### December 4, 2023



## Fernside Boulevard Traffic Calming & Bikeways Project

Existing Conditions & Toolbox







# About the project



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### Why are we here?

**Project goal:** reduce traffic speeds and improve safety and mobility for all

- Coordinate with pavement resurfacing
- Implement plans and policies:
  - Vision Zero Action Plan
  - Active Transportation Plan
  - City Council Strategic Plan
  - San Francisco Bay Trail (regional)



### Fernside is a Tier 3 High Injury Corridor, All Modes



### Fernside has Tiers 2 & 3 Bicyclist High Injury Corridors



#### Fernside not in an Equity Priority Area



#### Fernside in Active Transportation Plan: Low-Stress Bikeway



- Adopted plan shows Fernside with a protected bike lane
- Key to the 2030 Low-Stress Backbone Network for all ages and abilities
- Part of regional San Francisco Bay Trail



## **Community Concerns about Street Safety**





## History

#### Late 1800s: A.A. Cohen's 106-acre Fernside estate



### **History**



Fernside Estate: ca. 1900

Fernside Loop: 1911

Eastshore Fill: 1950s

Fernside Blvd.





## **Existing Conditions**

### **Fernside Boulevard Recent Enhancements**

- At Versailles Ave:
  - 2010: Uncontrolled crossing upgraded to high-visibility striping
  - 2013: RRFB and concrete crosswalk protection improvements
- At Cambridge Dr.
  - 2014: Speed feedback sign below posted speed limit sign
- At Harvard Ave:
  - 2013: Uncontrolled crosswalk at Harvard Ave installed
  - 2021: RRFB and concrete crosswalk protection improvements
- At High St:
  - 2013: Removed second travel lane merge west of High St.
- East of High St:
  - 2019: Upgrade to buffered bike lanes as part of roadway repaying
- Between Otis and Lincoln Middle School
  - 2009: Two-way bikeway access to school







Relationship to historic redlining

#### Fernside from Tilden to High 80' Right-of-Way

60

20' center of sidewalk to edge of travel lane

6'

### Fernside from High to Liberty 80' Right-of-Way

57'

5.5'

6'

## 26' center of sidewalk to edge of travel lane

5.5

### Fernside from Liberty to San Jose 75' Right-of-Way

60'

5' 2.5'

#### 23' center of sidewalk to edge of travel lane

2.5' 5'

### 1,000 to 2,000 feet between Marked Crosswalks from Versailles Ave to Garfield Ave

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### **Bus Boardings and Alightings**



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# **Crash History**

# Vehicle Speed and Crash Outcomes Involving Pedestrians



### **High Crash Rate throughout the Corridor**



## 22 Injury Crashes from 2017-2021



#### Fatal Crash: September 6, 2021

- Fernside & Cambridge intersection
- High-speed driver on Cambridge failed to stop at stop sign, causing broadside collision with another vehicle traveling on Fernside







## **Data Collection**

# **Existing Speed Limit is 25 mph, but Actual Vehicle Speeds are Higher**



### Average Daily Traffic Compares to Similar Roadways



26,000

Traffic counts measured between 10/12/2023 and 10/18/2023

### Fernside Carries 200 to 500 **Vehicles per Hour in Each Direction**

**ADT** 

6,000

9:00 PM

6:00 PM

12:00 AM



**ADT** 



Fernside east of Harvard; Average Weekend

12:00

3:00 PM

Eastbound



1000

Fernside north of Central; Average Weekend

Fernside north of Central; Average T-Th



Traffic counts measured between 10/12/2023 and 10/18/2023

9:00 AM

- Westbound

6:00 AM

1000

800

600

400

200

12:00 AM

3:00 AM

Hourly Traffic (Vehicles/hour)



## **Pedestrian and Bicyclist Demand**

Fernside Blvd

FairviewAve

Gatheld Ave

LibertyAve

Lincoln

Before and after

school, bicycles

comprise 10-

15% of all traffic

on Fernside

Park

Central A

Between 10-20 pedestrians cross Fernside per hour before and after school

Nindsor

Broad

齐

Tilden Way

Fremont Dr Cloc Higher rate westbound in AM; eastbound in PM

Between 20-35 bicycles per hour travel through intersection during morning commute

Monte Ave

Nigh,

Cornell Dr

NTARY

YaleDt

Harvard Dr

Between 20-30 bicycles per hour make left turns traveling to/from school

StanoteDt

Encinal Ave

Modison St. Ave

Between 60-100 pedestrians cross Fernside per hour before and after school

LINCOLN MIDDLE SCHOOL

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Counts conducted on 10/24/2023



### **On-Street Parking Less Than 50% Occupied**



## Online Survey Results: 408 Responses as of Dec. 1



## What mode(s) of travel do you often use when traveling along or crossing Fernside Boulevard?

## **Online Survey Results**



## **Sample Survey Responses**



Survey available at <u>alamedaca.gov/fernside</u> Survey results gathered between Nov. 17 and Dec. 1, 2023





## Improvement Toolkit – Traffic Calming & Safety

## **Improved Sight Lines**



## **High Visibility Crosswalks**



### **Rectangular Rapid Flashing Beacon**



## **Pedestrian Refuge Islands**



## **Bulbouts**





## **Speed Feedback Sign**



## **Bus stop enhancements**









## Improvement Toolkit – Bikeways

## **Buffered Bicycle Lanes**





## **Physically Separated Bike Lane: 1-Way**





## **Physically Separated Bike Lane: 2-Way**





### **Raised Bike Lane**



![](_page_48_Picture_2.jpeg)