

**THIS PRINT COVERS CALENDAR ITEM NO.: 13**

**SAN FRANCISCO  
MUNICIPAL TRANSPORTATION AGENCY**

**DIVISION:** Streets

**BRIEF DESCRIPTION:**

Approving the implementation of transportation safety and connectivity improvements including establishing new two-way Class IV protected bikeways on Battery Street from Market to Vallejo streets and pedestrian safety improvement on Sansome Street as part of the Battery/Sansome Quick-Build Project.



**SUMMARY:**

- The proposed protected bikeways on Battery Street provide a bike connection in the Financial District for those who work in, live in, and visit the area – addressing a gap in the citywide bike network and providing connectivity to the Sansome Battery Connections Project just north of the project boundaries.
- The Battery/Sansome Quick-Build Project proposes a two-way Class IV protected bikeway on Battery Street from Market to Vallejo streets, a travel lane reduction, left-turn restrictions and associated parking and loading changes.
- Additional pedestrian safety improvements such as daylighting, upgrading crosswalks to continental crosswalks, installing advanced limit lines and upgrading signal lens to larger sizes are proposed on Sansome Street, but do not require the SFMTA Board’s approval.
- On October 27, 2020, the San Francisco County Transportation Authority (SFCTA) Commission approved funding for the planning and construction of the Battery/Sansome Quick-Build Project as one of a group of six corridor quick-build projects.
- The Planning Department has determined that the Battery/Sansome Quick-Build Project is statutorily exempt from the California Environmental Quality Act (CEQA).
- The proposed action is the Approval Action as defined by the S. F. Administrative Code Chapter 31.

**ENCLOSURES:**

1. SFMTAB Resolution
2. Battery Street Existing and Proposed Cross-Section Graphics
3. Battery/Sansome Quick-Build Project Plans
4. Battery/Sansome Quick-Build Battery/Sansome Quick-Build Alternatives with Cross Sections

**APPROVALS:**

	<b>DATE</b>
DIRECTOR 	<u>August 31, 2022</u>
SECRETARY 	<u>August 31, 2022</u>

**ASSIGNED SFMTAB CALENDAR DATE:** September 6, 2022

## **PAGE 2**

### **PURPOSE**

Approving the implementation of transportation safety and connectivity improvements including establishing a new two-way Class IV protected bikeway on Battery Street from Market to Vallejo streets and pedestrian safety improvements on Sansome Street as part of the Battery/Sansome Quick-Build Project.

### **STRATEGIC PLAN GOALS AND TRANSIT FIRST POLICY PRINCIPLES**

This action supports the following SFMTA Strategic Plan Goals:

Goal 4: Make streets safer for everyone.

Goal 6: Eliminate pollution and greenhouse gas emissions by increasing use of transit, walking and bicycling.

This item will support the following Transit First Policy Principles:

1. To ensure quality of life and economic health in San Francisco, the primary objective of the transportation system must be the safe and efficient movement of people and goods.
2. Public transit, including taxis and vanpools, is an economically and environmentally sound alternative to transportation by individual automobiles. Within San Francisco, travel by public transit, by bicycle and on foot must be an attractive alternative to travel by private automobile.
3. Decisions regarding the use of limited public street and sidewalk space shall encourage the use of public rights of way by pedestrians, bicyclists, and public transit, and shall strive to reduce traffic and improve public health and safety.
4. Pedestrian areas shall be enhanced wherever possible to improve the safety and comfort of pedestrians and to encourage travel by foot.
5. Bicycling shall be promoted by encouraging safe streets for riding, convenient access to transit, bicycle lanes, and secure bicycle parking.

### **DESCRIPTION**

#### **Existing Conditions**

##### Battery Street

The project area includes both Battery and Sansome streets between Market and Vallejo streets in the Financial District and Barbary Coast neighborhood. Large, high-rise buildings with offices, ground floor shops, and services exist on sections of the project corridors south of Clay Street. North of Clay Street, there are more residential units among office buildings, shops, and restaurants. North of Vallejo Street, there are additional landmarks, such as Levi's Plaza and Fisherman's Wharf and Coit Tower to the west. Battery and Bush streets merge into 1<sup>st</sup> Street, an arterial to access the Bay Bridge, at Market Street.

## PAGE 3

Battery Street from Market to Broadway streets has three southbound travel lanes. On the northernmost section of Battery Street from Broadway to Vallejo streets (one block), there are two southbound travel lanes with buffers on both sides. Curb-to-curb roadway widths range from 45 to 55 feet along the corridor, while sidewalk width ranges from 11 to 11.5 feet. Class III shared lane markings (i.e., “sharrows”) are marked on the easternmost and westernmost lanes of Battery Street from Bush to Clay streets. There are no bike facilities on Battery Street from Clay to Vallejo streets. There is on-street parking and loading on both sides of the project extents.

For the five-year period from January 2017 to December 2021, there were 62 reported traffic collisions that resulted in injury on Battery Street. The top factor for injury collisions was red light signal violations. The second highest reason for injuries was speeding.

All intersections within the project area are signalized, except for Battery Street at Vallejo Street, which is controlled by all-way stop signs.

Golden Gate Transit bus routes 114, 132, 154, and 172 run morning service on Battery Street and evening service on Sansome Street. The Golden Gate Transit bus stops are located along the project area at:

- Battery Street at Broadway
- Battery Street at Jackson Street
- Battery Street at Sacramento Street
- Battery Street at Pine Street

Muni route 82X Levi’s Plaza Express is currently suspended and it is unknown when it will be restored. Prior to COVID-19, the 82X had bus stops at:

- Battery Street at Broadway
- Battery Street at Jackson Street

In addition, the PresidiGo shuttle bus serving destinations in the Presidio travels on Battery Street from Broadway to Clay streets but does not make stops to pick up or drop off passengers on Battery Street.

Battery Street is on the San Francisco Bicycle Network with existing Class III shared lane markings from Bush Street to Clay Street. There are currently no protected bikeway options in the Barbary Coast neighborhood and Financial District. There are also two bikeshare stations on and nearby the project corridor on Battery Street at California Streets and on Clay Street at Battery Street.

### Sansome Street

The project extents on Sansome Street are from Market to Vallejo streets and are approximately half a mile long. Under existing conditions, Sansome Street is one lane in each direction, with a second northbound lane available during the evening peak hours from 3pm to 7pm. In the southbound direction, there is a vehicle restriction that only allows for transit, commercial vehicles, taxis, and bikes to access Sansome Street every day, from 7am to 8pm. Bike sharrows

## PAGE 4

are also marked on Sansome Street from Market/Sutter to Washington streets. Roadway widths range from 44 feet 9 inches to 45 feet 10 inches along the corridor, while sidewalk widths are 12 feet. There is on street parking and loading on both sides of the street.

Sansome Street accommodates multiple daily Muni routes, Golden Gate Transit, and PresidiGo buses. Currently Muni route 12 Folsom travels on Sansome Street from Broadway to Clay streets. Muni bus stops are located along the project area at:

- Sansome Street at Sacramento Street (northbound)
- Sansome Street at Washington Street (northbound)
- Sansome Street at Jackson Street (southbound)

Muni route 82X Levi's Plaza Express, 10 Townsend and 30X Marina Express are currently suspended but previously ran and stopped on Sansome Street.

Golden Gate Transit routes 114, 132, 154 and 172 run on Sansome Street from the Embarcadero to Pine Street. The Golden Gate Transit bus stops are located along the project area at:

- Sansome Street at Sacramento Street
- Sansome Street at Pacific Avenue

Similar to Battery Street, PresidiGo also runs on Sansome Street, but in the northbound direction from Washington to Broadway streets. Sansome Street from Sacramento to Washington streets has overhead wires used for Muni trolley buses.

Over the past five years from January 2017 to December 2021, there were 34 reported traffic collisions that resulted in injury on Sansome Street. The top factor for injury collisions was due to drivers failing to yield to pedestrians in the crosswalk.

## Project Elements

### Bicycle Safety and Connectivity Improvements

The project proposes to improve connectivity and safety for people on bikes and scooters on Battery Street by dedicating roadway space with quick-build materials, such as paint and posts. The proposal on Battery Street includes a two-way, northbound and southbound Class IV protected bikeway on the eastside of Battery Street from Market to Vallejo streets. The project area is currently designated as a bike route with sharrows from Bush to Clay streets. Since a two-way bikeway is being proposed on Battery Street, a dedicated bikeway is not being proposed on Sansome Street.

The two-way Class IV bikeway will range from 8 to 12 feet in width. Proposed vehicle travel lane widths will range from 10 to 11 feet, compared to 10 feet in the existing condition. Bike boxes and two-stage turn boxes will be included in the proposal at intersections where intersecting bike routes are present to help facilitate bike turn movements, such as Broadway, Bush and Market streets.

## PAGE 5

The proposal will expand the network of protected bikeways and offer a safe option for people biking and riding scooters to access the northeastern portion of the city. The protected bikeways will help improve connectivity to the bike lanes that were installed as part of the Sansome Battery Connections Project, north of the project boundaries.

### Travel Lane Reduction

The proposal for Battery Street involves a lane reduction from three lanes to two lanes during off-peak hours to create space for a two-way Class IV bikeway. This improves pedestrian safety by creating on-street space for people on bikes and on scooters who might otherwise use the sidewalk. Lane reductions have also been shown to reduce the likelihood of speeding. To address concerns of congestion, the proposal also includes a peak-hour tow-away (Tow-Away, No Stopping Any Time) on the west side of Battery Street from Bush to Washington streets from 7am to 9am and 3pm to 7pm. At all other times, the west side of Battery Street will be parking and loading.

Based on a traffic analysis using traffic counts prior to COVID-19, the peak-hour tow-away lane from Bush to Washington streets and the permanent travel lane reduction from Washington to Broadway streets will continue to accommodate peak hour traffic. The project team will continue to monitor traffic counts and conditions following the implementation of the project.

### Left Turn Restrictions

The proposal for Battery Street also involves southbound left-turn restrictions at Broadway and at California Street. The left-turn restrictions are being proposed to reduce the potential for crashes and conflicts between left-turning vehicles and people biking in the northbound and southbound directions. Southbound left-turns will be maintained at Clay Street and at Jackson Street using signal timing and signal hardware changes.

### Pedestrian Safety Improvements

On Battery Street, the proposal includes a lane reduction from three lanes to two lanes, which reduces the likelihood of speeding and exposure of pedestrians to vehicles during off-peak hours. The project also proposes to install quick-build pedestrian safety improvements at intersections, such as upgrading existing crosswalks with continental crosswalks, advanced limit lines, and daylighting or red zones in advance of an intersection to improve visibility.

On Sansome Street, pedestrian safety improvements such as daylighting, continental crosswalks, and advanced limit lines are also being proposed. Upgrading signal lenses to larger sizes are also proposed on Sansome Street to improve traffic signal visibility.

These pedestrian safety improvements on Battery and Sansome streets do not require the SFMTA's Board approval.

### Parking and Loading Changes

Tow-Away, No Stopping Any Time curb restrictions will be established on the east side of Battery Street from Bush Street to Vallejo Street, except for the following three locations where

## PAGE 6

passenger loading zones will be maintained:

- Battery Street, east side, from 12 feet to 56 feet south of Broadway Street (750 Battery Street)
- Battery Street, east side, from 73 feet to 137 feet north of Broadway (820 Battery Street)
- Battery Street, east side, from 109 feet to 169 feet north of Washington Street (550 Battery Street)

The project proposals include adding new commercial loading zones on the westside of Battery Street and side streets to provide loading capacity to the project area. Approximately 70 parking and loading zones will be removed as part of the proposal, but 16 commercial loading zones will be replaced at new locations nearby the corridor. Comparatively, if the project pursued two separate bikeways on Battery and Sansome streets, there would be a cumulative impact of over 130 parking spaces removed between both corridors.

As mentioned in the Travel Lane Reduction section, during weekdays from 7am to 9am and 3pm to 7pm, the proposal includes a peak-hour tow-away lane between Bush Street and Washington Street to accommodate a third southbound travel lane. Therefore, during the morning and evening peak hours, there will be no parking and loading on Battery Street between Bush Street and Clay Street.

Bus stops will not be impacted (removed or relocated) as a result of this proposal.

### **Proposed Project Parking and Traffic Modifications**

Items A through F, Items H through L, Item P, Item R, Item S, Item U and Item V require SFMTA Board Approval. Further, although Transportation Code, Division II, Section 201 subsection (a) delegates to the City Traffic Engineer the authority to install color curb markings, including commercial loading zones, the City Traffic Engineer recommends that the SFMTA Board approve Items G, M, N, O, Q, and T as part of the Battery/Sansome Quick-Build Project.

- A. ESTABLISH – CLASS IV BIKEWAY – Battery Street, northbound and southbound, from Bush Street to Vallejo Street; Bush Street, eastbound and westbound, from Battery Street to Market Street
- B. ESTABLISH – NO LEFT TURN EXCEPT BICYCLES – Battery Street, southbound, at California Street; Battery Street, southbound, at Broadway
- C. ESTABLISH – NO TURN ON RED - Battery Street, southbound, at Clay Street  
Battery Street, southbound, at Jackson Street; Pacific Avenue, westbound, at Battery Street; Washington Street, westbound, at Battery Street; Sacramento Street, westbound, at Battery Street; Pine Street, westbound, at Battery Street
- D. ESTABLISH – TOW-AWAY NO STOPPING, 3PM to 7PM, MONDAY THROUGH FRIDAY – Battery Street, west side, from Bush Street to Pine Street; Battery Street, west

side, from Pine Street to California Street; Battery Street, west side, from California Street to Sacramento Street; Battery Street, west side, from Sacramento Street to Clay Street

- E. ESTABLISH – TOW-AWAY NO STOPPING, 7AM to 9AM, MONDAY THROUGH FRIDAY – Battery Street, west side, from California Street to Sacramento Street; Battery Street, west side, from Sacramento Street to Clay Street
- F. ESTABLISH – TOW-AWAY NO STOPPING ANY TIME – Battery Street, east side, from Bush Street to Pine Street; Battery Street, east side, from Pine Street to California Street; Battery Street, east side, from California Street to Sacramento Street; Battery Street, east side, from Sacramento Street to Clay Street; Battery Street, east side, from Clay Street to 135 feet northerly; Battery Street, east side, from Washington Street to 28 feet southerly; Battery Street, east side, from Jackson Street to Pacific Avenue; Battery Street, east side, from Pacific Avenue to 218 feet northerly; Battery Street, east side, from Broadway to 12 feet southerly; Battery Street, east side, from Broadway to 73 feet northerly; Battery Street, east side, from Vallejo Street to 138 feet southerly; Battery Street, west side, from Clay Street to Washington Street; Battery Street, west side, from 80 feet to 202 feet north of Washington Street; Battery Street, east side, from Washington Street to 109 feet northerly; Battery Street, east side, from Jackson Street to 105 feet southerly
- G. ESTABLISH – PASSENGER LOADING ZONE, 9AM to 3PM MONDAY THROUGH FRIDAY, 7AM to 7PM SATURDAY - Battery Street, west side, from 5 feet to 49 feet south of Sacramento Street
- H. ESTABLISH – TOW-AWAY NO STOPPING, 7AM to 9AM AND 3PM to 7PM, MONDAY THROUGH FRIDAY, PASSENGER LOADING AT ALL OTHER TIMES- Battery Street, west side, from Clay Street to 88 feet southerly
- I. ESTABLISH – TOW-AWAY NO PARKING, YELLOW METERED 6-WHEEL COMMERCIAL LOADING ONLY, 1-HOUR TIME LIMIT, 9AM to 3PM MONDAY TO FRIDAY – Battery Street, west side, from 61 feet to 83 feet north of Bush Street; Battery Street, west side, from 5 feet to 105 feet south of California Street; Battery Street, west side, from 20 feet to 124 feet north of California Street; Battery Street, west side, from 120 feet to 162 feet north of Sacramento Street
- J. ESTABLISH – TOW-AWAY NO PARKING, YELLOW METERED 6-WHEEL COMMERCIAL LOADING ONLY, 1-HOUR TIME LIMIT, 11AM to 3PM MONDAY TO FRIDAY – Battery Street, west side, from Pine Street to 77 feet southerly; Battery Street, west side, from 18 feet to 78 feet north of Sacramento Street
- K. ESTABLISH – TOW-AWAY NO PARKING, YELLOW METERED 6-WHEEL COMMERCIAL LOADING ONLY, 1-HOUR TIME LIMIT, 7AM to 6PM MONDAY THROUGH FRIDAY, PASSENGER LOADING 6 PM TO MIDNIGHT DAILY – Battery Street, east side, from 30 feet to 69 feet south of Washington Street

**PAGE 8**

- L. ESTABLISH – GENERAL METERED PARKING, 7AM to 6PM MONDAY THROUGH SATURDAY, PASSENGER LOADING 6 PM TO MIDNIGHT DAILY – Battery Street, east side, from 69 feet to 107 feet south of Washington Street
- M. ESTABLISH – RED ZONE – Battery Street, east side, from Merchant Street to 24 feet northerly; Sansome Street, east side, from 8 feet to 26 feet south of California Street
- N. ESTABLISH – PASSENGER LOADING AT ALL TIMES – Battery Street, west side, from 7 feet to 81 feet south of Vallejo Street; Battery Street, west side, from 29 feet to 80 feet north of Washington Street; Battery Street, east side, from 109 feet to 169 feet north of Washington Street
- O. ESTABLISH – PASSENGER LOADING, 7AM to 6PM MONDAY THROUGH SATURDAY – Battery Street, east side, from 12 feet to 56 feet south of Broadway
- P. ESTABLISH – TOW-AWAY NO PARKING, YELLOW METERED COMMERCIAL LOADING ONLY, 30-MINUTE TIME LIMIT, 7AM to 6PM MONDAY THROUGH FRIDAY, PASSENGER LOADING 6PM to 2AM DAILY – Battery Street, west side, from 25 feet to 67 feet north of Pacific Avenue
- Q. ESTABLISH – PASSENGER LOADING, 7AM to 10PM DAILY – Jackson Street, south side, from 27 feet to 71 feet east of Battery Street; Washington Street, north side, from 14 feet to 54 feet east of Battery Street; Battery Street, east side, from 73 to 137 feet north of Broadway
- R. RESCIND – NO STOPPING EXCEPT BICYCLES; RESCIND – BIKESHARE STATION Battery Street, west side, from 10 feet to 101 feet north of California Street
- S. RESCIND – MOTORCYCLE PARKING – Battery Street, west side, from 29 feet to 103 feet north of Washington Street
- T. RESCIND – PASSENGER LOADING ZONE, AT ALL TIMES – Battery Street, west side, from 103 feet to 175 feet north of Washington Street
- U. RESCIND – TOW-AWAY NO STOPPING EXCEPT LAW ENFORCEMENT VEHICLES – Battery Street, west side, from 175 feet to 202 feet north of Washington Street
- V. ESTABLISH – TOW-AWAY NO PARKING, YELLOW METERED COMMERCIAL LOADING ONLY, 30-MINUTE TIME LIMIT, 7 AM TO 6 PM, MONDAY THROUGH SATURDAY – Pacific Avenue, north side, from 55 feet to 99 feet east of Battery Street



## Designs Alternatives Considered

The project team assessed numerous design alternatives prior to making the recommendation of an eastside, two-way Class IV protected bikeway on Battery Street. The following details the alternatives considered and the associated tradeoffs and constraints. See Enclosure 4 for cross section diagrams of the design alternatives considered.

### Sansome Street

*Option 1* – Two travel lanes (one in each direction) with an eastside, northbound Class IV protected bikeway with floating parking and loading, where possible. No parking on the westside. With this design, additional considerations include:

- Transit in both directions may be impacted due to the lane reduction since the peak-hour tow-away lane would be repurposed for a full-time bikeway
- Transit boarding islands would need to be installed
- All parking and loading removed from westside of the street
- Challenges with overall design due to overhead wires and emergency vehicle operational and staging needs in the case of an emergency
- A southbound bikeway would still be needed on Battery Street for connectivity
- Additional parking and loading would still be removed to accommodate a southbound bikeway on Battery Street

*Option 2* – Two travel lanes (one in each direction) with an eastside, northbound Class IV bikeway with curbside parking on the westside of the street. No parking on the eastside.

With this design, additional considerations include:

- Transit in both directions may be impacted due to the lane reduction since the peak-hour tow-away lane would be repurposed for a full-time bikeway
- Transit boarding islands would need to be installed
- All parking and loading removed from eastside of the street
- The project would not meet the minimum clearance required for emergency response vehicles
- A southbound bikeway would still be needed on Battery Street for connectivity.
- Additional parking and loading would still be removed to accommodate a southbound bikeway on Battery Street

*Option 3* – Shared bus-bike lane (in both directions) and one northbound vehicle travel lane. Design maintains westside parking. With this design, additional considerations include:

- Challenges for transit to share lanes with people on bikes
- Potential safety challenges since bikeway is unprotected
- All parking and loading removed from eastside of the street. The peak-hour tow-away lane would be repurposed for a full time northbound vehicle travel lane

For options 1 and 2, additional parking and loading removal would be needed on Battery Street

to accommodate a southbound bikeway – reducing the overall parking and loading supply in the project area.

### Battery Street

**Option 4 – Eastside, two-way Class IV protected bikeway (recommended design).** The proposal would include a travel lane reduction from three lanes to two lanes but would maintain a third lane during the AM and PM peak periods between Bush and Washington streets. With this design, additional considerations include:

- Left turn restrictions at Battery/Broadway and Battery/California
- Most parking and loading removed from the eastside of the street
- No impacts to transit running on Battery Street
- Consolidated bikeways onto one street, reducing the cumulative parking and loading impacts between both Sansome and Battery streets
- Aligns with eastside, southbound bikeway on Battery Street north of Vallejo Street
- Meets requirements for minimum clearance for emergency response vehicles

**Option 5 – Westside, two-way Class IV protected bikeway with potential mixing zones.** A mixing zone is a design where turning vehicles and bicyclists share the same space. This design is intended to reduce the speed of turning vehicles and allow bicyclists to avoid being in the turning path of a vehicle but can be challenging to navigate. Similar to option 4, the proposals would include a travel lane reduction from three lanes to two lanes but would maintain a third lane during the AM and PM peak periods. With this design, additional considerations include:

- Potential conflicts with right-turning vehicles and through (northbound and southbound) bikes. There are six intersections where right turning vehicles conflict with people on bikes rather than four intersections where left turning vehicles conflict with people on bikes in option 4
- Most parking and loading removed from the westside of street
- The need to install transit boarding islands at the existing four bus stops on Battery Street
- Limited access to transit, paratransit vehicles and other special vehicles that require deploying a ramp onto the sidewalk
- Misalignment with an eastside bikeway north of Vallejo Street
- Consolidated bikeways onto one street, reducing the cumulative parking and loading impacts between both Sansome and Battery streets
- Meets requirements for minimum clearance for emergency response vehicles

**Option 6a – Eastside southbound Class IV protected bikeway.** The proposal would include a wider protected bikeway and a travel lane reduction from three lanes to two lanes on the whole corridor. With this design, additional considerations include:

- Left turn restrictions at Battery/Broadway and Battery/California
- Most parking and loading removed from eastside of the street
- No impacts to transit running on Battery Street
- A northbound bikeway would still be needed on Sansome Street for connectivity

## PAGE 11

- Additional parking and loading would still be removed to accommodate a northbound bikeway on Sansome Street

*Option 6b* - Eastside southbound Class IV protected bikeway. The proposal would include a protected bikeway and maintain three travel lanes from Market to Broadway streets. With this design, additional considerations include:

- Left turn restrictions at Battery/Broadway and Battery/California
- Most parking and loading removed from eastside of the street
- No impacts to transit running on Battery Street
- A narrower (4.5 feet) bikeway may be uncomfortable at pinch point locations
- A northbound bikeway would still be needed on Sansome Street for connectivity
- Additional parking and loading would still be removed to accommodate a northbound bikeway on Sansome Street

*Option 6c* – Westside southbound Class IV bikeway. The proposal would include a wider protected bikeway and a travel lane reduction from three lanes to two lanes on the whole corridor. With this design, additional considerations include:

- Increases conflict points between right-turning vehicles and through bikes
- Most parking and loading removed from westside of street
- The need to install transit boarding islands at the existing four bus stops on Battery Street
- Limited access to transit, paratransit vehicles and other special vehicles that require deploying a ramp onto the sidewalk
- Misalignment with an eastside bikeway north of Vallejo Street
- A northbound bikeway would still be needed on Sansome Street for connectivity
- Additional parking and loading would still be removed to accommodate a northbound bikeway on Sansome Street

*Option 6d* – Westside southbound Class IV bikeway. The proposal would include a protected bikeway and maintain three travel lanes from Market to Broadway streets. With this design, additional considerations include:

- Increases conflict points between right-turning vehicles and through bikes
- Most parking and loading removed from westside of street
- The need to install transit boarding islands at the existing four bus stops on Battery Street
- Limited access to transit, paratransit vehicles and other special vehicles that require deploying a ramp on to the sidewalk
- Misalignment with an eastside bikeway north of Vallejo Street
- A northbound bikeway would still be needed on Sansome Street for connectivity
- Additional parking and loading would still be removed to accommodate a northbound bikeway on Sansome Street
- A narrower (4.5 feet) bikeway may be uncomfortable at pinch point locations

For options 6a through 6d, additional parking and loading removal would be needed on Sansome Street to accommodate a northbound bikeway – reducing the overall parking and loading supply

in the project area. There would also be impacts to transit.

### **Class IV Protected Bikeway**

As discussed above, a Class IV protected bikeway is proposed on Battery Street from Market to Vallejo streets.

A Class IV bikeway is a bikeway for the exclusive use of bicycles and includes a required separation between the bikeway and vehicle traffic. The project will use a combination of parking lanes and plastic delineators as physical separation. Vehicular encroachment into unprotected bike lanes is a frequent occurrence, forcing people who ride bikes to merge into the vehicle lane when blocked. The proposed protected bike lane will reduce the frequency of vehicles stopped in the bike lanes, improve safety, and provide a more inviting facility and a greater sense of comfort for bicyclists.

Separated bikeways are authorized under California State law (Assembly Bill No. 1193 effective January 1st, 2015). Section 891 of the Streets and Highways Code provides that agencies responsible for the development or operation of bikeways or roadways where bicycle travel is permitted may utilize minimum safety design criteria other than those established by Section 890.6 if all of the following conditions are met:

1. The alternative criteria are reviewed and approved by a qualified engineer with consideration for the unique characteristics and features of the proposed bikeway and surrounding environs;
2. The alternative criteria, or the description of the project with reference to the alternative criteria, are adopted by resolution at a public meeting, after having provided proper notice of the public meeting and opportunity for public comment; and
3. The alternative criteria adhere to guidelines established by a national association of public agency transportation officials.

The proposed protected bikeway on Battery Street meets these three conditions. The alternative criteria for the protected bikeway design have been reviewed and approved by a qualified engineer before installation. The alternative criteria for the project are to discourage motor vehicles from encroaching or double parking in the bicycle lane, provide a more inviting facility and a greater sense of comfort for bicyclists, and provide a greater perception of safety for bicyclists. The SFMTA Board of Directors will adopt these alternative criteria as part of this duly noticed calendar item with opportunity for public comment. Lastly, the project's alternative criteria adhere to guidelines set by the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide, Federal Highway Administration Separated Bike Lane Planning and Design Guide, and California Department of Transportation Design Bulletin Information Number 89 Class IV Bikeway Guidance. The NACTO guidelines state that parking-protected bikeways require the following features:

- Like a bike lane, a separated bikeway is a type of preferential lane as defined by the Manual on Uniform Traffic Control Devices (MUTCD).

- Bicycle lane word, symbol, and/or arrow markings shall be placed at the beginning of a cycle track and periodic intervals along the facility based on engineering judgment.
- If pavement markings are used to separate motor vehicle parking lanes from the preferential bicycle lane, solid white lane line markings shall be used. Diagonal crosshatch markings may be placed in the neutral area for special emphasis. Raised medians or other barriers can also provide physical separation to the cycle track.

The separated bikeways for Battery Street will conform to these NACTO design guidelines. The separated bikeway will also conform to best practices and design standards, including design guidelines developed jointly by the SFMTA, Mayor's Office on Disability, and San Francisco Public Works to ensure accessibility for all street users. It was also reviewed by the San Francisco Fire Department.

### **Stakeholder Engagement**

The SFMTA conducted outreach with community groups throughout the course of the project. Initial outreach, in summer to fall 2021, began by conducting door-to-door outreach with merchants to introduce the project and to get a better understanding of loading needs through a survey. The project team went door-to-door with the survey and informational materials two times in person during that period. Due to the ongoing changes with COVID-19 at the time, instead of pursuing another round of in-person outreach, the project team sent over 300 mailers to commercial retailers in the area to further introduce the project with an invitation to participate in the loading survey. Later in the year and through 2022, additional project introductions were made to groups, including the Downtown Community Benefits District, Jackson Square Merchants Association, Kai Ming Head Start Child Care Center, Barbary Coast Neighborhood Association, District 3 Supervisor Aaron Peskin's Office, and the SFMTA Bicycle Advisory Committee.

### Virtual Open House

Due to the numerous roadway constraints between the corridors as described above, there was one recommended alternative that was conceptually shared with the community through a virtual open house using ArcGIS's Storymap. The virtual open house was open for a two-week period in spring 2022 and gained 1,200 views in the English version and over 50 views in the Chinese version. The virtual open house was shared with the public through project mailers, utilizing the project listserv, the District 3 Office's newsletter, and posters throughout the corridors. Additionally, the project team held a pop-up event on the Battery Street frontage of the Embarcadero Center to share project information. Virtual office hours were also held so that community members could ask questions and have a dialogue with the project team. A survey was distributed as part of the virtual open house – over 50 responses were received, with a majority of respondents in support of the two-way bikeway concept on Battery Street. Additional comments and themes included: concerns of congestion with the lane reduction, interest in how left-turn restrictions would be enforced for bike safety, interest in a direct bikeway to and from the Financial District, and concerns of parking and loading removal as part of the project. In regard to these concerns, the project proposal includes a morning and evening peak hour tow-

away lane from Bush to Washington streets to alleviate congestion. Additional commercial and passenger loading is proposed on the westside of the street and side streets and maintained on sections of the eastside of the street to facilitate loading needs.

### Follow Up Outreach

Following the open house, the project team received feedback from the Barbary Coast Neighborhood Association, the Gateway Tenants Association, and residents of the Gateway (550 Battery Street and 430 Davis Court). Concerns were raised regarding turn restrictions, congestion, circulation in the neighborhood, passenger loading for residents who are seniors and people with disabilities, and the lack of need for a bikeway on Battery Street. To address these concerns, the project team made the following adjustments to the design:

- Maintaining the southbound left-turn at Battery onto Jackson Street to provide additional access to the Gateway's parking garage through traffic signal hardware changes and timing adjustments. The initial conceptual design proposed a southbound left turn restriction at this intersection.
- The initial proposal involved removing most of the parking and loading on the Battery Street frontage of the Gateway apartments. The project team proposed to move the needed passenger loading zones to both Washington and Jackson streets, but due to visibility and public safety concerns, the project team updated the design to accommodate a floating loading zone that is visible from the front doors and elevators of the building.
- In order to address congestion, the original proposal included a peak-hour tow away lane that would increase the number of vehicle lanes from two to three between Bush and Washington streets to alleviate congestion.

The project team reviewed emails from residents, as well as responses to a survey that the Gateway Tenants Association developed for their residents. The feedback from the Gateway community was valuable as the project team continued iterating the project designs to meet the needs of the community.

Additional design elements were also adjusted based off community feedback, including:

- Maintaining three of the four passenger loading zone on the eastside of Battery Street (550 Battery, 750 Battery and Kai Ming Head Start)
- New commercial loading zones at Battery/Pine and Battery Sacramento when Golden Gate Transit is not in service
- New loading zones on cross streets

The project team is holding the public hearing at the SFMTA Board meeting on September 6, 2022, to consider approving the project for implementation.

### **Emergency Access**

To maintain appropriate emergency access for the San Francisco Fire Department, San Francisco Police Department, and other first responders, the project proposal will:

## **PAGE 15**

- Install a bikeway that is 14-foot wide (including the bikeway and buffer) that could be used for emergency access in the event of an emergency.
- Install Opticom Emergency Vehicle Preemption receivers on traffic signals along the project corridor to allow emergency vehicle priority.

## **FUNDING IMPACT**

Funding for the proposed traffic modifications is provided by the San Francisco County Transportation Authority Prop B, D, and K funds in the amount of \$596,000. The total project cost is broken down into the following project phases:

- Planning and engineering - \$180,000 (Prop B, D and K)
- Construction - \$416,000 (Prop D and K)

## **ENVIRONMENTAL REVIEW**

The proposed Battery/Sansome Quick-Build Project is subject to the California Environmental Quality Act (CEQA). CEQA provides a statutory exemption from environmental review for pedestrian and bicycle facilities, including new facilities, pursuant to Public Resources Code Section 21080.25.

The Planning Department determined, on August 2, 2022, that the proposed Battery/Sansome Quick-Build Project (Case Number 2022-004864ENV) is statutorily exempt from CEQA pursuant to Public Resources Code Section 21080.25.

The proposed action is the Approval Action as defined by the S.F. Administrative Code Chapter 31.

A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors, and may be found in the records of the Planning Department at <https://sfplanninggis.org/pim/?tab=Planning+Applications&search=2022-004864ENV> and 49 South Van Ness Avenue, Suite 1400 in San Francisco, and is incorporated herein by reference.

## **OTHER APPROVALS RECEIVED OR STILL REQUIRED**

The City Attorney has reviewed this report.

## **RECOMMENDATION**

SFMTA staff recommend that the SFMTA Board approve the implementation of transportation safety and connections improvements, as set forth in Items A through V above, including establishing new Class IV protected bikeways on Battery Street between Market and Vallejo streets as part of the Battery/Sansome Quick-Build Project.

SAN FRANCISCO  
MUNICIPAL TRANSPORTATION AGENCY  
BOARD OF DIRECTORS

RESOLUTION No. \_\_\_\_\_

WHEREAS, The San Francisco Municipal Transportation Agency is committed to achieving the Vision Zero goal of eliminating transportation related fatalities; and

WHEREAS, The San Francisco Municipal Transportation Agency is committed to making San Francisco a Transit First city that prioritizes non-private automobile transportation; and

WHEREAS, The San Francisco Municipal Transportation Agency is committed to creating a network of protected bikeways citywide; and

WHEREAS, The San Francisco Municipal Transportation Agency has proposed the installation of a two-way protected bikeway and parking and traffic modifications along Battery Street from Market to Vallejo streets as follows:

- A. ESTABLISH – CLASS IV BIKEWAY – Battery Street, northbound and southbound, from Bush Street to Vallejo Street; Bush Street, eastbound and westbound, from Battery Street to Market Street
- B. ESTABLISH – NO LEFT TURN EXCEPT BICYCLES – Battery Street, southbound, at California Street; Battery Street, southbound, at Broadway
- C. ESTABLISH – NO TURN ON RED - Battery Street, southbound, at Clay Street  
Battery Street, southbound, at Jackson Street; Pacific Avenue, westbound, at Battery Street; Washington Street, westbound, at Battery Street; Sacramento Street, westbound, at Battery Street; Pine Street, westbound, at Battery Street
- D. ESTABLISH – TOW-AWAY NO STOPPING, 3PM to 7PM, MONDAY THROUGH FRIDAY – Battery Street, west side, from Bush Street to Pine Street; Battery Street, west side, from Pine Street to California Street; Battery Street, west side, from California Street to Sacramento Street; Battery Street, west side, from Sacramento Street to Clay Street
- E. ESTABLISH – TOW-AWAY NO STOPPING, 7AM to 9AM, MONDAY THROUGH FRIDAY – Battery Street, west side, from California Street to Sacramento Street; Battery Street, west side, from Sacramento Street to Clay Street
- F. ESTABLISH – TOW-AWAY NO STOPPING ANY TIME – Battery Street, east side, from Bush Street to Pine Street; Battery Street, east side, from Pine Street to California Street; Battery Street, east side, from California Street to Sacramento Street; Battery Street, east side, from Sacramento Street to Clay Street; Battery Street, east side, from Clay Street to 135 feet northerly; Battery Street, east side, from Washington Street to 28 feet southerly; Battery Street, east side, from Jackson Street to Pacific Avenue; Battery Street, east side, from Pacific Avenue to 218 feet northerly; Battery Street, east side, from Broadway to 12 feet southerly; Battery Street, east side, from Broadway to 73 feet northerly; Battery Street, east side, from Vallejo Street to 138 feet southerly; Battery Street, west side, from Clay Street to Washington Street; Battery Street, west side, from 80 feet to 202 feet north of Washington Street; Battery Street, east side, from Washington Street to 109 feet northerly; Battery Street, east side, from Jackson Street to 105 feet



southerly

- G. ESTABLISH – PASSENGER LOADING ZONE, 9AM to 3PM MONDAY THROUGH FRIDAY, 7AM to 7PM SATURDAY - Battery Street, west side, from 5 feet to 49 feet south of Sacramento Street
- H. ESTABLISH – TOW-AWAY NO STOPPING, 7AM to 9AM AND 3PM to 7PM, MONDAY THROUGH FRIDAY, PASSENGER LOADING AT ALL OTHER TIMES- Battery Street, west side, from Clay Street to 88 feet southerly
- I. ESTABLISH – TOW-AWAY NO PARKING, YELLOW METERED 6-WHEEL COMMERCIAL LOADING ONLY, 1-HOUR TIME LIMIT, 9AM to 3PM MONDAY TO FRIDAY – Battery Street, west side, from 61 feet to 83 feet north of Bush Street; Battery Street, west side, from 5 feet to 105 feet south of California Street; Battery Street, west side, from 20 feet to 124 feet north of California Street; Battery Street, west side, from 120 feet to 162 feet north of Sacramento Street
- J. ESTABLISH – TOW-AWAY NO PARKING, YELLOW METERED 6-WHEEL COMMERCIAL LOADING ONLY, 1-HOUR TIME LIMIT, 11AM to 3PM MONDAY TO FRIDAY – Battery Street, west side, from Pine Street to 77 feet southerly; Battery Street, west side, from 18 feet to 78 feet north of Sacramento Street
- K. ESTABLISH – TOW-AWAY NO PARKING, YELLOW METERED 6-WHEEL COMMERCIAL LOADING ONLY, 1-HOUR TIME LIMIT, 7AM to 6PM MONDAY THROUGH FRIDAY, PASSENGER LOADING 6 PM TO MIDNIGHT DAILY – Battery Street, east side, from 30 feet to 69 feet south of Washington Street
- L. ESTABLISH – GENERAL METERED PARKING, 7AM to 6PM MONDAY THROUGH SATURDAY, PASSENGER LOADING 6 PM TO MIDNIGHT DAILY – Battery Street, east side, from 69 feet to 107 feet south of Washington Street
- M. ESTABLISH – RED ZONE – Battery Street, east side, from Merchant Street to 24 feet northerly; Sansome Street, east side, from 8 feet to 26 feet south of California Street
- N. ESTABLISH – PASSENGER LOADING AT ALL TIMES – Battery Street, west side, from 7 feet to 81 feet south of Vallejo Street; Battery Street, west side, from 29 feet to 80 feet north of Washington Street; Battery Street, east side, from 109 feet to 169 feet north of Washington Street
- O. ESTABLISH – PASSENGER LOADING, 7AM to 6PM MONDAY THROUGH SATURDAY – Battery Street, east side, from 12 feet to 56 feet south of Broadway
- P. ESTABLISH – TOW-AWAY NO PARKING, YELLOW METERED COMMERCIAL LOADING ONLY, 30-MINUTE TIME LIMIT, 7AM to 6PM MONDAY THROUGH FRIDAY, PASSENGER LOADING 6PM to 2AM DAILY – Battery Street, west side, from 25 feet to 67 feet north of Pacific Avenue
- Q. ESTABLISH – PASSENGER LOADING, 7AM to 10PM DAILY – Jackson Street, south side, from 27 feet to 71 feet east of Battery Street; Washington Street, north side, from 14 feet to 54 feet east of Battery Street; Battery Street, east side, from 73 to 137 feet north of Broadway
- R. RESCIND – NO STOPPING EXCEPT BICYCLES; RESCIND – BIKESHARE STATION – Battery Street, west side, from 10 feet to 101 feet north of California Street
- S. RESCIND – MOTORCYCLE PARKING – Battery Street, west side, from 29 feet to 103 feet north of Washington Street
- T. RESCIND – PASSENGER LOADING ZONE, AT ALL TIMES – Battery Street, west

side, from 103 feet to 175 feet north of Washington Street

- U. RESCIND – TOW-AWAY NO STOPPING EXCEPT LAW ENFORCEMENT VEHICLES – Battery Street, west side, from 175 feet to 202 feet north of Washington Street
- V. ESTABLISH – TOW-AWAY NO PARKING, YELLOW METERED COMMERCIAL LOADING ONLY, 30-MINUTE TIME LIMIT, 7 AM TO 6 PM, MONDAY THROUGH SATURDAY – Pacific Avenue, north side, from 55 feet to 99 feet east of Battery Street; and

WHEREAS, Although the City Traffic Engineer has the authority to install color curb markings, the SFMTA Board is requested to approve color curb markings for Items G, M, N, O, Q, and T as part of the Battery/Sansome Quick-Build Project; and

WHEREAS, The public has been notified about the proposed modifications and has been given the opportunity to comment on those modifications through the public hearing process; and

WHEREAS, The proposed Battery/Sansome Quick-Build Project is subject to the California Environmental Quality Act (CEQA); CEQA provides a statutory exemption from environmental review for pedestrian and bicycle facilities, including new facilities, pursuant to Public Resources Code Section 21080.25; and

WHEREAS, the Planning Department determined on August 2, 2022 that the proposed Battery/Sansome Quick-Build Project (Case Number 2022-004864ENV) is statutorily exempt from CEQA pursuant to Public Resources Code Section 21080.25; and

WHEREAS, The proposed action is the Approval Action as defined by the S. F. Administrative Code Chapter 31; and

WHEREAS, A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors, and may be found in the records of the Planning Department at <https://sfplanninggis.org/pim/?tab=Planning+Applications&search=2022-004864ENV> and 49 South Van Ness Avenue, Suite 1400 in San Francisco, and is incorporated herein by reference; now therefore be it

RESOLVED, That the San Francisco Municipal Transportation Agency Board of Directors approves the proposed parking and traffic modifications associated with the Battery/Sansome Quick-Build Project listed as Items A-V above.

I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of September 6, 2022.

---

Secretary to the Board of Directors  
San Francisco Municipal Transportation Agency

## Enclosure 2: Battery Street Existing and Proposed Cross-Section Graphics

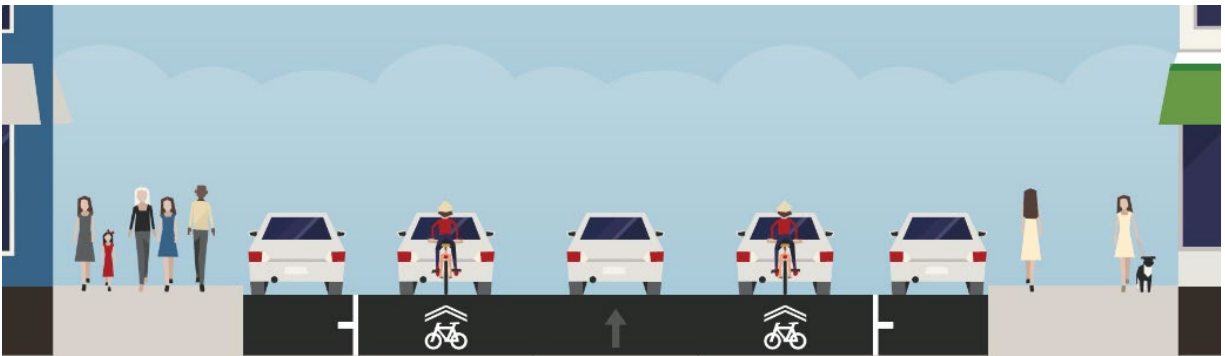


Figure 1: Typical Cross Section of Existing Conditions on Battery Street from Bush to Broadway streets (looking south)<sup>1</sup>

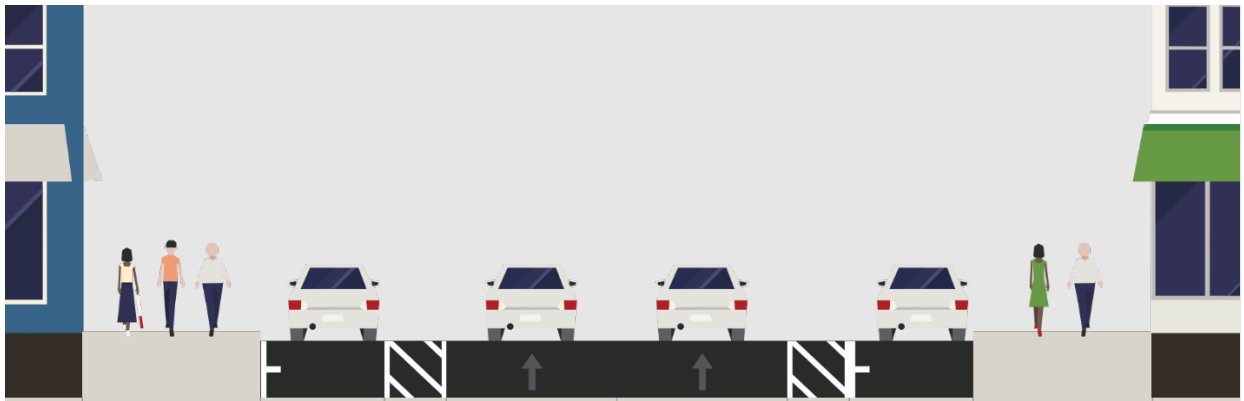


Figure 2: Typical Cross Section of Existing Conditions on Battery Street from Broadway to Pacific streets (looking south)

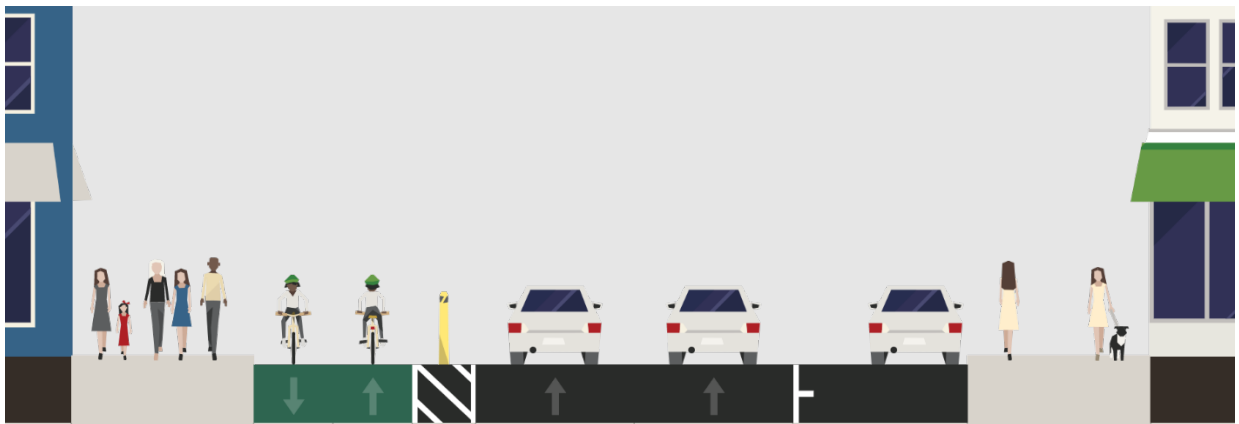


Figure 3: Proposed Cross Section of Battery Street from Bush to Broadway streets (looking south)

<sup>1</sup> Shared lane markings or “sharrows” are marked on Battery Street from Bush to Clay streets

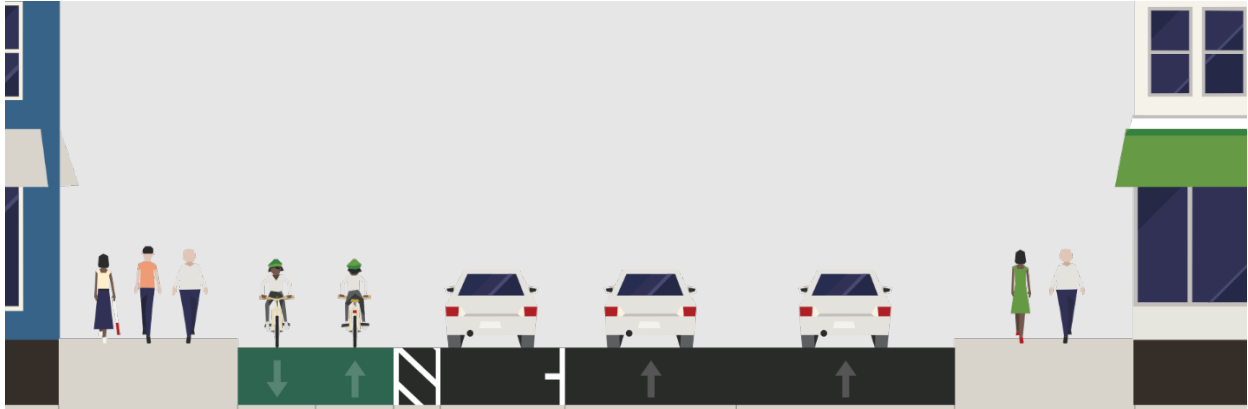


Figure 4: Proposed Cross Section of Battery Street from Broadway to Pacific streets (looking south)

Enclosure 3: Battey/Sansome Quick-Build Project Plan

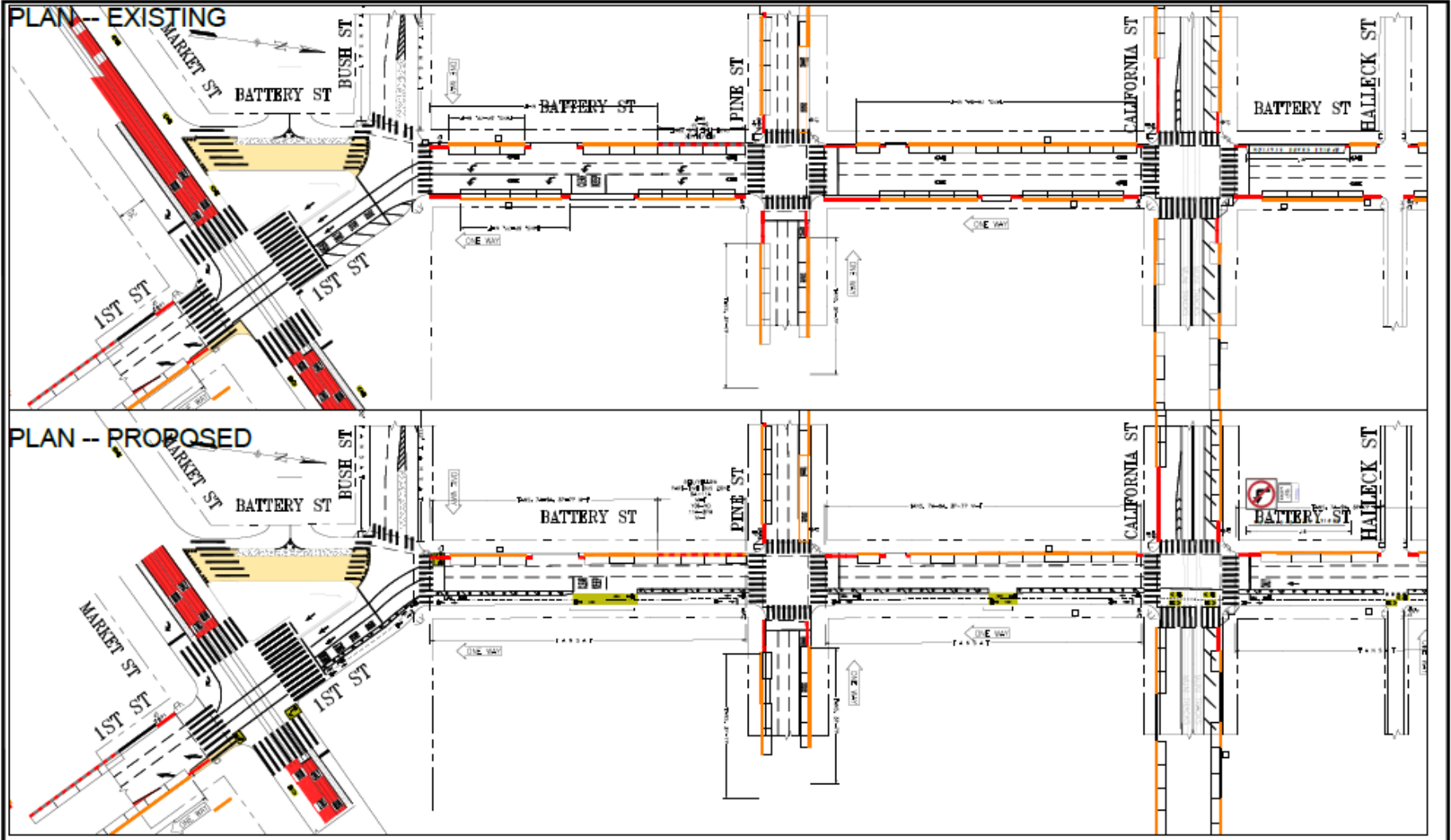


Figure 1: Existing and Proposed traffic striping of Battery Street from Market to Halleck streets

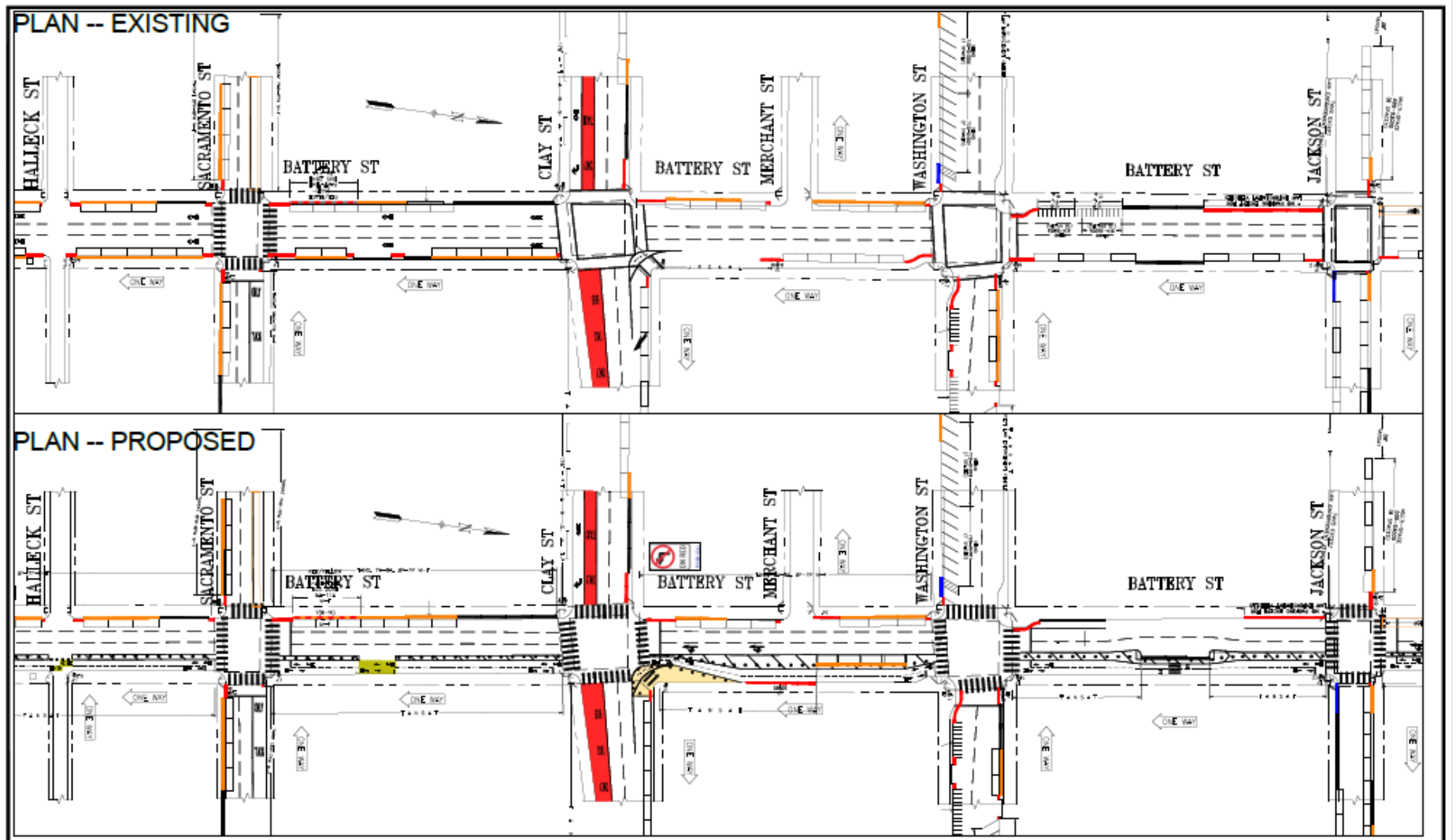


Figure 2. Existing and Proposed traffic striping of Battery Street from Halleck to Jackson streets

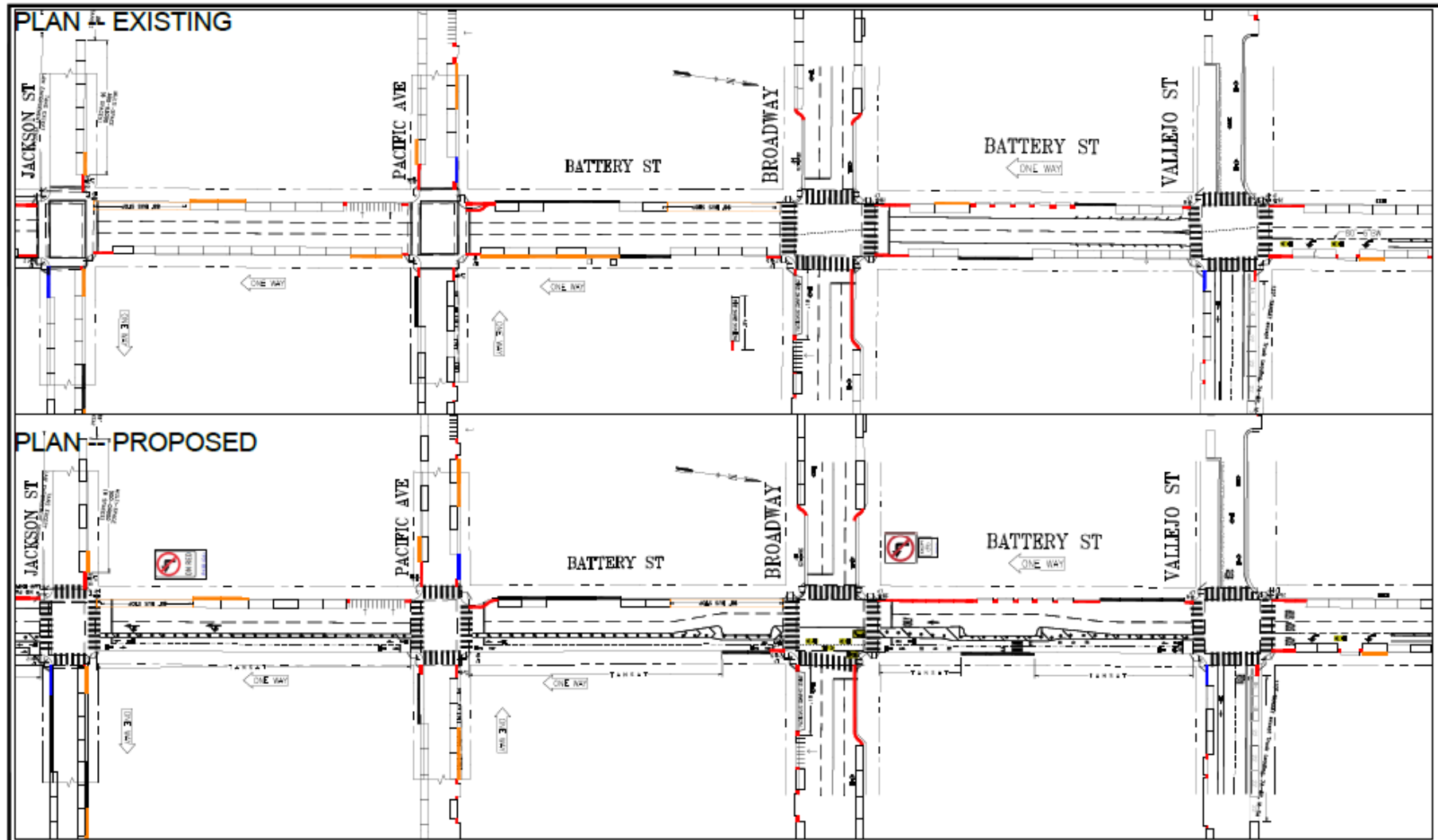


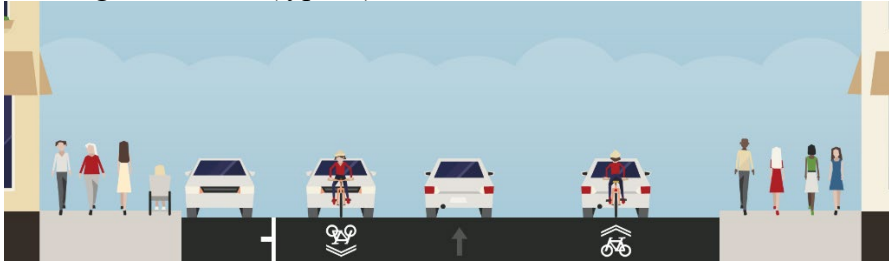
Figure 3. Existing and Proposed traffic striping of Battery Street from Jackson to Vallejo streets



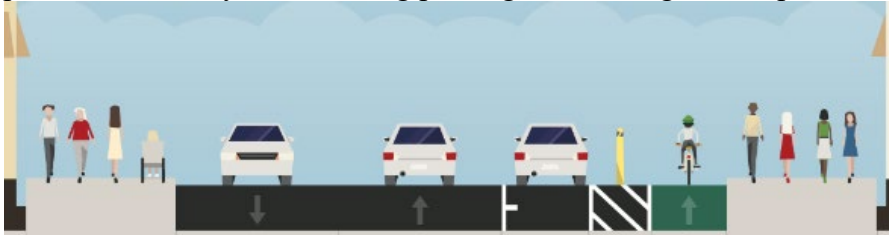
## Enclosure 4: Battery/Sansome Quick-Build Alternatives with Cross Sections

### Sansome Street (cross sections looking north)

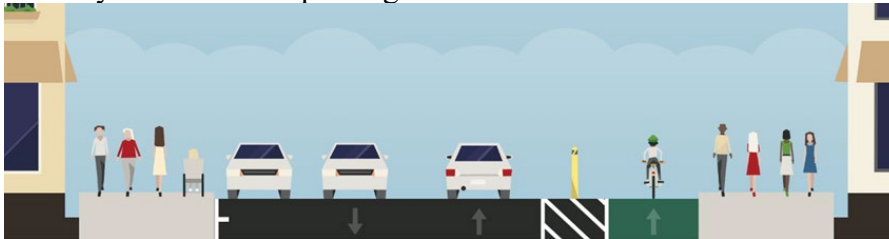
Existing Conditions (typical)



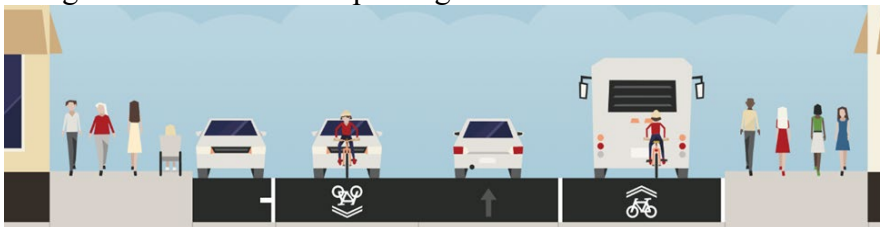
Option 1: Two travel lanes (one in each direction) with an eastside, northbound Class IV protected bikeway with floating parking and loading, where possible.



Option 2: Two travel lanes (one in each direction) with an eastside, northbound Class IV bikeway with curbside parking on the westside of the street.

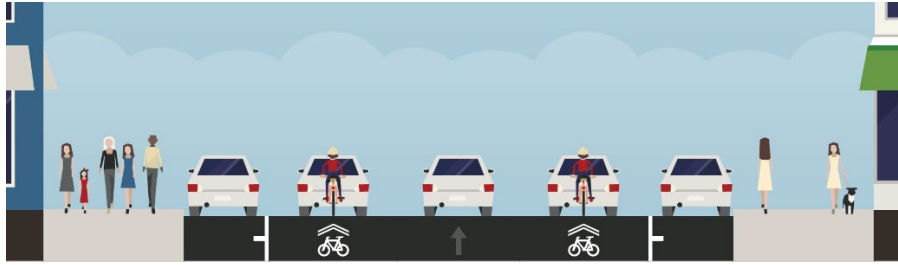


Option 3: Shared bus-bike lane (in both directions) and one northbound vehicle travel lane. Design maintains westside parking.

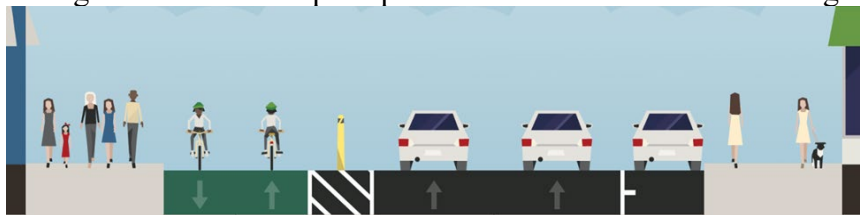


### Battery Street (cross sections looking south)

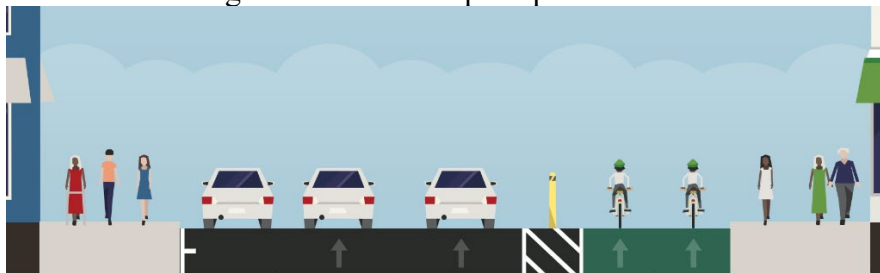
Existing Conditions (typical)



Option 4: Eastside, two-way Class IV bikeway (recommended design). The proposal would include a travel lane reduction from three lanes to two lanes, but would maintain a third lane during the AM and PM peak periods between Bush and Washington streets



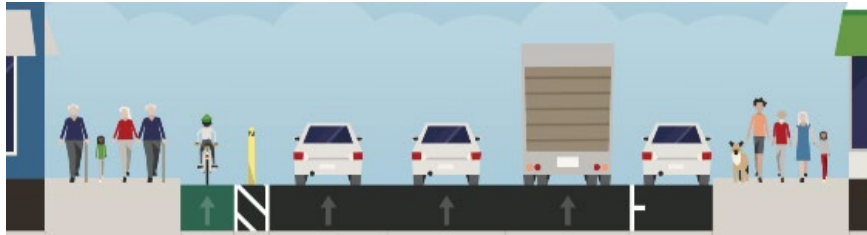
Option 5: Westside, two-way Class IV bikeway with mixing zones. Similar to option 4, the proposals would include a travel lane reduction from three lanes to two lanes but would maintain a third lane during the AM and PM peak periods.



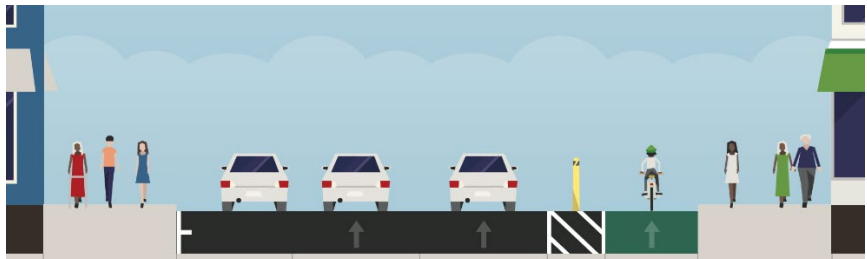
Option 6a: Eastside southbound Class IV bikeway. The proposal would include a wider protected bikeway and a travel lane reduction from three lanes to two lanes on the whole corridor.



Option 6b: Eastside southbound Class IV bikeway. The proposal would include a protected bikeway and maintain three travel lanes from Market to Broadway streets.



Option 6c: Westside southbound Class IV bikeway. The proposal would include a wider protected bikeway and a travel lane reduction from three lanes to two lanes on the whole corridor.



Option 6d: Westside southbound Class IV bikeway. The proposal would include a protected bikeway and maintain three travel lanes from Market to Broadway streets.

