

**Metropolitan Transportation Commission  
Programming and Allocations Committee**

July 13, 2022

Agenda Item 2c - 22-1052

**Transit Performance Initiative – Investment Program Semi-Annual Update**

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**Subject:**

Semi-annual update on the progress of projects awarded under the Transit Performance Initiative (TPI) Investment Program.

**Background:**

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, \$104 million has been programmed to 35 projects, and 17 of these have been completed or are substantially completed.

The first four rounds of the TPI program were funded by federal Cycle 2 STP/CMAQ funds. In May 2016, the Commission committed one-third of the region's annual population-based Low Carbon Transit Operations Program (LCTOP) funds to augment the TPI program, subject to the region's Cap and Trade Framework in MTC Resolution No. 4130, Revised. Four cycles of LCTOP funds have been programmed by MTC.

The COVID-19 crisis has caused delays on many ongoing projects due to staffing and supply chain issues. Most projects that were suspended or delayed have begun to move forward again with completion dates pushed back by a year or more. Some project schedules remain uncertain as agencies recover from COVID-19 impacts.

This program update covers the period from December 2021 through May 2022. Please refer to attachment A for further information.

**Future Calls for Projects**

Through this funding program, operators have completed projects that improve transit reliability, speed, and rider experience. Not only has transit service benefitted from these projects, but agencies have built up toolkits and experience on how to get transit out of traffic. With additional funding, more projects can be implemented to improve transit service.

Consistent with Blue Ribbon Transit Recovery Task Force initiative to advance Transit Priority, and in continuing with the ongoing goals of the TPI program, staff is initiating regional

discussions on a potential larger call for projects. Funding for this call could include up to \$15 million in Transit Priority OBAG 2 funds in addition to future LCTOP funds.

**Solano Transportation Authority Proposed Reprogramming**

Although the Solano Transportation Authority's (STA) Solano Express Fairgrounds Drive/SR-37 Bus Stop project is substantially complete and open for service, approximately \$620,000 of the TPI award remains for bicycle and pedestrian components to be completed as part of the overall interchange improvements project. STA has requested that \$500,000 of the remaining funds be reprogrammed to another Solano Express Bus Stop project at West Texas Street, which is currently in design and is expected to start construction in 2023, and which requires an additional \$500,000 in construction funding to meet added design requirements from Caltrans. Redirecting these TPI funds to the West Texas Street Bus Stop would expand the scope of the original TPI award and enable completion of a project funded by other state and regional funds. The remaining components of the Fairgrounds Drive/SR-37 Bus Stop will be completed at a later date when further funding for the interchange improvement project is available. This change will require updating the OBAG programming resolution, and because of a previous fund swap will require reprogramming State Transit Assistance funds, which staff will initiate if the change to the TPI project is approved. Staff intends to bring this request for Commission approval in the coming months.

**Issues:**

None

**Recommendation:**

Information

**Attachments:**

- Attachment A: TPI Investment Program Semi-Annual Update



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Therese W. McMillan

## 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 first four rounds of the TPI program were funded by federal Cycle 2 STP/CMAQ funds. In May 2016, the Commission committed one-third of the region's annual population-based Low Carbon Transit Operations Program (LCTOP) funds to augment the TPI program, subject to the region's Cap and Trade Framework in MTC Resolution No. 4130, Revised.

Four cycles of LCTOP funds have been programmed by MTC. Since 2012, \$104 million has been programmed to 35 projects. This includes three projects (totaling \$6.2 million) added to the program in March 2022 via LCTOP, pending Caltrans approval; reporting on these projects will begin next round if approved. Of the 35 TPI projects, 17 have been completed or are substantially completed.

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. Some projects still recovering from delays due to COVID-19-related staffing shortages and supply chain issues.

Project Sponsor	Total TPI Awards (\$M)
AC Transit (6 projects*)	\$35.1
SFMTA (9 projects)	\$35.8
VTA (5 projects)	\$15.4
Other (9 projects)	\$17.7
<b>Total</b>	<b>\$104.0</b>

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

## Ongoing Projects

Below is a list of ongoing TPI-funded projects by operator covered in this report. Recently completed projects are highlighted in bold. The full list of TPI project by round and by operator, including completed projects, is attached to this report as Appendix I.

<b>AC Transit</b>
<ul style="list-style-type: none"> <li>• San Pablo and Telegraph Rapid Bus Upgrades Project</li> <li>• Dumbarton Innovative Deployments to Enhance Arterials (IDEA)</li> <li>• Bay Bridge Forward – West Grand TSP</li> <li>• Quick Build Transit Lanes</li> </ul>
<b>SFMTA</b>
<ul style="list-style-type: none"> <li>• Mission Customer First</li> <li>• N-Judah Customer First</li> <li>• Colored Lanes on MTA Rapid Network</li> <li>• <b>Geary BRT Phase 1 (Substantially completed)</b></li> <li>• 27-Bryant Tenderloin Transit Reliability Project</li> <li>• 5-Fulton Arguello to 25<sup>th</sup> Ave Muni Forward</li> </ul>
<b>VTA</b>
<ul style="list-style-type: none"> <li>• Light Rail Transit Signal Priority Improvements</li> <li>• Stevens Creek Ltd 323 TSP</li> <li>• Eastridge to BART Regional Connector</li> </ul>
<b>Other</b>
<ul style="list-style-type: none"> <li>• <b>Novato</b> — Downtown SMART Station</li> <li>• <b>Santa Rosa CityBus</b> — New Transit System Optimization</li> <li>• <b>NVTA</b> — Imola Ave and SR-29 Express Bus Improvements</li> <li>• <b>Tri-Delta Transit</b> — <b>Wi-Fi for Bus and Paratransit Rider Connectivity (Substantially Complete)</b></li> </ul>

## Individual Project Updates

### Round 1

#### VTA

- Light Rail TSP
  - Equipment has been manufactured and shipped
  - Agreements with Cities of Santa Clara and San José have been executed
  - Pilot testing complete
  - Construction contract awarded
  - Installation expected to start this summer and completion expected in late 2023
- Stevens Creek – Limited 323 TSP
  - Original scope complete
  - Savings on original scope directed towards a TSP Central Monitoring System
  - Expected complete by end of 2022

*Muni*

- 14-Mission
  - Installation of info panels and stop branding complete
  - Plan for bus branding is under development
  - Some cost savings are anticipated, SFMTA expects to propose using them for other improvements on the corridor
- N-Judah
  - TSP, lane colorization, camera elements complete
  - Stop branding installation continues to be delayed due to COVID-19-related backlog of work

Round 2

*Muni*

Geary Rapid Project Phase 1

- Initial implementation resulted in 1-2 minutes of peak hour transit travel time savings
- Construction substantially complete
- Final segment of repaving to be done after a telecommunication project on the corridor is complete

Colored Lanes on Rapid Network

- Fremont St, Clay St, Stockton St, Fourth St, and additional lanes near Transbay Terminal completed
- Mission St (additional scope added in Dec 2020) expected to be installed by the end of 2022
- May have additional savings to apply to colored lanes on other corridors



Completed Geary Rapid Station and red colored lane (source: SFMTA)

Round 3

*MTC/AC Transit*

Bay Bridge Forward

- West Grand TSP
  - Design for the TSP element is complete; construction contract issued and expected to be completed in 2022
  - Design nearly completed for bus stop relocation (combined with the Telegraph Rapid Corridor project); construction expected to begin Fall 2022
- Other Bay Bridge Forward elements funded under this award complete

*AC Transit*

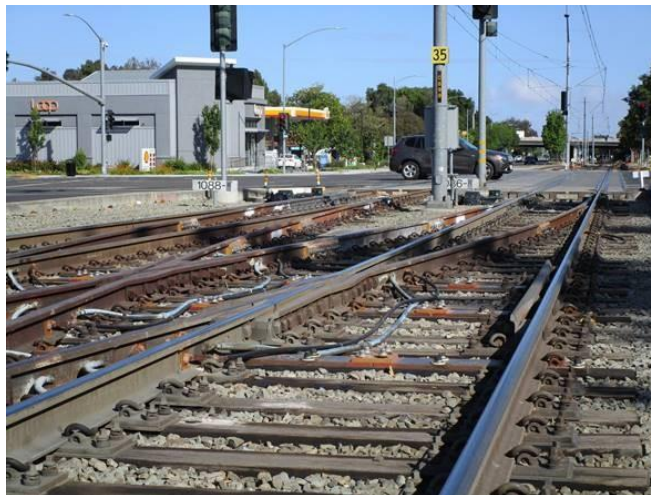
AC Transit San Pablo/Telegraph

- Telegraph Avenue
  - 95% design plans have been submitted to the cities for review
  - Starting Construction Management and Construction procurement processes
- San Pablo Avenue
  - Design complete, entering construction phase.
  - Construction contract awarded in May 2022

*VTA*

Light Rail Crossovers and Switches Project

- TPI-funded scope completed in 2020, overall project was completed and closed out in June 2022



Completed light rail crossover (Source: VTA)

Round 4

*City of Novato/SMART*

Novato Downtown SMART Station

- Phase 2 (signaling, systems, station amenities)
  - Construction complete, commuter train service commenced in January 2020
- Phase 3 (former Depot site improvements)
  - Construction suspended due to COVID-19
  - Additional funding and agreement with developer/operator needed to complete improvements



Novato SMART Station (Source: SMART)

*NVTA*

NVTA Imola Ave and SR-29 Express Bus Improvements

- Construction contractor began work in January 2022
- Expected to be complete and in service by end of July 2022
- Additional FY20 LCTOP funds awarded to help cover the construction costs of expanded scope, including bus lanes, new signals, and reconstruction of the park-and-ride lot

*Santa Rosa CityBus*

Santa Rosa CityBus New Transit System Optimization

- Modem and kiosk installation complete
- Progress on other scope items has stalled
  - Santa Rosa plans to invest remaining funding on an ITS upgrade, consistent with the original scope of the TPI award, pending approval of FTA
  - Incomplete scope items will be completed with other funds at a later date

## LCTOP Projects

### SFMTA

#### 27-Bryant Tenderloin Transit Reliability

- Scope includes pavement renovation, curb ramps, and traffic signal work
- Construction began in June 2022
- Anticipated complete in early 2023

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

- Scope includes bus bulbs and transit stop optimization
- Signal timing work began in December 2021
- Design of remaining elements is in progress and expected complete by end of 2022

### Tri Delta Transit

#### Wi-Fi for Bus and Paratransit Rider Connectivity

- Project is substantially complete; service was made available to the public in April 2021
- Remaining funds will be used for service for wi-fi equipment through 2024

### 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
- Design is nearly complete
- ROW and utility relocation underway and expected to be complete in 2022
- Expect to advertise construction contract in late 2022 and begin construction in Spring 2023
- Completion of construction dependent on availability of RM3 funding or securing other funds

### AC Transit

#### Dumbarton IDEA

- Design is complete and TSP equipment has been purchased
- Agreements with Caltrans and project partners complete, but Caltrans requirements resulted in project delay
- Project expected to be complete in Summer 2022

#### Quick Build Transit Lanes

- Preliminary engineering underway
- Construction could begin as early as March 2023, but AC Transit is working with cities on scheduling installation of red transit lane treatment relative to paving schedule

## 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.



A larger call for projects using OBAG 2 funds, timing TBD, will focus on transit priority projects consistent with Blue Ribbon Transit Recovery Task Force priorities. This additional funding, along with ongoing LCTOP funding, will help implement more projects to get transit out of traffic.

## 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](#)

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](#)

**Transit Performance Initiative - Investment Program  
Projects by Round (\$ in millions)**

**1st Round** (Approved May 2012)

Agency	Project	TPI Award (\$ millions)
AC Transit	Line 51 Corridor Delay Reduction & Sustainability Project <i>Complete</i>	\$10.5
	Mission Customer First <i>Substantially Complete</i>	\$5.4
	N-Judah Customer First* <i>Substantially Complete</i>	\$2.4
	Colored Lanes on MTA Rapid Network* <i>Original Scope Complete</i> (added scope ongoing)	\$3.0
San Francisco Municipal Transportation Authority (SFMTA)	Bus Stop Consolidation and Roadway Modification (9-San Bruno)** <i>Complete</i>	\$4.1
Santa Clara Valley Transportation Authority (SCVTA)	Light Rail Transit Signal Priority Improvements	\$1.6
	Stevens Creek — Limited 323 Transit Signal Priority <i>Complete</i>	\$0.7
<b>Total</b>		<b>\$27.7</b>

\*In July 2015, MTC approved reprogramming of \$3 million from the SFMTA Round 1 N-Judah Customer First project to the Colored Lanes on MTA Rapid Network project

\*\*Scope determined Sept. 2014. Project is reporting with Round 2 projects

**2nd Round** (Approved September 2014)

Agency	Project	TPI Award (\$ millions)
Various – Small Operators	Clipper Phase 3 Implementation <i>Complete</i>	\$8.0
Santa Clara Valley Transportation Authority (SCVTA)	Mountain View Double Track Improvements – Phase 1 <i>Complete</i>	\$8.0
City of Dublin/ Livermore Amador Valley Transit Authority (LAVTA)	Dublin Boulevard Transit Performance Initiative <i>Complete</i>	\$1.0
AC Transit	South Alameda County Major Corridors Travel Time Improvement <i>Complete</i>	\$5.2
	Colored Lanes on MTA Rapid Network <i>Original Scope Complete</i> (added scope ongoing)	\$1.0
San Francisco Municipal Transportation Authority (SFMTA)*	Geary BRT Phase 1 <i>Substantially Complete</i>	\$4.0
<b>Total</b>		<b>\$27.2</b>

\*In January 2017, MTC approved reprogramming \$4 million from the SFMTA Round 2 Colored Lanes and Muni Forward projects to Geary BRT Phase 1, which was also awarded TPI Round 3 funds.

**3rd Round** (Approved January 2017)

Agency	Project	TPI Amount (\$ millions)
Various	Bay Bridge Forward (AC Transit Double Deckers + Bus Wash + West Grand TSP)	\$10.0
SFMTA	Geary BRT Phase 1 <i>Substantially Complete</i>	\$5.6
SamTrans	Traffic Signal Priority on El Camino Real <i>Substantially Complete</i>	\$3.5
BART	Train Seat Modification Project <i>Complete</i>	\$1.5
AC Transit*	San Pablo and Telegraph Rapid Bus Upgrades Project	\$5.0
VTA	Santa Clara Light Rail Crossovers and Switches <i>Complete</i>	\$0.5
<b>Total</b>		<b>\$26.1</b>

\*AC Transit received a total of \$5M in combined federal STP/CMAQ funds and state Cap and Trade LCTOP funds.

**4th Round - North Bay** (Approved July 2017)

County	Project	TPI Amount (\$ millions)
Marin	Novato Downtown SMART Station <i>Phase 2 Complete</i>	\$0.5
Sonoma	Santa Rosa CityBus New Transit System Optimization	\$0.4
Napa	NVTA Imola Ave and SR-29 Express Bus Improvements	\$0.4
Solano	SolanoExpress Fairgrounds Drive/SR-37 Bus Stop <i>Substantially Complete</i>	\$1.0
<b>Total</b>		<b>\$2.3</b>

**Transit Performance Initiative - Investment Program  
Projects by Round - *Continued*** (\$ in millions)

**Low Carbon Transit Operations Program FY 2017-18** (Approved March 2018)

Agency	Project	TPI Amount (\$ millions)
SFMTA	Mission Bay Loop <i>Complete</i>	\$1.4
VTA	Eastridge to BART Regional Connector*	\$0.9
AC Transit	San Leandro BART -- Transit Access Improvements <i>Complete</i>	\$0.6
AC Transit	South Alameda County Major Corridors Travel Time Improvement Project <i>Complete</i>	\$0.2
<b>Total</b>		<b>\$3.1</b>

\*In December 2020, MTC approved reprogramming of VTA's North First Street Light Rail Speed and Safety Improvements Project - Phase 1 to the Eastridge to BART Regional Connector

**Low Carbon Transit Operations Program FY 2018-19** (Approved April 2019)

Agency	Project	TPI Amount (\$ millions)
SFMTA	West Portal Optimization and Crossover Activation* <i>Complete</i>	\$1.4
VTA	Eastridge to BART Regional Connector**	\$1.3
AC Transit	Dumbarton Innovative Deployments to Enhance Arterials (IDEA)	\$1.2
<b>Total</b>		<b>\$3.9</b>

\*\$753,280 in savings from SFMTA's West Portal Optimization and Crossover Activation project was redirected to a non-TPI project to ensure they were spent within LCTOP timely use of funds requirements. As this was a non-eligible TPI project, the minimum amount set aside for SFMTA TJPI funds programmed through LCTOP will be reduced by this amount.

\*\*VTA's FY 2018-19 LCTOP TPI award went to the 2021 Zero-Emission Bus Purchase program, which was ineligible under the TPI program. VTA has committed the same amount of local funds to the Eastridge to BART Regional Connector as a TPI-eligible replacement project.

**Low Carbon Transit Operations Program FY 2019-20** (Approved March 2020)

Agency	Project	TPI Amount (\$ millions)
NVTA	Imola Park and Ride and Express Bus Stop Improvements	\$1.1
ECCTA	Wi-Fi for Bus and Paratransit Rider Connectivity <i>Substantially Complete</i>	\$0.3
SFMTA	27 Bryant Tenderloin Transit Reliability Project	\$3.3
<b>Total</b>		<b>\$4.7</b>

**Low Carbon Transit Operations Program FY 2020-21** (Approved March 2021)

Agency	Project	TPI Amount (\$ millions)
SFMTA	5 Fulton: Arguello to 25th Ave Muni Forward	\$1.2
VTA	Eastridge to BART Regional Connector	\$0.7
AC Transit	AC Transit Quick Build Transit Lanes	\$0.7
<b>Total</b>		<b>\$2.7</b>

**Low Carbon Transit Operations Program FY 2021-22** (Approved March 2022)

Agency	Project	TPI Amount (\$ millions)
SFMTA	29 Sunset Muni Forward Phase 1	\$2.9
VTA	Eastridge to BART Regional Connector	\$1.7
AC Transit	Mission Boulevard Corridor TSP Project	\$1.6
<b>Total</b>		<b>\$6.2</b>

<b>TPI Program Grand Total</b>		<b>\$104.0</b>
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**Transit Performance Initiative - Investment Program  
Projects by Operator (\$ in millions)**

SFMTA	TPI Award (\$ millions)
Mission Customer First <i>Substantially Complete</i>	\$5.4
N-Judah Customer First <i>Substantially Complete</i>	\$2.4
Bus Stop Consolidation and Roadway Modification (9-San Bruno) <i>Complete</i>	\$4.1
Colored Lanes on MTA Rapid Network <i>Original Scope Complete (added scope ongoing)</i>	\$4.0
Geary BRT Phase 1 <i>Substantially Complete</i>	\$9.6
Mission Bay Loop <i>Complete</i>	\$1.4
West Portal Optimization and Crossover Activation <i>Complete</i>	\$1.4
27-Bryant Tenderloin Transit Reliability Project	\$3.3
5 Fulton: Arguello to 25th Ave Muni Forward	\$1.2
29 Sunset Muni Forward Phase 1	\$2.9
<b>Total SFMTA</b>	<b>\$35.8</b>

AC Transit	TPI Award (\$ millions)
Line 51 Corridor Delay Reduction & Sustainability Project <i>Complete</i>	\$10.5
South Alameda County Major Corridors Travel Time Improvement <i>Complete</i>	\$5.4
San Pablo and Telegraph Rapid Bus Upgrades Project	\$5.0
San Leandro BART -- Transit Access Improvements <i>Substantially Complete</i>	\$0.6
Dumbarton Innovative Deployments to Enhance Arterials (IDEA)	\$1.2
Quick Build Transit Lanes	\$0.7
Mission Boulevard Corridor TSP Project	\$1.6
<b>Subtotal AC Transit Awards</b>	<b>\$25.1</b>
Bay Bridge Forward (AC Transit Double Deckers + Bus Wash + West Grand TSP)	\$10.0
<b>Total AC Transit</b>	<b>\$35.1</b>

VTA	TPI Award (\$ millions)
Light Rail Transit Signal Priority Improvements	\$1.6
Stevens Creek — Limited 323 Transit Signal Priority <i>Original Scope Complete (added scope ongoing)</i>	\$0.7
Mountain View Double Track Improvements – Phase 1 <i>Complete</i>	\$8.0
Santa Clara Light Rail Crossovers and Switches <i>Complete</i>	\$0.5
Eastridge to BART Regional Connector*	\$4.6
<b>Total VTA</b>	<b>\$15.4</b>

Other Operators/Projects	TPI Award (\$ millions)
LAVTA/Dublin — Dublin Boulevard Transit Performance Initiative <i>Complete</i>	\$1.0
SamTrans — Traffic Signal Priority on El Camino Real <i>Complete</i>	\$3.5
BART — Train Seat Modification Project <i>Complete</i>	\$1.5
Novato — Downtown SMART Station <i>Phase 2 Complete (Phase 3 ongoing)</i>	\$0.5
Santa Rosa CityBus — New Transit System Optimization	\$0.4
NVTA — Imola Ave and SR-29 Express Bus Improvements	\$1.5
SolanoExpress — Fairgrounds Drive/SR-37 Bus Stop <i>Substantially Complete</i>	\$1.0
Clipper — Phase 3 Implementation <i>Complete</i>	\$8.0
Tri-Delta Transit — Wi-Fi for Bus and Paratransit Rider Connectivity <i>Substantially Complete</i>	\$0.3
<b>Total Other</b>	<b>\$17.7</b>

<b>TPI Program Grand Total</b>	<b>\$104.0</b>
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