

## Transit Performance Initiative Investment Program Semi-Annual Update

The Transit Performance Initiative (TPI) Investment program funds low-cost capital investments that can be implemented rapidly to improve operations and customer experience on major transit corridors and systems. This report summarizes TPI-funded projects throughout the life of the program and provides progress updates for ongoing TPI projects.

### Program Summary

Since 2012, \$131.1 million has been programmed to 48 capital and planning projects, and 28 of these have been completed or are substantially completed.

The TPI program has been funded through a combination of One Bay Area Grant (OBAG) federal funds from the OBAG 1 and OBAG 2 programs and from state Low Carbon Transit Operations Program (LCTOP). Five rounds of the TPI program, including the majority of the TPI 2022-23 Program awarded in February 2023 were funded by OBAG funds, totaling \$98.6 million. In May 2016, the Commission committed one-third of the region’s annual population-based LCTOP funds to augment the TPI program, subject to the region’s Cap and Trade Framework in MTC Resolution No. 4130, Revised. Five cycles of LCTOP funds have been programmed by MTC, totaling \$32.5 million from FY 2017-18 to FY 2022-23.

Completed projects have benefited transit service and helped agencies build up tools and experience for getting transit out of traffic. Ongoing projects from STP/CMAQ rounds 1-4 are in or entering construction, and LCTOP projects are either in design or under construction. COVID-19 and supply-chain issues caused delays on many projects. Overall, projects are moving forward again, and most remaining projects awarded through FY 2022 are expected to be complete in 2025. Funding awarded in FY23 has seen challenges in access from state and federal funders, as detailed in the “Funding Delays” section.

| Project Sponsor           | Total TPI Awards (\$M) |
|---------------------------|------------------------|
| AC Transit (11 projects*) | \$41.8                 |
| SFMTA (15 projects)       | \$48.4                 |
| VTA (8 projects)          | \$20.2                 |
| Other (13 projects)       | \$20.7                 |
| <b>Total</b>              | <b>\$131.1</b>         |

\*Includes Bay Bridge Forward award to MTC implemented in coordination with AC Transit

## Report Highlights

Several projects were completed this round, including some early TPI investments.

VTA's Light Rail Transit Signal Priority (TSP) project to install TSP equipment on board light rail vehicles and at intersections throughout the light rail system was completed. The project will close out in early 2025 and will complete an after study to analyze the project benefits after closeout. Staff will share findings from the after study in a future TPI report.

The original scope of VTA's Stevens Creek – Limited 323 TSP project was completed in 2019, improving travel times by a couple of minutes on the Limited Route 323. Savings on the project were redirected to procurement of equipment for a central monitoring system for VTA's TSP system. This additional scope was completed this reporting period, and has improved VTA's operations by allowing staff to quickly identify faults in the system and notify staff of issues to keep VTA buses and TSP equipment operating and on schedule.

AC Transit's Mission Boulevard TSP project to install TSP equipment along the corridor was completed this reporting period. The project filled gaps in the existing TSP system to improve travel times and reliability for AC Transit Line 99 and other routes along the corridor.

AC Transit made significant construction progress on the San Pablo Rapid Bus Upgrades and Quick Build Transit Lanes projects, and VTA continued construction on the Eastridge to BART Regional Connector. NVTA completed some portions of the Napa Valley Transit Safety and Efficiency Improvements project. Construction and implementation continued on most projects awarded through FY 2022. Progress on these projects is detailed in the "Individual Project Updates" section below.

## Funding Delays

The underlying federal funding source for the OBAG funds programmed in February 2023 as part of the TPI 2022-23 program goes through a multi-step, multi-agency review and approval process prior to the award and allocation of funds. Most OBAG funds awarded to transit operators are transferred from FHWA to FTA as part of this process. Most projects receiving these funds experienced significant delays throughout the federal award process, and many of them have yet to receive their funds – part of a systemic issue in which receiving federal awards can take an extraordinarily long time. This has resulted in delays of a year or more to the start of work on these projects, and may result in cost increases, effectively reducing the purchasing power of the TPI funds.

Further, funding from the LCTOP program awarded in the TPI 2022-23 program was released by the state many months later than typical; LCTOP program staff have indicated this is to be the expected schedule going forward.

Staff will continue to monitor the status of these funds, and work with sponsors to ensure applications for future awards are handled as efficiently as possible.

## Ongoing Projects

Below is a list of ongoing TPI-funded projects by operator covered in this report. Recently completed projects are listed in bold and will no longer be included in the Semi-Annual report (except projects noted as “substantially completed”, which will continue to report until remaining minor tasks or closeout are completed). The full list of TPI projects by round and by operator, including completed projects, is included in Attachment B.

|   |
|---|
| <b>AC Transit</b>   |
| <ul style="list-style-type: none"> <li>• San Pablo and Telegraph Rapid Bus Upgrades Project</li> <li>• <b>Dumbarton Innovative Deployments to Enhance Arterials (IDEA) (Substantially completed)</b></li> <li>• Quick Build Transit Lanes</li> <li>• <b>Mission Boulevard TSP (Substantially completed)</b></li> <li>• MacDonald Avenue Transit Signal Priority Project Phase 1</li> <li>• Foothill Corridor Planning Study</li> <li>• Cutting Boulevard Project</li> </ul>   |
| <b>SFMTA</b>  |
| <ul style="list-style-type: none"> <li>• N-Judah Customer First</li> <li>• <b>Colored Lanes on MTA Rapid Network (Substantially completed)</b></li> <li>• <b>Geary Rapid Project (Substantially completed)</b></li> <li>• 5-Fulton Arguello to 25<sup>th</sup> Ave Muni Forward</li> <li>• 29-Sunset Muni Forward Phase 1</li> <li>• Next Generation Transit Lane and Bus Zone Enforcement Pilot Program</li> <li>• 29-Sunset Improvement Project Phase 2</li> <li>• Third Street Dynamic Traffic Signal Optimization Project</li> <li>• Muni Forward Five-Minute Network Corridor Planning Program</li> <li>• Cloud-Based TSP</li> </ul> |
| <b>VTA</b>  |
| <ul style="list-style-type: none"> <li>• <b>Light Rail Transit Signal Priority Improvements (Substantially completed)</b></li> <li>• Stevens Creek Ltd 323 TSP</li> <li>• Eastridge to BART Regional Connector</li> <li>• Transit Reliability Improvement and Performance System (TRIPS)</li> <li>• Monterey Road Transit Lane Project</li> <li>• Senter Road Bus Boarding Islands and Bulb Outs</li> </ul>   |
| <b>Other</b>  |
| <ul style="list-style-type: none"> <li>• <b>SamTrans – Traffic Signal Priority on El Camino Real (Expanded Scope)</b></li> <li>• <b>Solano Transportation Authority – Solano Express Bus Stop Improvements*</b></li> </ul>  |

- **TAM/Marin Transit** – Marin County Hwy 101 Part Time Transit Lane
- **NVTA** – Napa Valley Transit Safety and Efficiency Improvements
- **SamTrans** – El Camino Real Mid-County Transit and Multimodal Corridor Plan
- **CCTA/County Connection** – Transit Corridors Study

\*As noted below, this project is not completed but reporting will continue via RM3 reporting only and will be removed from this list after this report

## Programming Updates

**SFMTA Colored Lanes on MTA Rapid Network:** this project funded implementation of red transit lanes on several Muni Rapid corridors. The initial scope of the project included colorization of portions of Clay Street, Fremont Street, and Fourth Street. These segments were completed with cost savings, and over time SFMTA achieved efficiencies from implementing many colored lanes projects and was able to extend these funds to further corridors. In addition to the original scope, segments of roadways surrounding the Transbay Terminal, First Street, Mission Street, and Geary Boulevard were colorized and materials to colorize portions of 16<sup>th</sup> Street were procured (installation of this colored lane is to be completed with other funds). In fall of 2024, SFMTA requested to use the remaining savings after completion of all previously-approved scope to complete a few small colorized lane gaps on Mission Street and to procure additional red thermoplastic paint to re-colorize the street after the scheduled repaving in 2027. Consistent with the Commission's adopted TPI savings policy, staff has approved this proposal.

**Solano Express Fairgrounds Drive/SR-37 Bus Stop:** In July 2022, the Commission approved reprogramming of \$500,000 of Solano Transportation Authority (STA)'s Solano Express Bus Stop Improvement program that was originally programmed to Solano Express Fairgrounds Drive/SR-37 Bus Stop project to another project at West Texas Street. In 2023, STA identified an additional \$123,000 in project savings to reprogram to the West Texas Street bus stop, which staff approved at a staff level consistent with the Commission's adopted TPI savings policy. After completing design for this project, STA determined that it would not move the project forward. STA has requested to reprogram the funds to additional transit and transit access scope on the Solano Express Fairgrounds Drive/SR-37 Interchange project. This funding will support an RM3 bridge toll allocation to RM3 Project 26.7, approved by the Commission in December 2024. Consistent with the Commission's adopted TPI savings policy, staff have approved this request and intend to consolidate reporting for this project under the RM3 program, so that TPI reporting will no longer be required for this project. Because of a previous funding swap, this action requires reprogramming of State Transit Assistance funds, which staff is addressing through Executive Director's Delegated Authority. No change to the OBAG programming is required for this action.

**SFMTA 27 Bryant Tenderloin Transit Reliability Project:** At project completion, SFMTA has \$952,989 in savings from the FY20 LCTOP award for this project. Staff are in discussions with SFMTA to ensure these savings are spent within LCTOP timely use of funds requirements and redirected according to TPI policies. T

## Individual Project Updates

### Round 1

#### *VTA*

##### Light Rail TSP (substantially complete)

- In-vehicle and intersection installations are completed
- Closeout expected early 2024 with after study to follow

##### Stevens Creek – Limited 323 TSP (substantially complete)

- Original scope complete
- Savings directed towards additional TSP Central Monitoring System – the server has been activated and field devices installed

#### *Muni*

##### N-Judah

- TSP, lane colorization, camera elements complete
- Stop branding design is complete; installation is anticipated in the coming months

### Round 2

#### *Muni*

##### Geary Rapid Project Phase 1 (Substantially Complete)

- Initial implementation resulted in 1-2 minutes of peak hour transit travel time savings
- Construction of Phase 1, including transit lane colorization, was completed in 2024
- Closeout is expected in early 2025

##### Colored Lanes on Rapid Network

- All original colored lanes segments and segments added before 2024 are complete
- Additional savings redirected via staff approval to additional segments on Mission Blvd and additional red thermoplastic paint (discussed in “Programming Updates” above)

## Round 3

### *AC Transit*

#### AC Transit San Pablo/Telegraph Rapid Bus Upgrades Project

- Telegraph Avenue
  - Construction started in late 2024 and expected to be completed in spring 2025; additional funding for project committed through RM3 after project costs were increased due to a difficult bidding environment
- San Pablo Avenue
  - Construction completed and closed out



Photo: Completed bus boarding island on Dana St., part of Telegraph Rapid Bus Upgrade project, AC Transit Photo

### *SamTrans*

#### Traffic Signal Priority on El Camino Real

- Original scope complete
- MTC approved a proposal in 2022 to use savings to expand TSP equipment to the remainder of the bus fleet, including 17 incoming expansion buses
- Implementation was delayed due to delays in FTA approval of the project revision and a delay to delivery of the new expansion buses, but installation is moving forward again
- Final installations on new expansion buses expected in 2027

## Round 4

### *Solano Transportation Authority*

#### Solano Express Fairgrounds Drive/SR-37 Bus Stop and West Texas Bus Stop

- After completing design, STA will not be moving forward with the West Texas Bus Stop; funds will be redirected to additional transit and transit access scope as described in “Programming Updates” above, and reporting will continue under the RM3 program only

## LCTOP Projects – FY18 through FY22 and FY24

### *AC Transit*

#### Dumbarton IDEA

- Scope: extend AC Transit’s TSP network across the Dumbarton/SR-84 corridor and install queue jump lanes and bus stop enhancements
- Construction and implementation complete
- Project evaluation in-progress

#### Quick Build Transit Lanes

- Scope: Quick-build red transit lanes on MacArthur Blvd in Oakland and Durant Ave in Berkeley
- Construction on MacArthur Blvd is nearing completion
- Construction on Durant Ave began in late 2024 and is expected to be complete in early 2025



Photo: Quick Build bike lane striping on MacArthur Blvd complete as part of Quick Build Transit Lanes project, AC Transit photo

#### Mission Boulevard TSP

- Scope: Implement TSP along the Mission Blvd. corridor in Hayward and Union City to close the gap in the Adaptive Traffic Control Systems

- Project complete and in closeout

#### Cutting Boulevard Project

- New project programmed by MTC in March 2024 and awarded by the state in October 2024
- Scope: Bus stop relocations, bus bulbs, longer bus stops, and accessibility improvements along Cutting Boulevard
- Project complements MTC's RM3-funded Richmond-San Rafael Forward Cutting Boulevard project

#### SFMTA

##### 5-Fulton Arguello to 25<sup>th</sup> Ave Muni Forward

- Scope: Transit bulb and signal upgrades
- Construction on transit bulbs and signal upgrades is in progress
- Expected completion in late 2025

##### 29-Sunset Muni Forward Phase 1

- Scope: stop consolidation, traffic signal upgrades, and other improvements to improve reliability, travel time, and safety
- Work on Sunset Blvd is 75% complete; remaining construction expected to be complete in 2026

#### Cloud-Based TSP

- New project programmed by MTC in March 2024 and awarded by the state in October 2024
- Scope: Upgrade network equipment and software to implement next-generation TSP across the Muni system



## VTA

### Eastridge to BART Regional Connector

- Current TPI funding for this project includes:
  - Reprogrammed FY 18 LCTOP funds
  - Replacement project for the LCTOP-funded FY 2019 ZEB project (which is not TPI eligible)
  - FY21 LCTOP funds
- Commission also allocated \$130M in RM3 bridge toll funds for construction
- In March 2024, VTA awarded the construction contract and committed additional funding to cover the cost increase, including additional (non-TPI) LCTOP funding and local VTA funds.
- Groundbreaking for construction occurred in June 2024 and construction is underway



VTA Eastridge to BART Regional Connector Images. Left: Project rendering showing elevated track over roadway. Right: Construction progress on elevated track. VTA images

### Senter Road Bus Boarding Islands and Bulb Outs

- New project programmed by MTC in March 2024 and awarded by the state in October 2024
- Scope: Construct bus boarding islands and bulb outs to reduce transit delays and maintain frequencies

## TPI 2022-23 Program

### AC Transit

#### Foothill Corridor Planning Study

- Scope: Study to identify service and design improvements to reduce delay and improve bus operations
- Initiated pre-procurement work
- Procurement and further work on project not yet started, awaiting fund transfer to FTA

#### MacDonald Ave Transit Signal Priority Project Phase 1

- Scope: Install TSP equipment along MacDonald Ave in Richmond

- Awarded design contract from on-call bench
- Design expected to be complete in Summer 2025

#### *SFMTA*

##### *Muni Forward Five-Minute Network Corridor Planning*

- Scope: Develop next generation of Muni Forward corridor projects to support five-minute headways
- Project not yet started, awaiting fund transfer to FTA

##### *Next Generation Transit Lane and Bus Zone Enforcement Pilot*

- Scope: Modernize a quarter of the Muni bus fleet with next generation camera technology to improve lane violation detection
- Project not yet started, project kickoff expected soon

##### *29-Sunset Improvement Project Phase 2*

- Scope: Removal of some stops, relocation of stops, improved amenities, implementation of TSP on the Muni 29 Sunset Bus Route
- Project not yet started, awaiting fund transfer to FTA

##### *Third Street Dynamic Traffic Signal Optimization Project*

- Scope: Implement Smart technology traffic signals on the T-Third Street light rail line
- Project not yet started, awaiting fund transfer to FTA

#### *VTA*

##### *Monterey Road Transit Lane (Planning)*

- Scope: Transportation Analysis and Final Design for dedicated bus lanes on Monterey Road
- Project not yet started, awaiting fund transfer to FTA

##### *Transit Reliability Improvement and Performance System (TRIPS)*

- Scope: Implement a centralized TSP system
- Consultant has been selected
- Systems Engineering Management Plan to guide implementation of countywide system is underway
- Beginning coordination with jurisdictions

#### *Other Operators*

##### *County Connection – Transit Corridors Study*

- Scope: Analyze current conditions on four major bus corridors, gather feedback, and identify speed and reliability improvements
- Initiated discussion with on-call planning consultant
- Work on project not yet started, awaiting fund transfer to FTA

#### SamTrans – El Camino Real Mid-County Transit and Multimodal Corridor Plan

- Scope: Develop preferred conceptual design for the ECR mid-county corridor
- Project not yet started, awaiting fund transfer to FTA

#### Marin Transit – Marin County Highway 101 Part Time Transit Lane

- Scope: Pilot a Part Time Transit lane on the shoulder of SB US-101 in Marin County
- To be implemented by the Transportation Authority of Marin (TAM); TAM and Marin Transit have entered into a funding agreement
- Initiated planning phase and Project Initiation Document with Caltrans

#### Napa Valley Transportation Authority – Napa Valley Transit Safety and Efficiency Improvements

- Scope: Suite of improvements at three transit facilities and to vehicles serving the Vine transit network
- Socol Gateway Transit Center wayfinding and signage complete
- Vehicle surveillance system installed, expected to be in full operations in Spring 2025
- Imola Park and Ride surveillance system installation underway, electronic signage installation expected to start in early 2025
- Design for Redwood PnR improvements expected to start in early 2025

## Look Ahead

Staff will continue to monitor project progress and work with project sponsors to apply project savings to additional improvements consistent with the TPI Savings Policy.

Projects awarded in the FY 2022-23 OBAG and LCTOP and FY 2023-24 LCTOP rounds will get underway.

Staff expect to coordinate future funding with the Regional Network Management transit priority efforts, such as the BusAID program.

## Background and Context

Additional background information on TPI funds and projects can be found in the Committee and Commission items for the following actions:

Initial Programming of each TPI round:

- [STP/CMAQ Round 1 – May 17, 2012](#)
- [STP/CMAQ Round 2 – September 24, 2014](#)
- [STP/CMAQ Round 3 – May 27, 2015](#)
- [STP/CMAQ Round 4 – May 25, 2016](#)
- [LCTOP FY 17-18 – March 28, 2018](#)
- [LCTOP FY 18-19 – April 24, 2019](#)
- [LCTOP FY 19-20 – March 25, 2020](#)
- [LCTOP FY 20-21 – March 24, 2021](#)
- [LCTOP FY 21-22 – March 23, 2022](#)
- [FY2022-23 Round – February 22, 2023](#)
- [LCTOP FY 23-24 – March 27, 2024](#)

Major Reprogramming Actions:

- Round 1
  - [July 22, 2015](#)
- Round 2
  - [January 25, 2017](#)
- Round 3
  - [April 26, 2017](#)
- LCTOP FY 17-18
  - [December 16, 2020](#)