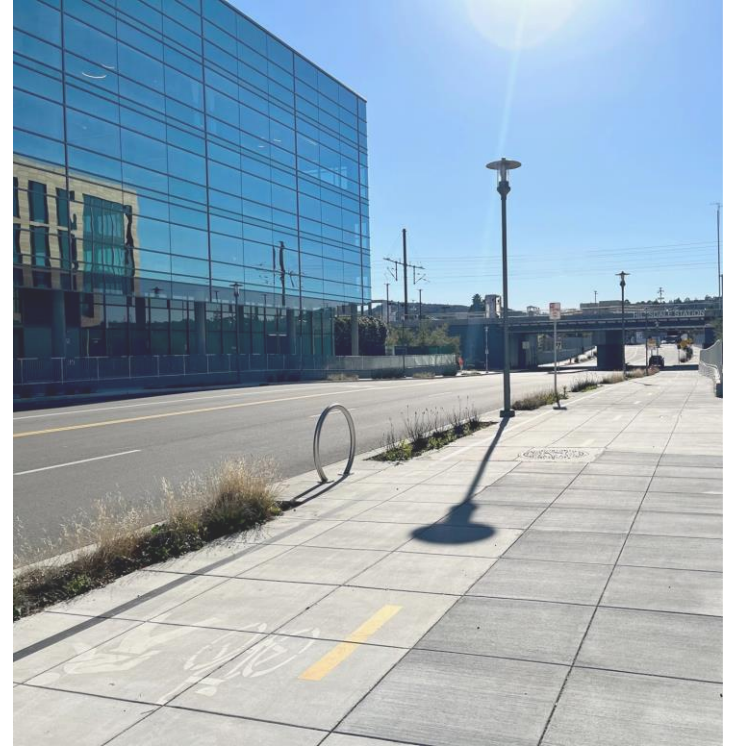




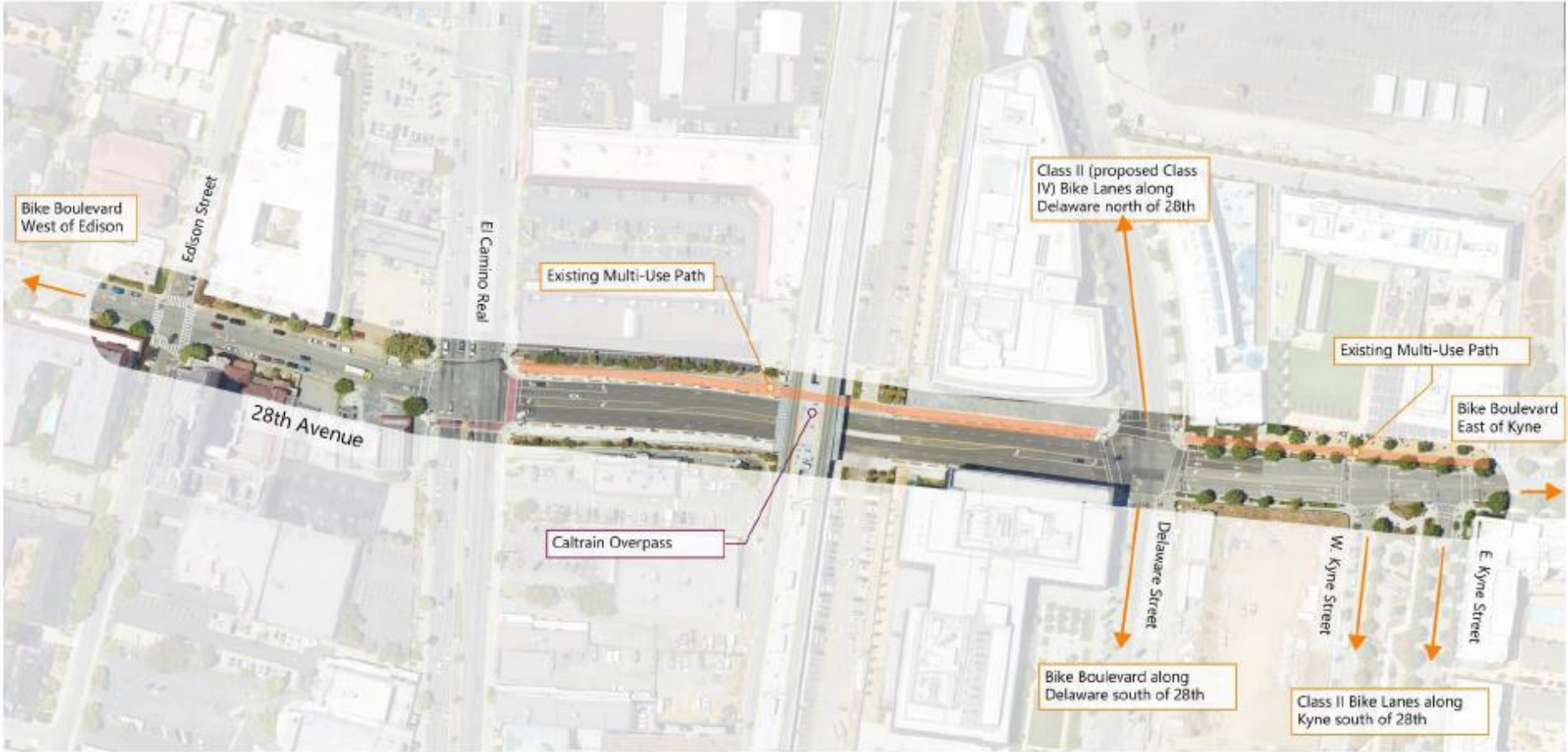
## 28<sup>th</sup> Avenue Bicycle & Pedestrian Improvements

# Project Goals & Purpose

- Encourage active transportation and transit.
- Provide a safe connection for crossing El Camino Real, accessing the Hillsdale Caltrain Station, and traveling along 28th Avenue.
- Design facilities which support all ages and abilities.
- Consider current and future travel demands in the area to allocate space to people walking, biking, taking transit and driving or riding cars.

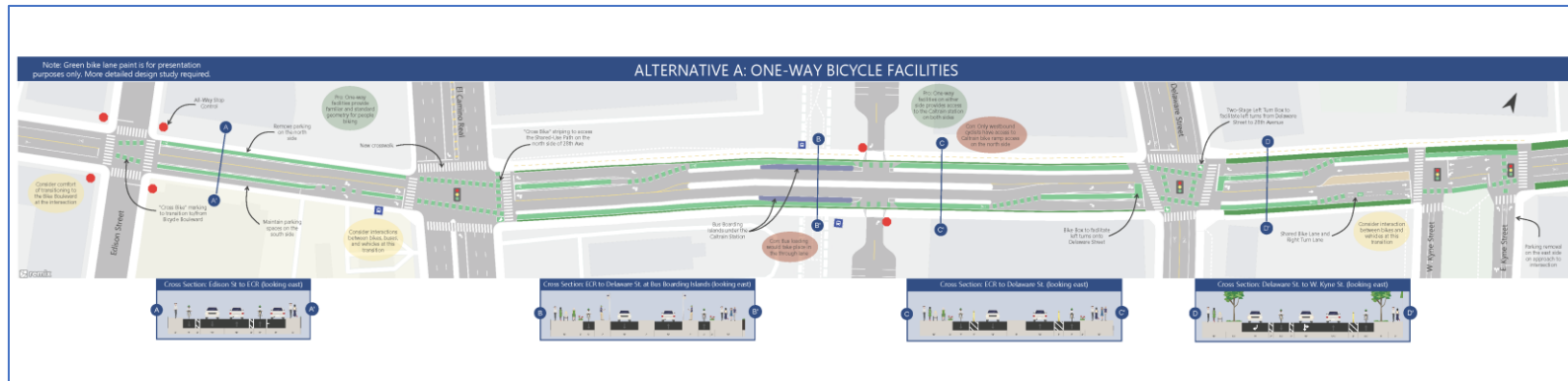


# Project Extents



# Bicycle Facilities and Elements

Use slides 5 through 10 to familiarize yourself with the elements shown in the concept designs



# Bicycle Facility Types

## Class I Shared-Use Path

- Exclusive right-of-way for bicyclists and pedestrians
- Support recreational and practical travel
- Common along/through park spaces



Vine Trail, Napa Valley



Bay Bridge Trail, Oakland



# Bicycle Facility Types

## Class II Bike Lane

- Established along streets and defined by striping
- One-way bike facilities



State Route 12, the Springs Region of Sonoma

## Class IIB Buffered Bike Lane

- Provides more separation from adjacent traffic lane with diagonal markings as a “buffer”



Sloat Blvd, State Route 35, San Francisco

# Bicycle Facility Types

## Class III Bike Route

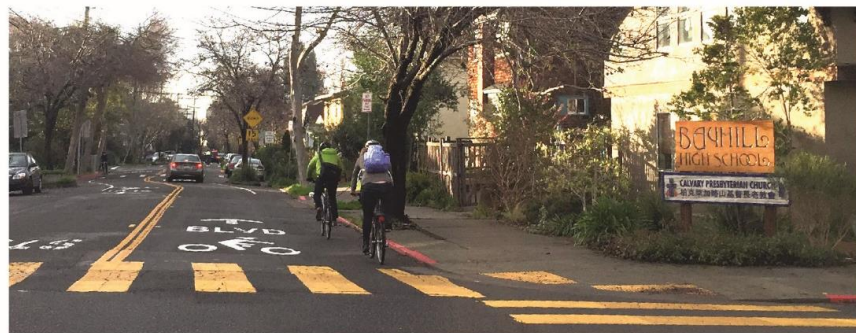
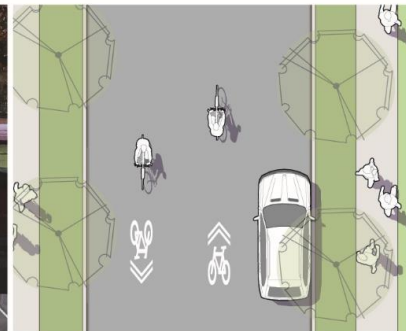
- Designate a preferred route for bicyclists on streets shared with motor vehicles
- Low vehicle speeds and volumes preferred

## Class III Bicycle Boulevard

- Use traffic calming and diversion measures to create safer conditions for streets shared with motor vehicles



2nd St, Oakland



Milvia St, Berkeley

# Bicycle Facility Types

## Class IV Separated Bikeway or Cycle Track

- Exclusive right-of-way for bicyclists
- Physically separated from vehicle traffic (flex posts, bollards, parking, or raised median)
- Improve level of comfort for bicyclists along higher-speed and/or heavily trafficked roadways



Fulton St, Berkeley



Division St, San Francisco



# Other Bicycle Elements



## Bike Box

Dedicated space where bicyclists can wait during the red light at signalized intersections



## Two-Stage Turn Box

Dedicated space where bicyclists can wait to turn left at signalized intersections

Use green phase for both directions



## Conflict Markings

Improve visibility of bike lane crossings at intersections and informs all roadway users of expected behaviors



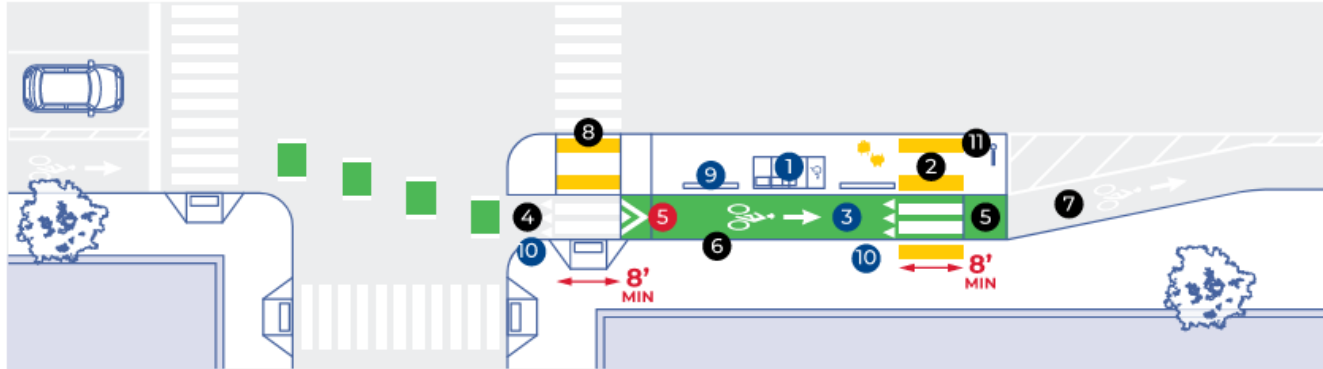
## Bike Signals

Signal heads for bikes only, indicating when bikes have the right of way to cross an intersection

# Bus Boarding Islands Elements



- |   |   |                                |
|---|---|--------------------------------|
| 1 Bus shelter                                 | 5 Bicycle ramp<br>Maximum: 1:12 slope               | 9 Vertical railing             |
| 2 Accessible landing zone<br>Minimum: 5' x 8' | 6 Furnishing zone/<br>detectable edge               | 10 Bikes yield to<br>peds sign |
| 3 Green pavement                              | 7 Bike lane taper<br>Preferred: 1:10 / Maximum: 1:5 | 11 Bus stop sign               |
| 4 Bicyclist yield area                        | 8 Detectable warning<br>surface                     |                                |



# Project Considerations & Constraints

- The concept designs are confined by the existing width of the street (curb-to-curb edge)
- All design alternatives consider removing parking on the north side of 28<sup>th</sup> Avenue between Edison Street and El Camino Real



# Three Design Alternatives

Alternative A: One-way Bike Facilities on Each Side of 28<sup>th</sup> Avenue

Alternative B: Two-way Bike Facility on the North Side of 28<sup>th</sup> Avenue

Alternative C: One-Way Bike Facilities with Priority for Pedestrians at Signals

Download the designs at [www.cityofsanmateo.org/GapClosure](http://www.cityofsanmateo.org/GapClosure)