SFMTA

The Fast Lane to Recovery

Temporary Emergency Transit Lanes Evaluation Summary

May 2022

Program Overview

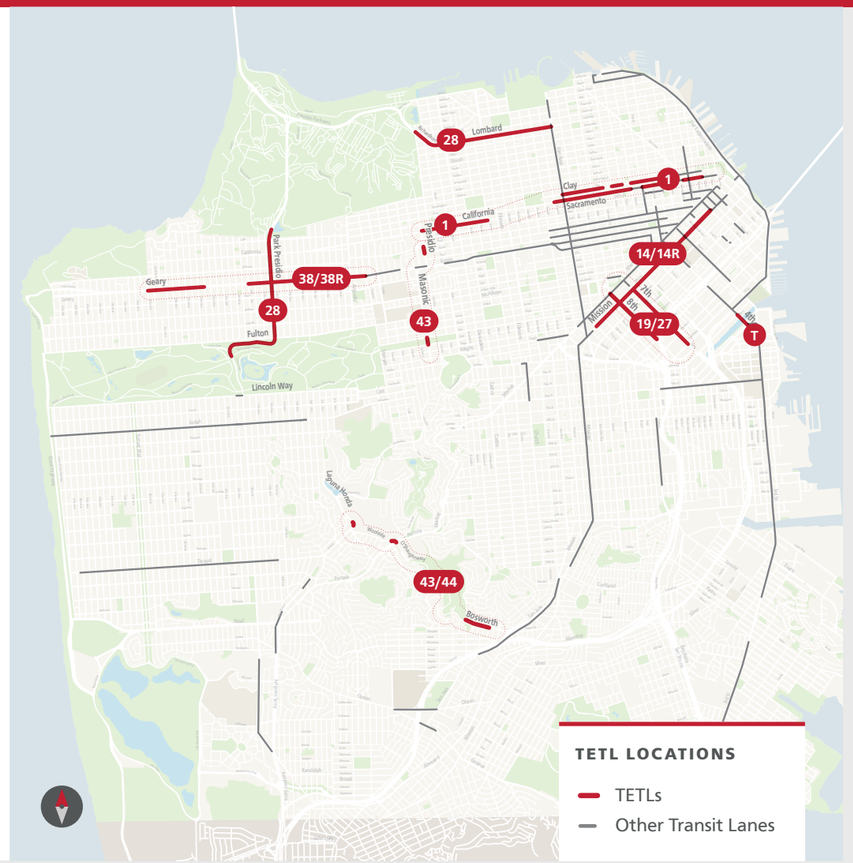
The Temporary Emergency Transit Lanes (TETL) program was a critical piece of the SFMTA's response to the COVID-19 pandemic.

The TETL program installed temporary transit lanes and other transit speed and reliability improvements on key Muni lines to:

- **Provide as much frequency as possible despite pandemic-related limitations on operational resources**
- **Minimize rider exposure to COVID-19 due to crowded buses**
- **Build up transit resiliency and reliability to ensure an equitable and sustainable economic recovery**

MUNI ROUTES BENEFITING FROM TETL PROJECTS:

- **1** California
- **14** Mission / **14R** Mission Rapid
- **19** Polk / **27** Bryant
- **28** 19th Avenue
- **38** Geary / **38R** Geary Rapid
- **43** Masonic / **44** O'Shaughnessy
- **T** Third



Why these improvements at these locations?

A time savings analysis conducted early in the pandemic determined that reduced congestion on city streets resulted in quicker end-to-end travel times for transit and more reliable trips. Building off this analysis, the SFMTA identified key routes that could benefit from transit lanes that would preserve those speed and reliability improvements. These transit lanes improved reliability along the entire line, improving rider experience in Muni Service Equity Strategy neighborhoods and throughout the city.

Program Timeline

Installation Complete
Community Engagement

2020

FEB — *Local COVID-19 Emergency Proclamation*

MAR — *Shelter-in-Place Order*

JUN — **SFMTA Board of Directors approval of TETL program**

AUG — TETL — **19 Polk / 27 Bryant**

SEP — TETL — **14 Mission / 14R Mission Rapid**

2021

JAN — TETL — **T Third**

FEB — TETL — **38 Geary / 38R Geary Rapid**

APR — TETL — **43 Masonic / 44 O'Shaughnessy**

JUL — TETL — **1 California**

SEP — TETL — **28 19th Avenue: (Lombard HOV lanes)**

2022

APRIL — TETL — **28 19th Avenue: (Park Presidio HOV lanes)**

Program Benefits

Program Benefits for the 6 Completed TETL Projects (Park Presidio/Lombard HOV lanes pilot with Caltrans is still in progress)

BENEFIT	RESULT	DESCRIPTION
Unprecedented Speed of Implementation	**40%** of riders use lines that benefit from TETLs **15.6 miles** of transit lanes and HOV lanes installed **6 of 7 TETL projects** now approved permanently (HOV lanes pilot still in progress)	The TETL program and its six completed projects were implemented at an unprecedented pace and at low cost, benefiting a high percentage of existing riders. ***Fastest expansion of transit lanes in the city's history!***
Supports Muni Service Equity Strategy	**6 of 6 Completed TETL projects** improved service on lines that serve neighborhoods identified by the Muni Service Equity Strategy	It was a priority for the SFMTA to ensure program benefits were in line with the Muni Service Equity Strategy.
Improves Transit Speed & Reliability	**6 of 6 Completed TETL projects** improved transit travel times & reliability A quantitative assessment was conducted for all TETL projects except for the 43/44. The 43/44 travel time evaluation is based on extensive qualitative data collection.	The TETL program was successful in its primary objective to improve or preserve transit speed and reliability along key routes. Improved speed and reliability means shorter transit trips and less crowding, and therefore, more limited potential exposure to COVID-19.
Responds to Community Needs	**2,250+ respondents** reached through 6 customer surveys **4 of 6 surveys** found that a majority of respondents supported making the improvements permanent	A critical component to weighing success at the SFMTA is customer satisfaction. Muni riders strongly supported the changes, but we also heard concerns about parking and vehicle access. To address this feedback, we made adjustments to the final design of several of the projects, including restoring some loading spaces.
Improves Operator Experience	**200+ operators** reached through 6 operator surveys **6 of 6 surveys** found that a majority of operators stated that improvements made their jobs easier	Our bus operators have more on their shoulders than ever and reducing obstacles in their way is at the core of the SFMTA's success.
Provides Benefits to Residents	BENEFITS **In addition to improving transit speeds and reliability, the TETL program:** • calmed traffic • improved transit access to neighborhood businesses • supported affordable travel options • combated climate change	The SFMTA is not only responsible for providing quality transit, but also for creating more livable streets, building a climate resilient community, and delivering an equitable and efficient transportation system.

Program Benefits

Neighborhoods identified by Muni Service Equity Strategy

- Bayview
- Chinatown
- Excelsior-Outer Mission
- Inner Mission
- Oceanview-Ingleside
- Tenderloin/SoMa
- Visitation Valley
- Western Addition

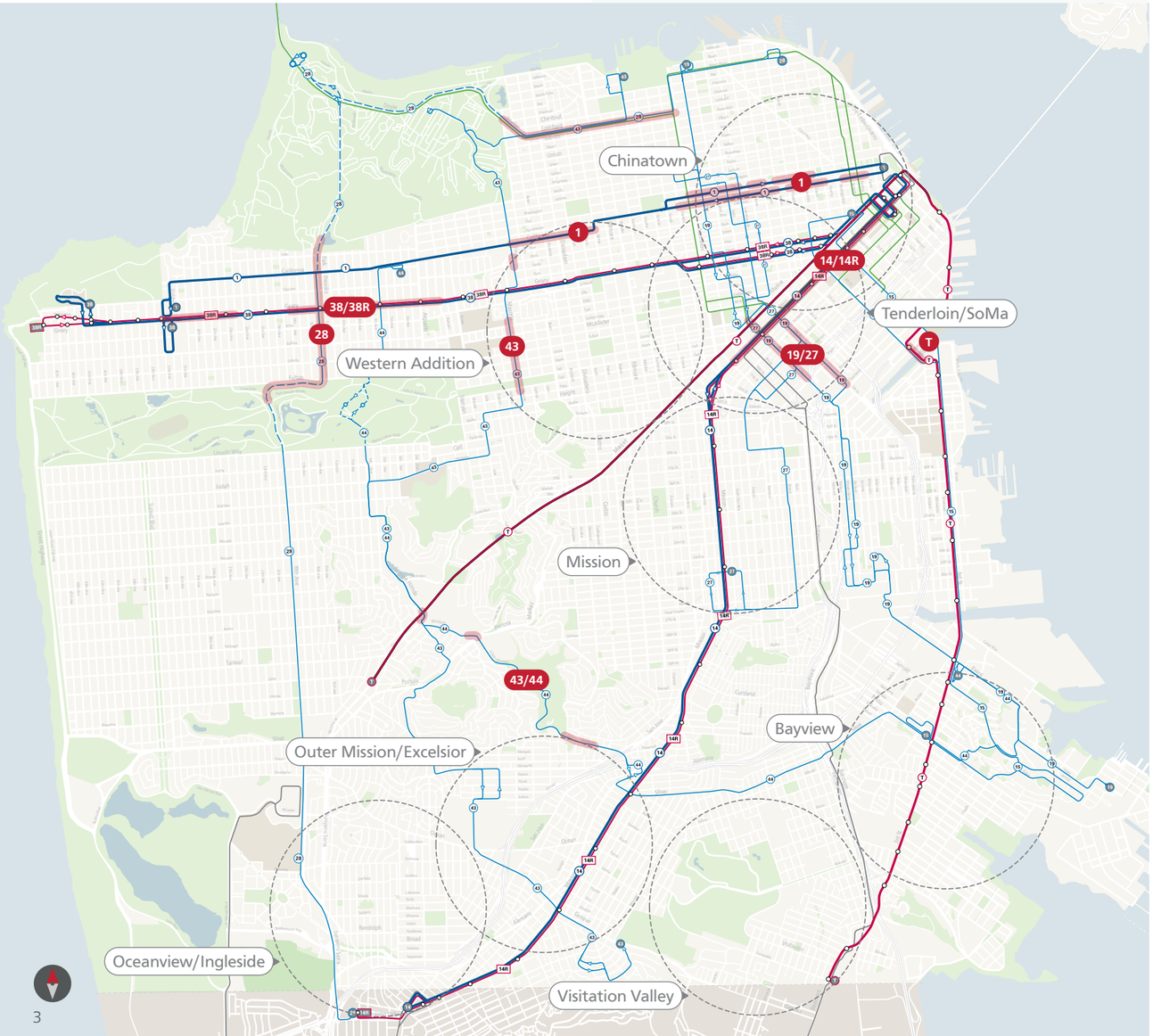
TETL Project Locations

SFMTA TRANSIT ROUTES BENEFITING FROM TETL PROJECTS

- **Muni Rapid Bus** 14R 38R
- **Muni Metro Rail** T
- **Muni Local Bus** High Frequency 1 14 28 38
- **Muni Grid Bus** Medium Frequency 19 27 43 44

OTHER ROUTES BENEFITING FROM TETL PROJECTS

- Golden Gate Transit
- SamTrans



1 California

PROJECT BY THE NUMBERS

Transit Travel Times

UP TO 11% *FASTER*

than pre-pandemic levels, with the most significant improvements in congested areas where bus lanes were installed*

*Pre-pandemic (January-February 2020) compared to post-project (August-October 2021)

Community Feedback

41%

of survey respondents supported making the project permanent

Operator Feedback

71%

of surveyed operators stated that the improvements made their jobs easier

Rider Demographics

Based on 2017 SFMTA On-Board Survey

Riders with household incomes less than $35,000

26% Systemwide
17% 1 California

Riders that are people of color

57% Systemwide
43% 1 California

Muni Service Equity Strategy

NEIGHBORHOOD SERVED BY 1 CALIFORNIA

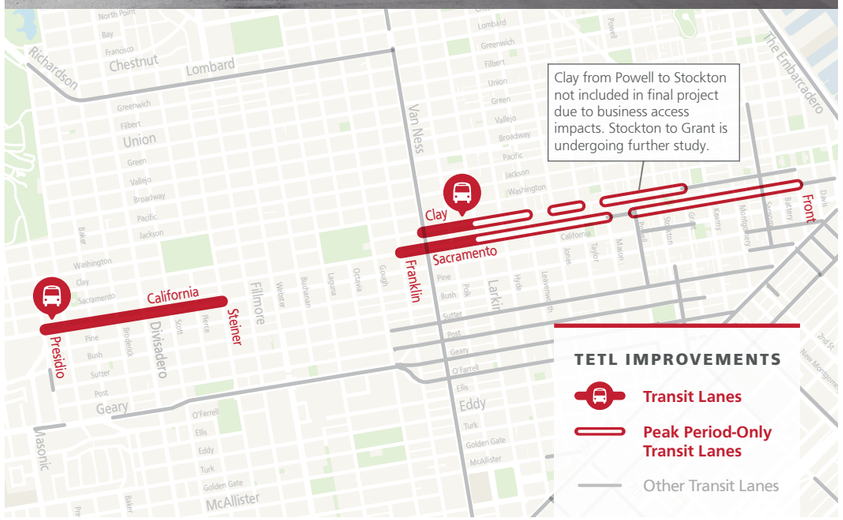
Chinatown

PROJECT DESCRIPTION

Transit lanes were installed to help keep the 1 California moving, preserving travel time gains seen early in the pandemic for people who depend on transit to get around the city.

PROJECT STATUS

Approved permanently



Additional Benefits

Minimal Impacts to Traffic

Minimal traffic impacts on the corridor after transit lanes were installed. No affected portion of the corridor saw auto speed reductions greater than 1%.*

*Pre-project (April 2021) compared to post-project (August 2021)

Opportunity for Improved Transit Performance through Parking Enforcement

Recent data collection shows that cars are parked in the peak hour transit lane on 20-35% of surveyed blocks, reducing the effectiveness of the transit lanes by forcing buses to weave into the adjacent travel lane. We will use our data to target enforcement and awareness efforts to the areas that need it most in order to maximize the travel time and reliability benefits of the project.

14 Mission | 14R Mission Rapid

PROJECT BY THE NUMBERS

Transit Travel Times

UP TO 31% *FASTER*

than pre-pandemic levels after transit lanes were installed, even as traffic volumes began approaching pre-pandemic levels*

*Pre-pandemic (January-mid March 2020) compared to post-project (January-March 2021)

Community Feedback

64%

of survey respondents supported making the project permanent

Operator Feedback

58%

of surveyed operators stated that the improvements made their jobs easier

Rider Demographics

Based on 2017 SFMTA On-Board Survey

Riders with household incomes less than $35,000

52% 14R Mission
43% 14 Mission
26% Systemwide

Riders that are people of color

82% 14R Mission
76% 14 Mission
57% Systemwide

Muni Service Equity Strategy

NEIGHBORHOODS SERVED BY 14 MISSION & 14R MISSION RAPID

Mission | Outer Mission/Excelsior | Tenderloin/SoMa

PROJECT DESCRIPTION

Upgraded full-time transit lanes on Mission Street in SoMa reduced delay and improved reliability on this busy downtown corridor.

PROJECT STATUS

Approved permanently

Additional Benefits

38% Commercial Loading Supply

By removing peak-period tow-away restrictions and converting some parking spaces to loading, the project increased availability of yellow zones.

70% Muni-involved Collisions

The project widened the narrow travel lanes on Mission Street. Muni-involved collisions dropped by more than 70%*

*Pre-project (June-August 2020) compared to post-project (January-March 2021)

PROJECT BY THE NUMBERS

Transit Travel Times

UP TO 27% FASTER

than pre-pandemic levels after transit lanes were installed, even as traffic volumes began approaching pre-pandemic levels*

*Pre-pandemic (January-February 2020) compared to post-project (May-November 2021)

Community Feedback

61%
of survey respondents supported making the project permanent

Operator Feedback

89%
of surveyed operators stated that the improvements made their jobs easier

Rider Demographics

Based on 2017 SFMTA On-Board Survey

Riders with household incomes less than $35,000

41% 27 Bryant
40% 19 Polk
26% Systemwide

Riders that are people of color

63% 27 Bryant
58% 19 Polk
57% Systemwide

Muni Service Equity Strategy

NEIGHBORHOODS SERVED BY 19 POLK & 27 BRYANT

Bayview | Mission | Tenderloin/SoMa

PROJECT DESCRIPTION

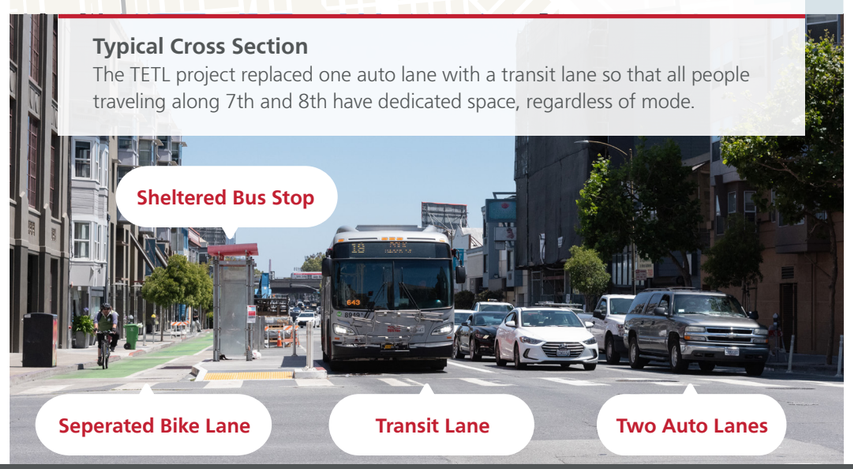
Transit lanes installed along segments on 7th and 8th streets in SoMa to help improve transit speeds and reliability.

Transit lanes

PROJECT STATUS

Approved permanently

Typical Cross Section
The TETL project replaced one auto lane with a transit lane so that all people traveling along 7th and 8th have dedicated space, regardless of mode.



PROJECT BY THE NUMBERS

Transit Travel Times

UP TO 13% FASTER

than pre-pandemic levels after transit lanes were installed, even as traffic volumes began approaching pre-pandemic levels*

*Pre-pandemic (January-February 2020) compared to post-project (March-April 2021)

Community Feedback

52%
of survey respondents supported making the project permanent

Operator Feedback

83%
of surveyed operators stated that the improvements made their jobs easier

Rider Demographics

Based on 2017 SFMTA On-Board Survey

Riders with household incomes less than $35,000

31% 38 Geary
29% 38R Geary
26% Systemwide

Riders that are people of color

57% Systemwide
53% 38 Geary
51% 38R Geary

Muni Service Equity Strategy

NEIGHBORHOODS SERVED BY 38 GEARY & 38R GEARY RAPID

Tenderloin/SoMa | Western Addition

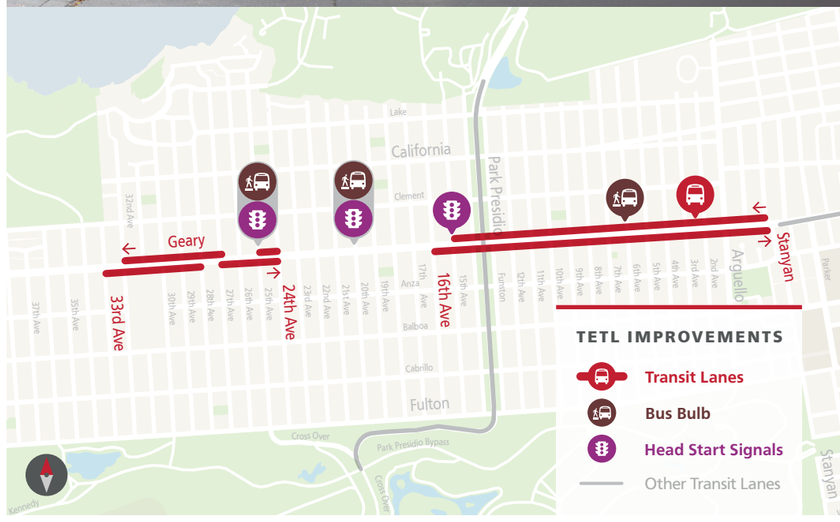
PROJECT DESCRIPTION

New transit speed and reliability treatments have improved 38 Geary bus performance with minimal traffic impacts to Geary Boulevard or parallel streets, despite increases in traffic citywide.

Transit lanes

PROJECT STATUS

Approved permanently



Additional Benefits

Improved Waiting Experience

Bus bulbs doubled waiting areas at five busy 38 Geary Rapid stops, improving customer experience and accessibility.

Minimal Diversion of Auto Trips

Parallel streets had smaller speed reductions than Geary as traffic returned, indicating diversions to other streets are likely minimal.*

*Pre-project (September-October 2020) compared to post-project (March-April 2021)

43 Masonic | 44 O'Shaughnessy

PROJECT BY THE NUMBERS

Transit Travel Times

TETL spot improvements helped buses move through bottlenecks *quicker* and *with fewer delays

*Based on operator feedback

Community Feedback

61%
of survey respondents supported making the project permanent

Operator Feedback

62%
of surveyed operators stated that the improvements made their jobs easier

Rider Demographics

Based on 2017 SFMTA On-Board Survey

Riders with household incomes less than $35,000

36% 43/44
26% Systemwide

Riders that are people of color

63% 43/44
57% Systemwide

Muni Service Equity Strategy

NEIGHBORHOODS SERVED BY 43 MASONIC & 44 O'SHAUGHNESSY

Bayview | Outer Mission/Excelsior | Western Addition

PROJECT DESCRIPTION

Transit lanes and left-turn restrictions were installed on key segments of the 43 Masonic and 44 O'Shaughnessy routes to improve transit speeds and reliability.

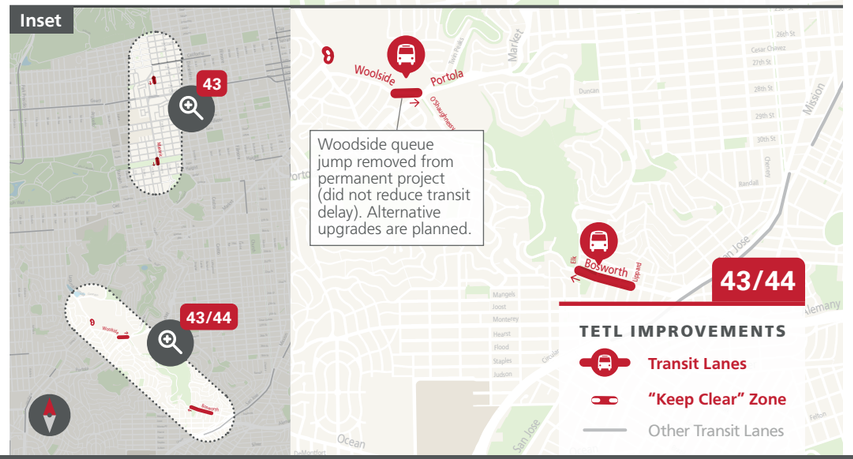
Transit lanes

PROJECT STATUS

Approved permanently

Additional Benefits

Left-turns are a chief cause of vehicle collisions in San Francisco. Implementing full-time left-turn restrictions at these intersection should provide a safety benefit for seniors, people walking and bicycling, and others on this vital stretch.



T Third

PROJECT BY THE NUMBERS

Transit Travel Times

UP TO 28% *FASTER*

than pre-pandemic levels where the transit improvements were installed, despite increases in city-wide traffic*

*Pre-pandemic (September 2019-February 2020) compared to post-project (January-June 2021)

Community Feedback

41%
of survey respondents supported making the project permanent

Operator Feedback

80%
of surveyed operators stated that the improvements made their jobs easier

Rider Demographics

Based on 2017 SFMTA On-Board Survey, includes K Ingleside

Riders with household incomes less than $35,000

26% Systemwide
25% T Third

Riders that are people of color

62% T Third
57% Systemwide

Muni Service Equity Strategy

NEIGHBORHOODS SERVED BY T THIRD

Bayview | Chinatown | Visitation Valley

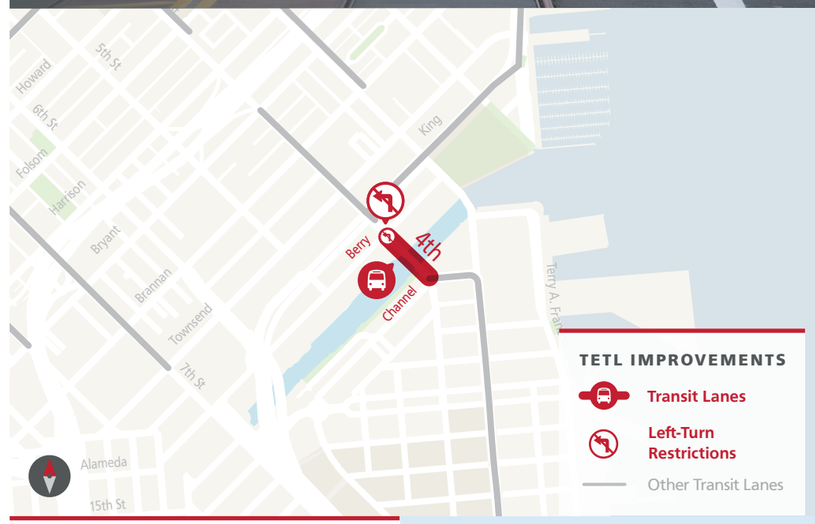
PROJECT DESCRIPTION

A southbound transit lane and northbound left-turn restriction installed on the 4th Street bridge addressed a key bottleneck that delayed the T Third line. Trains can now move more quickly over the bridge without getting stuck in traffic.

PROJECT STATUS

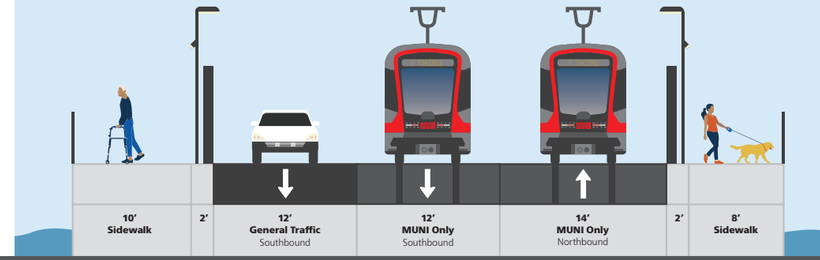
Approved permanently

Transit lanes



New 4th Street Bridge Operations

Northbound auto traffic can continue to use 3rd Street Bridge via Channel



Next Steps

Permanent Project Approval

After extensive outreach and evaluation, six of six transit lane projects were made permanent by the SFMTA Board of Directors in late 2021 and early 2022. In addition, the 28 19th Avenue HOV lane pilot is proposed for a three-year extension to allow for further evaluation in partnership with Caltrans.

Some modifications were made to the TETLs when they were made permanent to address community feedback and operational issues. Most notably:

- 1 California: Based on merchant loading concerns, the evening peak bus lane was removed on Clay from Powell to Stockton. In addition, the evening peak bus lane on Clay from Stockton to Grant is undergoing further evaluation.

- 44 O'Shaughnessy: A short bus lane on Woodside approaching Portola did not operating well due to traffic backups that impacted transit. We are pursuing alternative designs to reduce delay at this intersection.

Future Transit Lanes

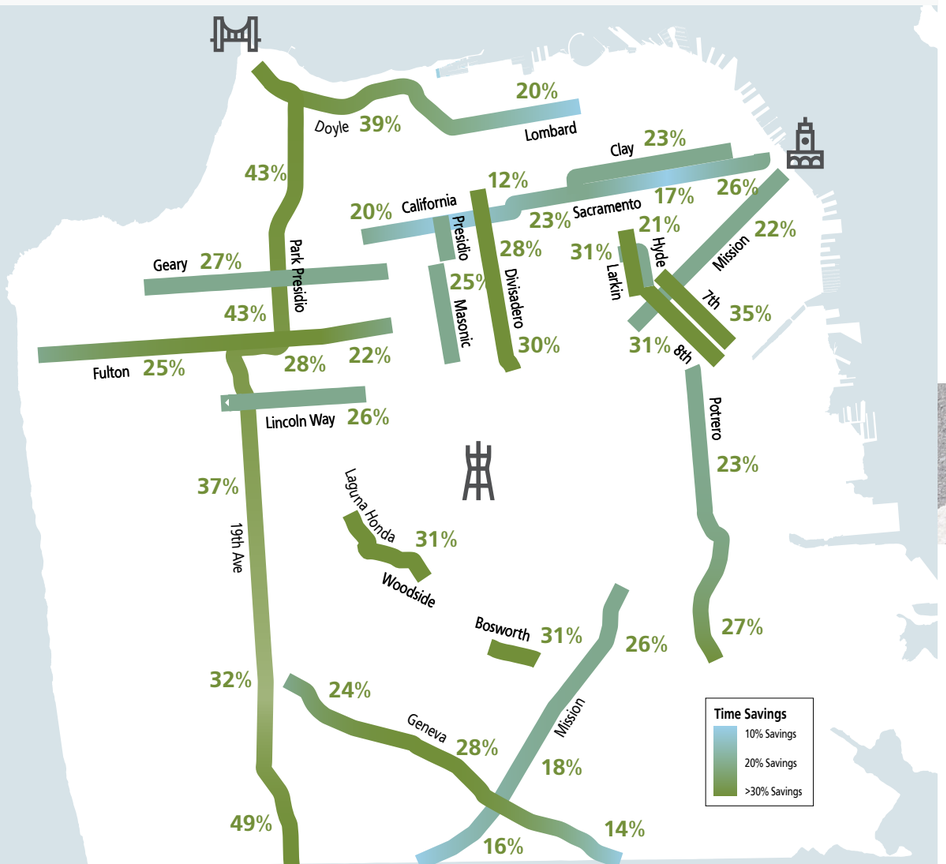
The initial shelter-in-place travel time savings analysis used to identify corridors for TETL improvements (shown below) will be used to identify additional corridors for future improvements as part of Muni Forward, the SFMTA's ongoing transit priority program.

Travel Time Savings During Shelter in Place

We analyzed travel times on all Muni routes during the city's Shelter in Place order in April 2020 compared to February 2020, before pandemic restrictions were in place.

On average, routes saw a 15% reduction in travel time due to reduced congestion, but some corridors saw nearly a 50% reduction. A selection of these corridors is shown in the map at right.

This analysis helped us identify corridors for the TETL program, and will continue to inform planning for future transit lanes.



Acknowledgements

SFMTA TEAM

Darcie Alaba
Sebastian Arias
Steve Boland
Liz Brisson
Amy Fowler
Anna Harkman
Dan Howard
Melinda Hue
Sean Kennedy
Jonathan Kibrick
Tracey Lin
Cheryl Liu
Daniel Mackowski
Kate McCarthy
Erin McMillan
Francesca Napolitan
Edgar Orozco
Michael Rhodes
Felipe Robles
Shalon Rogers
Kevin Shue
David Sindel
J.P. Streeter
Edward Tang
Britt Tanner
Ian Trout
Kansai Uchida
Manito Velasco
Liliana Ventura
Bonnie Jean von Krogh
Dustin White
Tony Young
Hester Yu

CONSULTANT SUPPORT

Natalie Chyba, Fehr & Peers
Lupita Huerta, Fehr & Peers
Jess Sandoval, Fehr & Peers
Melody Wu, Fehr & Peers
Mike Alston, Kittelson & Associates