

4th Street Bridge Transit Lanes

SFMTA Board of Directors September 7, 2021

Project Approach

- Keep T Third Street trains moving and reduce crowding by reducing delays
- Focus on locations where delays occur frequently
- Depending on the effectiveness of the transit lanes, propose making the lanes permanent





Before Temporary Transit Lanes

- One of the few locations on the T Third Street without dedicated lanes
- Track lanes were shared with auto traffic, causing trains to get stuck behind cars, delaying trains
- Lengthy signal delays for trains at 4th/Berry where tracks merged into the traffic lanes





Current Temporary Project

Initial Phase

- Installed the southbound transit lane
- Restricted northbound left turns at 4th/Berry, installed transit lane in left turn pocket
- Continued to allow
 northbound traffic on the 4th St Bridge

Full northbound closure of 4th St Bridge (Phase 2) was to be implemented later, pending evaluation, but was found not to be necessary



Current Temporary Project

Initial Phase

- Installed the southbound transit lane
- Restricted northbound left turns at 4th/Berry, installed transit lane in left turn pocket
- Continued to allow
 northbound traffic on the 4th St Bridge

Full northbound closure of 4th St Bridge (Phase 2) was to be implemented later, pending evaluation, but was found not to be necessary





Outreach and Engagement

- Outreach to community-based organizations and individual stakeholder briefings
- Two virtual public meetings
- 5,000 e-mails to T Third Street riders for each event
- 5,200 community mailers for each event
- 40 on-street posters for each event
- Social media
- Project webpage
- Two stakeholder surveys
- Operator survey





Feedback Heard and Incorporated

Concerns	How Addressed
Detours for southbound vehicles, access to 100 block of Berry Street, UCSF facilities	Retained southbound left turn at 4th/Berry
Detours for northbound vehicles	Phased implementation to retain northbound access, provided transit delays do not occurMission Bay/Berry intersection or signal modifications to facilitate right turns still under analysis
Signal delays for vehicles detouring at Mission Bay Drive and Berry Street	Initiated consultation with CPUC, which has jurisdiction over railroad crossings, to adjust signal timing to facilitate right turns to Berry



Feedback Heard and Incorporated

Concerns	How Addressed
Garage access	Restriped 3rd Street in May to allow left turns from One Mission Bay garage
Traffic congestion due to special events	 4th Street Bridge is already closed to general traffic northbound after Oracle Park events Parking Control Officers direct traffic at 4th/Berry after Chase Center events and can override left turn restriction when needed
Traffic congestion and queues as economy recovers, request to delay permanent approval	Monitoring traffic throughout project, including at each stage of reopening, and project has not caused reduced traffic speeds. Project is intended to protect high-capacity transit vehicles from delay as congestion returns, and allow the street to move the most people in accordance with Transit First Policy



Evaluation Results: Transit

- Trains blocked by congestion <1% of trips once project was installed
 - No need to expand project to prohibit northbound traffic
- Less signal delay at 4th/Berry
 - Trains 2.5x more likely to arrive on green
 - When arriving on red, average wait reduced 70%
- Avg time savings of 1min 18 secs round trip (project length <700 ft)





Evaluation Results: Traffic

- Alternative routes required for northbound 4th Street traffic to access westbound Berry
 - Traffic speeds on surrounding streets minimally affected
 - No significant rate of traffic diversions to nearby streets
 - Largest impact was on northbound 3rd Street, traffic speeds declined by <1 mph on average from October to April
- Some northbound left turns continue to occur at 4th/Berry despite posted restrictions





Evaluation Results: Operators

80% of operators who were aware of the project reported that it has made their jobs easier

Responses to "Have the transit improvements made your job easier?"

	Yes, 80%		No, 20%



Evaluation Results: Riders

Project successfully protected trains from delay as traffic volumes returned citywide: Most respondents who regularly ride the T Third Street line either thought trip quality, travel time, and reliability was better or about the same

Responses to questions asking whether overall trip quality, travel time, and reliability had changed since the 4th Street Bridge TETL project was implemented





Evaluation Results: Equity

The T Third Street serves diverse communities, including neighborhoods with higher proportions of people of color and households with low incomes than the citywide average

	Household income below \$35,000 ¹	People of Color
K/T Ingleside-Third Street	25%	62%
Muni Systemwide average	26%	57%
Bayview-Hunters Point ²	34%	92%
Visitacion Valley ²	32%	93%
Dogpatch ²	7%	46%
Mission Bay / China Basin ²	17%	63%

^[1] Low income households are defined by the SFMTA as those with total incomes under 200% of the federal poverty level per household size. Household size data was not readily available, so household income under \$35,000 (approximately 200% of the federal poverty level for a two-person household) is used as a proxy.

American Community Survey 2019 data via city-data.com



Evaluation Results: Community

Support for making the project permanent is highly correlated with zip code

Responses to question of whether to make the project permanent, and respondents' home zip code





Evaluation Results: Community

Support for making the project permanent is highly correlated with travel mode

Responses to question of whether to make the project permanent, and which mode respondents have primarily used to travel across the 4th Street Bridge since January 2021





Today's Legislation

Make the existing 4th Street Bridge Temporary Emergency Transit Lanes permanent:

- Transit and Taxi Only Lane in the southbound track lane on 4th between Berry and Channel
- No left turn from northbound 4th onto westbound Berry
- Muni-Only Lane in the northbound left turn pocket at 4th & Berry





Reference Slides





М SFMTA

Temporary Emergency Transit Lanes

- Install on corridors that normally experience congestion to keep transit moving and reduce crowding
- Allow transit vehicles to complete trips in less time and return into service more quickly
- Provide more frequent service with same number of vehicles, mitigating service reductions
- Would not be painted red
- Are automatically removed within 120 days after emergency order is lifted, unless there is a public process to make a lane permanent





T Third Street (4th Street Bridge)

- One of the few locations on the T-Third without dedicated lanes
- Track lanes currently shared with auto traffic due to narrow historic bridge
- Convert track lanes to 24/7 transit lanes (bikes allowed)
- Restrict northbound left turns at 4th/Berry to address frequent delays, improve reliability





Existing Conditions

The 4th St Bridge has three lanes: one northbound, two southbound

T Third Street trains share the northbound lane and one of the southbound lanes with traffic

Frequent transit delays at 4th/Berry due to traffic making left turns



4th Street Bridge Facing North



4th/Berry Intersection Facing South



è è

R

4th/Berry Intersection Facing North



Temporary Project Approved in January

One lane in each direction on the 4th St Bridge would become a Transit Lane

Traffic would continue to be allowed in the remaining **southbound** lane on the 4th St Bridge

Traffic would be prohibited **northbound** on the 4th St Bridge, requiring turn restrictions and detours at 4th/Channel

Left turn restriction **northbound** at 4th/Berry



Legislation Approved in January

- Direct the City Traffic Engineer to approve temporary emergency transit lanes on 4th Street, northbound and southbound, between Berry Street and Channel Street
- To prevent unauthorized vehicles from accessing the northbound transit lane, temporarily restrict turns and thru traffic to northbound 4th Street at the intersection of 4th and Channel Streets
- Temporarily restrict left turns, northbound, from 4th Street onto Berry Street
- Temporary emergency transit lanes and turn restrictions must be removed within 120 days after emergency order expires if not approved for permanent legislation
- They may also be modified or even removed any time during the emergency in response to evaluation and feedback



Phased Northbound Implementation Plan

Initial Phase

- Install the southbound transit lane
- Restrict northbound left turns at 4th/Berry, install transit lane in left turn pocket
- Continue to allow northbound traffic on the 4th St Bridge

Traffic and transit delay will be evaluated

If traffic still causes transit delays, the **full project would be installed**





Evaluation

- Community input will shape how we evaluate the success of the project, with a focus on equity, health and economic recovery
- Public engagement and evaluation will guide whether and what longerterm improvements are pursued
- We've asked stakeholders: as we evaluate, which metrics are most important to focus on?



Outreach and Engagement (Fall 2020)

- Virtual public meeting (60 participants)
- Outreach to community-based organizations
- 5,000 e-mails to T-Third riders
- 5,200 community mailers
- 40 on-street posters
- Social media
- Project webpage
- Individual stakeholder briefings
- Stakeholder survey





Implementation Phasing



4th/Berry Before Project





4th/Berry Temporary Project







4th/Channel Temporary Project (Second phase, only if needed)



COVID-era Service Challenges





Distance reduces capacity to one-third







Program Benefits

- Equity: The project <u>reduces the</u> <u>risk of exposure for people who</u> <u>have the fewest travel choices</u> and ensures there is enough capacity on board, especially for lower-income people of color
- **Public Health:** Reducing crowding on transit is imperative to preventing the spread of COVID-19
- Economic Recovery: A strong economic recovery is dependent on an efficient transit system





Demographics of Survey Respondents

- About 1/3 of respondents reported their background as White, and another 1/3 as Asian.
- Those with a Latin/Hispanic background represented 8 percent and Black respondents numbered 3 percent
- Respondents reporting their native language as English made up 78 percent of replies. Other native speakers were from Mandarin, Cantonese, Spanish, and Russian backgrounds.



Central Subway Turn Restrictions

Left turn restrictions at 4th/King in the northbound and southbound directions are part of the approved Central Subway project, though not yet implemented

Implementation likely in Fall 2021 as Central Subway testing begins on the surface tracks at 4th/King

4th Street Bridge TETL has a northbound left turn restriction at 4th/Berry, which may help reduce residential cut through on Berry to 5th if made permanent



Evaluation

- Community input will shape how we evaluate the success of the project, with a focus on equity, health and economic recovery
- Public engagement and evaluation will guide whether and what longerterm improvements are pursued
- We've asked stakeholders: as we evaluate, which metrics are most important to focus on?

