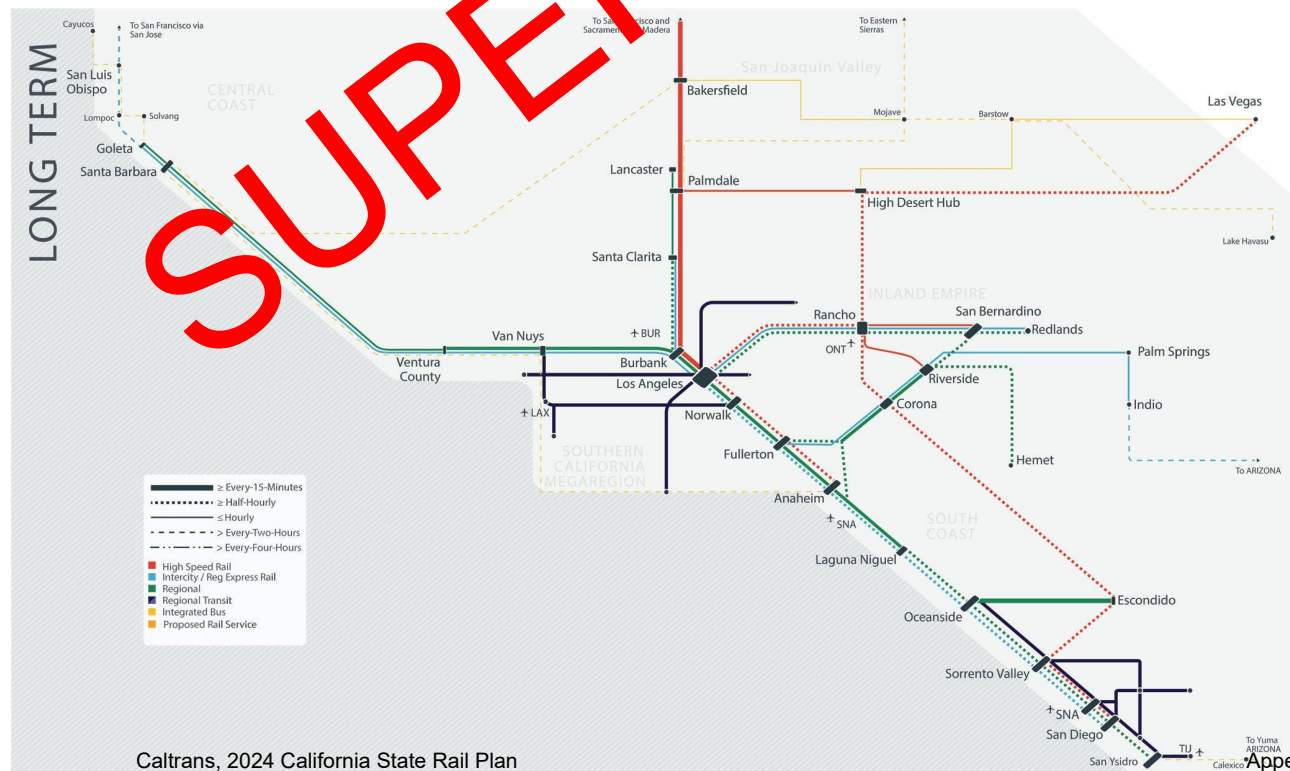
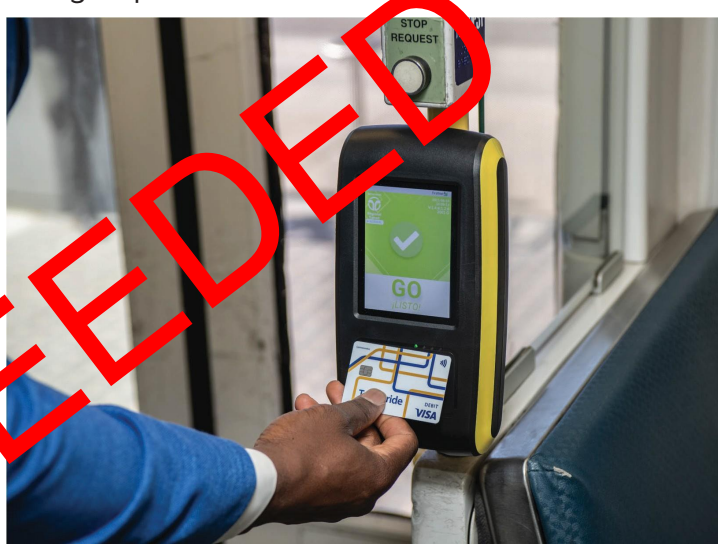
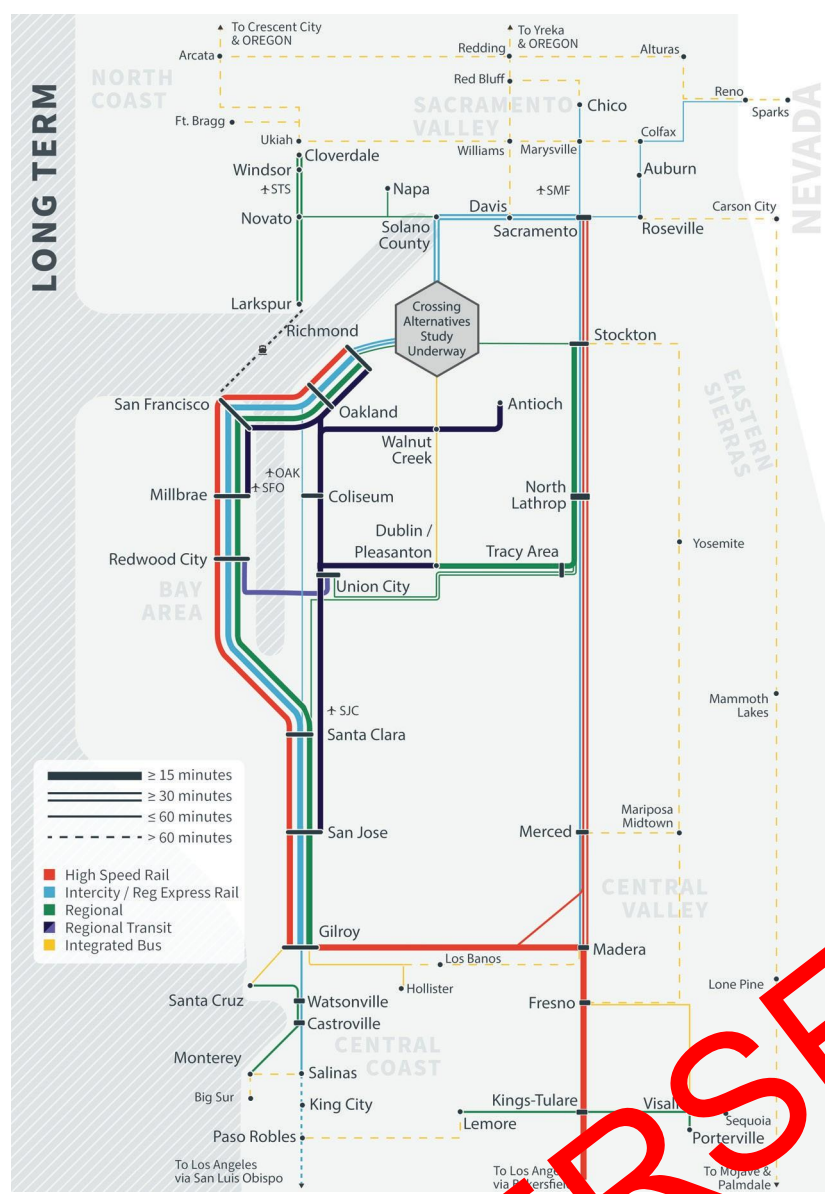
**\$20.6B**  
(Near-Term)

**\$25.7B**  
(Mid-Term)

**\$53.1B**  
(Long-Term)



The Rail Plan organizes its capital planning into near-, mid-, and long-term horizons. The overall program identifies \$99.5B in passenger, freight, zero-emissions operations, and port/logistics support investments, exclusive of California High-Speed Rail.



# Responses to Frequently Asked Questions

Caltrans received substantial amount of input from the public as the 2023 California State Rail was developed, including over 600 public comments submitted to Caltrans on the Draft Rail Plan. In addition to incorporating revisions to address this public feedback, responses to frequently asked questions from the public and stakeholders, including responses to specific geographic issues, are provided below.

## Why is the State proposing such a large investment in rail?

California is home to 40 million people and is projected to grow to 50 million by 2040. To stay at the forefront of economic, environmental, technological, and cultural advancements, California must invest in and build a high-performance statewide transportation system accommodating our needs. Increasing investment in intercity passenger rail systems is an important component of Caltrans’ overall strategy for developing the transportation system and providing options for travel that are consistent with the California Transportation Plan and the state’s goals for improving the environment, building our economy, and supporting the development of healthy and vibrant communities.

Caltrans is required by state law to develop plans for integrating the state’s individual passenger rail systems with High Speed Rail as part of the State Rail Plan. As such, the Rail Plan reflects total statewide investment by the state, regions and individual operators that can be integrated as part of a statewide network and make intercity rail a viable and convenient option for travel across the state. The Rail Plan is a strategic planning document that identifies a long-term vision and goals to guide incremental planning and funding decisions that support, or at least do not preclude, development of an integrated state network and a viable, convenient travel option for local, regional and interregional trips. This plan identifies a framework for partnerships to leverage the state’s investment in High Speed Rail and intercity passenger rail corridors with regional and local investments in commuter rail systems and public transit to deliver projects that when tied together, can deliver benefits on a statewide scale that must be considered in the context of total statewide transportation spending to determine their value.

The benefits of expanding the state interest in investing in intercity, regional rail and intercity transit systems are substantial:

- **Alternatives to Congestion and Reductions in Greenhouse Gas Emissions:** By investing in the Rail Plan’s 2040 Vision, 88 million daily passenger miles can be diverted from highways to a largely electrified or near zero emission rail network that benefits the total performance of the state’s transportation corridors, including parallel highway corridors. This rail alternative to increasing highway congestion provides for additional transportation capacity equivalent to additional lanes of freeway that would eliminate 13 million metric tons of carbon dioxide emissions annually and improve air quality.
- **Supporting the California Economy:** Investing in rail effectively fosters economic growth. A return of two dollars is expected for every dollar invested in rail, representing \$77.5 billion in new economic output by 2040, including 463,000 full time jobs and \$28 billion in labor income.
- **Improving Safety:** Additionally, passenger rail is already **17 times safer** than traveling in an auto. Growth projections associated with delivering the Rail Plan’s Vision by 2040 show that of the projected growth in trips, 74 million daily vehicle miles traveled can be captured on rail, thus potentially eliminating 250 fatalities and 19,000 transportation-related injuries when applying current rates.

The long-term Vision in the Rail Plan identifies infrastructure elements and high-level budget estimates for maximizing the performance potential of the entire state transportation system for carrying people and goods. The Rail Plan is intended to inform choices on how the state invests and to make sure that future actions allow these benefits to be realized in the future.

### Are rail investments cost effective?

---

Yes. The investment strategy is based on anticipated funding over the first 10 years of the plan and is phased specifically to scale services to market demand and eliminate redundant services and investments. To the greatest extent possible, service implementation planning to deliver the long-term Vision will identify infrastructure projects and alternatives that support the Vision while minimizing temporary, or throw-away investments. Service planning guided by the Rail Plan will also be carried-out in a manner that evaluates alternatives for scheduling and operating services more efficiently in the future, maximizing the capacity of existing infrastructure before significant capital investments are considered. The need for new capital investments identified in the Rail Plan is tied to providing significant new connections between the state’s travel markets and many more frequencies carrying many more riders than our disconnected rail systems can carry now – the Rail Plan also presents a strategy for delivering extensions of the state High Speed Rail system to Sacramento and between Los Angeles, the Inland Empire and San Diego sooner and at much less cost, upgrading existing corridors to support these services as much as possible prior to large scale investment in dedicated HSR track.

Compared to the entire transportation system at large, rail can capture 33% of new trips in the state based on Rail Plan projections, on an efficient and effective rail network. This is significant in terms of reducing vehicle miles traveled (VMT) and achieving the valuable benefits outlined in Chapter 6 of the Rail Plan. Expanding statewide investment in the rail network based on the Rail Plan is a strategy for reducing the total long-term infrastructure costs for meeting the needs of our growing population while providing for important economic and environmental benefits. Investing in the integrated rail network in a way that prioritizes service and connectivity integration to support the long-term vision provides significant infrastructure savings while providing additional capacity to the entire transportation system. Investing in the integrated rail network assumes many more connections for more people to more places and thus expands the transportation options and reinforces energy efficient, multimodal transportation.

### Does the Rail Plan account for operational expenses?

---

The Rail Plan included an analysis of the operational costs to be expected from the type of system identified in the Vision, which assumes many more connections for many more people, with more frequencies on a largely electrified rail network that can be operated far more efficiently than the services in operation here today. The analysis of operating costs in the Rail Plan is aligned with known international models for delivering passenger rail services that are operated at significantly less cost per passenger mile and per train mile than existing services. Caltrans expects that the service improvements and investments identified in the plan will serve to significantly drive operating costs and subsidies and allow for reinvestment in the system in certain corridors, which will help deliver the Rail Plan’s Vision. Extrapolated across the entire system, the needed investments outlined in the Rail Plan are reasonable, considering the total future growth captured on the rail system and the efficiencies built into the Vision.

Efficient operations attract future private dollars in direct and indirect economic development, as well as drive down the operating costs. These savings can be put right back into the system in the form of capital investments toward the 2040 Vision. Self-sustaining funding reinforces the need for detailed, collaborative service implementation planning to guide project prioritization to organize projects that

deliver network-wide efficiencies. Associated efficiencies from better connectivity and infrastructure improvements will produce operational cost savings that can be invested back into rail system as operational funding.

## How will the Rail Plan be implemented? How does it prioritize projects?

---

An ambitious new feature of this Rail Plan incorporates the outputs of the state’s network integration planning process, which has been coordinated by the California State Transportation Agency (CalSTA) with Caltrans as part of the plan. This network integration planning included a market analysis using High Speed Rail modeling resources, a review and analysis of the state’s infrastructure and constraints, and an operational analysis of a network based on synchronized schedules between services allowing for fast, convenient transfers at hub stations on a network. This process acted as a tool for communicating and reaching consensus on the Vision with rail operating partners across the state, and a framework for coordinated planning and investment decisions to deliver the Vision.

The Rail Plan identifies capital costs associated with delivering the improvements that are necessary for achieving a long-term network vision, with a 2040 horizon year established to analyze the various effects of improvements if implemented within that timeframe. The long-term vision identifies the improvements needed to meet the service levels possible for moving people and goods based on an understanding of the state’s travel markets and to what extent rail can serve that demand, which is necessary to guide development of an integrated system over time.

The plan identifies two interim timeframes that respond to state and federal requirements, which are opportunities to describe a phased approach to achieving the long-term vision:

- **The 2022 short-term capital plan** represents improvements already being planned for which funding for construction and implementation is largely committed - detailed service planning in the next 4 years, with a substantial funding commitment from the State, will identify which projects get prioritized and how they will be delivered, with a focus on implementation in key corridors to deliver improvements that meet service goals for the subsequent time periods.
- **The 2027 mid-term capital plan** represents a realistic phasing of the Vision where the State coordinates with rail partners to grow passenger services to a level that maximizes existing capacity. The 2027 capital plan is derived from the Vision, based on what the State reasonably expects to be funded in the next ten years. This 10-year plan establishes the goals and improvements that need to be in place to initiate pulse-hub operations on a network allowing for integration between services with timed transfers, including deployment of an integrated ticketing system allowing travel across the state with a single a single ticket.
- **The 2040 long-term capital plan** includes the infrastructure elements required to support the service and connectivity goals of the 2040 Vision. It is intended to maximize the performance and market-capture potential of passenger rail and represents what is possible if funding and political support is in place to deliver this system.

While specific time horizons are used as building blocks for planning, some projects may get completed well in advance of the dates – the phasing identified in the Rail Plan represent time thresholds by which improvements need to be in place and do not stop projects from being delivered sooner.

Service implementation planning will focus on network integration and inform applications for state funding. This will require committed collaboration between the State, rail operators, regional, and local planning partners. The collaboration will require working with existing governance structures to deliver improvements, with decisions about future governance needs based on a thorough understanding of the infrastructure and operation requirements of the network.

**Senate Bill 1 – The Road Repair and Accountability Act of 2017 (SB1)** provides needed long-term resources to invest in California’s rail system. The economic, environmental, safety, and congestion-related benefits justify this investment and support the State’s mission of advancing multimodal transportation. These state resources can be leveraged with regional and local funding sources to deliver improvements as part of statewide rail network over the next 10 years, which will provide a foundation for further development to achieve the long-term Vision.

### Why is High-Speed Rail included in the Rail Plan?

---

The Rail Plan is an important component of a statewide process to plan for an integrated passenger rail network in California. Caltrans is required to create a Rail Plan that integrates the State’s systems with High Speed Rail. The Rail Plan Vision leverages investments in the High Speed Rail system by integrating intercity and regional services to provide connections that can deliver auto and air competitive door-to-door trips using coordinated schedules and connectivity hubs. The Rail Plan incorporates the timeline, budget, and planning priorities of High Speed Rail as identified in the 2018 High Speed Rail Business Plan for Phase 1 of this system between Anaheim, Los Angeles and San Francisco. High Speed Rail will provide crucial longer distance services that will act as the backbone of the statewide rail network while serving local markets in the Central Valley – the Rail Plan establishes the core services that should be provided by High Speed Rail to connect the state and provide access to local communities – additional market based services will be implemented by High Speed Rail using the capacity available on the system being constructed. The Rail Plan also presents a strategy for interim investments that will allow High Speed Rail trains to travel through on existing corridors to provide connections to Sacramento, the Inland Empire cities and San Diego with travel times almost as fast as those specified for the full, dedicated “Phase 1” High Speed system to these areas.

For more information on High Speed Rail, please read the [2018 Business Plan](#).

### Does the Rail Plan identify specific rail alignments? How will this impact me?

---

The Rail Plan identifies a statewide network design that establishes a state interest in service goals and points of connectivity between services in rail corridors across the state. The plan does not identify or specify project-specific details about the location of new track, especially as it relates to High Speed Rail – the details of future investment will be subject to detailed service planning with many more opportunities for community input to ensure that rail service improvements are associated with projects that address safety, such as grade separations or crossing improvements, and other measures to make rail a good neighbor as the system grows. Individual projects are also subject to project-level environmental review, including documentation of probable impacts and mitigation measures to meet state and federal requirements.

Several Native American Tribes expressed concerns about cultural resources that may be affected by rail project construction. The Rail Plan does not itself result in ground disturbances and identify specific effects to resources. The plan does instruct that all future rail development in the state will be guided by the Rail Plan’s Vision, values, and objectives. Given the tribes’ concerns for potential effects to cultural resources, this Plan seeks to emphasize the need for tribal coordination by future project proponents early in the project planning and development process.

High Speed Rail planning, development and construction falls under the purview of the [California High Speed Rail Authority](#) and interested members of the public are encouraged to contact the High Speed Rail Authority for more information – links to the High Speed Rail Authority and online resources are listed elsewhere on this site.

### How can someone tell which agency will be delivering the identified improvements?

The Rail Plan provides an operator neutral framework for partnerships between the State, other public agencies, and private industry that can be used to leverage different sources of funding and different types of operating models. Service goals are strategic, rather than prescriptive. The intention of providing an operator neutral framework was to better coordinate services and projects while collaborating across regions to deliver cost-effective improvements that implement the statewide Rail Plan goals while remaining sensitive to local and regional needs and priorities. Specific operating and institutional responsibilities will be negotiated over time to deliver the improvements.

### What are connectivity/mobility hubs? Where are local station stops?

The State supports regional multimodal hubs and opportunities to connect regional services to the statewide network. The 2040 Vision foresees a statewide passenger rail network that physically integrates services at hub stations, allowing for seamless transfers between services, and convenient trips by rail across the state. These hubs provide connection points to local and regional transit systems providing fast frequent access to regional destinations and expanding the coverage of the State rail network. In addition to service goals, the Vision establishes State connectivity goals and key transfer hubs that tie corridors together. These hubs will have co-located rail, transit, bicycle, and pedestrian facilities to connect people to the rail network through coordinated schedules and infrastructure. In some cases, hubs will require infrastructure investments to improve connectivity. However, many of the statewide hubs already exist and only need operational and minor capital improvements to achieve the statewide rail connectivity and service goals.

Some hubs are specifically identified in the Rail Plan where their location and connectivity are crucial to the network design, pulse schedule, and integration of the entire system. The network design, in some corridors, also identifies different services providing for both express trips making stops at transfer hubs, and regional services that provide for local stops in between where there is a state interest in providing this access to the larger network with connections at hubs for longer distance travel. However, this network design does not identify all potential local or regional stops on the network and does not preclude planning or funding anticipated for individual stops on the rail system. Hubs or stations not identified as a specific capital project are still important and may be integrated in the future as detailed service planning based on State Rail Plan service goals is completed.

### How does the Rail Plan propose coordination with local transit?

The 2050 Vision depends on local connectivity. Network hubs identified in the Rail Plan also consider and provide for connectivity to fast, frequent urban mass transit systems that do not require timed connections because of their 15 minute or better frequency. In some cases, the network design assumes that these services provide service levels in urban areas that meet state goals and intercity or regional service goals are scaled accordingly to serve the expected market – expansion of the Bay Area Rapid Transit District (BART) to San Jose is an example of this. Where connectivity hubs have been identified on the network, the State will work with regional partners to coordinate transit schedules for services operating frequencies more than 30 minutes that can provide for important connections within a region

and co-locate all service types at the hubs to enhance mobility and ease of transfer rail and transit. the many transit services not identified on the statewide network, connectivity to the rail network v be important for local and regional mobility, but those decisions will be made by local transit agencies and local decision makers – the Rail Plan identifies many more opportunities for local/regional transit connections to a statewide transportation system than exists today.

## What does the Rail Plan mean by a ‘second Transbay crossing’? Why is it important?

---

The Rail Plan identifies the need for a second Transbay crossing between San Francisco and the East Bay as an important delivery option for providing the necessary connectivity and service through the Bay Area to support statewide goals. In 2017, San Francisco and San Jose ranked second and fifth, respectively, for worst cities for vehicular congestion in the country – both with 2-3% more congestion than 2016. Simultaneously, BART trains are running at capacity and at crush-capacity during peak commute hours, and Caltrain reaches bi-directional maximum capacity during the peak.

As the regional population grows, continued strain is put on the transportation system; and as the median income and housing prices grow exponentially in the Bay Area core, workers are forced to move further away from their jobs, increasing their dependency on a congested transportation system. Improvements to the Transbay crossing will help alleviate some of these regional issues, but there are additional megaregional and statewide implications of not building a second crossing that accommodates conventional rail.

A second crossing with conventional rail will better connect the Bay Area to the Central Valley and Sacramento regions, increasing interregional investment and competitiveness. However, an important consideration for the location and timeline for a San Francisco to East Bay connection is the location and timeline of proposed Dumbarton rail service and an East Bay hub. The bay crossings will need to be studied as part of a comprehensive planning effort to model and analyze the impact of changing travel patterns resulting from increased cross-bay connectivity. The result of those planning efforts will indicate where an East Bay hub needs to be located to support and deliver the Rail Plan connectivity goals.

Without a second, conventional rail crossing, the region’s access to additional markets and rail services will likely decrease statewide economic activity and competitiveness and reduce mobility opportunities associated with other Bay Area investments. There are many decisions still to be made regarding the location, type, timeline, funding and equity concerns of constructing a second Transbay crossing and locating an East Bay hub and the State supports short term action to study the alternatives. Implementing the Rail Plan vision and pursuing partnerships to generate associated economic growth depends on a second Transbay crossing.

## How much are the freight railroads investing?

---

The freight railroads are making their own investments into the statewide rail network, although publicly available lists of capital projects are limited as the railroads are private businesses and are not required to disclose those investments. The private freight railroads invest in their own systems to meet their business objectives. The improvements identified in the State Rail Plan are designed to either preserve rail freight capacity, or provide for rail freight enhancements in certain high traffic corridors, particularly intercontinental trade corridors that provide rail connections to ports. The Rail Plan establishes a policy framework for working with and guiding public and private investments that enhance freight movement while providing co-benefits with passenger services. The Rail Plan serves to clarify state policy for investing in rail freight to support state goals for improving goods movements.

The Rail Plan provides inputs to Caltrans California Freight Mobility Plan, which will be updated in 2020 and prioritize specific freight projects for funding.

The 2040 Vision and network were designed after analysis that led to the understanding of freight constraints, including projected freight volumes and the ability to accommodate increased passenger service while preserving freight capacity. The goals identify places where the State wants to add capacity to support the network vision, but also where there are willing private partners or public ownership of the ROW. Where there are willing private partners, the State could consider the payment of access fees for new passenger service that flexibly addresses maintenance and capital needs of the host railroad in lieu of developing capital projects and the fee paid to the railroad will support additional capacity improvements.

## How does the Rail Plan relate to Regional Transportation Plans (RTPs) and Sustainable Communities Strategies (SCS)?

---

Each region's most recent RTPs/SCSs are incorporated into the State Rail Plan as underlying assumptions for service goals; and are likewise expected to use the State Rail Plan guidance to align their regional goals and priorities with statewide benefits and connectivity. Both the RTPs/SCSs and the Rail Plan align with the goals and policies of the CTP and inform funding and project delivery. However, the Rail Plan is mode-specific and therefore provides more detailed rail objectives and plans for an integrated network beyond the scope of many RTP/SCSs.

The Rail Plan also seeks to coordinate future statewide planning with regional planning to better connect services between regions and across the state to increase ridership and improve mobility. The statewide travel demand modeling assumes regions will plan for growth in priority development areas as outlined in SB375 and therefore accounts for concentrated housing and jobs growth in certain parts of a region to facilitate coordinated land uses around transit rich corridors. The State is uniquely poised to lead interregional and megaregional transportation planning that is beyond the capacity of any one MPO or RTPA and the Rail Plan sets the policy framework, investment strategy, and service and delivery goals to guide megaregional planning in a way that supports the statewide network.

## Does the Rail Plan provide for connections in the North State?

---

The Rail Plan includes Integrated Express Bus connections between Sacramento and Redding to provide regular connections to Sacramento and the state rail network, which provide opportunities to connect local and regional transit service to a state system at Redding and points in between. The Rail Plan also supports extension of regular, regional passenger rail services as far north as Oroville with timed bus connections to Chico, as well as continued planning for extending rail service to Redding and further strengthening rail and bus connections to this part of the state.

Integrated Express Bus service is used as an important part of the State rail network, in part to deliver service to rural markets. The State Rail Plan assumes there are different delivery options for providing integrated express bus connections, which emphasize partnerships and flexibility in State support for connecting bus services. Delivery options include:

- **State-supported bus routes:** where connections are made with state-supported bus routes, the Rail Plan supports improvements to allow purchase of a ticket to ride state-supported buses between local stops without requiring a connecting rail trip.



- **Partnerships with local transit districts:** where local transit agencies operate longer distance regional bus routes, the State is interested in partnerships with those operators where those routes can provide connectivity as part of the State network.
- **Commercial operators:** Greyhound provides intercity bus service in several California interregional corridors that provide State connectivity as part of the rail network.

In addition to increased integrated express bus service to provide connections, the State supports coordinated planning to provide daytime passenger rail north of Sacramento to Redding via the Sacramento airport.

### What is the Rail Plan doing to prioritize construction of a San Diego rail layover facility?

The Santa Fe Depot in Downtown San Diego has become the center of a thriving station community that represents the kind of community that can be developed in station areas and which is important to the success of the rail and transit network. Unfortunately, layover and maintenance functions currently must be performed in the station facility overnight due to the absence of a dedicated facility in the Southern LOSSAN rail corridor. The State is committed to coordinating with rail operators, owners, and planning agencies in the San Diego region to plan and implement improvements that meet the long-term goals identified in the Rail Plan. The improvements will be implemented in a manner that addresses existing and potential impacts to the growing community living near the existing facility.

Development of a layover and maintenance facility for this corridor is a short-term priority for the State and the Rail Plan commits to completing a feasibility study addressing maintenance needs in the South LOSSAN rail corridor and advancing plans to construct a facility as soon as possible. This study will include an analysis of existing and planned train service levels and schedules to facilitate a more synchronized operating pattern in the corridor that will no longer require trains to layover at the Santa Fe Depot in downtown San Diego. Recently awarded Transit and Intercity Capital Program (TIRCP) funds include funding for this study which will require multi-agency coordination.

### What does the Rail Plan say about preserving rail corridors and publicly owned ROW?

The State supports preserving rail rights of way for future rail services, particularly where there has been a public investment to purchase rail lines for this purpose. These rights of way can successfully accommodate different types of transportation, including bicycle and pedestrian trails – numerous examples of these shared rail rights of way exist, which the Rail Plan documents, accommodating and benefiting both intercity and local travel needs.

Caltrans received substantial public feedback expressing support for maintaining the Santa Cruz Branch line in Santa Cruz County for rail use, which could be converted to a bicycle trail if a regional decision is made to so. The Rail Plan identifies this facility as a key corridor for providing passenger rail connectivity to this popular destination in the Central Coast, with connections to the San Francisco Bay Area and High Speed Rail at Gilroy, as well to the rest of the Central Coast region. This facility provides an alternative to automobile travel in the congested Highway 1 and Highway 17 corridors, and provides for an alternative route into and out of this area if area highways are closed due to weather or severe traffic-related incidents. Caltrans supports regional efforts to develop the Santa Cruz Branch Line for passenger rail use, including development of a bicycle trail, all of which are consistent with the Sustainable Communities Strategy for the Monterey Bay Area and meeting regional greenhouse gas targets.



## Does the Rail Plan support improvements for freight rail to the Port of Humboldt Bay?

The State also has an interest in supporting regional economic development and investment in ports, proposals for economic development in the North Coast region and improvements to the Port of Humboldt Bay being an example. The Rail Plan Vision for freight supports the expansion of new freight rail facilities at ports if the benefits and feasibility of those projects can be documented to justify state investment, which can leverage regional funding support and private investment to deliver improvements.

# Appendix 5. Rail Funding

## APPENDIX 5.1. KEY RAIL FUNDING

Funding Programs	Funding Amount	Intended Use	Funding Category	Eligibility
<b>Federal funding:</b> Corridor Identification and Development (CID) Program	\$7.2 Billion (FY 2022) Shared among all three steps.	CID Program funds intercity rail corridor development, from planning through environmental clearance and preliminary engineering. The intent of this funding is to develop intercity Rail projects that the federal government can fund. Caltrans is the sponsor of five corridors in California, and four additional corridors were awarded to other sponsors.	Planning & Project Development	States and political subdivisions of states, groups of states, an Interstate Compact, public agencies /publicly chartered authorities, Amtrak, federally recognized Tribes
<b>Federal funding:</b> Federal-State Partnership for Intercity Passenger Rail	\$2 Billion (FY 2024)	This program provides funding for capital projects that reduce the state of good repair backlog, improve performance, or expand or establish new intercity passenger rail service	Capital	States and political subdivisions of states, groups of states, an Interstate Compact, public agencies /publicly chartered authorities, Amtrak, federally recognized Tribes
<b>Federal funding:</b> Infrastructure for Rebuilding America (INFRA)	\$8 Billion (total available FY22-FY26)	Railway-highway grade crossing or grade separation project; or a freight project that is an intermodal or rail project, or within the boundaries of a public or private freight rail.	Capital	1. Environmental Requirement: The Department encourages applicants to 1) consider climate change and environmental justice in project planning efforts, and 2) to incorporate project components dedicated to mitigating or reducing impacts of climate change.  2. Local Match: 40%
<b>Federal funding:</b> Rebuilding American Infrastructure with Sustainability and Equity (RAISE, previously known as BUILD / TIGER)	\$1.5 Billion (FY 2023)	Helps project sponsors at the state and local levels, including municipalities, Tribal governments, counties, and others complete critical freight and passenger transportation infrastructure projects.	Capital	1. Equity: at least \$35 million is for projects located in or directly benefitting Areas of Persistent Poverty  2. Local Match: 10%

<p><b>Federal Funding:</b> Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program</p>	<p>\$2.5 Billion (FY 2023)</p>	<p>Provides funding for projects that improve safety, efficiency, and reliability of passenger and freight rail, including: Planning; Construction; Equipment and Materials; Operations and Maintenance; Technology Demonstrations and Deployment; Technical Assistance, Workforce Development, and Training/Education; Research and Development; Climate and Sustainability; Accessibility; Security</p>	<p>Capital</p>	<p>State Governments; Local Governments; Federally Recognized Tribes and Affiliated Groups; Transportation Providers and Operators; Academic and Research Institutions; Private-Sector Applicants; Non-profit</p>
<p><b>State funding:</b> Transit and Intercity Rail Capital Program (TIRCP)</p>	<p>\$3.63 Billion (FY 2023)</p>	<p>This program provides funding for transformative capital improvements that will modernize and transform California's intercity, commuter, and urban rail systems, bus transit, and ferry transit systems. Further goals are expanding and improving rail service to increase ridership, rail service integration, and safety improvements.</p>	<p>Capital</p>	<p>1. Environmental Requirement: All projects must demonstrate that they will achieve a reduction in GHG emissions.</p> <p>2. Ridership: Grant recipient must show benefits such as improved transit ridership, integration with other rail and transit systems, including California High-Speed Rail, and improved rail safety.</p> <p>3. Equity Requirement: The program has a goal of providing at least 25% of benefits to disadvantaged communities.</p>
<p><b>State funding:</b> Trade Corridors Enhancement Program (TCEP)</p>	<p>\$1.051 Billion Total (FY23-24 and FY24-25)</p>	<p>Federally designated Trade Corridors of National and Regional Significance &amp; California's portion of the National Highway Freight Network.</p>	<p>Capital</p>	<p>1. Congestion Relief: Project provides for increased volume of freight traffic through capacity expansion or operational efficiency to improve the interregional transportation network and move goods to, through, and from ports.</p> <p>2. Environmental Requirement: Project contributes to corridor or air basin emission reduction of greenhouse gases, diesel particulates (PM 10 and PM 2.5), carbon monoxide, nitrogen oxides, and other pollutants.</p> <p>3. Local Match: Require 30% matching funds.</p>
<p><b>State funding:</b> Solutions for Congested Corridors Program (SCCP)</p>	<p>\$250 Million (FY24)</p>	<p>The primary objective of this program is to fund projects designed to reduce congestion in highly traveled and highly congested corridors through performance improvements that balance transportation improvements, community impacts, and that provide environmental benefits.</p>	<p>Capital</p>	<p>Eligible Applicants: Regional transportation planning agencies, county transportation commissions, and Caltrans are all eligible to apply for program funds.</p> <p>Program funds cannot be used to construct general-purpose lanes on a state highway.</p>



<p><b>State funding:</b> State Rail Assistance Program</p>	<p>Increases to ~\$50 million in FY 2024-25, totaling \$237 million over the five-year period.</p>	<p>This program provides funding directly to intercity passenger rail Joint Power Authorities (JPAs) and commuter rail agencies for operations and capital investments.</p>	<p>Capital/ Operating</p>	<p>For intercity rail, statute minimum of 25% of funding to each of the State's three intercity rail corridors with regularly scheduled service. CalSTA will determine the allocation of the remaining 25%.</p>
<p><b>State Funding:</b> Port and Freight Infrastructure Program (PFIP)</p>	<p>\$1.2 Billion (FY 2022)</p>	<p>Improve supply chain congestion, capacity, safety, and efficiency of goods movement throughout California's maritime ports.</p>	<p>Operating</p>	<p>Eligible applicants are public agencies who administer or operate the following requirements:</p> <ul style="list-style-type: none"> <li>• 70% for infrastructure projects supporting goods movement related to the Port of Los Angeles, the Port of Long Beach, or both.</li> <li>• 30% for other high-priority projects supporting ports and goods movement infrastructure in the rest of the state, including inland ports</li> </ul>

## APPENDIX 5.2. ADDITIONAL FUNDING SOURCES

	Funding Program	Funding Description	Funding Source	Controlling Authority	Administering Authority	Intended Uses	Funding Levels	Funding Type	Funding Category	Applications Due	Special Notes
Federal	Interstate Rail Compact	Provides financial assistance to entities implementing interstate rail compacts pursuant to section 410 of the Amtrak Reform and Accountability Act of 1997.	Bipartisan Infrastructure Law (BIL)	FRA	FRA	provides financial assistance to entities implementing interstate rail compacts pursuant to section 410 of the Amtrak Reform and Accountability Act of 1997. More information will become available once the Notice of Funding Opportunity (NOFO) is announced.	TBA	Competitive	Capital	TBA	
Federal	Multimodal Projects Discretionary Grant - Multi-jurisdictional	<a href="https://www.transportation.gov/grants/multimodal-project-discretionary-grant-notice-funding-opportunity">https://www.transportation.gov/grants/multimodal-project-discretionary-grant-notice-funding-opportunity</a> Two programs: Multi-jurisdictional: projects of regional or national significance  Rural: mprove and expand the surface transportation infrastructure in rural areas to increase connectivity, improve the safety and reliability of the movement of people and freight, and generate regional economic growth and improve quality of life.	Federal Infrastructure Bill	DOT	DOT	Supports multi-modal, multi-jurisdictional projects of regional or national significance	\$1 Billion (FY 2022)	Competitive	Capital		
Federal	Public Transportation on Indian Reservations Program	Funds will be awarded competitively for any purpose eligible under FTA's Formula Grants for Rural Areas Program, including planning, capital, and operating assistance for tribal public transit services in rural areas.	Tribal Transit Program Grant	FTA	FTA	Federal public transportation law (49 USC 5311(c)(1)(A)) authorizes the competitive amount of the Public Transportation on Indian Reservations (Tribal Transit Program or TTP) Program. The TTP is a set-aside from the Formula Grants for Rural Areas program that included a \$30 million formula program and a \$5 million competitive grant program for Fiscal Years 2016-2021.	\$8.75 million total	Competitive	Capital		
Federal	State of Good Repair and Rail Vehicle Replacement Program	This program provides financial assistance to transit agencies that operate fixed-guideway and high-intensity motorbus systems for the maintenance, replacement, and rehabilitation of capital assets, including competitive grants for rail rolling stock, as well as for the development and implementation of transit asset management plans. These funds reflect a commitment to ensuring that public transportation operates safely, efficiently, reliably, and sustainably so communities can offer balanced transportation choices that help to improve mobility, reduce congestion, and encourage economic development.	Bipartisan Infrastructure Law (BIL)	FTA	FTA	This program provides financial assistance to transit agencies that operate fixed-guideway and high-intensity motorbus systems for the maintenance, replacement, and rehabilitation of capital assets, including competitive grants for rail rolling stock, as well as for the development and implementation of transit asset management plans.	\$44,722 Million (FY22 - FY26)	Competitive	Capital	TBA	
Federal	Transit-Oriented Development Planning (TOD)	Provide funding to local communities to integrate land use and transportation planning with a new fixed guideway or core capacity transit capital investment. Comprehensive planning funded through the program must examine ways to improve economic development and ridership, foster multimodal connectivity and accessibility, improve transit access for pedestrian and bicycle traffic, engage the private sector, identify infrastructure needs, and enable mixed-use development near transit stations.	Transit Oriented Development Grants	FTA	FTA	Neighborhood revitalization [More affordable housing [Public- and private investment [Economic returns to surrounding landowners and businesses [Increased ridership for transit systems [Congestion relief, improved air quality and other environmental benefits [Improved safety for pedestrians and cyclists.	\$68 Million (FY 22-26)	Discretionary/Competitive	Capital		
Federal	Amtrak Grants	FRA executes and oversees annual grant agreements with the National Railroad Passenger Corporation (Amtrak) that apportion Federal funds appropriated by Congress to Amtrak. Appropriation amounts are determined by the Department of Transportation, through its annual budget submission, and by Amtrak, through its annual Grant and Legislative Request. Amtrak uses these Federal funds for its operating and capital activities, including a portion of its operating expenses, capital maintenance of fleet and infrastructure, capital expansion and investment programs, and capital debt repayment.	Congress	FRA	Amtrak / JPAs	Amtrak uses these Federal funds for its operating and capital activities.	\$3.8 Billion Annually (FY 22-FY 26)	Formula	Capital/ Operating	N/A	
Federal	Capital Investment Grants Program (CIG)	The FTA Capital Investment Grant (CIG) Program is the primary Federal competitive funding program for major capital transit projects. The CIG program administers funds through three categories: Small Starts, New Starts, and Core Capacity. These categories are described below. Small Starts. Either have costs less than \$300 million or are seeking less than \$100 million in CIG funds, New Starts. Either have costs greater than \$300 million or are seeking more than \$100 million in CIG funds, Core Capacity. Corridor-based investment in an existing fixed guideway system to increase capacity by at least 10 percent in a corridor that is at or over capacity or will be in five years.	FAST Act	FTA	FTA	Funds light rail, heavy rail, commuter rail, streetcar, and bus rapid transit projects.	\$3 Billion Annually (FY 22 - FY 26)	Discretionary	Capital	Requires completion of multiple steps over several years in order to get CIG funding. Must submit letter after steps are completed in order to be eligible for funding. No specific due date.	Total Federal funds may not exceed 80%. Unlike the BUILD and INFRA programs, projects seeking CIG funds can apply on a rolling basis, and eligibility is determined by a broad set of criteria.

	Funding Program	Funding Description	Funding Source	Controlling Authority	Administrating Authority	Intended Uses	Funding Levels	Funding Type	Funding Category	Applications Due	Special Notes
Federal	FTA's State Safety Oversight Program (SSO)	The purpose of the State Safety Oversight program is to oversee safety at rail transit systems. The SSO program is administered by eligible states with rail transit systems in their jurisdiction. FTA provides federal funds through the SSO Formula Grant Program for eligible states to develop or carry out their SSO programs.	FAST Act	FTA	FTA	The purpose of the State Safety Oversight program is to oversee safety at rail transit systems. FTA provides federal funds through the SSO Formula Grant Program for eligible states to develop or carry out their SSO programs.	\$3.25 Million (FY 2020)	Formula	Capital/Operating		Funds may be used for operational and administrative expenses, including training, travel and equipment.
Federal	Grants for Buses and Bus Facilities Competitive Program	The Buses and Bus Facilities Program through a competitive process, as described in this notice. Grants under this program are for capital projects to replace, rehabilitate, purchase, or lease buses and related equipment, or to rehabilitate, purchase, construct, or lease bus-related facilities.	Federal Grants	FTA	FTA	The Grants for Buses and Bus Facilities Competitive Program (49 U.S.C. 5339(b)) makes federal resources available to states and direct recipients to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities. Funding is provided through formula allocations and competitive grants.	\$372 Million Total	Competitive	Capital		
Federal	National Highway Freight Program	Section 1116 of the FAST Act created the formula-funded National Highway Freight Program, which funds projects that support the movement of goods on the National Highway Freight Network, including rail crossings, with \$1.2 billion annually in funding. California is expected to receive \$600 million over the next 5 years, or an average of \$117 million per year, from the National Highway Freight Program. As much as 10 percent of these funds may be put toward improvements to freight rail or ports.	FAST Act	FHWA	FHWA	This program is to support the movement of goods on the National Highway Freight Network, including rail crossings.	\$7.15 Billion (FY 22 - FY26) CA is expected to receive approximately \$662 million per year over the next 5 years.	Formula	Capital	N/A	Federal share not to exceed 60%
Federal	Rail Infrastructure Financing and Improvement Act (RRIF)	The FAST Act expanded eligible projects for railroad rehabilitation and improvement financing to include transit-oriented and station development. The FAST Act also shortens review time and allows joint public-private ventures to encourage more applications to apply. As of May 31, 2015, the program has executed 35 loans for approximately \$2.7 billion nationally. Some California projects have received loans through RRIF.	SAFETEA-LU	USDOT The National Surface Transportation and Innovative Finance Bureau (the Build America Bureau)	The Secretary of Transportation (Secretary)	The FAST Act expanded eligible projects for railroad rehabilitation and improvement financing to include transit-oriented and station development. the RRIF Program dedicates funding to providing vital access to financing for shortline and regional railroads.	\$35 Billion in total; can finance up to 80% of eligible rail project costs	Federal Credit Assistance	Capital	N/A?	Direct loans can fund up to 100% of a railroad project with repayment periods of up to 35 years and interest rates equal to the cost of borrowing to the government.
Federal	Railroad Crossing Elimination	Fund highway-rail or pathway-rail grade crossing improvement projects that focus on improving the safety and mobility of people and goods	Federal Grant	FRA	FRA	This program provides funding for highway-rail or pathway rail grade crossing improvement projects that focus on improving the safety and mobility of people and goods	\$1.1 billion (FY 2024)	Discretionary	Capital		
Federal	Railroad/Highway Grade Crossing Program (Section 130)	The Railway-Highway Crossings (Section 130) Program provides funds for the elimination of hazards at railway-highway crossings. The Section 130 Program has been correlated with a significant decrease in fatalities at railway-highway grade crossings. Since the Program's inception in 1987 through 2014, for which most recent data is available, fatalities at these crossings have decreased by 57 percent. The overall reductions in fatalities come despite an increase in the vehicle miles traveled on roadways and an increase in the passenger and freight traffic on the railways.	FRA's FAST Act grants	FHWA	CPUC / Caltrans DRMT	This program provides funds for the elimination of hazards at railway-highway crossings.	\$1.2 Billion (FFY 2022 - FFY 2026) California gets \$83.6 million between FFY 2022 and FFY 2026	Formula	Capital	N/A	Federal shares 90% and local has to match 10%
Federal	Transportation Infrastructure Finance and Innovation Act (TIFIA)	The act provides federal credit and financing assistance with flexible repayment terms to projects of national and regional significance, including rail transit programs. To date, California has received roughly \$2.8 billion in TIFIA assistance, \$1.7 billion of which has gone to rail transit programs, primarily intercity rail in Los Angeles. The FAST Act reauthorized TIFIA, but with funding levels significantly lower than Moving Ahead for Progress in the 21st Century Act (MAP-21).	FAST Act	USDOT The National Surface Transportation and Innovative Finance Bureau (the Build America Bureau)	The Secretary of Transportation (Secretary)	This act provides federal credit and financing assistance with flexible repayment terms to projects of national and regional significance, including rail transit programs.		Federal Credit Assistance	Capital		
State	Active Transportation Program	Bicycle parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.  1. Equity: More than 400 of the funded projects are Safe Routes to Schools projects and programs that encourage a healthy and active lifestyle throughout students' lives. In addition, every cycle has seen more than 85% of funds going towards projects that will benefit disadvantaged communities throughout the State.  2. Local Match: The Commission does not require a funding match for ATP. Large MPOs, in administering a competitive selection process, may require a funding match for projects selected through their competitive process.					232 Million (FY 2020)		Capital / Planning		



	Funding Program	Funding Description	Funding Source	Controlling Authority	Administrating Authority	Intended Uses	Funding Levels	Funding Type	Funding Category	Applications Due	Special Notes
State	Interregional Transportation Improvement Program (ITIP)	The purpose of the Interregional Transportation Improvement Program (ITIP) is to improve interregional mobility for people and goods across the State of California on highway and passenger rail corridors of strategic importance. These strategic corridors provide the transportation network that connects the state's major regions to one another and connects the rural regions to the large urban areas. The corridors also provide connectivity to neighboring states and the international border with Mexico. The ITIP is a program of projects funded through the State Transportation Improvement Program (STIP) that obtains funding primarily through the per-gallon State tax on gasoline.	25% of STIP funds go to ITIP. Of which, 15% of the funds must go to intercity rail improvements	Caltrans / CTC	Caltrans	The ITIP funds for intercity rail projects and to improvements outside the urbanized areas on interregional road routes.	\$214 Million (FY 2022)	Formula	Capital/ Operating	Winter (Caltrans submit ITIPs by Dec 15th of odd years)	Due each odd - numbered year
State	Local Partnership Program (LPP)	SB 1 established the State-Local Partnership Program (LPP), which provides \$200 million in funding annually to provide matching funds for projects funded through voter-approved dedicated transportation tax measures (also known as 'self-help programs'). Eligible projects include road maintenance and rehabilitation purposes and other transportation infrastructure improvements, such as active transportation and transit and rail projects. The majority of funds (\$180 million) are allocated by the CTC with 60% available by formula and 40% available on a competitive basis, to ensure smaller jurisdictions are able to compete.	SB 1	CTC	Caltrans Division of Local Assitance & Caltrans DRMT	The objective of this program is to provide funding to local and regional agencies to improve transit and rail.	\$200 Million annually	Discretionary/ Formula	Capital/ Operating		Projects are required to provide a one-to-one match for LPP funds with local, measure, federal, or other non-state funds unless the project is in a jurisdiction generating under \$100,000 in fees.
State	Low Carbon Transit Operations Program (LCTOP)	Another transportation program now available through the GGRF includes the Low Carbon Transit Operations Program (LCTOP), under which funds are allocated to local agencies to support new or enhanced bus and rail services and intermodal transit facilities, and to prioritize projects that support disadvantaged communities. The LCTOP receives a continuous allocation of 5 percent of the Cap-andTrade revenues via GGRF. Revenue from the Cap-and-Trade Program is allocated to GGRF.	Transit, Affordable Housing, and Sustainable Communities Program & GGRF (5%)	CARB	Caltrans DRMT	Supports new or expanded rail service, expand intermodal transit facilities, and may include equipment acquisition, fueling, maintenance and other costs to operate those services or facilities, with each project reducing greenhouse gas emissions.	\$799 Million (FY 2021-22)	Formula	Capital/ Operating	N/A	
State	Regional Transportation Improvement Program (RTIP)	The Regional Transportation Improvement Program (RTIP) is a program of highway, local road, transit and active transportation projects that a region plans to fund with State and Federal revenue programmed by the California Transportation Commission in the State Transportation Improvement Program (STIP). The RTIP is developed biennially by the regions and is due to the Commission by December 15 of every odd numbered year. The program of projects in the RTIP is a subset of projects in the Regional Transportation Plan (RTP), a federally mandated master transportation plan which guides a region's transportation investments over a 20 to 25 year period. The RTP is based on all reasonably anticipated funding, including federal, state and local sources. The RTP is developed through an extensive public participation process in the region and reflects the unique mobility, sustainability, and air quality needs of each region.	75% of STIP funds go to RTIP	CTC	Regional Transportation Planning Agencies	The RTIP funds a variety of local or regional projects for transit, from buses to bus stations to light rail.	\$429 Million (FY 2022)	Formula	Capital	Winter (regions submit RTIPs by Dec 15th of odd years)	Submitted every two years
State	Short-Line Railroad Improvement Program (SLRIP)	This small program offers funding to short-line railroad infrastructure projects intended to improve freight mobility, volume thresholds, and support modern rail freight traffic and the communities and industries they serve throughout California.  1.Environmental Requirement: Projects need to demonstrate how they would reduce GHG emissions and criteria pollutants, as well as how the project would help advance California's air quality and climate goals. 2.Project Support: Projects would need to demonstrate meaningful public outreach and engagement for the proposed project. 3.Local Match: At least 30% match of private funds!					\$7.2 million (total program)		Capital		
State	Sustainable Transportation Planning Grant Program	The Sustainable Transportation Planning Grant Program includes: - Sustainable Communities Grants (\$29.5 million) to encourage local and regional planning that furthers state goals, including, but not limited to, the goals and best practices cited in the Regional Transportation Plan Guidelines adopted by the CTC. - Strategic Partnerships Grants (\$4.5 million) to identify and address statewide, interregional, or regional transportation deficiencies on the State highway system in partnership with Caltrans. A sub-category funds transit-focused planning projects that address multimodal transportation deficiencies.	SB 1	CTC	Caltrans	The Grant Program also supports related State sustainability initiatives including California State Rail Plan.	\$84 Million (FY 2023-2024)	Competitive/Formula	Operating		

	Funding Program	Funding Description	Funding Source	Controlling Authority	Administrating Authority	Intended Uses	Funding Levels	Funding Type	Funding Category	Applications Due	Special Notes
State	TDA - Local Transportation Fund	The Transportation Development Act (TDA) creates in each county an LTF for transportation purposes specified in TDA. LTF is used to provide for public transit planning and operations as well as coordination between transit providers serving a particular region. In addition, LTF may also be used to fund bicycle and pedestrian projects. If a region has limited public transit needs, LTF may be used to fund local street and road improvements, as long as there are no unmet transit needs that are deemed reasonable to meet.	Transportation Development Act (TDA) of 1971 (Local Transportation Fund (LTF), which is derived from a ¼ cent of the general sales tax collected statewide)	Transportation Planning Agencies (TPAs)	Caltrans DRMT	Rail passenger service operations & capital improvements	\$2.4 Billion (FY 2022)	Formula	Capital/ Operating		
State	The Grade Separation Program (Section 190)	This is a State-funded safety program that supports projects that replace and upgrade existing at-grade railroad crossings, primarily with grade separations. The CPUC establishes a project list, and the Caltrans DRMT administers the program. Section 190 of the California Streets and Highways Code requires the State's annual budget to include \$15 million for funding these projects. The maximum funding per project is \$5 million annually.	Authorized by Section 190 of the Streets and Highways Code	CTC	CPUC / Caltrans DRMT	This program funds the construction of grade separation projects.	15 Million Annually	Discretionary	Capital		
Local	Alameda and Contra Costa Counties (Measure C1)	Transportation options that allow for independence and mobility for seniors and persons with disabilities. Transportation to areas where people work and attend schools. Reduced greenhouse gas emissions and promotes alternatives to driving. Bus service reliability and on-time performance. Continued support of bus operations and maintenance.	Extends the existing 8 dollars per month parcel tax at current levels for 20 years	Alameda-Contra Costa Transit District Board of Directors / Measure C1 Oversight Committee	AC Transit	AC Transit bus O&M	\$600 Million in total	Sales Tax	Capital/ Operating	N/A	Set to expire after 2039.
Local	Caltrain (Measure RR)	Support the operation of Caltrain service levels throughout the corridor from San Francisco to Gilroy, and the expansion of Caltrain peak hour service from six trains per hour per direction to eight trains per hour per direction, as well as the expansion of the Gilroy service to a minimum of five morning and five afternoon trains.	0.125% sales tax increase for 30 years	Peninsula Corridor Joint Powers Board (Caltrain)	Peninsula Corridor Joint Powers Board (Caltrain)	Expansion of Caltrain peak hour service from six trains per hour per direction to eight trains per hour per direction, as well as the expansion of the Gilroy service to a minimum of five morning and five afternoon trains.	\$100 Million/year	Sales Tax	Operating	N/A	Set to expire in 2050
Local	City of Berkeley (Measure GG)	Enacts a tax on users of Transportation Network Companies for prearranged trips originating in Berkeley, at a rate of 50 cents per trip for private trips and 25 cents per trip for pooled trips, regardless of the number of passengers on the trip.	50 cents per private trips, 25 cents per pooled trips	City of Berkeley	City of Berkeley		\$910,000/years	Sales Tax	Capital	N/A	Set to expire January 1, 2041
Local	Contra Costa County (Measure J)	Funds used for highways, arterials, transit facilities and services, bicycle and pedestrian facilities, and transportation projects that support all alternative modes of travel and reflects projects and programs of countywide, sub-regional, and local interest.	0.5% sales tax for 25 years	Contra Costa Transportation Authority Board	Contra Costa Transportation Authority	Capitol Corridor Rail Station Improvements at Hercules and Martinez; Hercules Rail Station; BART - East Contra Costa Rail Extension	\$2.5 Billion in total	Sales Tax	Capital	N/A	Set to expire after 2034.
Local	Fresno County (Measure C)	Funds used for public transit (24%), local transportation program (34.6%), street and highway transportation program (30.4%), alternative transportation (6%), environmental enhancement (3.5%), and administration/planning (1.5%).	0.5% transportation sales tax for 20 years	Fresno County Transportation Authority (FCTA) Board / Measure C Citizen Oversight Committee	FCTA	Rail consolidation	\$1.71 billion in total	Sales Tax	Capital	N/A	Set to expire after 2027.
Local	Los Angeles County (Measure M)	To improve freeway traffic flow/safety; repair potholes/sidewalks; repave local streets; earthquake-retrofit bridges; synchronize signals; keep senior/disabled/student fares affordable; expand rail/subway/bus systems; improve job/school/airport connections	New 0.5% sales tax increase; and continues previous Measure R (additional 0.5%). Continues in perpetuity	LA Metro	LA Metro	Intended to be used for improving freeway traffic flow; accelerating rail construction; enhance local and regional bus service; bike and ped connections; etc.	\$120 Billion in total	Sales Tax	Capital	N/A	No expiration Funding can only be used for purposes described in the Ordinance and Expenditure Plan
Local	Madera County (Measure T)	Funds used for the improvement needs of regional streets and highways and to accelerate delivery of streets and highways projects delayed due to shortage of funding. The majority of the resources is aimed at meeting scheduled street maintenance (including Maintenance Districts), rehabilitating aged local systems, and could be applied to increase road capacity, provide for pedestrian/bicycle improvements and public transit enhancements or for other transportation improvements.	½ cent sales tax for 20 years	Madera County Transportation Commission (MCTC) Board / Measure T Oversight Committee	MCTC	Railroad grade separation	\$213 million in total	Sales Tax	Capital	N/A	Set to expire after 2027.

	Funding Program	Funding Description	Funding Source	Controlling Authority	Administrating Authority	Intended Uses	Funding Levels	Funding Type	Funding Category	Applications Due	Special Notes
Local	Marin County (Measure AA)	Maintain, improve, and manage local roads and other infrastructure; maintain and expand efficient and effective local transit services; reduce school-related congestion and provide safer access to schools; reduce congestion on Highway 101.	0.5% special sales tax for 30 years til 2049	Transportation Authority of Marin (TAM) Board of Comissioners / Citizens' Oversight Committee	TAM	Maintain and expand efficient and effective local transit services.	\$810 Million in total	Sales Tax	Capital	N/A	Set to expire after 2049.
Local	Merced County (Measure V)	Half of the funding to local jurisdictions (nondiscretionary); of the remaining half, 20 percent on bicycle/pedestrian and 5 percent on transit.	0.5% sales tax for 30 years	The Merced County Association of Governments (MCAG) Governing Board / Measure V Citizens Oversight Committee	MCAG	Passenger rail; Railroad crossing safety improvements	\$450 Million in total	Sales Tax	Capital	N/A	Set to expire after 2047.
Local	Monterey County (Measure X)	Maintain Local Roads & Repair Potholes; increase Safety and Reduce Traffic Congestion, improve Transportation for Youth, Seniors, People with Disabilities & Working Families; Make Walking and Biking Safer	a retail transactions and use tax of a three- eighths' of one-percent (3/8%) for the next 30 years	Transportation Agency for Monterey County(TAMC) Board / Measure X Citizens Oversight Committee	TAMC	Improve congestion	\$600 million in total	Sales Tax	Capital	N/A	Set to expire after 2047.
Local	Napa County (Measure T)	Measure T funding is to be used for maintenance, reconstruction, and/or rehabilitation of streets, roads, and transportation infrastructure within the public right-of-way including but not limited to: sidewalks, curb and gutters, curb ramps, lighting, traffic signage, striping, and local roadway drainage.	1/2 cent sales tax for 25 years	NAPA Valley Transportation Authority (NVTA) Board / Independent Taxpayer Oversight Committee	NVTA	Measure T used for local streets and roads maintenance programs.	\$282.15 Million in total	Sales Tax	Capital	N/A	Set to expire after 2043.
Local	Orange County (Measure M2)	Funds will be spent across all modes, with 75% going to freeways, streets and roads; and 25% going to transit.	0.5% sales tax increase for 30 years	OCTA	OCTA	Transportation Improvements	\$12 Billion in total	Sales Tax	Capital	N/A	30 years; expires after 2041 Funding can only be used for purposes described in the Transportation Investment Plan
Local	Riverside County (Measure A)	Reduce current congestion and provide adequate transportation facilities to accommodate reasonable growth in the future. Provide funding for the adequate maintenance and improvement of Funds used for local streets and roads in the cities and unincorporated areas. Enhance Riverside County's ability to secure state and federal funding for transportation by offering local matching funds.	0.5% sales tax increase for 30 years	Riverside County Transportation Commission	RCTC	Transportation Improvements, including highway widening; metrolink expansion; transit expansion for seniors with disabilities.	\$640 Million in total	Sales Tax	Capital	N/A	30 years; set to expire after 2039; Gives RCTC authority to issue bonds up to \$500 million
Local	Sacramento Transportation Authority (Measure A)	Funds from Measure A are used to reduce traffic congestion, improve public transit, fix local streets and roads, and protect the environment.	1/2 cent sales tax for 30 years	Sacramento Transportation Authority (STA) Board / Independent Taxpayer Oversight Committee	STA	Bus and light rail capital and operations; expand rail service	\$8.38 Billion in total	Sales Tax	Capital/ Operating	N/A	Set to expire after 2039.
Local	San Benito County (Measure G)	Maintain local roads, repair potholes, and improve traffic; Route 25 4-lane expressway project.	1% sales tax for 30 years	Council of San Benito County Governments (SBCOG) Board of Directors / Measure G Citizens' Oversight Committee	SBCOG	Improve traffic	\$480 Million in total	Sales Tax	Capital	N/A	Set to expire after 2049.

	Funding Program	Funding Description	Funding Source	Controlling Authority	Administrating Authority	Intended Uses	Funding Levels	Funding Type	Funding Category	Applications Due	Special Notes
Local	San Bernardino County (Measure I)	Funds used for freeway program, freeway interchange program, major street program, local street program, Metrolink/Rail program, express bus/bus rapid transit program, senior and disabled transit program, traffic management systems program	0.5% sales tax increase for 30 years	San Bernardino County Transportation Authority	SBCTA	Transportation improvement and congestion management projects	\$1.8 Billion in total	Sales Tax	Capital	N/A	Set to expire after 2040
Local	San Diego County (TransNet 2)	Funds used for congestion relief program including major transportation corridor improvements, local system improvements, and transit system improvements.	0.5% sales tax increase for 40 years	SANDAG	SANDAG	Highway, transit and local road projects to reduce congestion	\$14 Billion in total	Sales Tax	Capital	N/A	Set to expire after 2048 Mandated the formation of an Independent Taxpayer Oversight Committee (ITOC)
Local	San Francisco County (Prop K)	Funds used for transit (65.5%), streets and traffic safety (24.6%), transportation system management/strategic initiatives (1.3%), and paratransit (8.5%).	1/2 cent sales tax for 30 years	San Francisco County Transportation Authority (SFCTA) Board / Citizens Advisory Committee	SFCTA	Caltrain electrification; Caltrain Downtown Extension to the Salesforce Transit Center; Caltrain state of good repair; BART station improvements	\$2.35 billion in total	Sales Tax	Capital	N/A	Set to expire after 2034.
Local	San Francisco County (Prop L)	San Francisco voters in November 2022 approved Proposition L, the Sales Tax for Transportation Projects measure that will direct \$2.6 billion (2020 dollars) in half-cent sales tax funds over 30 years to help deliver safer, smoother streets, more reliable transit, continue paratransit services for seniors and persons with disabilities, reduce congestion, and improve air quality.	\$0.005 sales tax increase for 30 years	San Francisco County Transportation Authority (SFCTA) Board	San Francisco County Transportation Authority (SFCTA) Board	Deliver safer, smoother streets, more reliable transit, reduce congestion, and more.	\$2.6 Billion in total	Sales Tax	Capital	N/A	Set to expire after 2053
Local	San Joaquin County (Measure K)	Major improvements target San Joaquin County freeways, streets and roads, public transit networks, pedestrian, and bicycle friendly programs.	1/2 cent sales tax for 30 years	The San Joaquin Council of Governments (SJCOG) Board	SJCOG	Railroad crossing safety, rail passenger improvements	\$2.55 Billion in total	Sales Tax	Capital	N/A	Set to expire after 2041.
Local	San Mateo County (Measure W)	Funding used for highway projects, local street repair, grade separations for Caltrain tracks that intersect local streets, expanded bicycle and pedestrian facilities, and improved transit connections.	0.5% sales tax for 30 years	San Mateo County Transportation Authority	50% of those funds are administered by the San Mateo County Transportation Authority while the remaining 50% are administered by the SamTrans Board of Directors.	Grade separation for Caltrain tracks	\$2.4 Billion in total	Sales Tax	Capital	N/A	Set to expire after 2049.
Local	Santa Barbara County (Measure A)	Funds used for local street improvements such as pothole repairs and synchronized traffic signals, increasing senior and disabled accessibility to public transit, building safer walking and bike routes to schools, providing increased opportunities for carpool and vanpool programs.	0.5% sales tax increase for 30 years	SBCAG	SBCAG	Transportation improvements	\$1.05 Billion in total	Sales Tax	Capital	N/A	Set to expire after 2040 Audits and public review conducted by Citizen's Oversight Committee
Local	Santa Clara County (Measure B)	\$1.5 billion for BART Phase II; \$250 million for bicycle/pedestrian projects; \$2.85 billion for highways; \$1.2 billion for local streets; \$500 million for transit operations.	0.5% sales tax for 30 years	Valley Transportation Authority (VTA) Board of Directors / Measure B Citizens' Oversight Committee	VTA	BART Phase II; Caltrain corridor capacity improvement; Caltrain grade separation	\$6.5 Billion in total	Sales Tax	Capital/ Operating	N/A	Set to expire after 2047.
Local	Santa Cruz County (Measure D)	This ½-cent sales tax guarantees every city and the county a steady, direct source of local funding for local streets and road maintenance, bicycle and pedestrian projects (especially near schools), safety projects, and transit and paratransit service, as well as numerous essential transportation projects and programs throughout the county.	0.5% sales tax for 30 years	The Santa Cruz County Regional Transportation Commission (RTC) Committee / Measure D Taxpayer Oversight Committee	RTC	Measure D will provide \$40,000,000 in funding for the Rail Corridor: 1. Preservation of rail corridor infrastructure, including maintaining and repairing the corridor 2. Analysis of future potential uses, including transit and other transportation uses, of the right-of-way through an open, transparent public process	\$500 Million in total	Sales Tax	Capital	N/A	Set to expire after 2047.

	Funding Program	Funding Description	Funding Source	Controlling Authority	Administrating Authority	Intended Uses	Funding Levels	Funding Type	Funding Category	Applications Due	Special Notes
Local	Sonoma County (Measure DD)	Increased bus frequencies and extended hours of operations should be prioritized where routes make first and last mile connections to major bus transit hubs, schools, and rail stations, or serve major transit corridors or commute routes between communities.	a ¼ cent sales tax for 20 years	Sonoma County Transportation Authority (SCTA) Board / Citizens Advisory Committee	SCTA	Supports increased bus frequencies and extended hours of operations	\$26 Million/year	Sales Tax	Operating	N/A	Set to expire in 2040.
Local	Sonoma County (Measure M)	Measure M provides for a ¼ cent sales tax to be used to maintain local streets, fix potholes, accelerate the widening of Highway 101 for High Occupancy Vehicle (HOV) lanes, improve local street operations, restore and enhance transit services, support the development of passenger rail service, and build safe bicycle and pedestrian routes.	a ¼ cent sales tax for 20 years	Sonoma County Transportation Authority (SCTA) Board / Citizens Advisory Committee	SCTA	Support the development of passenger rail service (SMART)	\$321 Million in total	Sales Tax	Capital	N/A	Set to expire after 2025.
Local	Stanislaus County (Measure L)	Local street and road improvements, traffic management, bicycle/pedestrian improvements and transit connection improvements.	0.5% sales tax for 25 years	Stanislaus Council of Governments (StanCOG) / Measure L Oversight Committee	StanCOG	Transit connection	\$975 Million in total	Sales Tax	Capital	N/A	Set to expire after 2042.

# Appendix 6. Safety

# 2024 California State Rail Plan

## Safety

### Description

Appendix 8.1 includes a description of various safety entities related to rail and transit.

### Safety and Security

Like all transportation systems, freight and passenger rail operations face safety and security challenges. Rail-related safety incidents range from minor injuries to fatalities, which can occur due to at-grade crossing conflicts, trespassing on railroad property, pedestrian conditions, human error, and other deficiencies. Where deficiencies exist, safety risks can be mitigated through a combination of programs, such as public education campaigns. The California Operation Lifesaver Incorporated program, for example, administers an outreach program to share a rail safety message with the public, K-8 students, emergency responders, and professional drivers. Sometimes safety risks can be improved through track and signal upgrades, gate and warning system activation, and grade separations when practicable. The safety and security of railroads is regulated by federal and state law, and enforced by a variety of federal and state agencies.

Funding of critical safety improvements is administered through a variety of federal and state programs. Regulatory Agencies Federal rail safety regulators include:

Name	Description	Link to Website
FRA Office of Railroad Safety	conducts safety inspections, collects and analyzes accident data, and enforces existing safety laws and regulations. A Passenger Rail Division in the Office of Safety develops passenger-rail-specific safety programs and initiatives, and enforces safety policies, regulations, and guidance for commuter, intercity, and HSR.	<a href="https://railroads.dot.gov/railroad-safety">https://railroads.dot.gov/railroad-safety</a>
Transportation Security Administration	oversees Amtrak and commuter rail system security by monitoring stations and infrastructure, and identifying and mitigating potential security risks to both passengers and cargo.	<a href="https://www.tsa.gov/">https://www.tsa.gov/</a>

## 2024 California State Rail Plan

National Transportation Safety Board	investigates and reports on all passenger railroad fatalities or property damage.	<a href="https://www.nts.gov/Pages/default.aspx">https://www.nts.gov/Pages/default.aspx</a>
California Public Utilities Commission (PUC)	helps enforce federal safety and security regulations; conducts design safety reviews of crossing projects; investigates railroad accidents; regulates safety and security at transit crossings and stations; and responds to safety-related public and agency inquiries. The CPUC also hires railroad safety inspectors to supplement FRA’s regional inspectors. In addition to safety regulation, the CPUC has authority over the construction and/or modification of existing crossings and grade separations.	<a href="https://www.cpuc.ca.gov/">https://www.cpuc.ca.gov/</a>
Caltrans Division of Rail and Mass Transit (DRMT)	inspects state-owned rail equipment and facilities; funds safety improvements; and is a partner in safety education and awareness programs.	<a href="https://dot.ca.gov/programs/rail">https://dot.ca.gov/programs/rail</a>
Pipeline and Hazardous Materials Safety Administration (PHMSA)	regulates the rail transportation of materials that are poisonous by inhalation and carried in tank cars.	<a href="https://www.phmsa.dot.gov/">https://www.phmsa.dot.gov/</a>
California Office of Emergency Services (Cal OES)	coordinates preparedness for and response to natural and manmade disasters; and administers transit security grants to intercity passenger rail and commuter rail systems.	<a href="https://www.caloes.ca.gov/">https://www.caloes.ca.gov/</a>



# Appendix 7. Passenger Operations and Finance

## APPENDIX 7.1. AMTRAK SALARIES AND EXPENDITURES

# 2024 California State Rail Plan

## AMTRAK SALARIES AND EXPENDITURES BY STATE

### Description

This section shows Amtrak’s total salaries and expenditures per state in fiscal year 2021. The total salaries figure is the sum of all Amtrak employee’s salary who are employed in the state. The expenditures figure is Amtrak’s total procurement in the state, including both goods and services.

### Sources

Amtrak State Fact Sheets FY 2023:

<https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/statefactsheets/CALIFORNIA23.pdf>

Row ID	State	Total Amtrak Salaries	Total Amtrak Expenditures
4	California	\$185,233,855	\$338,516,162

## APPENDIX 7.2. FAREBOX RECOVERY RATIOS

# 2024 California State Rail Plan

## FAREBOX RECOVERY RATIO BY SERVICE

### Description

This section shows the Farebox Recovery Ratio for each state-supported rail service over the previous ten years from fiscal year 2012-13 to 2021-22. The Farebox Recovery Ratio is the ratio of a service’s revenues to its expenses in a given fiscal year.

### Sources

Capitol Corridor FY 2024-25 – FY 2025-26 Draft Annual Business Plan:

<https://www.capitolcorridor.org/wp-content/uploads/2024/01/CCJPA-DRAFT-FY25-FY26-Annual-Business-Plan-Jan-2024.pdf>

LOSSAN Rail Corridor Agency Business Plan FY 2024-25 to FY 2025-26

[https://www.octa.net/pdf/LOSSAN\\_Business\\_Plan\\_FY\\_24-25-FY\\_25-26.pdf](https://www.octa.net/pdf/LOSSAN_Business_Plan_FY_24-25-FY_25-26.pdf)San Joaquin Joint Powers Authority 2024 Business Plan Update (for FY 2024/2025 – FY 2025/2026)

<https://cdn.sjjpa.com/wp-content/uploads/20240610084720/2024-SJJPA-Business-Plan-Update.pdf>

Row ID	Fiscal Year	Capitol Corridor	Pacific Surfliner	San Joaquins
1	2012-13	48.0%	61.7%	56.2%
2	2013-14	50.9%	67.1%	52.3%
3	2014-15	52.0%	71.0%	51.3%
4	2015-16	56.0%	78.8%	50.4%
5	2016-17	59.0%	79.2%	49.3%
6	2017-18	59.0%	76.5%	43.0%
7	2018-19	61.0%	70.2%	41.0%
8	2019-20	42.0%	54.6%	33.4%
9	2020-21	21.0%	27.3%	21.7%
10	2021-22	35.0%	53.8%	32.2%
	2022-23	40.0%	46.3%	33.2%

## APPENDIX 7.3. ON TIME PERFORMANCE

# 2024 California State Rail Plan

## ON TIME PERFORMANCE (OTP) Description

This section shows On Time Performance (OTP) for state supported and interstate rail services in California during fiscal year 2023. Since the passenger rail network is primarily owned by freight railroads, known as host railroads, freight rail traffic is frequently the cause of delay for passenger rail service.

### Sources

Amtrak Fact Sheet Fiscal Year 2023 State of California

<https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/statefactsheets/CALIFORNIA23.pdf>

Amtrak Fact Sheet Fiscal Year 2022 State of California

<https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/statefactsheets/CALIFORNIA22.pdf>

Amtrak Fact Sheet Fiscal Year 2021 State of California

<https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/statefactsheets/CALIFORNIA21.pdf>

Amtrak Fact Sheet Fiscal Year 2020 State of California

<https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/statefactsheets/CALIFORNIA20.pdf>

Amtrak Fact Sheet Fiscal Year 2019 State of California

<https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/statefactsheets/CALIFORNIA19.pdf>

Capitol Corridor FY 2023-24 – FY 2024-25 Draft Annual Business Plan:

<https://www.capitolcorridor.org/wp-content/uploads/2023/01/CCJPA-DRAFT-FY24-FY25-Annual-Business-Plan-Jan-2023.pdf>

San Joaquin Joint Powers Authority Draft 2023 Business Plan Update (public review draft)

[https://cdn.sjjpa.com/wp-content/uploads/DRAFT-2023-SJJPA-Business-Plan-Update\\_Public-Review-Draft-1.pdf](https://cdn.sjjpa.com/wp-content/uploads/DRAFT-2023-SJJPA-Business-Plan-Update_Public-Review-Draft-1.pdf)

LOSSAN Rail Corridor Agency Business Plan FY 2022-23 to FY 2023-24

[https://www.octa.net/pdf/LOSSAN\\_Business\\_Plan\\_FY\\_22-23-FY\\_23-24.pdf](https://www.octa.net/pdf/LOSSAN_Business_Plan_FY_22-23-FY_23-24.pdf)

## 2024 California State Rail Plan

Row ID	Service	Host Railroads	FY19 OTP	FY20 OTP	FY21 OTP	FY22 OTP	FY23 OTP
<b>Long Distance Routes</b>							
1	California Zephyr	BNSF, Union Pacific	33.3%	54.2%	37.6%	29.0%	33.0%
2	Coast Starlight	BNSF, Union Pacific, SCRRA	49.4%	63.6%	56.8%	53.0%	58.0%
3	Southwest Chief	BNSF, New Mexico DOT	37.5%	55.9%	36.3%	28.0%	34.0%
4	Sunset Limited	BNSF, Union Pacific	14.9%	29.5%	27.1%	21.0%	44.0%
5	Texas Eagle	BNSF, Canadian National, Union Pacific, Trinity Railway Express	28.5%	42.3%	52.0%	49.0%	60.0%

Row ID	Service	Host Railroads	FY19 OTP	FY20 OTP	FY21 OTP	FY22 OTP	FY23 OTP
<b>Intercity Routes</b>							
1	Capitol Corridor	Union Pacific	88.7%	85.1%	91.2%	85.0%	85.0%
2	San Joaquins	BNSF, Union Pacific	69.2%	75.5%	82.2%	80.0%	85.0%
3	Pacific Surfliner	BNSF, Union Pacific, SCRRA, San Diego Northern	74.0%	80.2%	86.1%	74.0%	66.0%

## **APPENDIX 7.4. HISTORIC RIDERSHIP BY STATION**



# 2024 California State Rail Plan

## HISTORIC RIDERSHIP BY STATION

This section shows historic annual ridership trends for each Amtrak station in California. The data ranges from FY19 to FY23, a five-year period.

### Sources

2019 Amtrak California Fact Sheet:

<https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/statefactsheets/CALIFORNIA19.pdf>

### Notes

Between FY19 and FY23, multiple stations were closed and a new station was added. These stations are annotated showing which fiscal year service began or was shut down.

Row ID	Station	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	% Change (2019 - 2023)
1	Anaheim	239,471	112,054	71,651	158,796	129,231	-46%
2	Antioch-Pittsburg	34,615	22,331	19,035	24,262	27,985	-19%
3	Auburn	15,325	6,730	1,587	5,357	10,905	-29%
4	Bakersfield	424,157	250,609	196,791	314,684	658,266	55%
5	Barstow	3,112	2,457	1,567	1,959	3,855	24%
6	Berkeley	174,656	83,958	25,999	57,302	77,341	-56%
7	Burbank (Airport)	63,749	32,607	20,653	43,671	46,470	-27%
7a	Burbank (Downtown)				2,218	7,152	N/A
8	Camarillo	53,219	27,819	11,807	31,862	40,346	-24%
9	Carlsbad Poinsettia*	-					N/A
10	Carlsbad Village**	160					N/A
11	Carpinteria	32,597	15,585	9,242	15,883	20,980	-36%
12	Chatsworth	62,464	28,853	17,752	38,654	38,353	-39%
13	Chico	10,580	7,544	3,383	7,625	25,250	139%
14	Colfax	5,845	3,370	2,034	3,753	5,214	-11%
14a	Col. Allensworth Park				470	776	N/A

## 2024 California State Rail Plan

15	Corcoran	26,789	16,710	9,951	14,964	17,915	-33%
16	Davis	380,034	194,029	70,194	163,636	223,609	-41%
17	Dunsmuir	5,178	3,680	2,160	3,496	3,507	-32%
18	Emeryville	585,849	279,498	164,264	283,631	471,695	-19%
19	Encinitas*	-					#VALUE!
20	Fairfield-Vacaville***	101,369	61,003	28,245	39,248	51,360	-49%
21	Fremont	48,512	23,234	9,341	21,216	29,124	-40%
22	Fresno	368,262	194,144	136,415	221,781	278,603	-24%
23	Fullerton	256,594	129,611	86,618	172,130	160,622	-37%
24	Glendale	44,390	22,226	13,227	31,521	40,094	-10%
25	Goleta	110,409	57,055	19,947	52,365	67,181	-39%
26	Great America (Santa Clara)	194,677	100,196	19,970	39,593	65,006	-67%
27	Grover Beach	13,293	8,815	6,446	12,748	17,602	32%
28	Guadalupe-Santa Maria	9,298	5,929	5,148	9,744	10,099	9%
29	Hanford	181,209	93,645	60,573	97,628	128,786	-29%
30	Hayward	70,383	38,591	10,328	20,641	27,477	-61%
31	Irvine	347,262	184,298	108,774	180,103	353,971	2%
32	Lodi	11,285	4,639		1,584	5,145	-54%
33	Lompoc-Surf	6,610	5,093	3,712	7,560	8,089	22%
34	Los Angeles	1,413,006	708,925	466,417	928,558	1,000,243	-29%
35	Madera	27,591	16,854	11,819	19,014	23,438	-15%
36	Martinez	352,068	197,953	124,389	176,571	242,645	-31%
37	Merced	133,311	78,318	48,737	94,304	120,583	-10%
38	Modesto	116,342	70,147	51,281	76,286	89,101	-23%
39	Moorpark	17,539	7,686	1,050	16,960	23,091	32%
40	Needles	8,641	5,682	3,633	4,667	5,826	-33%
40a	Northridge				3,936	12,610	N/A
41	Oakland	396,640	211,617	97,880	154,266	199,354	-50%
42	Oakland Coliseum	92,730	41,310	17,233	23,557	27,940	-70%
43	Oceanside	258,266	142,524	106,892	185,734	257,767	0%
44	Ontario	4,077	2,662	2,926	3,374	11,675	186%
45	Oxnard	91,436	49,530	36,307	59,653	81,236	-11%
46	Palm Springs	3,045	2,217	1,171	2,224	1,687	-45%

## 2024 California State Rail Plan

47	Paso Robles	11,808	6,549	3,923	8,197	14,301	21%
48	Pomona	1,607	1,097	1,052	1,131	1,315	-18%
49	Redding	10,135	7,801	4,382	6,625	7,008	-31%
50	Richmond	291,270	155,109	60,116	114,929	154,239	-47%
51	Riverside	10,973	6,706	4,926	6,947	24,163	120%
52	Rocklin	17,199	8,793	2,113	5,031	9,653	-44%
53	Roseville	39,289	21,274	7,976	21,022	34,747	-12%
54	Sacramento	1,100,550	565,196	255,183	456,647	740,697	-33%
55	Salinas	19,965	11,469	7,379	16,160	31,962	60%
56	San Bernardino	10,275	6,736	3,883	6,855	16,403	60%
57	San Clemente Pier	15,753	6,707	7,563	14,107	5,110	-68%
58	San Diego	652,818	319,689	235,775	443,091	274,987	-58%
59	San Diego-Old Town	362,340	174,880	113,163	253,617	151,928	-58%
	San Francisco				14,192		N/A
60	San Jose	238,638	125,113	51,848	110,949	202,760	-15%
61	San Juan Capistrano	194,555	90,699	71,260	117,526	74,995	-61%
62	San Luis Obispo	72,922	48,229	30,449	75,279	109,784	51%
63	Santa Ana	143,020	72,968	50,733	95,854	72,613	-49%
64	Santa Barbara	317,664	160,074	123,317	213,697	325,490	2%
65	Santa Clara (University)	67,887	33,870	6,350	21,489	28,238	-58%
65a	Santa Rosa			17			N/A
66	Simi Valley	46,391	23,948	16,690	26,689	29,971	-35%
67	Solana Beach	369,414	165,202	94,621	176,089	89,369	-76%
67a	Solvang			1			N/A
67b	South Lake Tahoe			473			N/A
68	Sorrento Valley**	463					N/A
69	Stockton (Downtown)	16,517	16,517	8,818	1	2,824	11,714
70	Stockton (San Joaquin St.)	276,886	276,886	183,931	156,622	212,527	399,001
71	Suisun-Fairfield	128,369	128,369	70,243	30,771	38,530	50,427
72	Truckee	15,104	15,104	9,138	5,747	9,997	15,588

## 2024 California State Rail Plan

73	Turlock-Denair	32,633	32,633	18,729	12,378	21,437	26,347
73a	Vallejo			3			N/A
74	Van Nuys	67,522	34,754	22,171	44,026	63,035	-7%
75	Ventura	83,095	41,907	23,357	43,659	62,284	-25%
76	Victorville	5,501	3,680	2,584	4,554	5,352	-3%
77	Wasco	39,232	26,997	13,916	22,781	25,830	-34%
78	<b>Total</b>	<b>11,455,840</b>	<b>5,962,044</b>	<b>3,527,292</b>	<b>6,435,647</b>	<b>8,187,978</b>	<b>-29%</b>
	* Service ended in FY19						
	** Service ended in FY19						
	*** Service started in FY18						

## **APPENDIX 7.5. PASSENGER MILES TRAVELED**

# 2024 California State Rail Plan

## PASSENGER MILES TRAVELED

### Description

This section contains the Passenger Miles Traveled (PMT) for Capitol Corridor, the San Joaquins, and Pacific Surfliner from FY 2015-16 to FY 2021-22.

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
<b>Capitol Corridor</b>							
PMT	108,609,358	113,798,088	113,798,088	119,601,577	60,045,281	24,994,057	50,335,344
<b>San Joaquins</b>							
PMT	155,936,000	-	145,990,000	145,597,000	-	-	-
<b>Pacific Surfliner</b>							
PMT	251,650,373	259,160,678	253,461,239	248,232,669	122,159,766	78,157,721	-

<b>Capitol Corridor Thruway Bus Route Passenger Miles Traveled – FFY 2022</b>		
<b>Thruway Bus Route</b>		<b>Passenger Miles Traveled</b>
Route 3	(Sacramento – Marysville – Chico – Redding)	57,570
Route 20	(Sacramento – Roseville – Colfax – Reno)	2,787,487
Route 21	(Oakland – San Jose – Santa Barbara)	5,809,282
Route 35	(Martinez – Vallejo – Napa – Santa Rosa – Eureka)	195,450
Route 99	(San Francisco – Emeryville)	1,221,051
<b>Total Passenger Miles Traveled</b>		<b>10,070,840</b>

## 2024 California State Rail Plan

San Joaquin Thruway Bus Route Passenger Miles Traveled – FFY 2022		
Thruway Bus Route		Passenger Miles Traveled
Route 1	(Fresno/Bakersfield – Los Angeles – Santa Ana – Oceanside – San Diego)	28,160,548
Route 3	(Stockton – Sacramento – Chico – Redding)	8,183,879
Route 6	(Stockton – San Jose – Santa Cruz)	1,781,256
Route 7	(Martinez – Napa – Santa Rosa – Arcata)	4,060,726
Route 10	(Santa Barbara – Bakersfield – Barstow – Las Vegas)	5,449,209
Route 15a/15b	(Merced – Yosemite National Park) (Fresno – Yosemite National Park)	361,476
Route 18	(Visalia – Hanford – San Luis Obispo – Santa Maria)	1,166,694
Route 19	(Bakersfield – Pasadena – Riverside – San Bernardino)	5,489,894
Route 56	(San Jose – Stockton)	288,096
Route 99	(Oakland – Emeryville – San Francisco)	458,791
<b>Total Passenger Miles Traveled</b>		<b>55,400,569</b>

Pacific Surfliner Thruway Bus Route Passenger Miles Traveled – FFY 2022		
Thruway Bus Route		Passenger Miles Traveled
Route 4	(Los Angeles – Santa Barbara – Goleta)	427,727
Route 17	(Santa Barbara – San Luis Obispo – Oakland)	11,230,498
Route 39	(Fullerton – Palm Springs – Coachella Valley)	1,225,952
<b>Total Passenger Miles Traveled</b>		<b>12,884,177</b>

### Sources

Capitol Corridor Annual Business Plans:

<https://www.capitolcorridor.org/business-plan/>

San Joaquin Joint Powers Authority 2023 Business Plan Update

<https://cdn.sjpa.com/wp-content/uploads/20230609125423/2023-SJPA-Business-Plan-Final.pdf>

LOSSAN Rail Corridor Agency Business Plan FY 2022-23 to FY 2023-24

<https://www.octa.net/about/leadership/lossan-agency/plans-and-documents/>

## **APPENDIX 7.6. INTERCITY RIDERSHIP**



# 2024 California State Rail Plan

## INTERCITY RIDERSHIP

### Description

This section contains the following passenger rail data:

- Intercity Rail Ridership
- Thruway Bus Ridership

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
<b>Capitol Corridor</b>	1,560,814	1,607,277	1,706,849	1,777,136	898,007	354,373	705,365	921,105
<b>San Joaquins</b>	1,135,424	1,125,626	1,090,200	1,076,454	794,634	392,538	656,469	828,352
<b>Pacific Surfliner</b>	2,889,067	2,972,807	2,998,296	2,777,872	2,075,229	596,251	1,469,800	1,542,198

<b>Capitol Corridor Thruway Bus Route Ridership – FY 2023</b>		
<b>Thruway Bus Route</b>		<b>Ridership</b>
Route 3	(Sacramento-Marysville-Chico-Redding)	2,809
Route 20	(Sacramento-Roseville-Colfax-Reno)	40,138
Route 21	(Oakland-San Jose-Santa Barbara)	36,561
Route 35	(Martinez-Vallejo-Napa-Santa Rosa-Eureka)	6,892
Route 99	(San Francisco-Emeryville)	79,778
<b>Total Ridership</b>		<b>166,178</b>

<b>San Joaquin Thruway Bus Route Ridership – FY 2023</b>		
<b>Thruway Bus Route</b>		<b>Ridership</b>
Route 1	(Fresno/Bakersfield – Los Angeles – Santa Ana – Oceanside – San Diego)	230,028
Route 1C	(Bakersfield – Van Nuys – Santa Monica)	24,094
Route 3	(Stockton – Sacramento – Chico – Redding)	149,551
Route 6	(Stockton – San Jose – Santa Cruz)	28,472
Route 7	(Martinez – Napa – Santa Rosa – Arcata)	38,732
Route 10	(Santa Barbara – Bakersfield – Barstow – Las Vegas)	33,189
Route 15a/15b	(Merced – Yosemite National Park) (Fresno – Yosemite National Park)	4,859
Route 18	(Visalia – Hanford – San Luis Obispo – Santa Maria)	12,408

Route 19	(Bakersfield – Pasadena – Riverside – San Bernardino)	41,839
Route 56	(San Jose – Stockton)	6,419
Route 99	(Oakland – Emeryville – San Francisco)	40,496
	<b>Total Ridership</b>	<b>610,123</b>

<b>Pacific Surfliner Thruway Bus Route Ridership – FY 2023</b>		
<b>Thruway Bus Route</b>		<b>Ridership</b>
Route 4	(Los Angeles – Santa Barbara – Goleta)	5,427
Route 17	(Santa Barbara – San Luis Obispo – Oakland)	62,792
Route 39	(Fullerton – Palm Springs – Coachella Valley)	15,547
	<b>Total Ridership</b>	<b>83,766</b>

### Sources

Capitol Corridor Annual Business Plans:  
<https://www.capitolcorridor.org/business-plan/>

San Joaquin Joint Powers Authority 2024 Business Plan Update:  
<https://sijpa.com/business-plan/>

LOSSAN Rail Corridor Agency Business Plan FY 2024-25 to 2025-26:  
<https://www.octa.net/about/leadership/lossan-agency/plans-and-documents/>

## **APPENDIX 7.7. REGIONAL RIDERSHIP**

# 2024 California State Rail Plan

## Appendix 4.7

### REGIONAL RIDERSHIP

#### Description

Appendix 4.7 contains the following passenger rail data:

- Regional Ridership

Agency	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
<b>ACE</b>	1,299,717	1,398,954	1,506,183	1,061,990	160,007	321,752	474,498
<b>Caltrain</b>	18,648,850	18,504,880	17,662,773	13,692,716	1,263,084	4,054,829	7,012,116
<b>SMART</b>		636,029	716,847	571,527	122,849	354,328	640,099
<b>Metrolink</b>	11,715,699	11,688,794	11,935,356	9,357,013	2,102,196	3,855,973	4,662,629
<b>COASTER</b>	1,454,865	1,433,125	1,408,677	944,109	162,707	588,409	813,207
<b>TOTAL</b>	<b>33,119,131</b>	<b>33,661,782</b>	<b>33,229,836</b>	<b>25,627,355</b>	<b>3,810,843</b>	<b>9,175,291</b>	<b>13,602,549</b>

#### Sources

California State Controller’s Office – Local Government Financial Data – Transit Operators, Revenue and Expenditures:

<https://bythenumbers.sco.ca.gov/>

# Appendix 8. Freight Data

## 2024 California State Rail Plan

### **Freight Data**

#### **Description:**

California freight rail metrics are presented, including:

- CA Gross Domestic Product (by industry group)
- 2022 Public Waybill Sample summary
- Total Carloads shipped to, from, and within CA
- Total weight (tonnage) shipped to, from, and within CA
- Total weight (tonnage) of selected commodities in CA

#### **Sources**

Bureau of Economic Analysis; Sample waybill

# 2024 California State Rail Plan

## California Gross Domestic Product by Industry Group

(millions of 2022 dollars)

Bureau of Economic Analysis

LineCode	Description	2022
1	All industry total	\$ 3,598,102.70
2	Private industries	\$ 3,202,617.10
3	Agriculture, forestry, fishing and hunting	\$ 50,125.10
6	Mining, quarrying, and oil and gas extraction	\$ 15,849.00
10	Utilities	\$ 54,241.50
11	Construction	\$ 134,773.50
12	Manufacturing	\$ 423,698.60
13	Durable goods manufacturing	\$ 257,601.00
25	Nondurable goods manufacturing	\$ 166,097.60
34	Wholesale trade	\$ 209,674.60
35	Retail trade	\$ 185,941.00
36	Transportation and warehousing	\$ 109,512.70
45	Information	\$ 358,893.40
50	Finance, insurance, real estate, rental, and leasing	\$ 642,553.30
51	Finance and insurance	\$ 184,655.80
56	Real estate and rental and leasing	\$ 457,897.40
59	Professional and business services	\$ 529,228.20
60	Professional, scientific, and technical services	\$ 352,491.90
64	Management of companies and enterprises	\$ 53,788.40
65	Administrative and support and waste management and remediation services	\$ 122,947.90
68	Educational services, health care, and social assistance	\$ 271,339.40
69	Educational services	\$ 37,304.60
70	Health care and social assistance	\$ 234,034.80
75	Arts, entertainment, recreation, accommodation, and food services	\$ 149,996.90
76	Arts, entertainment, and recreation	\$ 54,634.90
79	Accommodation and food services	\$ 95,362.10
82	Other services (except government and government enterprises)	\$ 66,790.00
83	Government and government enterprises	\$ 395,485.60
84	Federal civilian	\$ 52,856.60
85	Military	\$ 31,392.70
86	State and local	\$ 311,236.30
	Addenda:	
87	Natural resources and mining	\$ 65,974.10
88	Trade	\$ 395,615.60
89	Transportation and utilities	\$ 163,754.20
90	Manufacturing and information	\$ 782,592.00
91	Private goods-producing industries 2/	\$ 624,446.20
92	Private services-providing industries 3/	\$ 2,578,170.90

### Legend / Footnotes:

1/ Gross Domestic Product (GDP) is in millions of current dollars (not adjusted for inflation). Industry detail is based on the 2012 North American Industry Classification System (NAICS). Calculations are performed on unrounded data.

2/ The private goods-producing industries consist of agriculture, forestry, fishing, and hunting; mining, quarrying, and oil and gas extraction; construction; and manufacturing.

3/ The private services-producing industries consist of utilities; wholesale trade; retail trade; transportation and warehousing, excluding Postal Service; information; finance and insurance; real estate, rental, and leasing; professional, scientific, and technical services; management of companies; administrative and support and waste management and remediation services; educational services; health care and social assistance; arts, entertainment, and recreation; accommodation and food services; and other services (except government and government enterprises).

Last updated: March 31, 2023— revised statistics for 1997-2022.



**FREIGHT CARLOADS TO & THROUGH CALIFORNIA**

<b>Year</b>	<b>Carloads Shipped from CA</b>	<b>Carloads Shipped to CA</b>	<b>Carloads Shipped within CA</b>
2015	2,970,033	5,886,000	327,733
2016	3,042,733	5,412,700	489,600
2017	3,257,700	5,773,567	556,933
2018	3,108,667	6,087,200	270,100
2019	2,956,867	6,075,000	333,800
2020	2,798,733	5,429,867	169,367
2021	3,793,767	8,057,267	379,733
2022	3.8 M	8.3 M	648.5 K

**FREIGHT WEIGHT TO & THROUGH CALIFORNIA**

<b>Year</b>	<b>Weight Shipped from CA</b>	<b>Weight Shipped to CA</b>	<b>Weight Shipped within CA</b>
2015	71,884,833	402,324,466	26,359,000
2016	87,178,467	362,708,333	45,058,333
2017	95,318,300	386,921,633	50,998,667
2018	70,946,367	391,319,566	21,246,900
2019	72,456,067	404,114,200	28,215,000
2020	53,267,467	336,408,100	11,531,967
2021	130,827,200	552,412,866	31,097,333
2022	148.7 M	598.5 M	50.7 M



# Appendix 9. Statewide Market Viability Assessment



# Statewide Market Viability Assessment

## State Rail Plan 2022

---

June 2023

# What is a Market Viability Assessment?

- A Market Viability Assessment (MVA) is an analytical process, with third party data as inputs, used to understand high-level travel demand and patterns.
- A MVA documents current travel demand and makes reasonable assumptions about mode share to understand ridership capture under those parameters.
- A MVA is **not** meant to forecast ridership like a traditional ridership model but can be used as a complimentary strategic assessment.
- The 2022 California State Rail Plan (SRP) MVA identified a long-term potential travel market by extrapolating recent trip counts by the expected State growth rate and applying a mode share<sup>1</sup> capture.

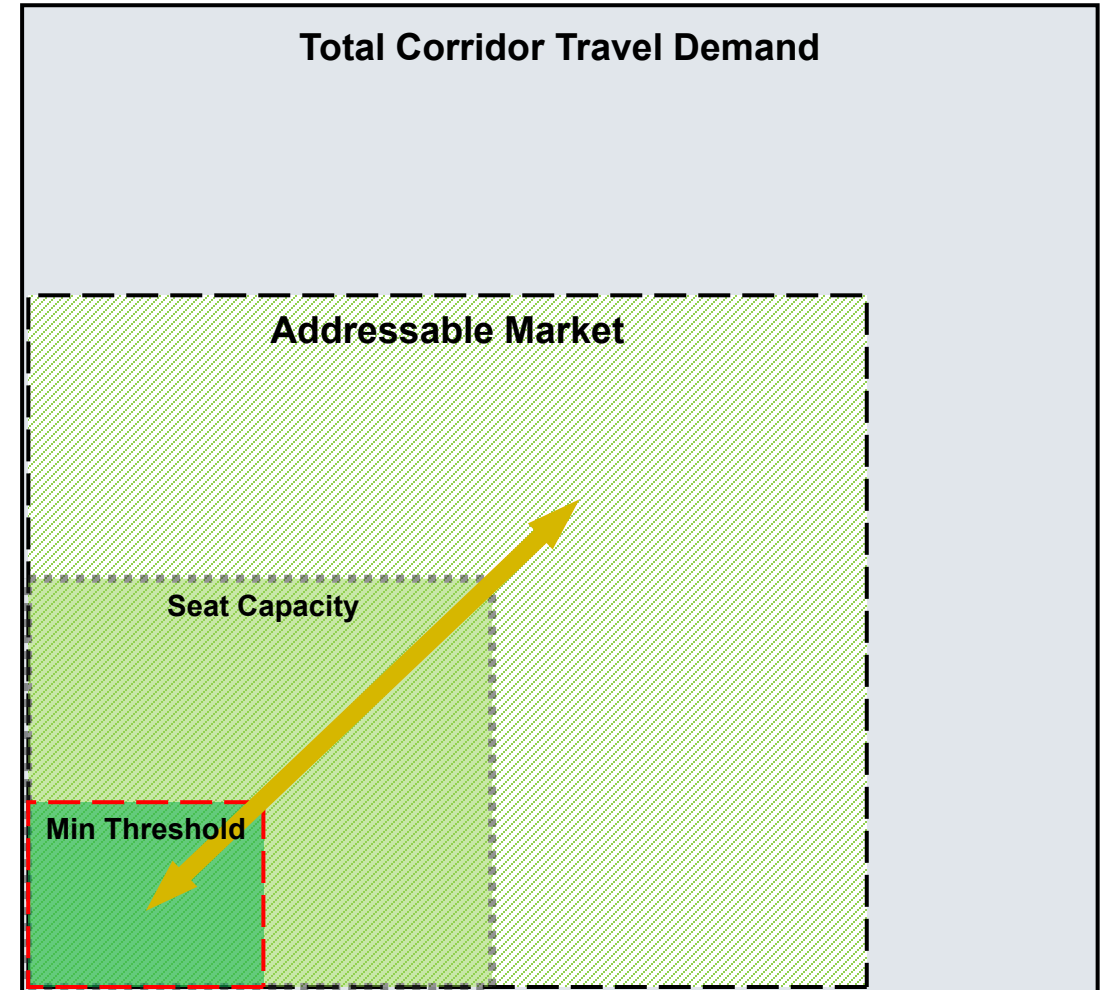


Figure 1: MVA travel demand capture process

1. Mode share refers to the portion of total trips that rail service captures.

# What types of questions can a MVA help answer?



A MVA offers quantitative travel estimates as inputs into O-D pair travel demand, build vs no-build scenarios, service expansion opportunity, equipment needs, COVID recovery, and greenhouse gases (GHG) estimates from vehicle miles traveled (VMT) mode shift. It is not meant to replace a ridership forecast model.

## Key Questions

- What's the overall volume of travel demand between a set of origin and destination pairs?
- What is the ridership implication as a function of given mode share assumptions within a market?
- How should we deploy service given travel demand in the market?

### 6.2 Market Viability Assessment

The Vision identifies ~300 station areas throughout California. They range from major urban terminals, to regional transit centers, to rural intercity bus stops. Each station serves a local market in and around the station (its 'catchment area') and a statewide market by facilitating connections. Catchment areas vary in size by the value of the service on offer. To better understand these markets and the network, Caltrans assigned flat assumptions to station catchment areas ranging from 1.75-mile radius for a local transit or bus station to up to a 10-mile radius for a high-speed station. While these catchment areas certainly do not capture all trips that might utilize a station, they are intended to conservatively capture the majority of the relevant local market to a given station.

#### 6.2.1 Travel Demand in California

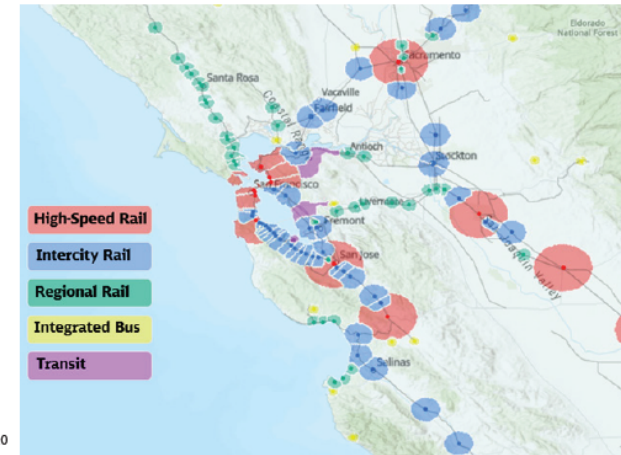
In pre-Covid 2019, when filtering out trips within station areas, there were just over 35 million trips taken every day between station areas. Over 98% of those trips were taken by car. To achieve the State's economic, environmental, and equity goals – a significant portion of those trips will need to be captured by rail and bus in future. The Rail Plan's Vision specifically designs for market capture rates to shift auto VMT to the statewide rail and bus network.

Within this station area to station area market within the statewide network, trips range in distances from just a few miles across town to up to 1000 miles across the state. However, the median travel distance is approximately 15 miles with the middle 50% of all trips ranging between 8 and 33 miles in length.

- That market, ~17.5 million daily trips between station areas, represents the largest potential to shift a high volume of trips from highway travel to public transport. These trips represent the core market for frequent, all-day, bi-directional regional rail services.
- There are an additional ~7.5 million daily trips ranging from 33 miles to 400 miles. While lower in volume, this market represents the core market for intercity and high-speed rail service, supported by integrated long-distance bus services

#### 6.2.2 Benchmarking Peers

While California's current rail and transit mode share capture lags at less than 2% statewide, international peers of comparable size, investment, and network development often see rail mode share approaching 8% of all trips. Highly integrated networks, like that of Switzerland, capture up to



# How was the MVA for the State Rail Plan developed?

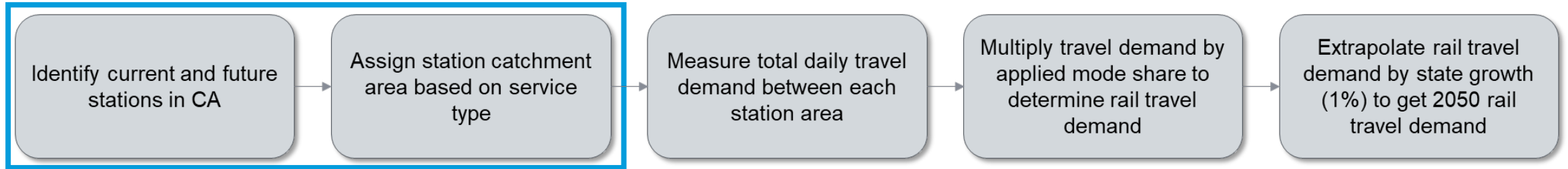


Figure 2: SRP MVA process

- All current and planned rail and integrated bus stations in the State were identified and assigned a circular catchment area.
  - A catchment area is assigned to capture origins/destinations within a reasonable distance of the station.
  - Each station's catchment area is based on the highest available service type: high speed rail, intercity, regional rail, transit, and intercity bus.
  - Service types with typically longer trip distances have a larger catchment area.
  - If the station has multiple service types, the larger catchment area is applied.

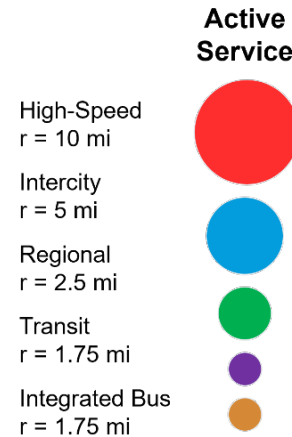


Figure 3: Station catchment size by service type

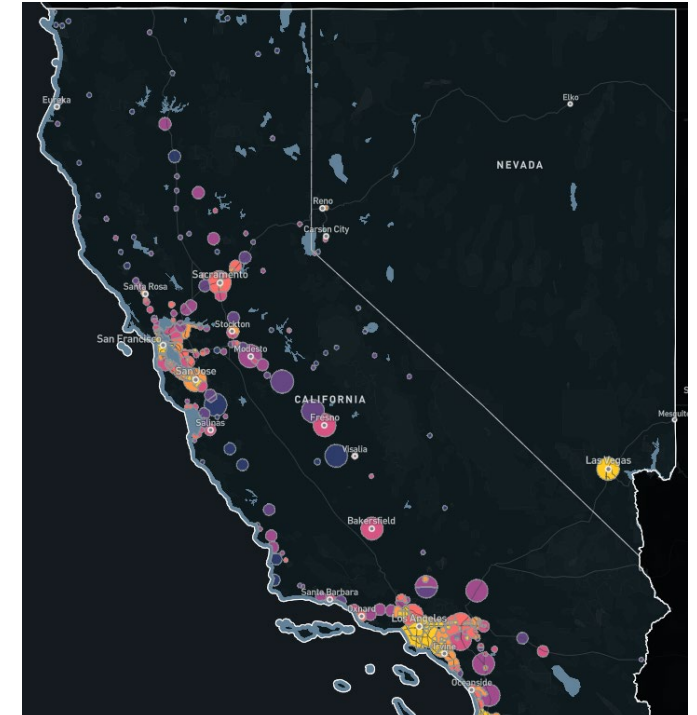


Figure 4: State station area travel demand

# What data source does the MVA use?

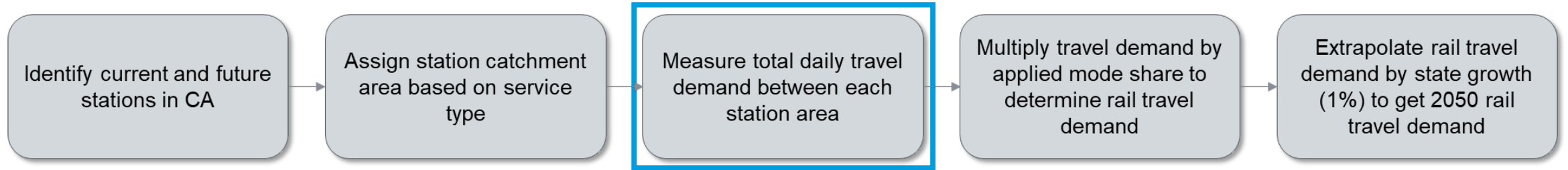


Figure 3: SRP MVA process

The MVA measured typical daily weekday travel (estimated based on a Thursdays in the Fall<sup>1</sup>) between each station area. The MVA uses third-party data that combines Census, National Transit Database, and State Department of Transportation (DOT) traffic counts with financial and cellular data. This includes trips on all modes of transportation.

Filters were applied to only include trips possible on transit:

- **Trip type:** Commercial trips, such as freight, were removed as they would not be possible on transit.
- **Trip time:** Overnight travel was removed; only trips between 6 am and 10 pm were included, which are the typical operating hours of transit.
- **Trip distance:** All trips less than 4 miles were removed because they were deemed too short to be captured by rail or intercity bus.
- Origin – destination pairs that are in the same zone were removed, unless they were in a transit dense area, i.e., BART or LA Metro.

1. Based on pre-COVID 2019 Replica data

# What are the results of the MVA?

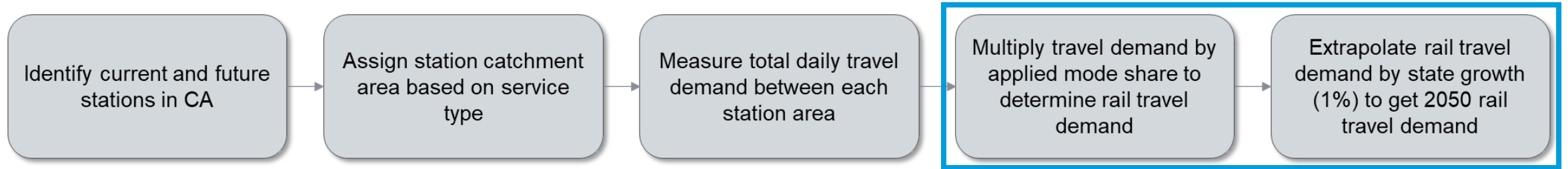


Figure 3: SRP MVA process

- With the filters applied, the total daily travel volume captured is called the ‘addressable market.’<sup>1</sup>
  - The 2019 addressable market is 38 million daily trips.
  - The total demand was extrapolated by one percent per year<sup>2</sup> to get 2050 travel demand.
  - Total State travel volume is estimated to be **52 million** in **2050**.

2050 Statewide Travel Capture Rate	2050 Rail Daily Ridership Potential
2% ( <i>Status Quo</i> )	1 Million
2.5% ( <i>Marginal Increase</i> )	1.3 Million
8.5% ( <i>International Comparison</i> <sup>3</sup> )	4.4 Million
14% ( <i>CARB VMT Reduction Goal</i> )	6.5 Million

Table 1: 2050 SRP Statewide Travel Capture Rate and Daily Ridership Potential

1. Theoretical maximum volume of trips in the corridor 2. The assumed California State population growth rate 3. Germany and Spain.

# What are the implications for strategic planning in California?

To understand future travel demand for rail, a mode share assumption was applied to the addressable market. Pre-defined benchmark assumptions for future mode share in the rail service area estimates were used. The rail travel demand market shifts based on the mode share assumption.

- Applying different mode shares to travel demand allows decision-makers to understand if the project or policy is viable to meet ridership goals.
  - The current California state rail mode share capture is 2%.
  - The SRP MVA also explored a 2.5% mode share, which represents a marginal increase from the status quo.
    - This mode share represents the **highest confidence level** because it is only a marginal increase from the status quo, with estimates of approximate 1.3 million daily riders.
  - A mode share of 14% is needed to reach the goals set forth by California Air Resources Board (CARB) for a 20% VMT reduction in the state.

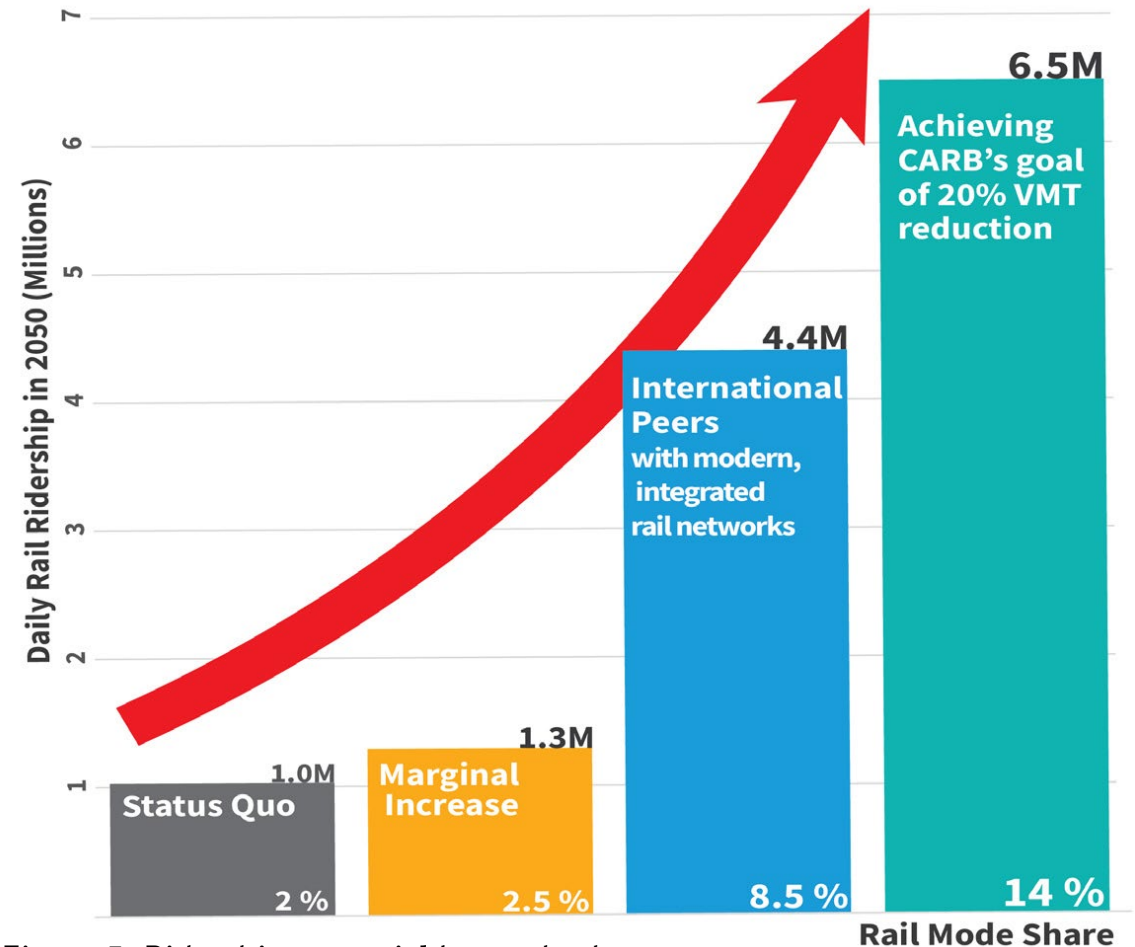


Figure 5: Ridership potential by mode share capture



## **What is the data source used in the MVA?**

Third-party data that uses Census, National Transit Database, and State Department of Transportation (DOT) and adds financial and cell-phone data to make assumptions about mobility. The SRP MVA used typical weekday data for 2019.

## **What is the difference between a MVA and a ridership forecast model?**

A MVA does not consider future land development and infrastructure improvements like traditional forecast models. It only uses current travel patterns. A MVA is not a replacement for a ridership model; it serves as preliminary assessment to understand travel demand.

Ridership modelling is more detailed, time consuming, has many assumptions, and is ideal for service planning validation. A MVA is a conceptual, agile, iterative, has basic assumptions, and is ideal for strategic service planning.

## **Why wasn't more recent travel data used? How does the MVA account for Covid-19 recovery?**

2019 was the year before COVID. COVID drastically shifted travel patterns; to account for COVID recovery, the most recent pre-COVID data was used.

## **How does the MVA account for future changes in population, housing, employment, or remote work?**

The SRP MVA only accounted for population by extrapolating current travel demand by California state growth estimates (1% per year). In this model, other changes are assumed to scale with population.

## **How is the MVA used as a decision-making tool?**

A MVA provides an additional level of confidence by minimizing unknowns when making strategic decisions. Different mode shares with varying confidence levels are applied to inform decision-making and use to determine whether projects are financially viable.

# Appendix 10. Governance

## APPENDIX 10.1. STATE POLICY GUIDANCE

## 2023 California State Rail Plan

### STATE POLICY GUIDANCE

#### Description

California has been at the forefront in proactively identifying and addressing critical trends that impact the condition and performance of a statewide transportation system. Key to this are the following state policies:

**AB-32 (2006)** created the Cap-and-Trade program and requires that California's GHG emissions be reduced to 1990 levels by the year 2020..

- Available:
  - [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=200520060AB32](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200520060AB32)
- Health and Safety Code
  - Added §38500 to Div. 25.5

**AB-1358 (2008)** requires cities and counties to include complete streets policies in their general plans.

- Available:
  - [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=200720080AB1358](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200720080AB1358)
- Government Code
  - Amended §65040.2 and §65302

**SB-375 (2008)** the "Sustainable Communities and Climate Protection Act of 2008," promotes integrated transportation and land use planning at the regional level to reduce GHG emissions from passenger vehicle travel, and helps California meet AB 32 goals. SB 375 requires the California Air Resources Board to develop regional GHG emissions reduction targets for passenger vehicle travel, setting benchmarks in 2020 and 2035 for each of the State's 18 Metropolitan Planning Organizations.

- Available:
  - [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=200720080SB375](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200720080SB375)
- Government Code
  - Amended § 65080, § 65400, § 65583, § 65584.01, § 65584.02, § 65584.04, § 65587, and § 65588
  - Added § 14522.1, § 14522.2, and § 65080.01
- Public Resources Code
  - Amended §21061
  - Added §21159.28, and Chapter 4.2 (commencing with §21155)

**The Smart Mobility Framework (2010)** is a planning framework that helps guide and assess how well plans, programs, and projects meet a definition of "smart mobility" and

## 2023 California State Rail Plan

further integrates these smart mobility concepts into transportation planning in California.

- Available: <https://dot.ca.gov/programs/transportation-planning/division-of-transportation-planning/active-transportation-and-complete-streets/smart-mobility-framework>

**SB-535 (2012)** established environmental justice goals and requirements for the Cap-and Trade program. The law addresses concerns that actions taken to achieve the goals laid out by AB 32 must not disproportionately affect low-income and disadvantaged communities.

- Available: [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201120120SB535](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120SB535)
- Health and Safety Code
  - Added §39711, 39713, 39715, 39721, and 39723

**SB-743 (2014)** created a process to change the way transportation impacts are analyzed and mitigated to focus on reducing VMT instead of automobile LOS.

- Available: [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201320140SB743](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB743)
- Government Code
  - Amended §65088.1 and §65088.4
- Public Resources Code
  - Amended §21181, §21183, §21186, §21187, §21189.1, and §21189.3
  - Added §21155.4, Chapter 2.7 (commencing with §21099) to Division 13
  - Added and repealed
    - §21168.6.6 of
  - Repealed and added §21185

**Executive Order B-32-15 (2015)** directs State agencies to improve freight efficiency, transition to zero-emission technologies, and identify State policies, programs, and investments to achieve these goals while increasing the competitiveness of California's freight system.

- Available: <https://www.ca.gov/archive/gov39/2015/07/17/news19046/index.html>

**Executive Order B-30-15 (2015)** establishes a California GHG reduction target of 40 percent below 1990 levels by 2030 and reaffirms the long-term target of reducing GHGs to 80 percent below 1990 levels by 2050

- Available <https://www.ca.gov/archive/gov39/2015/04/29/news18938/index.html>

## 2023 California State Rail Plan

**AB-1482 (2016)** directs ongoing updates to the State's climate adaptation strategy and identifies priority actions needed to reduce climate risks.

- Available:
  - [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160AB1482](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB1482)
- Public Resources Code
  - Amended Division 34 §75125
  - Added Part 3.7 (commencing with §71150)

**SB-1 (2018)**, the road repair and accountability act of 2017, is the first legislation in more than 20 years to significantly increase state transportation funding with dedicated funding directed to rail and transit.

- Available:
  - [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201720180SB1](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB1)
- Government Code
  - Amended §14526.5
  - Added §14033, §14110, §14526.7, §14556.41, §16321, Chapter 5 (commencing with §14460) to Part 5 of Division 3 of Title 2
  - Repealed §63048.66, §63048.67, §63048.7, §63048.75, §63048.8, and §63048.8
  - Repealed and added §63048.65
- Health and Safety Code
  - Added §43021
- Public Utilities Code
  - Amended §99312.1
  - Added §99312.3, §99312.4, and §99314.9
- Revenue and Taxation Code
  - Amended §6051.8, §6201.8, §7360, §8352.4, §8352.5, §8352.6, and §60050
  - Added §7361.2, §7653.2, §60050.2, §60201.4, Chapter 6 (commencing with §11050) to Part 5 of Division 2
- Streets and Highways Code
  - Amended §2104, §2105, §2106, and §2107
  - Added §2103.1 and §2192.4, Article 2.5 (commencing with §800) to Chapter 4 of Division 1, Chapter 2 (commencing with §2030), Chapter 8.5 (commencing with §2390) to Division 3
- Vehicle Code
  - Amended §4156
  - Added §4000.15 and §9250.6

**Executive Order N-19-19 (2019)** requires the State Transportation Agency will leverage \$5 billion in annual state transportation spending to 1) align the state's climate goals with the state's transportation spending; 2) Reduce driving by strengthening the

## 2023 California State Rail Plan

connection between jobs, housing, and transportation. 3) Reduce congestion by investing in innovative strategies that encourage people to shift from cars to other modes of transportation; 4) Invest in transportation options that improve Californians' health such as walking, bicycling, and other active modes; and 5) Mitigate costs for lower-income Californians.

- Available: <https://catc.ca.gov/-/media/ctc-media/documents/ctc-codes/execorder-n-19-19-all.pdf>

**Executive Order N-79-20 (2020)** calls for elimination of new internal combustion passenger vehicles by 2035. It establishes a target for the transportation sector that helps put the state on a path to carbon neutrality by 2045 and furthers the impetus for the providers of charging and refueling infrastructure, electric utilities, and others to plan for and support the increasing consumer demand for these vehicles.

- Available: <https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf>

**Climate Action Plan for Transportation Infrastructure (CAPTI) (2021)** details how the state recommends investing billions of discretionary transportation dollars annually to aggressively combat and adapt to climate change while supporting public health, safety and equity. CAPTI builds on executive orders signed by Governor Gavin Newsom in 2019 and 2020 targeted at reducing greenhouse gas (GHG) emissions in transportation, which account for more than 40 percent of all emissions, to reach the state's ambitious climate goals.

- Available: <https://calsta.ca.gov/subject-areas/climate-action-plan>

## APPENDIX 10.2. STRACNET

## **STRATEGIC RAIL CORRIDOR NETWORK (STRACNET) and DEFENSE CONNECTOR LINES**

### **Description**

The purpose of the Railroads for National Defense (RND) Program is to identify defense rail requirements; assure consideration for national defense in civil railroad policy, plans, standards, and programs; and gain support and responsiveness for defense rail line requirements.

Military Traffic Management Command (MTMC) initiated the RND Program with the development of Strategic Rail Corridor Network (STRACNET) in 1976. STRACNET is a 33,000-mile interconnected network of rail corridors (not actual rail lines) important to national defense. It was developed from analyses of mobilization/deployment needs, peacetime traffic, and combat tank shipments as an indicator of oversize/overweight movements. FRA designated a main line to satisfy each STRACNET corridor.

### **Sources**

<https://www.sddc.army.mil/sites/TEA/Functions/SpecialAssistant/RND%20Publications/S%20TRACNET%202023.pdf>



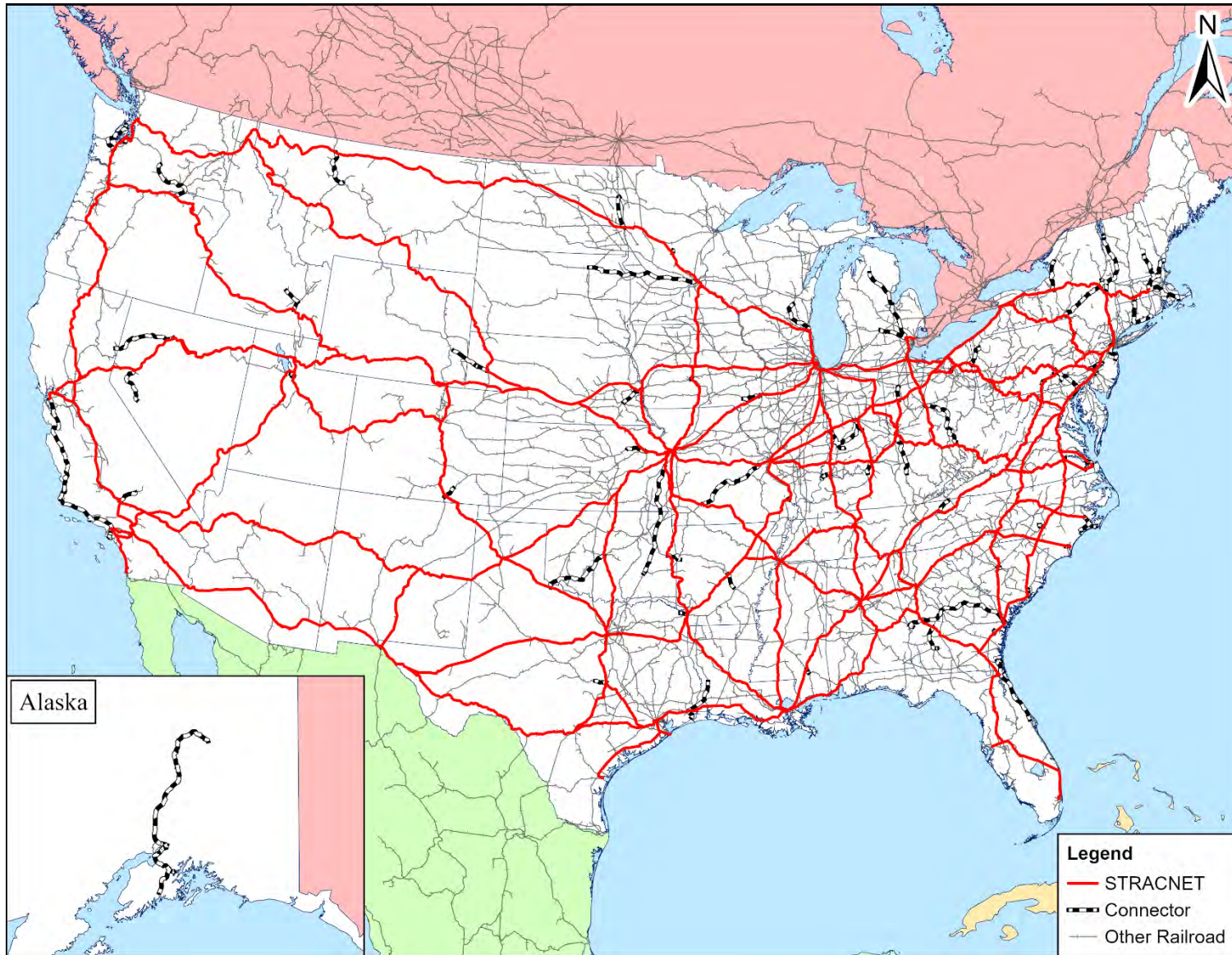


Figure 2. Civil Rail Lines Most Important to National Defense

## STRATEGIC RAIL CORRIDOR NETWORK (STRACNET) and DEFENSE CONNECTOR LINES



# Appendix 11. FRA Final State Rail Plan Guidance

## Description

The Final State Rail Plan Guidance explains the process to be followed in developing state rail plans, including minimum content requirements, a standardized format, and the Federal Railroad Administration's (FRA) review and acceptance process, as established by the Passenger Rail Investment Improvement Act of 2008 (PRIIA). PRIIA requires each state to prepare a rail plan in order to be eligible for funding for passenger and freight rail projects as well as to receive grants to relieve rail congestion. In the final guidance the FRA has emphasized the importance of integrating the development of rail plans with other state planning efforts as much as possible. Because individual state rail plans but be updated every four years at a minimum and state update cycles vary, there is no set schedule for when states will submit rail plans to FRA for review and acceptance.

## Sources

FRA Website:

[https://railroads.dot.gov/sites/fra.dot.gov/files/fra\\_net/3382/Final State Rail Plan Guidance September 2013 .pdf](https://railroads.dot.gov/sites/fra.dot.gov/files/fra_net/3382/Final_State_Rail_Plan_Guidance_September_2013.pdf)

FRA Guidance Chapter Number	FRA Guidance Chapter Content	California State Rail Plan Chapter/Section	California State Rail Plan Chapter/Section Title
1.0	The Role of Rail in Statewide Transportation	Chapter 1	Strategic Vision
1.1	The State’s goals for the multimodal transportation system.	1.2	Program Benefits- Delivering on CalSTA’s Core Four Priorities
1.2	A conceptual analysis of rail transportation’s role within the State’s transportation system.	1.3	The Importance of an Integrated Network
1.3	A description of the institutional governance structure of the State rail program(s) including: SRTA, SRPAA, State and local agencies involved in delivering rail services, such as rail authorities, transit agencies and MPOs, and State authorizing (and limiting) laws and powers for planning, funding, and operating rail services; and a statement that the State is in compliance with the requirements of Section 22102 (which stipulates eligibility requirements for a long-established FRA rail freight grant assistance program pertaining to State planning and administration).	1.7 1.8	Federal Railroad Administration Compliance State Law Compliance
1.4	A description of the State’s authority for grant, loan, and public/private partnership financing; how the State has used these authorities in the past; State revenue sources that are dedicated to rail funding (if any); and how much the State has provided in funding over the past five years.	1.6 4.3 Appendix 8	Funding and Federal Partnership Funding Opportunities Rail Funding

FRA Guidance Chapter Number	FRA Guidance Chapter Content	California State Rail Plan Chapter/Section	California State Rail Plan Chapter/Section Title
1.5	<p>A summary of the freight and passenger rail services, initiatives and plans, such as environmental reviews required by NEPA, and Service Development Plans (SDP), sponsored by State rail transportation authorities, regional planning agencies, regional transportation authorities, and municipalities within the State, or in the region in which the State is located, that have been considered while preparing the plan. A summary of services, initiatives, and plans of private sector railroads, as well as connections between rail services and other modes in the State transportation system, to the extent known to the State, are to be included here as well.</p>	<p>Chapter 2</p> <p>Chapter 3</p>	<p>Passenger Network Strategy</p> <p>California’s Freight Network</p>
<b>2.0</b>	The State’s Existing Rail System	Appendix 3	Rail Network Inventory
2.1	Description and Inventory	Appendix 3.1	Description and Inventory
2.1.1	<p>The existing freight, intercity passenger, and commuter rail transportation system, services currently operating, operating objectives, and system performance, including: a review of all rail lines and corridors, existing and proposed for freight, commuter, and intercity passenger service, including high speed lines as well as railway assets currently out of service or rail banked. The ownership of, and operating rights over, each segment of the railroad network, whether private or public, is to be clearly identified.</p>	<p>Appendix 3</p> <p>Chapter 2.3</p> <p>Chapter 3</p>	<p>Rail Network Inventory</p> <p>Host Railway Coordination - Railway Ownership Map</p> <p>California’s Freight Network</p>

FRA Guidance Chapter Number	FRA Guidance Chapter Content	California State Rail Plan Chapter/Section	California State Rail Plan Chapter/Section Title
2.1.2	Major freight and passenger terminals and stations that serve as intermodal connections, including seaports and airports.	Appendix 3  Chapter 3	Rail Network Inventory  Annual Container Traffic Figure Includes seaport volumes
2.1.3	Objectives for the passenger rail services operating within the State, including minimum service levels by route, including service frequency, capacity, and projected ridership.	Chapter 2  Appendix 3	Passenger Network Strategy  Rail Network Inventory
2.1.4	A performance evaluation of intercity passenger services operating in the State (both interstate and intrastate services) according to metrics such as those established under PRIIA Section 207: FRA Metrics and Standards for Intercity Passenger Service. Only currently available data for PRIIA Section 207 analysis is requested. Identify possible improvements in existing services and a describe strategies to achieve those improvements).	Chapter 2  Appendix 3	Passenger Network Strategy  Rail Network Inventory
2.1.5	A statement on public financing for rail projects and service in the State, including a list of current and prospective public capital and operating funding resources, public subsidies, State taxation, and other financial policies relating to rail operations and infrastructure development. This section should also address existing challenges to State investment or involvement in rail transportation as posed by the State's constitution, laws, or regulations, or by implementation of current or proposed federal regulations.	1.6  2.5  4.3  Appendix 5	Funding and Federal Partnership  Corridor Identification and Development Program  Funding Opportunities Rail Funding  Rail Funding

FRA Guidance Chapter Number	FRA Guidance Chapter Content	California State Rail Plan Chapter/Section	California State Rail Plan Chapter/Section Title
2.1.6	Ongoing programs and projects intended to improve the safety and security of rail transportation, including all major projects funded under section 130 of Title 23.	Appendix 3.3	Capital Projects
2.1.7	A general analysis of rail transportation’s economic and environmental impacts in the State including, but not limited to, congestion mitigation, safety impacts including the benefit of freight rail compared to freight on public highways, trade and economic development, air quality, land use, energy use, resiliency to climate change impacts, and community impacts.	1.2  3.1	Program Benefits – Delivering on CALSTA’s Core Four Priorities  Freight Rail Network Goals
2.2	The State’s Existing Rail System: Trends and Forecasts	Chapter 1  3.3	Strategic Vision  Freight Trends
2.2.1	Demographic and Economic growth factors, including: <ul style="list-style-type: none"> <li>• Population.</li> <li>• Employment.</li> <li>• Personal income.</li> <li>• Industrial outlook by sector</li> </ul>	Chapter 1  3.3  Appendix 8  Appendix 7.  Chapter 3  Appendix 4	Strategic Vision  Freight Trends  Freight Carloads & Industry GDP  Population Growth Projection 2020-2050  Intro  Passenger Strategy

FRA Guidance Chapter Number	FRA Guidance Chapter Content	California State Rail Plan Chapter/Section	California State Rail Plan Chapter/Section Title
2.2.2	Freight demand and growth by type of service, e.g. intermodal, commodity, manifest.		
2.2.3	Passenger travel demand and growth.		
2.2.4	Fuel cost trends.		
2.2.5	Rail congestion trends.		
2.2.6	Highway and airport congestion trends.		
2.2.7	Land use trends.		
2.3	The State’s Existing Rail System: Rail Service Needs and Opportunities	Chapter 2	Passenger Network Strategy
3.0	Proposed Passenger Rail Improvements and Investments	Chapter 2	Passenger Network Strategy
4.0	Proposed Freight Rail Improvements and Investments	Chapter 3	California’s Freight Network
5.0	The State’s Rail Service and Investment Program	4.3  Appendix 2	Funding Opportunities Rail Funding Capital Projects
5.1	Vision	Chapter 1	Strategic Vision
5.2	Program Coordination	1.4  2.3  4.4  4.6	Plans and Strategies  Rail Plan Host Railroad Coordination Coordination Planning for Future Investments
5.3	Rail Agencies	Appendix 10	Governance



FRA Guidance Chapter Number	FRA Guidance Chapter Content	California State Rail Plan Chapter/Section	California State Rail Plan Chapter/Section Title
5.4	Program Effects	2.5  2.6  4.2	State Planning Priorities Network Implementation  Economic Benefits
5.5	Passenger Element	Chapter 2  Appendix 2  Appendix 7	Passenger Network Strategy Capital Projects Passenger Operations and Finance
5.6	Freight Element	Chapter 3  Appendix 2	California's Freight Network Capital Projects
5.7	Rail Studies and Reports	4.3  Appendix 2	Funding Opportunities Capital Project
5.8	Passenger and Freight Rail Capital Program	Appendix 2	Capital Projects
<b>6.0</b>	Coordination and Review	Appendix 4	Outreach and Coordination
	Technical Appendix	Appendix 1-11	California State Rail Plan Appendix