



Allocation Package December 27, 2023

**SB 125:
Formula-Based Transit and Intercity Rail Capital Program
and Zero Emission Transit Capital Program**

369 W 18th St | Merced, CA 95340
Phone (209) 723-3153
www.mcagov.org

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PH: 209.723.3153
FAX: 209.723.0322
www.mcagov.org
369 W. 18th Street
Merced, CA 95340

December 22, 2023

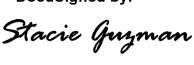
To whom it may concern,

The Merced County Association of Governments (MCAG) is pleased to submit this Initial Allocation Package for the SB 125 Formula-Based Transit and Intercity Rail Capital Program (TIRCP) and the Zero Emissions Transit Capital Program. As a regional transportation planning agency (RPTA), we support two transit operators that connect residents and visitors to destinations throughout Merced County and our region. This infusion of funds will help MCAG, and its operators, accelerate critical capital projects that will expand service and increase ridership, while being a partner to the State in achieving its goals for zero emissions vehicles and improved air quality.

Developed in consultation and coordination with our transit operators, partner regional transit agencies, and other county governments, our Initial Allocation Package presents a 4-year plan for the \$33,557,593 of SB 125 funding assigned to MCAG. It includes fleet transitions to zero emissions bus (ZEB) technology, the complementary infrastructure to operate and maintain the ZEB vehicles, and additional transit service to make connections at both the micro and interregional levels. This is our preliminary plan subject to change with updated operator data and continued project development. Working with CalSTA, MCAG will refine our Allocation Package as necessary over the SB 125 program timeframe.

To the best of my knowledge and belief, I assure the information contained herein is true and accurate; and I am authorized to submit this request for funding through the California State Budget Act of 2023, SB 125 Formula-Based Transit and Intercity Rail Capital Program and Zero Emission Transit Capital Program. The Merced County Association of Governments appreciates your review and consideration of our Initial Allocation Package. Should you have any questions, please contact me at (209) 723-3153 x 109 or stacie.guzman@mcagov.org.

Sincerely,

DocuSigned by:

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Stacie Guzman

Executive Director

Merced County Association of Governments

B. NARRATIVE EXPLANATION

The Merced County Association of Governments currently has two transit service operators, the Transit Joint Powers Authority (TJPA, The Bus) and Yosemite Area Regional Transportation System (YARTS).

- Administered by the TJPA, The Bus operates 15 fixed routes and paratransit services, carrying approximately 600,000 passengers a year. Pre-COVID pandemic annual ridership averaged 1,000,000. The TJPA is made up of an 11-member board of elected officials from each of the six incorporated cities in Merced County: Atwater, Dos Palos, Gustine, Livingston, Los Banos, and Merced, along with the five members of the Board of Supervisors.
- Yosemite Area Regional Transportation System (YARTS) supplies year-round and peak summer transit service into Yosemite National Park along gateway communities surrounding Highways 140 (Merced and Mariposa Counties), 120 (Tuolumne County), 395/120E (Mono County) and 41 (Madera County). The YARTS service carries an average of 75,000 per year with its highest annual ridership cresting 120,000.

This Initial Allocation Package Narrative Explanation describes each transit service operator's short-term financial strategy for service retention and the intended use of the SB 125 funds. The information is supported by various documents including the MCAG 2023 Federal Transportation Improvement Program, 2021-2022 Transit Asset Management Plans, 2022 Short Range Transit Plans, and the 2023-2024 Unmet Transit Needs Plan (available upon request).

i. Explanation of what funding and service actions are being taken within the region that utilize resources other than SB 125 funding.

MCAG and its service operators take full advantage of all local, state, and federal funding available to sustain operations. Operations and maintenance for transit services are fully covered by these revenue sources. If these funding levels decrease and/or costs increase, then the level of transit service is reduced to match the available levels of funding. Each service operator has different operating and funding characteristics that have resulted in unique decisions to maintain operational and financial sustainability.

TJPA, The Bus

TJPA is funded by FTA 5307, FTA 5311, FTA 5339, Low Carbon Transit Operations Program (LCTOP), Local Transportation Fund (LTF), State of Good Repair (SGR) funds, and State Transit Assistance (STA) funds for operations, as well as for limited capital needs. At the local level, TJPA also receives revenue through the Measure V sales tax, a 30-year .5 cent sales tax for transportation estimated to generate \$20 million annually. Up to five percent of Measure V funding goes to transit operations to offer a Free Fare Program for Veterans, Seniors, and ADA Eligible Passengers. It has also been used as local matching funds for zero-emission capital grant applications. These funding sources, combined with farebox revenues, enable TJPA to maintain current operations of The Bus without a deficit.

While the revenue from these local, state, and federal sources has come in above estimates in the past year, it has just kept pace with the general increase in operating costs associated with an inflationary economy. TJPA continues to actively manage operating costs to avoid service cuts and increased fares through efficiency improvements such as breaking up long, time-consuming routes;

streamlining routes by eliminating out-of-direction movements; and removing of “flag down stops” service. These operational measures have worked in tandem to preserve The Bus’ service but leave little ability to implement recommendations to increase ridership, like expanded microtransit to lower density, disadvantaged areas. Furthermore, this tight financial operating position restricts TJPA’s ability to build the capital reserve necessary to systematically meet other mandates for zero emission buses (ZEBs) and its associated infrastructure. While FTA 5339 awards and CMAQ allocations can assist with capital investments when available, the funding is not projected to support a full transition of fleet by 2040.

YARTS

YARTS receives its funding from FTA 5311(f), Local Transportation Funds from multiple counties, a service agreement with the National Park Service, a service agreement with AMTRAK, and farebox revenues. With these funds, totaling approximately \$3.2 million annually, YARTS manages a lean budget to maintain service levels. As an example, while a rockslide may temporarily cancel service and create minimal savings; these savings can be easily depleted to address one engine failure.

YARTS has already performed service cuts to support operational and financial sustainability in response to the effects of the COVID pandemic. In 2021, YARTS decided to reduce the number of runs on the core-service routes, operating 4,769 less vehicle-hours per year and serving 11 percent fewer passenger-trips than in 2019. This service adjustment was anticipated to generate \$500,000 towards a capital reserve to begin the replacement of aging fleet. In 2023, YARTS incorporated the service reductions into procurement of a new operating contract. But, by that time, the savings from the service reductions was needed to cover the increased costs of operations and maintenance with the new contractor. While YARTS was fortunate to receive a minimal amount of extra FTA 5339 funding (\$15,000) for an emergency reserve, it has had to continue to defer capital investment in a new ZEB fleet indefinitely.

- ii. *Description and justification of the RTPA strategy to use SB 125 funding to construct capital projects and fund operating expenses that lead to improved outcomes in its jurisdiction.*

The infusion of the SB 125 formula funding enables MCAG and its operators to keep service levels of the current fixed-route and paratransit service, while accelerating the capital investment necessary to transition fleet to ZEBs and expand service to attract new ridership. MCAG instituted new cleanliness and safety measures in the wake of the COVID and has maintained those protocols to enhance the ridership experience. It is also exploring to new fare collection methods that will increase ease of payment. The next step for MCAG is to transition fleet and increase the convenience of taking transit. It is a proactive approach that leverages this one-time opportunity to complement, instead of compete, with major rail investments.

TJPA, The Bus

Capital investments have always been secondary to operational needs; and it would have taken several years to generate enough capital reserve to transition The Bus’ fleet to ZEBs, powered by either battery electric buses (BEB) or hydrogen fuel cell electric buses (FCEBs). Given this, TJPA would potentially be at risk of not achieving 2040 ZE fleet goal set by the State. And, it would lack the infrastructure to charge/fuel vehicles or maintain any new technology. Furthermore, any fleet replacement would take priority over other initiatives to attract additional ridership.

The SB 125 formula funding allows the TJPA to simultaneously contribute to better air quality and achieve increased ridership. By investing the SB 125 funds in electric and hydrogen buses, microtransit fleet, and charging and fueling infrastructure, any funding sources currently directed to capital expenditures can shift to support sustained operations of service expansions. This includes additional microtransit service and enhancing connectivity to commuter rail at regional transit hubs. In 2021, TJPA launched the Micro Bus, a shared, on-demand, public transit system that provides passengers transportation within the communities of Los Banos, Dos Palos, Gustine, and Santa Nella. This type of service has been successful at serving lower density, rural, and more disadvantaged areas. With increasing ridership each month, this type of service and has proven to be successful but is more expensive than traditional fixed-route service. The SB 125 funding will help position TJPA to absorb this increase in cost in the long-term. It will also support linkages to the Altamont Corridor Express (ACE) and Amtrak from transportation hubs and communities in Merced County, increasing ease of using transit to travel across the greater San Joaquin Valley.

In July 2021, MCAG Governing Board approved the extension of the Measure V free fare program for seniors, veterans, and ADA-eligible riders on fixed-route bus services to also include paratransit, dial-a-ride, and microtransit services. The SB 125 funding for capital investments mitigates the risk of budget shortfalls that may lead to the Measure V Free Fare Program being cut, helping to ensure that these transit dependent riders throughout the County now benefit from a completely free transit system, thus empowering them to travel independently throughout the region.

YARTS

As previously described, YARTS has a narrow operating margin with little capital reserve to maintain or replace its fleet. Additionally, the physical operating environment for YARTS buses is challenging for current BEB technology. The distances that BEBs would need to travel without a mid-day charge exceeds the range that available models can reliably operate, particularly given the additional power needed to climb mountain grades or operate air conditioning (such as in the Central Valley in summer) and heating systems (such as in Yosemite National Park in winter). Hydrogen bus technology is still new with questions on manufacturing process, dependability, and overall cost.

Prior to making such a large investment in fleet replacement with inadequate or emerging technology, YARTS plans to use the SB 125 funding to make initial investments to prove viability. This includes participation in demonstration efforts to assess hydrogen fuel cell vehicles (FCEB) and starting to secure space for sufficient hydrogen fueling facilities.

- iii. *Detailed breakdown and justification for how the funding is proposed to be distributed between transit operators and among projects, consistent with the legislative intent described in SB 125.*

The allocation of MCAG's SB 125 funds considers the distribution of ridership by operator in the region, total asset management issues, and overall project readiness. For instance, TJPA is proposed to receive 85 percent of the SB 125 funding, and it provides approximately over 90 percent of the region's ridership.

Operator	TIRCP	ZETCP (GGRF)	ZETCP (PTA)	Total
MCAG	\$209,123			\$209,123
The Bus, TJPA	\$22,066,006	\$3,460,061	\$722,403	\$26,248,470
YARTS	\$3,000,000			\$3,000,000
The Bus, TJPA & YARTS	\$4,100,000			\$4,100,000

Total	\$29,375,129	\$3,460,061	\$722,403	\$ 33,557,593
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MCAG proposes to distribute the SB 125 funding in alignment with the priorities identified in short-term and long-term planning documents to achieve zero emissions targets and ridership goals, while providing a direct and meaningful investment to disadvantaged communities. With these common objectives, MCAG and its operators have also considered opportunities for shared resources to maximize efficiency and cost effectiveness.

Purpose	TIRCP	ZETCP (GGRF)	ZETCP (PTA)	Total
Zero Emissions	\$19,997,536	\$3,460,061.	\$722,403	\$24,180,000
Increased Ridership	\$9,168,470			\$9,168,470
Administrative	\$209,123			\$209,123
Total	\$ 29,375,129	\$3,460,061	\$722,403	\$33,557,593

These coordinated investments are focused on creating linkages to interregional transit hubs, thereby reducing VMT, congestion, and greenhouse gas emissions, particularly on highways around the State's most treasured national parks and natural landscapes. Whether you are a resident of Merced County, a commuter from the San Francisco Bay area, or visitor from abroad, the vision is to be able to access everyday destinations or the trails at Yosemite without needing a car. Enhancing these connections reflects the MCAG region's commitment to addressing non-attainment issues and achieving the State's goals for improved air quality.

The Initial Allocation Package includes 8 capital projects and 3 transit projects, as well as approximately \$210,000 for administrative costs which is within the 1% allowable share. Detailed information on the high-priority nature and significance of each project is reflected in the Project Descriptions in Section C.

Project	TIRCP	ZETCP	Total
Long Term Planning/Administrative	\$209,123		\$209,123
Electric Bus Charging Infrastructure	\$1,766,566	\$2,433,434	\$4,200,000
Westside O&M Facility	\$4,530,970	\$1,749,030	\$6,280,000
YARTS Seed funding for O&M Facility	\$2,000,000		\$2,000,000
Microtransit Services Expansion (Operations)	\$4,388,470		\$4,388,470
Microtransit Services Expansion (Vehicles)	\$2,080,000		\$2,080,000
Hydrogen Fueling Station & Facility Compliance	\$4,100,000		\$4,100,000
Hydrogen Bus Replacement for The Bus	\$6,400,000		\$6,400,000
Fuel Cell Demo Project	\$1,000,000		\$1,000,000
Amtrak Thru-Way Bus Service Pilot	\$1,500,000		\$1,500,000
Service to the ACE Station - Bus Bridge Program	\$1,200,000		\$1,200,000
The Bus Transpo Redesign	\$200,000		\$200,000
TOTAL	\$29,375,129	\$4,182,464	\$33,557,593

C. PROJECT DESCRIPTIONS

Project #	Project Name	Funding Type	Description
1	Long Term Planning/Administrative*	Operating/Administrative	Staff time dedicated to administration of SB125 funding, program management and compliance over the 4-year period.
2	Electric Bus Charging Infrastructure	Capital	Installation of battery electric charging infrastructure at the operations and maintenance facility to support The Bus's zero-emission, electric bus fleet.
3	Westside O&M Facility	Capital	Develop an O&M facility on the westside of Merced County to store and refuel/charge buses. Project includes land acquisition through construction.
4	YARTS Seed funding for O&M Facility	Capital-Project Development	Land acquisition and/or local match for the development and construction of operations and maintenance facility for YARTS.
5	Microtransit Services Expansion (Operations)	Operating	Expand microtransit services into Atwater, and west and south Merced to increase ridership in these areas.
6	Microtransit Services Expansion (Vehicles)	Capital	Purchase of microtransit vehicles required for the expansion outlined in Project 5.
7	Hydrogen Fueling Station & Facility Compliance	Capital	Develop hydrogen infrastructure to support the operation of hydrogen fuel cell vehicles for both The Bus and YARTS
8	Hydrogen Bus Replacement for The Bus	Capital	Fleet replacement with hydrogen technology.
9	Fuel Cell Demo Project	Capital	Local contribution for an over-the-road coach pilot service on Hwy 140.
10	Amtrak Thru-Way Bus Service Pilot	Operating	Operational funding to offer one round trip commuter route via Amtrak thru-way services between Merced and Gilroy.
11	Service to the ACE Station - Bus Bridge Program	Operating	Enhance T Route service to serve as bus bridge to ACE rail in Stanislaus County.
12	Concourse Redesign for The Bus Traspo	Capital-Project Development	Redesign concourse to maximize space and enhance passenger experience in alignment with the adjacent rail station area development.

* Detailed project description not provided due to nature of work and amount within the 1% allowed administrative share.

**Funding information in each project description is in year of funding availability, while milestone schedule information represents anticipated time period of expenditure.

***Results of modeling are summarized in the project descriptions; detailed model outputs can be packaged and provided upon request.

Project Title:	(2) Electric Bus Charging Infrastructure
Type of Project	Capital
Implementing Agency:	TJPA

Project Description:

The TJPA has already purchased 9 BEBs with plans to secure up to 25. It is prepared to comply with the State's targets for fleet transition; however, it currently lacks the complementary infrastructure to regularly support BEBs. Plug in chargers, commonly referred to as depot chargers, are the most common, cost effective, and appropriate for The Bus's battery electric service. Funding for TJPA's Electric Bus Charging Infrastructure (Project 2) will purchase and install 21 depot chargers to support charging stations for fifteen (15) BEBs and six (6) support vehicles. It also includes options for public charging and capacity for future expansion.

Summary of Project Scope

This project covers construction and installation of battery electric charging infrastructure at the operations and maintenance facility to support The Bus's BEB fleet.

Start/End Dates of Project	
Start Date	End Date
Aug-23	Jun-25

Detailed Project Schedule

	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33
Design									
Construction									
Implementation			*						

* Year of Implementation

Project Cost and Funding Sources

\$5,000,000

Source	FY24	FY25	FY26	FY27
TIRCP	\$696,393	\$1,070,173		
ZETCP (PTA)	\$722,403			
ZETCP (GGRF)	\$ 836,516	\$874,515		
CMAQ		\$800,000		
Total	\$2,255,312	\$2,744,688		

Project Location

The Electric Bus Charging Infrastructure will be constructed at the current Wardrobe Ave operations and maintenance facility located at 950 Wardrobe Avenue, Merced, CA 95341.

GHG Reduction

The project directly addresses the greenhouse gas emissions by advancing and allowing the transition to BEB's for TJPA. Replacing conventional buses with electric buses eliminates direct emissions of GHGs such as carbon dioxide, leading to improved air quality and reduced overall GHG emissions from transit activities in Merced County. Total project GHG emissions reductions per for the lifespan of this project, 12 years, are 1,842 MTCO₂e. This equates to 0.000530 MTCO₂e per each SB 125 dollar.

	Per TIRCP \$	Per CCI \$	Total
Emission Reductions (MTCO ₂ e)	0.000530	0.000530	1,842

The Electric Bus Charging Infrastructure is anticipated to support 36 full-time equivalent jobs, 12 of those directly funded through GGRF funds. Of these 12 jobs, 4 are direct, 4 are indirect and 4 full-time equivalent induced jobs.

Figure 1. Designs of Wardrobe Ave O&M Facility to accommodate BEBs.



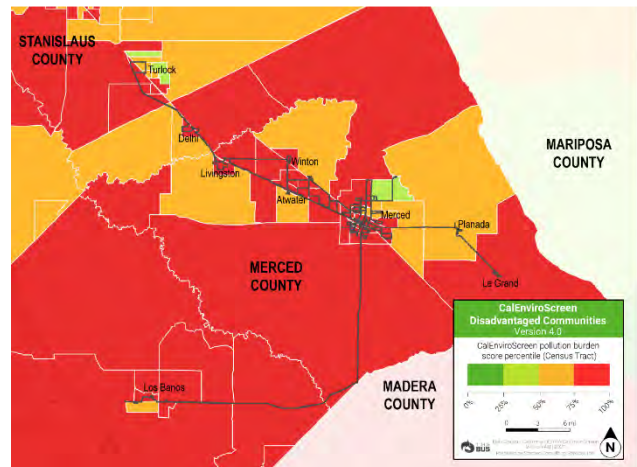
Ridership Benefits

The Electric Bus Charging Infrastructure supports the deployment of BEBs, which emphasize a commitment to sustainability and the environment by reducing tailpipe emissions from transit activity. This provides a direct public health benefit and lessens noise on neighborhood streets. BEBs also provide a quieter ride for TJPA customers.

Benefit to Disadvantaged Communities

As mandated by CARB's ICT regulations, deployment of ZEBs must prioritize communities most burdened by pollution as defined by the SB 535. As part of The Bus's ICT ZEB Rollout Plan, anticipated BEBs are planned to be deployed along routes M1, M2, M3, M4, and M7 which all serve populations in the highest (most burdened) Disadvantaged Community quartile. Charging infrastructure installed by Project 2 will allow for the use of BEBs by TJPA and will reduce point source emissions in disadvantaged communities in and along priority routes.

Figure 2. SB 535 DACs in Merced County Area



Project Title:	(3) Westside O&M Facility
Type of Project	Capital
Implementing Agency:	TJPA

Project Description:

TJPA owns an existing operations and maintenance facility (Wardrobe Ave), which has the space to accommodate 71 diesel and gasoline vehicles and limited ability to expand. The current capacity will become constrained in future years due to BEB's and hydrogen fuel cell vehicles requiring additional space to accommodate charging and fueling infrastructure. There is also a need to accommodate a growing microtransit fleet, especially as TJPA strives to expand microtransit service. A new facility would increase vehicle storage space support additional electric bus charging infrastructure. Besides accommodating ZEBs for TJPA, the Westside O&M Facility (Project 3) may serve existing and future YARTS operations and maintenance needs. An effort is underway to determine the exact program requirements for the site, estimated to be 3-8 acres.

Summary of Project Scope

Land acquisition, design, and construction of an O&M facility on the westside of Merced County to store and charge/fuel ZEBs.

Start/End Dates by Project Phase		
Phase	Start Date	End Date
Land Acquisition	Jan-26	Jun-26
Design	May-26	Dec-26
Construction	Nov-26	Jan-28

Detailed Project Schedule

If the project is approved as eligible in the initial allocation package, MCAG will prepare a detailed project schedule will completion dates of all major delivery milestones.

Project Cost and Funding Sources

\$8,000,000

Source	FY24	FY25	FY26	FY27
TIRCP	\$1,000,000	\$3,530,970		
ZETCP (GGRF)			\$874,515	\$874,515
Measure V	\$500,000			
5339		\$600,000		
SGR	\$500,000	\$120,000		
Total	\$2,000,000	\$4,250,970	\$ 874,515	\$874,515

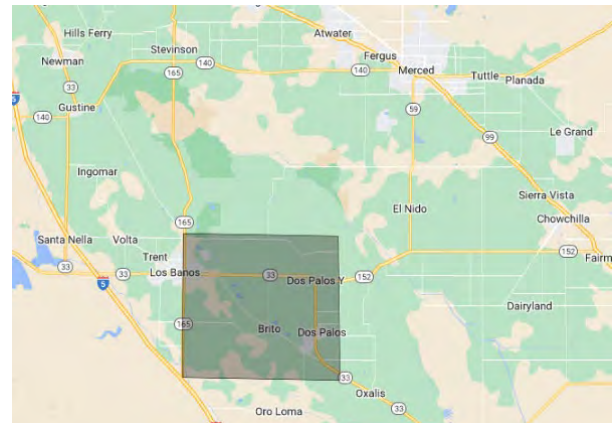
Project Location

The Westside O&M Facility will be constructed between Los Banos and Dos Palos with access to state route (SR) 152.

GHG Reduction

The Westside O&M Facility project offers greenhouse gas reduction benefits by supporting battery electric bus charging, minimizing deadheading for service operations in western Merced and allowing for the expansion of microtransit service to western Merced County. The Westside O&M Facility will house 10 BE cutaways purchased using SB 125 money during the completion of Microtransit Services Expansion – Vehicles (Project 6). To reduce the double counting of GHG emission reductions, see Project 6 for estimated GHG reductions associated with the Westside O&M Facility project. Based on CARB’s Job Co-benefit Modeling Tool, Westside O&M Facility supports of total of 73 full-time equivalent jobs. Of these, GGRF funds directly support 7 full-time equivalent jobs, 3 indirectly, and induce another 6 full-time equivalent jobs for a total of 16 supported full-time equivalent jobs.

Figure 3. Area under consideration for Westside O&M Facility.



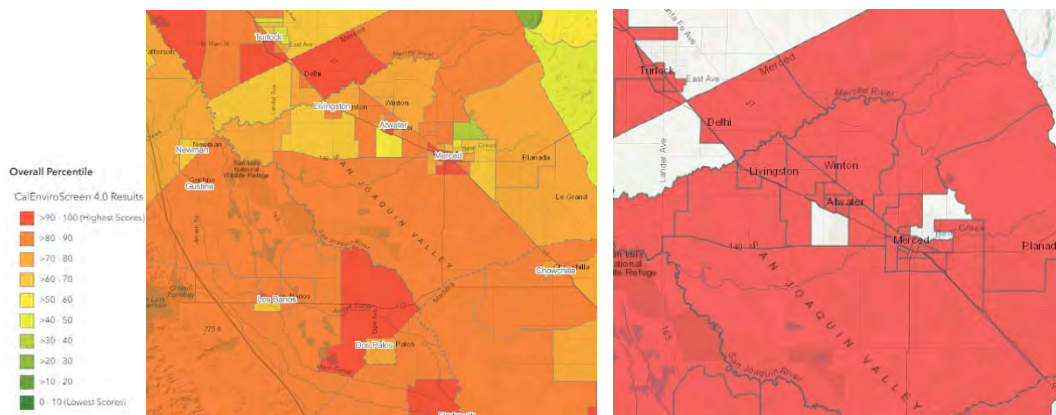
Ridership Benefits

By building an additional operations and maintenance facility, Project 3 supports the growth and improvement of public transit services, which can lead to increased ridership. Additionally, the new facility will support microtransit services on the western and southern portions of Merced, increasing service quality and reliability in largely disadvantaged portions of the city. A new Westside O&M Facility ensures that fleet can be properly maintained and operated, improving service reliability. With an expanded and well-equipped operations and maintenance facility, MCAAG can better serve existing and future TJPA, as well as possibly YARTS operations. The increased space allows for expansion of transit fleet, enabling MCAAG transit operators to offer more frequent service, additional routes, and increased coverage in underserved areas in the future. The availability of more service options and improved connectivity can also attract choice riders.

Benefit to Disadvantaged Communities

The Westside O&M Facility contributes to reducing pollution burdens in the adjacent transit service areas. This is particularly significant given these areas are in the top 10% and top 25% of pollution burden, indicating a higher exposure to environmental hazards. ZEB’s supported by the Westside O&M will reduce point source emissions in disadvantaged communities in and along priority routes.

Figure 4. CalEnviroScreen and SB 535 Disadvantaged Communities in Merced County



Project Title:	(4) Seed Funding for Operations and Maintenance Facility
Type of Project	Project Development
Implementing Agency:	YARTS

Project Description:

Currently, Yosemite Area Regional Transit System (YARTS) does not own any administrative, maintenance, operations or fueling facilities; instead, relying on a Contractor. The Contractor-owned maintenance and operations facility houses staff for day-to-day operations and the majority of YARTS buses. During certain times of the year, YARTS-owned vehicles are also stored on private property in Tuolumne or parked overnight along the side of the road in Mammoth Lakes. This lack of publicly owned facilities is reflected in higher ongoing operating costs and impeding a transition to zero emission fleet. This project is for seed funding for continued project development, initial land acquisition, and/or to support a local match contribution for future phase costs to design and construct a future YARTS-owned Operations and Maintenance Facility (Project 4) which is necessary to support the future conversion of YARTS fleet to alternative fuel vehicles.



Summary of Project Scope

The scope of the funding is for project development, such as location analysis, facility programming for size of storage or vehicle maintenance functions, and capacity of alternative fueling stations. It may also include initial land acquisition or local match for future phases.

Start/End Dates by Project Phase		
Phase	Start Date	End Date
Planning	Jul-24	Sep-24
Design	Oct-24	Feb-25

Detailed Project Schedule

If the project is approved as eligible in the initial allocation package, MCAG will prepare a detailed project schedule with completion dates of all major delivery milestones.

Project Cost and Funding Sources

\$2,000,000

Source	FY23-24	FY24-25	FY25-26	FY26-27
TIRCP		\$2,000,000		-
Total Cost		\$2,000,000		

Project Location

To be determined. Recommendation from the YARTS Strategic Plan including purchase of a facility in Merced, but also consideration of locations in Mammoth Lakes, Groveland or Oakhurst.

GHG Reduction

The project supports service in a limited access, high traffic area and will mitigate the negative impacts of traffic congestion and emissions on environmentally sensitive ecosystems and hard-to-reach road networks. The YARTS fleet consists of 14 over-the-road coaches, with an additional three provided by a lease agreement. Service requires a total of 14 vehicles required in the fleet, including a spare ratio. The establishment of a YARTS Operations and Maintenance Facility would enable the transition of this fleet to zero emissions vehicles, further protecting delicate ecosystems and parkgoers from air pollution.

Ridership Benefits

The addition of a YARTS-owned Operations & Maintenance facility would improve operational efficiency and enhance service reliability. The project's focus on supporting the transition to alternative fuel vehicles aligns with sustainability goals, making public transportation more appealing to environmentally conscious riders and potentially attracting new passengers. The new facility will support timely and efficient transportation and improved access to Yosemite National Park.

Benefit to Disadvantaged Communities

This project offers benefits disadvantaged communities and transit dependent riders. It improves transportation access by establishing a YARTS-owned facility, enabling the continuation of reliable transit service to Yosemite National Park and other destinations in the Sierra Nevada Mountains east of Merced. The project promotes transportation equity, reducing disparities and ensuring equal access to national parks and other destinations. Additionally, the project's focus on transitioning to alternative fuel vehicles reduces emissions, improving the environment and benefiting the health of residents in DACs in and along the YARTS routes particularly around Merced. The project aims to reduce disparities, enhance mobility, and create a more inclusive and equitable transportation system for all residents.

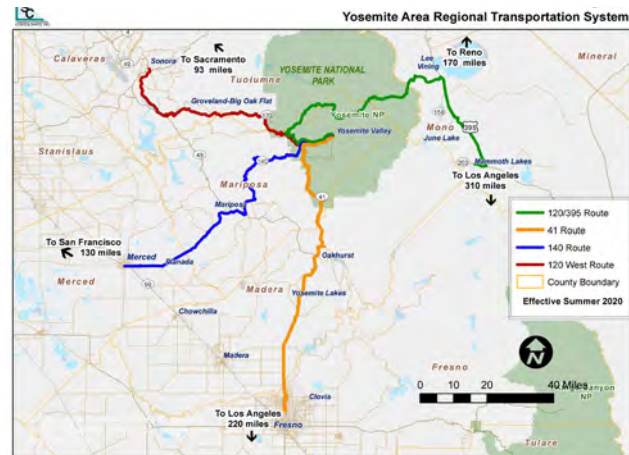
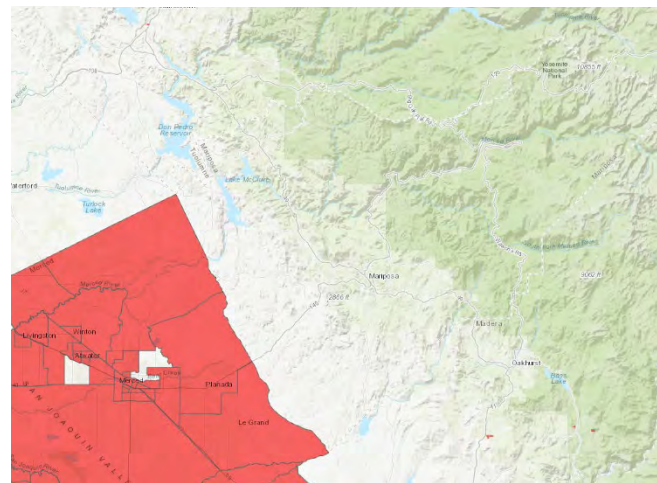


Figure 5. DACs in YARTS Service Area



Project Title:	(5) Microtransit Services Expansion
Type of Project	Operating
Implementing Agency:	TJPA (Operator)

Project Description:

TJPA launched the Micro Bus service as a pilot microtransit service in the communities on the westside of Merced County in May 2021. “Micro Bus” is transit-on-demand service, which utilizes a high-quality app as part of a third-party provider to link riders with transit. It currently supplements fixed-route passenger service in Los Banos, Gustine, Santa Nella, and Dos Palos. Based on the pilot service success, the TJPA’s plans to expand Micro Bus to areas where it is difficult to serve with fixed route service, such as areas with less density, yet still a transit dependent population. Operated by the TJPA, the Microtransit Services Expansion Project (Project 5) will expand the Micro Bus program to cover 3 new service areas—Atwater, and west and south Merced.

Summary of Project Scope

This project will cover operations costs associated with expanding microtransit services into Atwater, and west and south Merced to increase ridership in these areas.

Start/End Dates by Project Phase		
Phase	Start Date	End Date
Operations	Jul-24	Jan-28

Detailed Project Schedule

If the project is approved as eligible in the initial allocation package, MCAG will prepare a detailed project schedule with completion dates of all major delivery milestones.

Project Cost and Funding Sources

\$5,188,470

Source	FY24	FY25	FY26	FY27
TIRCP (Operating)	\$2,188,470	\$2,200,000		
Farebox	\$200,000	\$200,000		
5307	\$200,000	\$200,000		
Total	\$2,588,47	\$2,600,000		

Current and Future Ridership

The TPJA ridership is between 600,000- 700,000 a year, approximately 90 percent of the region’s overall ridership. Micro Bus is currently less than 1 percent of the region’s total ridership; however, the funding for this project is projected to pay for approximately 60,000 Passengers per year.

2023 Ridership (through September): 25,398; less than 1% of region’s total ridership

	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
Micro Bus	2,262	2,215	2,611	2,248	2,925	2,844	2,859	3,778	3,656

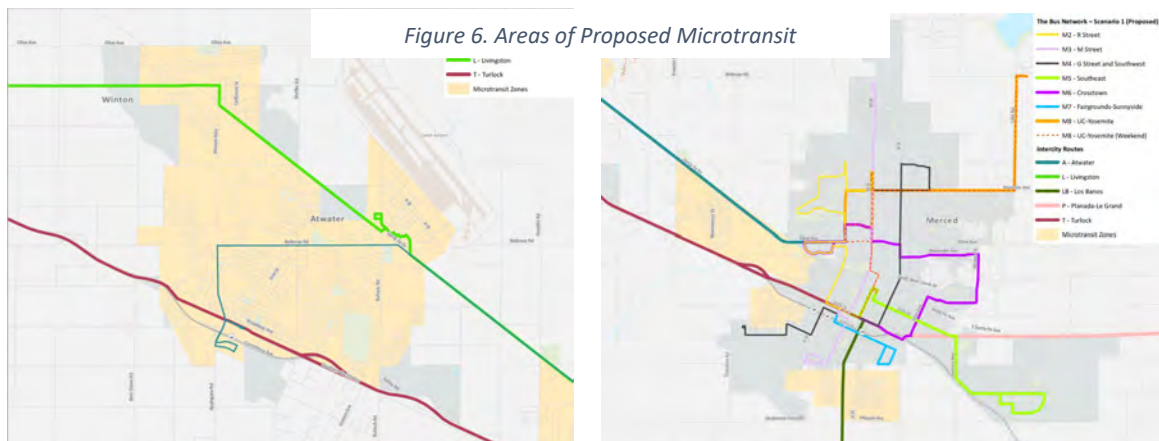
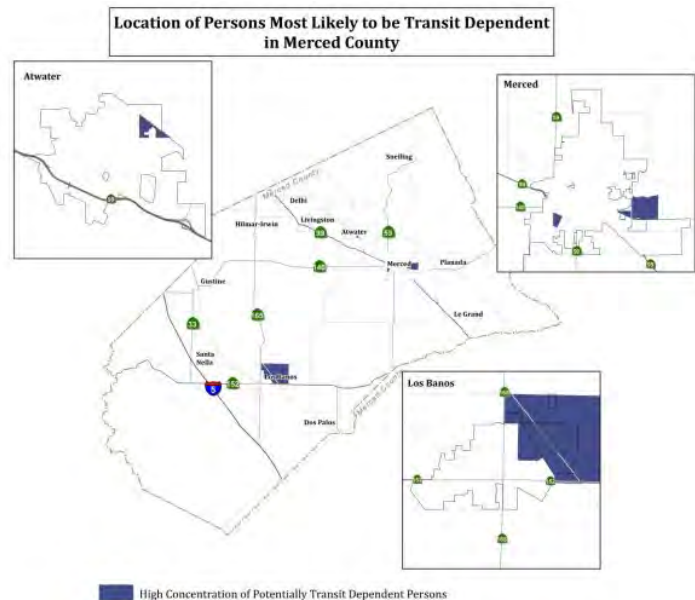
This investment will increase ridership by targeting disadvantaged communities and transit-dependent riders, as well as appealing to choice-riders. By expanding the Micro Bus program to new service areas and providing connectivity to fixed route services and regional transportation hubs, Project 5 ensures that transit-dependent populations have more reliable transportation options. The on-demand nature of the Micro Bus service attracts time-sensitive riders seeking convenience and flexibility. The Short-Range Transportation Plan assumes a 1.5% increase based on the service changes implemented with Microtransit Service Expansion.

Anticipated growth in microtransit ridership for FY22-27.

Microtransit Area	FY21-22 Baseline	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	5_Year Total
Merced	30,113	30,564	31,023	31,488	31,960	32,440	157,475
Atwater	28,297	28,722	29,152	29,590	30,034	30,484	147,982

Benefits to Transit Dependent Riders

The Microtransit Services Expansion Project extends high-quality, point-to-point service within to transit-dependent riders in Atwater and southwest Merced, catering to local trips and connecting communities with citywide and regional transportation hubs. The service will provide efficient and reliable transportation, while also being cheaper than private sector services like Lyft and Uber, making it an affordable option for individuals who may face financial constraints or live in areas with limited transportation choices. This project enhances accessibility, promotes connectivity, and empowers transit-dependent riders by providing a cost-effective and reliable transit service tailored to their specific needs.



Identification of Investment in Safety/Security

Microtransit offers fast, point-to-point service with no waiting at bus stops, reducing time where transit customers are in unregulated environments. Utilizing smaller vehicles with better visibility and easier for drivers to control, especially in tight neighborhood or areas with considerable pedestrian traffic, will improve safety outcomes for riders, operators, and pedestrians. Service provided through a high-quality app enables real-time tracking of passenger location and experience, providing visibility and a platform for feedback and reporting safety issues. These measures ensure a safer transit experience, reducing exposure to risks, promoting efficient response to safety concerns, and instilling confidence and peace of mind for riders.

Project Title:	(6) Microtransit Services Expansion - Vehicles
Type of Project	Capital
Implementing Agency:	TJPA

Project Description:

The Microtransit Service Expansion – Vehicles project (Project 6) is critical to expand the additional microtransit services outlined in Microtransit Service Expansion (Project 5) to Atwater and south and west areas of Merced. It will fund the purchase of 10 new zero-emission cutaways to allow TJPA to expand and transition their microtransit fleet to zero emissions vehicles. Fleet purchases through this project will be used in and supported by investments in the Westside O&M Facility (Project 3).

Summary of Project Scope

Purchase of 10 zero emissions cutaways required for the service expansion in Atwater and south and east Merced.

Start/End Dates by Project Phase		
Phase	Start Date	End Date
Fleet Acquisition	Oct-25	Apr-26

Detailed Project Schedule

If the project is approved as eligible in the initial allocation package, MCAG will prepare a detailed project schedule will completion dates of all major delivery milestones.

Project Cost and Funding Sources

\$2,080,000

Source	FY24	FY25	FY26	FY27
TIRCP	\$2,080,000			
Total	\$2,080,000			

Project Location

Microtransit services into Atwater, and west and south Merced (Project 5) with vehicles stored at Westside O&M Facility (Project 3).

GHG Reduction

By providing funding for the purchase of 10 new zero-emission vehicles, the Microtransit Service Expansion – Vehicles project enables the transition to a zero-emission microtransit fleet. These vehicles reduce point source emissions in areas with microtransit service, resulting in a substantial reduction of harmful pollutants and greenhouse gas emissions and leading to improved air quality and reduced overall greenhouse gas emissions from transit activities in Merced County.

Assuming a 7-year useful life, emissions reductions per dollar funded through TIRCP for Project 6 will be 0.001 MTCO₂e. Total lifetime project emissions reductions will be 2,080 MTCO₂e.

	Per TIRCP \$	Per CCI \$	Total
Emission Reductions (MTCO ₂ e)	0.001	0.0	2,080

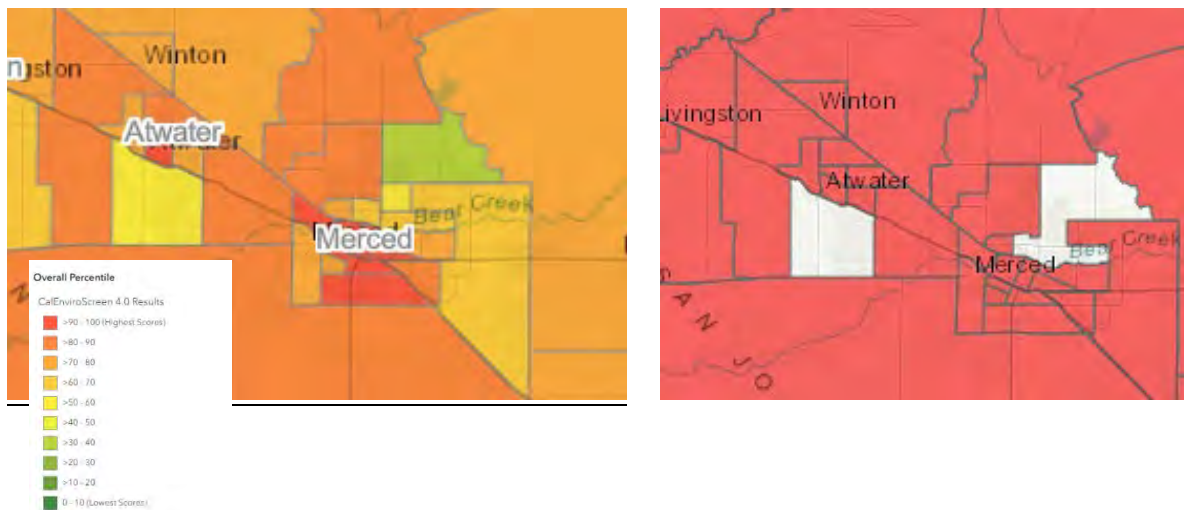
Ridership Benefits

The Microtransit Services Expansion - Vehicles project offers ridership benefits by supporting the expansion of microtransit services outlined in Project 5. Microtransit service improves accessibility and flexibility, increasing overall ridership and promoting the use of public transportation options. By expanding the Micro Bus program to new service areas and providing connectivity to fixed route services and regional transportation hubs, the project ensures that transit-dependent populations have more reliable transportation options. The on-demand nature of the Micro Bus service attracts choice and time-sensitive riders seeking convenience and flexibility. Additionally, Microtransit Services Expansion – Vehicles project enables TJPA to upgrade their micro transit fleet and provide a cleaner, quieter, and more comfortable ride for passengers.

Benefit to Disadvantaged Communities

The Microtransit Service Expansion – Vehicles project directly affects identified DACs in Atwater and west and south Merced. It will support Project 5 in providing a reliable and cost-effective point-to-point transportation options, bridging the transportation gap experienced by disadvantaged communities. Additionally, the introduction of zero-emission vehicles reduces point source emissions, contributing to improved air quality and a healthier environment for the DACs in which microtransit services operate.

Figure 7. CalEnviroScreen and SB 535 in South



Project Title:	(7) Hydrogen Fueling Station and Facility Compliance
Type of Project	Capital
Implementing Agency:	TJPA/YARTS

Project Description:

The Hydrogen Fueling Station and Facility Compliance (Project 7) explores and creates hydrogen fueling infrastructure at the existing (Wardrobe Ave) or future (Project 3) O&M facilities, and potentially along various routes for use by both TJPA and YARTS. While battery electric buses (BEBs) are the dominant presence in the transit vehicle market, it is important for TJPA and YARTS to consider hydrogen fuel cell technology, especially considering the diverse, physical environment in which the systems operate. The advantages of a hydrogen fuel cell electric bus (FCEBs) are longer range capabilities compared with the BEBs and the fueling process is faster than conventional wired battery electric charging--the FCEB fueling process is similar to refueling with other gaseous fuels like CNG.

While some of The Bus routes can be served by BEB technology, others would benefit from FCEB, such as the proposed regional connections like the ACE Bus Bridge (Project 10) and Amtrak Thru-way service (Project 11). The characteristics of YARTS routes also pose challenges for BEBs and may be better suited for FCEBs (Project 9). For FCEBs to be a viable option for TJPA and YARTS in the future, the Hydrogen Fueling Station and Facility Compliance project enables MCAG to be proactive in developing the infrastructure to anticipate acceptance of the technology.

Summary of Project Scope

This project will include planning, design, and construction of hydrogen fueling infrastructure to support the operation of hydrogen fuel cell vehicles for both The Bus and Yosemite Area Transportation Services (YARTS).

Start/End Dates of Project	
Start Date	End Date
Jan-30	Jun-33

Detailed Project Schedule

	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33
Design									
Construction									
Implementation									

* Year of Implementation

Project Cost and Funding Sources

\$5,600,000

Source	FY24	FY25	FY26	FY27
TIRCP		\$4,100,000		
CMAQ			\$1,500,000	
Total		\$4,100,000	\$1,500,000	

Project Location

Zero emissions bus infrastructure will be installed at existing Wardrobe Road facility located at 950 Wardrobe Avenue, Merced, CA 95341.

GHG Reduction

The Hydrogen Fueling Station and Facility Compliance project (Project 7) will reduce GHG emissions by supporting the transition to zero emissions fleets for TJPA and YARTS, meaning reductions in point source emissions and cleaner air in the communities in the greater Merced County area. The project will also decrease overall maintenance and reliance on third-party maintenance and towing services, further reducing lifetime emissions for transit fleet vehicles. By developing the necessary infrastructure, Project 7 enables MCAG transit operators to continue the transition to a zero-emission fleet, supporting both FCEBs and BEBs, reducing point source emissions and environmental impacts while promoting sustainable public transit operations.

The total project GHG emissions reductions per dollar funded through TIRCP will be 0.041180 MTCO₂e. This equates to a total asset lifetime (assumed 20 years) project emissions reduction of 85,654 MTCO₂e.

	Per TIRCP \$	Per CCI \$	Total
Emission Reductions (MTCO ₂ e)	0.041180	0.0	85,654

Ridership Benefits

The Hydrogen Fueling Station and Facility Compliance project offers ridership benefits including extended range capabilities, enhanced service reliability, reduced downtime of vehicles during maintenance, and a cleaner quieter rider experience. By building out the infrastructure necessary for adopting FCEBs, the project will support the transition to FCEB vehicles for use in operation by The Bus and YARTS, enabling efficient and reliable transportation for longer distances, making it easier for residents and tourists to reach popular destinations like Yosemite.

Benefit to Disadvantaged Communities

By creating hydrogen fueling infrastructure for zero-emission heavy-duty public transit vehicles, particularly hydrogen fuel cell electric buses (FCEBs), Project 7 addresses environmental justice concerns by reducing point source emissions and air pollution in DACs in the San Joaquin Valley.

Project Title:	(8) Hydrogen Bus Replacement for The Bus
Type of Project	Capital
Implementing Agency:	TJPA

Project Description:

As mentioned in Project 7, The Bus routes can be served by BEB technology, but some are better suited for FCEBs, such as the proposed regional connections like the ACE Bus Bridge (Project 10) and Amtrak Thru-way service (Project 11). While TJPA is moving forward with acquiring up to 15 BEBS, this project would purchase up to 4 FCEBs to support the more challenging physical operating environments.

Summary of Project Scope

Purchase of 4 FCEBs.

Start/End Dates by Project Phase		
Phase	Start Date	End Date
Fleet Acquisition	Jun-31	Jun-41

Detailed Project Schedule

		FY 2031-32	FY 2032-33	FY 2033-34	FY 2034-35	FY 2035-36	FY 2036-37	FY 2037-38	FY 2038-39	FY 2039-40	FY 2040-41
Infrastructure		*									
FCEB Procurement			12	3		7		6		11	

**Year of Implementation.*

Project Cost and Funding Sources

\$6,400,000

Source	FY24	FY25	FY26	FY27
TIRCP	\$ 6,400,000			
Total	\$ 6,400,000			

Project Location

The TJPA service area including Merced County and its communities.

GHG Reduction

Project 8 directly addresses greenhouse gas emissions by supporting the transition to zero-emission fleets. The project will significantly decrease in point source emissions in the communities in and around the TJPA service area, leading to improved air quality and reduced overall GHG emissions from transit activities in Merced County. Total project GHG emissions reductions per dollar funded through TIRCP will be 0.000441. This equates to a total lifetime GHG emission reduction of 2,821 MTCO₂e. There are no additional CCI funds requested for this project.

	Per TIRCP \$	Per CCI \$	Total
Emission Reductions (MTCO ₂ e)	0.000441	0.0	2,821

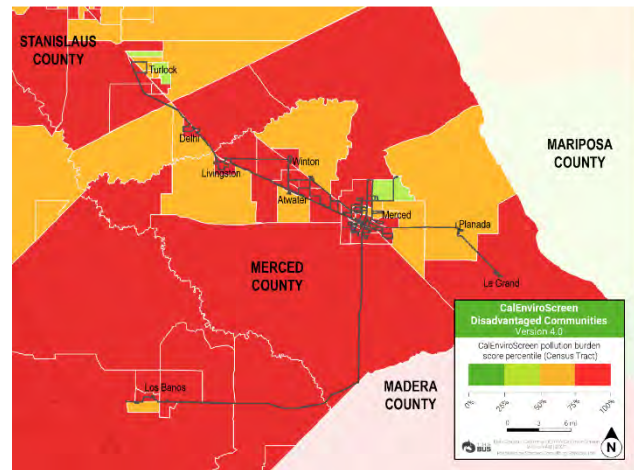
Ridership Benefits

The project emphasizes a commitment to sustainability and the environment by meaningfully reducing tailpipe emissions from transit activity. This provides a direct public health benefit and reduces noise pollution in the TJPA service area. New FCEBs will also offer a cleaner, quieter, more comfortable ride for TJPA customers.

Benefit to Disadvantaged Communities

As mandated by CARB's ICT regulations, deployment of ZEBs must prioritize communities most burdened by pollution as defined by the SB 535. FCEBs purchased in project 8 will all serve populations in the DACs. TJPA's transition to ZEBs, will reduce point source emissions in disadvantaged communities in and along major regional connection routes like the ACE bus Bridge (Project 11).

Figure 8. SB 535 DACs in Merced County Area



Project Title:	(9) Fuel cell Demo Project
Type of Project	Capital
Implementing Agency:	YARTS

Project Description:

This project will support demonstration and testing of a hydrogen over-the-road coach in complex topography which presents challenges for current electric bus technology. The physical operating environment requires vehicles that can travel long distance with grade changes and keep comfortable internal environments (run A/C and heating for extended periods), without stopping to charge. Hydrogen bus technology is still new, though it may have advantages over BEBs for the type of long-haul services provided by YARTS. Prior to making a large investment in fleet replacement with emerging technology, YARTS plans to use SB 125 funding to participate in the Fuel Cell Demo Project (Project 9) which will make initial investments to prove viability of FCEBs.

Summary of Project Scope

Local contribution for an over-the-road coach pilot service on Hwy 140.

Start/End Dates by Project Phase		
Phase	Start Date	End Date
Fleet Acquisition	Sep-26	TBD given technology development

Detailed Project Schedule

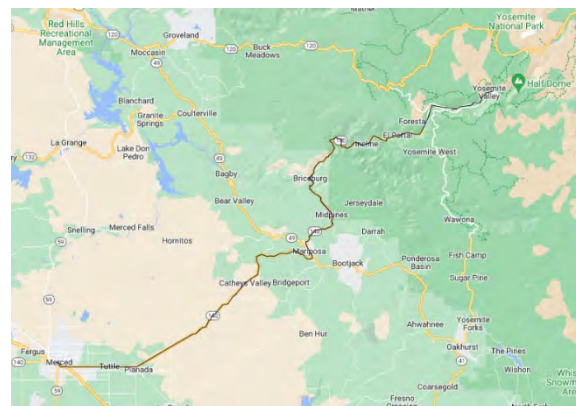
If the project is approved as eligible in the initial allocation package, MCAG will prepare a detailed project schedule with completion dates of all major delivery milestones.

Project Cost and Funding Sources

\$1,000,000

Source	FY24
TIRCP	\$ 1,000,000
Total	\$ 1,000,000

Figure 9. Project Location along Hwy 140.



Project Location

The ZEB would run from Merced up to the Yosemite Valley along Highway 140.

GHG Reduction

The Fuel Cell Demo Project contributes to meeting California's Innovative Clean Fleets mandates and assesses the feasibility of FCEBs in the greater Yosemite National Park region. The transition to FCEBs would reduce emissions, enhance air quality, and decrease YARTS' carbon footprint. The project

promotes sustainable transit, aligns with clean energy goals, and fosters environmental awareness among passengers and the community.

The Fuel Cell Demo Project will realize a total lifetime project emissions reductions of 4,106 MTCO₂e. Total project GHG emissions reductions funded through TIRCP will be 0.003422 MTCO₂e/dollar.

	Per TIRCP \$	Per CCI \$	Total
Emission Reductions (MTCO ₂ e)	0.003422	0	4,106

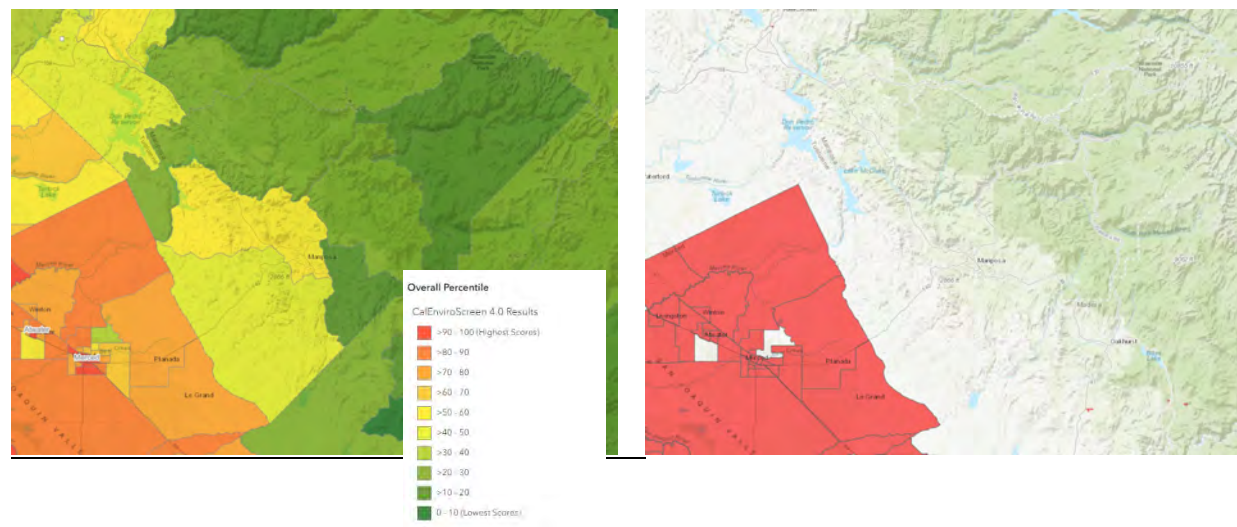
Ridership Benefits

The Fuel Cell Demo Project will evaluate the viability of hydrogen FCEBs for use by YARTS. The potential benefits of FCEBs to YARTS riders include extended range capabilities and less time charging or fueling, and increased service reliability. Additionally, new FCEBs will be able to maintain a comfortable internal environment for long periods and in harsh climates, create less road noise and vibration, and provide a cleaner, quieter, more enjoyable ride. It also offers exposure to zero-emission technology, providing educational opportunities for YARTS staff and the community, with spreading knowledge about zero-emission technologies and their role in combating climate change and reducing air pollution.

Benefit to Disadvantaged Communities

YARTS prioritizes transportation equity and Project 9 promotes access by disadvantaged communities to clean and efficient transportation options, reducing transportation disparities. The adoption of FCEBs reduces point source emissions in DACs along and around YARTS operating routes, benefiting the health and well-being of residents, and contributing to a more environmentally just and sustainable transportation system.

Figure 10. CalEnviroScreen and SB 535 Disadvantaged Communities in YARTS service area.

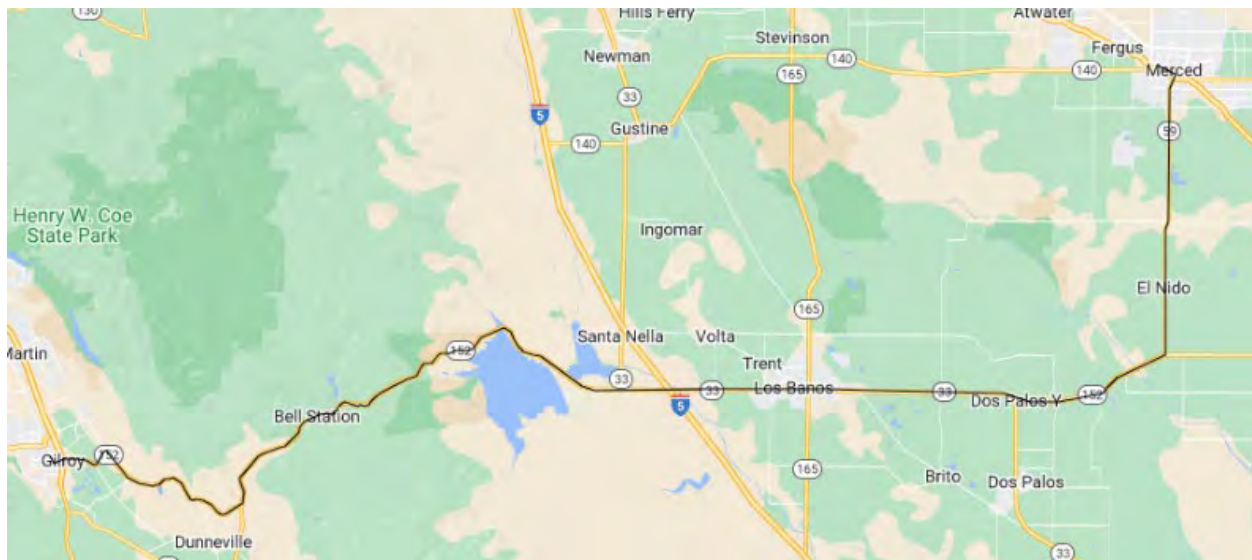


Project Title:	(10) Amtrak Thru-Way Bus Service Pilot
Type of Project	Operating
Implementing Agency:	TJPA, Amtrak

Project Description:

While community feedback from Merced residents, students at Merced college, and other transit users is consistently positive regarding TJPA services, specific requests include improved access to Amtrak and other transportation hubs. MCAG is invested in coordination with passenger train operators with an emphasis on establishing and expanding bus services to meet train arrivals, supporting intercity passenger service on the Amtrak San Joaquin route and new commuter rail service provided by the Altamont Corridor Express (ACE) to Sacramento and San Jose. To support regional goals for expanding access to high-speed rail, the Amtrak Thru-Way Bus Service Pilot (Project 10) will fund operations of a new commuter bus service connecting Merced and the Gilroy Caltrain station with one thru-way round trip commuter route

Figure 11. Amtrak Thru-Wy Bus Service Pilot Route



Summary of Project Scope

This project is for operational funding to offer round trip commuter route via Amtrak thru-way services between Merced and Gilroy (Caltrain Station).

Start/End Dates by Project Phase		
Phase	Start Date	End Date
Operation	Dec-24	Jun-26

Detailed Project Schedule

If the project is approved as eligible in the initial allocation package, MCAG will prepare a detailed project schedule will completion dates of all major delivery milestones.

Project Cost and Funding Sources

\$1,500,000

Source	FY24	FY25	FY26	FY27
TIRCP (Operating)	\$1,000,000	\$500,000		
Total	\$1,000,000	\$500,000		

Amount of Service

The Amtrak Thru-Way Bus Service Pilot will offer a commuter-type service, providing at minimum one run in the morning and another in the evening.

Current and Future Ridership

Currently, the TPJA ridership is between 600,000- 700,000 a year, 90 percent of the region's overall ridership. Connecting Amtrak riders, Gilroy residents, Merced, and YARTS/Yosemite National Park will create new travel opportunities, increasing ridership. Better linkage with regional and state transportation hubs, as well as increased service provided by Amtrak, will expand travel options, attracting a broader range of riders, including tourists and other travelers. By connecting rail and transit hubs in Gilroy and Merced, the project also aims to attract choice riders, contributing to reduced congestion on roads, promoting environmental sustainability, and improving the overall rider experience.

Benefits to Transit Dependent Riders

The Amtrak Thru-Way Bus Service Pilot aims to establish and expand bus services that align with train arrivals, ensuring transit riders have seamless connections across the region. This enhanced access to public hubs allows riders to navigate the transit system more effectively, improving their overall travel experience and reducing travel times. They can enjoy faster travel to destinations spanning the San Joaquin Valley, Bay Area, and Sacramento Valley. This increased connectivity not only facilitates regional travel but also supports the broader State goal of establishing a high-speed Rail system connecting Merced to the Bay Area and Southern California. The project increases transportation equity and justice by providing transit-dependent riders with improved access to a wider array of destinations, increasing their opportunities for employment, education, healthcare, and other essential services.

Identification of investment in safety/security

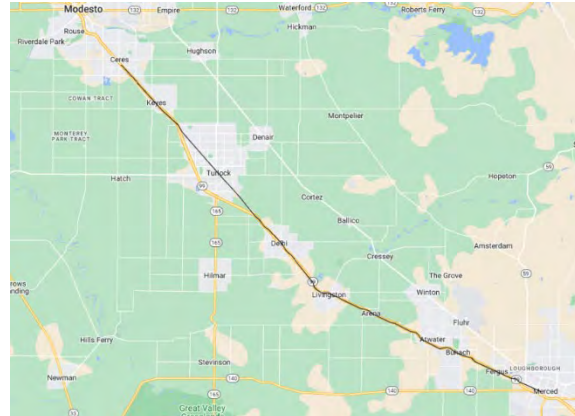
The Amtrak Thru-Way Bus Service Pilot enhances safety and security by offering connections to rail service and direct transportation to rail stations, reducing waiting times and reducing the frequency of transfers at bus stops. This enhances the safety of transit users by minimizing potential risks associated with extended waiting periods and uncertainties during transfers, promoting a more secure and seamless travel experience.

Project Title:	(11) Service to the ACE Station: Bus Bridge Program (Merced to Ceres)
Type of Project	Operating
Implementing Agency:	TJPA

Project Description:

This project will expand direct, fixed-route service from Turlock to Ceres to increase mobility for urban and rural populations. This project will link the City of Merced, Turlock, and Ceres; and the rest of the urban clusters along Route 99. With a history of partnership between MCAG and Stanislaus Council of Governments, it will connect these communities to the Altamont Corridor Express (ACE) and Amtrak service, as a part of a regional effort increase ease of transportation across the County and greater San Joaquin Valley.

Figure 12. Project Location along Hwy 99.



Summary of Project Scope

Enhance T Route service to serve as bus bridge to ACE rail in Stanislaus County.

Start/End Dates by Project Phase		
Phase	Start Date	End Date
Operation	Apr-27	Jan-28

Detailed Project Schedule

If the project is approved as eligible in the initial allocation package, MCAG will prepare a detailed project schedule will completion dates of all major delivery milestones.

Project Cost and Funding Sources

\$1,200,000

Source	FY24	FY25	FY26	FY27
TIRCP (Operating)		\$1,200,000		
Total		\$1,200,000		

Amount of Service

The Service to the ACE Station: Bus Bridge Program will offer a commuter-type service, providing at minimum one run in the morning and another in the evening.

Current and Future Ridership

Currently, the TPJA ridership is between 600,000- 700,000 a year, 90 percent of the region's overall ridership. Currently, there are currently no direct routes that continue to Ceres; however, the existing Turlock Route ridership was 72,972 in 2023. This accounts for 12.7% or total regional fixed route ridership. The project will expand the demand for the route between Merced and Turlock, allowing for faster and more comfortable travel between additional urban centers.

Benefits to Transit Dependent Riders

By creating fixed-route service between Merced and Ceres, Project 11 enhances the mobility options for transit dependent riders, allowing them to travel more efficiently and conveniently between urban centers. A direct route eliminates the need for transfers or indirect routes, reducing travel time and providing a more reliable transportation option. This coordination improves the overall efficiency and convenience of the transit system, making it easier for transit-dependent riders to access various destinations seamlessly.

Identification of investment in safety/security

This investment enhances safety and security by reducing waiting times and reducing the number of transfers at bus stops. This enhances the safety of transit users by minimizing potential risks associated with extended waiting periods and uncertainties during transfers, promoting a more secure and seamless travel experience.

Project Title:	(12) Concourse Redesign for The Bus Transpo
Type of Project	Operating
Implementing Agency:	TJPA, Amtrak

Project Description:

The Concourse Redesign for the Bus Transpo explores the opportunities for the current Merced Transportation Center (The Bus Transpo) site considering the opening of the Merced Multi-modal Station. Currently owned by the City of Merced, The Bus Transpo is the hub for local and regional bus service. However, in the future, the new Merced Multi-Modal Station be the heart of transit connections in Merced County. This new station will provide a location for all passenger services and will include bays to facilitate bus connections to ACE and Amtrak high-speed rail service. Given the high-speed rail station development, this project will contemplate revised programming needs and operations for the Bus Transpo, such as a non-passenger functions like storage and ZEV charging, and including potential purchase by TJPA.

Summary of Project Scope

This project includes design costs for the redesign of the Bus Transpo center to complement the adjacent rail station area development.

Start/End Dates by Project Phase		
Phase	Start Date	End Date
Design	Jul-25	Jun-26

Detailed Project Schedule

If the project is approved as eligible in the initial allocation package, MCAG will prepare a detailed project schedule will completion dates of all major delivery milestones.

Project Cost and Funding Sources

Full project cost to be determined; funding is for initial project development.

Source	FY24	FY25	FY26	FY27
TIRCP	\$200,000			
Total	\$200,000			

Project Location

16th Street and O Street in Merced.

GHG Reduction

The redesign of the Merced Transpo may include staging and fueling area for ZEBs connecting into the new Merced Multi-modal Station, without taking away space for passenger-facing functions that encourage transit use over private vehicles, reducing emissions from cars and trucks. Additionally, the project will support multimodal transportation options like bike, scooter, and microtransit services for first and last mile connections, decreasing reliance on single occupancy vehicles, reducing congestion, and point source emissions.

Figure 13. Bus Transpo Location



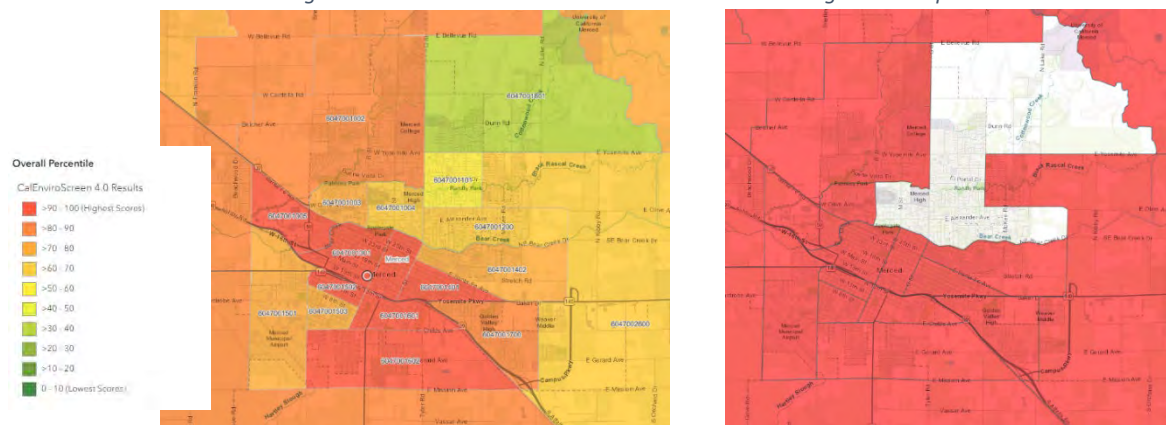
Ridership Benefits

When redesigned and constructed, the Merced Bus Transpo will supply additional space for necessary bus operations functions at key connections of intercity and regional transit services. Focused on the requirements around ZEV infrastructure, it would have space to address non-passenger facing operations and maintenance needs near boarding/alighting areas. This preserves space for bays for transfers at the Merced Multi-modal Station and not detract from the passenger experience. Additionally, a transition to a TJPA-owned facility would help manage operating costs and sustain fares at reasonable levels all the while expanding the transit options.

Benefit to Disadvantaged Communities

The re-envisioned Merced Transpo and adjacent train depot is located in a disadvantaged community. The presence of integrated intercity and regional bus services will offer improved connectivity, increasing transportation equity and making it easier for individuals in disadvantaged areas to access destinations. It also contributes to zero emissions vehicles and the public health benefits of improved air quality in adjacent DACs. The redesigned space will aim to improve comfort and convenience, ensuring a positive travel experience for all passengers.

Figure 14. CalEnviroScreen and SB 535 DACs surrounding Bus Transpo



D. SOURCES AND USES TABLE

The following describes the proposed uses of TIRCP and ZETCP funds by fiscal year of availability and encumbrance. The corresponding Excel template document is also provided as an attachment.

SB125 Fund Request Template: Proposed Year of Funding (Encumbrance)										
Implementing Agency/ies	Project	Fund Source	Capital				Operating			Total
			FY23-24	FY24-25	FY25-26	FY26-27	FY23-24	FY24-25	FY25-26	FY26-27
MCAG	Long Term Planning/Administrative	TIRCP	\$ 104,561	\$ 104,562						\$ 209,123
Transit Joint Powers Authority Board for Merced County (The Bus, TJPA)	Electric Bus Charging Infrastructure	TIRCP	\$ 696,393	\$ 1,070,173	\$ -	\$ -				\$ 1,766,566
		ZETCP (PTA)	\$ 722,403		\$ -	\$ -				\$ 722,403
		ZETCP (GGRF)	\$ 836,516	\$ 874,515	\$ -	\$ -				\$ 1,711,031
		CMAQ		\$ 800,000	\$ -	\$ -				\$ 800,000
The Bus, TJPA	Westside O&M Facility	TIRCP	\$ 1,000,000	\$ 3,530,970	\$ -	\$ -				\$ 4,530,970
		ZETCP (GGRF)	\$ -	\$ -	\$ 874,515	\$ 874,515				\$ 1,749,030
		Measure V	\$ 500,000	\$ -	\$ -	\$ -				\$ 500,000
		5339		\$ 600,000	\$ -	\$ -				\$ 600,000
		SGR	\$ 500,000	\$ 120,000	\$ -	\$ -				\$ 620,000
Yosemite Area Regional Transportation System (YARTS)	YARTS Seed funding for O&M Facility	TIRCP	\$ -	\$ 2,000,000	\$ -	\$ -				\$ 2,000,000
The Bus, TJPA	Microtransit Services Expansion (Operations)	TIRCP					\$ 2,188,470	\$ 2,200,000		\$ 4,388,470
		Farebox					\$ 200,000	\$ 200,000	\$ -	\$ 400,000
		5307					\$ 200,000	\$ 200,000	\$ -	\$ 400,000
The Bus, TJPA	Microtransit Services Expansion (Vehicles)	TIRCP	\$ 2,080,000		\$ -	\$ -				\$ 2,080,000
The Bus, TJPA and YARTS	Hydrogen Fueling Station & Facility Compliance	TIRCP	\$ -	\$ 4,100,000	\$ -	\$ -				\$ 4,100,000
		CMAQ	\$ -	\$ -	\$ 1,500,000	\$ -				\$ 1,500,000
The Bus, TJPA	Hydrogen Bus Replacement for The Bus	TIRCP	\$ 6,400,000	\$ -	\$ -					\$ 6,400,000
YARTS	CALSTART Fuelcell Demo Project	TIRCP	\$ 1,000,000	\$ -	\$ -					\$ 1,000,000
										\$ -
The Bus, TJPA and Amtrak	Amtrak Thru-Way Bus Service Pilot	TIRCP					\$ 1,000,000	\$ 500,000		\$ 1,500,000
The Bus, TJPA	Service to the ACE Station - Bus Bridge Program (Merced to Turlock)	TIRCP						\$ 1,200,000		\$ 1,200,000
										\$ -
The Bus, TJPA	Concourse Redesign for The Bus Traspo	TIRCP	\$ 200,000							\$ 200,000
										\$ -
		Grand Total	\$ 14,039,873	\$ 13,200,220	\$ 2,374,515	\$ 874,515	\$ 3,588,470	\$ 4,300,000	\$ -	\$ 38,377,593
		TIRCP	\$ 14,669,424	\$ 14,705,705						33,557,593.00
		Zero-Emission Capital	\$ 1,558,919	\$ 874,515	\$ 874,515	\$ 874,515			SB125 Other sources	\$ 4,820,000

E. TRANSIT OPERATOR DATA

The following describes requested regionally representative transit operator data. The corresponding data is also included in the Transit Operator Data Excel file provided as an attachment.

i. *Existing fleet and asset management plans by transit operators.*

The Transit Asset Management Plan for The Bus (2021) and YARTS (2022) are provided below.

The Bus: [TAMP-Updated 10012021 \(mercedthebus.com\)](https://www.mercedthebus.com/10012021)

YARTS: [YARTS-TAM-Plan-2022.pdf](#)

ii. *Revenue collection methods and annual cost involved in collecting revenue.*

The information below reflects the revenue collection methods as outlined in the O&M agreements with First Transit/Transdev for both TJPAMC and YARTS. As recently as March 2023, MCAG changed the process of monthly revenue collection for both operators. The average cost for revenue collection is approximately \$550 per month. Monthly expenditure data can be found in the attached Transit Operator Data Excel file.

The Bus

1. FARE REVENUE COLLECTION AND RECONCILIATION

1.1. Fare Collection

CONTRACTOR shall ensure that the proper ridership fare, pass, and ticket amounts are collected from bus patrons and deposited in the farebox. All fare, pass and ticket revenue collected on TJPAMC's bus system shall remain the property of TJPAMC. CONTRACTOR shall be responsible for the functionality of the fareboxes and farebox equipment, excluding the computer. Additionally, CONTRACTOR shall maintain daily ridership logs for each bus used in a manner satisfactory to TJPAMC. CONTRACTOR shall reconcile all ridership farebox revenue collections and pass sales on a daily basis. CONTRACTOR shall follow TJPAMC Cash Counting Protocol. See Exhibit I – Cash Counting Protocol.

12.1.1 – Armored Car Service and Cash Counting – CONTRACTOR shall, in accordance with a procedure specified by TJPAMC, account for revenues collected on fixed-route and dial-a-ride vehicles and deposit such revenues on a daily basis into a local bank account designated by TJPAMC for that purpose, via an armored car service provided by TJPAMC. CONTRACTOR's General Manager shall be responsible for establishing procedures for staff to handle keys to the vaults and vault room. The transportation of revenues from the GFI vault room to the bank must be conducted by an armored car service to be provided by or to be reimbursed by TJPAMC. TJPAMC reserves the right to audit fare revenue collection and accounting at reasonable times without prior notification to CONTRACTOR. Revenues are to be counted daily, and revenues are to be separated/counted on the last day of the month, every month, so not to co-mingle month revenues. See Exhibit I - Cash Counting Protocol.

1.2. Farebox Probing

Fareboxes shall be probed at the end of each service day for buses based in Merced and twice per week for those based in Los Banos, or as directed by TJPAMC. Cashboxes shall be removed during the probing process and emptied into a vault provided by TJPAMC in accordance with established procedure. CONTRACTOR shall count and deposit said revenue on a daily basis in

a manner satisfactory to TJPAMC. CONTRACTOR shall deposit farebox revenues into an account held by CONTRACTOR at a bank located in Merced, California. CONTRACTOR shall remit farebox revenues to TJPAMC on a monthly basis, with daily deposit details.

1.3. Fare Media

CONTRACTOR shall sell fare media on TJPAMC vehicles in a manner prescribed by TJPAMC. Media sales shall be reconciled daily. Revenue shall be held in a secure location and deposited as required by TJPAMC. All sales are subject to audit by TJPAMC.

1.4. Fare Media Supplies

CONTRACTOR shall update TJPAMC on quantity of pass stock and may be required to assist TJPAMC in ordering additional trim cards. TJPAMC is responsible for the costs associated with trim card supplies.

1.5. Fare Revenue Reimbursement by CONTRACTOR

TJPAMC may require CONTRACTOR to reimburse it for fare revenue lost, misplaced, stolen or otherwise missing as a result of illegal, inappropriate or negligent behavior by CONTRACTOR's employees. CONTRACTOR shall implement modifications to this procedure as prescribed by TJPAMC.

YARTS

2. FARE REVENUE COLLECTION AND RECONCILIATION

2.1. Fare Collection

CONTRACTOR shall develop policies and procedures for cash handling and accountability, to be approved by the YARTS Transit Manager, and shall collect those cash fares according to procedures approved by YARTS. A weekly update of fare collection shall be provided weekly by corridor. A fare revenue summary shall be sent to YARTS by the tenth (10th) business day of the following month.

First Transit will perform internal audits on a random basis and provide reports to YARTS on completion. Armored car service will be provided (paid for) by YARTS and shall be coordinated with TJPAMC fare collection.

2.2. Fare Media

CONTRACTOR shall sell fare media on YARTS vehicles in a manner prescribed by YARTS. Media sales shall be reconciled daily by vehicle. Revenue shall be held in a secure location and deposited as required by YARTS. All sales are subject to audit by YARTS.

2.3. Fare Revenue Reimbursement by CONTRACTOR

YARTS may require CONTRACTOR to reimburse it for fare revenue lost, misplaced, stolen, or otherwise missing as a result of illegal, inappropriate, or negligent behavior by CONTRACTOR's employees. CONTRACTOR shall implement modifications to this procedure as prescribed by YARTS.

2.4. Fare Disputes

First Transit will discuss fare disputes, including fare evasion, and their resolution with YARTS to ensure compliance with all established policies and procedures.

iii. *Existing and Planned Service Changes*

The current schedule data available on The Bus and YARTS websites, also available in the GTFS format is an accurate representation of the service that customers experience in operation. No major changes to the level of service are planned at this time. If service changes do occur, information will be updated in the GTFS format on a timely basis.

The Bus : [GTFS-Web-Link--DISCLAIMER-202111-002 \(mercedthebus.com\)](https://www.mercedthebus.com/2021/11/02/disclaimer/)

YARTS: Developers (GTFS Data) - YARTS - Public Transit to Yosemite

iv. Expenditures on security and safety measures

The TJPA currently incurs an average of \$9,000 a month (\$118,000 annually) on security and safety measures at the Merced Transpo (Transit Center) as shown in the Transit Operator Data Excel file. The intent of the security guard services is to establish an environment where passengers, bus operators, and transit staff are and feel safe while using public transit. This includes one (1) security personnel shall be present at all times during the for a minimum of fifteen (15) hours per day during the weekdays (Monday through Friday) and ten (10) hours per day on the weekends (Saturdays and Sundays). The TJPA does not anticipate any changed levels of security and safety in the future; however, the cost to provide the security guard services escalates by approximately \$5,000 a year over the next three-to-five-year term.

v. Opportunities for service restructuring

TJPA or YARTS are not currently contemplating any opportunities for service restructuring such as eliminating service redundancies or evaluation of governance structures. As outlined in this Allocation Package, MCAG is actively partnering other Councils of Government and regional transit partners, such as Amtrack and the Altamont Commuter Express JPA to coordinate service connections.