CalSTA
CALIFORNIA STATE TRANSPORTATION AGENCY

REBUILDING CALIFORNIA SB1

CALIFORNIA CLIMATE INVESTMENTS
Cap and Trade Dollars at Work

Transit and Intercity Rail Capital Program
Sixth Round Selected Projects – Project Detail Summary

April 24, 2023

Total Funding Awarded:
$371,957,000 awarded to 11 new projects in Southern California
$168,297,000 awarded to 9 new projects in the Rest of the State
$150,000,000 awarded to 8 projects statewide in the Major Projects – Project Development category

Estimated 2,068,000 metric tons of CO_2e ($MTCO_2e$) reduced

1. **Antelope Valley Transit Authority (AVTA) and Victor Valley Transit Agency (VVTA)**

   Project: High Desert Clean Connector

   Award: **$3,902,000**
   Total Budget: **$5,454,000**

   Estimated TIRCP GHG Reductions: **11,000 MTCO2e**

   The project will purchase four zero emission buses to provide a new commuter service between Antelope Valley and Victorville, which is currently not served by transit. The new buses also further expand AVTA's zero emission fleet, which is one that is already 100% electrified. The project leverages recent investments by Caltrans to expand Highway 138 as well as investments from Victorville into their transit hub and will improve direct connectivity between the regions and enhance connectivity to other regional services, including Metrolink and future high speed rail stations in Palmdale and Victorville.

   The route traverses largely low income and disadvantaged communities, providing improved transit, job access, and significant air quality and climate change benefits locally. Altogether, the project expands AVTA's leading zero emissions transit service into neighboring regions and improves zero emissions transit connectivity among Los Angeles, San Bernardino and Riverside Counties.

   Project completion is expected by 2025.

   Key Project Ratings:
   Cost per GHG Ton Reduced: Medium-High
   Increased Ridership: Medium
   Service Integration: High
   Improves Safety: Medium
   Project Readiness: Medium
   Funding Leverage: Medium
   Multi-Agency Coordination/Integration: Medium
   Priority Population Benefits: Medium
   Housing Co-Benefits: Medium

2. **Capitol Corridor Joint Powers Authority (CCJPA) with City of Sacramento, City of Hercules, and Santa Cruz Metropolitan Transit District**

   Project: Capitol Corridor Emerging Market Access Program

   Award: **$30,871,000**
   Total Budget: **$163,861,000**

   Estimated TIRCP GHG Reductions: **161,000 MTCO$_2$e**

   The project delivers a set of interrelated investments in growing communities along the Capitol Corridor system that will create and improve access to intercity rail, connecting transit, and local communities. Work will include:

   - Delivering key multimodal access improvements at the Sacramento Valley Station (SVS) Transit center. Includes construction of a regional bus and mobility hub that allows for unified regional

buses, bicycles, electric vehicles, and car share within a short distance of regional rail services. This project is also expected to receive significant federal funding. The buses served by this future facility traverse corridors from many other counties near and far from Sacramento, providing a key opportunity to improve the integration of the statewide rail and bus system.

- Purchase and installation of contactless EMV readers on buses for the CCJPA Thruway, San Joaquins Point Powers Authority (SJJPA) Thruway, and Santa Cruz METRO systems to allow fares to be collected through contactless bank cards or smart devices, wholly consistent with ongoing statewide Cal-ITP efforts.
- Progresses design for a modern multimodal transit facility along the Capitol Corridor route in Hercules to be served by intercity rail, local bus, and proposed ferry services. The project will include associated improvements such as a third track designed to bypass the station for freight operations, grade-separated access to the new platform, and increased safety measures along the corridor. Once constructed, this station will be the centerpiece of a transit-oriented community.
- Progresses design for the Sacramento to Roseville Third Track Project, Phase 2, and positions CCJPA and project partners to pursue competitive federal funding, including the Federal Railroad Administration's (FRA) Federal State Partnership Program (FSP). Once constructed, the project will allow for up to 20 trains daily between Sacramento and Roseville.

A portion of the funding awarded is contingent on the applicant securing non-TIRCP matching funds.

Project completion for the entire scope is expected by 2030.

Key Project Ratings:
Cost per GHG Ton Reduced: Medium-High
Increased Ridership: Medium-High
Service Integration: High
Improves Safety: Medium-High
Project Readiness: Medium
Funding Leverage: High
Multi-Agency Coordination/Integration: High
Priority Population Benefits: Medium-High
Housing Co-Benefits: Medium-High

3. Capitol Corridor Joint Powers Authority (CCJPA)

Project: Capitol Corridor Emerging Market Access Program

Award:	**$11,276,000**
Total Budget:	**$294,000,000**
Estimated TIRCP GHG Reductions:	**N/A (Pre-construction work only)**

This award for funding from the Major Projects – Project Development category will continue support for the Link21 Megaregional Rail Program effort, which is planning for the construction of a second underground train crossing of the San Francisco Bay. This crossing will enable riders access to destinations across Northern California, which includes the greater San Francisco Bay Area, the Sacramento area, the Monterey Bay area, and the Northern San Joaquin Valley.

Specifically, the funding will support planning to identify project concepts to advance into and through environmental review. Work will result in a Record/Notice of Determination (ROD/NOD) for a new transbay rail crossing between Oakland and San Francisco, with associated improvements elsewhere in the area. Work will include coordination with host railroad Union Pacific and operations analysis.

Depending on the specific concepts advanced as a result of this work, Link21 could enable improvements such as direct intercity rail service between Sacramento and San Francisco, enhanced connections between Capitol Corridor and BART, new points of system access throughout the Transbay Corridor area, and separated passenger and freight tracks.

Project is a partnership between BART and CCJPA and is expected to leverage significant federal funds for project development.

Project completion for this phase is expected by 2027.

Key Project Ratings:
Cost per GHG Ton Reduced: N/A
Cost per GHG Ton Reduced: Medium-High
Increased Ridership: Medium-High
Service Integration: High
Improves Safety: Medium-High
Project Readiness: Medium
Funding Leverage: High
Multi-Agency Coordination/Integration: High
Priority Population Benefits: Medium-High
Housing Co-Benefits: Medium-High

4. City of Pasadena

Project: Pasadena Transit System Legacy Project: #MoreServiceLessEmissions

Award:	**$14,424,000**
Total Budget:	**$144,263,000**
Estimated TIRCP GHG Reductions:	**144,000 $MTCO_2e$**

This project implements a set of interrelated transit improvements, which includes purchasing 25 fixed route zero-emission buses, 15 paratransit zero-emission buses, and supporting fueling infrastructure. The Project scope also includes a variety of service optimization improvements including transit signal priority and other corridor improvements, fare payment validators, and onboard passenger amenities.

All 40 new buses will be equipped aftermarket with onboard amenities designed to enhance passengers' experience including real-time information such as estimated time of arrival. All new buses will also be equipped with Bus Mobile Validators to allow for automatic fare collection via Metro's Transit Access Pass (TAP) System, Cal-ITP validators to expand standardized contactless payment system statewide, and standard ADA equipment, signage, communication devices, and reserved seating.

This award will allow the City of Pasadena to make its first significant investment toward a zero-emission fleet for a system that currently does not have any zero-emission vehicles or zero-emission

infrastructure. The 40 new buses will replace existing Renewable Natural Gas and unleaded gas buses at the end of their useful life and add new buses to expand the fleet.

Project completion is expected by 2028.

Key Project Ratings:
Cost per GHG Ton Reduced: High
Increased Ridership: High
Service Integration: Medium-High
Improves Safety: High
Project Readiness: High
Funding Leverage: High
Multi-Agency Coordination/Integration: Medium
Priority Population Benefits: High
Housing Co-Benefits: High

5. City of Richmond

Project: Richmond MOVES Microtransit

Award:	**$3,117,000**
Total Budget:	**$6,235,000**

Estimated TIRCP GHG Reductions: **3,000 $MTCO_2e$**

The Project expands existing microtransit services to provide service across the entire city boundary of the City of Richmond with zero-emission vehicles. In total, the applicant's microtransit fleet will expand from 3 to a total of 8 zero-emission vehicles to operate the service city-wide.

Launched in April 2022, the service known as “Richmond MOVES”, was designed with the goal of providing better service to disadvantaged areas of Richmond by providing general mobility and greater access to regional mobility hubs such as the Richmond BART/Amtrak station, the El Cerrito del Norte BART station and the Richmond Ferry Terminal. The service will utilize zero-emission electric vehicles, grouping multiple passengers heading in the same direction, and books them into a shared vehicle, thereby improving efficiencies for both the rider and the city.

Project completion is expected by 2027.

Key Project Ratings:
Cost per GHG Ton Reduced: Medium
Increased Ridership: Medium
Service Integration: Medium-High
Improves Safety: Medium
Project Readiness: Medium-High
Funding Leverage: Medium-High
Multi-Agency Coordination/Integration: Medium-High
Priority Population Benefits: High
Housing Co-Benefits: Medium-Low

6. City of Santa Monica

Project: Ridership Growth, Workforce Development, and Zero Emission Regional Connectivity

Award: **$22,977,000**
Total Budget: **$147,477,000**

Estimated TIRCP GHG Reductions: **229,000 $MTCO_2e$**

The Project expands frequency on two high-performing routes and fully delivers phases 2-4 of the City's bus charging infrastructure plan. This includes the implementation of a new vehicle charging system and utility upgrades, including construction of a charging canopy, to support fleet electrification efforts; and purchase up to 103 zero-emission buses to replace existing CNG buses (which includes a mix of 30-foot, 40-foot and 60-foot vehicles)

By leveraging openings of new rail lines in the region, the City of Santa Monica will be investing approximately 11,500 annual service hours to increase frequencies to every 10 minutes on Lincoln Blvd (Route 3 and Rapid 3). This corridor service and new buses will provide seamless connectivity for customers flying into Los Angeles from the new LAX Multi-Modal Transportation Center to the Westside of LA, and Santa Monica. Importantly, the increase in service levels will provide direct and meaningful benefits to customers along these routes living in disadvantaged communities, and 88 percent report belonging to low-income households.

Project completion is expected by 2028.

Key Project Ratings:
Cost per GHG Ton Reduced: High
Increased Ridership: Medium
Service Integration: Medium-Low
Improves Safety: Medium
Project Readiness: Medium
Funding Leverage: Medium-High
Multi-Agency Coordination/Integration: Medium
Priority Population Benefits: Medium-Low
Housing Co-Benefits: Low

7. City of Simi Valley

Project: Simi Valley Regional Transit Center and Pathway to Transition to a Zero Emissions Transit Fleet

Award: **$7,053,000**
Total Budget: **$8,303,000**

Estimated TIRCP GHG Reductions: **11,000 $MTCO_2e$**

The project will construct a new transit center for Simi Valley, linking the city bus routes with the regional routes provided by the Ventura County Transportation Commission (VCTC), providing connections from those routes and the other city routes to a city route which connects with the Metrolink/Amtrak stations at Simi Valley and Chatsworth, and the LA Metro “Orange Line” at the Chatsworth station.

Includes the construction of a regional transit hub, including the infrastructure to allow "in-route" charging of electric transit vehicles, which will allow the agency to operate three routes with electric buses. The second component is the purchase of six electric buses to convert all the transit buses which will be eligible for replacement in the next three years and place the electric buses into service by the end of the useful life of the existing six CNG buses that will be replaced.

Project completion is expected by 2025.

Key Project Ratings:
Cost per GHG Ton Reduced: Medium-High
Increased Ridership: Medium-High
Service Integration: Medium
Improves Safety: Medium
Project Readiness: Medium
Funding Leverage: Medium-Low
Multi-Agency Coordination/Integration: Low
Priority Population Benefits: Medium
Housing Co-Benefits: Low

8. Culver City

Project: CityBus Local Mobility Expansion Project

Award:	**$3,247,000**
Total Budget:	**$3,547,000**

Estimated TIRCP GHG Reductions: **5,000 $MTCO_2e$**

The project aims to incentivize mode shift away from private vehicles with the following two components.

The Jefferson Circulator is a new transit service which will provide frequent all-day service between a light rail station and a transit hub along a commercial corridor, and will also serve parks, dense housing, and a community college, all of which are currently underserved by transit. The corridor is expected to add thousands of jobs and new residents in the next decade and this transit investment will serve the area and capture new trips created as a result of its growth. The new service will also serve a disadvantaged community at its northern end. Includes the purchase of five electric minibuses and associated infrastructure for use in the new service.

The second component is implementation of an all-day and late-night microtransit service in the Downtown Culver City area, served by a dedicated city-owned electric vehicle fleet. This service will be operated in cooperation with LA Metro and will be used to evaluate the possibility of further expanding microtransit service to other parts of the city. Also Includes the purchase of five electric minibuses and associated infrastructure for use in the new service.

Project completion is expected by 2025.

Key Project Ratings:
Cost per GHG Ton Reduced: Medium-High

Increased Ridership: Medium-High
Service Integration: Medium
Improves Safety: Medium
Project Readiness: Medium-High
Funding Leverage: Medium-Low
Multi-Agency Coordination/Integration: Medium-Low
Priority Population Benefits: Medium
Housing Co-Benefits: Medium

9. High Desert Corridor Joint Powers Authority

Project: High Desert Intercity High-Speed Rail Corridor Preliminary Engineering

Award: **$8,000,000**
Total Budget: **$57,000,000**

Estimated TIRCP GHG Reductions: **N/A (Pre-construction work only)**

This award for funding from the Major Projects – Project Development category will result in the completion of the necessary environmental clearance and 30% preliminary engineering for the High Desert Intercity Rail Corridor.

Once fully constructed, the project will result in a new high speed rail alignment between Palmdale and Victor Valley creating a critical connection between future California High Speed Rail service and planned Brightline West service to Las Vegas, Nevada. The project also includes construction of a new maintenance facility and station in Palmdale.

This TIRCP award will be used as matching funds as the awardee pursues additional federal funds for the project, including but not limited to, the FRA's Corridor ID Program.

Project completion for this phase is expected by 2027.

Key Project Ratings:
Cost per GHG Ton Reduced: N/A
Increased Ridership: High
Service Integration: High
Improves Safety: High
Project Readiness: High
Funding Leverage: Medium
Multi-Agency Coordination/Integration: Medium-High
Priority Population Benefits: Medium-High
Housing Co-Benefits: Medium-Low

10. Humboldt Transit Authority (HTA) with Yurok Tribe and Redwood Coast Transit Authority

Project: Expanding Transit Service and Growing Zero-Emission Fleets on California's North Coast

Award: **$8,612,000**
Total Budget: **$17,591,000**

Estimated TIRCP GHG Reductions: 4,000 $MTCO_2e$

This project will deploy 4 battery electric buses on the Yurok Tribal Transit Service for two routes, including a dial-a-ride service for tribal members, providing key connections to the statewide transit and rail system. The routes will be operated by the Yurok Tribe and provide service from Orleans to Willow Creek through the Karuk, Yurok, and Hoopa Tribal lands.

The awardee will also deploy 6 zero-emission vehicles on an existing Redwood Coast Transit intercity route to Arcata, extend service into Eureka, and construct a new transit center in Crescent City. Importantly, this will leverage a previous TIRCP award by integrating an existing route and expand service to the new Eureka Regional Transit and Housing Center, which was the subject of a Cycle 5 TIRCP award.

Lastly, the project will design and pilot a prototype over-the-road fuel cell electric coach in an effort to more permanently address the challenges posed with operating zero-emission long-distance routes.

Project completion for the funded phases is expected by 2027.

Key Project Ratings:
Cost per GHG Ton Reduced: Medium-Low
Increased Ridership: Medium
Service Integration: High
Improves Safety: Medium
Project Readiness: Medium
Funding Leverage: Medium-High
Multi-Agency Coordination/Integration: Medium-High
Priority Population Benefits: High
Housing Co-Benefits: Medium

11. Los Angeles County Metropolitan Transportation Authority (LA Metro)

Project: CORE Capacity & System Integration Project

Award: $95,000,000
Total Budget: $141,700,000

Estimated TIRCP GHG Reductions: 234,000 $MTCO_2e$

The Project includes capital, operational, rehabilitation, and expansion (i.e., CORE) improvements for the Metro K (Crenshaw/LAX) Line and C (Green) Line light rail transit (LRT) lines that are necessary to accommodate and allow the operation of three-car trains, including: platform expansion at Aviation/LAX, Douglas, Mariposa, and Redondo Beach stations; the addition of two new traction power substations (TPSS); replacement of the failing 30-year-old Overhead Catenary System (OCS) on Metro's C Line; and replacement of wooden track ties at crossovers and rail fasteners at bridges, stations, and aerial structures on the C Line between Redondo Beach and Crenshaw stations.

Importantly, the project will expand passenger capacity on the C (Green) Line and the integrated K (Crenshaw/LAX) Line by 50 percent through these targeted investments. The project solves capacity deficiencies caused by short platforms at the four stations and insufficient traction power.

The increased capacity will be sufficient to handle surges in demand related to special events, including the 2028 Summer Olympic and Paralympic Games, while also increasing day-to-day passenger capacity. These investments will support an expanding light rail network that will provide direct connections to the Los Angeles International Airport (LAX) and future planned extensions to Torrance and Hollywood.

Project completion is expected by 2028.

Key Project Ratings:
Cost per GHG Ton Reduced: Medium-High
Increased Ridership: Medium
Service Integration: High
Improves Safety: High
Project Readiness: Medium-High
Funding Leverage: Medium
Multi-Agency Coordination/Integration: High
Priority Population Benefits: High
Housing Co-Benefits: High

12. Los Angeles County Metropolitan Transportation Authority (LA Metro)

Project: Eastside Transit Corridor Phase 2

Award: **$35,000,000**
Total Budget: **$47,100,000**

Estimated TIRCP GHG Reductions: **N/A (Pre-construction work only)**

This award for funding from the Major Projects – Project Development category will advance to partial design for the locally preferred alignment of the L Line (Gold) Eastside Corridor Extension. Advancing the project development on the project will position the applicant to compete for Federal Transit Administration (FTA) Capital Investment Grant (CIG) funding.

Once constructed, the project will result in a 4.6-mile extension of the Gold Line to Greenwood Avenue in Montebello, closing a gap in service and providing a new rail connection for communities located in East Los Angeles. The project will serve concentrated areas of employment, activity centers, and residential communities while addressing the needs of transit-dependent populations without reliable access to the rail system.

Project completion for this phase is expected by 2025.

Key Project Ratings:
Cost per GHG Ton Reduced: N/A
Increased Ridership: Medium
Service Integration: Medium
Improves Safety: Medium
Project Readiness: Medium-High
Funding Leverage: Medium
Multi-Agency Coordination/Integration: Medium-High
Priority Population Benefits: Medium-High

Housing Co-Benefits: Medium-Low

13. North County Transit District (NCTD) and San Diego Association of Governments (SANDAG)

Project: San Dieguito Bridge Replacement, Double Track and Special Events Platform Project

Award: **$100,000,000**
Total Budget: **$230,800,000**

Estimated TIRCP GHG Reductions: **148,000 $MTCO_2e$**

The project will build a special events platform at the Del Mar Fairgrounds, replace the 107-year-old wooden trestle San Dieguito River Railway Bridge and construct 0.9 miles of double track along the San Diego subdivision of the LOSSAN Corridor.

The project location is an existing single track that creates bottleneck, which restricts rail capacity and operational flexibility. Passenger trains moving in the same direction cannot pass slower moving freight trains and trains moving in the opposite direction must wait for the oncoming train to clear the single tracked area before proceeding. Providing a second track for passing around the San Dieguito River will provide increased operational flexibility for freight and passenger movements and eliminate the need for trains to sit idling, waiting at a siding for another train to use the single-track segment, particularly when service disruptions occur.

When complete, combined with other investments along the LOSSAN corridor, this project will allow an additional 10 Pacific Surfliner trains, 8 commuter trains, and 7 freight trains on an average weekday. These increased service frequencies will ensure the rail corridor is prepared for increased public transportation demand ahead of the 2028 Olympics in Los Angeles, among other large regional events.

Note that additional greenhouse gas emission reduction benefits are being investigated that may improve the number of tons reduced published in this summary.

Project completion is expected by 2028.

Key Project Ratings:
Cost per GHG Ton Reduced: Medium-High
Increased Ridership: High
Service Integration: High
Improves Safety: High
Project Readiness: Medium
Funding Leverage: Medium
Multi-Agency Coordination/Integration: Medium-High
Priority Population Benefits: Medium-Low
Housing Co-Benefits: Medium-High

14. Orange County Transportation Authority (OCTA) with Los Angeles – San Diego – San Luis Obispo Rail Corridor (LOSSAN)

Project: Coastal Rail Corridor Relocation Study

Award: **$5,000,000**
Total Budget: **$5,500,000**

Estimated TIRCP GHG Reductions: **N/A (Pre-construction work only)**

This award for funding from the Major Projects – Project Development category assesses the potential realignment of part of an eleven-mile segment of the LOSSAN rail corridor to inland on the Interstate 5 freeway or adjacent to the I-5. Most of the rail line in the study area is approximately 200 feet or less from the coastline in south Orange County, making it vulnerable to catastrophic failure as coastal erosion and rising sea levels impact operations. The analysis will entail further researching into the previous environmental analysis and preliminary design for the FRA Program Environmental Impact Report.

This TIRCP award will be used as matching funds as the awardee pursues additional federal funds for the project, including but not limited to, the FRA's Corridor ID Program to support future phases of the realignment proposal.

Project completion for this phase is expected by 2026.

Key Project Ratings:
Cost per GHG Ton Reduced: N/A
Increased Ridership: Medium-High
Service Integration: High
Improves Safety: High
Project Readiness: Medium
Funding Leverage: Medium-Low
Multi-Agency Coordination/Integration: Medium
Priority Population Benefits: Medium
Housing Co-Benefits: Medium-High

15. Orange County Transportation Authority (OCTA)

Project: Central Mobility Loop

Award: **$39,407,000**
Total Budget: **$75,565,000**

Estimated TIRCP GHG Reductions: **170,000 $MTCO_2e$**

The project consists of a number of components, including:

- Purchasing 33 expansion hydrogen fuel-cell buses and associated infrastructure for expanded service.
- Replaces 10 gasoline-powered paratransit vehicles with zero-emission vehicles, which leverages a recent federal grant awarded to OCTA.
- Implements transit signal priority at 60 traffic signals and to all buses traveling along the 12-mile Bravo! 543 route, allowing buses to move through intersections with more consistent speeds. Notably, this builds on OCTA's 94 signal timing projects throughout Orange County that has resulted in 3,285 signals being synchronized over 838 miles of streets.
- Installation of new bike storage at the Santa Ana Regional Transportation Center (SARTC) as well as fast charging stations at both SARTC as well as the Fullerton Transportation Center.

Together, these components will build on OCTA's prior transit and paratransit investments. In particular, this project leverages previous TIRCP investment in the OC Streetcar project, which was the subject of a Cycle 2 TIRCP award and subsequent supplemental award in 2023.

Project completion is expected by 2027.

Key Project Ratings:
Cost per GHG Ton Reduced: High
Increased Ridership: Medium-High
Service Integration: Medium-High
Improves Safety: High
Project Readiness: Medium
Funding Leverage: Medium
Multi-Agency Coordination/Integration: Medium
Priority Population Benefits: Medium-High
Housing Co-Benefits: Medium

16. Riverside County Transportation Commission (RCTC) with Southern California Regional Rail Authority (SCRRA)

Project: Metrolink Double Track Project: Moreno Valley to Perris

Award:	**$15,500,000**
Total Budget:	**$34,000,000**
Estimated TIRCP GHG Reductions:	**313,000 $MTCO_2e$**

The project reconstructs an existing and outdated freight track, within the Metrolink 91/Perris Valley Line (91/PVL) right-of- way. As the existing track does not currently support passenger service, this project will create a second mainline track that will accommodate Metrolink trains traveling at passenger train speeds up to 79 mph, while also safely accommodating local freight trains serving freight rail shippers along the corridor and will serve the cities of Perris and Moreno Valley, as well as unincorporated areas of Riverside County.

Once implemented, the project will improve reliability, allow increased frequency, and facilitate on-time performance. Through these improvements, Metrolink will have the capacity to expand train frequency by 50 percent on the 91/PVL and provide service at consistent and more frequent intervals throughout the day in each direction, with the goal being every 30 minutes, consistent with the Metrolink Southern California Optimized Rail Expansion (SCORE) Program and California State Rail Plan.

Project completion is expected by 2026.

Key Project Ratings:
Cost per GHG Ton Reduced: High
Increased Ridership: High
Service Integration: Medium-High
Improves Safety: Medium-High
Project Readiness: Medium-High
Funding Leverage: Medium
Multi-Agency Coordination/Integration: Medium

Priority Population Benefits: Medium
Housing Co-Benefits: Medium-Low

17. Sacramento Regional Transit (SacRT)

Project: Increasing Ridership Through System Enhancement

Award:	**$8,553,000**
Total Budget:	**$17,079,000**
Estimated TIRCP GHG Reductions:	**10,000 $MTCO_2e$**

This TIRCP award fully funds the train technology implementation component, which will greatly enhance SacRT's system reliability as well as the quality of rider information, and result in increasing ridership. This project will replace multiple disparate information systems, implement new systems, create methods of communication between all systems and create and implement necessary integrations between the systems on-board vehicles, the back office, in the stations, and to third party apps which will ultimately deliver improved and more efficient transit operations while in parallel, enabling customer service conveniences such as wireless service and real-time ridership information, and ability to use third party apps.

Specific elements of the project include:

- Implementing computer aided dispatch (CAD) /automatic vehicle location (AVL) which will enable dispatchers to communicate directly with vehicles and will be the underlying technology for the GTFS information.
- Real-Time GTFS information – By implementing a CAD/AVL system SacRT can provide enhanced and real-time passenger information not currently available. This project will meet all California Minimum GTFS Guidelines and provide real-time arrival information for passengers as well as to third-party smartphone applications.
- Implementation of disruption management solutions that will provide staff the ability to react quickly to unavoidable service disruptions. Disruption management will ensure that both operators and passengers get the updated information in real-time.
- Implementation of an on-board next station announcement system as well as on-board wi-fi access on all light rail vehicles.

Project completion for the funded element is expected by 2025.

Key Project Ratings:
Cost per GHG Ton Reduced: Medium
Increased Ridership: Medium-High
Service Integration: Medium
Improves Safety: Medium-High
Project Readiness: Medium-High
Funding Leverage: Medium-High
Multi-Agency Coordination/Integration: Medium-High
Priority Population Benefits: High
Housing Co-Benefits: Medium-High

18. San Diego Metropolitan Transit System (MTS)

Project: Zero Emission Transit Enhancements 2.0

Award: **$60,447,000**
Total Budget: **$75,559,000**

Estimated TIRCP GHG Reductions: **48,000 $MTCO_2e$**

The project consists of two components that enhance both MTS's Orange light rail line and bus operations at the Kearny Mesa Division.

- The first component electrifies the Kearny Mesa Division. Includes the construction of a new overhead charging system for the first 30 battery-electric buses based at the Kearny Mesa Division, as part of MTS agency wide transition to a zero-emission fleet by 2040.
- The second component upgrades MTS's existing signaling system, completes track safety and state of good repair improvements along MTS's Orange Line. This will provide enhancements along 18 miles of track including grade crossing safety, new universal interlocking crossovers and replacement of signaling interfaces. This component also leverages a 2022 TIRCP award, which invested in general track, signal and grade crossing improvements at various locations along the Orange line.

Together, these components enhance operational flexibility and reliability and helps MTS maintain a state of good repair while also positioning the agency for a transition to a zero-emission fleet in phases.

Project completion is expected by 2030.

Key Project Ratings:
Cost per GHG Ton Reduced: Medium
Increased Ridership: Medium-Low
Service Integration: Medium
Improves Safety: Medium-High
Project Readiness: High
Funding Leverage: Medium
Multi-Agency Coordination/Integration: Medium
Priority Population Benefits: Medium
Housing Co-Benefits: Low

19. San Francisco Bay Area Water Emergency Transportation Authority (WETA)

Project: San Francisco – Alameda/Oakland Rapid Electric Emission Free Ferry (REED)

Award: **$13,800,000**
Total Budget: **$134,353,000**

Estimated TIRCP GHG Reductions: **317,000 $MTCO_2e$**

The project expands electrical infrastructure to the Downtown San Francisco Ferry Terminal, the

Alameda Main Street Ferry Terminal, and WETA's Central Bay Maintenance Facility. This will enhance the electric capacity at those sites and allow for expansion of electric propelled, zero-emission ferry service along the Main Street Alameda-Oakland to San Francisco route. The existing vessels will be converted to electric operations, and three new electric vessels will also be procured.

Notably, the project will allow for the doubling of service form the existing 20 round trips between Oakland and San Francisco to up to 40 round trips in the corridor at 15-minute frequencies during peak periods. Ferry ridership demand has proven to be resilient during pandemic recovery compared to other regional transit options and increased service frequencies will maximize the system's ability to fully capture latent demand as job and population growth continues in this service area.

Once implemented, the project further strengthens regional transit connectivity. The Downtown San Francisco ferry terminal is located within walking distance to several transit options including BART and MUNI buses, trolleys, light rail, and Amtrak bus connections. In addition, connecting Golden Gate Transit ferries to Marin County, and WETA/San Francisco Bay Ferries to Oakland, Alameda, Vallejo, and Richmond arrive and depart from the Downtown San Francisco Ferry Terminal. WETA's Oakland terminal features a convenient connection to Capitol Corridor intercity rail service.

The project is matched by significant local, regional and federal investment. Project completion is expected by 2025.

Key Project Ratings:
Cost per GHG Ton Reduced: High
Increased Ridership: High
Service Integration: Medium-High
Improves Safety: Medium
Project Readiness: Medium-High
Funding Leverage: High
Multi-Agency Coordination/Integration: Medium
Priority Population Benefits: Medium
Housing Co-Benefits: Medium-High

20. Santa Clara Valley Transportation Authority (VTA)

Project: Eastridge to BART Regional Connector (EBRC)

Award:	**$46,593,000**
Total Budget:	**$529,900,000**
Estimated TIRCP GHG Reductions:	**39,000 $MTCO_2e$**

The project will result in a 2.4-mile extension of the VTA light rail system intended to create new regional and multimodal connectivity for East San Jose. It creates a direct rail link between VTA's 2nd busiest bus transit center at Eastridge Mall in San Jose, the new Milpitas BART Station, and the rest of the VTA light rail system.

The extension will include an elevated light rail station at Story Road with a pedestrian overcrossing, and aground level station at the Eastridge Transit Center. Also includes installation of two traction power substation to power the light rail system. When this project is complete, VTA riders will be able to get on light rail at the Eastridge Transit Center and connect directly with BART at Milpitas Station.

Long a priority for the region, this award represents the final piece to bring rail into Eastridge Transit center and is matched by significant local funding. The congested, transit dependent neighborhoods of East San Jose are all classified as low-income communities and these residents will be able to travel on protected rail right-of-way through some of the Bay Area's most congested corridors to the major regional job centers.

Project completion is expected by 2029.

Key Project Ratings:
Cost per GHG Ton Reduced: Medium
Increased Ridership: Medium
Service Integration: Medium-High
Improves Safety: Medium
Project Readiness: Medium-High
Funding Leverage: High
Multi-Agency Coordination/Integration: Medium
Priority Population Benefits: Medium
Housing Co-Benefits: Medium-High

21. Santa Cruz County Regional Transportation Commission (RTC)

Project: Zero Emission Passenger Rail & Trail Project

Award:	**$3,450,000**
Total Budget:	**$8,760,000**

Estimated TIRCP GHG Reductions: **N/A (Pre-construction work only)**

This award for funding from the Major Projects – Project Development category and fully funds the project concept report phase of the project. The project concept report will refine the locally preferred alternative from earlier planning work and provide a stable project definition that would then be carried through subsequent project phases to and through the draft and final CEQA/NEPA environmental documents. The Report will involve extensive community outreach and early engineering, requiring multiple iterations to complete initial system planning.

Once constructed, the full scope the project will result in a zero-emission passenger rail service on 22 miles of the RTC-owned Santa Cruz Branch Rail Line, as well as the remaining sections the Coastal Rail Trail, within the project limits. Implementation of the future capital project will convert the underutilized branch line into a multimodal corridor, transforming the way people travel to and within Santa Cruz County.

Project completion for this phase is expected by 2025.

Key Project Ratings:
Cost per GHG Ton Reduced: N/A
Increased Ridership: Medium-High
Service Integration: Medium-High
Improves Safety: Medium-High
Project Readiness: Medium

Funding Leverage: Medium-High
Multi-Agency Coordination/Integration: Medium
Priority Population Benefits: Medium
Housing Co-Benefits: Medium

22. Santa Cruz Metropolitan Transit District (Metro)

Project: Santa Cruz Zero Emission Intercity Transit Service Expansion Project

Award:	**$38,589,000**
Total Budget:	**$201,975,000**
Estimated TIRCP GHG Reductions:	**91,000 $MTCO_2e$**

The project delivers a set of interrelated improvements, which includes:

- Purchasing 24 zero emission buses to expand service on routes 71, 17, and 91 along the heavily traversed Highway 1 and Highway 17 corridors. Service is expected to have every 15-minute service along the corridors. The expanded service will connect Watsonville and Santa Cruz residents with regional rail service including Caltrain, Capitol Corridor, the Alatamont Corridor Express (ACE) and future High-Speed service at Diridon Station in San Jose.
- Implement rapid bus enhancements along the Soquel Drive/Main Street corridor, coordinate with regional transit agency scheduling, and implement Cal-ITP integrated ticketing. This includes improving boarding platforms, enhancing bus shelters and expanding bike parking to improve multimodal connections.
- Construct a hydrogen fueling station, maintenance bay upgrades and workforce development. The fueling center will include both bus fueling and over-the-fence retail fueling accessing to the public.
- Redevelop the Watsonville Transit Center supporting Infill Housing Development and install a Bike Hub.
- Construct Pacific Station, METRO's downtown Santa Cruz transit center, as a 180+ unit mixed-use, affordable housing development with a bike hub, real time passenger information, off-board fare payment and other multimodal improvements. Notably, free transit passes will be provided to all residents of the future developments, catalyzing additional ridership.

Together, these components will reduce travel time, improve reliability, create safer boarding areas, reduce crossing distances, and lower traffic speeds, while delivering needed affordable housing to the region.

Project completion is expected by 2028.

Key Project Ratings:
Cost per GHG Ton Reduced: Medium-High
Increased Ridership: High
Service Integration: High
Improves Safety: Medium
Project Readiness: Medium-High
Funding Leverage: Medium-High
Multi-Agency Coordination/Integration: Medium-High
Priority Population Benefits: Medium-High
Housing Co-Benefits: High

23. Southern California Regional Rail Authority (SCRRA)

Project: Metrolink Locomotive Modernization Study, Pilot and Implementation

Award: **$10,000,000**
Total Budget: **$12,000,000**

Estimated TIRCP GHG Reductions: **105,000 $MTCO_2e$**

The Project includes three phases (Study, Pilot, Implementation) resulting in deployment of one or more fuel efficiency strategies to significantly reduce locomotive fuel consumption and associated GHG and criteria pollutant emissions. The Project also studies, pilots, and implements modern maintenance activities, such as a transition to condition-based maintenance for Metrolink assets, to improve safety, reliability, state-of-good- repair, and to reduce operations and maintenance costs to support service. The Project operationalizes Metrolink's emissions reduction intentions and streamlines processes and actions by identifying the best automated data collection, communications, behavioral advice and feedback approaches, and systems to help identify and automate alerts for corrective actions to reduce fuel consumption to reduce emissions while simultaneously improving the fleet's state-of-good-repair. These changes will result in significant GHG reductions due to the emissions reductions that are realized.

This Project's initial study phase will allow Metrolink to delve more deeply into a range of potential solutions that have become available. Phase 2 will design and conduct a pilot so that Metrolink can determine which strategy or strategies would be beneficial for fleetwide rollout, and finally Phase 3 deploys the selected strategies for an initial 18-month period of implementation, based on the findings of the first two phases. Following the initial implementation phase, a full, permanent systemwide deployment will begin in 2027.

Project completion is expected by 2027

Key Project Ratings:
Cost per GHG Ton Reduced: High
Increased Ridership: Medium
Service Integration: Medium-High
Improves Safety: Medium-High
Project Readiness: Medium-High
Funding Leverage: Medium-Low
Multi-Agency Coordination/Integration: Medium
Priority Population Benefits: Medium
Housing Co-Benefits: Low

24. Town of Truckee

Project: Keep Truckee Moving: Expansion and Electrification

Award: **$4,437,000**
Total Budget: **$8,520,000**

Estimated TIRCP GHG Reductions: **8,000 $MTCO_2e$**

The project will purchase on-demand microtransit technology to implement a new microtransit service and includes the purchase of seven zero-emissions vans for system-wide expansion, and two zero-emission replacement vans with supporting charging infrastructure at the new Railyard Transit Center/Mobility Hub in the town of Truckee to begin the zero-emission fleet transition. Includes construction of the transit center building and final streetscape amenities to complete the Truckee Railyard Transit Center/Mobility Hub and enables Placer County Tahoe Truckee Area Regional Transportation (TART) which currently operates two routes connecting to Truckee to utilize the new charging infrastructure.

As demonstrated in Truckee's recent microtransit pilot studies, microtransit service has shown to increase ridership while complementing fixed route service. Currently, the town operates one local fixed route on hourly headways. The new on-demand microtransit service will operate in many neighborhoods not currently served by the existing fixed route, help to overcome first and last mile connection barriers to transit use and bikeshare locations, and enable new connections to regional transit at the Truckee Railyard Transit Center/Mobility hub, as well as to the Amtrak rail, Amtrak bus and Greyhound bus service. Due to extreme cold, winter road conditions, and terrain, complete transition to zero-emission presents challenges where all-wheel drive options will be needed. In the interim, purchasing zero-emission vehicles for on-demand service will help safely begin the zero-emission transition until additional options are available.

The current Transit Center is housed in the historic Train Depot and lacks adequate bus staging as well as adequate bicycle and pedestrian facilities due to the historic nature of the building and site. The new Railyard Transit Center will be located less than a mile east of the Train Depot and centrally located close to downtown Truckee with passenger and bike amenities, improved access to the bicycle and pedestrian network including the Truckee River Legacy and Trout Creek trails and will support planned increase in transit services including zero-emission charging as well as the planned Town E-Bike Share Network.

Project completion is expected by 2027.

Key Project Ratings:
Cost per GHG Ton Reduced: Medium-High
Increased Ridership: High
Service Integration: Medium
Improves Safety: Medium-High
Project Readiness: Medium-High
Funding Leverage: Medium
Multi-Agency Coordination/Integration: Medium
Priority Population Benefits: Medium-Low
Housing Co-Benefits: Medium

25. Transbay Joint Powers Authority (TJPA)

Project: Downtown Rail Extension TIRCP Project Development

Award:	**$60,000,000**
Total Budget:	**$146,968,000**
Estimated TIRCP GHG Reductions:	**N/A (Pre-construction work only)**

Funding will advance final design for the Downtown Rail Extension (DTX) while positioning the project to

advance in engineering work with the Federal Transit Association (FTA) Capital Investment Grants (CIG) New Starts program by meeting FTA local funding milestones. Funding will also position the project to apply for future constructure funding from TIRCP.

Once constructed, the project will extend Caltrain's existing terminus approximately two miles into downtown San Francisco which will connect two new stations including the Salesforce Transit Center and a new underground station at Fourth and Townsend streets. Both Caltrain's commuter rail service and California's future High-Speed Rail services will operate on the DTX and provide passenger service to both Fourth and Townsend and Salesforce Transit Center stations. The project will fill the critical last mile gap for Peninsula commuters and travelers and connect eight Bay Area counties and the State of California through 11 transit systems: Caltrain, AC Transit, Golden Gate Transit, Greyhound, Muni, SamTrans, WestCat Lynx, Amtrak, Paratransit, BART, and the future California High-Speed Rail system.

Completion of final design in expected by 2023.

Key Project Ratings:
Cost per GHG Ton Reduced: N/A
Increased Ridership: High
Service Integration: High
Improves Safety: High
Project Readiness: High
Funding Leverage: Medium-High
Multi-Agency Coordination/Integration: Medium-High
Priority Population Benefits: Medium-High
Housing Co-Benefits: High

26. Transportation Agency for Monterey County (TAMC)

Project: Pajaro/Watsonville Multimodal Station Project

Award:	**$2,274,000**
Total Budget:	**$2,274,000**

Estimated TIRCP GHG Reductions: **N/A (Pre-construction work only)**

The project will receive funding for environmental to advance project development, including completion of NEPA review and an update to the CEQA document, positioning the project to apply for federal funding, as well as future construction funding from TIRCP.

Once constructed, the project will deliver a new multimodal transit station in Pajaro located in Monterey County which will serve as regional hub in a disadvantaged community, providing key links to local transit, intercity rail, and long-distance rail services. Key links will be enabled through connectivity at the station between Monterey-Salinas Transit (MST), Santa Cruz Metro (METRO), and Caltrain, with an opportunity to add an Amtrak *Coast Starlight* stop to provide enhanced rail network connections between the Monterey Peninsula, Santa Cruz, Salinas, and Hollister to future High-Speed Rail in Gilroy as well as connections with San Francisco County and beyond. The station will include contactless open payment services through the California Integrated Travel Project and charging stations to support electric vehicles with the possibility of connecting a bike and walking lane that will directly connect to the station as part of the Santa Cruz County Regional Transportation Commission's (SCCRTC) Monterey Bay Sanctuary Scenic Trail project. The station also serves a critical link for the SCCRTC Zero Emission Rail

Transit project on the Santa Cruz Branch Rail Line and Coastal Rail Trail in development which will connect to the station.

Completion of environmental is expected by 2025.

Key Project Ratings:
Cost per GHG Ton Reduced: N/A
Increased Ridership: High
Service Integration: High
Improves Safety: Medium-High
Project Readiness: Medium
Funding Leverage: Low
Multi-Agency Coordination/Integration: High
Priority Population Benefits: Medium-High
Housing Co-Benefits: Medium

27. Tri-Valley – San Joaquin Valley Regional Rail Authority

Project: Valley Link Rail

Award:	**$25,000,000**
Total Budget:	**$40,000,000**

Estimated TIRCP GHG Reductions: **N/A (Pre-construction work only)**

This award for funding from the Major Projects – Project Development category will advance design, equity focused community engagement and third-party agreements for the Valley Link Rail Project during the current Project Development phase under the Federal Transit Administration's (FTA) Capital Investment Grants (CIG) Program. This funding will serve as a resource in identifying and addressing major risks prior to completing Project Development in May 2024 and solidify the CIG program funding request with the most accurate project cost estimate while ensuring the advancement of equitable and authentic community engagement.

Once completed, the project will create a new 22-mile passenger rail transit system connecting the cities of Dublin, Pleasanton, Livermore, and the Mountain House Community Services District with all-day, bi-directional service at frequent intervals throughout the day. The Valley Link Rail Project includes construction of the line with four stations, two operations and maintenance facility sites, and the purchase of ten zero emission, multiple-unit rail cars to operate the service. The future service will connect to Bay Area Rapid Transit (BART) at the Dublin/Pleasanton BART Station to link riders to the broader Bay Area including Oakland, San Francisco, and San Jose. The east end of the system connects to over 105,000 commuters traveling daily over the Altamont Pass, providing a transit alternative through the highly congested Interstate 580 highway corridor.

Completion for this phase of project development is expected by 2024

Key Project Ratings:
Cost per GHG Ton Reduced: N/A
Increased Ridership: Medium-High
Service Integration: Medium-High
Improves Safety: Medium

Project Readiness: Medium
Funding Leverage: Medium
Multi-Agency Coordination/Integration: Medium
Priority Population Benefits: Medium-Low
Housing Co-Benefits: Medium

28. Yuba-Sutter Transit

Project: Next Generation Zero-Emission Bus Operations and Administration Facility

Award: **$13,725,000**
Total Budget: **$49,259,000**

Estimated TIRCP GHG Reductions: **17,000 $MTCO_2e$**

The project will construct a new solar powered transit facility with supporting charging infrastructure on a former brownfield site, located on Avondale Avenue at North Beale Road in the community of Linda, to support a growing zero-emission vehicle fleet. The project includes the purchase of 15 zero-emission buses to replace existing gas buses and to implement a new bi-county on-demand bus service in five newly formed transit service zones (Yuba City, Marysville, Linda, Olivehurst, and Plumas Lake) within Yuba and Sutter counties. The on-demand service will replace underperforming fixed routes, increasing operational flexibility while complementing existing key fixed routes. The project also includes one zero-emission over-the-road coach to replace an existing diesel vehicle and implement a new commuter service to Roseville at the Roseville Galleria. The new commuter service will provide connectivity to Placer County Transit and Roseville Transit services for connections to surrounding employment, retail, and other key destinations including Roseville Amtrak.

The project complements a recent Affordable Housing and Sustainable Communities grant which installs a crosswalk and bus stop amenities on both sides of North Beale Road at the intersection of Avondale Avenue adjacent to the project as well as sidewalks, greenscaping, and streetlights to improve access, usability, and safety.

The project is receiving matching funds from the Affordable Housing and Sustainable Communities program as well as the Low Carbon Transit Operations Program.

Project completion is expected by 2027.

Key Project Ratings:
Cost per GHG Ton Reduced: Medium-High
Increased Ridership: High
Service Integration: Medium
Improves Safety: Medium-High
Project Readiness: Medium
Funding Leverage: Medium-High
Multi-Agency Coordination/Integration: Medium
Priority Population Benefits: Medium
Housing Co-Benefits: Medium-Low