

Caltrans Bay Area Bike Highway Study

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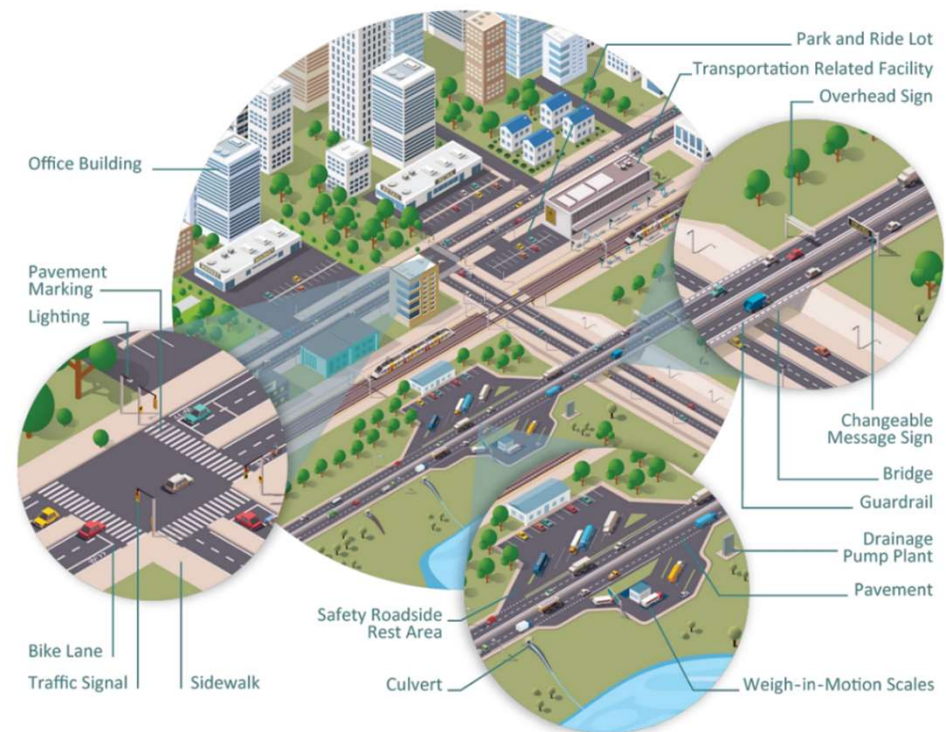
Caltrans Bay Area Bike Highway Study

- Identify international best practices with recommendations for the Bay Area and California context
- Corridor suitability and feasibility analysis
- Bike highway concepts as case studies
- Next steps for implementation



Caltrans Role

- Design and traffic control standards
- Owner/operator of the State Transportation Network
- Investment priorities and opportunities



Typical Highway Assets

Source: Caltrans Transportation Asset Management Plan (TAMP)

BIKE HIGHWAYS BACKGROUND



What are Bike Highways?*

- High-quality, direct or dedicated, and long-distance bikeways
- Support
 - higher speed travel
 - large volumes of people bicycling
 - Connections to regional destinations

* Based on review of worldwide best practices



Bike Highway in Denmark. Photo: Maurits Lopez Cardozo



BIKE HIGHWAYS BACKGROUND



Intended Users

- Bicycle Commuters
- Recreational riders
- Powered micromobility
- E-bikes

*Bike Highways in Bogotá,
Netherlands, Xiamen.
Photos: Maurits Lopez Cardozo;
Ma Weiwei*



Design Principles

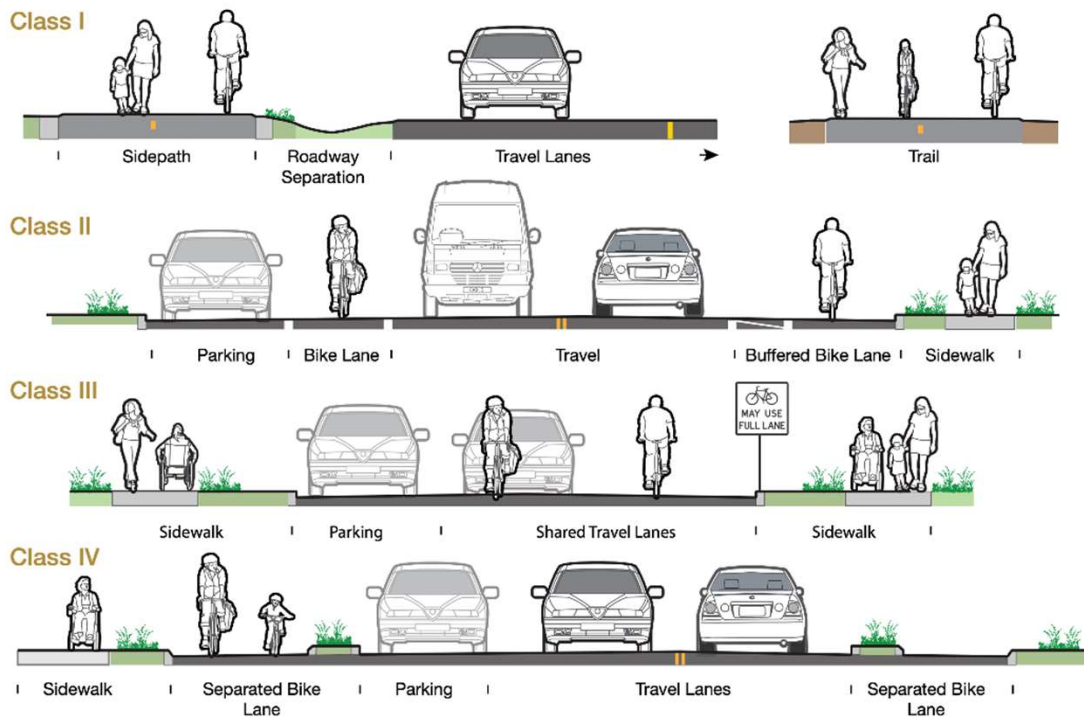
- Dedicated
- Low Effort
- Direct
- Long-distance connections



BIKE HIGHWAYS DESIGN CONSIDERATIONS



Bikeway Classification in California



Finding from Bike Highway Study:
In the Bay Area and California, Bike Highways may best be thought as a route “overlay” intended for a specific type of user (i.e., higher speed, longer distance cycling), rather than a single specific facility type.

From *Toward an Active California*

Facility Design | Route Identification and Wayfinding

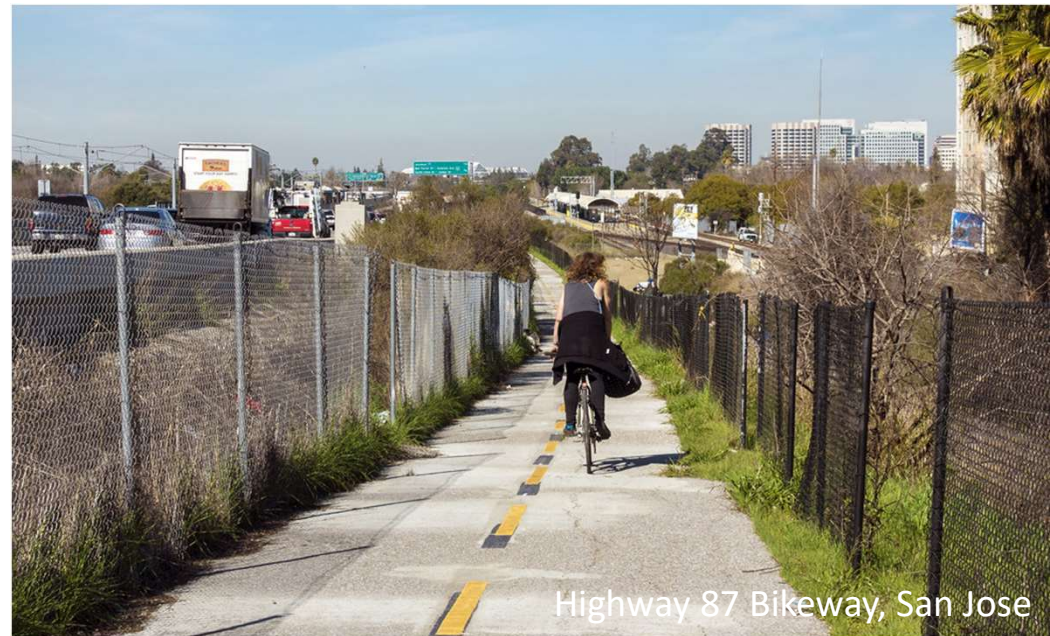
Provides sense of safety, security and comfort, and improves coherency of network



BIKE HIGHWAYS CORRIDOR ANALYSIS



Freeway Corridors



Conventional State Highways

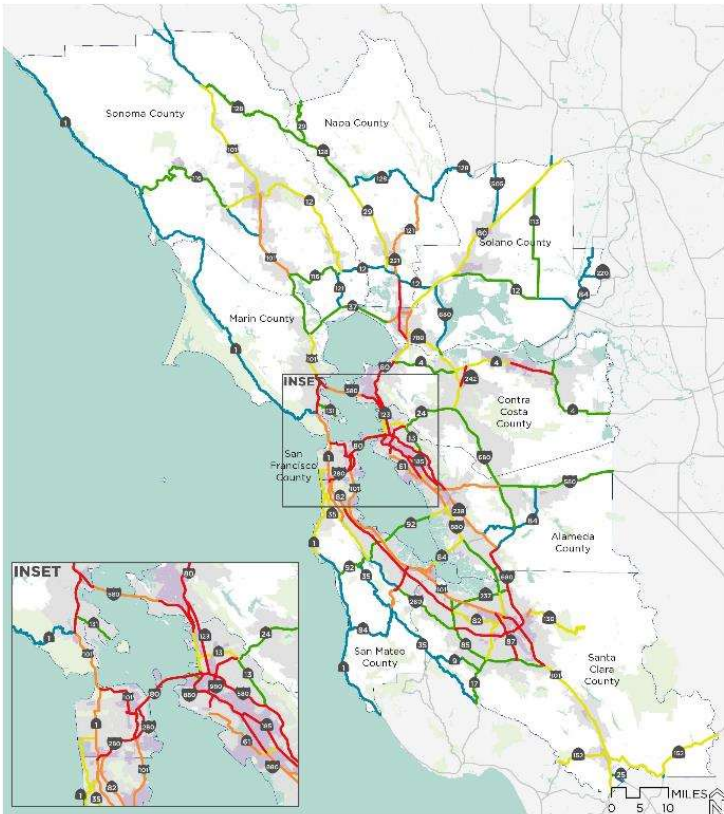


Potential Corridors

Broad assessment based on available data for existing and potential demand, equity, and feasibility



Suitability Score



Combined Suitability and Feasibility Score



Combined Score

- High
- Moderate-High
- Moderate
- Moderate-Low
- Low

- Bridge or tunnel segment - suitability score only
- Segment not included due to geographic balancing

Destinations + Boundaries

- Park
- MTC Community of Concern
- Urban Area
- County Boundary

d4bikehighwaystudy.org



BIKE HIGHWAYS ILLUSTRATIVE CONCEPTS



Elevated Bikeway

BIKE HIGHWAY

CLASS I - SHARED-USE PATH

CLASS I - SHARED-USE PATH

RAMP STRUCTURE

CLASS I - SHARED-USE PATH

CLASS IV - SEPARATED BIKEWAY
(ONE-DIRECTIONAL)

CLASS IV - SEPARATED BIKEWAY
(ONE-DIRECTIONAL)



Photo by Ivo Deft

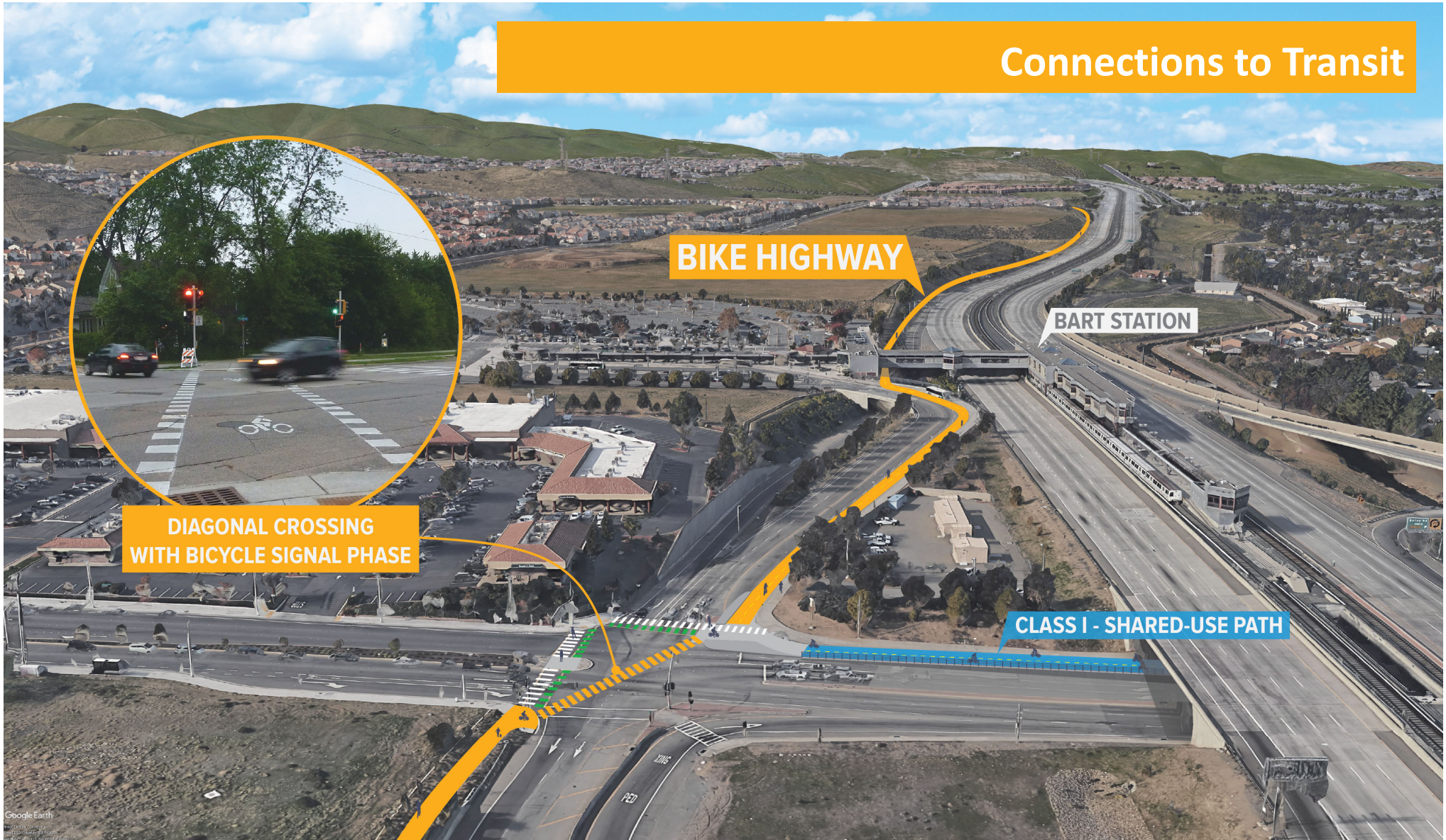
Connections to Transit

BIKE HIGHWAY

BART STATION

**DIAGONAL CROSSING
WITH BICYCLE SIGNAL PHASE**

CLASS I - SHARED-USE PATH



Center Aligned Bike Highway

**CLASS IV - SEPARATED BIKEWAY
(ONE-DIRECTIONAL)**

**CLASS IV - SEPARATED BIKEWAY
(BI-DIRECTIONAL)**

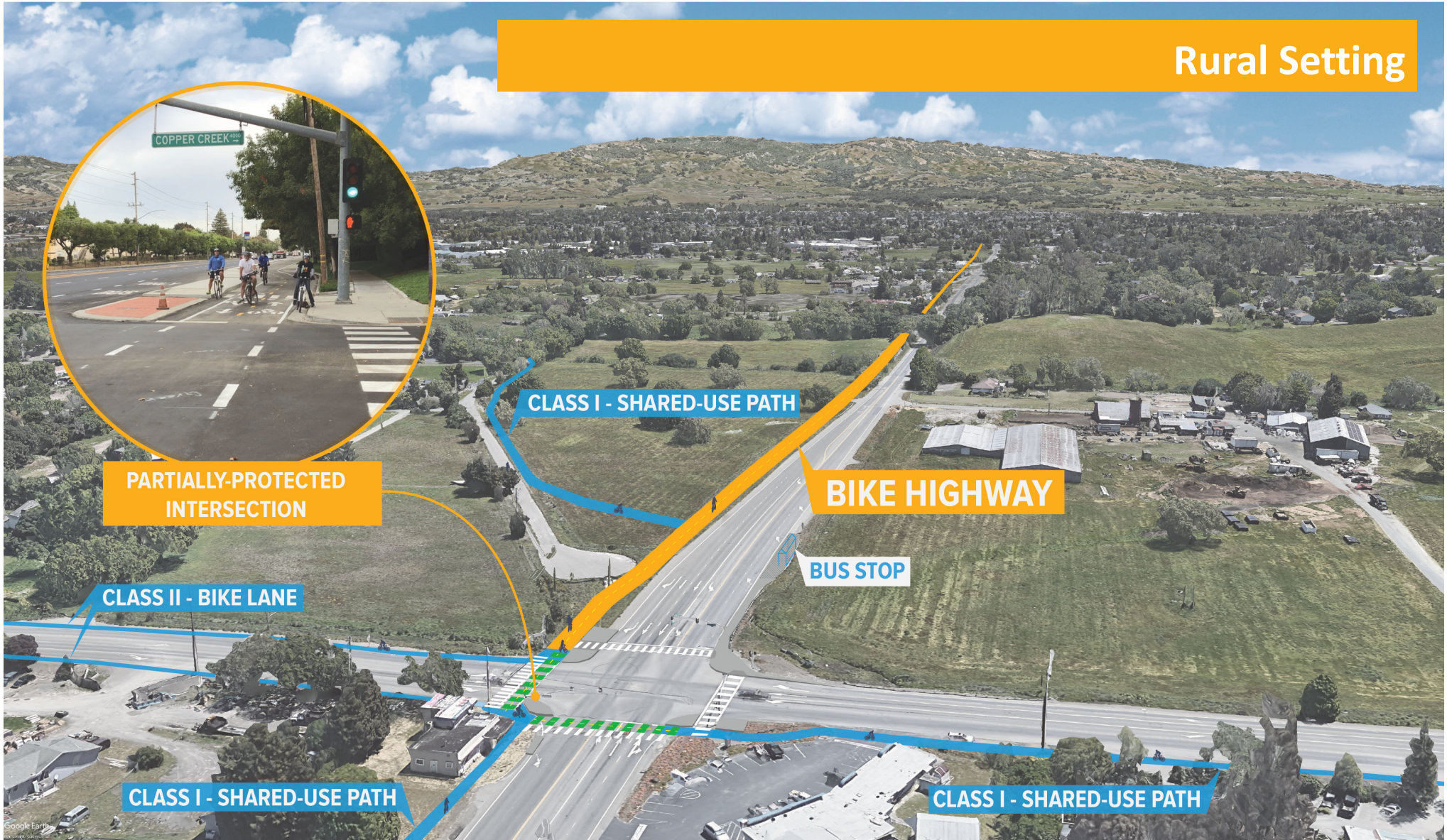
BIKE HIGHWAY

BICYCLE SIGNAL PRIORITY

PATH SPLITS AROUND PILLARS



Rural Setting



Highway Interchange

CLASS I - SHARED-USE PATH



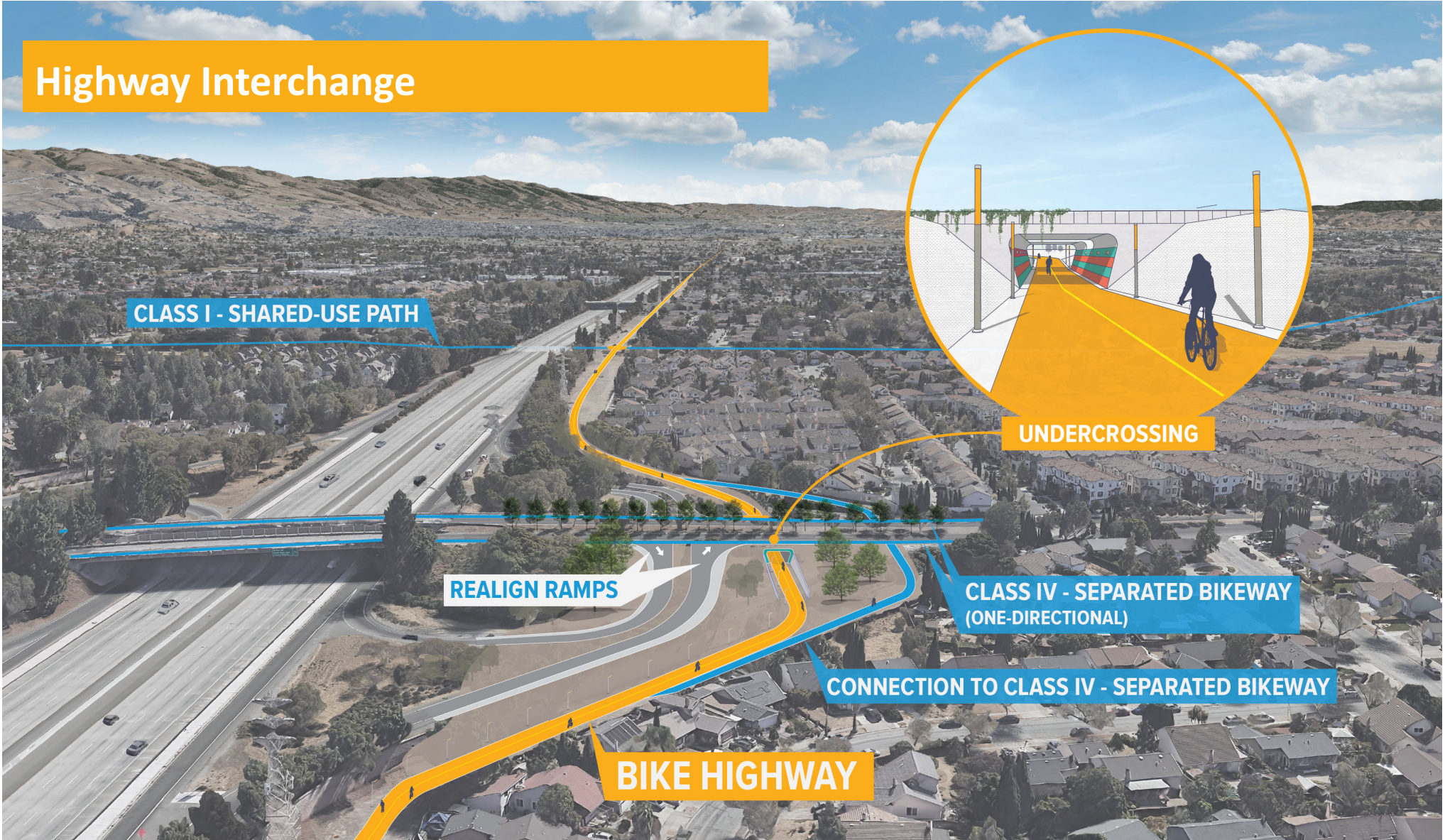
UNDERCROSSING

REALIGN RAMP

CLASS IV - SEPARATED BIKEWAY
(ONE-DIRECTIONAL)

CONNECTION TO CLASS IV - SEPARATED BIKEWAY

BIKE HIGHWAY



Interaction with Transit

INTER-CITY CONNECTIONS

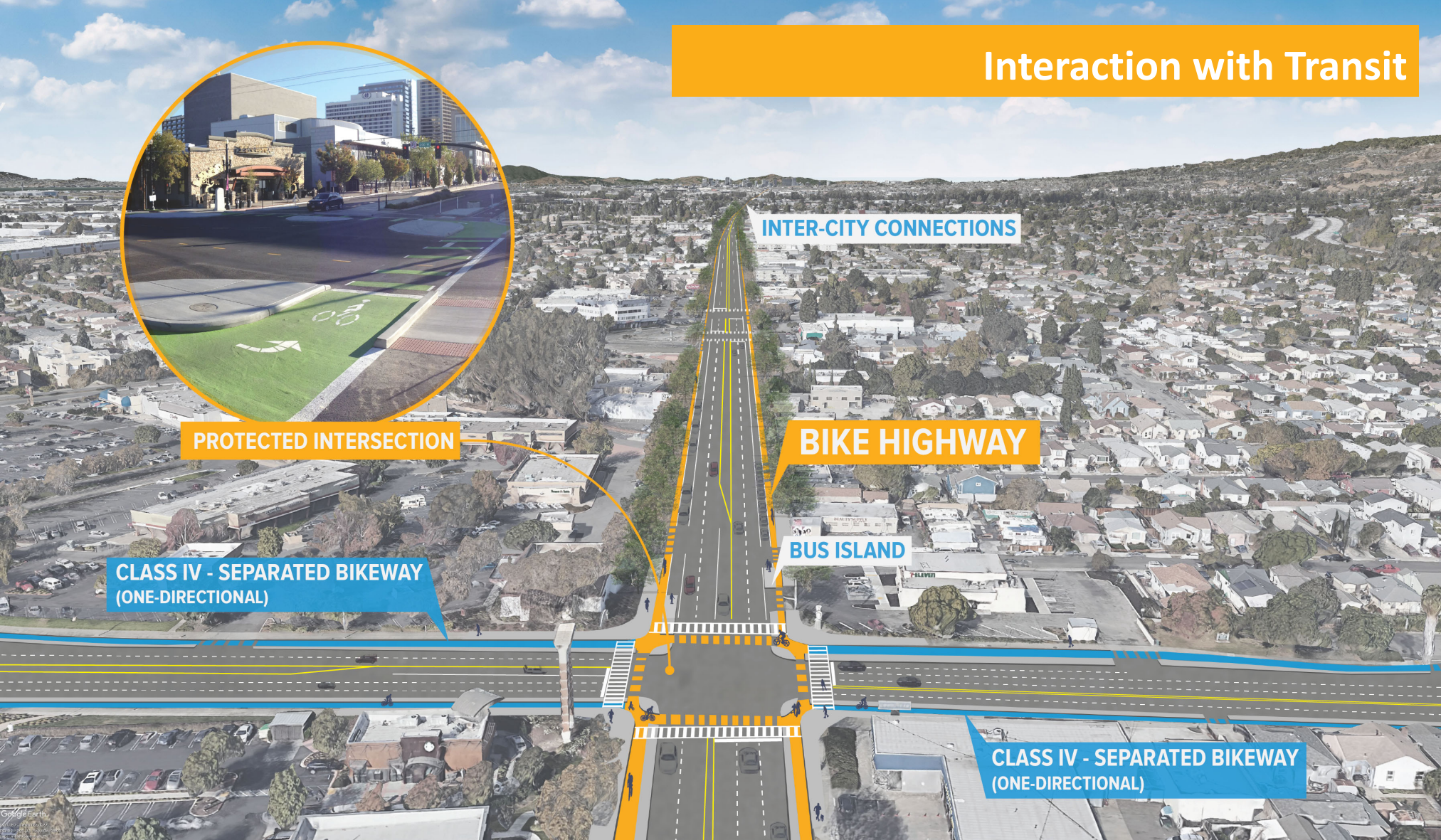
BIKE HIGHWAY

BUS ISLAND

PROTECTED INTERSECTION

CLASS IV - SEPARATED BIKEWAY
(ONE-DIRECTIONAL)

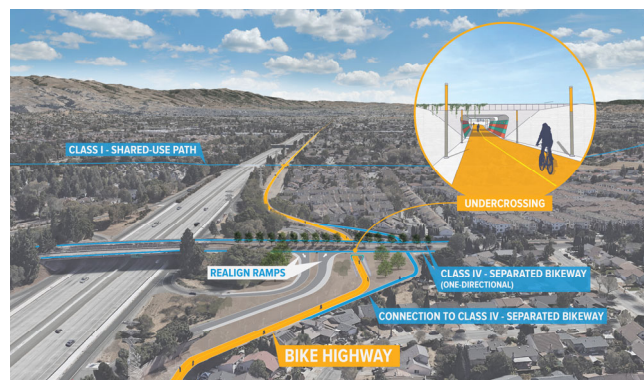
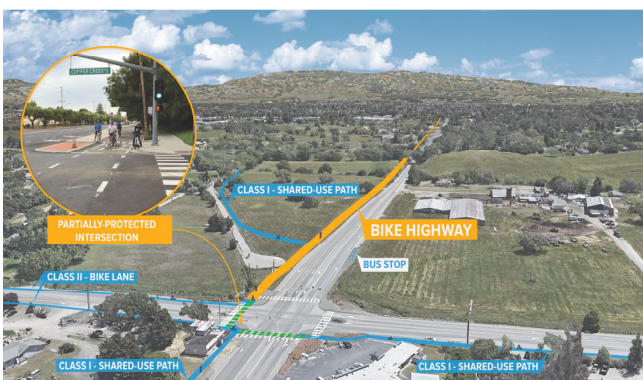
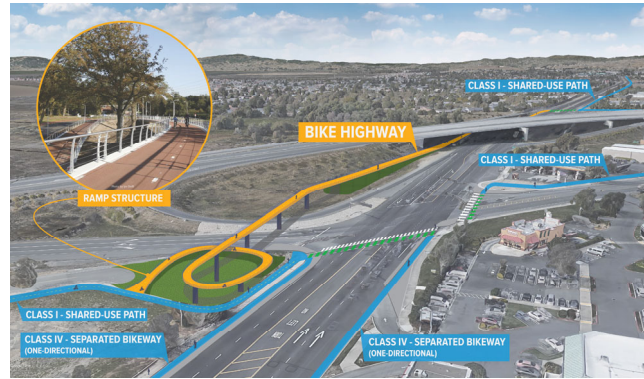
CLASS IV - SEPARATED BIKEWAY
(ONE-DIRECTIONAL)



ILLUSTRATIVE CONCEPTS

Tell us what do you think?

bit.ly/D4BikeHighway2



Public and stakeholder input to date:

- Separation from vehicular traffic and from people walking/using a mobility device
- Connection to job centers, residential, and commercial centers
- Access for low-income and disadvantaged communities
- “Highway” terminology associated with past harms – need to engage communities

Round 2 survey with illustrative concepts



State Funding Programs

- Active Transportation Program (ATP)
- Solutions for Congested Corridors (SCCP)
- Local Partnership Program (LPP)
- Interregional Transportation Improvement Program (ITIP)
- State Highway Operations & Protection Program (SHOPP)
- Trade Corridor Enhancement Program (TCEP)
- Transit & Intercity Rail Capital Program (TIRCP)



Thank you



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