Transit and Intercity Rail Capital Program
Fifth Round Selected Projects – Project Detail Summary
July 7, 2022

Total Funding Awarded:
$796.1 million awarded towards 23 projects, totaling $1.97 billion of total project cost.

Estimated 4,333,000 metric tons of CO₂e (MTCO₂e) reduced

All projects are located within disadvantaged communities or low-income communities and contribute direct, meaningful, and assured benefits to disadvantaged communities, low-income communities, or low-income households (also referred to as Priority Populations)
1. Anaheim Transportation Network (ATN)

Project: ATN FAST (Family of Advanced Solutions for Transit): Revolutionizing Transit for a Global Audience

Award: $22,778,000
Total Budget: $48,433,722

Estimated TIRCP GHG Reductions 159,000 MTCO₂e

(Additional project benefits accrue to the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program, which is anticipated to contribute $420,000 to the project)

This project will create a complete, zero-emission transit ecosystem that offers end-to-end solutions for residents, employees and the global audience drawn by tourism/convention centers and the future LA 2028 Summer Olympics events. The project has multiple components:

1. Fills an immediate need by acquiring 7 zero-emission battery electric vans to launch a new service (EVE – Everyone Ventures Everywhere) that connects John Wayne Airport to both the convention center and the Anaheim Regional Transportation Intermodal Center (ARTIC).
2. Improves first/last mile connectivity by purchasing 10 electric vehicles and associated infrastructure to expand the successful FRAN (Free Rides Around the Neighborhood) microtransit service into new neighborhoods in Anaheim and in new partnerships with the City of Orange, Chapman University and CHOC Children’s Hospital.
3. Completes the transition of ART (Anaheim Regional Transportation) to a 100% zero emission fleet by purchasing 15 zero-emission buses to replace existing buses and augment existing routes and installing photovoltaic electricity generation at two facilities.
4. Addresses current and growing transit needs through creation of a new, state-of-the-art transit service (ANNA – Advancing Neighborhood Networks for All) that links planned high density developments with key employment and entertainment destinations, including the purchase of 10 additional zero-emission buses.

Priority populations will directly benefit from the improved service as 92 of the 104 census tracts located in the project area are in a disadvantaged or low-income community. Implementation of zero-emission service will also have direct air quality benefits for a region that is in an extreme nonattainment area for ozone and a serious maintenance area for carbon monoxide.

The project will significantly improve connectivity by enhancing the frequency of service to ARTIC, where connections can be made to Metrolink, Pacific Surfliner and future High Speed Rail trains. The project will also invest in integrated, contactless payments and trip planning in partnership with the California Integrated Travel Project.

Project is expected to be completed by 2027.
Key Project Ratings:
Cost per GHG Ton Reduced: High
Increased Ridership: Medium-High
Service Integration: Medium-High
Improves Safety: Medium
Project Readiness: High
Funding Leverage: Medium-High
Multi-Agency Coordination/Integration: Medium-High
Priority Population Benefits: High
Housing Co-Benefits: Medium

2. Antelope Valley Transit Authority (AVTA) with Antelope Valley Schools Transportation Agency (AVSTA)

Project: Sweet Home Antelope Valley, Where the Skies are so Blue

Award: $4,829,000
Total Budget: $10,866,505

Estimated TIRCP GHG Reductions 139,000 MTCO$_2$e
(Additional project benefits accrue to the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program, which is anticipated to contribute $1,548,000 to the project)

This project will build upon AVTA’s successful transition to a 100% zero emission fleet by extending a zero-emission microtransit service into some of the most transit-vulnerable communities in the region. It also partners with AVSTA to acquire the land immediately adjacent to AVTA and AVSTA and develop new shared, solar-powered bus charging infrastructure that supports both AVTA and AVSTA fleets. The project includes purchase of 6 AVTA microtransit vehicles for expansion service, as well as 6 AVSTA zero emission school buses that will replace aging diesel buses, reducing exposure to diesel particulate matter and its associated health risks for children of the Antelope Valley.

The project will directly benefit disadvantaged communities in a region that is heavily pollution-burdened. Of the priority populations that will see benefits, all are in the top 80th percentile in pollution burden. Implementation of zero emission vehicles and expanding a popular zero emission microtransit service will have clear air quality benefits.

The microtransit service will significantly improve connectivity between the expanded service communities and key intermodal hubs served by both fixed route bus and Metrolink services.

Project is expected to be completed by 2024.
Key Project Ratings:
Cost per GHG Ton Reduced: High
Increased Ridership: Medium-Low
Service Integration: Medium
Improves Safety: Medium-High
Project Readiness: High
Funding Leverage: Medium-High
Multi-Agency Coordination/Integration: Medium-High
Priority Population Benefits: Medium-High
Housing Co-Benefits: Medium-Low

3. Bay Area Rapid Transit (BART)

Project: East Bay Transit-Oriented Development Mobility Enhancement Project

Award: $49,000,000
Total Budget: $76,900,000

Estimated TIRCP GHG Reductions: 242,000 MTCO₂e

This project constructs essential transportation infrastructure at the Lake Merritt, El Cerrito Plaza and West Oakland BART stations to support transit-oriented development (TOD) that will result in over 2000 new homes being built, with at least 30% affordable housing. With all three developments “shovel-ready,” the projects include parking reduction and consolidation (in combination with on-street parking management), freeing up property to enable TOD, as well as bike and pedestrian improvements, transit center improvements, replacement of BART’s uninterruptable power supply, new public spaces, and amenities supporting the passenger experience. The projects will support significant ridership increases and vehicle miles traveled (VMT) reductions, as well as multi-modal transportation access. Ridership growth will be encouraged at locations where BART has capacity to grow, and the projects will contribute to neighborhood and district vitality, creating places offering a mix of uses and serving households of all income levels.

Improvements at each location include the following:

1. El Cerrito Plaza TOD – Consolidation of off-street parking into a 150-space parking garage with electric vehicle charging facilities, that allows 600-800 apartments to be constructed on the existing surface lot, with 37% of the units being affordable housing that services households with incomes up to 60% of the Area Median Income (AMI). Also includes on-street parking management implementation that will include demand-based, zone-based pricing to ensure parking availability and reduce the traffic impact of unregulated parking. Includes a bike station for at least 350 bicycles for BART riders, with a design that accommodates many types of bikes such as cargo bikes, adaptive bikes and e-bikes, to encourage families, seniors, and people with mobility challenges to shift from driving cars to parking bikes at BART. Includes enhancements to the Ohlone Greenway, with new connections to the east side of the station, creating attractive and safe biking and pedestrian access to BART while minimizing conflicts with motorized vehicles, as well as a half-mile protected bikeway...
to provide a safe and comfortable connection for residents and commuters to the San Pablo commercial corridor, the Ohlone Greenway and the residential neighborhoods to the east. Finally, includes Oak Street extension to prioritize transit connectivity and consolidate bus lanes on one side of the station, including traffic calming measures.

(2) Lake Merritt TOD – Part of a master planned program that includes more than 550 new homes in three residential buildings, of which more than 40% will be below market rate, and affordable to households from 30% AMI to 120% AMI, with deeply targeted homes for seniors and large families. The master plan also includes commercial space (some below market, and including childcare), as well as a paseo on top of the BART tunnel that bisects the site, visually connecting to two linear blocks of open space to the BART Plaza and Madison Square Park towards Chinatown. Includes BART purchase of two additional rail cars to increase service above pre-pandemic levels, replacement and relocation of the Uninterruptible Power Supply system for BART, design and construction of the intermodal plaza and public paseo, and numerous bicycle and pedestrian improvements on Oak and Fallon Streets including bike/ped signal enhancements and two-way protected bike lanes.

(3) West Oakland TOD – Specific plan includes demolition of the existing 385-space surface parking lot, construction of new mid-rise and high-rise buildings with 762 residential units plus office space and ground floor retail (one-third of residential units will be affordable serving households below 30% AMI). Builds bicycle and pedestrian improvements including new cycle tracks on 7th and Mandela Streets, an 18th Street Bikeway, and a new bike station with attendant for up to 350 bikes.

This project is receiving part of its funding match from the Strategic Growth Council’s Affordable Housing and Sustainable Communities program.

Expected completion dates are: West Oakland (2025), Lake Merritt (2026) and El Cerrito Plaza (2029). Due to the extended timeline for project delivery that goes beyond this cycle’s 5-year program (completion date: 2029), the project is expected to receive funding over the life of the implementation schedule.

Key Project Ratings:

- Cost per GHG Ton Reduced: High
- Increased Ridership: Medium-High
- Service Integration: Medium
- Improves Safety: High
- Project Readiness: Medium-High
- Funding Leverage: Medium
- Multi-Agency Coordination/Integration: High
- Priority Population Benefits: High
- Housing Co-Benefits: High
4. Capitol Corridor Joint Powers Authority (CCJPA), with the City of Sacramento, Sacramento Area Council of Governments (SACOG), Sacramento Regional Transit District (SacRT), and Downtown Railyards Venture, LLC (DRV)

**Project:** Sacramento Valley Station (SVS) Transit Center: Priority Projects

**Award:** $49,865,000  
**Total Budget:** $95,050,000  
**Estimated TIRCP GHG Reductions:** 156,000 MTCO₂e

This project delivers a set of interrelated projects to introduce better connectivity between modes at the Sacramento Valley Station, as well as redesigned commuter and intercity bus service to the SVS and Downtown Sacramento, that will increase ridership on both trains and buses. Project elements include design of a new bus mobility center to facilitate convenient transfers between modes, realignment of existing light rail tracks and construction of a new platform, construction of a new cycle track on H Street to improve access to the station, and construction of a new pick-up and drop-off loop.

The light rail tracks will be realigned into a loop with a new north-south oriented platform just south of the Steve Cohn Passageway entrance (about 450 feet closer to the rail tracks than currently, and only 100 feet from the future Bus Mobility Center), as well as a new double track alignment from the new platform to the intersection of F Street and 6th Street. The construction of the new pick up and drop off loop at the station will allow more efficient transfers. The project includes installation of a new storm drain trunk line which will enable new transit-oriented development on key parcels next to SVS.

A new regional bus layover facility will be built in a 2-block portion of X Street between 6th and 8th Street. The proposed facility will allow buses to layover in Sacramento between runs, improving bus efficiency and reducing vehicle miles traveled, as well as fossil fuel consumption. Initial users of the facility are expected to include El Dorado Transit, Galt-Sacramento SCT Link, Placer Transit, Roseville Transit, San Joaquin RTD, and Yuba-Sutter Transit.

The project will also support the consolidation of downtown regional bus routes, building on the study SACOG completed with 2020 TIRCP funding. Construction of shared stops between SVS and the future Midtown Amtrak San Joaquin and Altamont Corridor Express station will be completed, including the reuse of seventeen bus shelters from the Temporary Transbay Terminal in San Francisco. This component will also complete an unfinished portion of 5th Street between Railyards Boulevard and North B Street as the most efficient connector for all north area buses to access the freeway to SVS and serve the new state office complex on Richards Blvd. That will provide the connectivity to implement 10 additional bus stops (5 northbound and 5 southbound) north of H Street. Commuter buses operated by Amador Transit, Butte Regional Transit, El Dorado Transit, Soltrans, Galt-Sacramento SCT Link, Placer Transit, Roseville Transit, San Joaquin RTD, Yolobus and Yuba-Sutter Transit will be routed along new shared northbound and southbound routes. This work will complement SacRT’s TIRCP-funded network integration to better integrate its
service with intercity rail at both SVS and the future Midtown station.

The project will also purchase and install contactless EMV readers coordinated with the California Integrated Travel Project on rail and bus vehicles to allow fares to be collected through contactless bank cards and mobile wallets.

Ridership at Sacramento Valley Station is also expected to be positively impacted by the city’s housing policies, confirmed with a Pro-Housing designation by HCD, the first city to receive such a designation in the state. A significant amount of housing is expected to be added in the Railyards District, adjacent to the station area.

These plans will be developed in cooperation with many transit partners and agencies throughout the Sacramento region, and with additional technical assistance provided by the California Department of Transportation, in order to ensure integration of regional and interregional capital improvements and service.

Project is expected to be completed by 2025.

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

5. City of Cupertino with the City of Santa Clara

Project: South Bay Microtransit Expansion

Award: $8,465,000
Total Budget: $16,931,283

Estimated TIRCP GHG Reductions: 76,000 MTCO₂e

This project expands transit options for the South Bay community by expanding the existing microtransit service, called Via-Cupertino, to include the City of Santa Clara using a zero-emission vehicle fleet. Residents in Cupertino and Santa Clara currently lack access to end-to-end public transit and experience limited first-mile/last-mile (FMLM) connections, resulting in over-dependence on single-occupancy vehicles. The service expansion will focus on offering improved connections from rail and train stations to job centers and other destinations, facilitating greater use of transit for longer multimodal trips. The service will provide increased transit access to a SB 535 disadvantaged communities zone, as well as zones with high poverty, low public transit utilization and high senior population. In addition, the service
may be customized to serve priority populations by offering discounted or fare-free rides to those who are eligible. The cities will partner with Via Transportation to provide on-demand, dynamically routed microtransit shuttle service.

In the first phase, residents will have increased FMLM transit access to the South Bay’s transit hubs (including Caltrain, Capitol Corridor and VTA) as the service immediately transitions to zero emission service and expands its fleet from 9 to 12 vehicles (by the end of the second year of service). Residents in Cupertino and Santa Clara will be able to request on-demand trips to and from locations within the zone as well as to and from multiple points of interests outside of the zone including Sunnyvale Caltrain station; Kaiser Santa Clara; Rancho San Antonio; Mountain View Caltrain Station; Lawrence Caltrain Station; Santa Clara Caltrain Station; Amtrak Great American Station; and various VTA Light Rail Stations.

In the second phase, service will incorporate more square mileage in Santa Clara and will gradually increase the number of fleet vehicles to better serve highly transit-dependent populations. Phase 2 will launch in 2026 and will incorporate 6.5 more square miles (for a total of 26.5 square miles throughout the entire zone) and add 4 more vehicles (for a total of 16) to preserve efficiency of service.

This project will be implemented over a five-year period between 2023 and 2028 with funding provided over the life of the project.

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

6. City of Glendale and Arroyo Verdugo Communities

**Project:** Making a Beeline for Electrification – City of Glendale and Arroyo Verdugo Communities Zoom towards Cleaner Transportation

**Award:** $34,648,000
**Total Budget:** $46,843,458

**Estimated TIRCP GHG Reductions:** 71,000 MTCO₂e
*Additional project benefits accrue to the Low Carbon Transit Operations Program, which is anticipated to contribute $197,000 to the project*

This project implements several recommendations from the Transit Fleet Electrification Feasibility Study for the Arroyo Verdugo Transit Operators that will allow the Glendale and La
Cañada Flintridge and the unincorporated areas of La Crescenta and Montrose to complete their transition to a zero-emission fleet and expand service. The study found that the current bus maintenance facility is undersized and cannot accommodate the infrastructure needed for a fully battery-electric fleet deployment, and that the best way to achieve this was to build a parking deck above the bus parking area to allow sufficient space for the charging equipment and employee parking. Such an investment will also make it possible for a later phase to seek funding to electrify the Burbank Bus fleet that may operate from the facility in the future.

The project will purchase 27 battery-electric buses (BEBs) for replacement and expansion, allowing for reduced headway service on two routes and a new route to connect the Glendale Transportation Center (serving Metrolink and Amtrak) to the Glendale Community College. It will also build a parking deck to accommodate infrastructure for BEB charging (installing 14 electric chargers), employee parking and a photovoltaic canopy (offsetting energy demand for the chargers). The project will install shelter and shade structures at 400 bus stops (with real-time bus arrival information at major stops), provide California Integrated Travel Project payment readers on Beeline buses for an added fare payment option and a real-time GTFS feed available to all trip planning apps and websites, provide an integrated bus technology system that includes Wi-Fi, stop announcements and security cameras, and provide a climate mobility and safety app to inform riders of GHG emission of transit modes while utilizing gamification to encourage interaction and change travel behavior.

The improved maintenance facility serving the zero emission vehicles will be in a disadvantaged community. Also, a significant number of census tracts that fall within the project area are heavily pollution-burdened, falling in the top 80th percentile of burdened communities. Project implementation will not only have important GHG reductions but also air quality benefits for the region.

The project will include network integration efforts with Burbank Bus, LA Metro (including its BRT and NextGen Bus implementation), Metrolink and Amtrak.

Project completion is expected by 2025.

Key Project Ratings:

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<th>Rating</th>
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7. City of Oakland

Project: Oakland Waterfront Mobility Hub

Award: $10,732,000
Total Budget: $10,732,000

Estimated TIRCP GHG Reductions: 10,000 MTCO₂e

This project implements a suite of transportation improvements aimed at reducing greenhouse gas emissions, strengthen linkages between local, regional, and intercity transit, support statewide goals around density and land use, and improve quality of life along Oakland’s waterfront and downtown neighborhoods by improving access to the historic waterfront and provide new connections to several underserved communities. Specific components include delivering the 2nd Street Transportation Hub, the Clay Street Corridor improvements, and the 8th Street Corridor improvements, components of a larger project that includes a combination of bus-only lanes, improvement of intersection safety across freight and passenger rail tracks, expansion of an existing bus layover facility to include a transit center, bike, and pedestrian improvements along key corridors.

Specific funded components include:

(1) 2nd Street Corridor: A new transportation hub on the south side of 2nd Street between Jefferson Street and Washington Street. New bus shelters, benches, pedestrian-scale lighting, landscaping, real-time transit arrival information, a staging and transition location for transit riders and bus operators, and concrete bus pads, with bus stops that have parallel pull-in designations adjacent to the existing Class 2 bike lanes. Space for shared micromobility, improved wayfinding signage, reconstructed and expanded sidewalks, and closure of the bike lane gap between Harrison and Alice through conversion of existing angled parking to back-in angle or parallel parking.

(2) Clay Street Corridor: Enhancing pedestrian safety, comfort and access between the transportation hub and the ferry terminal by installing new sidewalk along Clay Street between Embarcadero West and 2nd Street with upgraded lighting, expanded sidewalks and narrowed vehicle access, as well as all-way stop controls at six intersections.

(3) 8th Street Corridor: Better connect Lake Merritt BART, Chinatown, Washington Street, Jack London Square and Oak Street by removing sidewalk tripping hazards, daylighting intersections and driveways, installing permanent intersection crossing improvements for pedestrians and bicyclists at the 8th Street and Madison Street intersection, improving ADA-compliant passenger loading zones, adding bike racks, wayfinding and lighting.

Once implemented, the project will transform ridership, access, and connectivity between local, regional, and intercity transit in Downtown Oakland and surrounding densifying communities. In addition to improving access to Oakland’s historic waterfront, this project will enhance physical connectivity between priority populations in Old Oakland, Chinatown, Downtown, and the Jack London District. Surveys indicate that 46% of residents in the project area commute by transit, which is nearly double the citywide rate of 24%
indicating a high rate of transit-dependent residents that would directly benefit from project implementation.

Collectively, these improvements connect Oakland’s neighborhoods while supporting statewide mode shift and sustainable community goals. The project capitalizes on Oakland’s planned commitments to improve mobility and is aligned with the City’s Transit First, Climate Emergency and Just Transition resolutions to reduce greenhouse gas emissions and vehicle miles travelled.

Project completion is expected by 2030. Due to the extended timeline for project delivery that goes beyond this cycle’s 5-year program, the project is expected to receive funding over the life of the implementation schedule.

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

8. **City of Torrance**

**Project:** The Regional Connectivity Improvement Bus Program

**Award:** $9,600,000

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

**Estimated TIRCP GHG Reductions:** 51,000 MTCO₂e

This project purchases 10 zero-emission electric buses and associated charging infrastructure to replace CNG and gasoline buses and implement service expansion to enhance Torrance Transit’s overall service spanning from the City of Torrance to Downtown Los Angeles, Downtown Long Beach, and surrounding South Bay regions. The project will improve connections to LA Metro light rail, Metrolink, and Amtrak. Specific service expansions include:

1. Line 4X (Express Service) expansion to weekday midday and Sunday service with 30-minute frequency. New weekday midday and Sunday service enhancements for Line 4X will improve connections to L.A. Metro light rail (A, B, C, D, E, J, and L Lines) as well as commuter and intercity rail with Metrolink and Amtrak services.

2. Rapid 3 (Limited Stop Service) expansion to midday service with 30-minute frequency. New midday service for Rapid 3 will also improve connections to L.A. Metro light rail at Carson Station and Amtrak bus service at the Downtown Long Beach Station.
Upon completion, the project expands service and improves reliability on two key routes that serve the cities of Torrance, Carson, Long Beach, and Los Angeles. The routes will link the planned West Carson TOD development with key destinations including Harbor-UCLA Medical Center, the Mary K. Giordano Regional Transit Center, and Downtown Long Beach.

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

9. City of Wasco

Project: City of Wasco Improving Air Quality and Economic Growth with Bus Electrification

Award: $1,000,000
Total Budget: $1,543,000

Estimated TIRCP GHG Reductions: 1,000 MTCO₂e
(Additional project benefits accrue to the Low Carbon Transit Operations Program, which is anticipated to contribute $149,000 to the project, as well as the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program, which is anticipated to contribute $225,000 to the project).

This project purchases three medium electric shuttle buses and implements a contactless payment system that aligns with California Integrated Travel Project efforts. Deploying electric buses will enhance regional connectivity and support ridership growth by providing riders a sustainable clean transportation option while increasing county and state connections with Amtrak, Kern Regional Transit, and future high-speed rail. This project aligns with local, regional, and state transportation and air quality goals.

The electric buses will support Wasco’s local Dial-a-Ride shuttle services to expand service to low-income affordable housing projects, with one additional vehicle available for service as a result of this investment (an increase of 50%). It will also support Wasco shifting towards greener sources of energy, which in turn will save money that can be reallocated to other operating needs and support for electric vehicle charging infrastructure. In addition, the network integration and contactless payment system will enhance the rider experience. Together, these improvements will move transit forward, provide long-term sustainability and increase equity in a rural community that is among the most disadvantaged in California.
This project was selected with consideration given to establishing a statewide program with geographic equity. Project completion is expected by 2024.

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

10. Contra Costa Transportation Authority with County Connection and Livermore Amador Valley Transportation Authority

Project: I-680 Express Bus Program

Award: $14,460,000
Total Budget: $63,492,500

Estimated TIRCP GHG Reductions: 53,000 MTCO\textsubscript{2}e

Delivers a program of projects that will collectively support the implementation of the new zero-emission express bus service along the I-680 corridor between the Martinez Amtrak station and the Dublin/Pleasanton BART station, extending peak service to the Pleasanton ACE station. The program includes purchasing six hydrogen fuel cell buses and associated infrastructure to support the service. Included is the first phase of construction of fueling stations and maintenance infrastructure, which lays the foundation for future expansion of the zero-emission bus fleet as the facilities will have the capacity to fuel and maintain a growing fleet of buses. During the procurement of fuel cell buses, the funding award also provides for the rebranding and upgrade of six existing vehicles that will be used to provide interim service in the corridor.

The project also includes the development of a shared mobility hub at Bollinger Canyon Road to facilitate express bus connectivity and support ridership growth. This hub will have enhanced bike and pedestrian connections, shared micromobility services, transit signal priority, and bus bays. Studies to improve first mile-last mile connectivity will also be delivered as part of the project scope. Included will be a testing and training at GoMentum Station on part-time transit lanes/transit bus on shoulder (PTTL/TBOS) operations and development of an integrated transit plan (ITP) for Contra Costa County.

These project elements address the need for passengers who are traveling from disadvantaged and low-income communities to or along the corridor, reduce barriers to
transit, encourage mode shift, provide connections throughout the San Francisco Bay Area region, reduce single occupancy vehicles, increase transit reliability, and incorporate new technologies including clean hydrogen fuel and PTTL/TBOS to improve mobility and reduce greenhouse emissions.

Key funding will also be contributed from other state and federal funds towards the new bus purchase and the fueling infrastructure.

Project completion is expected by 2027 for all components.

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

11. Fresno County Rural Transit Agency

Project: Fresno County Rural Transit Agency Resiliency Hub

Award: $6,175,000
Total Budget: $6,862,025
Estimated TIRCP GHG Reductions: 14,000 MTCO\textsubscript{2}e

This project will construct a resiliency hub that includes four inductive charging stations, solar back-up battery energy storage, and a solar electric vehicle charging station to support the electric bus fleet and EV micro transit services of Fresno County. The hub will be located in a disadvantaged community, adjacent to the future high speed rail station. It will enable FCRTA to operate all four routes that terminate in Fresno with an electric bus fleet. This will support greater efficiency, range, and ensure that a single vehicle can serve an entire route and preserve battery life.

Implementation of the project will result in longer bus routes being offered with electric vehicles and a doubling of service hours that can be offered with the microtransit fleet, providing critical transit access to rural, low-income, and disadvantaged communities throughout Fresno County evidenced by the fact that 70% of the census tracts in the project area are priority populations. Deployment of new transit technology will provide sustainable transportation service and infrastructure in Fresno County that will help reduce vehicle miles traveled, greenhouse gas emissions, and increase transit equity and resiliency in a system with a service area that covers 6,000 square miles.
Project completion is expected by 2023.

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

12. Humboldt Transit Authority

**Project:** Expanding Transit Services and Introducing Zero-Emission Fleets on California’s North Coast

**Award:** $38,743,000

**Total Budget:** $65,155,000

**Estimated TIRCP GHG Reductions:** 389,000 MTCO$_2$e

*(Additional project benefits accrue to the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program, which is anticipated to contribute $2,640,000 to the project).*

This project procure 11 zero-emission hydrogen fuel cell electric buses, installs supportive hydrogen fueling infrastructure, and constructs an intermodal transit and housing center. The new buses will serve the local Trinidad-to-Scotia route as well as a new intercity route (the Redwood Coast Express) to Ukiah, connecting riders to Mendocino County, south to the SMART train, and the San Francisco Bay Area. This new route will benefit HTA riders, as well as those connecting from Redwood Coast Transit (Del Norte County) and Trinity Transit.

The hydrogen fueling station will be one of the first north of the Bay Area (the only one north of Santa Rosa) and will include both bus fueling and over-the-fence retail fueling at the HTA Corporation Yard, accessible to the public and other fleet operators, which will catalyze hydrogen supply infrastructure along the North Coast and the U.S. 101 corridor. Expected fleet operator users include the City of Eureka, Humboldt County, Caltrans and UPS. Project partners Air Products and the Schatz Center will build and maintain the station. Upgraded maintenance bays at the HTA facility will also support the Fuel Cell Electric Buses.

With Cal Poly Humboldt projected to double in size to about 12,000 students in the next seven years, the existing housing shortage will be further exacerbated. HTA’s innovative transit center, the Eureka Regional Transit and Housing Center (EaRTH Center), will not only integrate local and intercity bus service with carshare, rideshare, bicycle and paths and pedestrian travel, but also provide workforce and student housing, a childcare center, retail and open space co-located with transit at the center. This project will support strategies to meet the demand of an improved transit infrastructure, workforce, and housing.
development. Through match funding, the EaRTH Center will provide housing for students, staff and faculty and a convenient 20-minute transit commute to the university on a zero-emission bus.

HTA is also exploring partnering with technology partners and the local community college to train community members the skills to repair and maintain the hydrogen fuel cell electric buses, including the ability to work with fuel cell power plants, high voltage batteries, electric drive trains, and high-pressure gaseous fuel systems.

Finally, the project will implement improved coordinated regional scheduling and integrated ticketing among the project partners. Service gaps along the US 101 corridor will be filled, and connections will be possible with SMART through connecting service by Mendocino Transit Route 65, and also connections to Napa via transfer to Lake Transit Route 7.

Project completion is expected by 2024.

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

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

Project: Los Angeles Nextgen and Zero Emission Bus Implementation Project

Award: $177,500,000
Total Budget: $469,580,000

Estimated TIRCP GHG Reductions: 781,000 MTCO2e
(Additional project benefits accrue to the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program, which is anticipated to contribute $18,000,000 to the project).

This project purchases 261 zero emission buses and supportive infrastructure to deploy on LA Metro’s Tier 1 and Tier 2 routes from Division 9 and 18, as well as the J (Silver) Line. This project supports LA Metro’s transition to a fully zero-emission fleet and will be deployed primarily on high-priority, high-frequency corridors. The two divisions include ten lines that operate at Tier 1 service frequencies (headways of 10-minutes or less on weekdays) and five lines that operate at Tier 2 frequencies (12 to 15-minute headways), inclusive of the Silver Line routes (910/950). The new vehicles will have on-board amenities including WiFi and operate with lower noise and vibration than existing buses. These vehicles will also feature
all-door boarding, which is estimated to reduce line running times by 2.5%. The project will also convert Divisions 9 and 18 from CNG to electric charging, and construct charging infrastructure at transit line terminus layover facilities.

80 miles of bus priority lanes will be deployed on Tier 1 corridors, in coordination with the Los Angeles Department of Transportation. Where deployed, these improvements are expected to improve line travel time by 7%. Metro is also working with LADOT to upgrade and expand the transit signal priority system with a wireless cloud-based system on Tier 1 corridors, expected to improve travel time on those corridors by 8%. Enhanced bus stops with sidewalk bulbs and/or boarding islands will allow vehicles to board and alight passengers without pulling out of the travel lane, provide more level access, provide additional waiting space for shelters and other stop amenities, and make bus stops more accessible. Improved boarding areas are expected to improve safety conditions and reduce incidents during boarding and alighting, which today make up about 15% of all accidents involving Metro buses. Shelters will be improved along the six Division 18 Tier 1 corridors to provide protection from the elements and extreme heat events, as well as routing information and arrival status information. Project shelter installations have been prioritized based on measures of heat exposure, equity focus communities, ridership, access to key destinations and long wait times.

These corridor improvements will be available for shared use by other transit agencies.

The project makes a significant investment, leveraged by substantial matching funds, to reduce GHG emissions, improve local air quality, and provide some of the most disadvantaged and transit-dependent communities and in Los Angeles County with a transportation option that has over 80 transfer points to Metro’s rail system as well as to Metrolink and Amtrak intercity services. Specific corridor improvements will be developed with the participation of affected communities and may be supported by Metro’s new Community-Based Organization Partnering Strategy, which leverages the expertise and local community knowledge to more effective engage the broader community.

Project completion is expected by 2028. Due to the extended timeline for project delivery for several components that goes beyond this cycle’s 5-year program, the project is expected to receive funding over the life of the implementation schedule.

Key Project Ratings:
Cost per GHG Ton Reduced: Medium-High
Increased Ridership: Medium-High
Service Integration: Medium-Low
Improves Safety: Medium
Project Readiness: High
Funding Leverage: Medium-High
Multi-Agency Coordination/Integration: Medium
Priority Population Benefits: Medium-High
Housing Co-Benefits: Medium-Low
14. Monterey-Salinas Transit District (MST) and Transportation Agency for Monterey County (TAMC)

**Project:** SURF! Busway and Bus Rapid Transit

**Award:** $25,000,000  
**Total Budget:** $58,839,059

**Estimated TIRCP GHG Reductions:** 31,000 MTCO$_2$e

This award funds a joint project between TAMC and MST to provide a more sustainable alternative to addressing the highway congestion within the corridor of the now defunct Monterey Branch Line. Construction of this Bus Rapid Transit (BRT) project will enable MST buses to operate on a TAMC-owned right-of-way that parallels Highway 1 between the cities of Marina and Seaside, avoiding congestion that often delays buses today, and delivering peak period trips that are faster than driving. The project will connect rapidly growing housing centers in the City of Marina with the commercial and hospitality jobs on the Monterey Peninsula.

The six-mile dedicated busway—what will be the first separated BRT corridor on the Central Coast of California—will be an important tool to reduce peak morning and afternoon congestion in the region. It will allow buses the ability to bypass highway congestion, improve on-time performance, reduce greenhouse gas emissions, provide better access and more service for community members who depend on public transit. Many existing routes will use the busway instead of traveling on Highway 1, resulting in significant time savings for existing bus riders and attract significant new ridership.

Additional benefits of the project include adding seamless pedestrian and bicycle connections to existing facilities, a new multimodal transfer station, bus stops with ocean and surf themed amenities, real-time electronic bus arrival displays, and traffic signal priority in mixed flow traffic. The project will include key connections along the corridor to the Fort Ord Regional Trail and Greenway, California State University at Monterey Bay (CSUMB, enrollment 7,500 students), and the future Marina-Salinas Multimodal Corridor rapid bus connection to Salinas, the county’s largest city. The project will also connect to two major medical facilities in Marina - the Veteran Administration’s Outpatient Clinic and the Montage Health Center - and to the Marina Transit Exchange on the north end of the project and the Sand City Station on the south end of the project.

At least 26,300 people live in a SB 535 Disadvantaged Community and/or an AB1550 Low Income Community census tract that is within one-half mile of a SURF! bus stop. The busway along with traffic signal priority in Marina will directly serve the disadvantaged communities in Marina and Seaside by connecting residential neighborhoods to job centers, veterans to the new VA DoD Outpatient Clinic, and students to CSUMB.

Award has a contingency related to future federal funding through the Capital Investment Grants Program, with the applicants currently on schedule to advance the project to a federal grant award prior to the 2024 TIRCP cycle.
Project completion is expected by 2027.

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

15. Sacramento Regional Transit District (SacRT)

Project: Fleet Modernization Project

Award: $23,600,000
Total Budget: $47,200,000

Estimated TIRCP GHG Reductions: 44,000 MTCO₂e

Purchases 8 new low-floor light rail vehicles (LRVs) to further expand low-floor fleet operations on the light rail system. Over one-third of SacRT’s light rail fleet has reached the end of its useful life, and this investment leverages past TIRCP grants, as well strong local match, to help modernize the fleet.

Low-floor LRVs will produce operational efficiencies by speeding up train times and optimizing boarding convenience and safety along with increased capacity. They also will increase fleet reliability and reduce the number of shorter than planned trains need to be operated on the system. These are significant benefits to persons with disabilities, seniors, parents with strollers, and bicyclists, who will have more boarding options and increased boarding and alighting safety. These improvements are expected to support retaining and attracting new light rail riders, including residents of disadvantaged communities, who make up 30% of the population within SacRT’s service boundary.

The project also supports sustainable housing and land use development while providing meaningful benefits to priority populations by improving mobility and access to transit options. The project complements several TOD/joint development projects underway along the light rail corridors, including a surplus SacRT property near a station that was sold to an affordable housing developer who has entitlements and plans to begin construction on 128 units.

Ridership on SacRT is also expected to be positively impacted by further rollout of integrated contactless payment throughout the light rail and bus system, as well as by the city’s housing policies, confirmed with a Pro-Housing designation by HCD, the first city to receive such a designation in the state.
Project completion is expected by 2027.

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

16. San Diego Metropolitan Transit System

**Project:** Zero-Emission Transit Enhancement Project

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**Estimated TIRCP GHG Reductions:** 34,000 MTCO$_2$e

The project includes three elements that will enhance transit infrastructure and support underserved communities in the San Diego region:

1) The Orange Line improvement project will provide widespread enhancements along the 19 stations and 17.6 miles of track, including increasing train speed and grade crossing safety and upgrading station passenger information sign upgrades. This is one of three light rail lines and operates between Downtown San Diego and the City of El Cajon. It is a vital source of transportation in the MTS system, it supports travel to and from jobs, healthcare visits, and leisure trips for the communities surrounding the operating line. This project will address service reliability, safety, operational flexibility, passenger information, and state of good repair. A significant portion of the Orange Line lies in SB 535 Disadvantaged and AB 1550 Low-Income Communities. It is estimated that 70% of the Orange Line passengers board in SB 535 Disadvantaged Communities and 71% board in AB 1550 Low-Income Communities. Roughly 84% of boardings are in one or the other identified SB 535 or AB 1550 communities.

2) The 12$^{th}$ and Imperial Transit Center Rehabilitation project will modify the current layout for an improved utilization of the area since the current layout and demand has reached its capacity. This facility is in a disadvantaged and low-income community and will provide barrier-mitigating opportunities that are currently underserved by the current transit center layout. It is centrally located and serves as a near-seamless connection to all of MTS’s light rail trolley lines and connecting bus routes making it the busiest transit center within the operating system. It will incorporate multi-modal hub components and create a developable parcel for future Transit Oriented Development. This project will remove
underutilized street segments, reduce conflicting intersections, improve safety and environmental features, provide system improvements, increase ridership, and reduce greenhouse gas emissions.

3) The electrification of the Imperial Avenue Division (IAD) facility project provides overhead electrical chargers for the first 30 battery electric buses to support the zero-emission fleet by 2040. The bus routes that operate out of IAD serve 27 communities, that are both SB 535 Disadvantaged and AB 1550 Communities. There are 64 Disadvantaged Communities (DAC’s) within ½ mile of the proposed project service areas. This project will directly benefit the 64 Disadvantaged Communities and 153 surrounding Low-Income Communities. MTS’s ZEB Transition Plan ensures that the deployment of battery-electric buses and/or other ZEBs are prioritized in historically marginalized low-income and minority communities that are most affected by environmental factors such as the communities that surround the Imperial Avenue Division. Service is offered throughout the City of San Diego and into surrounding communities in an area that stretches from National City in the South Bay as far north as the city of Escondido and from the Pacific Ocean to the City of La Mesa in the East County. These routes meet a variety of customer needs providing transportation to work, school, shopping, medical appointments and recreational activities.

This project was selected with consideration given to establishing a statewide program with geographic equity. Project completion is expected by 2025.

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

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

Project: San Francisco Zero Emissions High-Frequency Ferry Network

Award: $14,946,000
Total Budget: $157,227,330

Estimated TIRCP GHG Reductions: 125,000 MTCO₂e

Acquisition of two new all-electric vessels and related shoreside charging infrastructure to ensure the completion of all-electric ferry service connecting Downtown San Francisco to neighborhoods in Mission Bay and Treasure Island, on a regular 40-minute headway that is consistent with connections to other ferry routes. This project builds on the benefits of
WETA’s 2020 TIRCP award, leverages federal funding for one of the boats, and regionally-prioritizes Solutions for Congested Corridors funding for the 4th boat to deliver the entire program.

This project increases ferry transit ridership by providing convenient, reliable, time-certain, and direct transit accessibility and connectivity between the East Bay, Downtown San Francisco and the new major employment, housing, and entertainment venues in Mission Bay and Treasure Island. Creating a connection to Mission Bay is regionally significant as it is a large employment center, which is host to two medical campuses and the new Chase Center. It will also increase ridership on existing ferry routes from Alameda, Oakland, Vallejo, and Richmond, as well as future route expansions.

The project increases network integration by delivering a direct connection for passengers from ferry service to bus, light rail, historic streetcar and cable car, BART, Caltrain, Amtrak Thruway bus services, and the future statewide high-speed rail network. It connects multiple disadvantaged and low-income communities to a reliable and affordable high frequency transit system with direct connections to major centers of employment. Finally, the project positions WETA and the State to lead the country in the development of new zero emission electric battery powered ferry vessels and related operating systems and advances the innovation of these technologies for more widespread use.

This project is receiving part of its funding match from the Strategic Growth Council’s Affordable Housing and Sustainable Communities program.

Project completion is expected by 2025.

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

18. San Francisco Municipal Transportation Authority (SFMTA)

Project: SFMTA Core Capacity Program

Award: $ 116,076,000
Total Budget: $ 378,291,062

Estimated TIRCP GHG Reductions: 1,186,000 MTCO₂e

Funding for this project will implement the Muni Forward program on three key corridors (K,
N, and the 38R Geary lines) to enhance reliability, efficiency, travel times, and rider comfort that has been successfully deployed on 70 miles of Transit Priority Projects across San Francisco. This Program builds on the successes of the Rapid bus network investments. These Muni Forward projects will promote similar or greater ridership gains on the K Ingleside and N Judah rail lines, and the 38 Geary bus line. This project leverages significant past TIRCP investments in 2020.

Muni Forward combines service improvements with transit priority infrastructure to improve run-times and reliability on SFMTA’s most heavily used transit routes. Elements include a combination of transit signal priority, transit lanes, stop consolidation, transit bulbs and islands, traffic lane changes, and complementary facility and pedestrian improvements. These improvements are expected to provide better certainty for riders, speed up service, and provide opportunities for increased service by optimizing operations. Priority population communities will benefit directly, as the K and 38R Geary Lines have been identified as priority lines in the Muni Service Equity Strategy. The project will expand access and enhance reliability for customers, make rider access safer and faster, and will attract new passengers to the system.

Phase 0 and Phase 1 of SFMTA’s Train Control Upgrade Project will also be funded. These two phases cover project development (Phase 0) and implementation of train control from Embarcadero and 3rd Street to Muni Metro East (Phase 1), improving the reliability of the overall Muni Metro service up to a key location of current system delay. These investments lay the foundation for future system-wide implementation of the full Train Control Upgrade Project.

The full Train Control Upgrade Project is a 7-phase capital project that invests in the Muni Metro rail system by replacing the over 20-year-old automatic train control system (ATCS) in the Market Street Subway with a new communications-based train control (CBTC) system, with completion planned for 2031. The full project will also expand CBTC coverage to the surface portions of Muni Metro, where signals and switches are independently operated in a first come, first serve configuration so that the entire system can be managed centrally with a single, modernized CBTC system. The new CBTC will improve vehicle volumes by 20 percent through the Market Street tunnel and will for the first time provide the ability for centralized line management of the entire light rail system. Safety will be significantly enhanced as the high standards of safety provided by the current subway control system are extended to surface operations.

Lastly, funding is provided for a Muni Metro Modernization Planning Study, which will identify the next package of investments to provide additional capacity and reliability improvements for Muni Metro. Selected infrastructure improvements will provide Muni rail customers faster, longer trains, providing a quality of service that can be relied on for time-sensitive trips. The outcome of the study will be a suite of projects that would be eligible and competitive for a Federal Transit Administration Core Capacity Capital Investment Grant.

Expected project completion for funded components is as follows: N Line (2028); K Line (2028); 38R Geary Line (2026); Phase 0 and Phase 1 of Train Control (2026); Planning Study (2024). Due to the extended timeline for project delivery for several components that goes beyond this cycle’s 5-year program, the project is expected to receive funding over the life of the implementation schedule.
### Key Project Ratings:

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### 19. San Joaquin Regional Rail Commission

**Project: Valley Rail Expansion: Altamont Corridor Express (ACE) Ceres to Turlock Extension**

- **Award:** $57,018,000
- **Total Budget:** $163,718,081
- **Estimated TIRCP GHG Reductions:** 61,000 MTCO$_2$e

The project delivers in full the ACE extension to Turlock, which is an interim phase of SJRRC’s planned Ceres to Merced extension. This project extends ACE services approximately 10 miles south to the Turlock Station and constructs the layover track, which is critical for integrating Turlock into the greater regional and statewide rail network, providing direct city-center-to-city-center connections within the San Joaquin Valley, as well as to and from the San Francisco Bay Area and the Sacramento Region. Crucially, the project lays the foundation for eventual integration with high-speed rail service in Merced and will further facilitate mode shift to rail and transit from long-distance highway trips and short-haul regional flights.

Once implemented, the extended ACE service will also provide a direct connection with Turlock Transit as all six bus lines serve the Turlock Transit Center, which will be adjacent to the proposed new ACE station. This expansion of service will directly benefit priority populations in a region that is heavily pollution burdened and provides a real alternative to residents that are largely dependent on single occupancy vehicles for transportation.

Project completion is expected by 2027.

Award has a contingency related to future federal funding through the Multimodal Projects Discretionary Grant program and matching state funds, with the federal application already submitted to the United States Department of Transportation and pending selection.
Key Project Ratings:
Cost per GHG Ton Reduced: Medium
Increased Ridership: Medium-High
Service Integration: Medium-High
Improves Safety: High
Project Readiness: Medium-High
Funding Leverage: Medium-High
Multi-Agency Coordination/Integration: High
Priority Population Benefits: Medium
Housing Co-Benefits: High

20. Santa Barbara Metropolitan Transit District (MTD)

Project: Next Wave: Expanding MTD’s Electric Legacy on the South Coast

Award: $14,480,000
Total Budget: $33,041,520

Estimated TIRCP GHG Reductions: 14,000 MTCO₂e
(Additional project benefits accrue to the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program, which is anticipated to contribute $1,104,000 to the project, as well as the Low Carbon Transit Operations Program, which is anticipated to contribute $136,000).

The proposed project includes the following elements:
1) The purchase of eight 40-foot battery electric buses and 3 electric microtransit vans, which continues MTD’s path towards full electrification of the fleet. This award brings the fleet to more than a quarter of the way to full electrification. The microtransit vans will allow the expansion of the existing service into additional zones to serve the City of Goleta, UC Santa Barbara, and the Goleta rail station to help close first/last mile gaps in the system.
2) General transit improvements including signal priority, contactless payment deployment consistent with Cal-ITP standards, additional bike racks, and bus shelter improvements to augment existing service and grow additional ridership in the system.
3) Facility improvements at two terminals (one in Goleta and one in Santa Barbara) including the construction of new ZEB infrastructure to support the charging and storing needs of the growing electrified vehicle fleet.

Combined, these project components will increase ridership, reduce greenhouse gas emissions, implement contactless payment, expand bike capacity on buses, and augment connections to the state rail system. Addressing the current lack of connectivity between rail stations and community destinations, replacing several diesel buses beyond their useful life, and closing the gaps in an incomplete contactless payment system throughout the transit system will ensure benefits in the immediate and long term.
21. Sonoma County Transportation Authority (SCTA) with Petaluma Transit, Santa Rosa CityBus, Sonoma County Transit, Sonoma Marin Area Rail Transit (SMART) and Mendocino Transit Authority

**Project:** Sonoma Regional Bus and Rail Connectivity Improvements

**Award:** $24,825,000

**Total Budget:** $53,769,000

**Estimated TIRCP GHG Reductions:** 63,000 MTGCO₂e

(Additional project benefits accrue to Low Carbon Transit Operations Program, which is anticipated to contribute $2,431,000 to the project).

The proposed project includes the following elements:

1. Purchase of 30 zero emission buses and associated charging infrastructure and passenger amenities for Petaluma Transit, Santa Rosa CityBus and Sonoma County Transit. Replacing older diesel, diesel-hybrid, and CNG buses with zero emission buses, along with the requisite charging infrastructure, places the partner agencies on a clear path towards meeting the California Air Resources Board’s Innovative Clean Transit Regulation while providing immediate greenhouse gas and air quality benefits.

2. Construction of the SMART Petaluma North commuter rail station at Corona Road, which will be the 13th station in the 45-mile SMART regional rail system, providing better access to high-quality long-distance transit for riders in the region.

3. Network integration among all application partners and other transit operators in Sonoma and Mendocino County, improving the rider experience and improving the efficiency of transit services by conducting a facility analysis for the Santa Rosa Transit Mall and ensuring GTFS Real Time and contactless payment capabilities across the operators involved in the project, including new contactless payment equipment for Mendocino Transit Authority.

Together, these components will improve access to passenger rail and bus transit, increase ridership, hasten the transition to a fully zero-emission bus fleet, and better integrate cross-agency operations, which are all necessary for the region to meet local, regional, and state goals.

Project completion is expected by 2027.
Key Project Ratings:
Cost per GHG Ton Reduced: Medium-High
Increased Ridership: Medium-High
Service Integration: High
Improves Safety: Medium
Project Readiness: High
Funding Leverage: Medium-High
Multi-Agency Coordination/Integration: High
Priority Population Benefits: Medium
Housing Co-Benefits: High

22. Southern California Regional Rail Authority (Metrolink)

Project: Metrolink Perris Valley Line Capacity Improvement Project

Award: $25,042,000
Total Budget: $57,042,279

Estimated TIRCP GHG Reductions: 157,000 MTCO₂e

The project would complete the final design and construction of three capacity improvements on Metrolink’s 91/Perris Valley Line (91/PVL) that allow for bi-directional, peak-period service to be increased with infrastructure improvements that enable 30-minute, bi-directional frequency. The three capacity improvements are as follows:

1) Perris-South Station Expansion;
2) Perris-South Layover 4th Track;
3) CP Eastridge to Moreno Valley/March Field Double Track.

The Perris Valley Line Subdivision is currently a single-track passenger rail corridor, which creates significant operational challenges and limits passenger service growth. The project will result in 2.7 miles of new double track along with a second platform with enhanced pedestrian access. It also includes 1,100 feet of double track and station platforms at the Perris-South station and a fourth layover track at the Perris-South layover facility to enhance operational capacity.

The project builds upon Metrolink’s 2018 and 2020 TIRCP awards for the SCORE program, which envisions a pulsed, frequent, and integrated system in the region in advance of the 2028 Olympics. Delivery of the improvements described will bring reliable, bi-directional 30-minute service to the 91/PVL corridor to complement the investments being made in the larger SCORE effort.

Of the 185,000 residents living within census tracts within a half mile of the project area, 73% reside in low income or disadvantaged communities. The investments being made will improve rail mobility and access for these priority populations and bring greater overall system reliability for Metrolink.
Project completion is expected by 2027.

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

23. Tulare County Regional Transit Agency (TCRTA) with Kings Area Rural Transit (KART), Visalia Transit (VT), and San Joaquin JPA

Project: Tulare Cross-Valley Corridor ZEB Expansion Phase 1

Award: $33,769,000
Total Budget: $53,702,693

Estimated TIRCP GHG Reductions: 475,000 MTCO₂e
(Additional project benefits accrue to the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program, which is anticipated to contribute $2,400,000 to the project, as well as the Low Carbon Transit Operations Program, which is anticipated to contribute $700,000).

The project supports the phased development of an east-west Cross Valley Corridor (CVC) by purchasing and implementing 14 zero-emission feeder buses in multiple cities in and along the corridor, as well as 16 zero emission microtransit vehicles to be operated in selected cities, that will provide comprehensive access to the future rail system for all these communities and will connect to the future California High Speed Rail system.

TCRTA will implement the Lindsay Transit Center Project, as well as 8 zero emission buses to be deployed on routes 10, 20 and 40 (connecting Dinuba, Visalia, Tulare, Delano, Lindsay and Porterville) and 8 microtransit vehicles. The transit center is adjacent to the future cross-valley rail corridor and will enhance connectivity and safety in the community. It will also provide supportive infrastructure for vanpooling services that have been successfully deployed across the region and are poised for additional growth.

KART will implement a new Transit Station and Administrative Facility in the City of Hanford, as well as 4 zero emission buses to be deployed on route 13 (which connects Hanford with Corcoran and Corcoran State Prison) and 8 microtransit vehicles to be deployed in Hanford and Lemoore. The transit center will provide supportive infrastructure for vanpooling services that are expanding in the region.

Visalia Transit is partnering with TCRTA and KART to deploy 2 zero emission buses on Route
15 between Hanford and Visalia, providing more frequent and regular service to all riders, including those connecting with current San Joaquin rail service at Hanford (and future high-speed rail riders at Kings-Tulare).

The project prioritizes interoperability of the transit systems across three counties, and works to streamline transfers between local transit, microtransit, bus rapid transit, and rail services. The planned investment in interconnectivity will strengthen the entirety of the system leading to gains in ridership throughout much of the region for all types of transit, including rail. The physical interconnections and the efforts to ease transfers between transit systems will not only serve local and regional traffic but will act like a funnel to draw potential rail riders from an enormous area that would otherwise face barriers to rail access without a private automobile. As additional service needs are identified, the improved and expanded transit centers will be able to accommodate those expansions. Strategic route alignment and stop selections are well-suited for future public transit system expansions that more directly connect the metropolitan areas of the San Joaquin Valley.

Delivery of the project is part of a larger vision for transforming the transportation patterns and practices in the San Joaquin Valley and helps lay the groundwork for additional ridership benefits in the future. An expanded, zero-emission bus service complements the work being done to ready the existing rail line for passenger service and is being coordinated with other projects in the region, including coordination with future high-speed rail service and is aligned with Cal-ITP efforts to implement contactless fare payment systems on the system.

The project enhances the connectivity of Fresno, Tulare, and Kings counties in urban, rural, and disadvantaged areas and provides significant air quality benefits in one of the most pollution-burdened regions in the state by replacing gasoline and CNG transit buses with zero-emission buses paired with expanded service to increase ridership. The pursuit of passenger rail operations, paired with a comprehensive zero-emission bus system, will mitigate emissions throughout the region.

Project completion is expected by 2028. Due to the extended timeline for project delivery for several components that goes beyond this cycle’s 5-year program, the project is expected to receive funding over the life of the implementation schedule.

Key Project Ratings:

<table>
<thead>
<tr>
<th>Rating Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per GHG Ton Reduced:</td>
<td>High</td>
</tr>
<tr>
<td>Increased Ridership:</td>
<td>Medium-High</td>
</tr>
<tr>
<td>Service Integration:</td>
<td>Medium-High</td>
</tr>
<tr>
<td>Improves Safety:</td>
<td>High</td>
</tr>
<tr>
<td>Project Readiness:</td>
<td>High</td>
</tr>
<tr>
<td>Funding Leverage:</td>
<td>Medium</td>
</tr>
<tr>
<td>Multi-Agency Coordination/Integration:</td>
<td>Medium-High</td>
</tr>
<tr>
<td>Priority Population Benefits:</td>
<td>High</td>
</tr>
<tr>
<td>Housing Co-Benefits:</td>
<td>Medium-High</td>
</tr>
</tbody>
</table>
Program of Projects End Notes:

The Caltrans Division of Rail and Mass Transportation’s Office of Project Development, Management and Delivery will lead implementation and grant management of the selected projects, with assistance from the Office of Planning and Operations Support to ensure alignment of project scope with the project award and the Caltrans Office of Race and Equity to ensure integration of efforts to deliver Priority Population benefits into the approved project scope and programming documents.

Where relevant, technical assistance will be provided by Caltrans to integrate bus procurement efforts with statewide zero emission bus efforts, and to ensure service integration with other adjoining services. Technical assistance will also be provided by the Department of Transportation to ensure hardware and software systems involved in providing and processing connectivity, data and information are consistent with statewide integration efforts, so that maximum ridership benefits and greenhouse gas reduction benefits are achieved.

Many awards will benefit from network integration technical assistance provided by CalSTA and Caltrans to improve integration with adjacent state-funded capital projects or state-funded rail operations and to ensure that TIRCP program and statewide goals and priorities are being addressed through the awarded projects.

All estimated greenhouse gas emissions have been rounded to the nearest thousand.