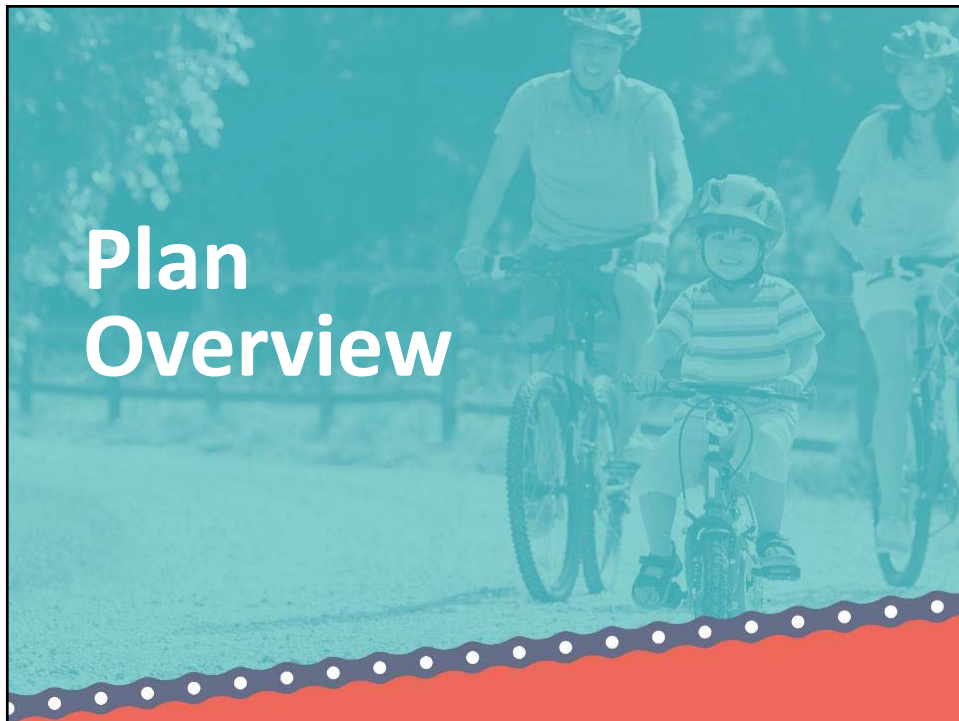


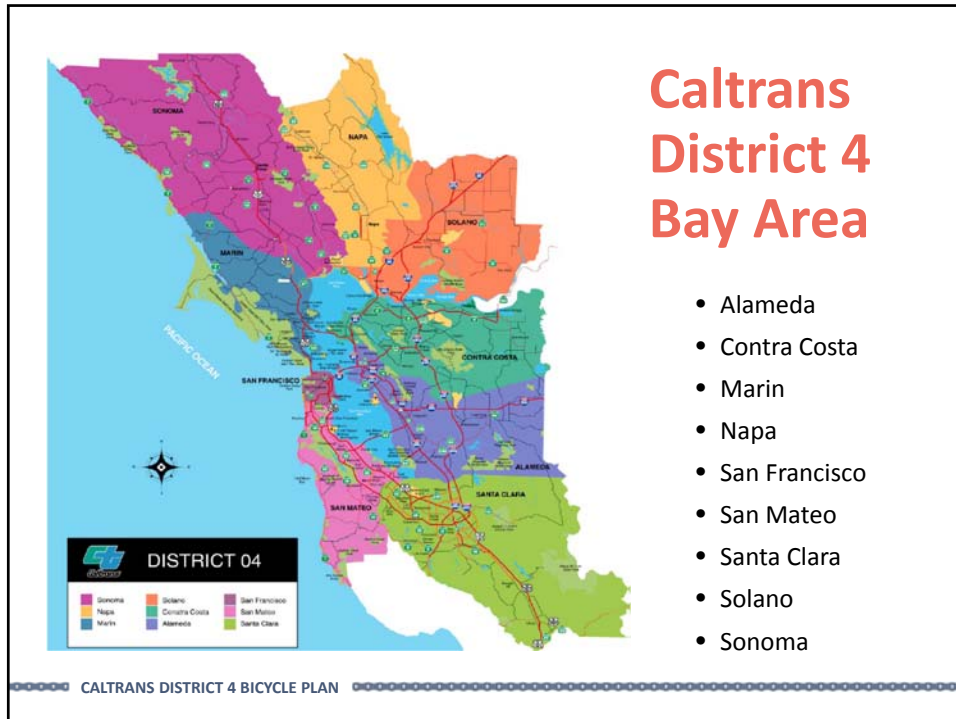


# Caltrans District 4 Bicycle Plan

Alameda CTC BPAC  
October 5, 2017



# Plan Overview



## District 4 Bicycle Plan Purpose:

*The Plan will identify and prioritize investments to improve bicycling on and across the State-owned transportation network. This Plan complements and builds on statewide, regional and local planning efforts to help create a connected, comfortable, and safer bicycle network for the Bay Area.*

## CA State Bike & Ped Plan

- *Toward an Active California*
- *Policy-level plan with strategies for Caltrans districts*
- Completed June 2017
- Website: [www.goactiveca.org](http://www.goactiveca.org)



## Caltrans District 4 Bicycle Plan

**Purpose:**

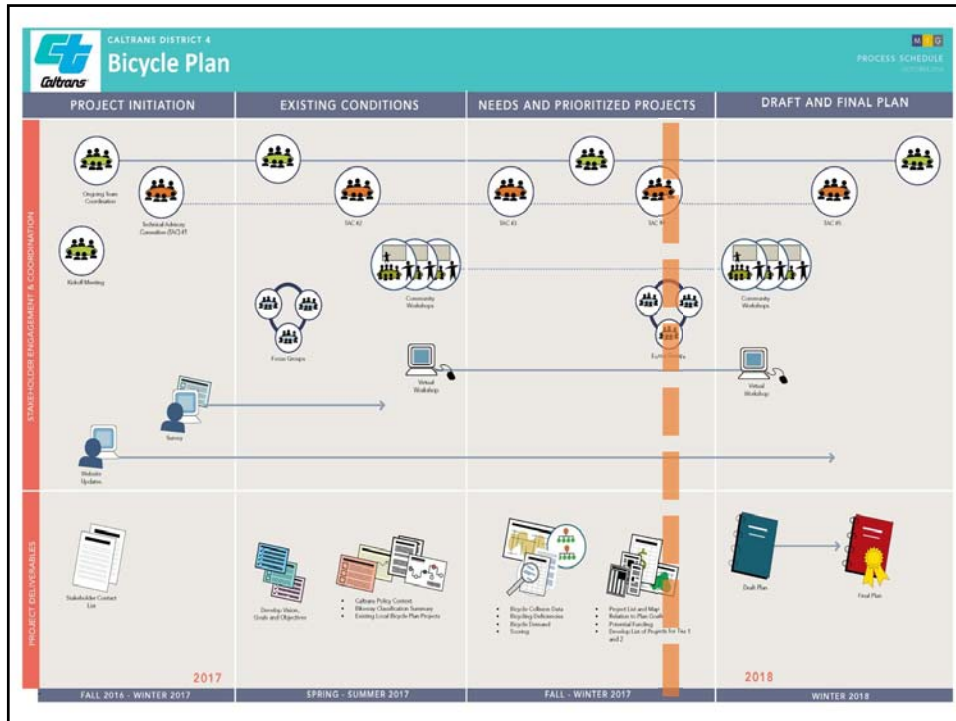
- Identify and prioritize investments to improve bicycling on and across the State-owned transportation network
- Builds on policy-level CA State Bike & Ped Plan
- Complements regional and local planning efforts
- Scheduled completion: Feb 2018
- Website: [www.dot.ca.gov/d4/bikeplan/](http://www.dot.ca.gov/d4/bikeplan/)

## District 4 Bicycle Plan



## Tasks

Task	Status
1 Project Management	Ongoing
2 Public Outreach & TAC	Ongoing
3 Goals and Objectives	Complete
4 Existing Conditions	Complete
5 Needs Analysis	Complete
6 Prioritize Projects	In progress
7 Draft and Final Plan	End of 2017



## Round 1 Outreach

- Spring 2017
- Focus groups
- Community workshops
- Online mapping survey



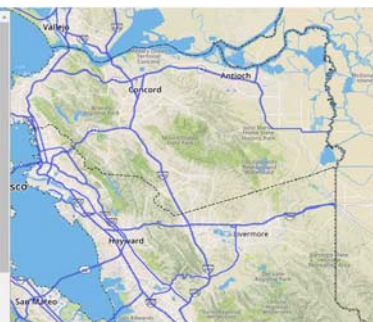
### CalTrans District 4 Bicycle Plan

Welcome to the Caltrans District 4 Bicycle Plan (Bicycle Plan) survey. The Bicycle Plan will be a visionary and comprehensive planning document to improve safety and mobility for bicyclists on and across the State transportation network in the Bay Area region.

The state transportation network, owned and maintained by Caltrans, includes more than 700 miles of freeways and expressways and over 1500 miles of non-freeway State highways throughout District 4. While local cities and counties have responsibility for many more streets and roads, this study will address barriers to bicyclists on roads that are typically higher speed and have higher volumes of automobile travel.

Caltrans has an opportunity to help remove barriers to bicycling on the State transportation network and to develop bicycle facilities that are safe, comfortable and convenient. We want your input.

This is not your typical survey! For some questions, you will place markers on the map to answer questions and get to follow-up questions.



CALTRANS DISTRICT 4 BICYCLE PLAN

## Focus Groups

Partnered with community-based organizations to target traditionally underrepresented communities:

- Cycles of Change
- Rich City Rides
- Sonoma County Bicycle Coalition
- Bike Concord
- Peninsula Conflict Resolution Center
- First Community Housing



Priority Improvements

- Dedicated bike lanes
- Bike-friendly transit options
- Expand bike network and improve connectivity
- Cycling amenities (e.g., repair stations)
- Safe bike storage
- Education of drivers and cyclists
- Community bike events



CALTRANS DISTRICT 4 BICYCLE PLAN



## Online Survey Results

- April-May 2017
- 4,721 visitors to the website
- 3,498 respondents completed at least one question in the survey
- 20,157 "pins" on the map

Figure 5. Where do you cross the State-owned network?



Figure 6. Where do you travel along the State-owned network?

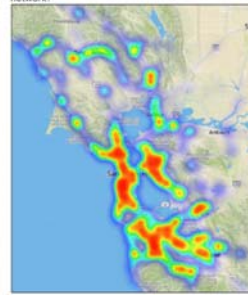


Figure 7. Where would you like to cross the State-owned network?

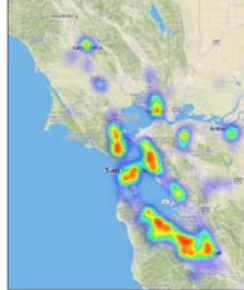


Figure 8. Where would you like to travel along the State-owned network?



CALTRANS DISTRICT 4 BICYCLE PLAN

## Survey Results

Why is it difficult to ride in this area?

Figure 9. Difficult Intersections.



Figure 10. Lack of Path or Trail to Ride On.



Figure 11. I Would Have to Ride Too Close to Traffic.



CALTRANS DISTRICT 4 BICYCLE PLAN

## Round 1 Workshops

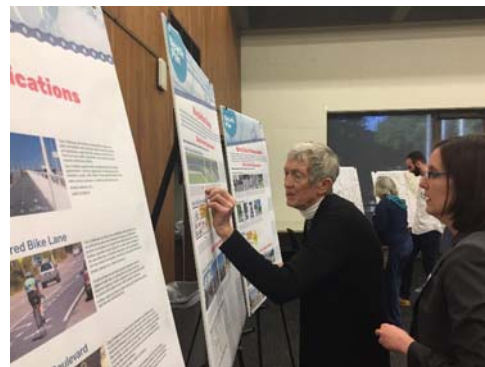
- Spring 2017
- Purpose
  - Inform participants
  - Share vision, goals, and objectives
  - Identify bicycle needs and deficiencies
- Round 1 Locations
  - San Francisco
  - Vallejo
  - San Jose



CALTRANS DISTRICT 4 BICYCLE PLAN

## Round 2 Workshops

- Fall 2017
- Purpose
  - Confirm bicycle needs
  - Review draft priority locations and projects
- Proposed locations:
  - Oakland
  - Petaluma
  - Menlo Park
- Online/virtual component



CALTRANS DISTRICT 4 BICYCLE PLAN



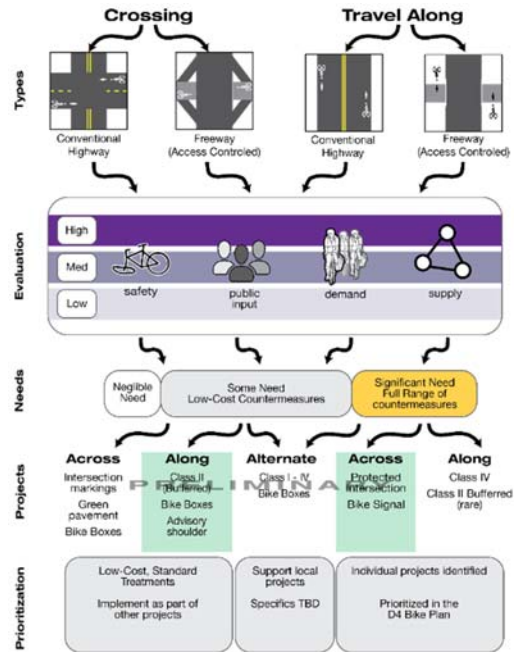
## Needs Analysis Approach

### Goals

- Identify where the SHS serves bicyclists
- Identify how the SHS complements local and regional networks
- Prioritize needs on and across the network
  - Demand
  - Safety
  - Supply/connectivity
  - Public input

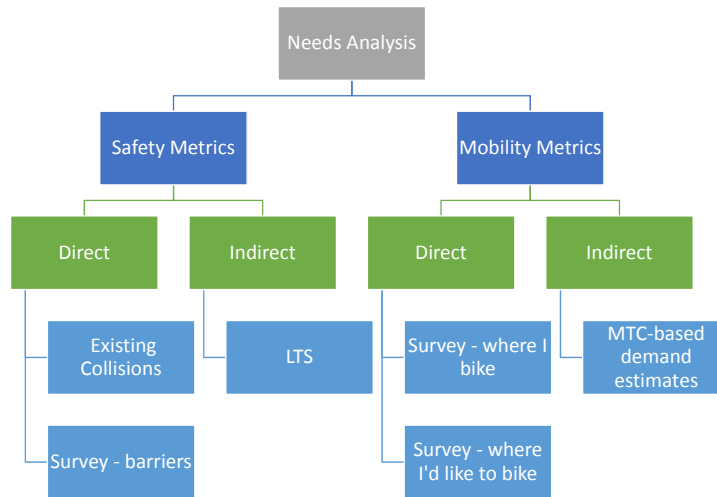


# Needs Analysis Approach



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# Needs Analysis Approach

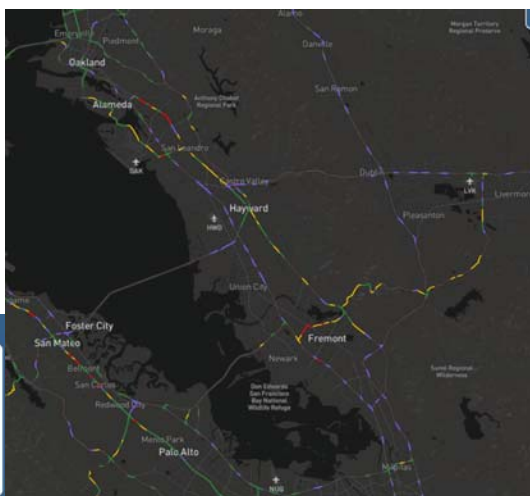


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## Preliminary Needs Analysis Results

Thresholds set for each data input

- Collisions, survey input, LTS, etc.

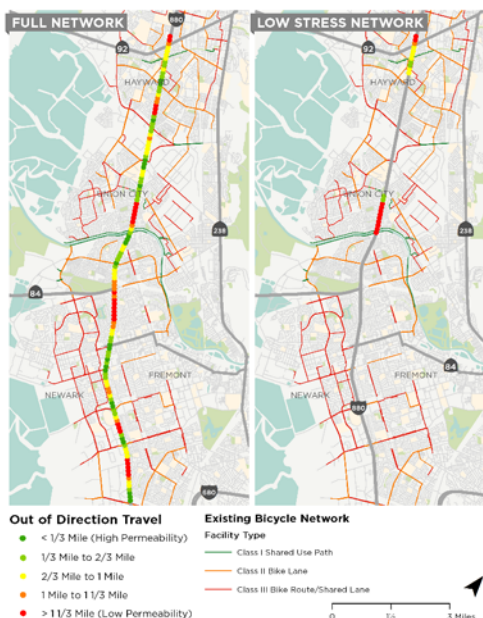


CALTRANS DISTRICT 4 BICYCLE PLAN

## FHWA Case Study Measuring Multimodal Connectivity

- Permeability
- Directness with which one may cross between points on either side
- Source – OpenStreetMap
- Measure – Route Directness Index
- Distance from highway affects out of direction travel required

Corridor 2: I-880, Southern Alameda County



CALTRANS DISTRICT 4 BICYCLE PLAN



## Project Types

### Striping/Maintenance

- Extension of bike lane through intersection
- Green markings at conflict areas
- Enhanced Signage
- Rumble Strips
- Flexible Delineators
- Bike Box
- Two-stage turn box

### Minor Project

- Enhanced crossing with RRFB
- Enhanced crossing with PHB
- Bike Signal

### Major Project

- Protected Intersection
- Roundabout
- Signalized Intersection
- Overcrossing / Undercrossing
- Interchange reconstruction

# Facility Types

## Urban Areas

- Conventional highway crossing
- Ramps/Interchange
- Freeway as physical barrier
- Travel along conventional highway

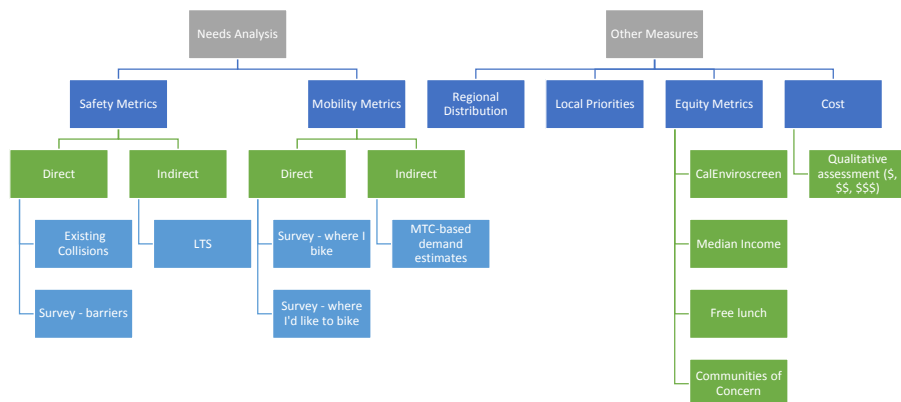
## Suburban/Rural

- Conventional highway crossing
- Ramps/Interchange
- Freeway as physical barrier
- Travel along conventional highway

## Unique

- Travel along fwy/ bridge\*
- Corridors: ECR, San Pablo, E 14th/Intl

# Project Prioritization





## Final Product

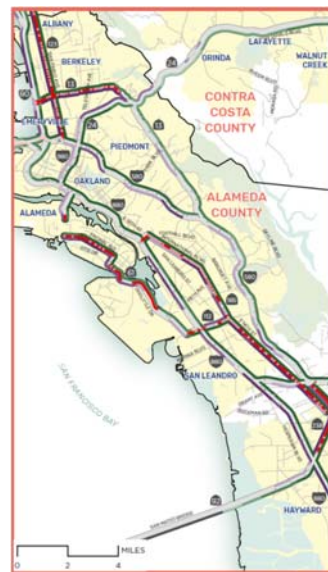
Online mapping tool

GIS data

Short report on methodology

Other products:

- Vision, Goals, and Objectives
- Outreach summary
- Bikeway Classification Guide
- Maps
- Project List





## Implementation

- State Highway Operation and Protection Program
  - Asset Management
  - Complete Streets component
- SB 1-funded projects
- Active Transportation Program
  - District 4 as applicant
  - Partnership and/or support for locally-sponsored grant applications
- Inform locally-sponsored projects and plans
- Inform corridor plans and Transportation Concept Reports

## Thanks!

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