



WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS

TRANSPORTATION & INFRASTRUCTURE COMMITTEE MEETING

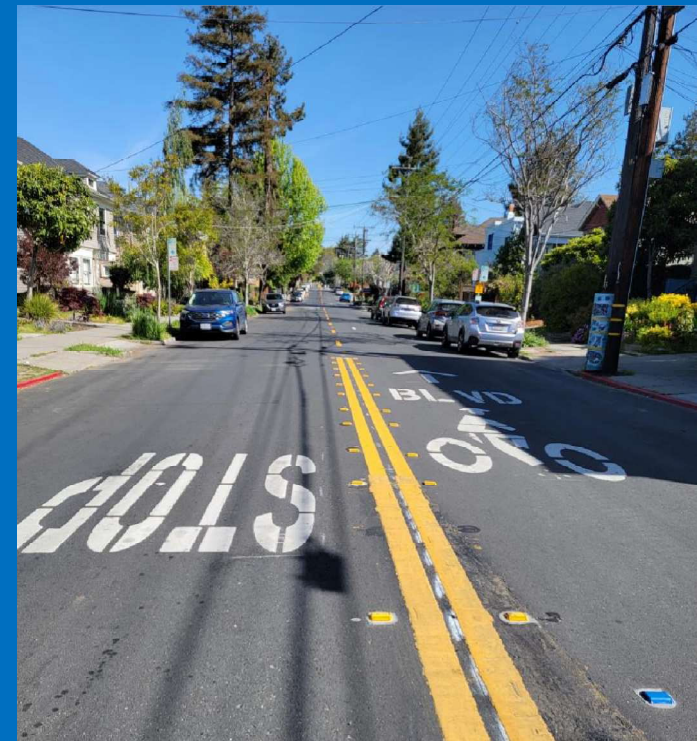
FEBRUARY 15, 2024

PUBLIC WORKS DEPARTMENT - TRANSPORTATION DIVISION

Presented by:

Ken Jung, Supervising Civil Engineer

Jesse Peoples, Associate Civil Engineer



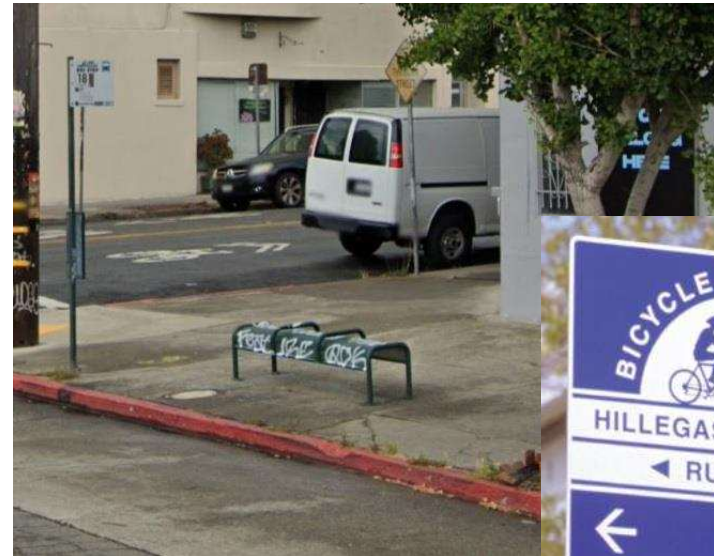


WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS

PURPOSE

1. Present Conceptual Design to the TIC
2. Respond to Questions by Commissioners
3. Request TIC vote: Support the conceptual design, with comments as applicable

~~Recommend conceptual design for City Council meeting on 3/19/24~~



Note:
Markups based on the as-presented version by City staff during the February 15, 2024 Transportation & Infrastructure Commission meeting



WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS

PROJECT LOCATION & GOALS

■ Woolsey-Fulton Bike Blvd. Project (WFBB)

- Safety improvements for pedestrians and bicyclists, especially at major crossings
- Fills gap in Citywide bike network: Ashby BART to Southside area

■ Shattuck-MLK Bus Stops Project (SMBS)

- Safety improvements for pedestrians
- Improve transit reliability
- Bus stop amenities





WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS FUNDING

- \$2.612M grant from State of California Affordable Housing and Sustainable Communities (AHSC) program
 - WFBB & SMBS Projects are the City's obligation toward AHSC funding for affordable housing private development at Adeline/Ashby.
- Alameda County Measures B& BB discretionary funds





WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS SCHEDULE

- Currently in **Conceptual Design** phase



Schedule is subject to change

- Finalize **concepts** in March 2024
- ~~■ City Council approval of **concepts** in March 2024~~
- Complete **design** by end of 2024
- **Construction** in 2025

Note:
Markups based on the as-presented version by City staff during the February 15, 2024 Transportation & Infrastructure Commission meeting

Must complete construction by Q1 2026



WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS PUBLIC ENGAGEMENT

- Project websites
- Postcards to 2,000+ addresses
- Concepts for review and comment:
 - 1/16/24 – 2/14/24
- Public meeting on 1/31/24
- TIC meeting on 2/15/24
- ~~Council meeting on 3/19/24~~

Note: Markups based on the as-presented version by City staff during the February 15, 2024 Transportation & Infrastructure Commission meeting

City of Berkeley Public Works Department
1947 Center St. 4th Fl.
Berkeley, CA 94704

Please visit the Project webpage for more information and to:

- Attend the virtual public meeting from 6 p.m. to 8 p.m. on January 31, 2024
- Send comments to: dhoffman@parametrix.com
- Preliminary concepts will be posted on the project webpage by January 17



<https://berkeley.ca.gov/woolsey-fulton-bicycle-bld>

City of Berkeley Woolsey-Fulton Bike Boulevard and Shattuck-MLK Bus Stops SAFETY PROJECTS

The City of Berkeley Public Works Department will be hosting an online public meeting to present on the proposed two projects and solicit input from the public. These projects are intended to improve safety for pedestrians and bicyclists, fill gaps in the Citywide bike network, and improve bus transit amenities.

A link to virtual public meeting will be posted on the project website approximately one day prior to the meeting date. <https://berkeley.ca.gov/woolsey-fulton-bicycle-bld>

Public Meeting: January 31, 2024 6 to 8 PM

LEGEND

- Proposed Safety Improvements
- Existing Public Code
- Existing BBS
- Existing Curbside Bike Network Street (By Other)
- Traffic Gate
- Bike Boulevard
- Disposal of Street Direction 100
- Rectangular Rapid Flashing Beacon (RRFB)
- Pedestrian Signal Beacon (PSB)
- Median Improvements
- Bus Stop Relocations

CITY OF BERKELEY ALAMEDA COUNTY, CALIFORNIA

WOOLSEY-FULTON BICYCLE BOULEVARD & SHATTUCK-MLK BUS STOPS PROJECTS

FOR PUBLIC REVIEW AND COMMENT
The City of Berkeley is requesting public review and comment on these draft concept sketches. These concepts will be presented at the online public meeting on January 31, 2024, from 6-8 PM. Input can be provided via:
The online public meeting on 1/31/24 and/or
Email to: dhoffman@parametrix.com by 2/14/24.

LEGEND

- APPROXIMATE PROPERTY LINE
- PROPOSED SIDEWALK
- PROPOSED CONCRETE SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED BIKE LANE
- BICYCLE BOULEVARD MARKER
- HIGH VISIBILITY SIDEWALK
- GREEN PAINT LANE CROSSING MARKER
- PROPOSED CURB CHANGING MARKER
- CURB CHANGING MARKER
- PROPOSED CURB CHANGING MARKER
- SELECTED SIDEWALK PANEL
- NEW CURB - NO PARKING ZONE
- GUTTER PAIS

Shattuck-MLK Bus Stops Project

Type: Transportation Status: Planning

PROJECT LOCATION

The project limits include the following:

- Marin Luther King Jr. Way/Prince St. Intersection
- Shattuck Ave./Arling Ave. Intersection
- Shattuck Ave./Woolsey St. Intersection

WHAT'S HAPPENING

Public Review & Comment: Due by February 14, 2024

Please provide comments on the [Draft Concept Sketches for Shattuck-MLK Bus Stops](https://www.berkeley.ca.gov/woolsey-fulton-bicycle-bld) by February 14, 2024. These sketches have been available online since January 17, 2024 and were presented at the public meeting on January 31, 2024.

The City of Berkeley's Shattuck-MLK Bus Stops Project (SMBSP) is intended to improve transit amenities and safety for transit riders as per the City's Transit First Policy. The project is currently in the conceptual design phase.

This project is closely linked to the [Woolsey-Fulton Bicycle Boulevard Project](https://www.berkeley.ca.gov/woolsey-fulton-bicycle-bld), as they share the same funding source (see below) and construction schedule, and the extents of both projects are in relatively close proximity to each other. The proposed improvements for both projects are depicted in the graphic below. Proposed improvements include relocating bus stops to the far sides of the intersections and installing shelter and seating at bus stops where feasible. Relocating bus stops from near-to-far-side of an intersection generally allows the bus stop length to be shorter, can reduce traffic congestion (especially by vehicles behind a bus that need to turn onto another street), and improves visibility of disembarking transit riders crossing the street (as they would not be obscured by the bus).

SCHEDULE

As of January 2024, the project schedule is anticipated as follows:

- September 2023 - February 2024: Conceptual design
- January 31, 2024: Public information meeting
- February 14, 2024: Deadline for public comments on conceptual design sketches
- March 2024 - December 2024: Detailed design
- Spring 2025 - early 2026: Construction

FUNDING SOURCE

The Shattuck-MLK Bus Stops Project is funded in part by a \$553,000 State of California Affordable Housing and Sustainable Communities (AHSC) grant. The project comprises Transit Related Amenities (TRA) to be implemented by the City as a condition of AHSC grant funding for private development projects at 2527 San Pablo Ave. and 2021 Arling Ave.

Other project funding includes Alameda County Measure 8B (Local Streets & Roads) discretionary funds, as

Project Team

Olga Rodriguez
Project Manager
Public Works

Provide state-of-the-art, well-maintained infrastructure, amenities, and facilities

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Foster a dynamic, sustainable and locally-based economy

[View our mission plan](#)

Create a resilient, safe, connected, and prepared City

[View our mission plan](#)

CITY OF BERKELEY

City Services | Community & Recreation | Safety & Health | Construction & Development | Doing Business | Your Government

Home | Our Work | Digital Projects | Woolsey-Fulton Bicycle Boulevard Project (WFBB)

Woolsey-Fulton Bicycle Boulevard Project (WFBB)

Type: Transportation Status: Planning

PROJECT LOCATION

The project limits include the following:

- Marin Luther King Jr. Way/Prince St. Intersection
- Arling Ave./Woolsey St. Intersection
- Woolsey St./Oak Grove (to be added)
- Woolsey St./Oak Grove (to be added)
- Prince St./Oak Grove (to be added)
- Prince St./Oak Grove (to be added)
- Prince St./Oak Grove (to be added)

WHAT'S HAPPENING

Public Review & Comment: Due by February 14, 2024

Please provide comments on the [Draft Concept Sketches for Woolsey-Fulton Bicycle Boulevard](https://www.berkeley.ca.gov/woolsey-fulton-bicycle-bld) by February 14, 2024. These sketches have been available online since January 17, 2024 and were presented at the public meeting on January 31, 2024.

If you are interested in submitting to material planning in the proposed traffic control at Shattuck/Oak Grove and at Woolsey/Prince, please email: dhoffman@parametrix.com. More information can be found at the <https://www.berkeley.ca.gov/woolsey-fulton-bicycle-bld> project page.

The City of Berkeley's Woolsey-Fulton Bicycle Boulevard (WFBB) Project fills a gap in the Citywide bike network between the Southside area and the Ashby BART station, as shown in the graphic below. The project originated in the City's Bicycle Plan and is currently in the conceptual design phase.

This project is closely linked to the [Shattuck-MLK Bus Stops Project](https://www.berkeley.ca.gov/shattuck-mlk-bus-stops), as they share the same funding source (see below) and construction schedule, and the extents of both projects are in relatively close proximity to each other.

Proposed improvements include:

- Close to 1.5 miles of high-quality bicycle boulevard pavement markings and signage at Woolsey St./Oak Grove (to be added), Woolsey St./Oak Grove (to be added), Prince St./Oak Grove (to be added) and Arling St./Prince St. (to be added).
- Traffic signage on Pedestrian Signal Beacon (PSB) at the Arling Street and Oak Grove Street intersections, Rectangular Rapid Flashing Beacon (RRFB) and Advanced Stop Line at the Shattuck Street and Woolsey Street intersections, Signal at Arling at the Public Works intersection, and traffic control at the Public/Oak Grove and Shattuck/Prince intersections.
- Pedestrian and bike improvements across Marin Luther King Jr. Way from Prince to the Ashby BART station and Arling St. (from Prince to the Ashby BART station) that include various to safety materials.

SCHEDULE

As of January 2024, the project schedule is anticipated as follows:

Funding Source

- Affordable Housing and Sustainable Communities (AHSC)

Project Team

Olga Rodriguez
Project Manager
Public Works

Foster a dynamic, sustainable and locally-based economy

[View our mission plan](#)

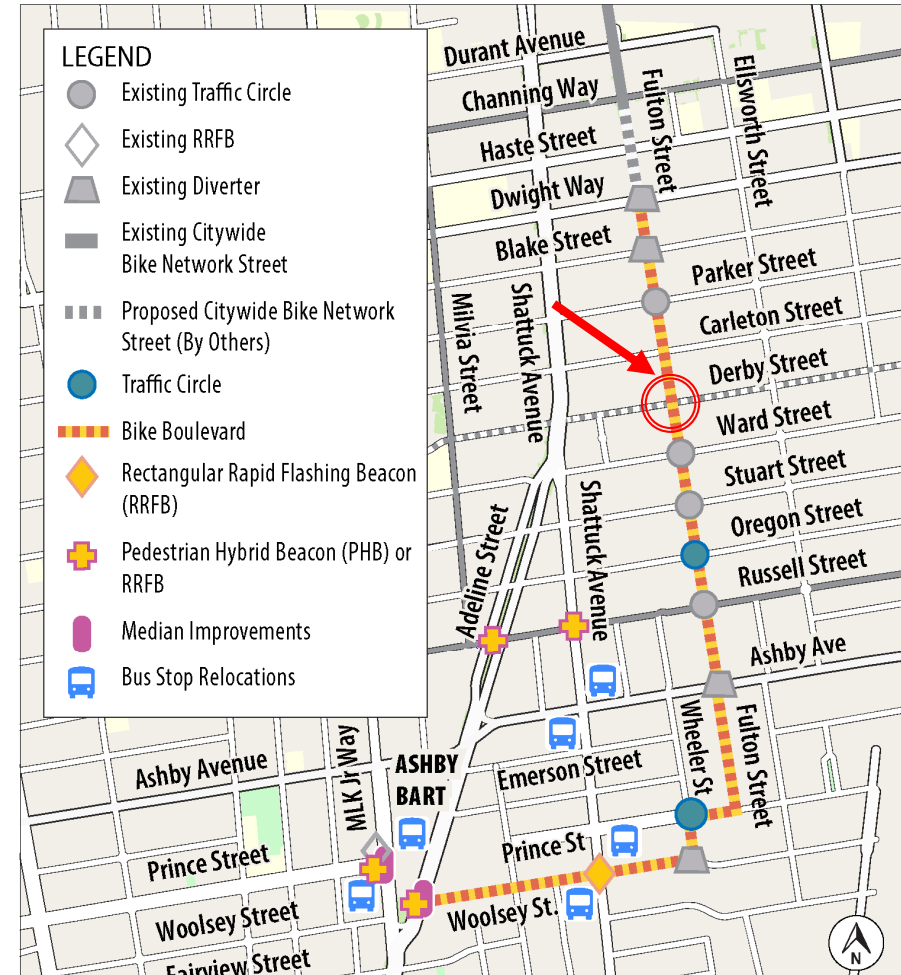
Create a resilient, safe, connected, and prepared City

[View our mission plan](#)



WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS PUBLIC ENGAGEMENT TAKEAWAYS

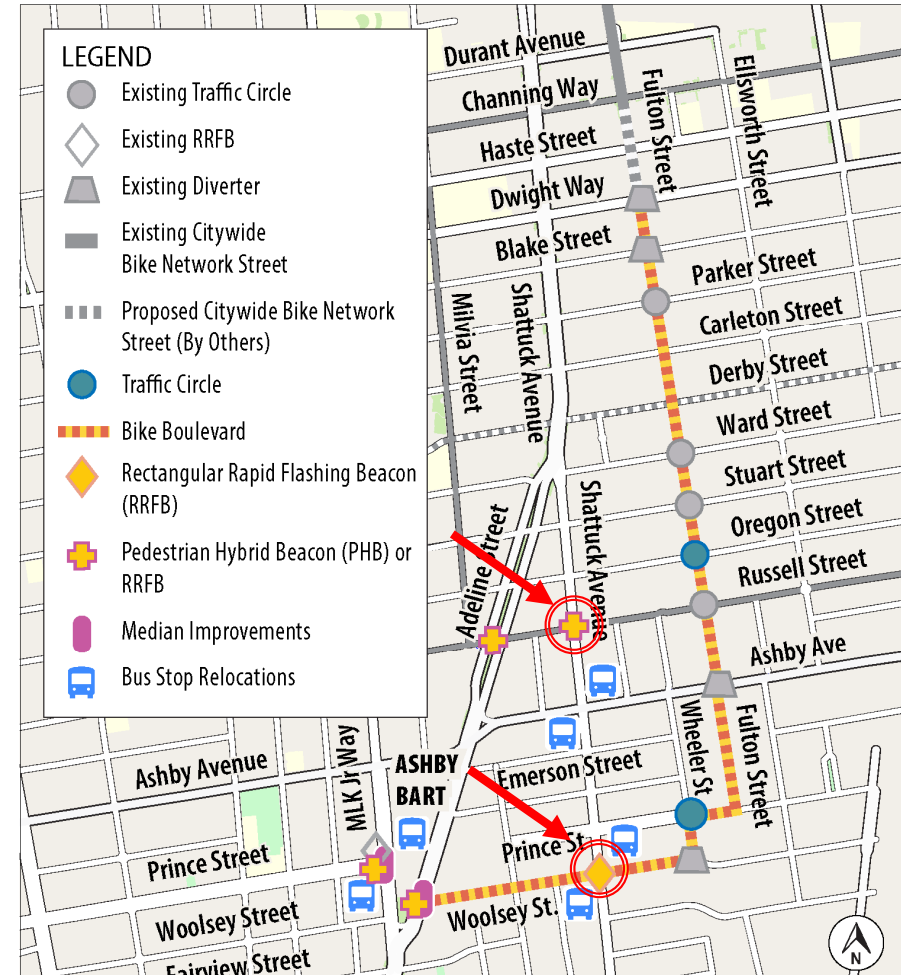
- Comment: Significant opposition to the proposed diverter at Fulton/Derby.
 - City: Removed from project scope
 - Diverter intended to balance vehicle volumes at intersection of 2 proposed bike boulevards
 - Will be studied in more detail as part of a future Derby bike boulevard





WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS PUBLIC ENGAGEMENT TAKEAWAYS

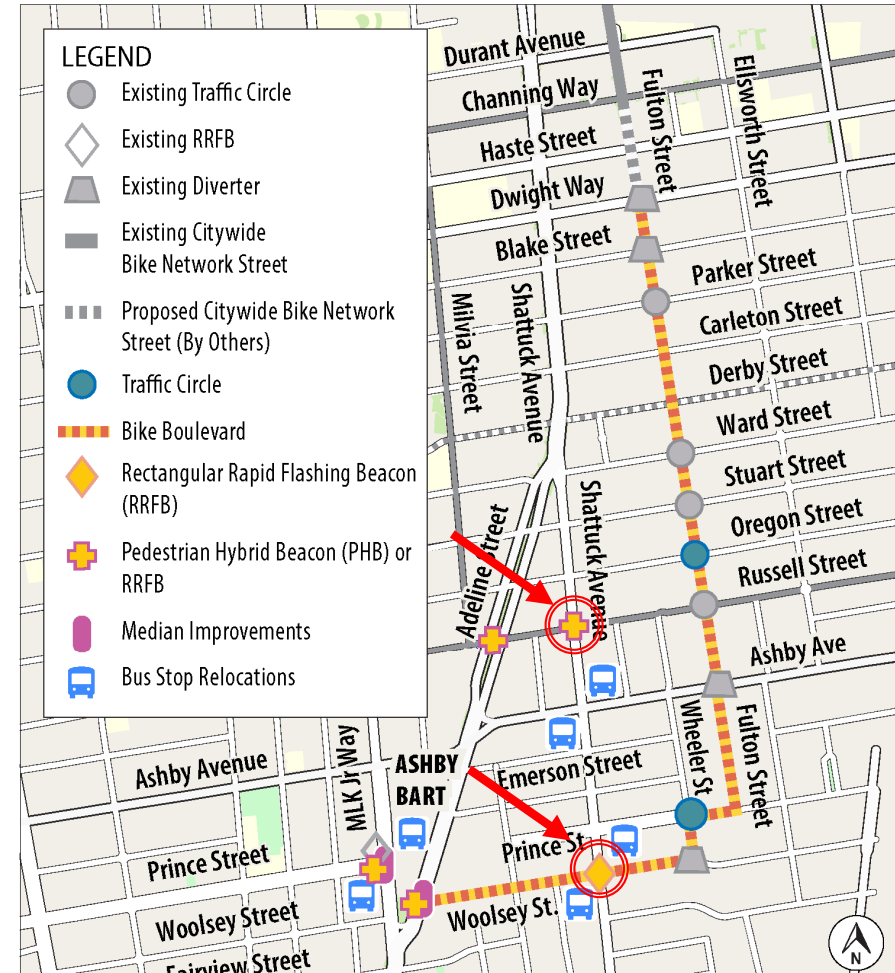
- Comment: Why don't the conceptual designs for Shattuck/Russell and Shattuck/Woolsey follow the recommendations in the Bike Plan?
 - City: Bike Plan recommends Median + RRFB
 - Bike Plan provides recommendations at a planning level to be evaluated on a project-specific basis
 - Space constraints at both intersections preclude installation of medianrefuges
 - Proposed bulbouts should slow traffic and improve sightlines





WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS PUBLIC ENGAGEMENT TAKEAWAYS

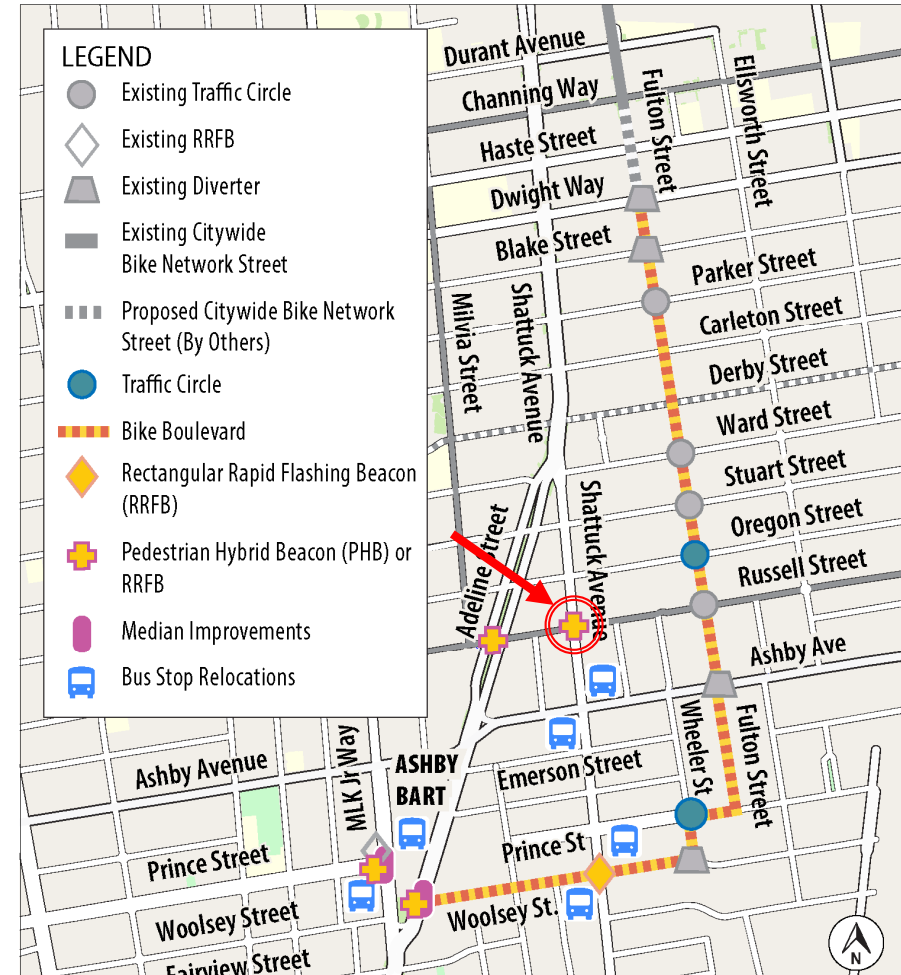
- Comment: Consider installing 4-ways stops at Shattuck/Russell and Shattuck/Woolsey.
 - City: Consider context, resulting vehicle behavior, congestion, collision history
 - Upcoming Bike plan revision aims to address policy of 4-way stops along bikeways





WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS PUBLIC ENGAGEMENT TAKEAWAYS

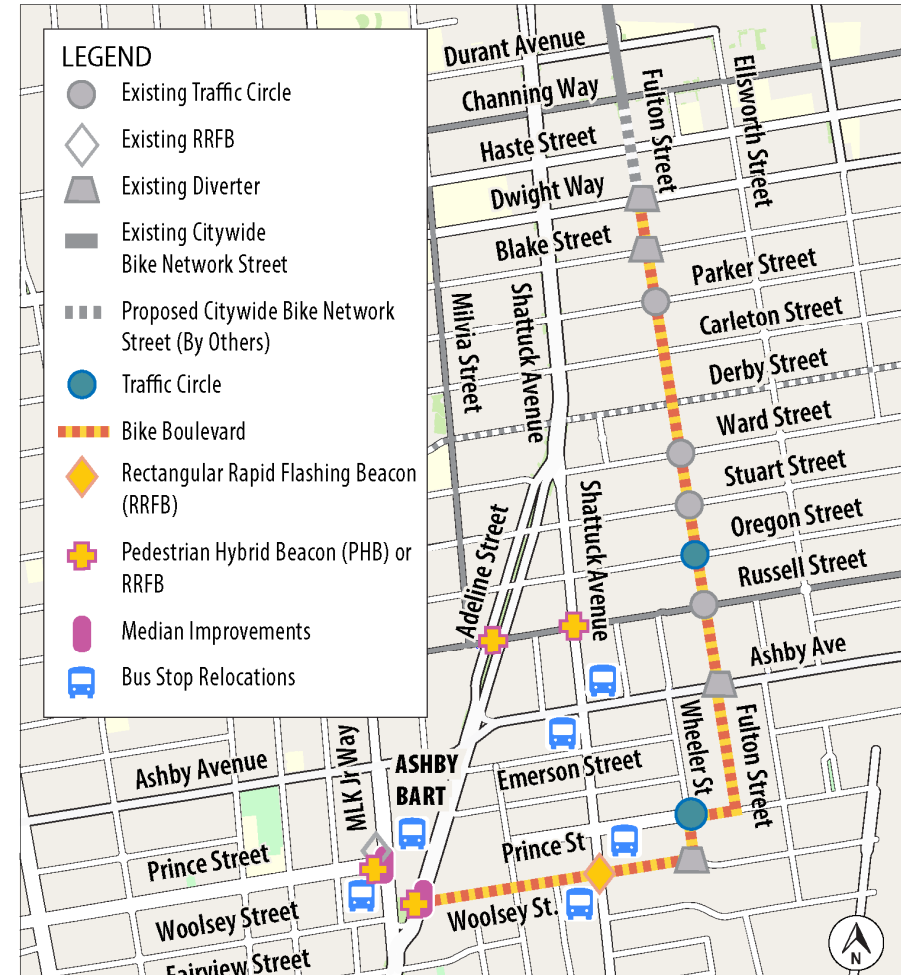
- Comment: Can a PHB be installed at Shattuck/Russell?
 - City: PHBs typically used for locations with multiple lane approaches
 - Shattuck/Russell is intersection of 2 two-lane streets
 - RRFB more appropriate at this location
 - Will look into relocating PHB to Shattuck/Russell and RRFB to Adeline/Russell





WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS PUBLIC ENGAGEMENT TAKEAWAYS

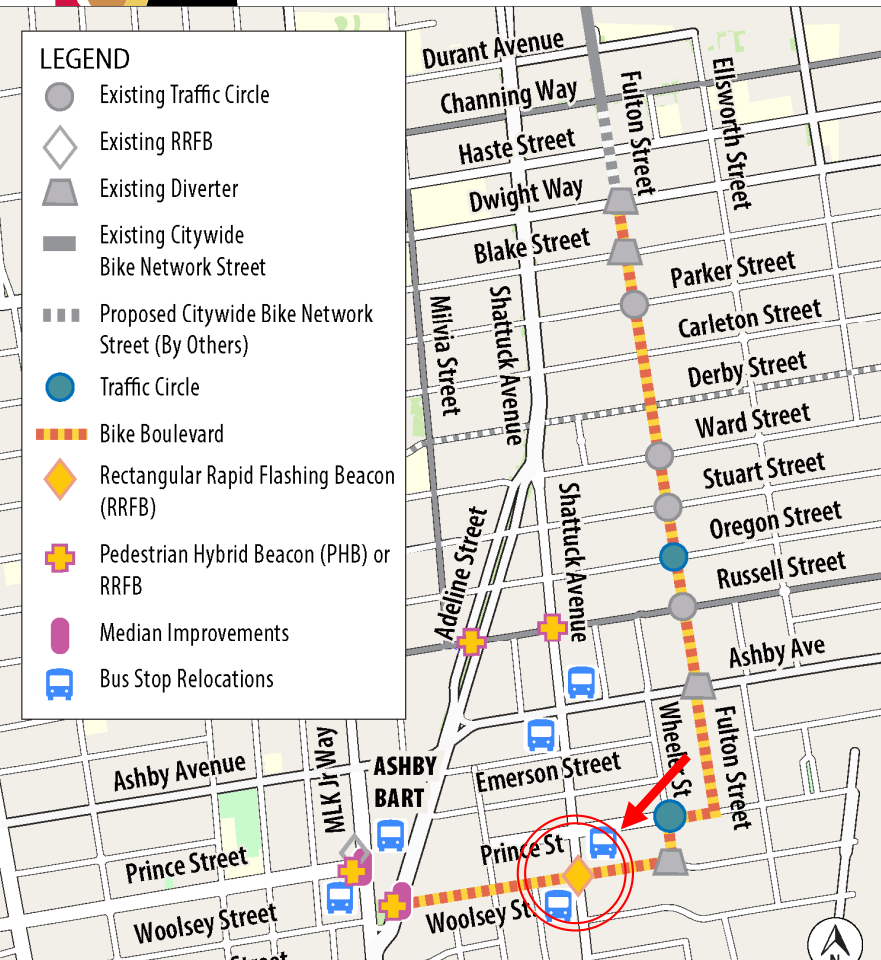
- Comment: Consider installing mid-block speed tables on every block of the proposed bike boulevard.
 - City: Require speed studies, consider emergency vehicles
 - Can review during detailed design phase
 - Several intersections have or will have traffic circles (5 in 7 blocks)





WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS

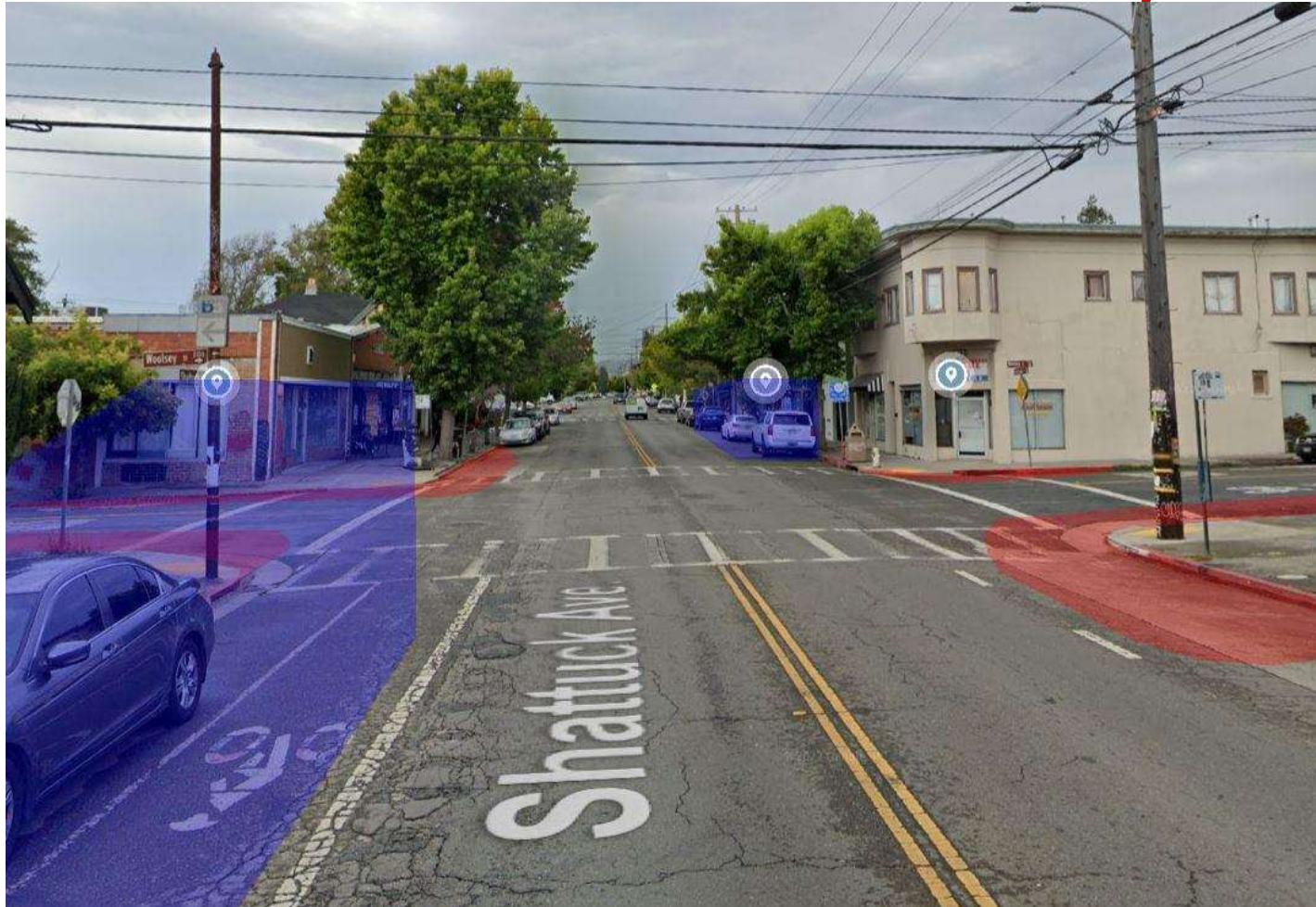
WOOLSEY STREET CORRIDOR – WOOLSEY/SHATTUCK



- RRFBs and sidewalk bulbouts at Woolsey/Shattuck intersection
- Woolsey St. is a proposed Bicycle Boulevard
- Bus stop relocations to far sides of intersection

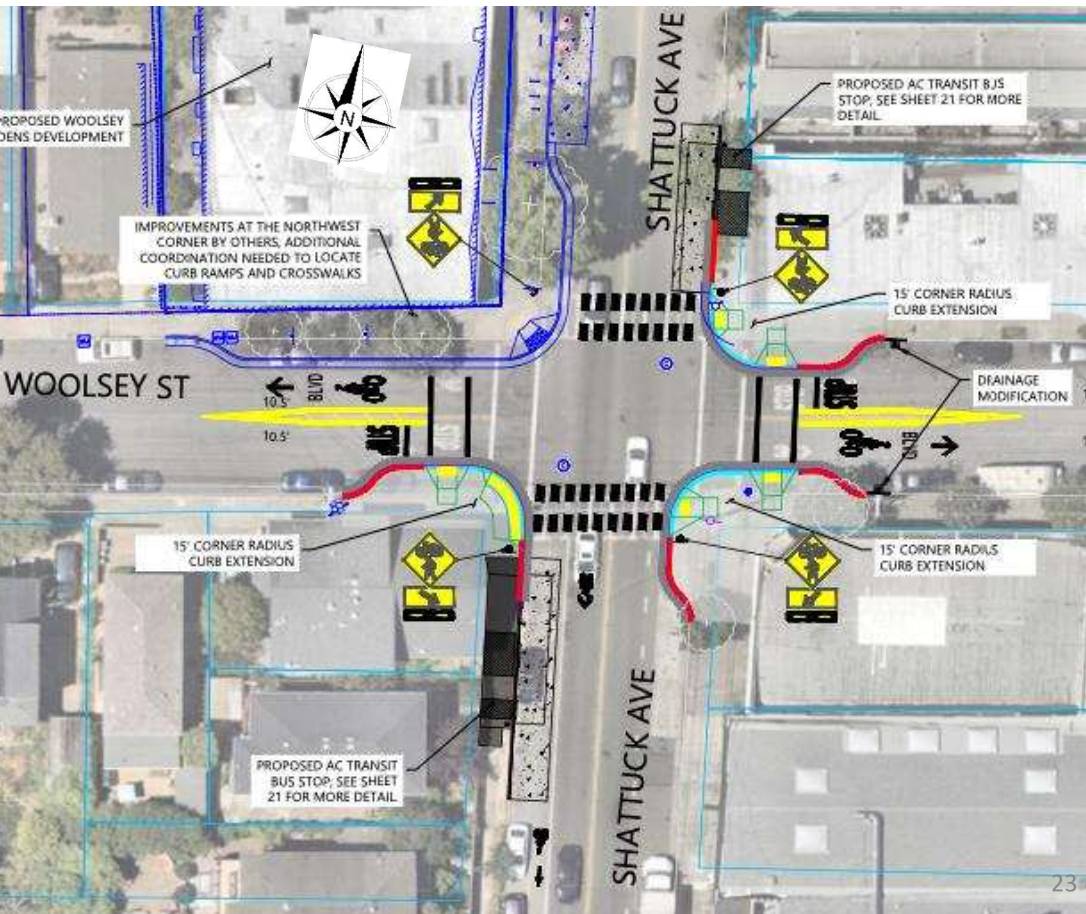


WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS WOOLSEY STREET CORRIDOR – WOOLSEY/SHATTUCK





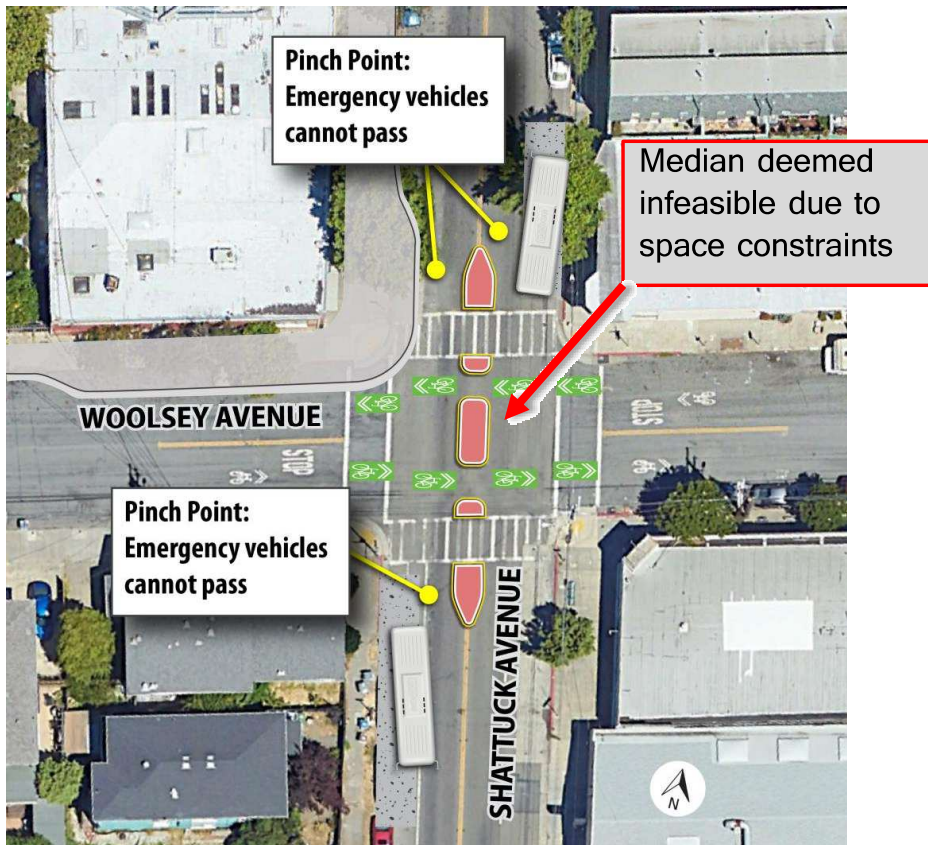
WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS WOOLSEY STREET CORRIDOR – WOOLSEY/SHATTUCK



- RRFB buttons at curb ramps and reachable by bicyclists
- Bus Stops move to far sides of intersection on Shattuck Ave.
 - Bus stop amenities TBD depending on available space
- Coordinating with development project at northwest corner



WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS WOOLSEY STREET CORRIDOR – WOOLSEY/SHATTUCK



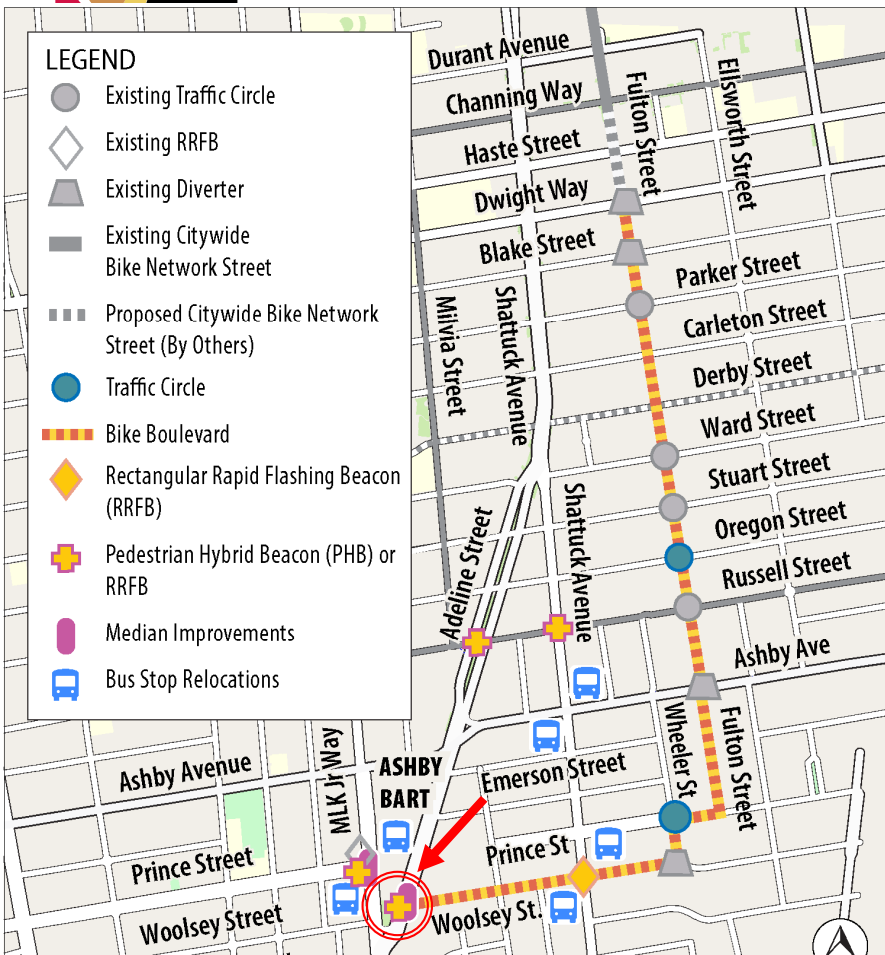
Infeasible to install a median refuge due to space constraints:

- Bus stops
- Curb extensions at NW corner
- Turn movements for emergency and solid waste vehicles



WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS

WOOLSEY STREET CORRIDOR – WOOLSEY/ADELINE



- PHB/RRFB and median improvements at Woolsey/Adeline intersection
- Consider future Adeline Corridor project
- Connection to Ashby BART station
- Coordinating with upcoming BART bicycle access improvements work at Ashby station

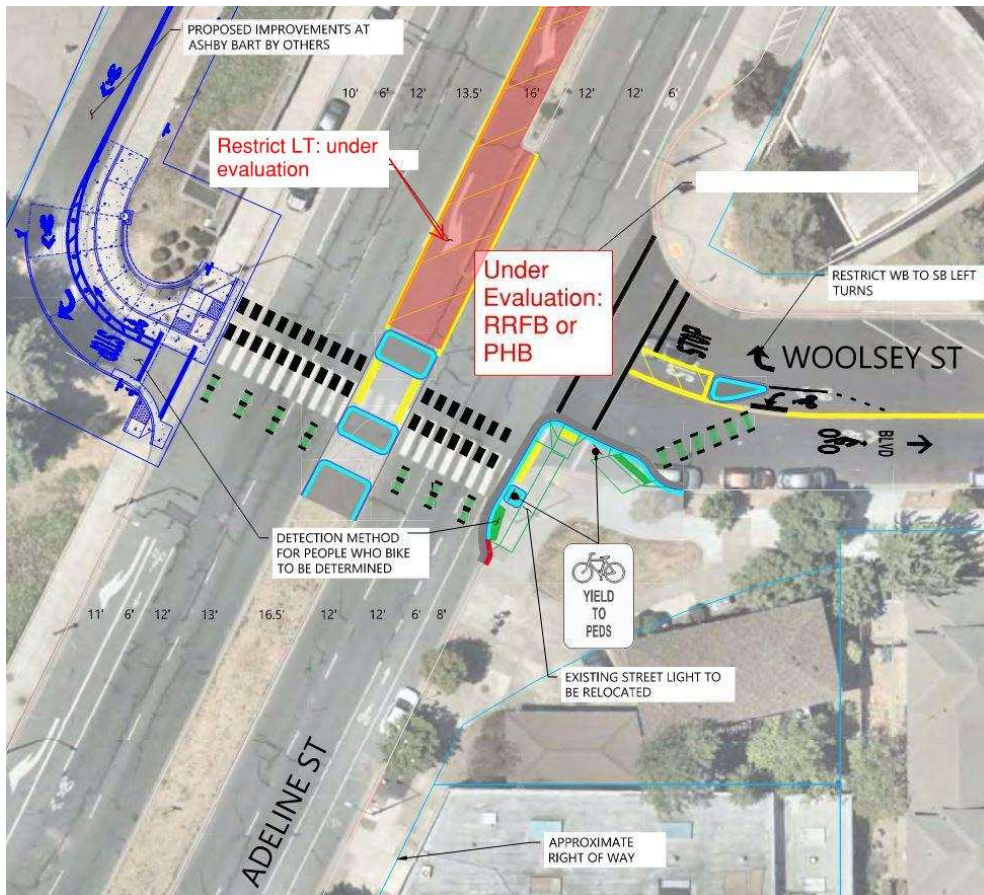


WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS WOOLSEY STREET CORRIDOR – WOOLSEY/ADELINE





WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS WOOLSEY STREET CORRIDOR – WOOLSEY/ADELINE

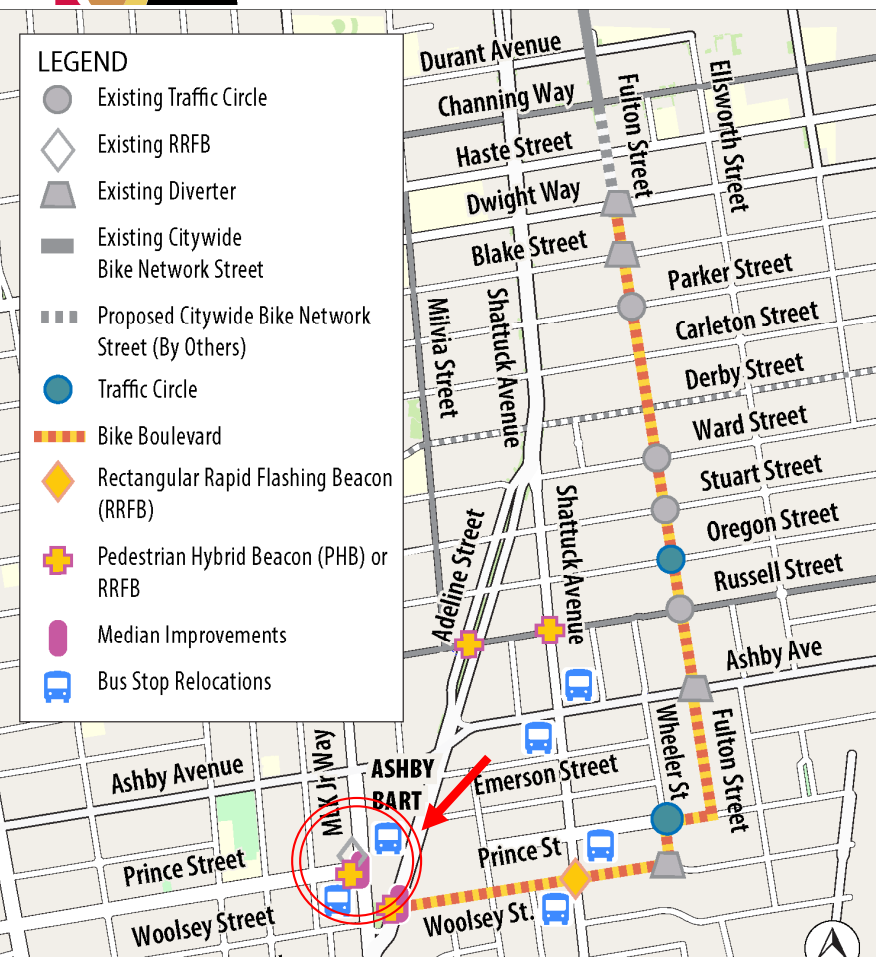


- PHB is per recommendation in Bicycle Plan
 - Evaluated for suitability at this intersection
- Considering RRFB (swap PHB/RRFB with MLK/Prince)
 - Future Adeline project
- Left turn restriction on westbound Woolsey
 - Evaluating potential left turn restriction on southbound Adeline
- Separated pedestrian and bike crossing across Adeline



WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS

MLK/PRINCE INTERSECTION



- Reuse existing RRFBs
- Considering PHB (swap PHB/RRFB with Adeline/Woolsey)
- Median refuges and sidewalk bulbouts
- Bus stop relocations to far sides of intersection



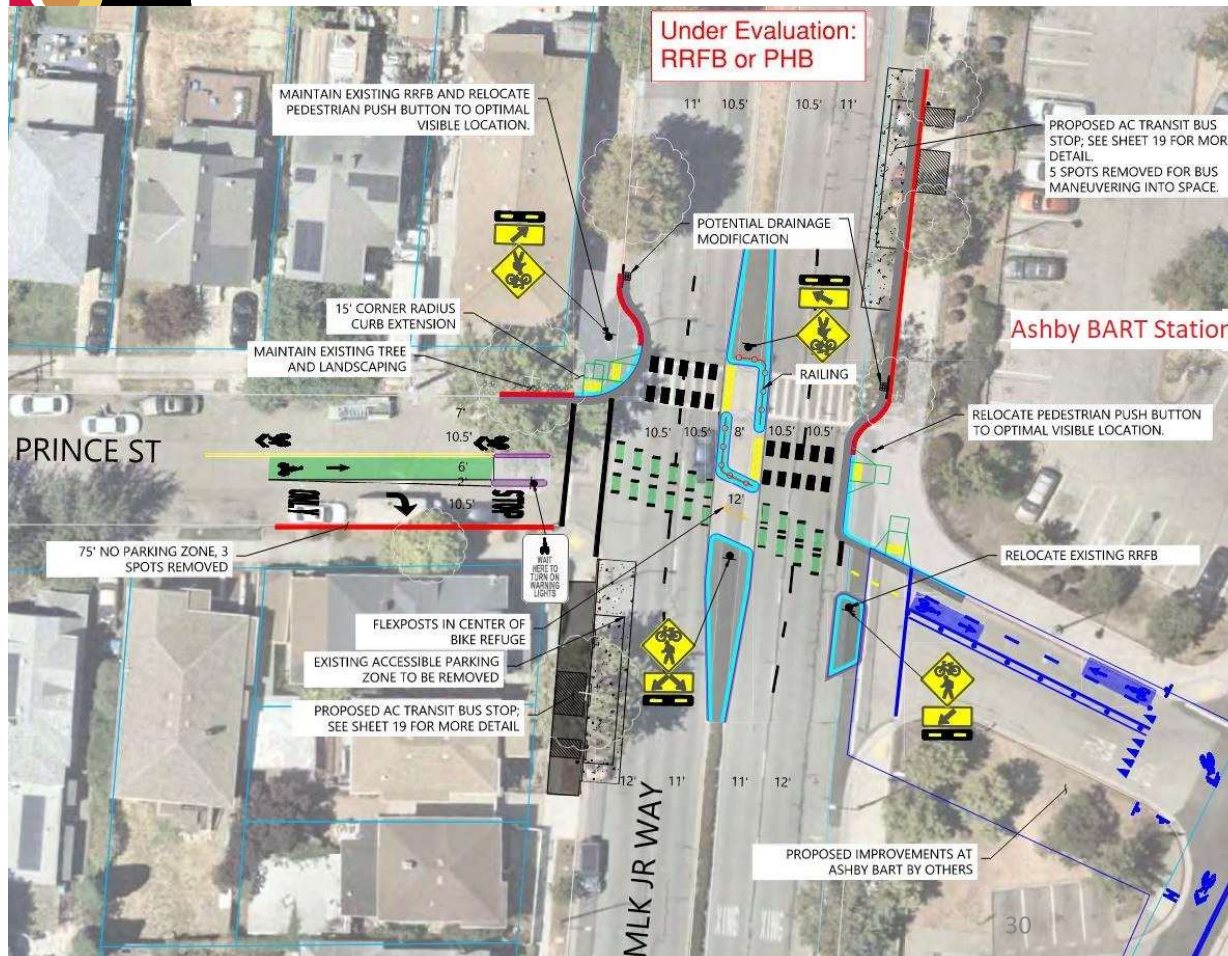
WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS MLK/PRINCE INTERSECTION





WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS

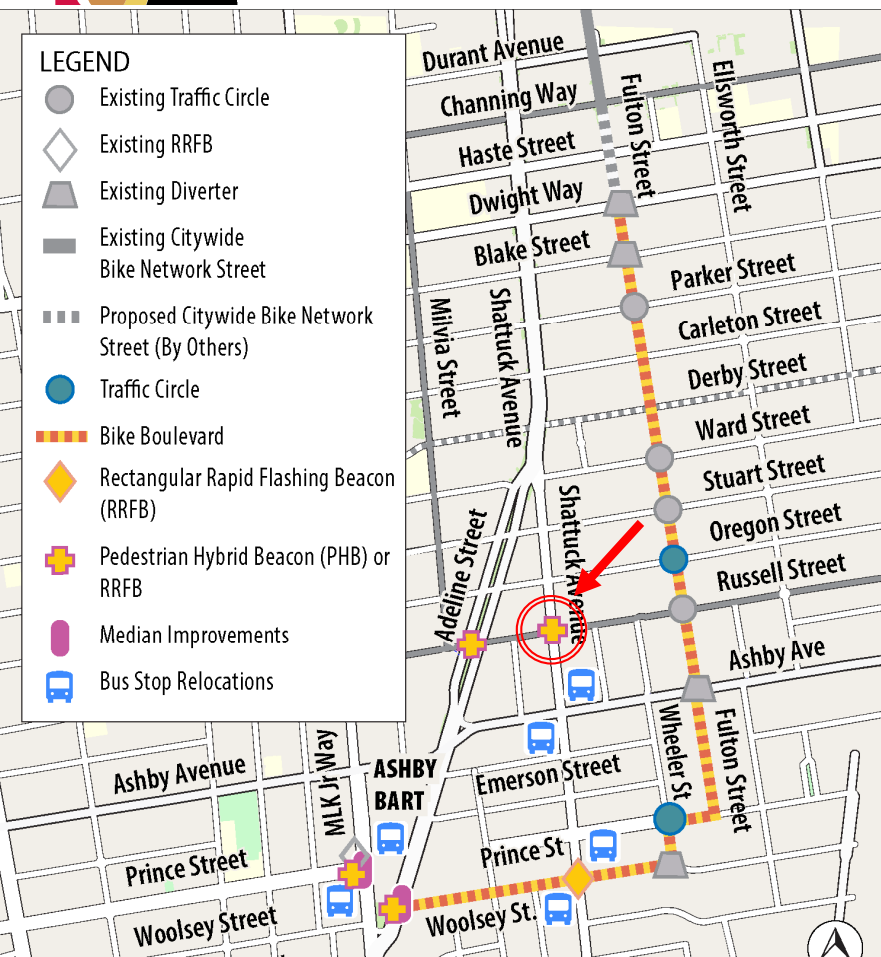
MLK/PRINCE INTERSECTION



- Widen median: pedestrian and bike refuges
- Offset crosswalk
- Sidewalk bulbouts shorten crossing distances
- Coordinating with upcoming BART access improvements at Ashby station
- Bus stop amenities TBD depending on available space



WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS RUSSELL STREET CORRIDOR – RUSSELL/SHATTUCK



- RRFBs and sidewalk bulbouts at Russell/Shattuck intersection
 - RRFBs appropriate for use
- Considering PHB (swap PHB/RRFB with Adeline/Russell)
 - PHB not ideal
- Russell St. is a Bicycle Boulevard

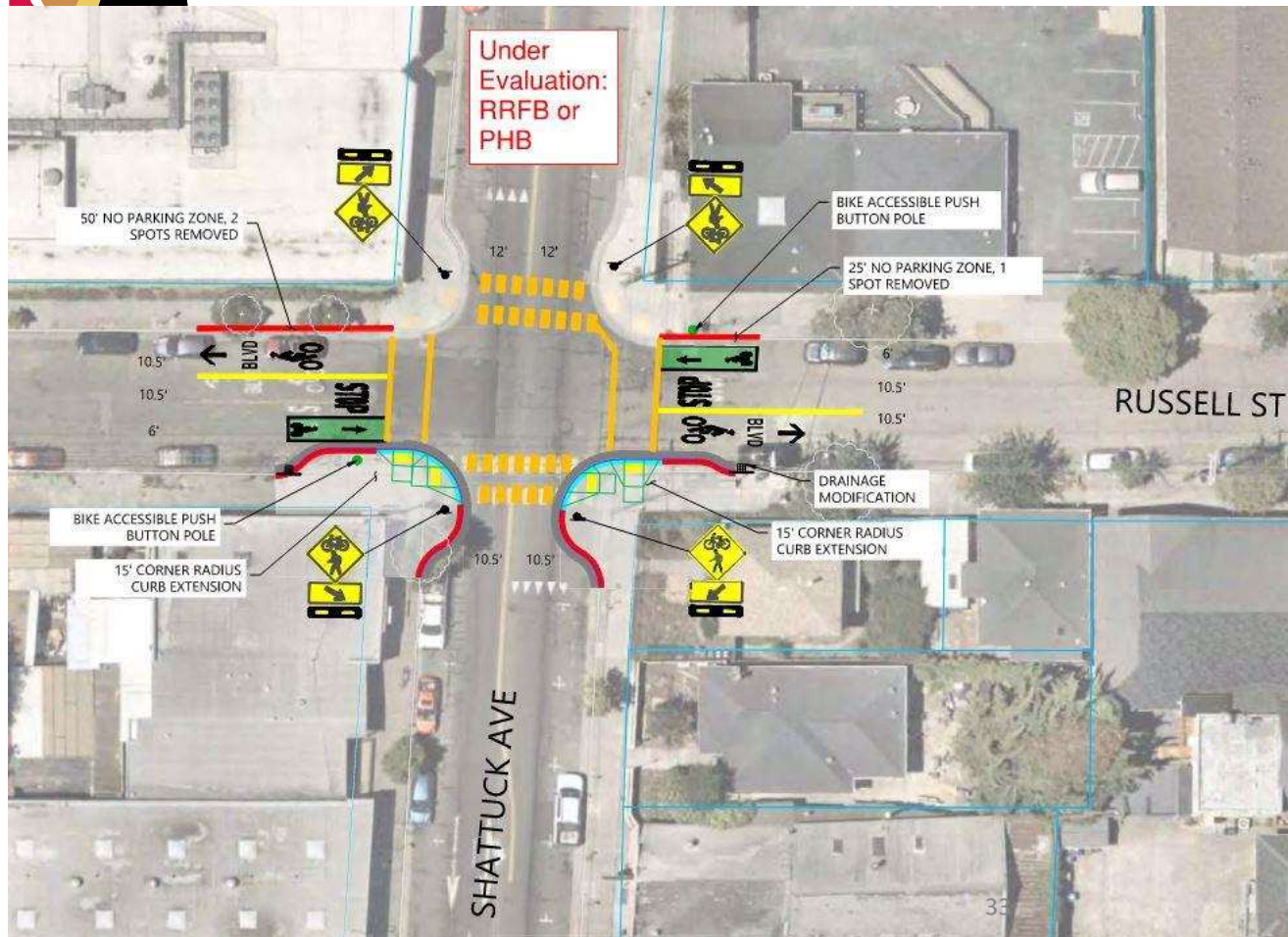


WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS RUSSELL STREET CORRIDOR – RUSSELL/SHATTUCK





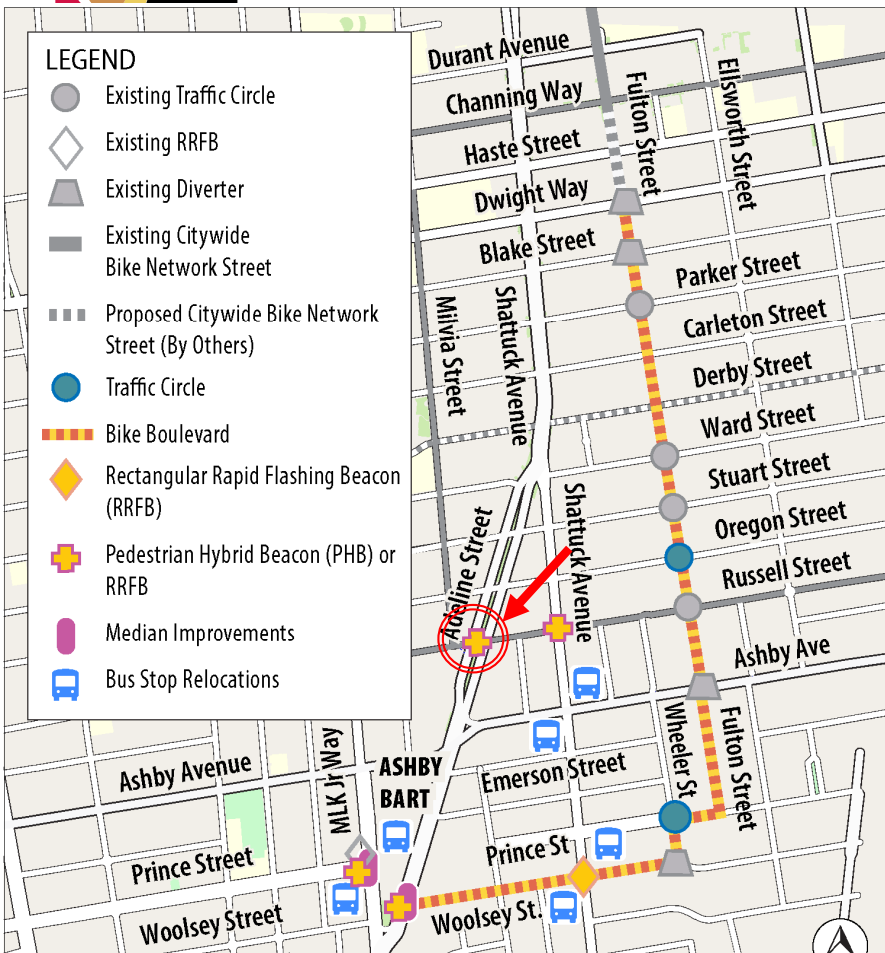
WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS RUSSELL STREET CORRIDOR – RUSSELL/SHATTUCK



- Existing curb ramps at northwest and northeast corners
- New curb ramps at southwest and southeast corners
- RRFB buttons at curb ramps and reachable by bicyclists



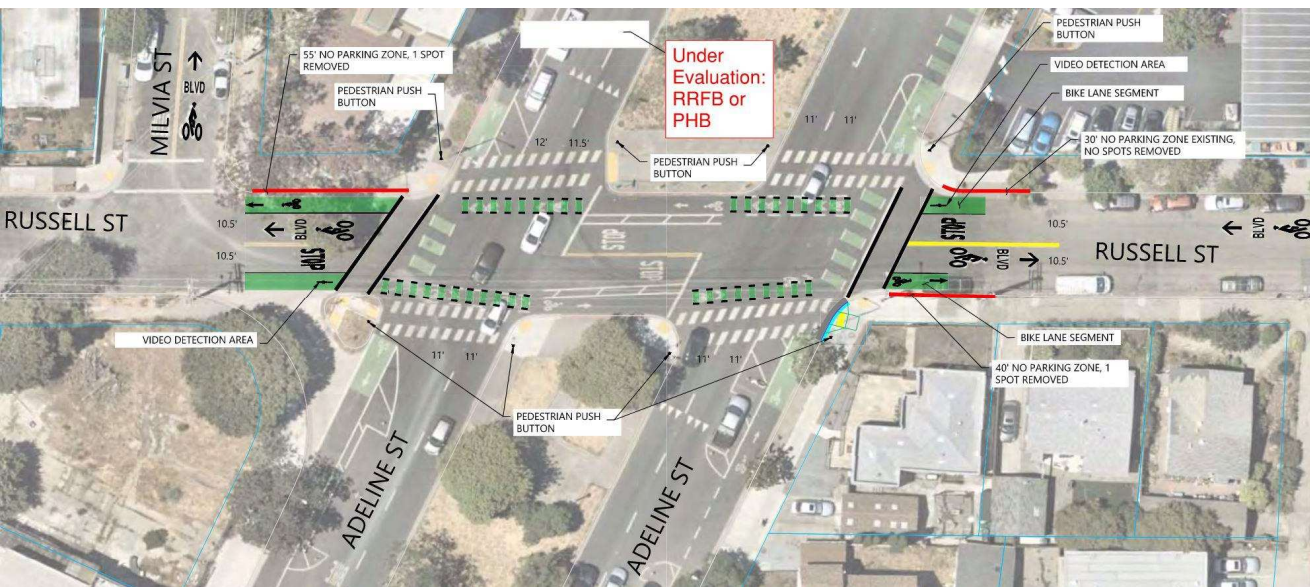
WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS RUSSELL STREET CORRIDOR – RUSSELL/ADELINE



- PHB at Russell/Adeline intersection
- PHB is per recommendation in Bicycle Plan
 - Evaluated for suitability at this intersection
- Considering RRFB (swap RRFB/PHB with Shattuck/Russell)
 - Depends in part on operational issues
- Russell St. is a Bicycle Boulevard



WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS RUSSELL STREET CORRIDOR –RUSSELL/ADELINE



- Long crossing – evaluating one- vs. two-stage PHB/RRFB activation
- Consider multiple conflict points and width of median
- Connects to Milvia St. Bicycle Boulevard and Adeline St. bike lanes



WOOLSEY-FULTON BIKE BOULEVARD & SHATTUCK-MLK BUS STOPS SAFETY PROJECTS

FOR MORE INFORMATION

- **WFBB Project Website**

<https://berkeleyca.gov/your-government/our-work/capital-projects/woolsey-fulton-bicycle-boulevard-project-wfbb>

- **SMBS Project Website**

<https://berkeleyca.gov/your-government/our-work/capital-projects/shattuck-mlk-bus-stops-project>