

PROJECT BACKGROUND

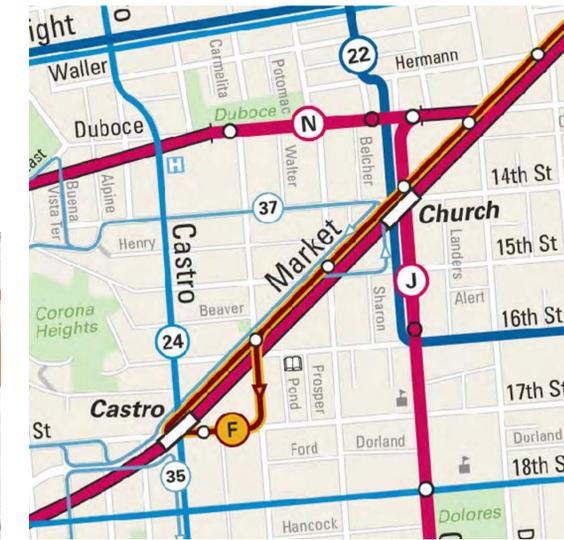
Project Needs

1. 17th Street between Church Street and Sanchez Street is identified as a location where there is a disproportionate number of crashes involving people riding bikes.
2. There is currently no marked bicycle facility at this location and people riding bikes must ride in mixed traffic on a street with rail tracks.
3. There is a significant number of bicyclists using 17th Street to avoid hills and access bicycle facilities north of Market Street, such as the Wiggle.

Bicycle Network



Muni Network

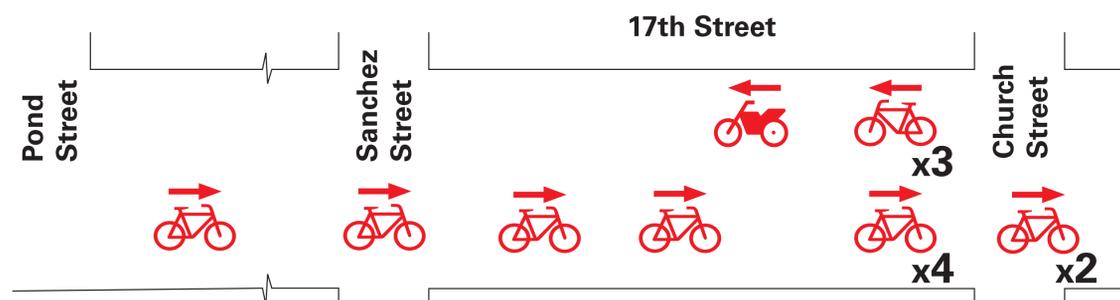


Key Considerations

Crash History

Within a 5 year period for 17th Street between Market Street and Church Street, 13 incidents of bicyclists and 1 incident of electric scooter crashing on the tracks were reported to the San Francisco Police Department. This is just a fraction of total crashes that occur. Many are unreported.

Diagram of Reported Crashes Involving Tracks



The majority of crashes involving the tracks on 17th Street occur midblock.

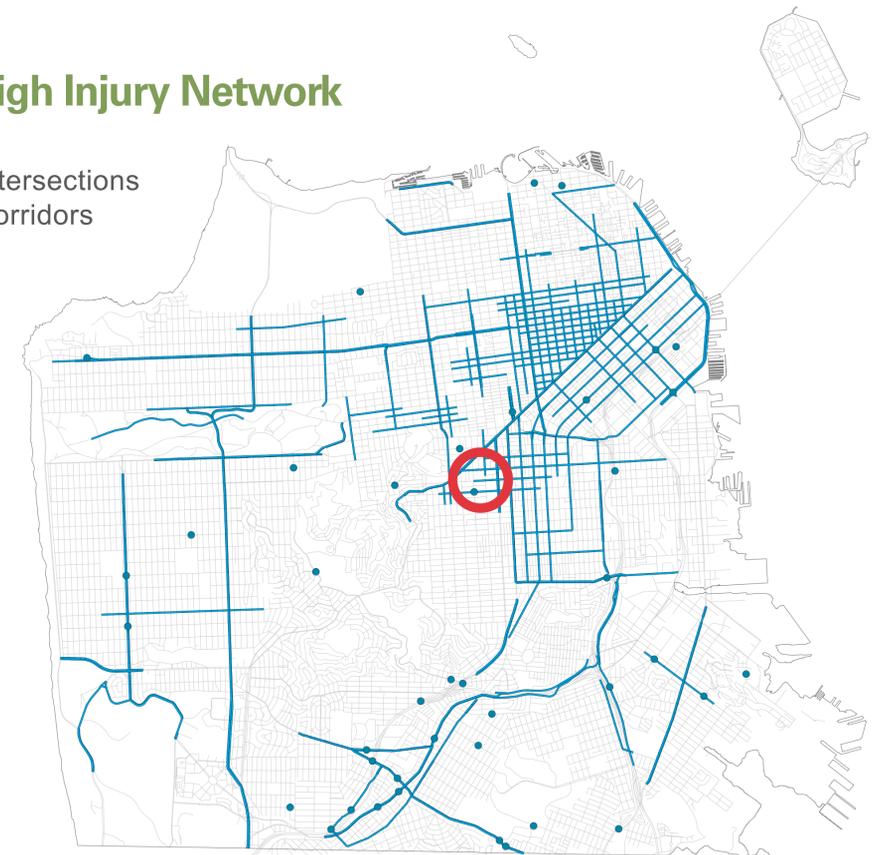
Vision Zero San Francisco

The City and County of San Francisco adopted Vision Zero San Francisco as a policy in 2014, committing an effort to prioritize street safety and eliminate traffic deaths and serious injuries in San Francisco by 2024.



Vision Zero High Injury Network

- High Injury Intersections
- High Injury Corridors



TRACKS & PAVEMENT

Maintaining the Tracks



- » The F line serves over 20,000 daily customers.
- » In 2017, the 17th Street tracks will resume carrying 20 streetcars a day into service to and from Cameron Beach Yard and for their return trip to the Cameron Beach Yard. Additionally, the many civic events (both planned and unplanned) necessitate the city to maintain tracks to allow transit to continue to operate during festivities.
- » While all of our tracks are not on revenue lines, all of our existing track is necessary for continued operation of our extensive rail system. No track work is planned to be removed in this corridor.
- » Streetcar service has been and will continue to be a vital part of our diverse transportation network.

Upgrading Pavement Around Tracks

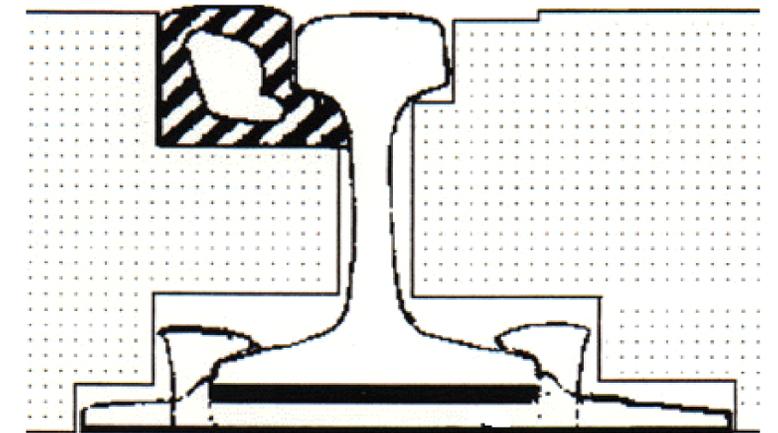


Pavement patching around the tracks has started. Additional pothole and pavement patchwork requests can be directed to 311.

At this time, there are no near-term plans to fully repave this section of 17th Street. This section of rail and pavement will not likely be replaced and upgraded in the next 15 years.

Flangeway Fillers

Though flangeway fillers seem like a promising product to fill in space along a rail where bicycle or wheelchair wheels can fall in, there has yet to be a product that can handle streetcar and light rail vehicle applications. Products so far can only handle heavy rail vehicles traveling on straight sections of rail at very low speeds (approx. 5 mph or less). Improved products are being developed and may be an option sometime in the future after appropriate testing.



Flangeway fillers are not yet available for the type of track and operations on 17th Street. Tracks and pavement will also need to be modified.

RECENT & PAST IMPROVEMENTS

Intersection Markings



In 2012, SFMTA added markings on the pavement to guide cyclists on a recommended path of travel through the intersection. The markings are intended to encourage cyclists to cross the tracks at a better angle. These markings were upgraded in 2014.

Pavement Work



Efforts have been made to fill in potholes and gaps along 17th Street west of Church Street.

Track Crossing & School Zone Signs



Starting in 2007, SFMTA has added warning signs to the intersection of 17th Street and Church Street in an effort to alert people about the presence of tracks. More recently, 15 mph school zone speed limit signs were installed.

Crosswalk Upgrades



Crosswalks on 17th Street were upgraded from standard markings to continental markings to provide higher visibility. The yellow color indicates that a school is nearby.

Red Zones



Red paint was applied to curbs on 17th Street west of Church Street to provide more room for cyclists to maneuver across the intersection. This treatment also helps increase visibility for all road users.

Curb Ramps



New curb ramps will be built and will help improve crossings along 17th Street, at Church Street and at Hartford Street, which will help people in wheelchairs navigate across the tracks more easily.

OTHER IDEAS CONSIDERED



Intersection Changes

Changes at the intersection can include:

- » Signal upgrades that allow cyclists and pedestrians to go before traffic (a “head-start”)
- » Left turn restrictions to simplify the intersection
- » Striping to better separate drivers and cyclists

A bike/pedestrian head start requires new signal heads, which means this older signal would need to be rebuilt to allow for more wires to be pulled through it, a 2 to 4 year process once funding is identified.

A No Left Turn sign for Church Street needs approval and may not be warranted here given it is a two-lane local road where turn prohibitions may be ignored.

One-Way Street

The idea to make 17th St one-way to create room for a marked bikeway does not work well with a set of tracks that operate as two-way, but other sections of 17th Street with no tracks could be made one-way to discourage traffic on the street.



Enforcement

Enforcement of speeding and double parking can improve conditions, but with limited resources that do not allow for 24-7 enforcement, design changes to the street are a more effective approach.



Traffic Calming

Traffic calming options become very limited for a street that has streetcar tracks as that precludes the ability to put in speed humps, islands, or chicanes that tighten the roadway and force drivers to slow.



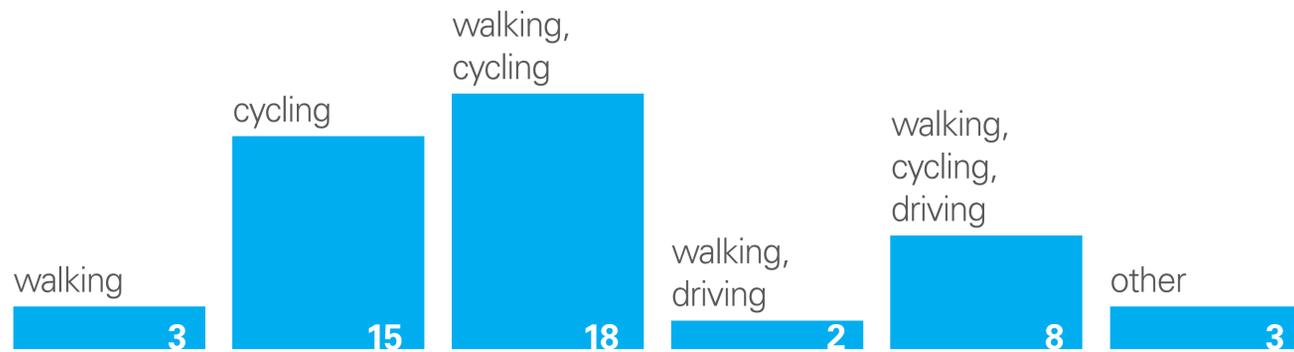
White Zones for Passenger Loading

This can help create space along a curb for people to pull over. Drivers do not always use curb space even when it is available, so there may still be double parking on the street. Passenger drop-offs and pick-ups occur with the school but also with people using taxis, Lyft, and Uber. White zones will be improved on Church Street to better accommodate Everett Middle School drop-off and pick-up.

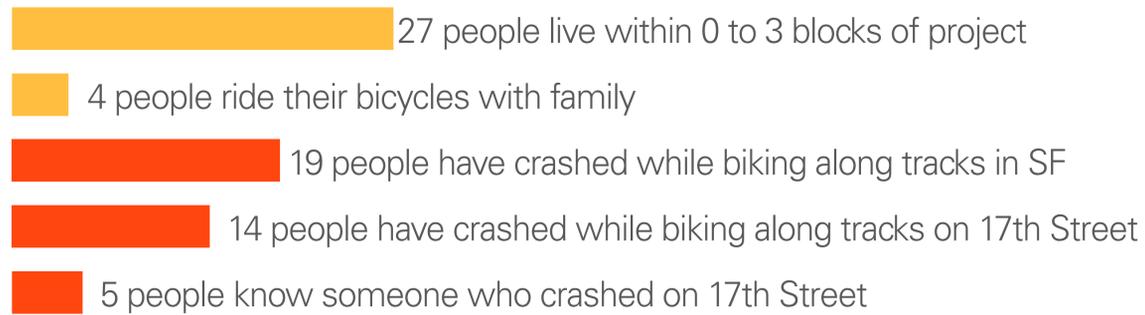
FEEDBACK WE HEARD

On February 22, 2017, SFMTA held an initial community meeting to share information about 17th Street between Church and Sanchez. During this meeting, SFMTA staff solicited comments about issues people experienced and welcomed thoughts about how to improve the safety of this street. Of the 57 people who attended the meeting, 49 submitted comments. The results are summarized below.

Commenter frequently travels on 17th Street by...



Of the 49 people who responded...

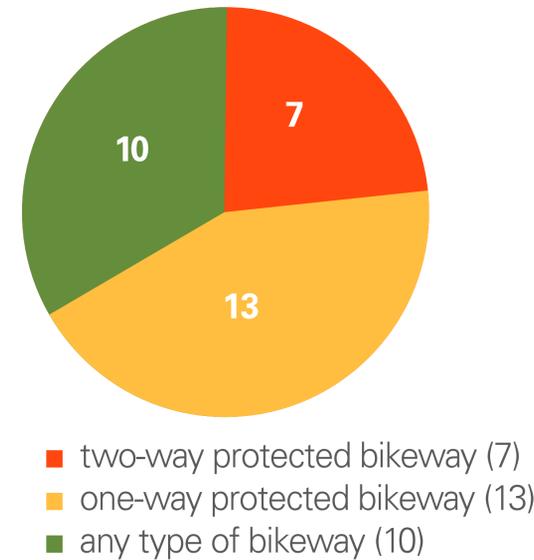


Opinions about tracks

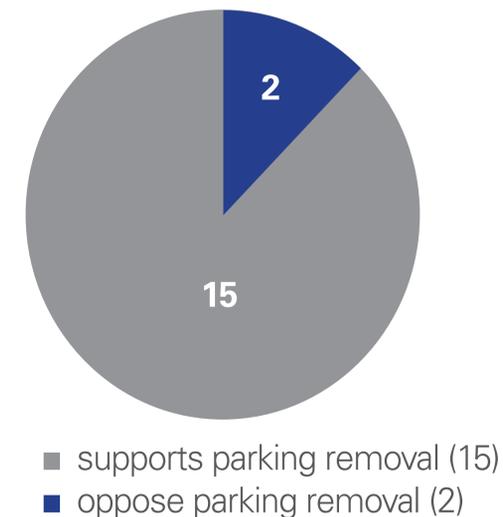


The SFMTA has considered this issue and has determined the tracks will remain to maintain operations and retain flexibility in the system for emergencies, construction, special events, etc.

Opinions about bikeway options



Opinions about on-street parking



SFMTA also conducted targeted outreach and inreach to the following stakeholders so far:

- » Neighborhood residents
- » Everett Middle School
- » Sanchez Elementary School
- » SF Fire Department
- » SF Police Department
- » SFMTA Muni
- » SFMTA Rail Change Control Board
- » SFMTA Accessible Services
- » SFMTA Enforcement

Potential Project Timeline

Conceptual Design
Spring/Summer 2017

Community Meeting #1
February 22, 2017

Community Meeting #2
June 15, 2017

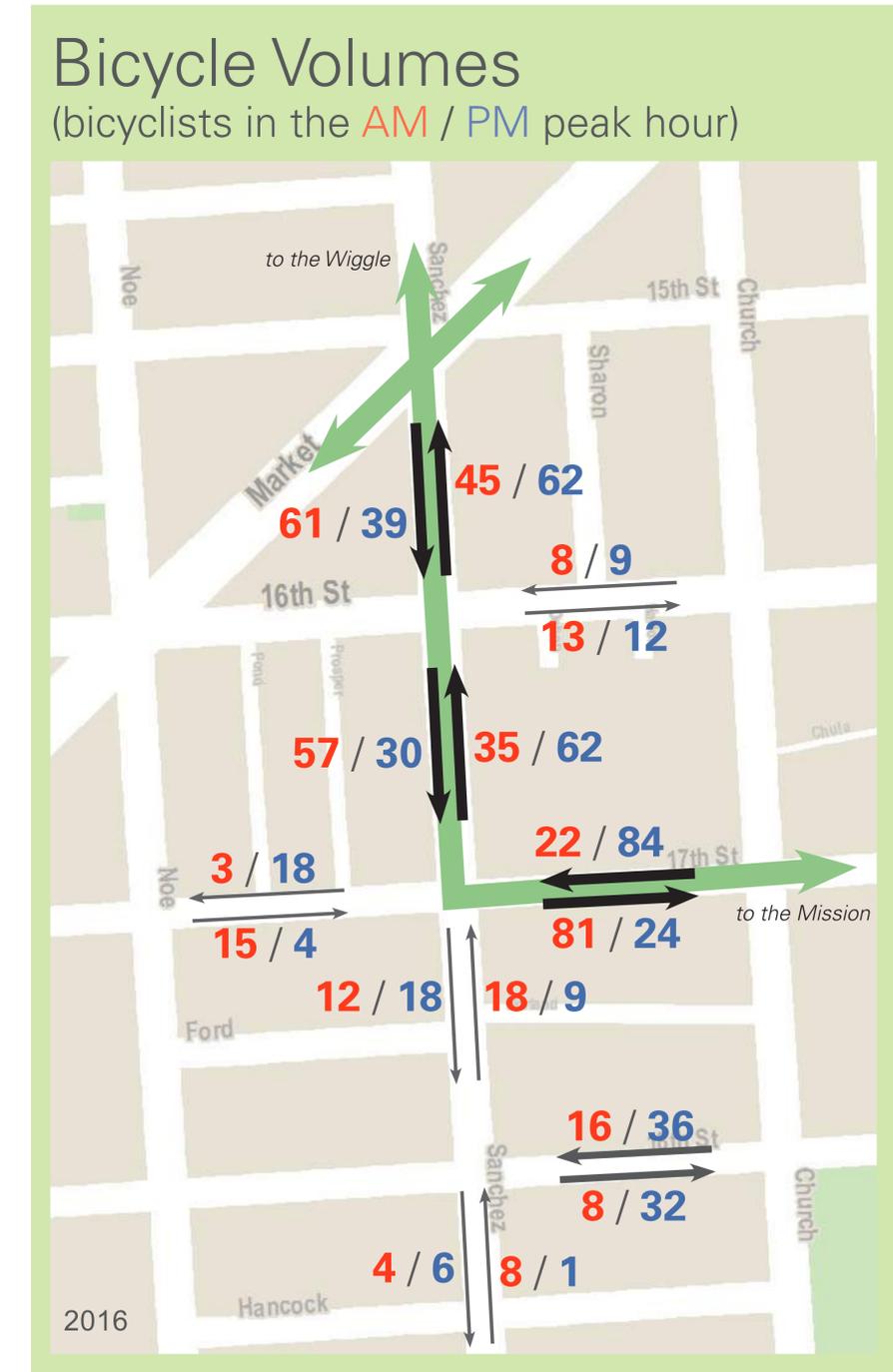
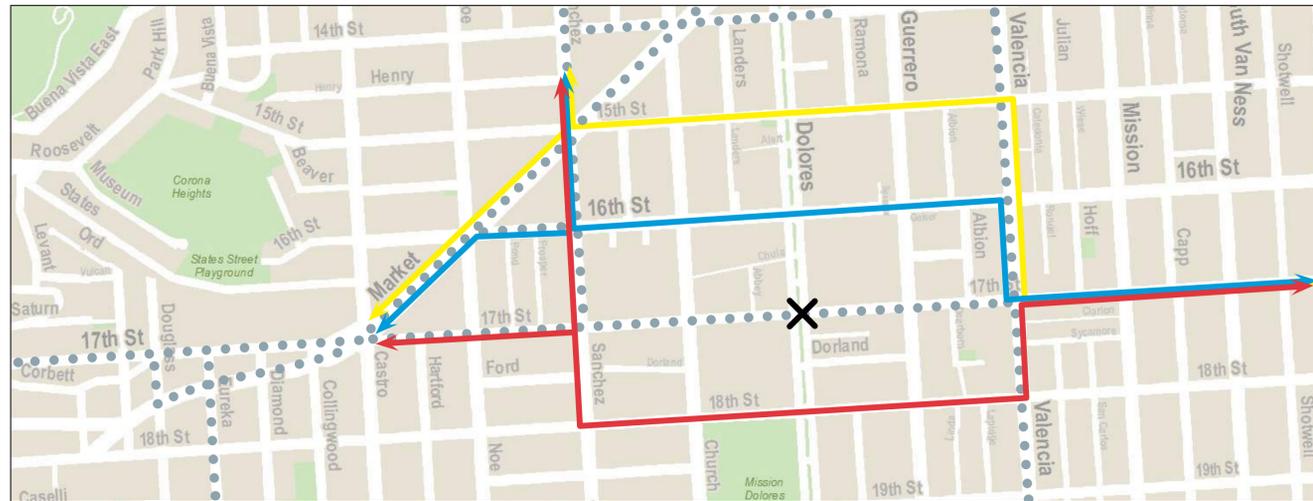
Public Hearing
Summer 2017

SFMTA Board Meeting (Final Approvals)
Summer/Fall 2017

Construction
Fall 2017

BICYCLE NETWORK CONNECTIONS

Requests to relocate the bike route from 17th Street to a parallel street have been studied. Given the connectivity of 17th Street and the lack of a very desirable alternate route, 17th Street will likely continue to see regular cycling use regardless of any alternate route designation. Therefore, the current proposal focuses on safety improvements to 17th Street between Church and Sanchez.



15th Street

Pros

- » No tracks
- » No transit-bicyclist interaction

Cons

- » Not a direct connection to the rest of 17th Street, which requires a jog involving more turns, including an additional left turn
- » Narrow and congested at times
- » Does not connect to 17th Street/Corbett bike route to the west
- » Parking removal needed for bikeway

16th Street

Pros

- » No tracks
- » Wider street

Cons

- » Not a direct connection to the rest of 17th Street, which requires a jog involving more turns, including an additional left turn
- » Lane or parking removal needed for bikeway
- » Transit is on 16th Street between Valencia Street and Church Street

18th Street

Pros

- » No tracks
- » Leads to the Castro neighborhood

Cons

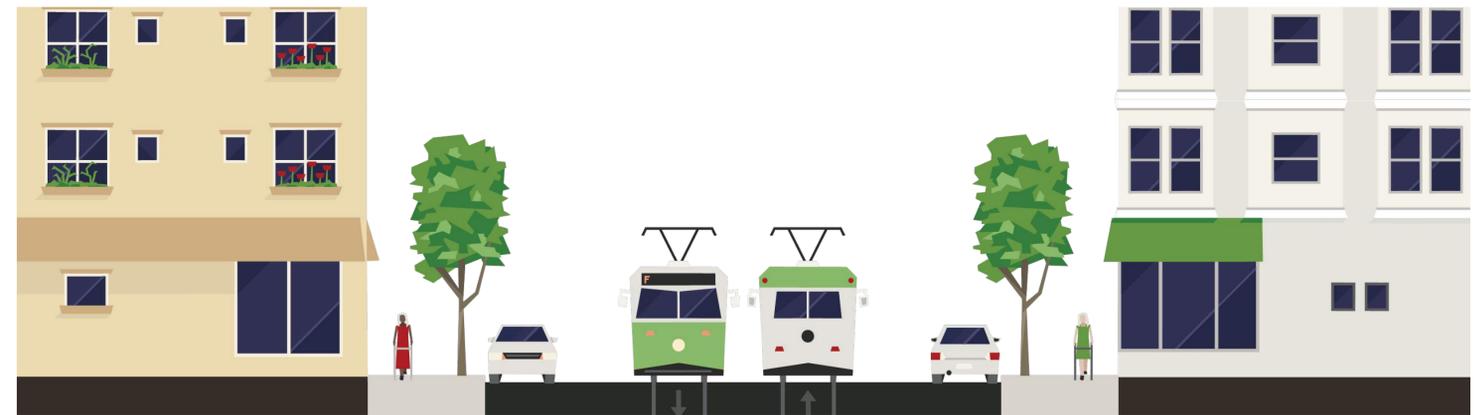
- » Not a direct connection to the rest of 17th Street, which requires a jog involving more turns, including an additional left turn
- » Narrow and congested at times
- » Transit is on 18th Street between Valencia Street and Sanchez Street
- » Parking removal needed for bikeway
- » Out of the way for people traveling between Sanchez Street and 17th Street

BIKEWAY DESIGN OPTIONS CONSIDERED

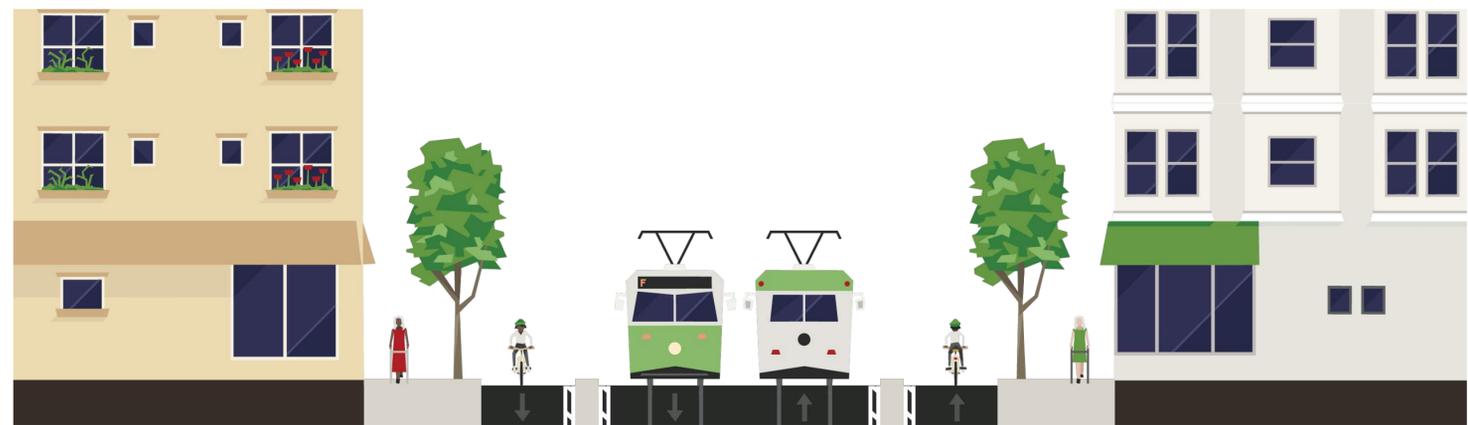
People traveling by bike on 17th Street between Church Street and Sanchez Street currently ride wherever there is room: between large transit vehicles and parked vehicles or by sharing the lane with moving streetcars and cars. While traveling in mixed traffic, bicyclists also have to watch out for double-parked vehicles and tracks in the roadway.

To address safety concerns and growing bicycle use, two conceptual protected bikeway designs were considered for 17th Street between Church Street and Sanchez Street.

Existing Conditions



One-Way Protected Bikeway



Advantages

- » Provides a protected bikeway on each side of the street
- » A more intuitive and predictable design at intersections

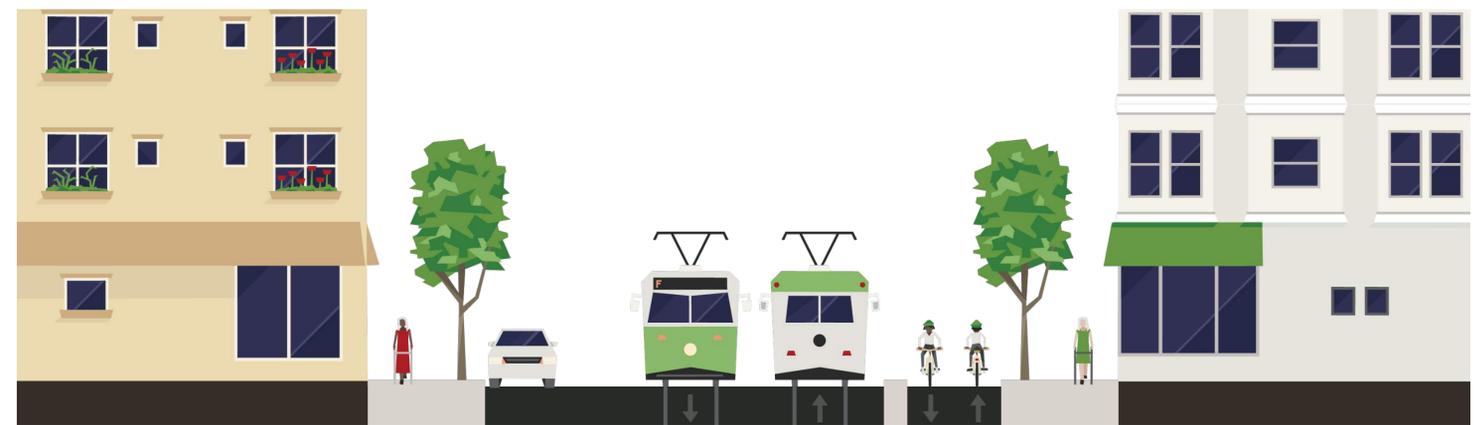
Challenges

- » Removes on-street parking on both sides of the street

Existing Parking on 17th Street from Church Street to Sanchez Street

North Side: 26 spaces
South Side: 19 spaces

Two-Way Protected Bikeway



Advantages

- » Provides a protected two-way bikeway

Challenges

- » Removes on-street parking on one side of the street
- » Complex and unusual transitions in and out of the two-way bikeway
- » Narrow bikeway
- » Causes more track crossings for some cyclists than today

Due to the challenges associated with a two-way bikeway, the proposal for this segment of 17th Street is the one-way protected bikeway.

PROPOSED ONE-WAY PROTECTED BIKEWAY

SFMTA considers a one-way protected bikeway as the best option to improve safety for all road users on 17th Street between Church and Sanchez. This design is based on the preference of those who submitted feedback to this project, technical feasibility, safety benefits, and growing bicycle use.



Features:

- A** Green pavement (actual extent may vary from illustration)
- B** Concrete islands (where possible)
- C** Maintain driveway access
- D** Tracks to remain
- E** Improve drop-off and pick-up space on Church Street for Everett Middle School
- F** Signal changes being explored to give cyclists and pedestrians a "head start"
- G** New curb ramps around intersection
- H** Posts placed where space is limited due to driveways

One-Way Protected Bikeway

looking west towards Sanchez

