The Embarcadero Enhancement Project

PORT OF SAN FRANCISCO

SFMTA

WALK SAN FRANCISCO

SPUR Forum

February 19, 2020

Port of San Francisco

Who Is The Port?

- Trustee for Public Trust Lands
- Self-supporting enterprise agency

Public Trust Mission

- Promote maritime commerce, navigation and fisheries
- Protect natural resources
- Provide facilities that attract the public to use the waterfront


PORT
SAN FRANCISCO
150 YEARS
A PLACE FOR
SAILING
PORT
150 YEARS
SHIPS
AUTOMATTIC


PIE
BREAKFAST
PARKING RATES
Papercity


PORT
150 YEARS
FAMILIES


Parking
Pier 39
Ferries
CHRONICLE


150 YEARS
DINING
STOP
widened sidewalk
new promenade paving
new railing
new lighting
ZONE 2: TAYLOR ST PLAZA
expand plaza
new seating
new paving
new precast element
Louis Poulsen
Albertslund Light
Jefferson St
Special Roadway Paving
Mason St Extension
Precast
Element
Performance Zones
Special Concrete Scoring
New London
Plane Trees
BREEZEWAY
JONES ST
TAYLOR ST
MASON ST
POWELL ST

Embarcadero Enhancement Project

Walk SF & Design for Accessibility

@walksf

walksf.org

WALK SAN FRANCISCO

Who is Walk SF?

VZ SF 2024

VISION ZERO SF

VISION ZERO COALITION

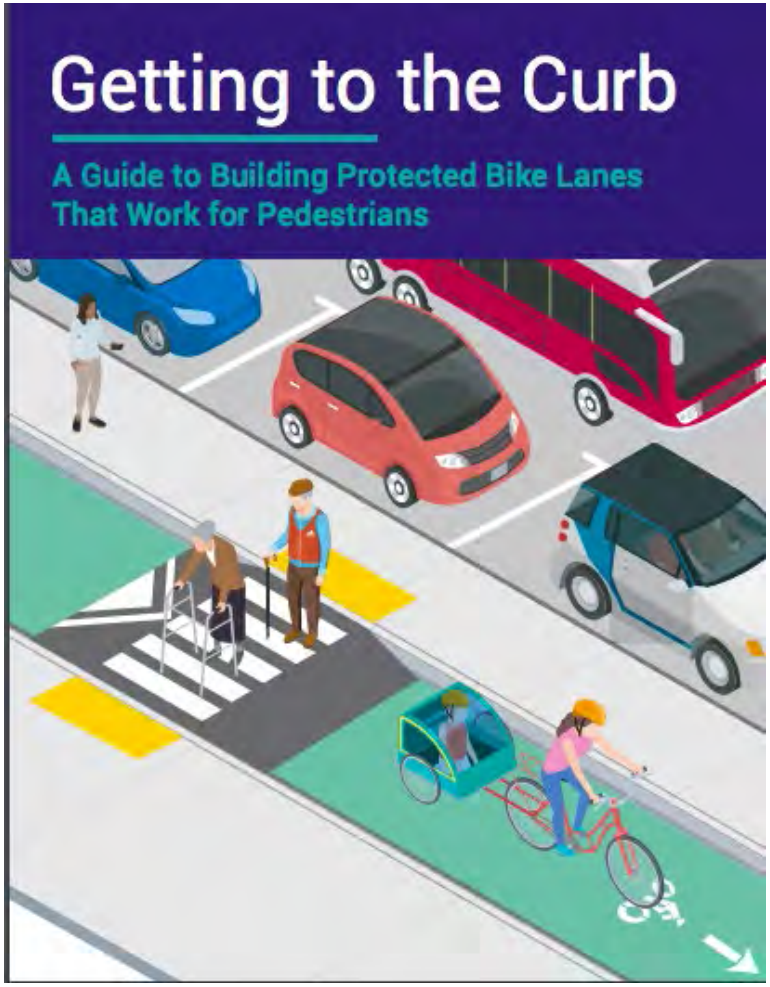
The Embarcadero - Our Waterfront Gem


PIERS 15/17
exploratorium


TOW-AWAY
NO STOPPING
ANY TIME
NO SKATEBOARDS
Bay
713
C
SAN FRANCISCO TAXICAB


SAN FRANCISCO
PUBLIC
WORKS
SFMTA
PORT
SAN FRANCISCO
A PLACE FOR
HISTORY
LEFT
RIGHT

Focus on safe bike infrastructure



Getting to the Curb

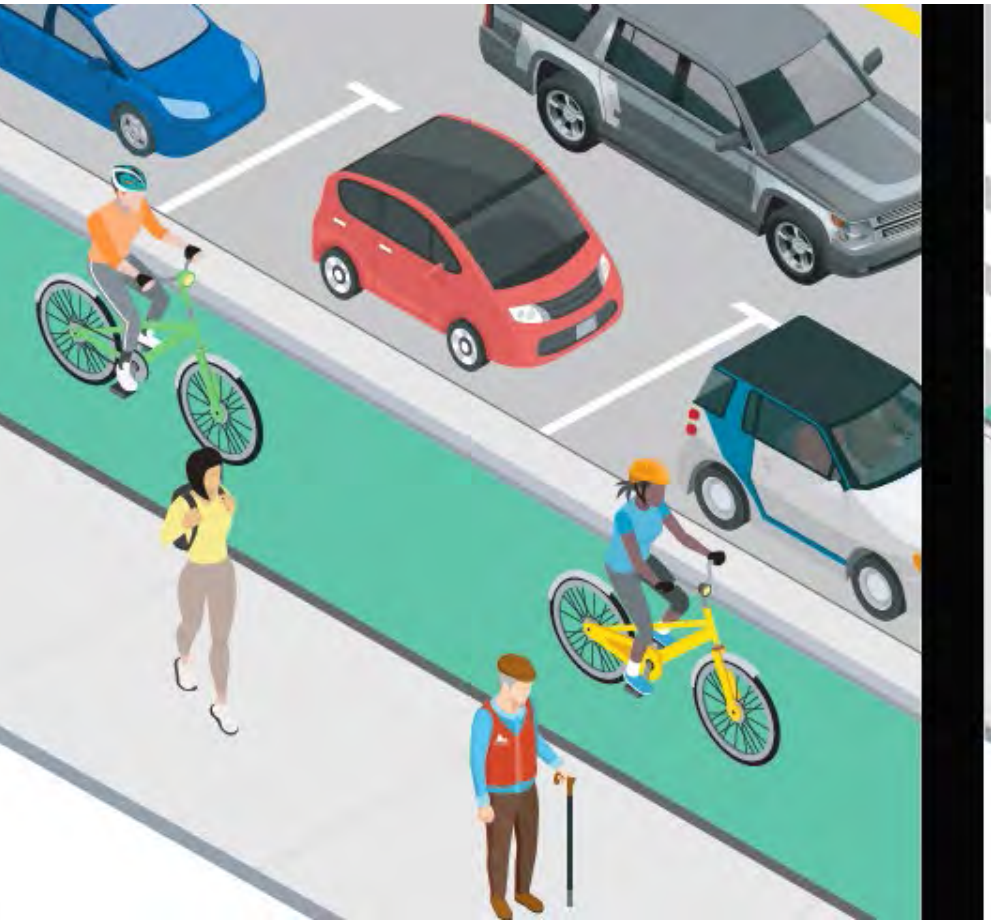
Getting to the Curb

Senior & Disability Working Group of the Vision Zero Coalition

Nine Principles

1. Institutionalize Inclusive Engagement and Co-Design
2. Design a Wide Buffer Area, At Least Five Feet
3. Ensure the Buffer Area Is Obstacle-Free
4. Build Raised Pedestrian Crossings Across the Bike Lane
5. Install Robust Speed Management Features at Bike Lane Crossings
6. Make Crossings High-Visibility
7. Ensure There Are Access Points to/from the Curb At Least Every 100 Feet
8. Ensure That Quick-Build Projects Include Sidewalk Curb Ramps
9. Include Accessible Loading Islands When No Paratransit Access or Parking

Separated bikeways today



Challenges crossing bikeway

Solutions

Buffer design challenges

Solutions

Importance of Inclusionary Planning & Community Engagement

THANK YOU!

Stay connected

Jodie Medeiros, Executive Director

Jodie@walksf.org

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walksf.org

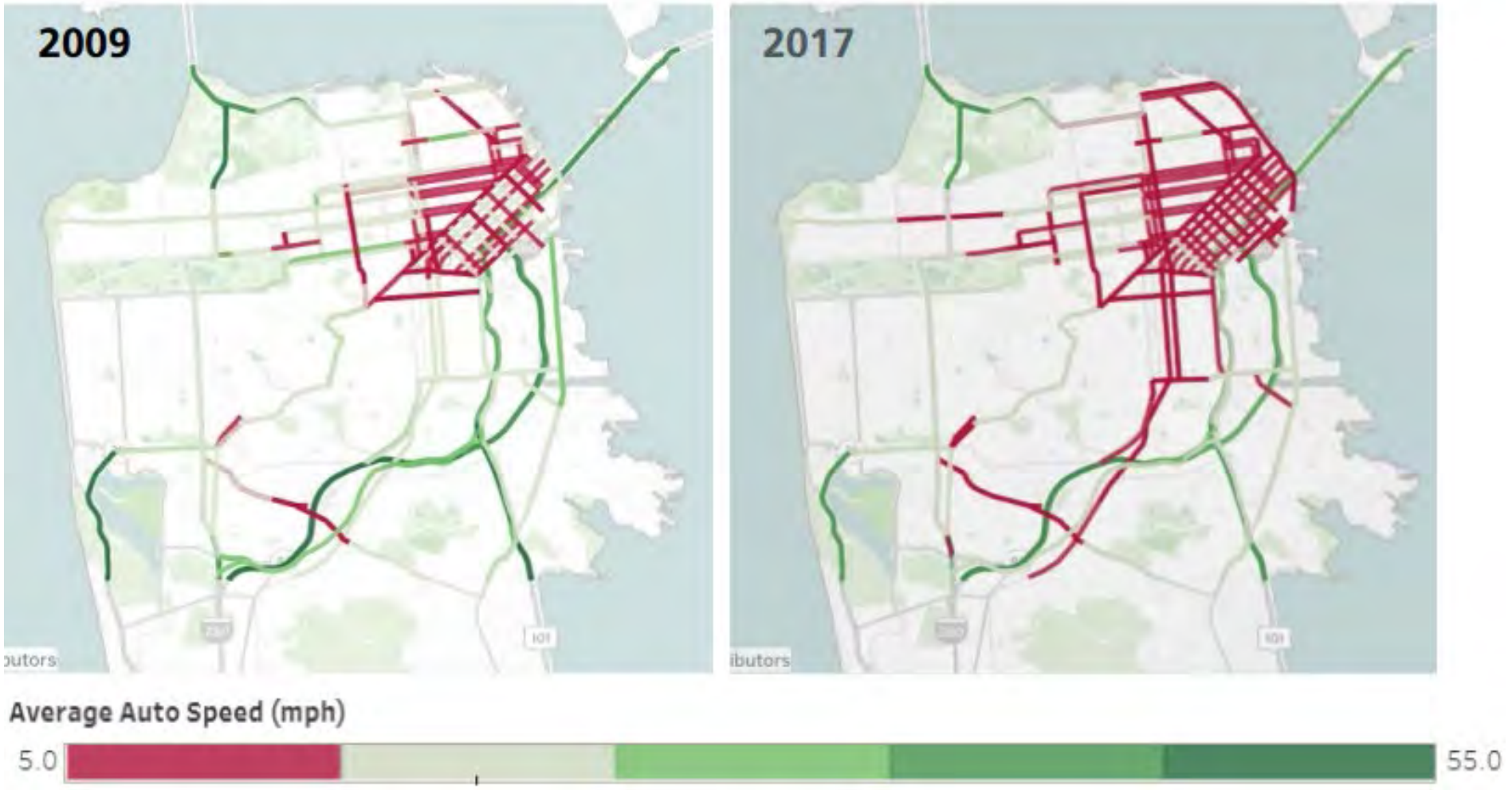
WALK SAN FRANCISCO

Embarcadero Enhancement Project


1927

Source: SF Chronicle

City Growth & Congestion



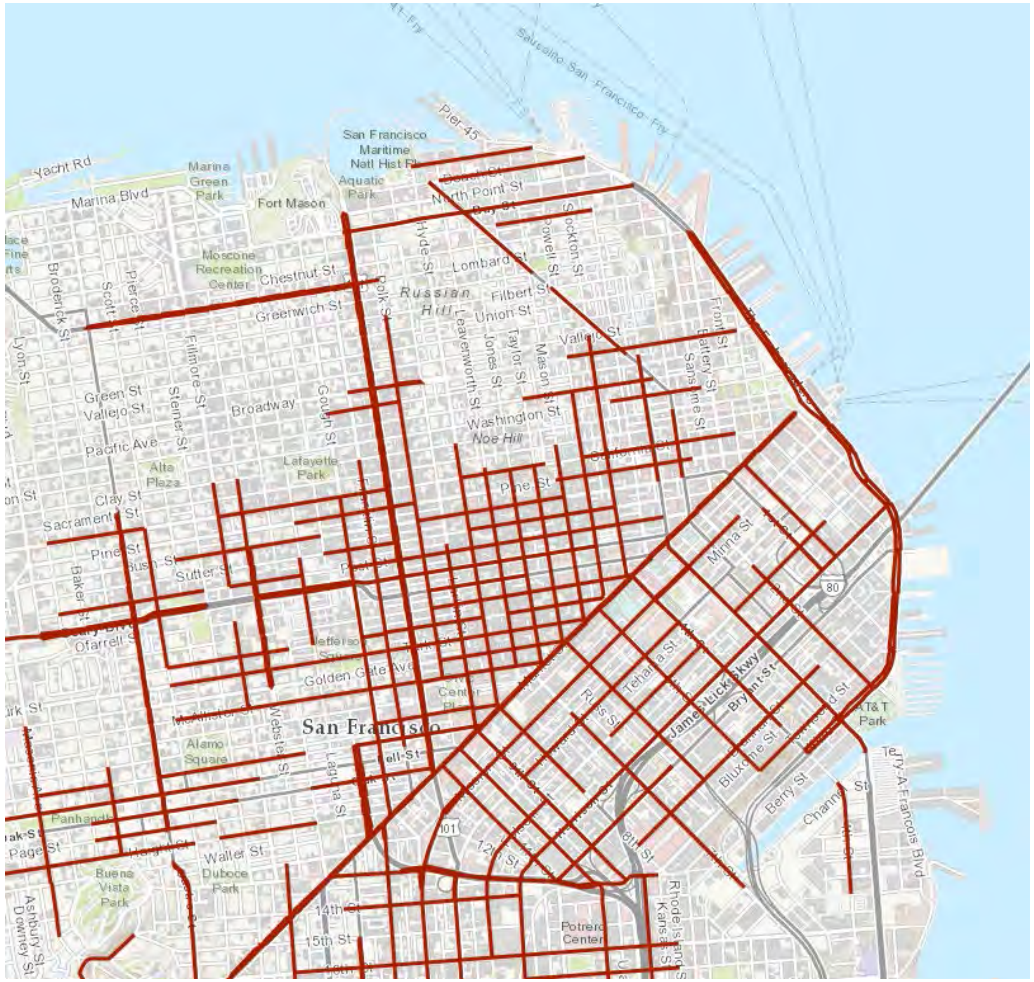
One recent study estimates 80%+ of increased delay on The Embarcadero is related to Uber & Lyft

The Experience Today

The Experience Today

The Experience Today

Vision Zero High-Injury Network



**Remaining victims include 26 pedestrians, 122 drivers/passengers (including one fatality at Bryant Street), and 2 "other"*

Most of The Embarcadero is on San Francisco's High Injury Network, representing the city's 13 percent of streets that account for 75 percent of severe and fatal traffic collisions.

Between 2014 and 2019, **242 people** were injured by traffic on The Embarcadero including two fatalities.

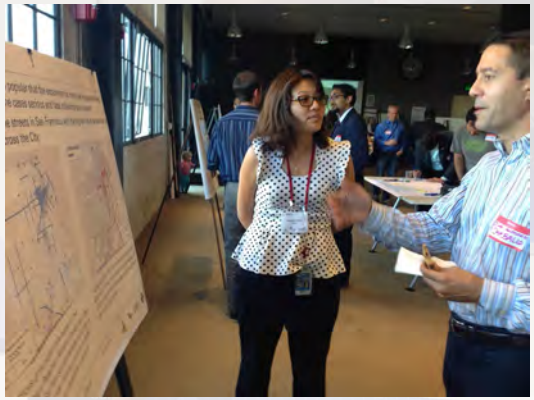
The vast majority of collisions occur at intersections. Nearly 40% of all victims (92) were people on a bicycle, despite being approx. 5% of all traffic.*

The drive behind Vision Zero is that these deaths and injuries are preventable and unacceptable.

Embarcadero Transportation Goals

- Safety
- Access
- Mobility
- Prosperity
- Civic Design
- Resiliency

2014 Open House / Design Workshops (x3)



What We Heard

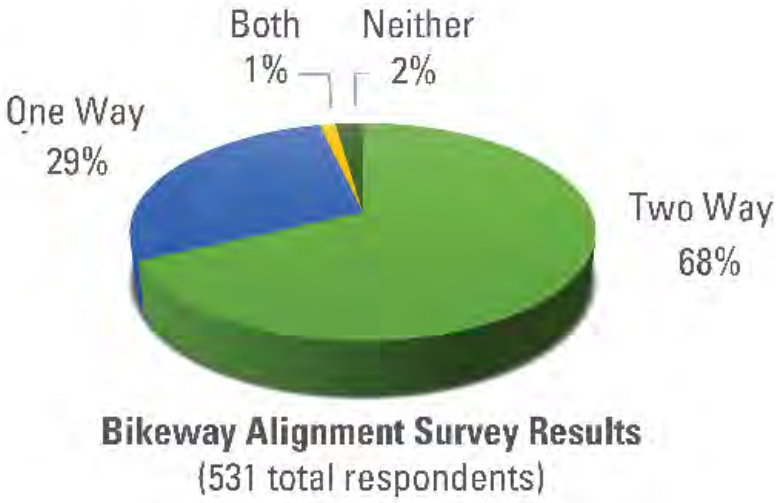
- Accommodate Loading/Unloading
- Wide and Welcoming Bikeway
- Think 'Big'
- Adapt to Best Uses of Curb (Right-of-Way)
- Details Matter
- Provide Flexibility
- Accommodate Larger Vehicles / Lane Widths
- Fisherman's Wharf/Pier 39 Area Needs Separate Planning

Detailed Summary Report available at sfmta.com/embarcadero

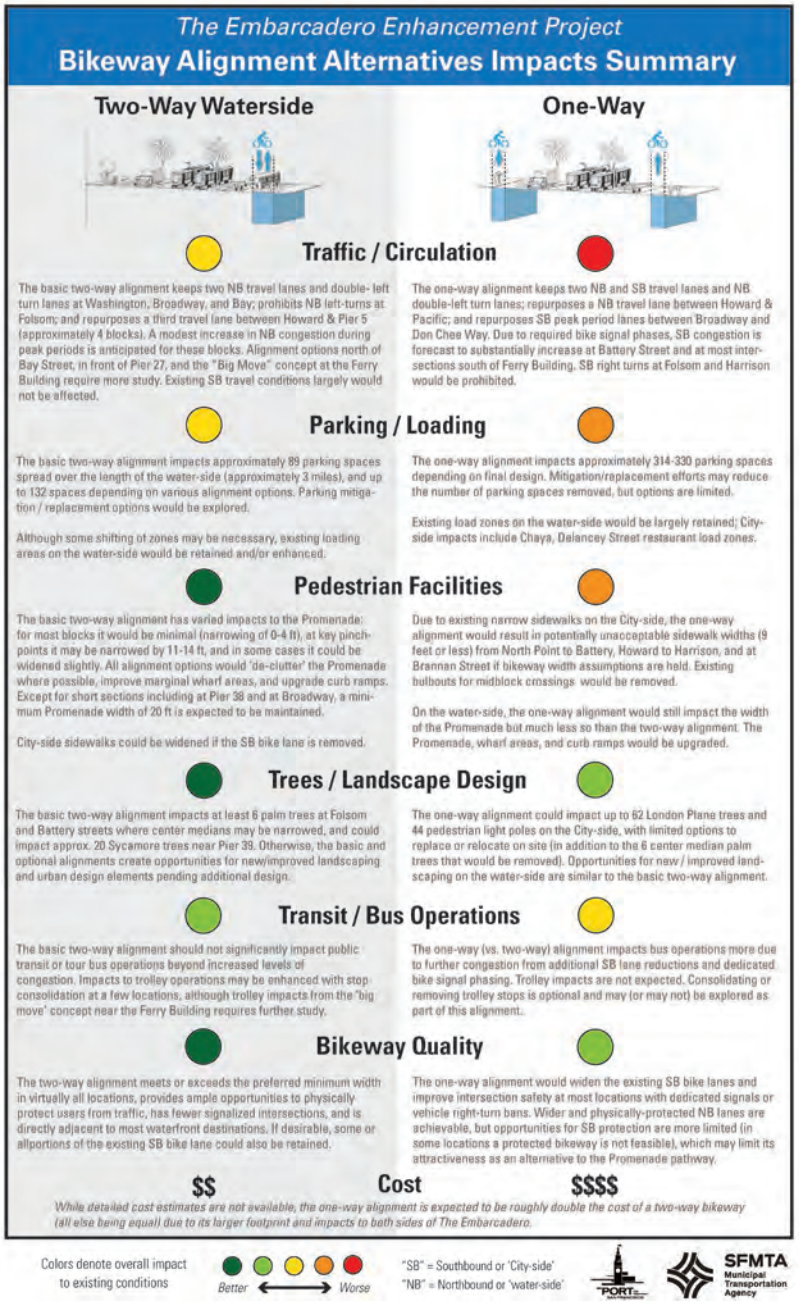
2016 Open House

Assessing Trade-Offs of Bikeway

- One-Way vs. Two-Way Protected
- Preliminary Parking & Traffic Analysis
- 17,000+ mailers / 300+ attendees
- Public Survey (531 responses)



Bikeway Alignment Survey Results
(531 total respondents)



Public Outreach / Engagement

Project Briefings

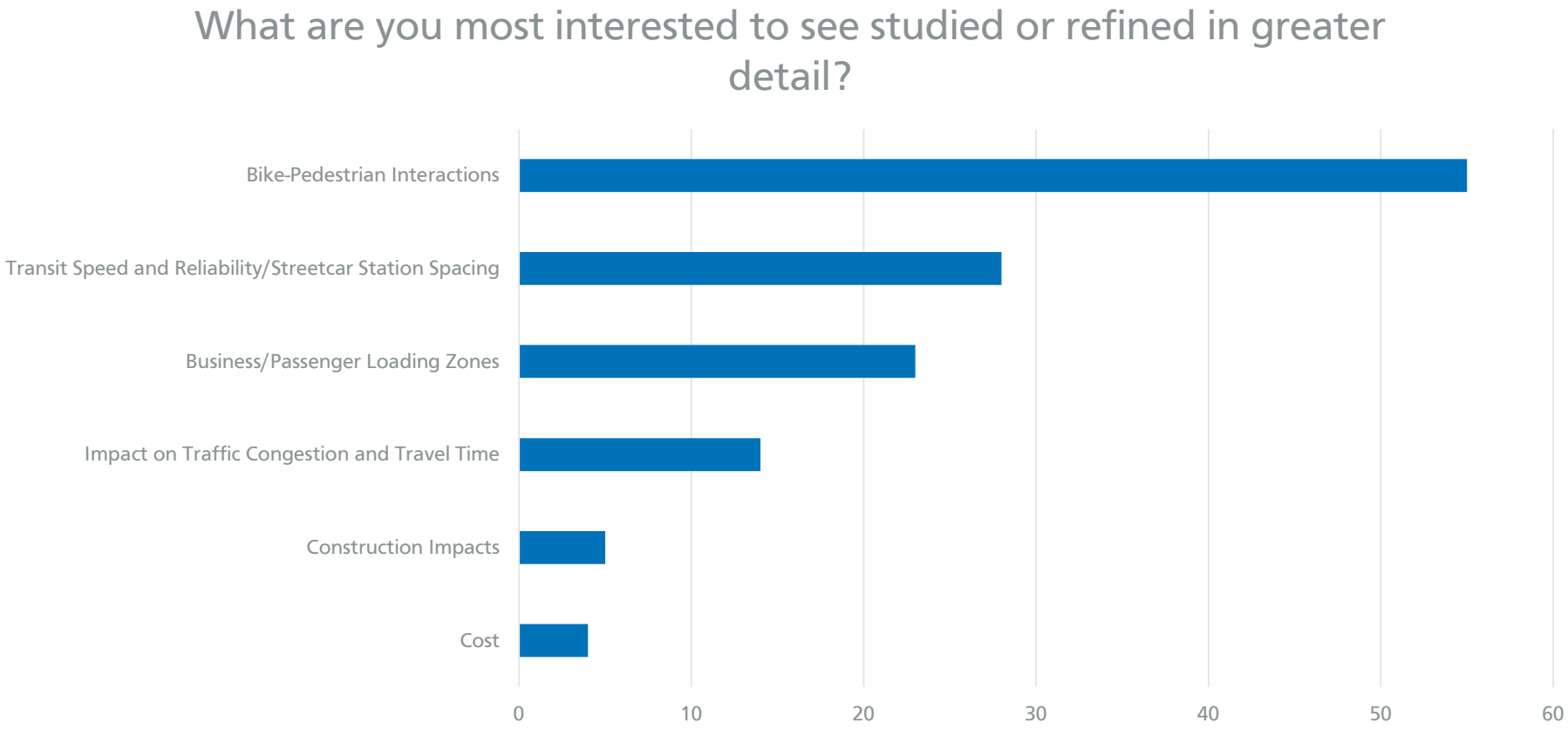
- Port Commission (2014, 2018)
- Northeast Waterfront Advisory Group (NEWAG)
- Central Waterfront Advisory Group (CWAG)
- Maritime Commerce Advisory Committee (MCAC)
- Ballpark Mission Bay Transportation Committee
- San Francisco Hotel Council
- SF Travel, SF Tour Guide Guild
- South Beach/Rincon/Mission Bay Neighborhood Assoc.
- Barbary Coast Neighborhood Association
- District 3 SFMTA Working Group
- Fisherman's Wharf Community Benefits District
- Fisherman's Wharf Restaurant Association
- Fisherman's Wharf Merchants Association
- MTC Bay Trail Steering Committee
- Individual stakeholders incl. Ferry Building, Exploratorium, Pier 39, and many others...

Changes are coming to the Embarcadero, San Francisco's waterfront

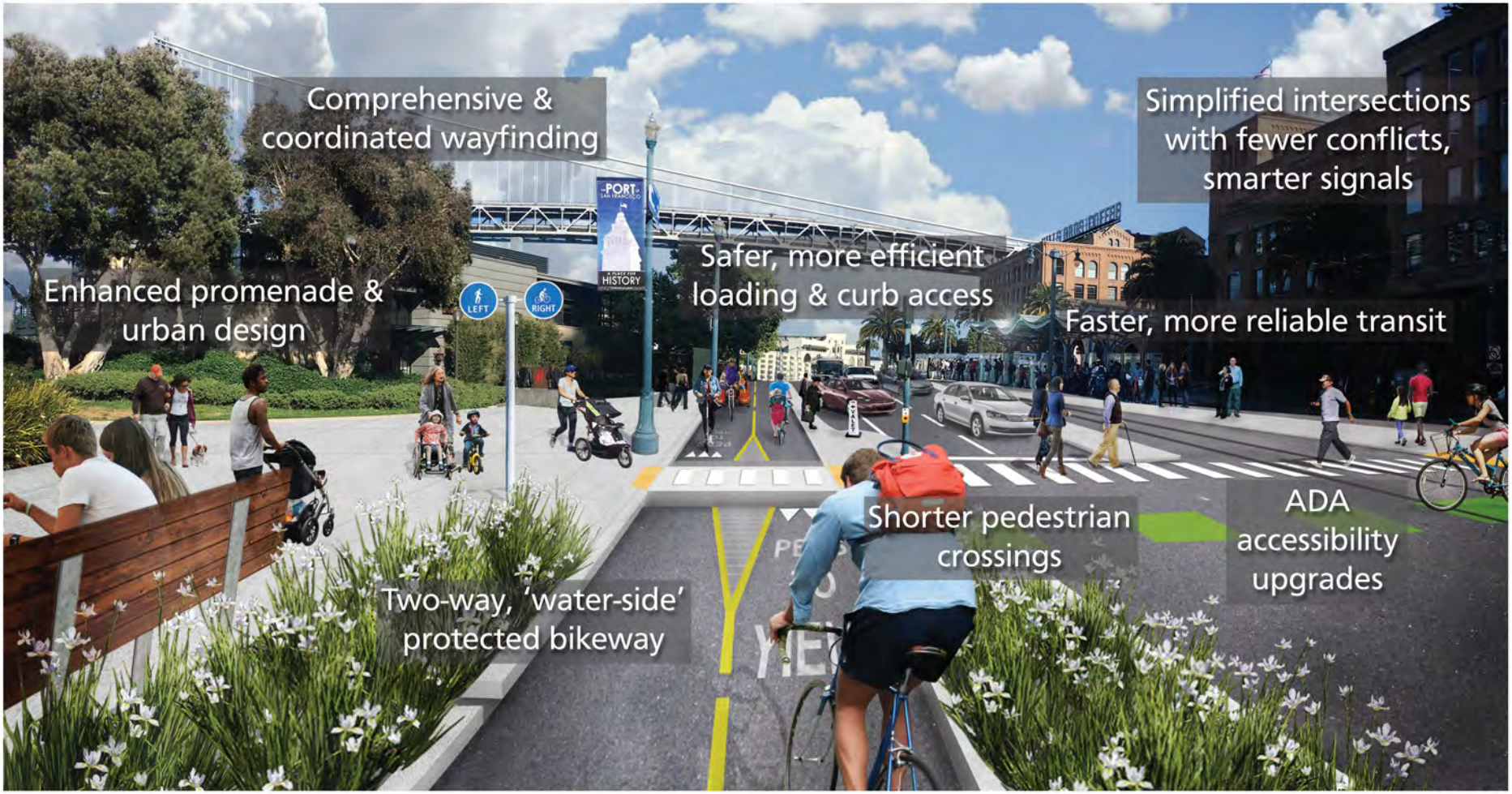
Media

Vendor Ride-Alongs

2018 Design Showcase Survey



VISION FOR A BETTER EMBARCADERO



SFMTA | PUBLIC WORKS | VISION ZERO SF

Embarcadero Enhancement Design Showcase - October 25, 2018

www.sfmta.com/embarcadero


ALCATRAZ LANDING
LEFT
RIGHT
TOW-AWAY
NO PARKING
PEDS
TO
YIELD

Design Strategies

START HERE

16 ft Preferred Width

Absorb existing 5-ft bike lane

Need 11 ft

TIER 1 STRATEGIES

Remove General Metered Parking

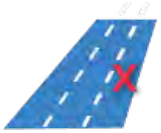
8 feet

Narrow Promenade

width varies

Narrow Center Median

width varies



Remove 3rd Northbound Travel Lane

11 feet

TIER 2 STRATEGIES

Utilize 'Marginal Wharf' Areas

~8 feet

Remove Northbound Left-Turn Lane

~11 feet

Consider Streetcar Stop Removal / Relocation

width varies

TIER 3 STRATEGIES

Consider 'Flex Zone' & Time Restrictions for Loading Access

width varies

Consider 'Mixing Zone' for Shared Pedestrian/Bicycle Access

width varies

Embarcadero Enhancement Project

Project Approvals / Environmental Determination (PAED) Phase

- $875,000 for preliminary engineering, traffic analysis, and public outreach
- CEQA review including historic resources evaluation & updated project description
- Ongoing coordination with Port Resiliency Program, RFP's for pier redevelopment
- $12m-$15m assumed for initial project segment (tentatively the 'southern segment')
- Consultant assistance includes 3D animation(s) of two-way bikeway for public engagement

SFMTA Quick-Build Initiative

LOCAL // BAY AREA & STATE

Breed calls for 20 miles of new protected bike lanes in SF in two years

Rachel Swan | May 9, 2019 | Updated: May 9, 2019 4:15 p.m.

Activists with the People Protected Bike Lane group form a human barrier to separate streets in San Francisco.

Vision Zero Desperately Needs Help

San Francisco's goal to eliminate traffic fatalities by 2024 seems farther away than ever. What will it take to get back on track?

by Ida Mojadad • 08/20/2019 5:39 pm - Updated 08/22/2019 12:08 pm

By SF Weekly's count, 23 people have died in traffic fatalities on city streets this year. (Art by Sophia Valdes)

LOCAL // BAY AREA & STATE

City speeds up approval process for new bike lanes, road safety improvements

Rachel Swan | June 5, 2019 | Updated: June 5, 2019 4:49 p.m.

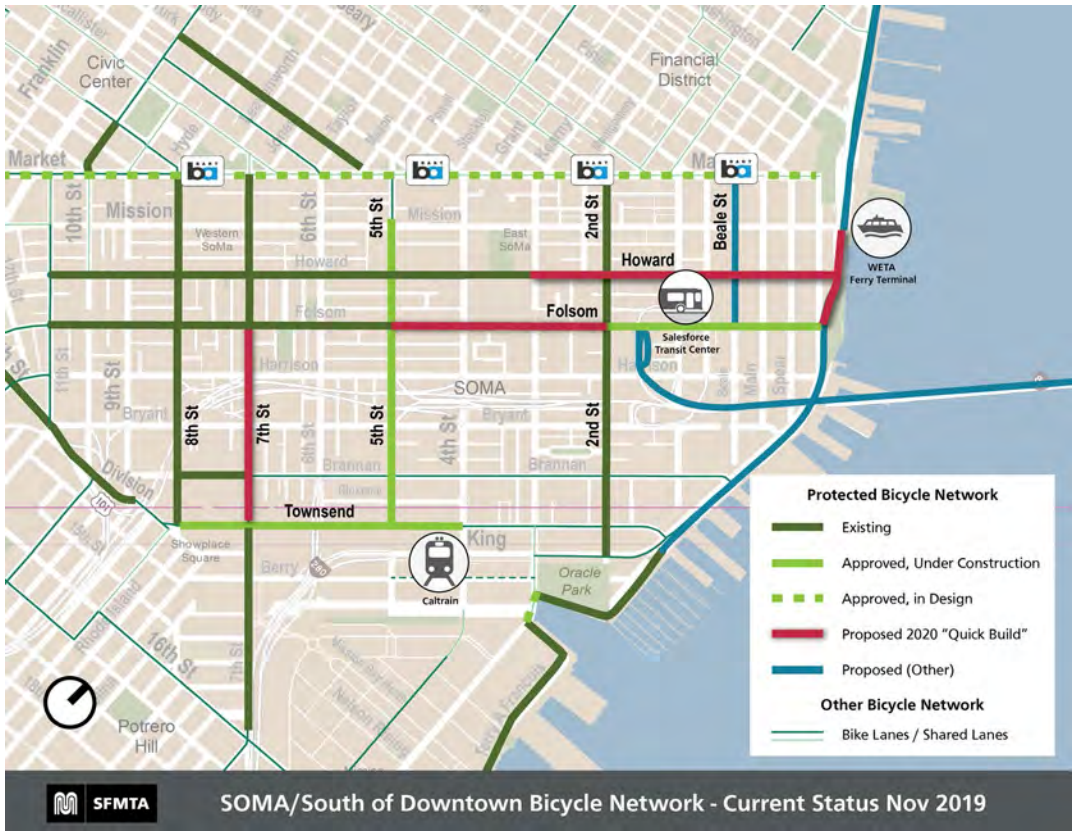
killed earlier this year after being struck by a vehicle.

SFMTA Quick-Build Initiative

Source: Paul Krueger (Flickr)

Folsom to Mission Quick-Build Proposal

Folsom to Mission Quick-Build Proposal



Protected Bikeway:

Short segment of two-way, water-side bikeway helps connect Ferry Terminal users with rapidly expanding SOMA protected bicycle network; also allows preview/testing of new bikeway concept, including bike signals

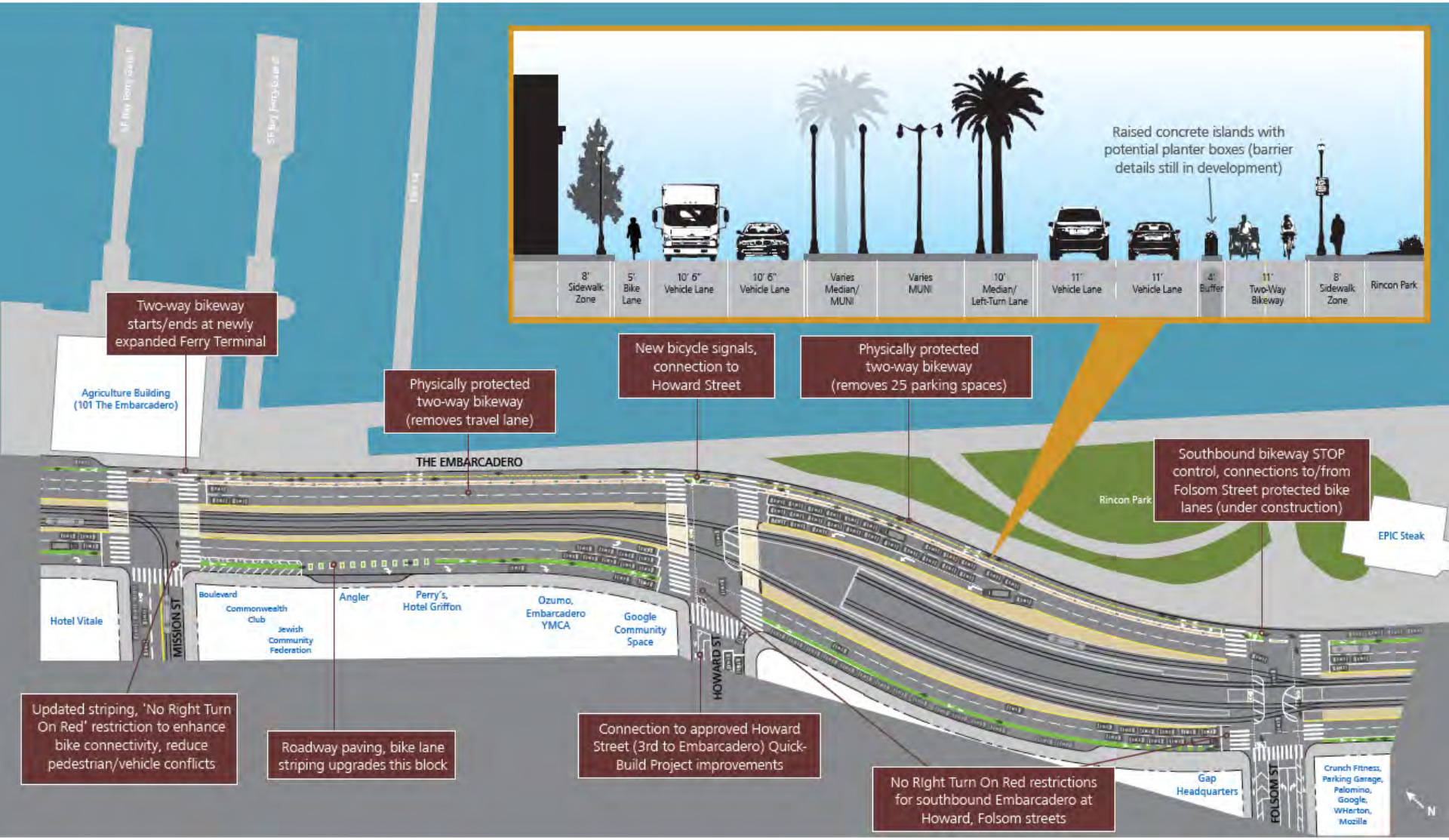
Safer Pedestrian Crossings:

Right-turn on red restrictions, 'painted safety zones,' one block of vehicle lane reduction to calm busy intersections; calmer promenade with reduced bicycle/scooter traffic

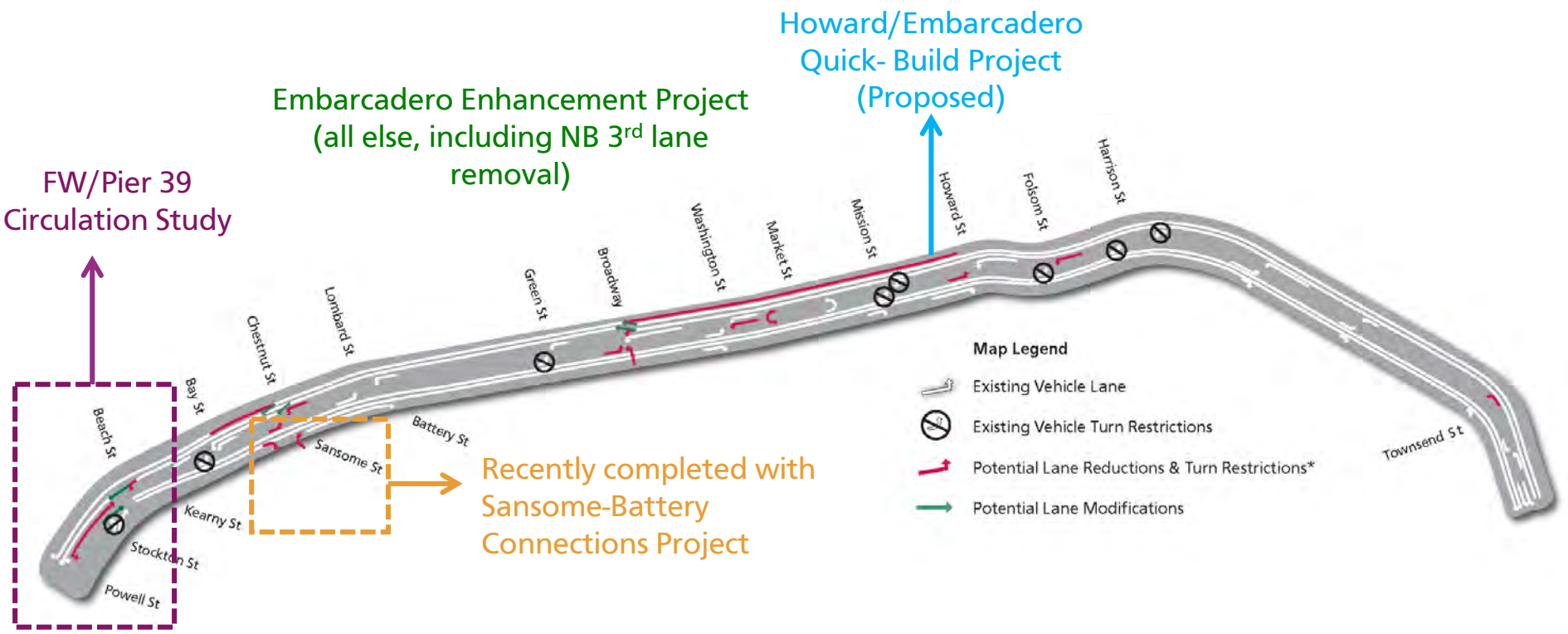
Spot Pavement Repair:

Smoother, safer rides for everyone

Folsom to Mission Quick-Build Proposal



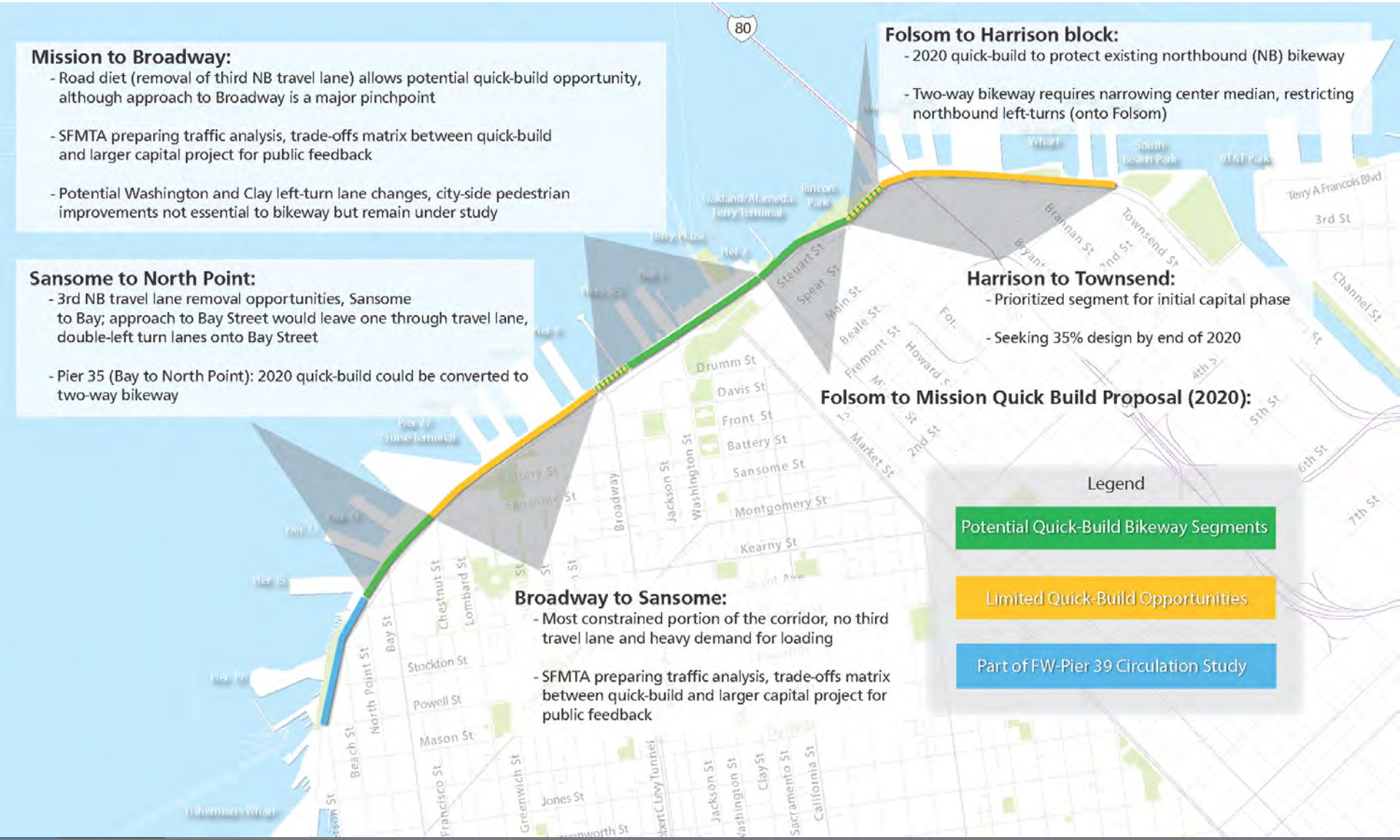
Design Direction - Circulation



Planning Phase Assumptions

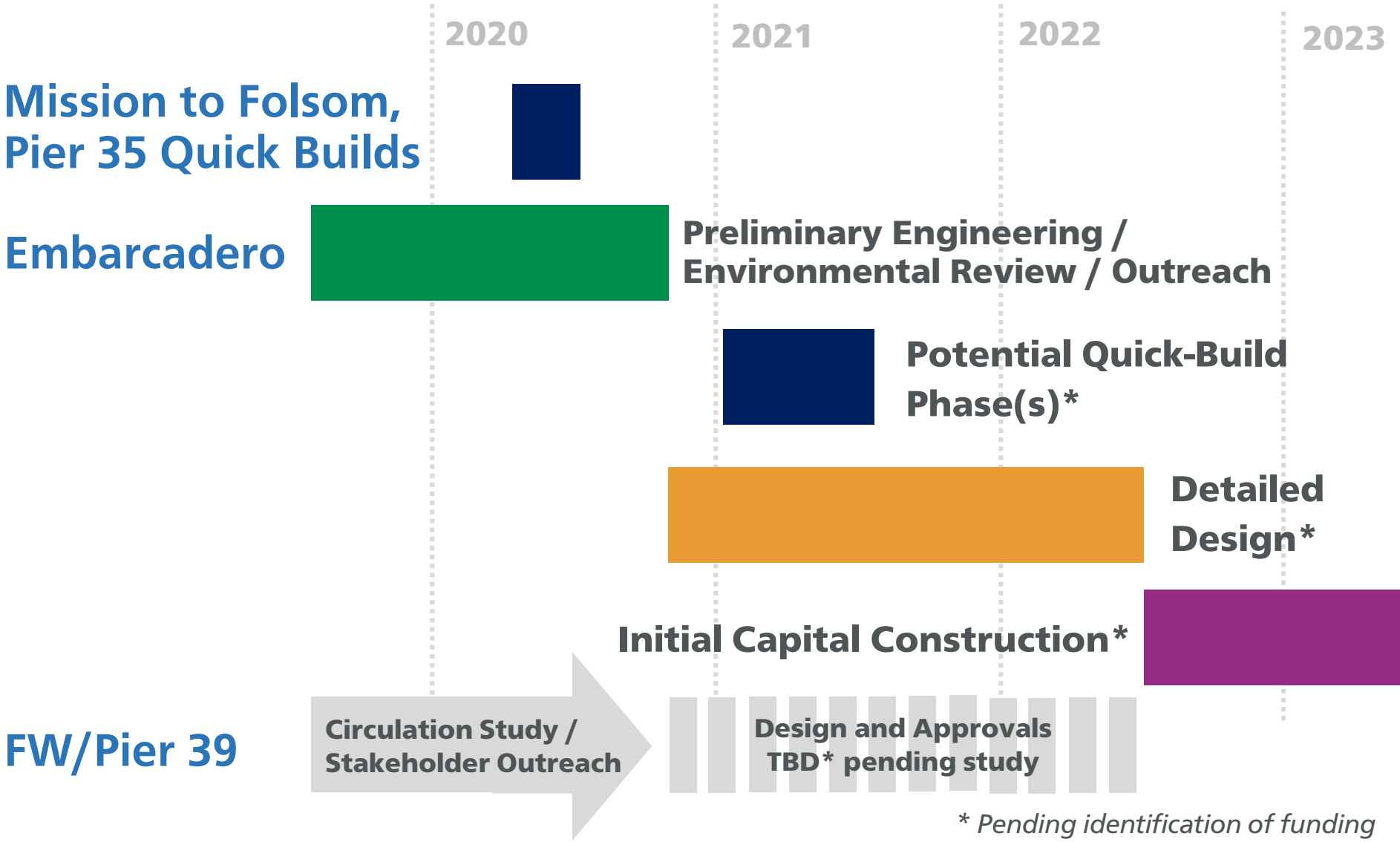
- Maintain two vehicle through lanes (except at NB approach to Bay Street)
- Seek to remove double-turn lanes if feasible (except at Bay Street)
- Simplify select intersections for safety, bikeway design, and/or for efficiency/transit travel time

Design Direction - Bikeway



Design Direction - Loading

Project Timelines (subject to change)



* *Pending identification of funding*

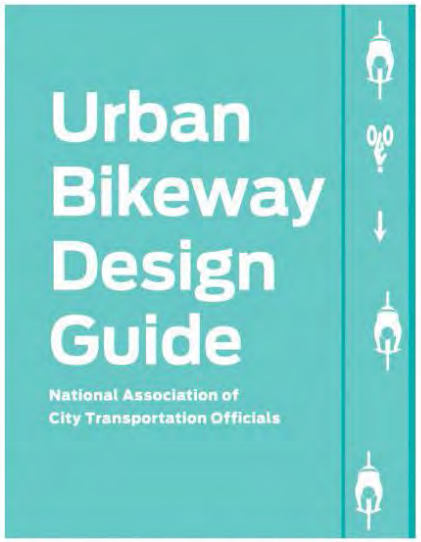
Design Considerations

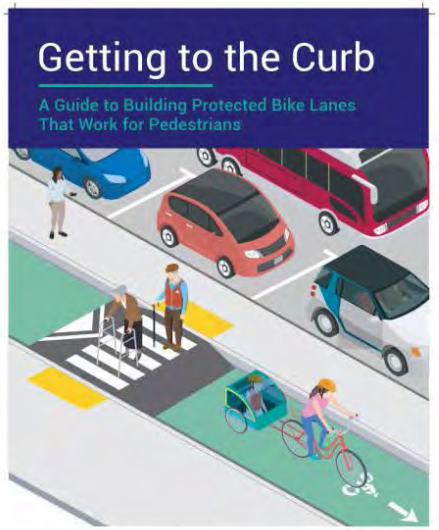
Intersection Treatments

Curbside Zones

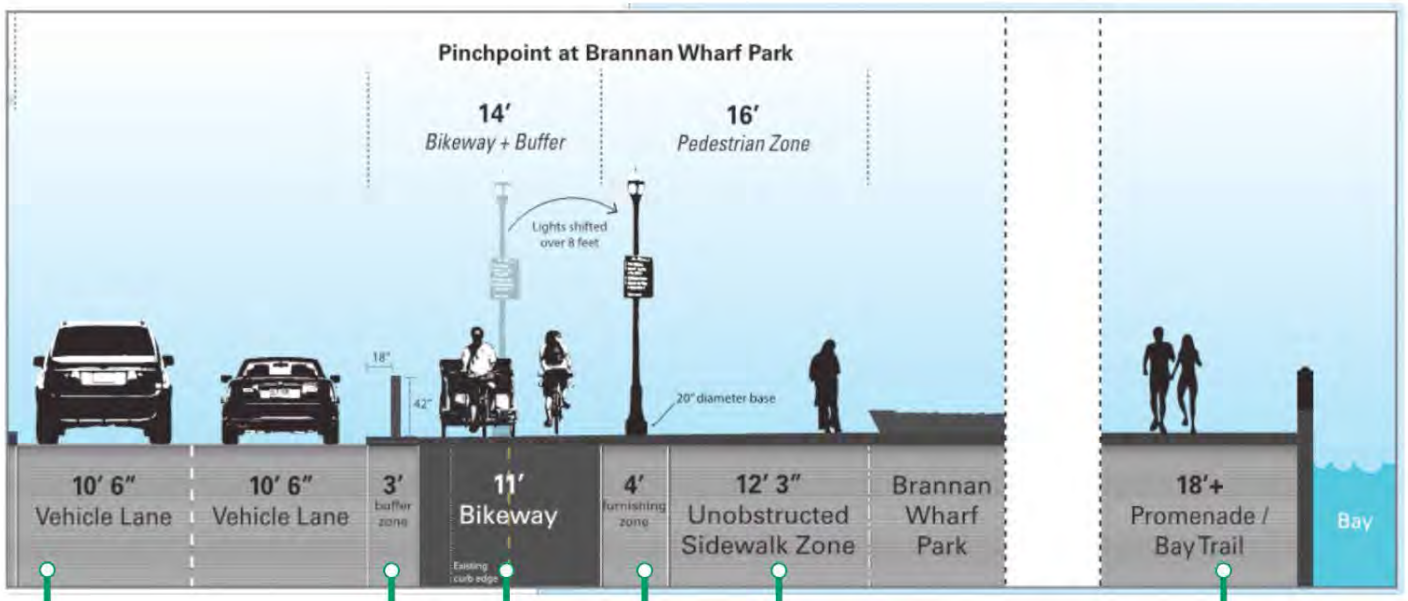
Turning Templates + Design Vehicles

Design Guidance





Cross Section Elements



Motor Vehicle Travel Lanes
The space in which motorists operate vehicles, including autos, trucks and buses.

Street Buffer
The Street Buffer separates the bikeway from motor vehicle traffic.

Separated Bikeway
The space in which the bicyclist operates. It is located between the street buffer and the sidewalk buffer.

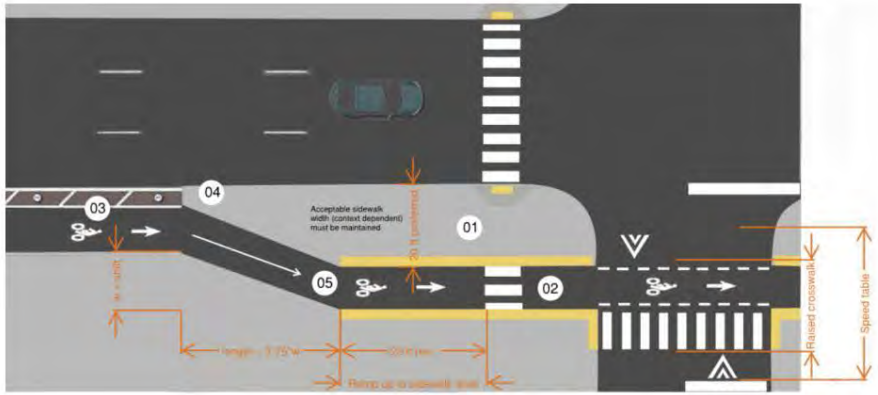
Amenity Zone/Sidewalk Buffer
The sidewalk buffer and amenity zone separates the bike-way from the pedestrian through zone and includes street furniture and amenities such as benches, lighting, refuse containers, bicycle parking, public art, and wayfinding signs.

Pedestrian Through Zone
Primary accessible pedestrian pathway paralleling the street and bikeway. The through zone ensures pedestrians have a safe and comfortable place to walk.

Sidewalk/ Promenade
The Embarcadero Promenade is the major continuous waterfront walkway and multiuse pathway along the Port of San Francisco's northern waterfront.

Intersection Treatments

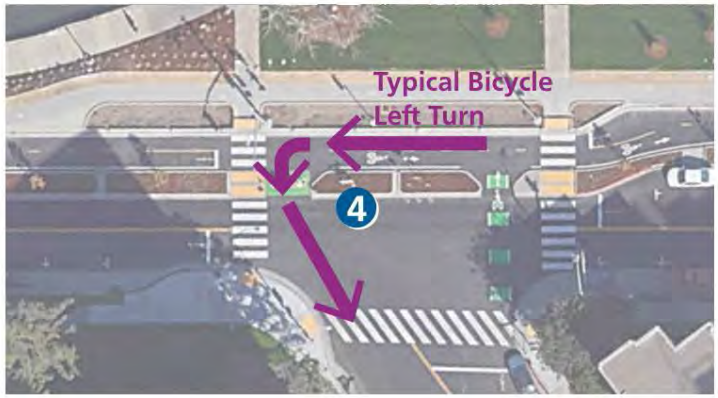
Protected Intersection

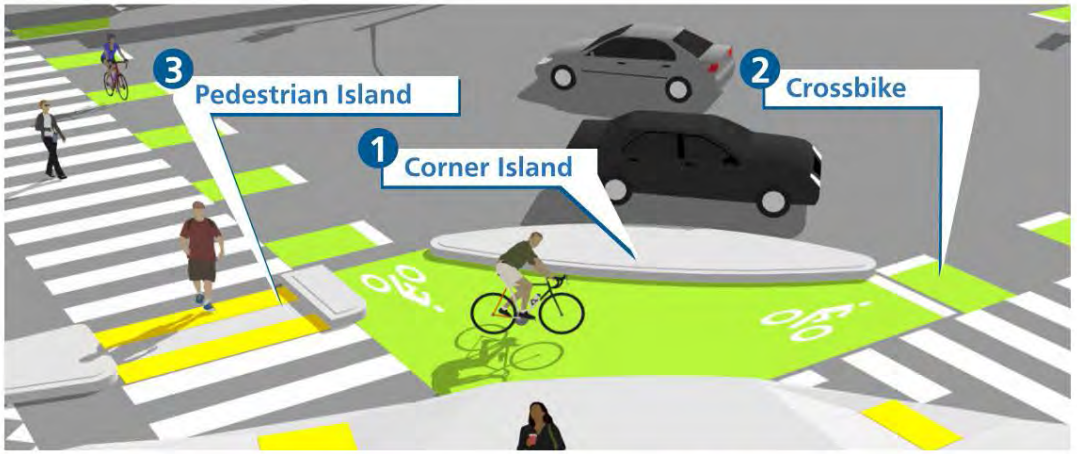


Bikeway Bend Out

Raised Bikeway Crossing

“Protected Intersection” Features





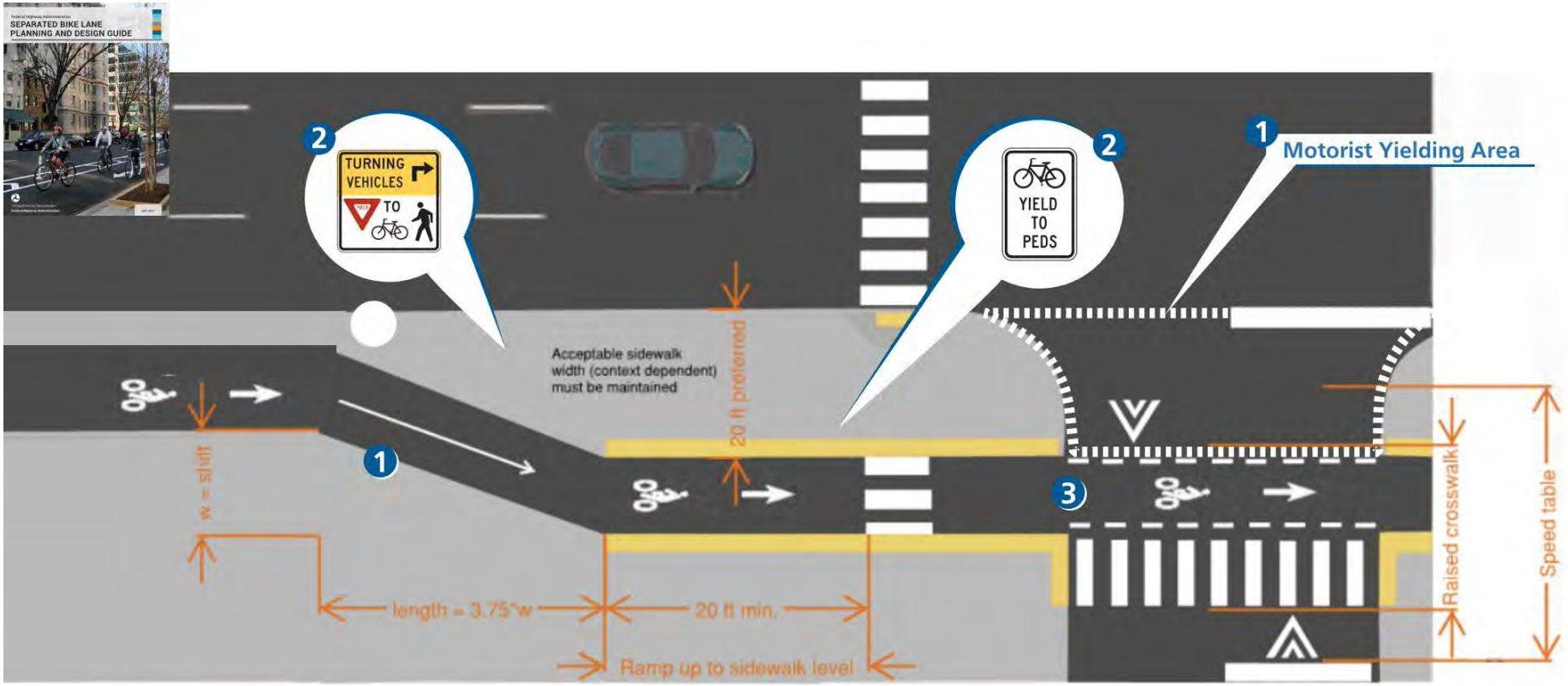
1 Buffer + Corner Island
Provides space for the **bicycle left turn queuing area** and **pedestrain refuge**. The buffer is a corner island **when motor vehicles cross** the bikeway

2 Signage + Markings
Crosswalk and **crossbike** markings identify conflict areas and guide users through the intersection

3 Pedestrian Island
Islands reduce crossing distances and improve visbility by keeping the intersection clear. **Wider islands** support large pedestrian volumes.

4 Bicycle Queue Area
Bicyclists can wait ahead of the crosswalk for a green signal and accommodates the natural position of bicyclists turning onto connecting bikeways.

Driveway "Bend-Out" Features

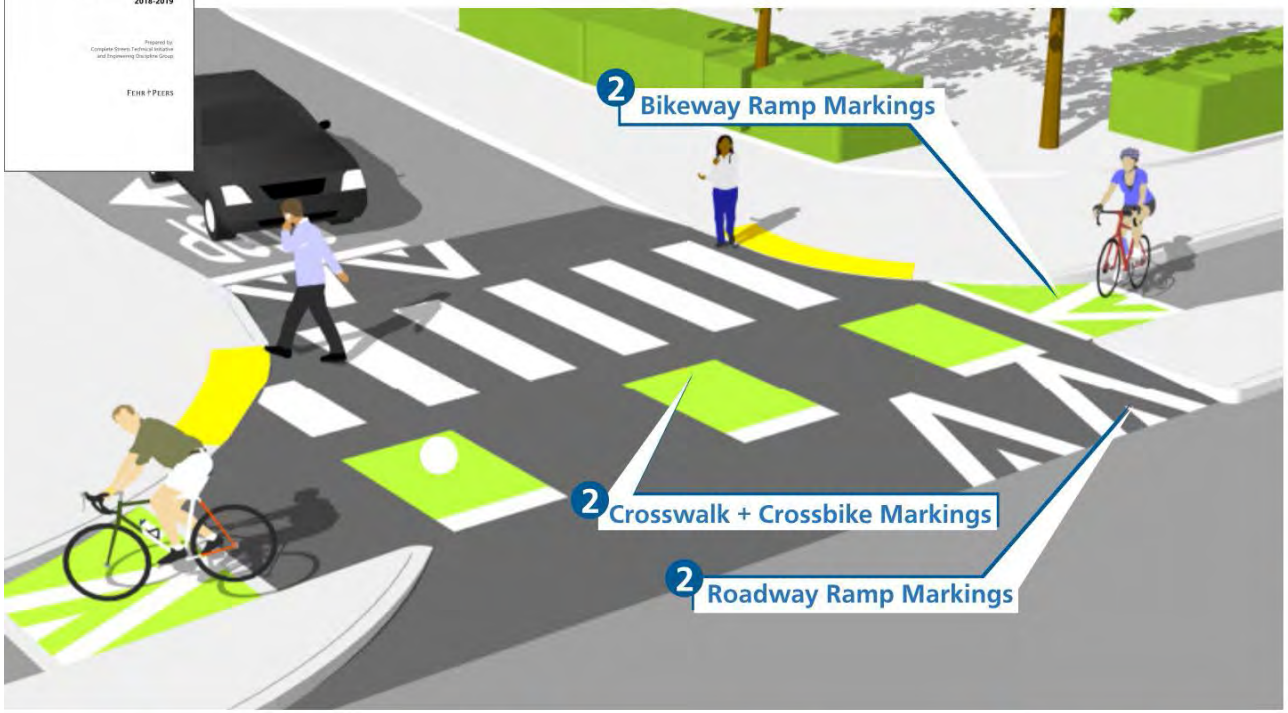


1 Bend-Out Configuration
Provides opportunity for an ample **pedestrian refuge** and **motorist yielding area** between the through street and intersecting street

2 Signage + Markings
Motor vehicle and bicycle-oriented signage and markings **identify right-of-way** and **warn** users of conflict areas.

3 Raised Crossing
The bikeway and pedestrian crossing area may be raised above street grade to s**low and alert motorists** to crossing pedestrians and bicyclists

“Raised Crossing” Features

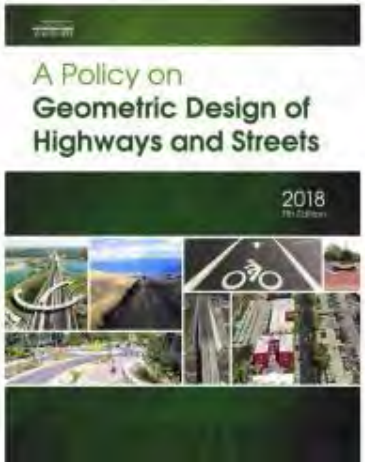


1 Raised Roadway Crossing
Alerts motorists to crossing bicyclists and pedestrians. **8%** max. grade requires about **seven feet** of bikeway street buffer space.

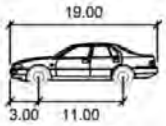
2 Signage + Markings
Motor vehicle and bicycle-oriented signage and markings **identify right-of-way** and **warn** users of conflict areas.

3 Bikeway Buffer Width
The bikeway buffer width must increase at the crossing to accommodate the roadway ramp width.

Design Vehicle Considerations

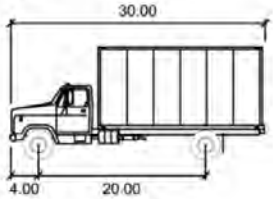


Passenger Car (P)



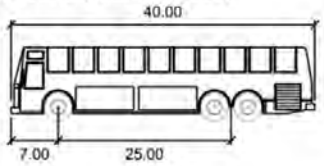
Width = 7'

Single Unit Truck (SU)



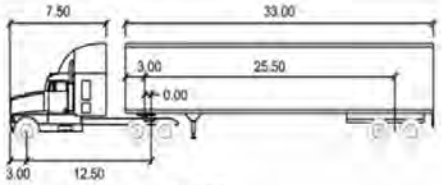
Width = 8'

40-foot City Bus (CITY-BUS)



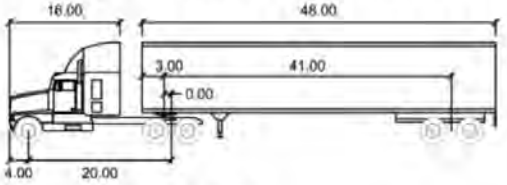
Width = 8.5'

Semitrailer (WB-40)



Width = 8'

Surface Transportation Assistance Act Semitrailer (STAA-STD-S0)



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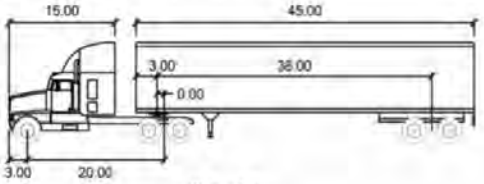
California Legal Semitrailer (CA LEGAL-50)



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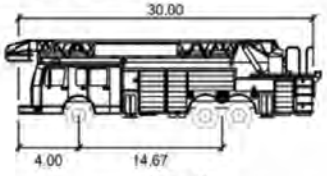
Fire Truck (Example)

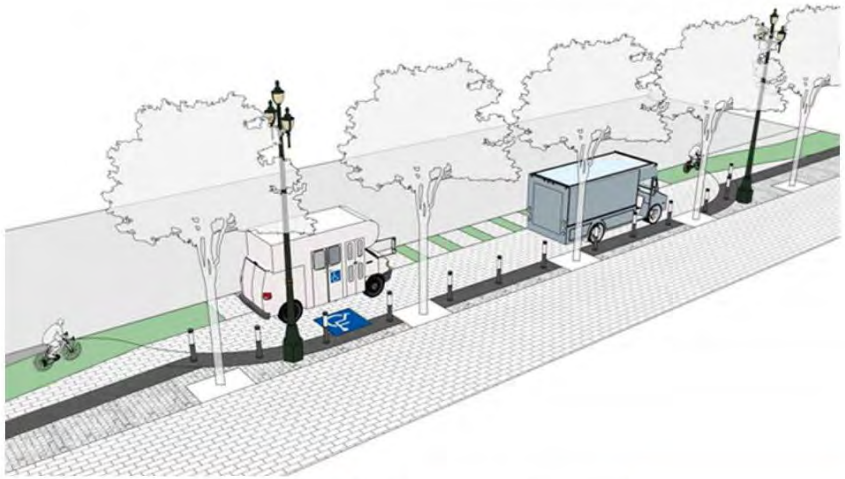


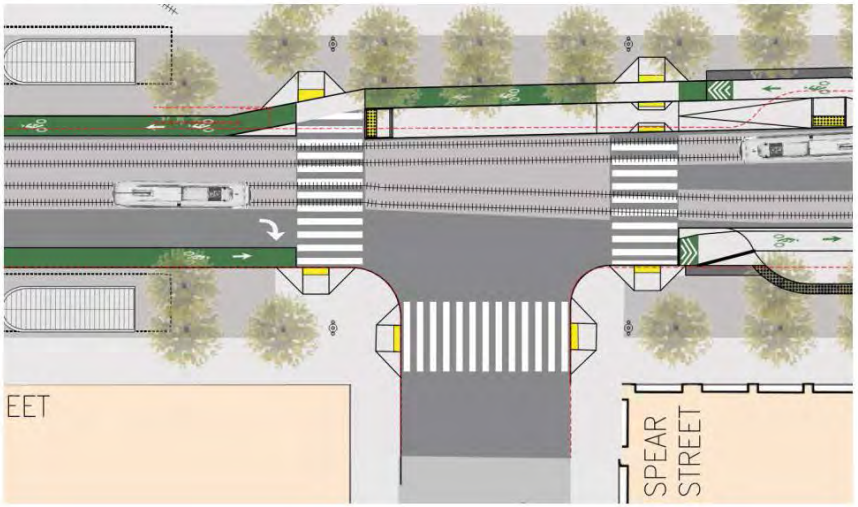
Width = 8'

12

Recent Inspiration

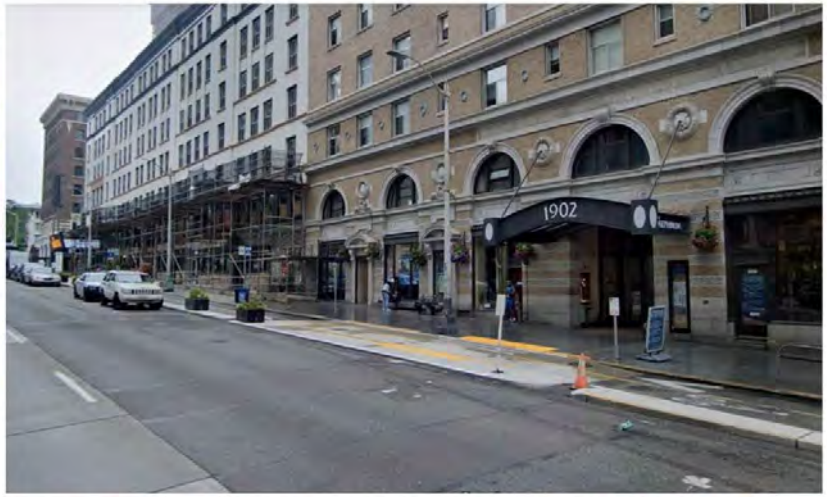
Better Market Street

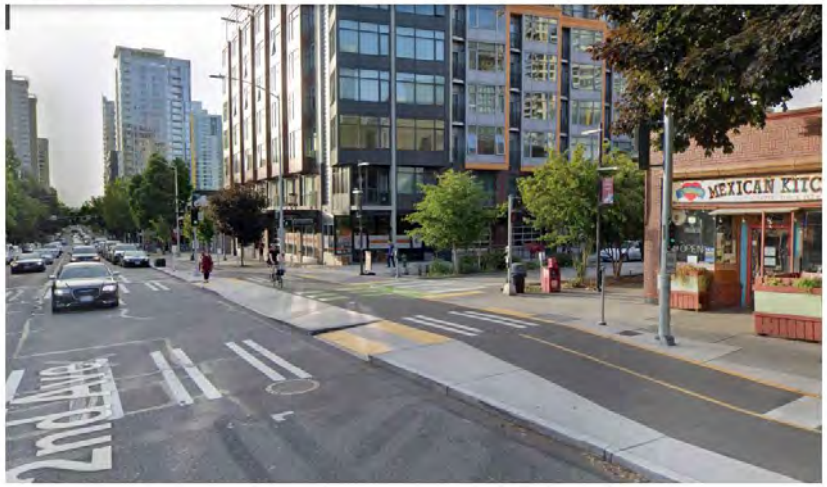




Sample Projects

Seattle, WA





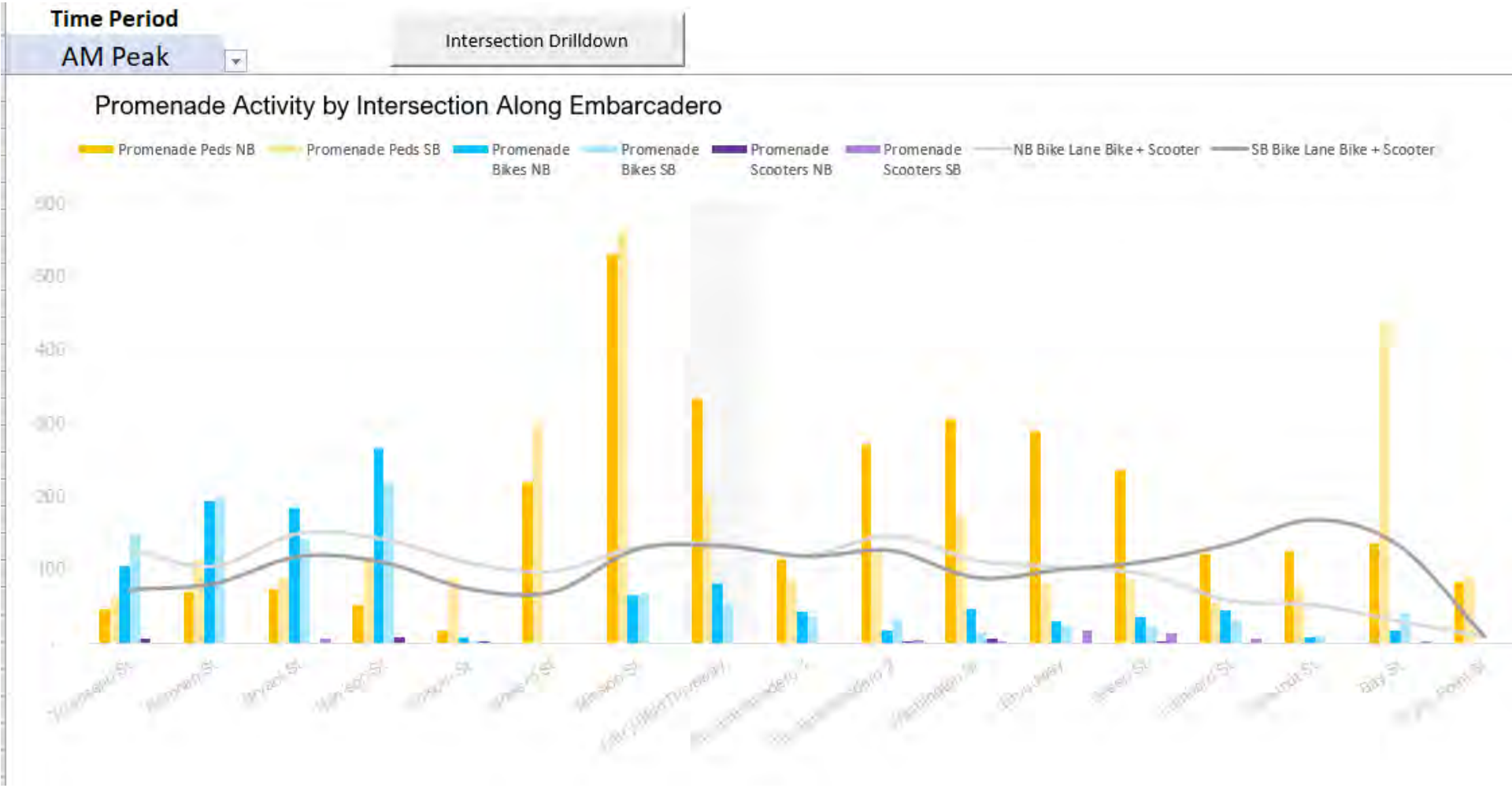
Sample Projects

Lake Merritt, Oakland

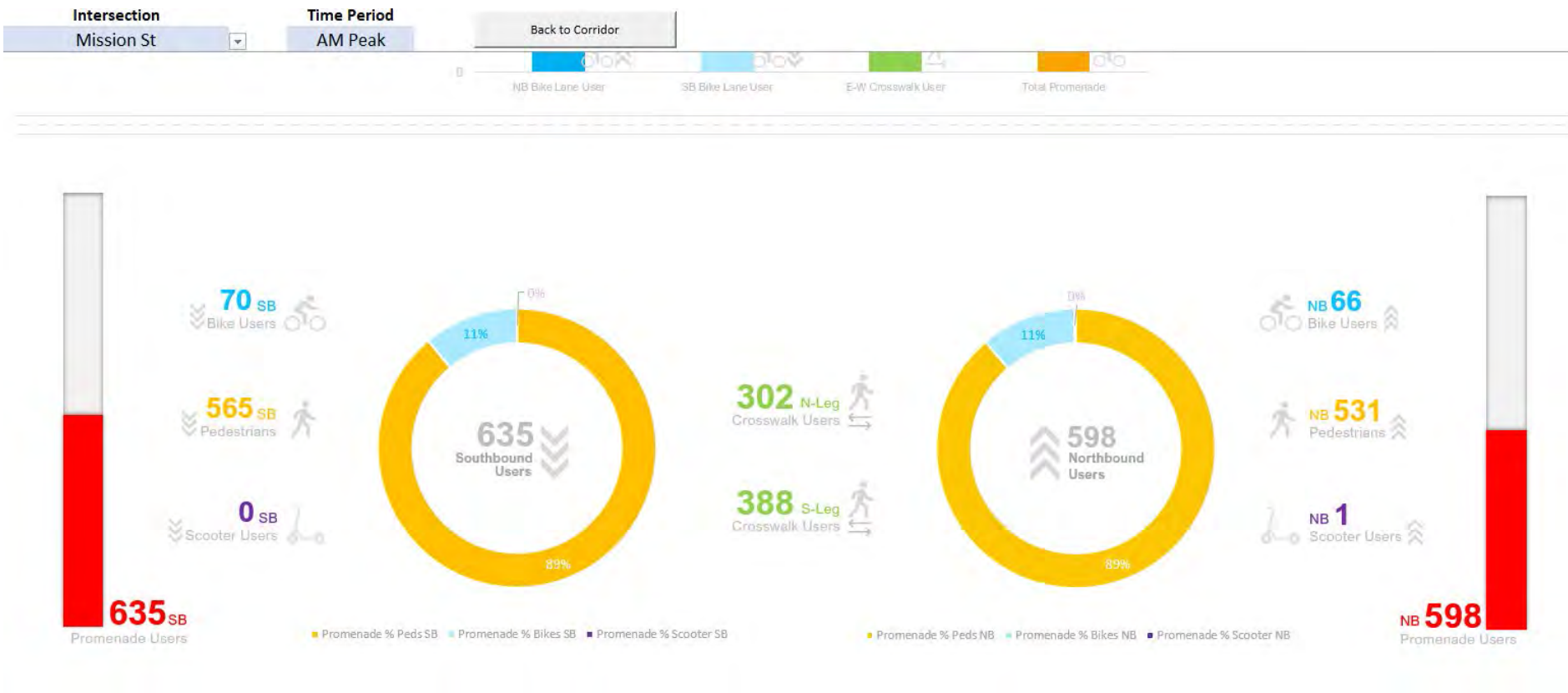
Context-Sensitive Design

Curb Management

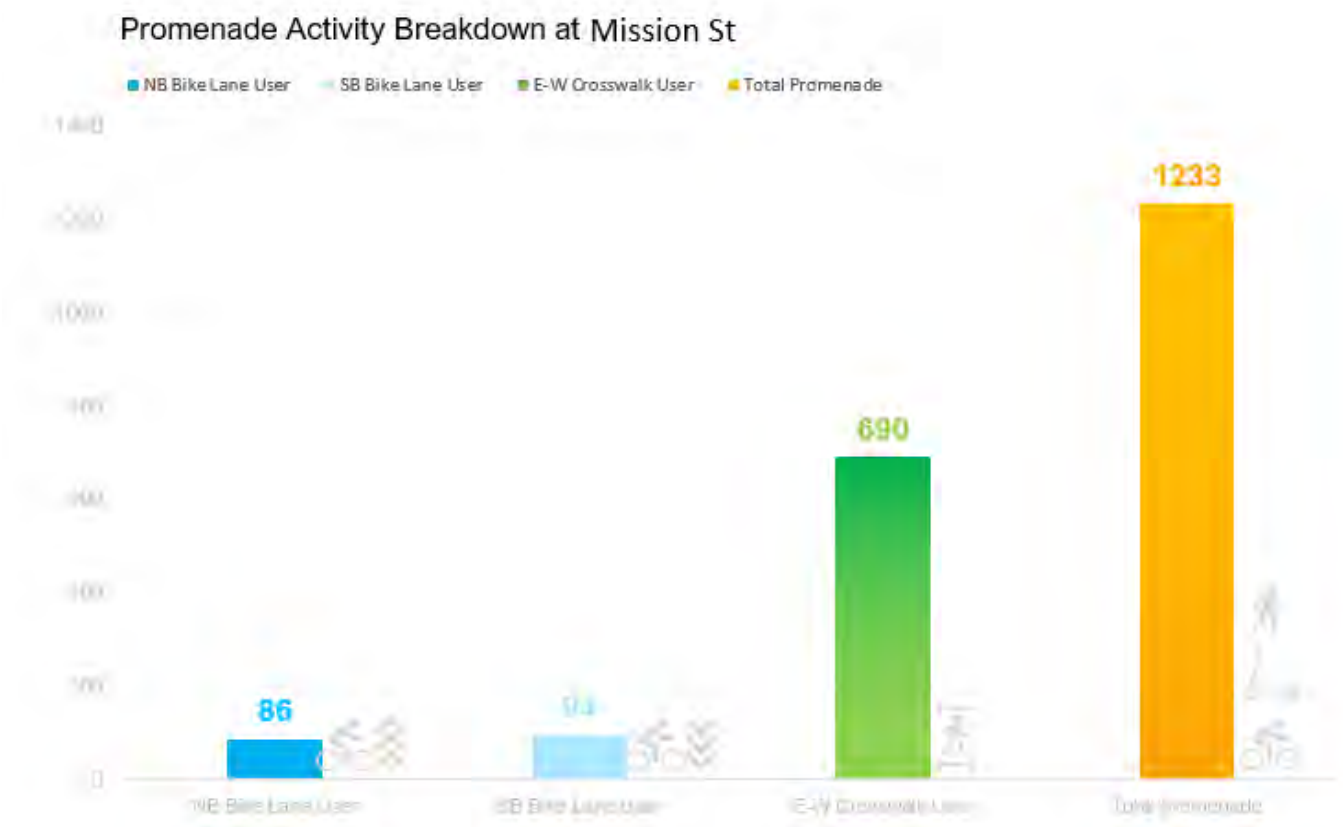
Data Dashboard



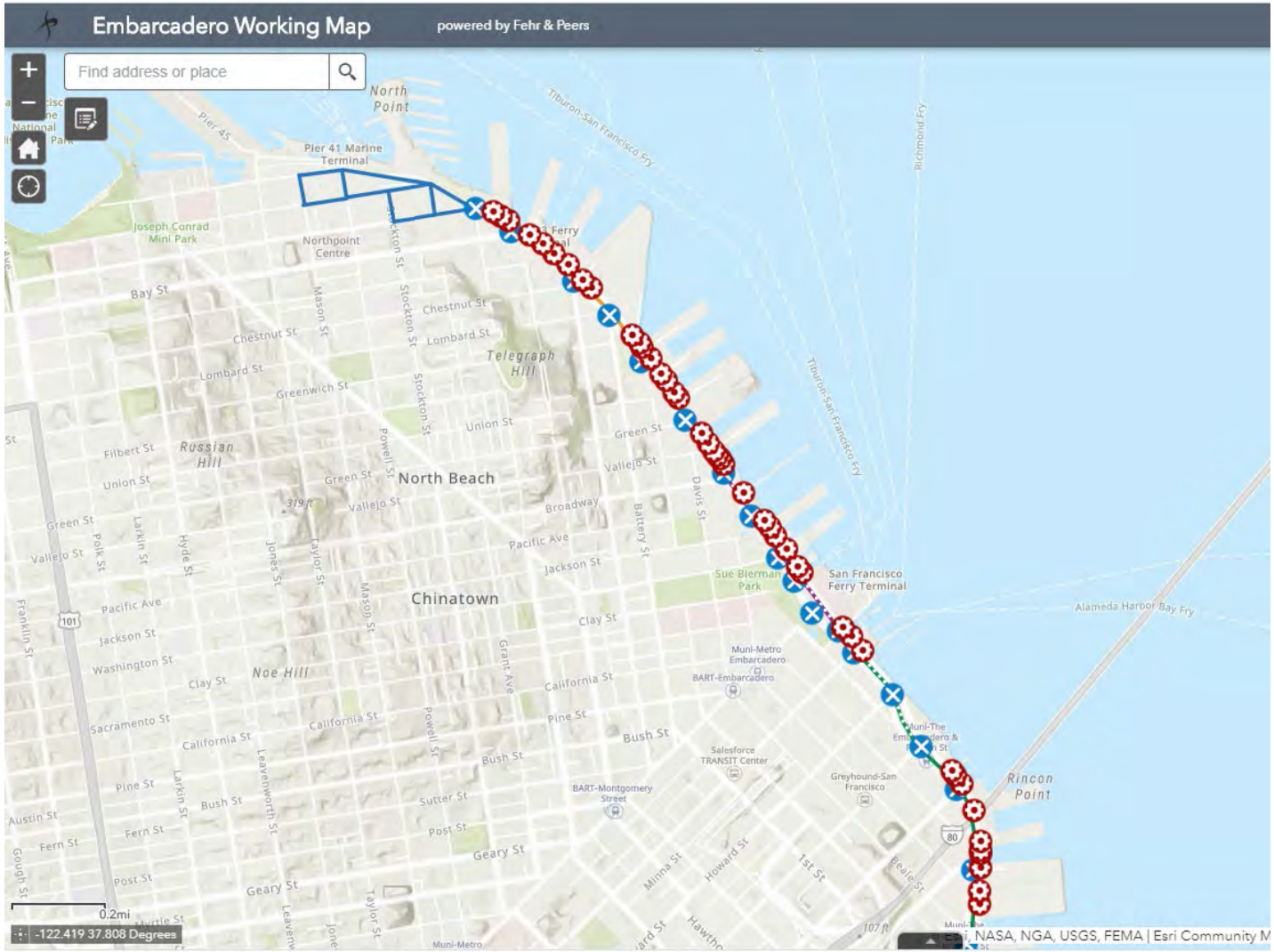
Data Dashboard



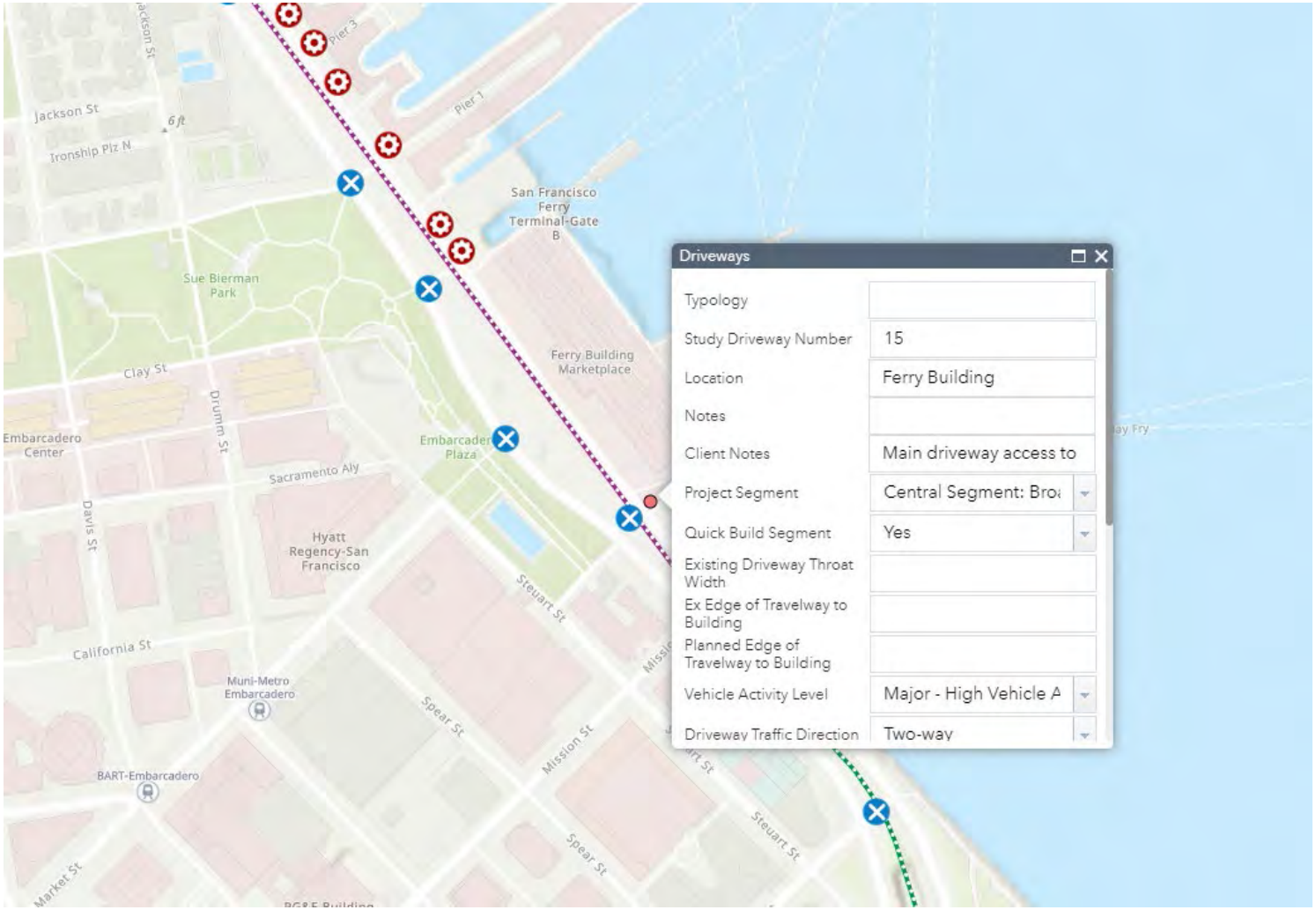
Data Dashboard



Webmap Collaboration



Webmap Collaboration



Thank You!

Questions?

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