









## Project Overview

What: Planning effort to develop a concept design for a bikeway along The Embarcadero

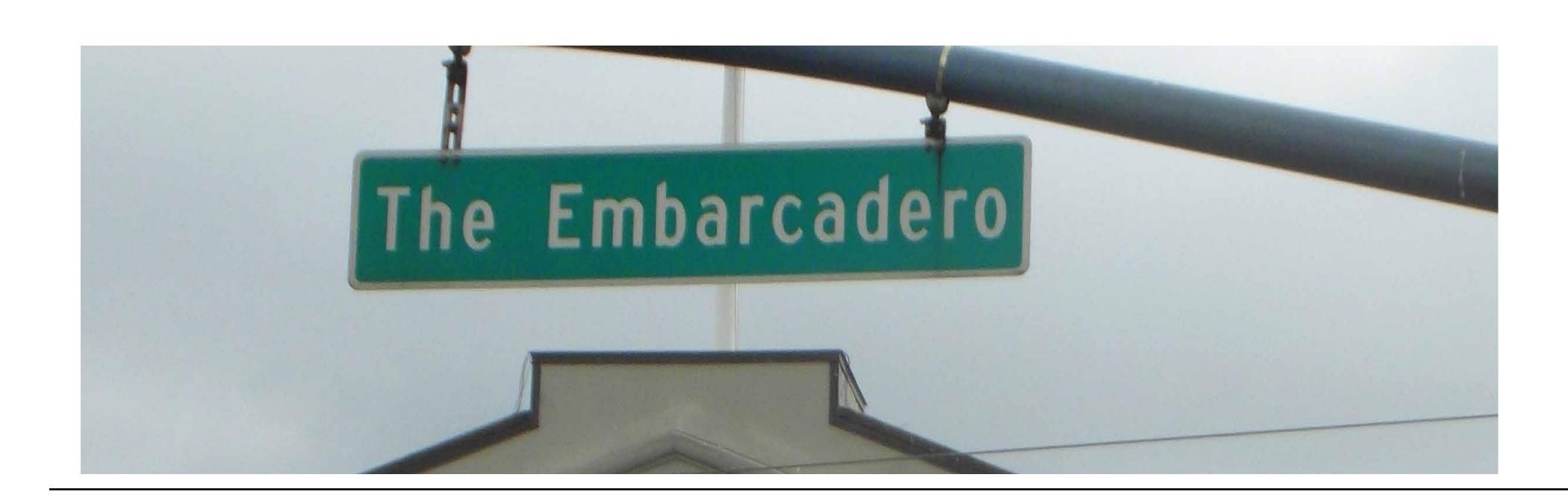
Why: To improve safety and comfort for everyone traveling along The Embarcadero

Where: Between Lefty O'Doul Bridge and Powell/Jefferson Streets

#### Who:

San Francisco Municipal Transportation Agency, Port of San Francisco, San Francisco Planning Department, San Francisco Department of Public Works

When: Concept design by Fall 2015









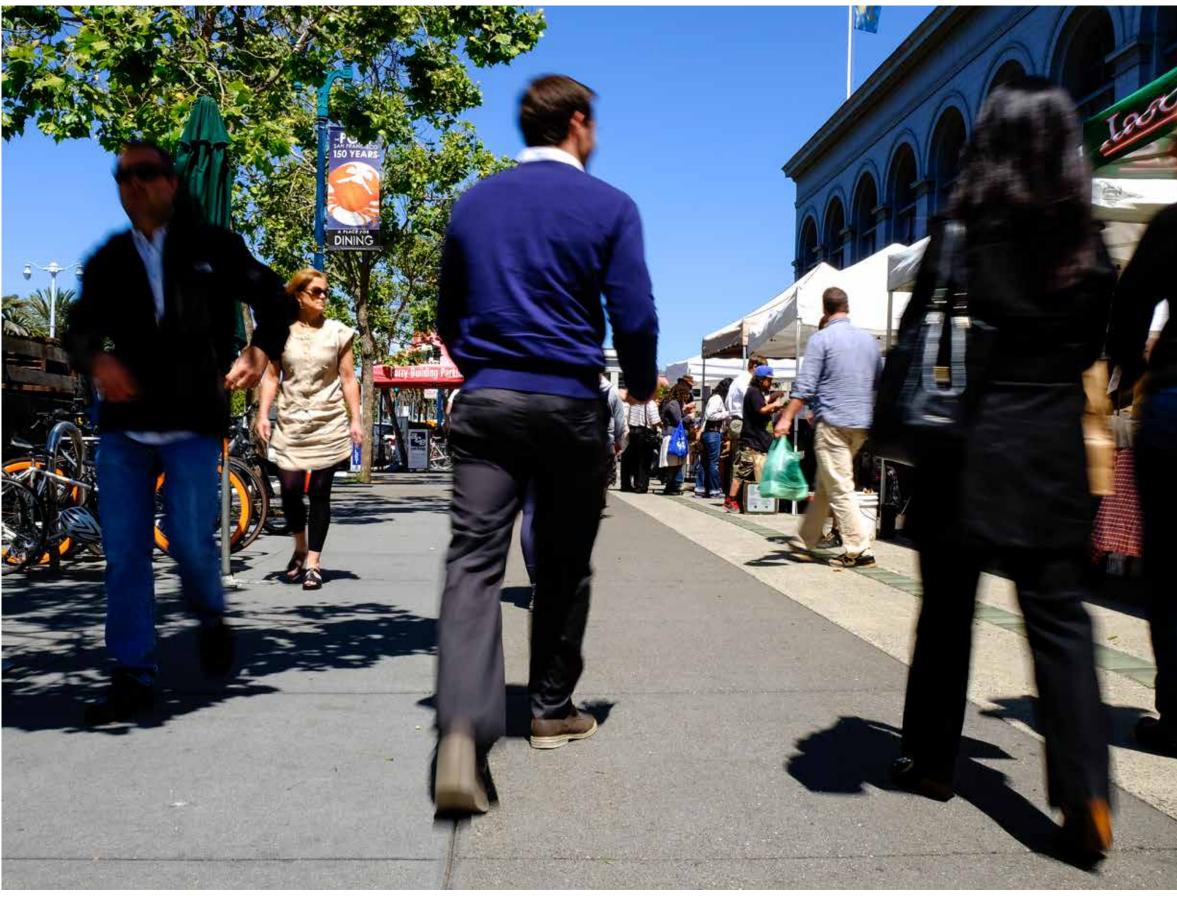




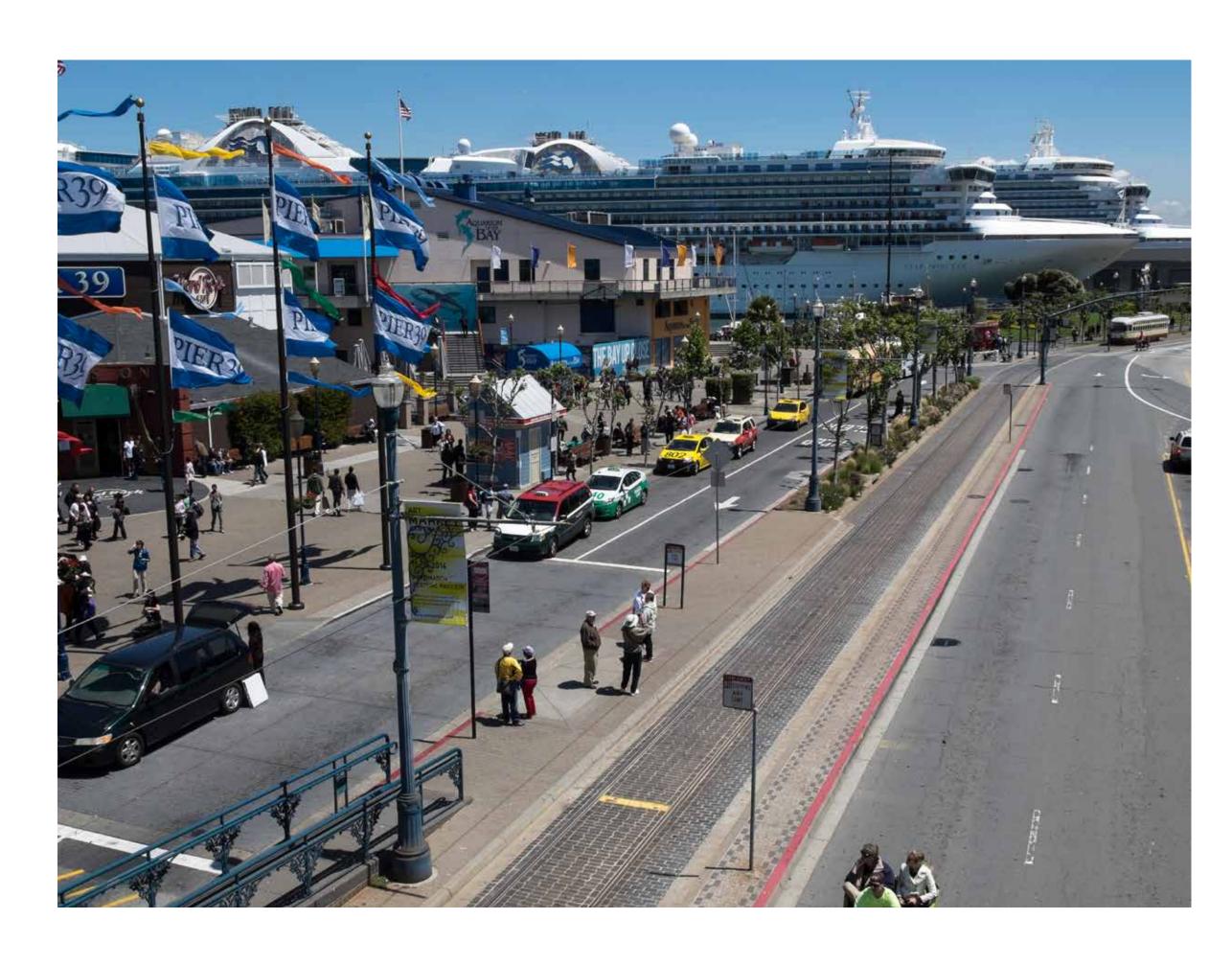
## The Embarcadero – Iconic and Popular!

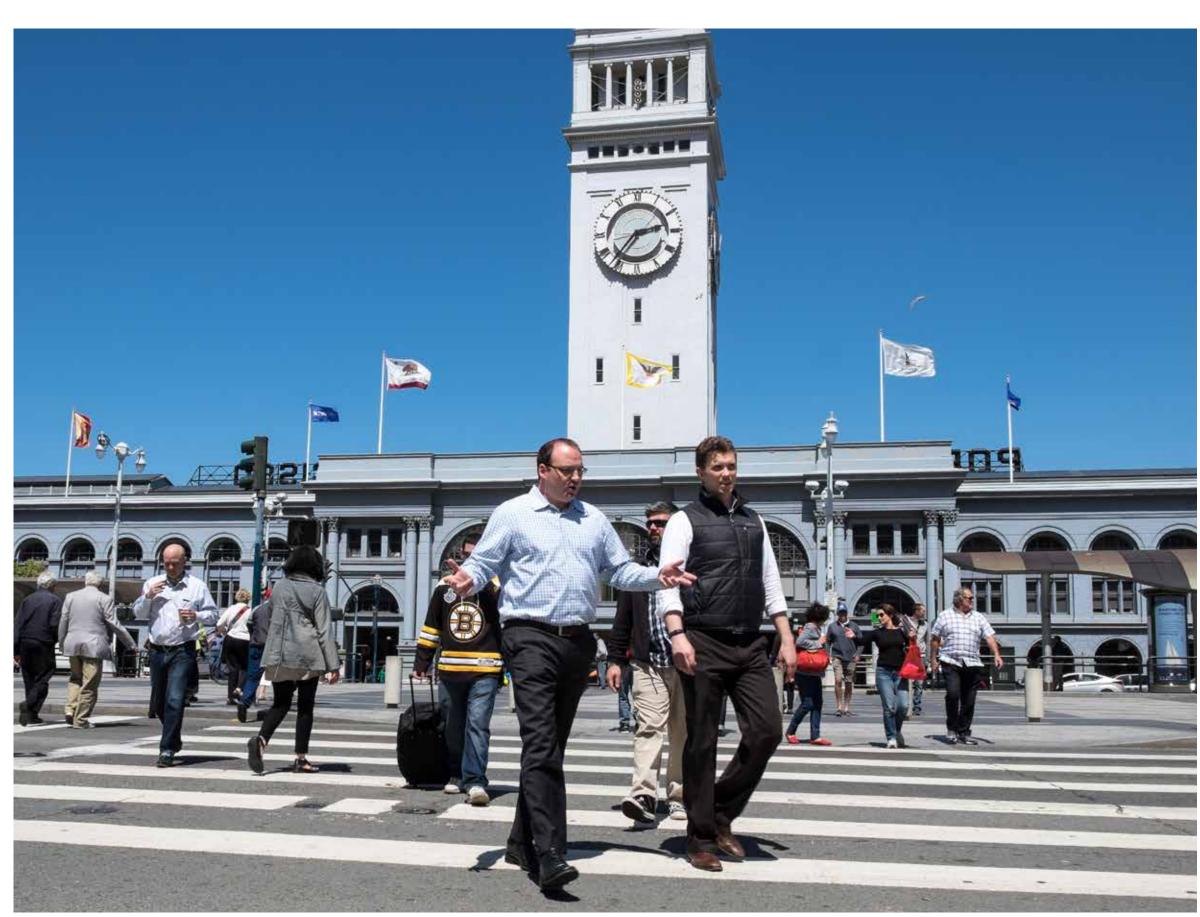
We want to make The Embarcadero even better by making it safer and more comfortable for all who walk, bike, drive and take transit along San Francisco's Waterfront.

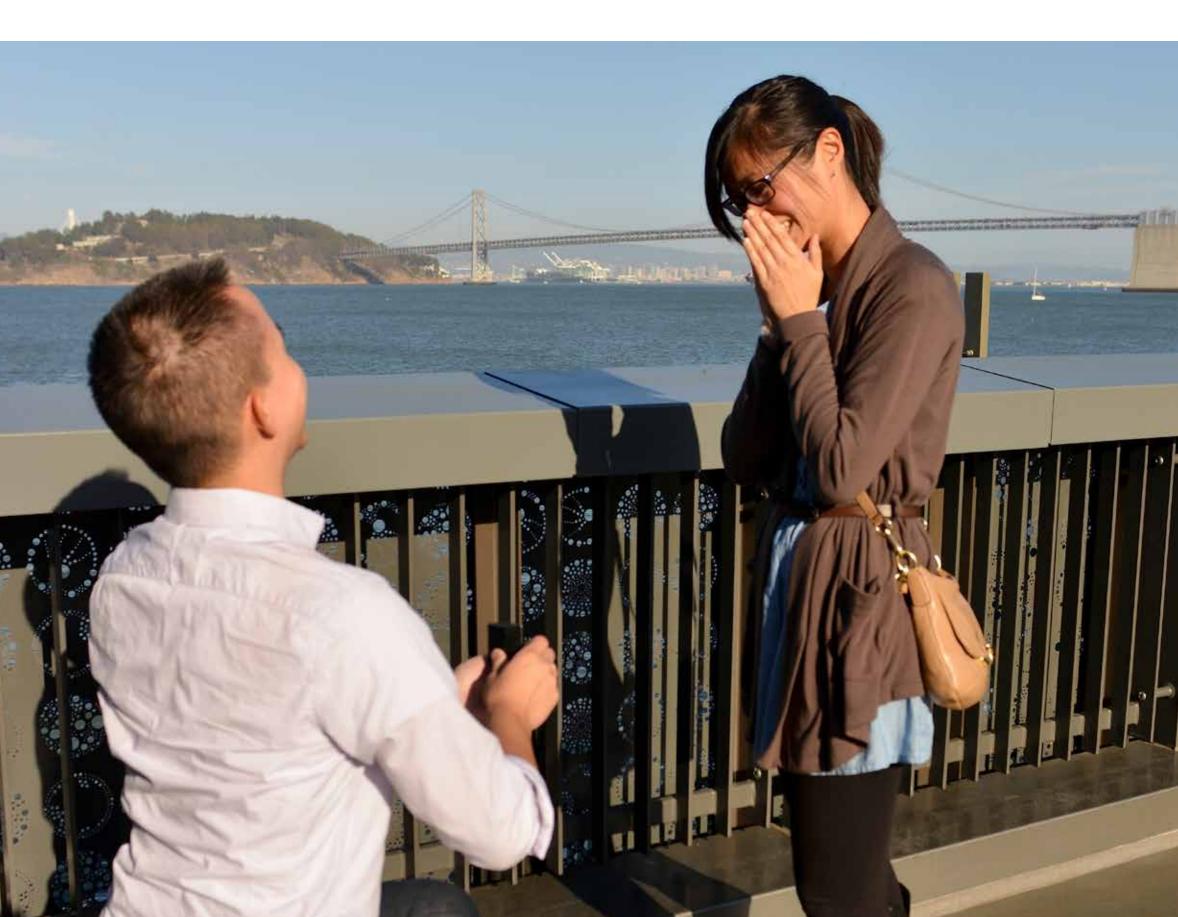
In just two decades, The Embarcadero has become one of San Francisco's most beloved and iconic streets, attracting scores of visitors, workers, and tourists to its historic piers, restaurants, ballpark, views and other world-class attractions. Many others just go to enjoy the unrivaled physical setting.











What do you love about The Embarcadero? Why do you go there?
How do you like to travel along the Waterfront? Let us know on the survey and the adjacent map!



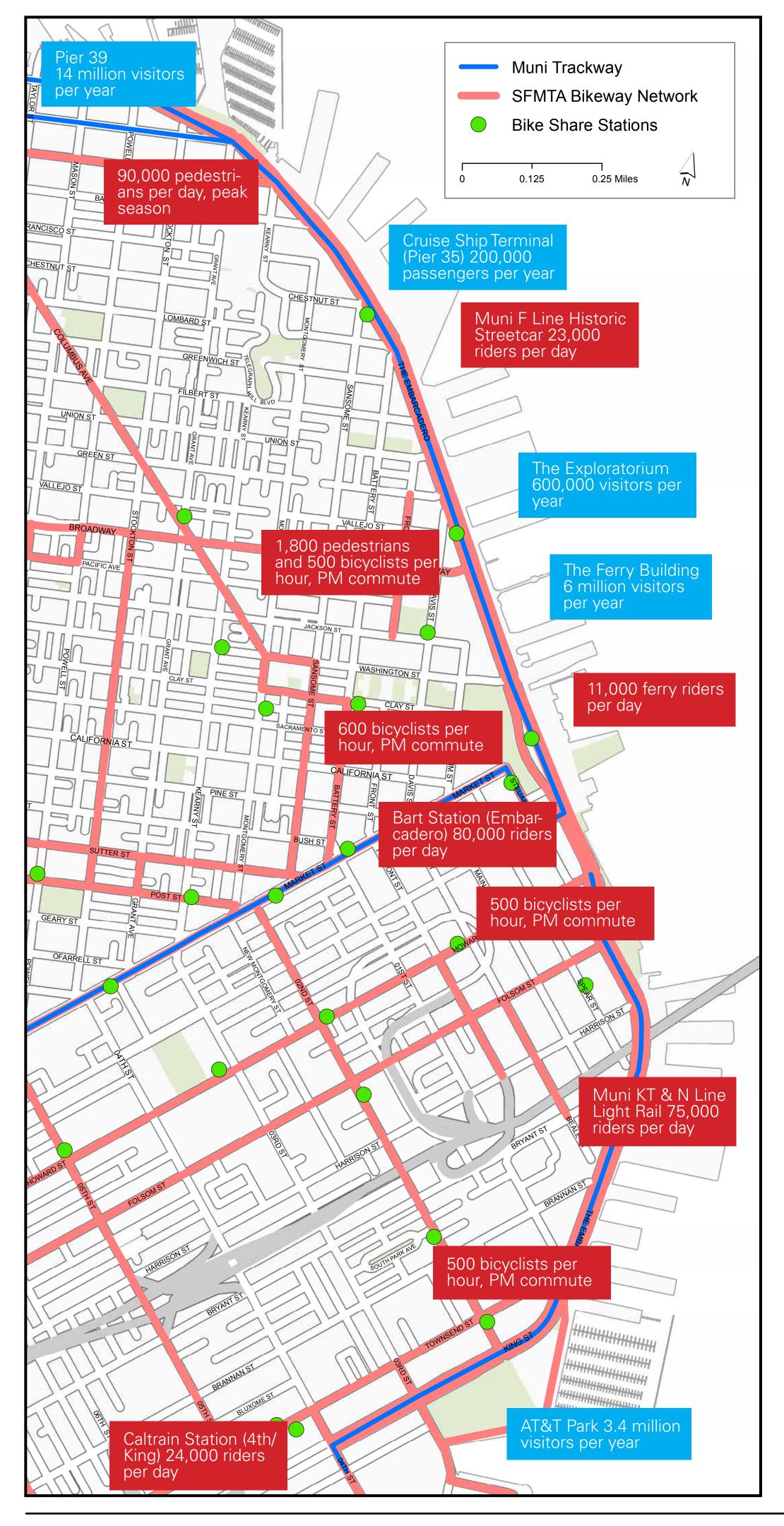






## How do we get around on The Embarcadero?

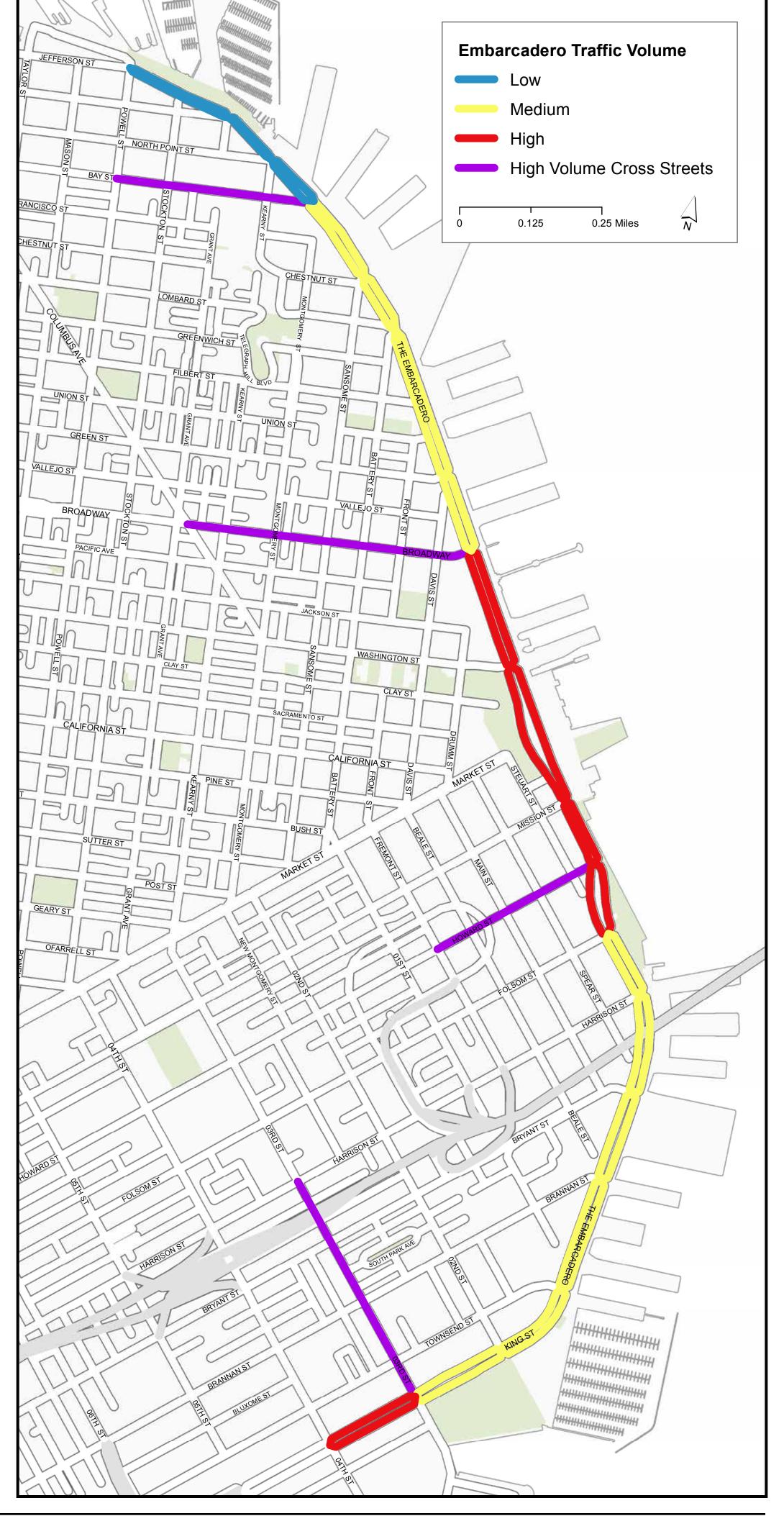
Along with being one of the most iconic streets in the City, The Embarcadero moves a lot of people and goods.



- Vehicle counts at different points along
   The Embarcadero show that the greatest
   numbers of vehicles are counted between
   Broadway and Folsom Streets. (The numbers of vehicles decrease substantially the
   further north along the route.)
- Bicycle counts are relatively consistent along the route, at between 500 and 600 people on bikes per hour in the peak hour
- Our pedestrian counts are inconsistent and generally do not include people on foot along the Promenade, where most of the pedestrians are located. We will address this gap in upcoming months.

#### **DID YOU KNOW?**

- Tens of millions walk along the Promenade each year. In some locations, the number of people walking rivals that of some of the greatest streets in the world, such as Broadway in Manhattan
- The Embarcadero is the 4th most traveled bike corridor in the City
- The Muni lines that run through The Embarcadero carry approximately 100,000 people per day
- The vehicle counts along The Embarcadero vary from 10,000 to 40,000 per day













## How do we get around on The Embarcadero?

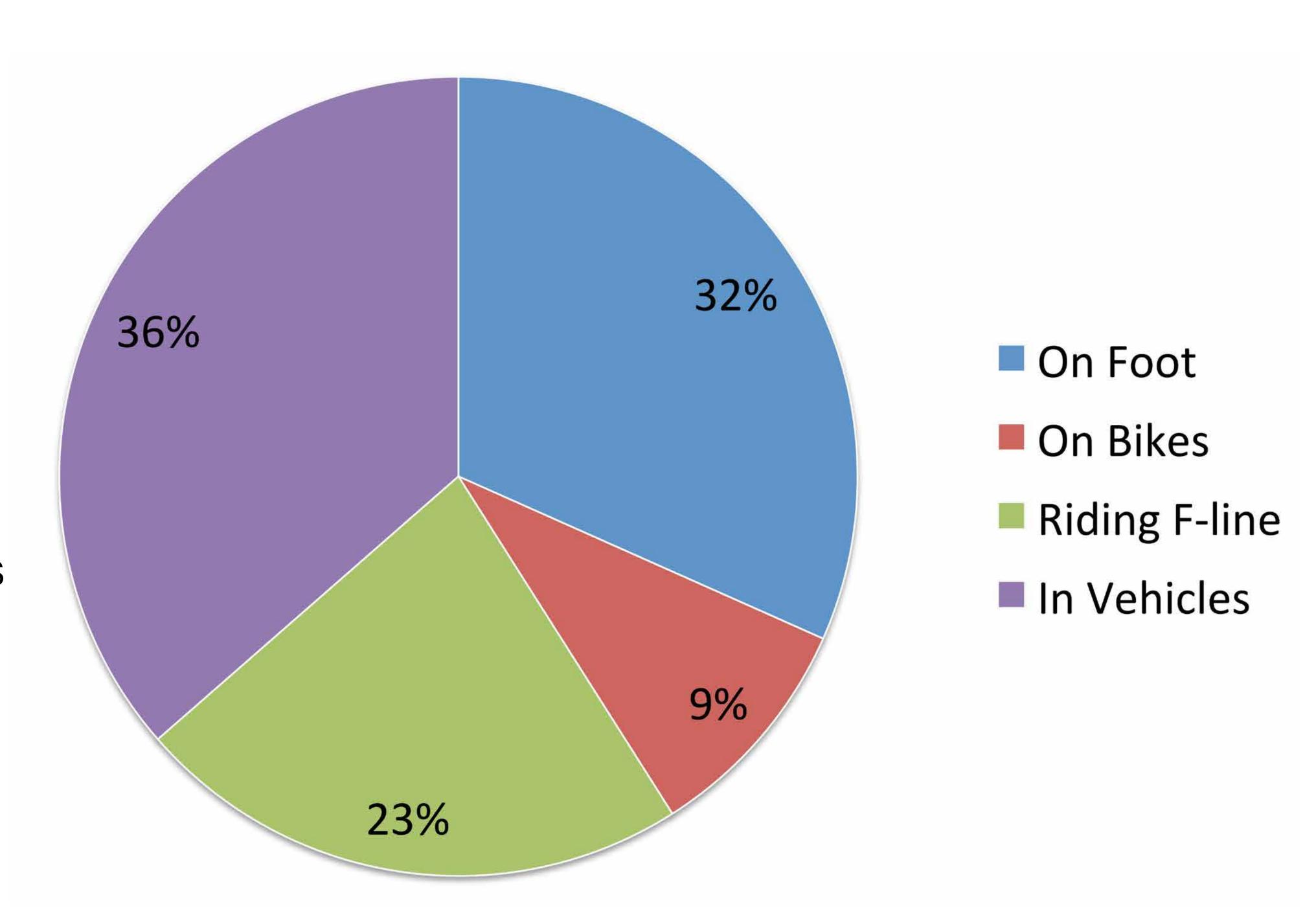
On Thursday, July 10, 2014 between 4:30-5:30pm the SFMTA observed 6,000 people traveling along The Embarcadero at Broadway using a variety of forms of transportation.

## How did we travel through The Embarcadero at Broadway??

6,000 number of people traveled through the intersection in that one hour period – on foot, on bicycles on transit and in cars.

- 38% of people moving through the intersection were in a private vehicle, versus 33% on foot.
- The number of people on bicycles was approximately 550 in the one-hour period, representing 9% of all people. This is approximately three times the typical share of cycling throughout the City.
- Approximately 23% of all people were on the F-Line historic street cars.

The Embarcadero is an extremely busy street no matter how you choose to get around!



Is there other data that the project team should be collecting? Let us know!









## The Embarcadero – Popularity has led to conflict

Each year more people are walking and biking along The Embarcadero, creating crowding conditions at many locations.

- A variety of activities, including truck loading, walking, bicycling, jogging, rollerblading, driving, accessing parking, accessing transit, and passenger pick up and drop off, has lead to conflicts and comfort concerns.
- Conflicts between people on foot, bicycle and in vehicles regularly occur on both the roadway and on the Promenade.

FYI - The Promenade is one of the few multi-use paths in San Francisco where people walking and bicycling are legally permitted to travel.

















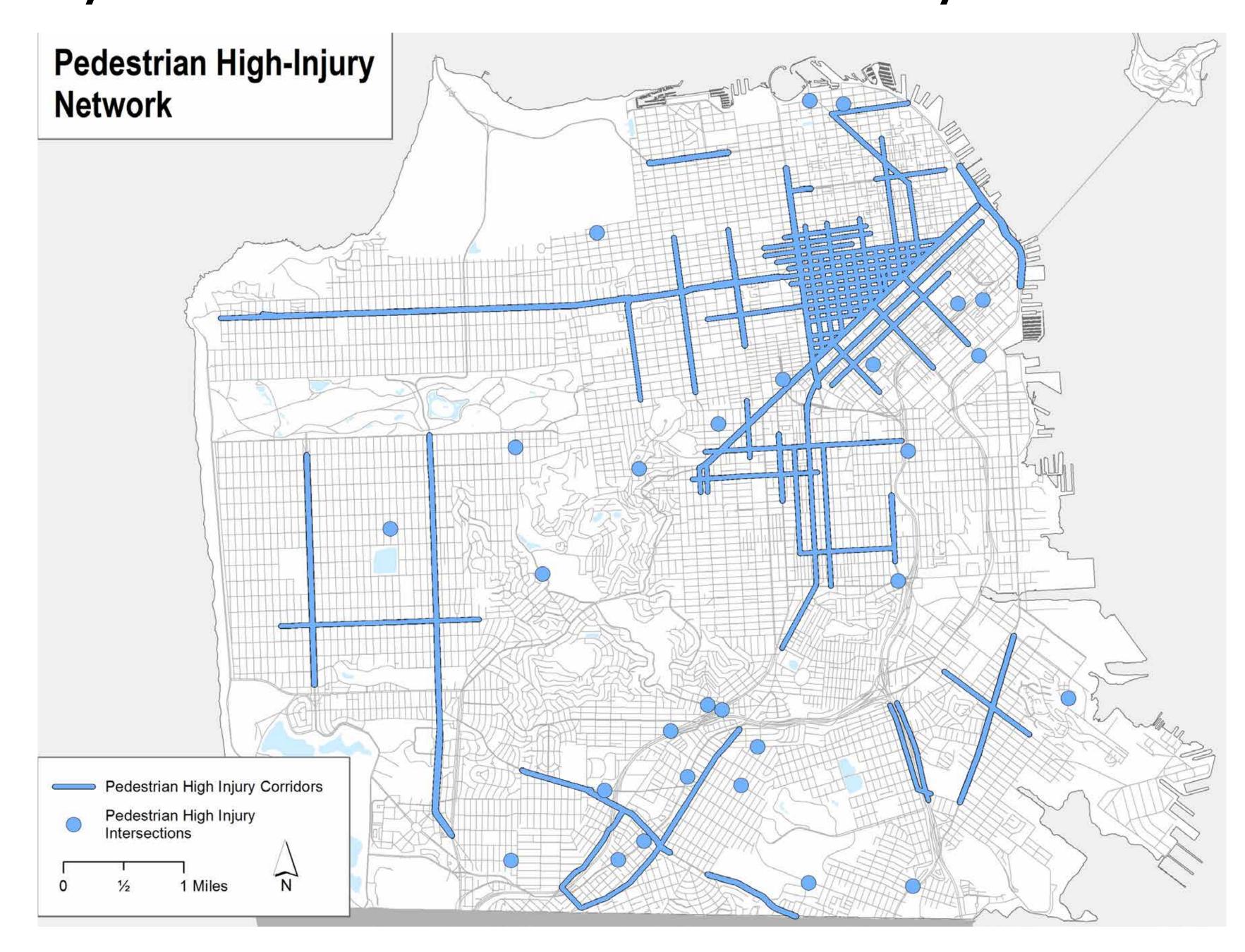




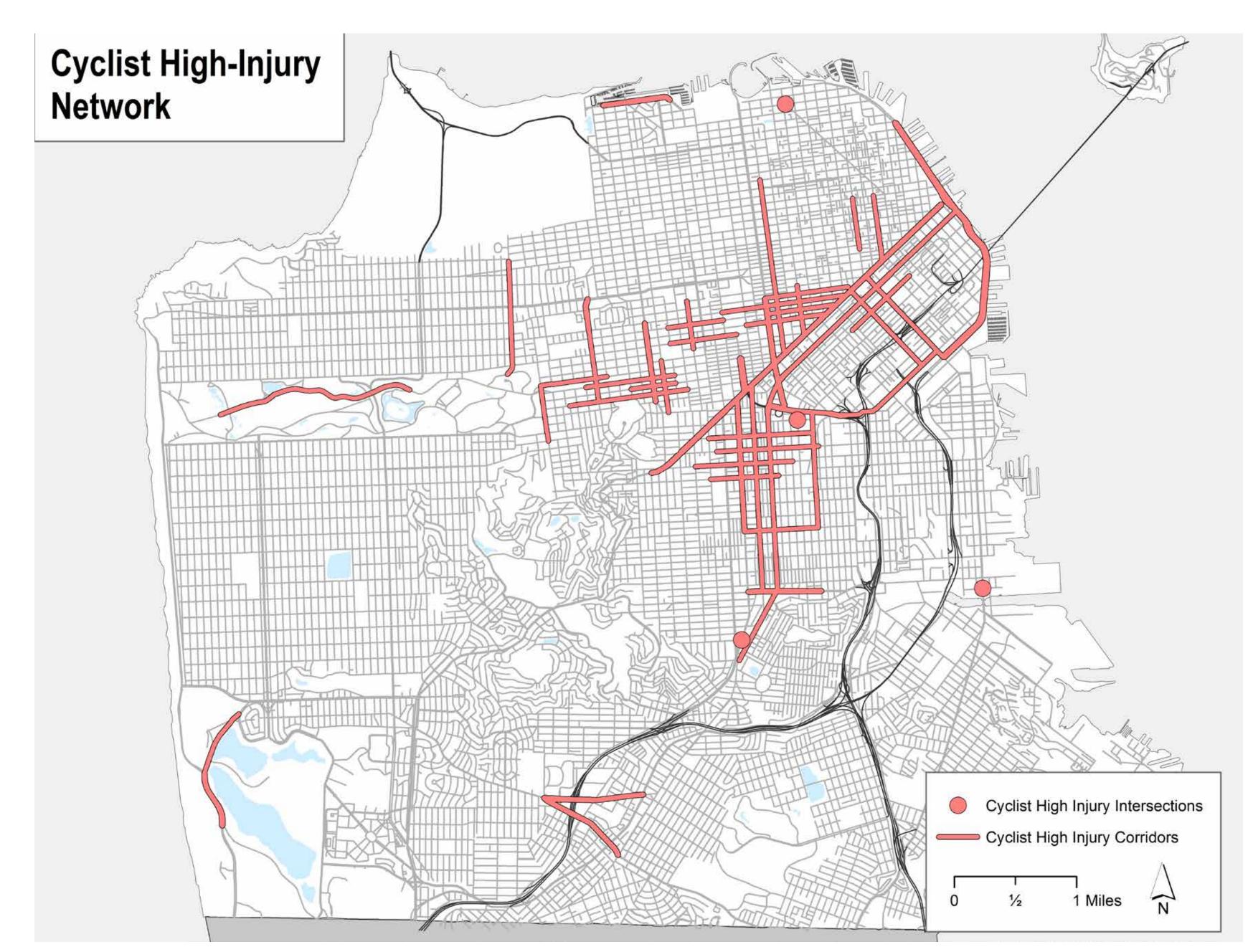
## Safety

The Embarcadero is so popular that the experience for many can be degraded and uncomfortable. In some cases serious and fatal collisions have occurred.

These maps show the streets in San Francisco with the highest rate of pedestrian and bicycle collisions across the City.



Sections of the project route appear on the "High-Injury Pedestrian Network", streets and intersections in San Francisco that represent just 6% of San Francisco's street miles but account for 60% of fatal and severe-in jury pedestrian collisions.



Approximately 75% of the project route also appears on the "High-Injury Cyclist Network" which represents a disproportionate collision rate involving cyclists.





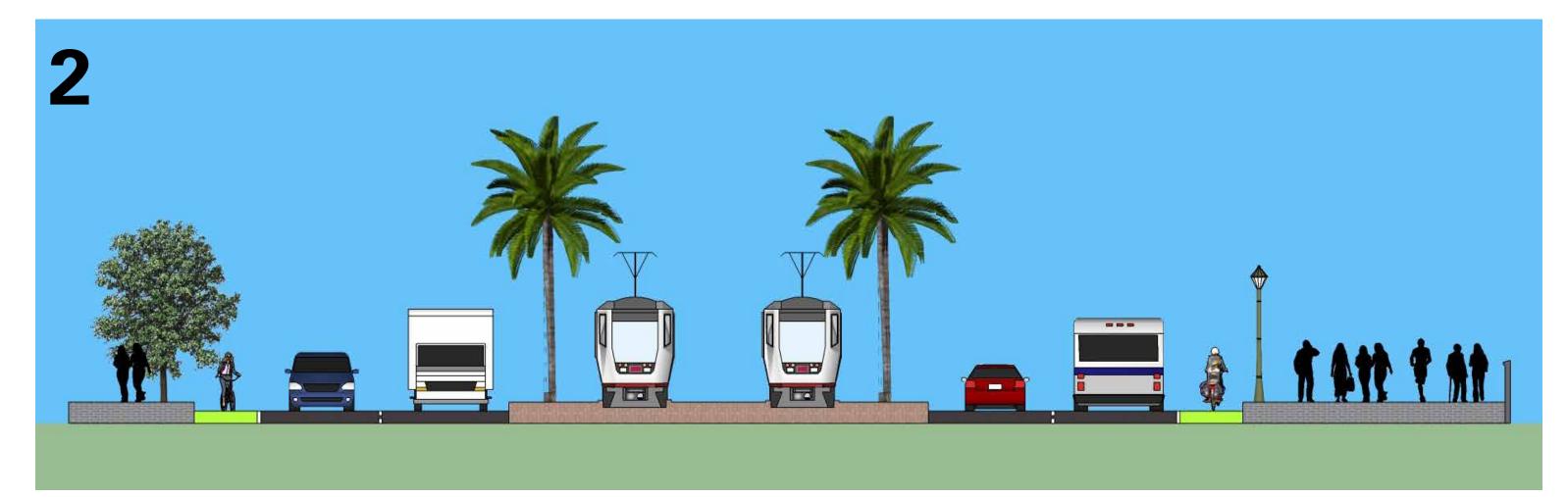




## Existing Conditions – No Typical Layout



Two travel lanes & bike lane & parking/drop-off



Two travel lanes & bike lane

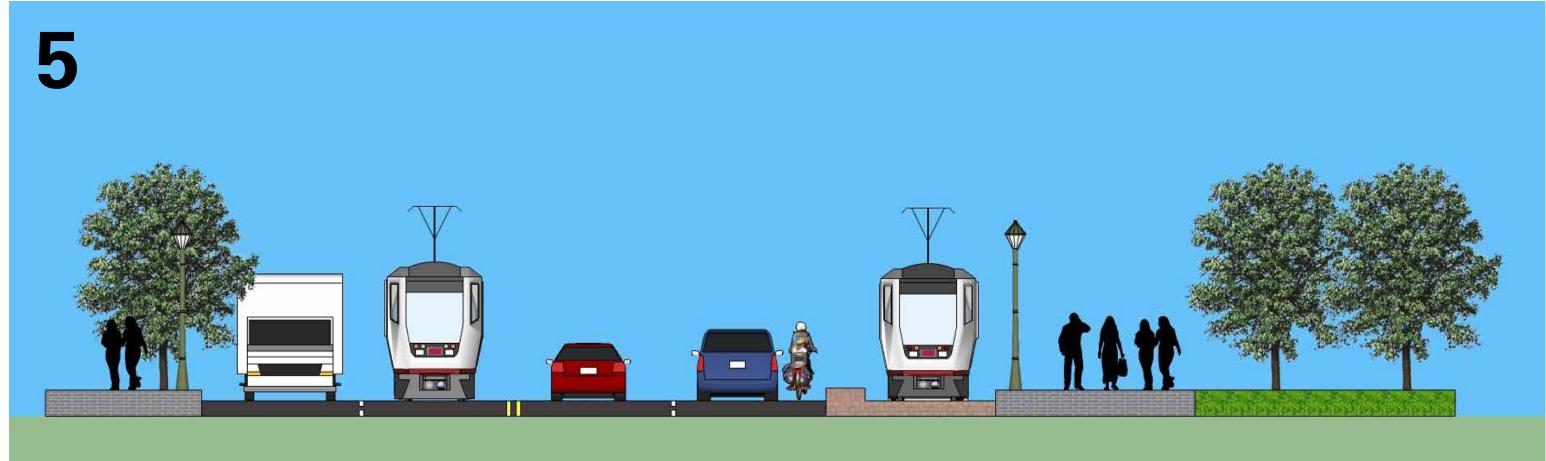


Three travel lanes & bike lane & parking/drop-off



Two travel lanes & part time tow away/part time bike lane





One-two travel lanes & Muni rail - No bike lanes





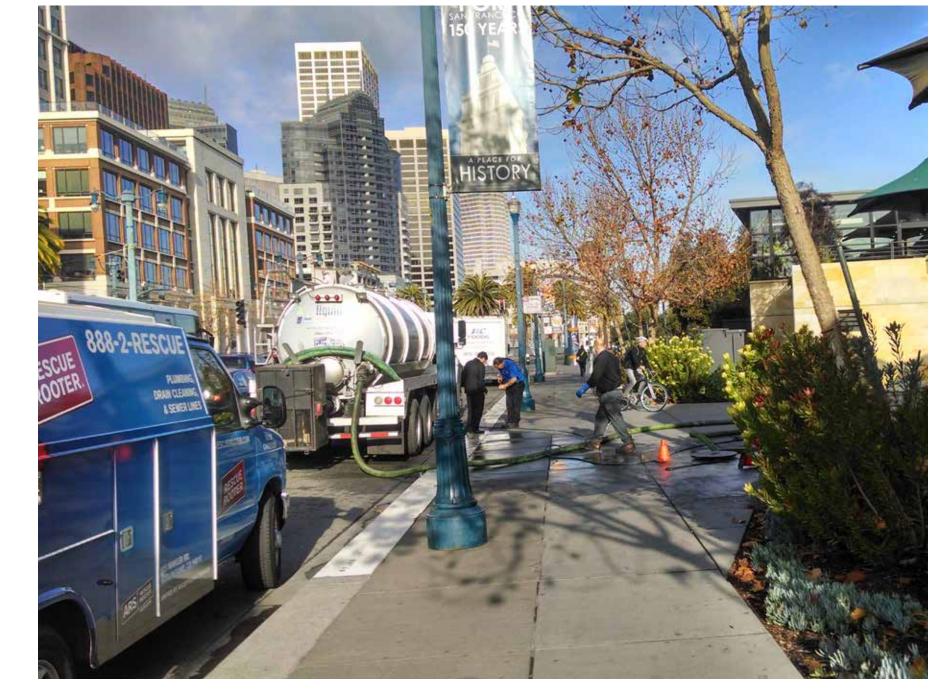


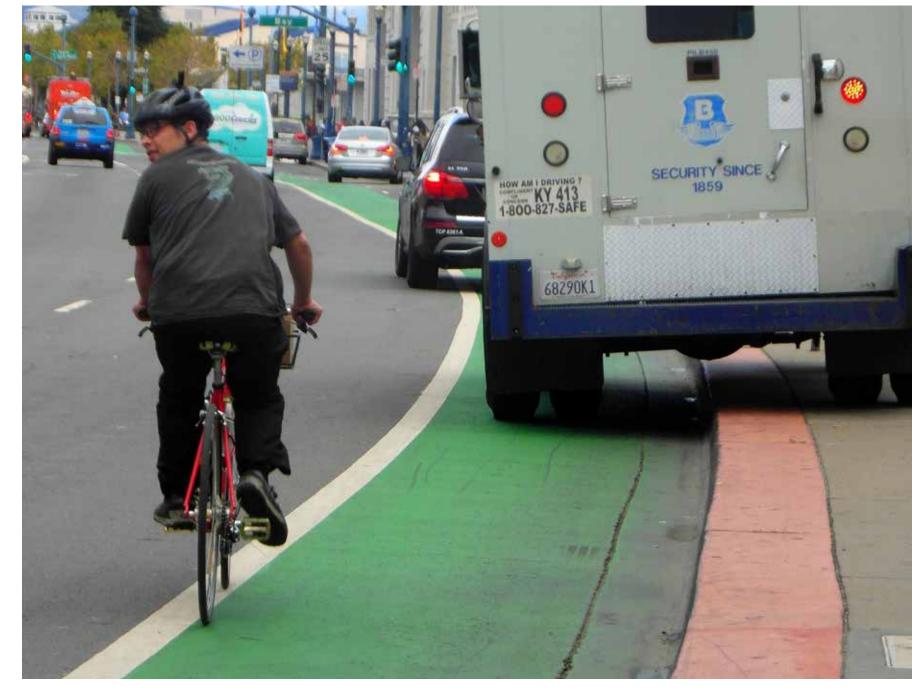


## **Existing Conditions**

Physical conditions on The Embarcadero range considerably over the course of the project route. For example:

- The number of travel lanes in each direction range from 1 (near Pier 39) to 3 (from Howard to Broadway)
- The Promenade (multi-use 'sidewalk' on east side of The Embarcadero) ranges in width from 15 to 49 feet
- Bicycle lanes are not continuous
  - They disappear in the southbound direction from 2nd to 3rd Streets, and there are no marked bicycle lanes north of North Point
  - They are 'part-time' from Folsom to Howard (northbound), from Broadway to north of Washington Street and from south of Washington Street to north of Mission Street (southbound)
  - They are painted green from Howard Street to North Point, except for the part-time locations
- Connections to other intersecting bicycle routes can be challenging























## What is a Bikeway?

#### A Bikeway...

- Is space primarily used for people on bicycles
- Is physically separated (by grade or barrier) from motor vehicles, parking lanes and pedestrians
- Enhances safety and comfort for all by reducing the risk of conflict and delivering increased predictability along the roadway
- Supports cyclists of all abilities
- May be one-way or two-way
- Tends to increase compliance with road rules, according to recent studies

#### What Are the Benefits of a Bikeway on The Embarcadero?

- Fewer cyclists on Promenade minimizes potential for conflict and improves comfort for pedestrians
- Encourages more predictable movements
- Improves compliance with rules of the road
- Creates a road that welcomes people of all ages and abilities
- Makes it easier for people to access the waterfront and other destinations around the City
- Shifts travelers to foot and bike, relieving pressure on public transit and frees up roadway and parking space















## Bikeway Design

# Intersection Treatments and Methods of Separation to Improve Safety

- A. Advisory and educational signage
- **B.** Pavement markings, green or special pavement
- C. Signal timing adjustments and /or bike signals
- **D.** Sight distance adjustments to improve ingress and egress at driveways
- E. Plantings
- F. Flexible posts/bollards
- G. Landscaping
- H. Free standing planters
- I. Curbs
- J. Parking





















## Project Assumptions

This project will not reinvent The Embarcadero! We intend to enhance the phenomenal design that makes The Embarcadero such a popular place!



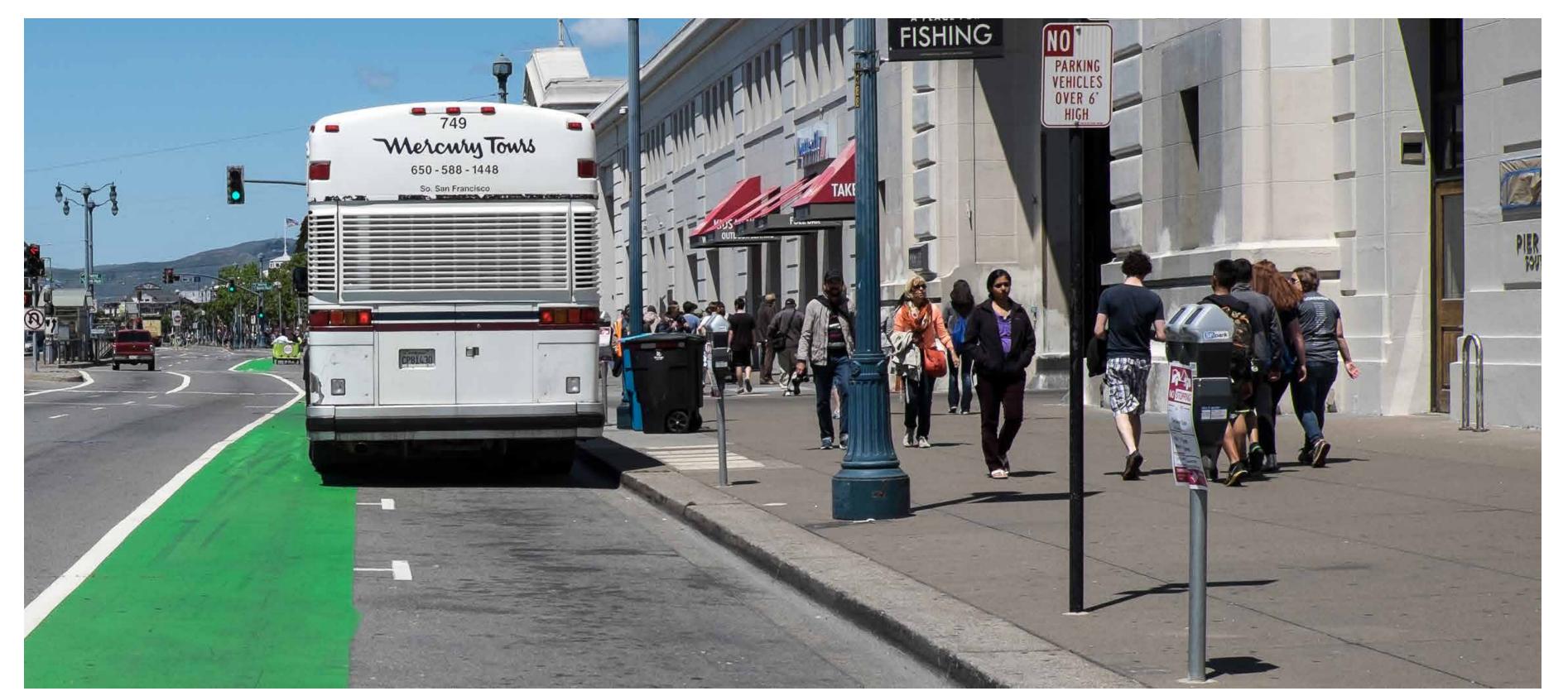
The project scope is limited to The Embarcadero



Physical separation of the bikeway from other sections of The Embarcadero is the intent.



Muni tracks and catenary wires will not move



Mobility and access needs for all users of The Embarcadero must be balanced









## Project Goals

## Use a sticker to show support for your top project goals

Project Goal	What do you prioritize?
Safer and More Comfortable – Make The Embarcadero safer and more comfortable for all roadway users, including people who walk, cycle, drive, and access transit	
Support Economic Development – Ensure that The Embarcadero continues to support businesses and industry that rely on the roadway for access and operation	
Increase and Improve Waterfront Access – Increase and improve access along the waterfront for residents, workers and visitors	
Improve Efficiency – Improve the efficiency of The Embarcadero through better management of curbside activities (deliveries, parking, loading, bicycle lanes, etc.)	
High Quality Design – Maintain and enhance the high quality urban design of the Embarcadero	
Integrate with Other Improvements — Ensure that improvements that are the result of this project are integrated with other transportation improvements intended to accommodate projected growth in San Francisco	







## Project Schedule



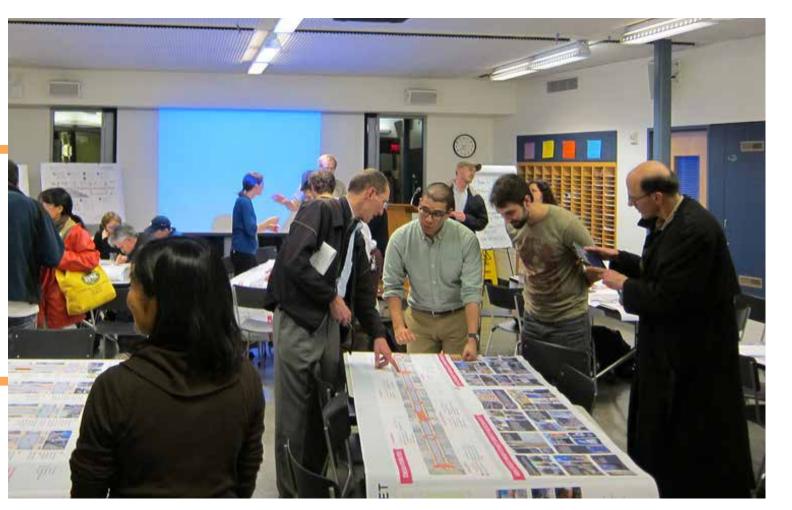
Project Pre-Development



Scope/Schedule/Budget
Data Collection
Existing Conditions Analysis



• Initial Stakeholder Outreach



Open House #1
Presentations



• Develop Design Alternatives



Workshops #1
Open House #2
Develop Cost Estimates



Select Preferred Option



Workshops #2
Open House #3
Presentations









## Next Steps

- Thank you for attending!
- Fill out a survey and submit it tonight or to the SFMTA by August 15, 2014
- Sign up for updates on our website:

## www.sfmta.com/embarcadero

 Roll up your sleeves and come to our Workshops this fall to start to think about design options

