

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

The 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. Since 2012, \$132.1 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 \$33.5 million from FY 2017-18 to FY 2022-23. This includes \$6.6 million in FY 2023-24 LCTOP funding programmed by the Commission in March 2024 to three new projects led by AC Transit, SFMTA, and VTA, but these funds have not yet been allocated by the state. These projects are included in the project lists below and in Attachment B but will begin reporting during the next round.

Completed projects have benefitted 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, including nine projects that were completed or substantially completed in 2023.

Project Sponsor	Total TPI Awards (\$M)
AC Transit (11 projects*)	\$41.8
SFMTA (15 projects)	\$49.4
VTA (8 projects)	\$20.2
Other (13 projects)	\$20.7
Total	\$132.1

*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.

The original scope of the Geary Rapid Project implemented safety and reliability improvements that resulted in 1-2 minutes of peak transit travel time savings and was finished with some cost savings to the original TPI award. The remaining funds were applied to additional lane colorization on the corridor, which was completed this reporting period.

The Colored Lanes on MTA Rapid Network 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, because the colorization projects were completed more quickly and with less materials than originally estimated. The savings were applied to additional segments, and over time SFMTA achieved efficiencies from implementing many colored lanes projects and was able to further extend these funds to still 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 16th Street were procured (installation of this colored lane is to be completed with other funds).

Other recently completed projects are SFMTA's 27 Bryant Tenderloin Transit Reliability Project, which implemented changes to the route and bus stop spacing to improve efficiency and constructed new transit bulbs at eight intersections; and AC Transit's Dumbarton Innovative Deployments to Enhance Arterials (IDEA), which implemented Transit Signal Priority (TSP), queue jumps, and bus stop enhancements along the Dumbarton Express Route, delivered with additional support from MTC's IDEA Program. The sponsors are evaluating the results of both of these projects, which will be included in a future TPI report if and when available.



Dumbarton transit signal and TSP installation

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.

Projects awarded FY 2023-24 LCTOP by the Commission in March 2024 are newly added to this list, in italics. After MTC programs the LCTOP funds, project sponsors must apply to the state to receive the allocation. Allocation is expected later this year, so these projects did not start during the reporting period and are not included in Individual Project Updates below.

AC Transit
<ul style="list-style-type: none"> • San Pablo and Telegraph Rapid Bus Upgrades Project • Dumbarton Innovative Deployments to Enhance Arterials (IDEA) • Bay Bridge Forward – West Grand TSP • Quick Build Transit Lanes • Mission Boulevard TSP • MacDonald Avenue Transit Signal Priority Project Phase 1 • Foothill Corridor Planning Study • <i>Cutting Boulevard Project</i>
SFMTA
<ul style="list-style-type: none"> • N-Judah Customer First (Substantially completed) • Colored Lanes on MTA Rapid Network • Geary Rapid Project • 27-Bryant Tenderloin Transit Reliability Project • 5-Fulton Arguello to 25th Ave Muni Forward • 29-Sunset Muni Forward Phase 1 • Next Generation Transit Lane and Bus Zone Enforcement Pilot Program • 29-Sunset Improvement Project Phase 2 • Third Street Dynamic Traffic Signal Optimization Project • Muni Forward Five-Minute Network Corridor Planning Program • <i>Cloud-Based TSP</i>
VTA
<ul style="list-style-type: none"> • Light Rail Transit Signal Priority Improvements • Stevens Creek Ltd 323 TSP • Eastridge to BART Regional Connector • Transit Reliability Improvement and Performance System (TRIPS) • Monterey Road Transit Lane Project • <i>Senter Road Bus Boarding Islands and Bulb Outs</i>

Other
<ul style="list-style-type: none">• SamTrans – Traffic Signal Priority on El Camino Real (Expanded Scope)• Novato — Downtown SMART Station• Solano Transportation Authority – Solano Express Bus Stop Improvements• 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

Individual Project Updates

Round 1

VTA

- Light Rail TSP
 - In-vehicle installations are completed
 - Intersection installations expected to be complete by the end of 2024
- Stevens Creek – Limited 323 TSP
 - Original scope complete
 - Savings directed towards additional TSP Central Monitoring System – the server has been activated and installation of the field devices is expected by the end of 2024

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

- Initial implementation resulted in 1-2 minutes of peak hour transit travel time savings
- Construction of Phase 1, including transit lane colorization, is complete

Colored Lanes on Rapid Network

- All colored lanes segments are complete

Round 3

AC Transit

AC Transit San Pablo/Telegraph

- Telegraph Avenue
 - Construction contract awarded and scheduled to begin mid-2024; 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

SamTrans

Traffic Signal Priority on El Camino Real

- Original scope complete
- MTC approved proposal to use savings to expand TSP equipment to the remainder of the bus fleet 2022; implementation has been delayed due to delays in FTA approval of revised scope and postponement of production of new battery-electric buses that will receive the new TSP equipment

Round 4

City of Novato/SMART

Novato Downtown SMART Station

- Train service at the Novato SMART Station commenced in January 2020. TPI funds were used to support installation of station signals, systems, and amenities.
- The original TPI award scope also included access improvements at the former Depot site funded through non-TPI funds. This component has been delayed awaiting private development of the site with no set date for implementation. Because the original TPI application focused on implementation of rail service to Downtown Novato, staff recommend considering the TPI grant complete.

Solano Transportation Authority

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

- Additional savings being directed to West Texas bus stop improvements; design of this project is underway, and construction is expected to begin in 2025

LCTOP Projects – FY18 through FY22

SFMTA

27-Bryant Tenderloin Transit Reliability

- Scope: transit bulbs, pedestrian bulbs, ADA-compliant curb ramps
- Construction was completed in May 2023, project is in closeout

5-Fulton Arguello to 25th Ave Muni Forward

- Scope Transit bulb and signal upgrades
- Design is complete; construction is expected to start in fall 2024

29-Sunset Muni Forward Phase 1

- Scope: stop consolidation, traffic signal upgrades, and other improvements to improve reliability, travel time, and safety
- Quick Build aspects of phase 1 are currently underway, remaining construction expected to be complete in 2026

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 made \$130M RM3 construction allocation
- 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

AC Transit

Dumbarton IDEA

- Scope includes extending AC Transit's TSP network across the Dumbarton/SR-84 corridor and installing 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 contract was executed and early construction activities began in March 2024

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
- Design complete and approved by all 4 agencies
- Construction began April 2024

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
- Currently bringing design consultant on board
- Fund transfer to FTA not yet finalized

MacDonald Ave Transit Signal Priority Project Phase 1

- Scope: Install TSP equipment along MacDonald Ave in Richmond
- Awarded design contract from on-call bench
- Fund transfer to FTA not yet finalized

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

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

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
- Contractor procurement underway
- Beginning conversations with roadway owners to identify locations and hardware

Other Operators

County Connection – Transit Corridors Study

- Scope: Analyze current conditions on four major bus corridors, gather feedback, and identify speed and reliability improvements
- 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 Caltrans local assistance and FHWA approval

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
- Procuring design contractors for Imola PnR and Redwood PnR improvements
- Soscol Gateway Transit Center wayfinding and signage complete
- Contract and procurement for vehicle improvements initiated

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 round will get underway.

Additional funding opportunities will be announced relative to FY 2024-25 LCTOP funds and for transit priority projects consistent with the Blue Ribbon Transit Transformation Action Plan.

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](#)