ITE San Diego Project of the Year 2018/2019

Escondido Creek Bikeway Missing Link Project

ITE San Diego

January 9th, 2020

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Missing Link Project Overview

- Background

- Project Initiation and ATP Grant Application
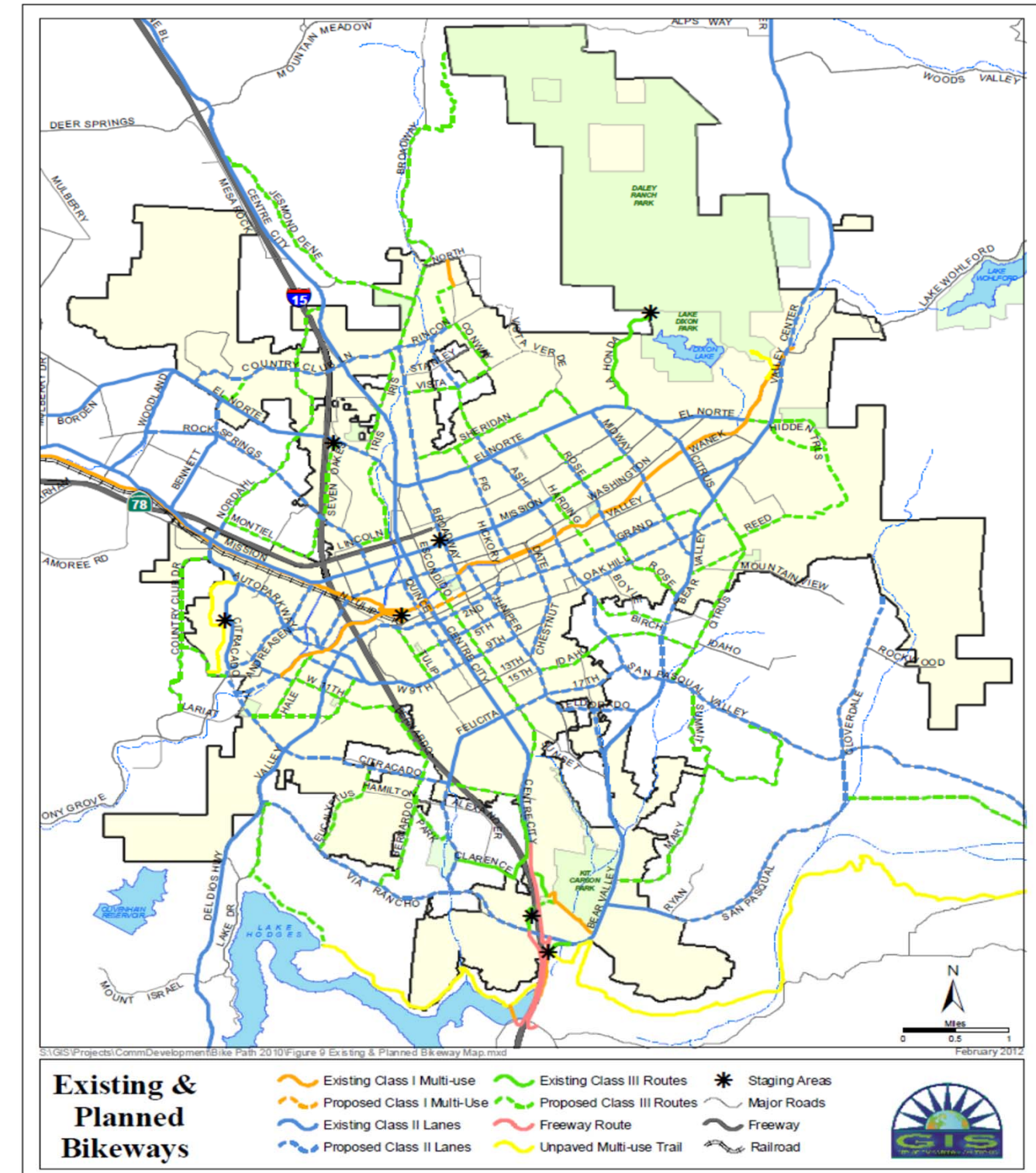
- Project Design and Construction

- Lesson Learned

Background – Ali Shahzad

❑ City Bicycle Master Plan first adopted in 1993

❑ 2012 Bicycle Master Plan Update approved by Transportation Commission on March 29, 2012 – Initial Concept included before a Caltrans Adopted standard

❑ 2012 Bicycle Master Plan Final Update adopted by City Council on October 17, 2012

Existing & Planned Bikeways

Existing Class I Multi-use	Existing Class III Routes
Proposed Class I Multi-Use	Proposed Class III Routes
Existing Class II Lanes	Freeway Route
Proposed Class II Lanes	Unpaved Multi-use Trail

Staging Areas · Major Roads · Freeway · Railroad
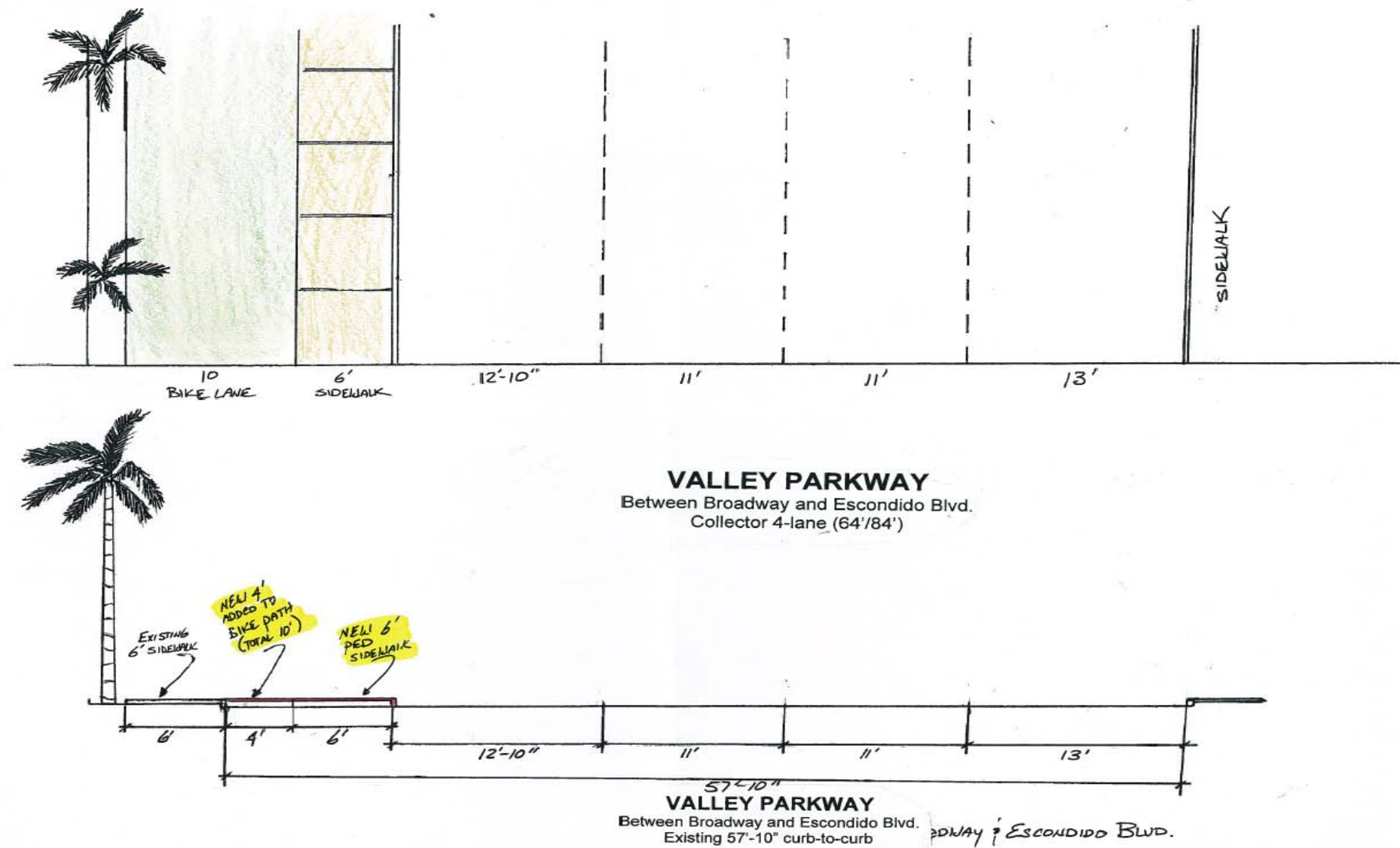
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Project Milestones

- March 29, 2012 - City of Escondido Bicycle Master Plan with the Missing Link was presented to the Transportation Commission, then added to the Final October 2012 Bike Masterplan

- August 5, 2015 - City Council authorized the grant funding agreement with SANDAG Active Transportation Program (ATP) grant of approx. $1.1 M in March 2015 to fund the design and construction of the Escondido Creek Bikeway Missing Link Project

- April 26, 2017 – City Council approved to amend the 2012 Bicycle Master Plan to include Class IV Bikeway (Cycle Track) as part of the project.

Initial Concept:

BI-DIRECTIONAL PROTECTED PATH (Class 1) Street Layout: Sidewalk - Bi-Directional Bike Lane - Painted Buffer adjacent to Vehicle Lane.

VALLEY PARKWAY
Between Broadway and Escondido Blvd.
Collector 4-lane (64'/84')

VALLEY PARKWAY
Between Broadway and Escondido Blvd.
Existing 57'-10" curb-to-curb

Missing Link Concept:

❑ Cycle Tracks separated by flexible posts
❑ Photo simulation of Cycle Tracks along N. Broadway

Class IV Two-way Cycle Tracks

Parallel Parking along N. Broadway

Striped buffer with flexible posts

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Missing Link Project Funding and Kick-off

❑City initially had a $500K SANDAG Grant to put the path on Centre City Pkwy. and adjacent to the Movie Theatres, which became unfeasible due to R/W and an technical design issues, the grant was returned

❑City received an $1.1 Million Active Transportation Grant in March 2015 to fully fund the design and construction of the project with the new concept layout

❑City hired consulting firm thru a RFP selection process; KOA Corporation, for design services in February 2016

❑Public Outreach Workshop was conducted at the City Hall on June 23, 2016

- Bike/Walk Escondido Group
- Escondido Education COMPACT
- Youth Leadership Group
- Hidden Valley Bike Program

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Existing Bike Facilities (Escondido to Oceanside)

Inland Rail Trail

Escondido Creek Trail

Source: SANDAG
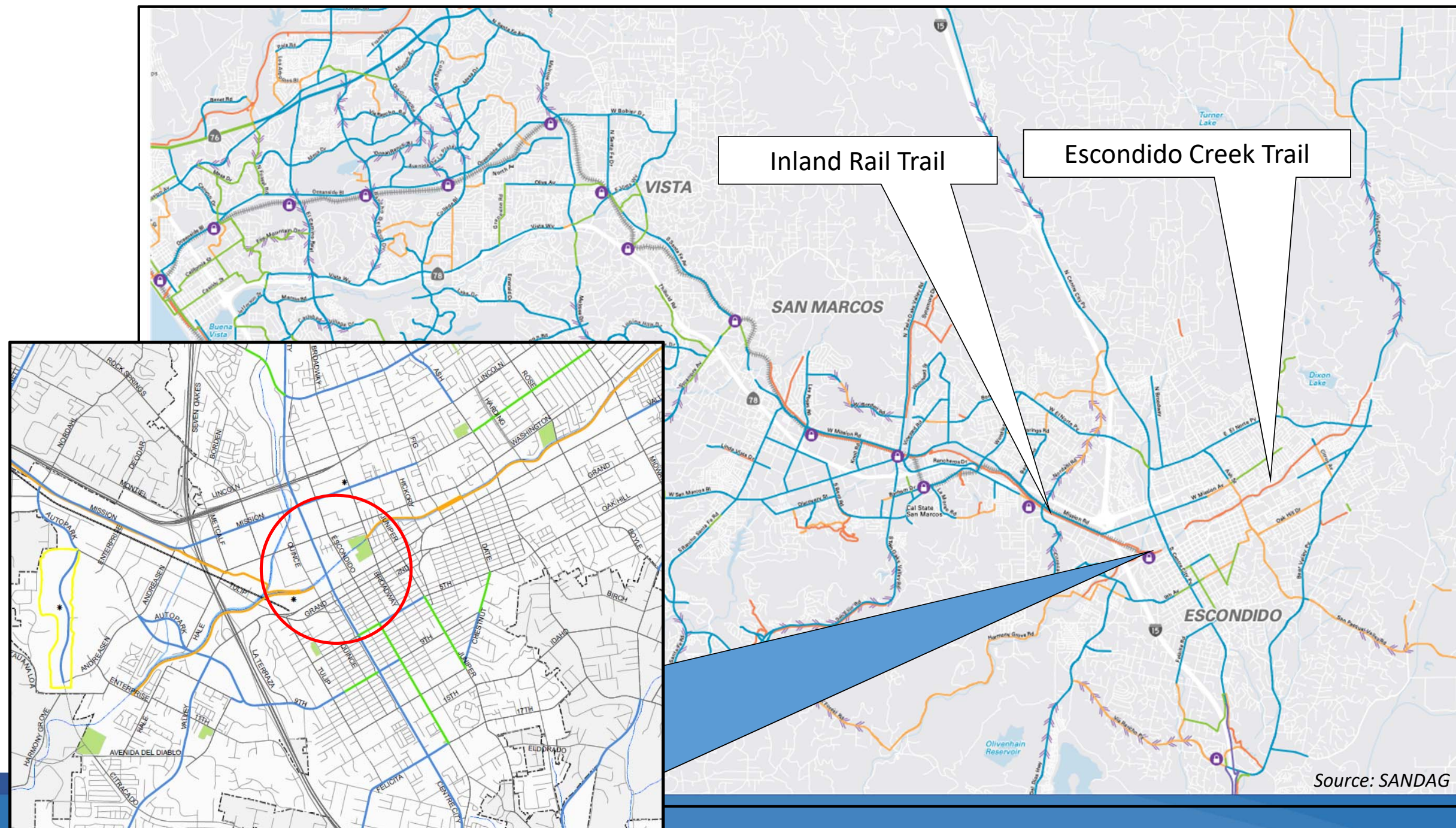
The "MISSING LINK"

- A need to fill a gap between Escondido Creek Trail and the Inland Rail Trail

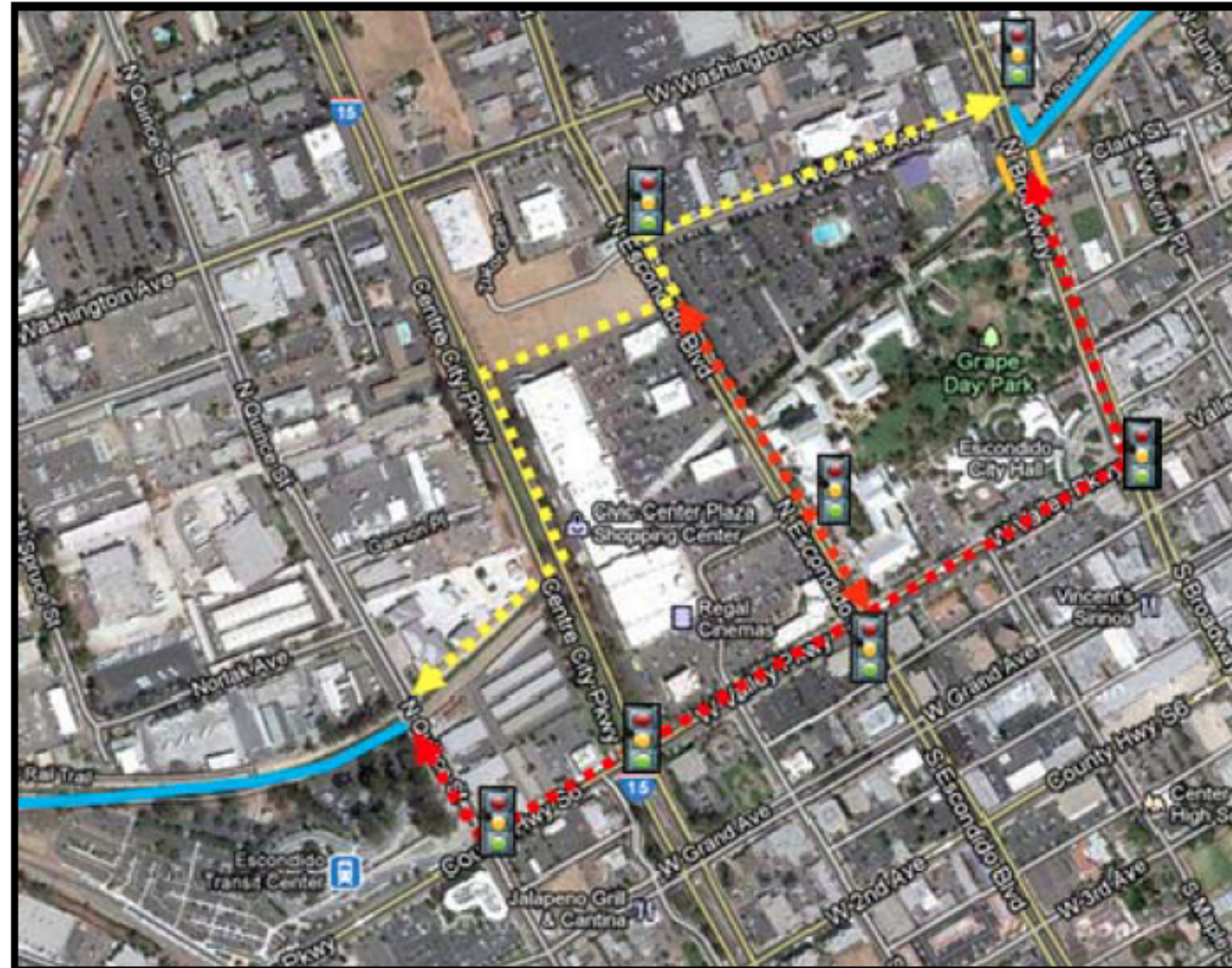

Escondido Creek Trail

Inland Rail Trail
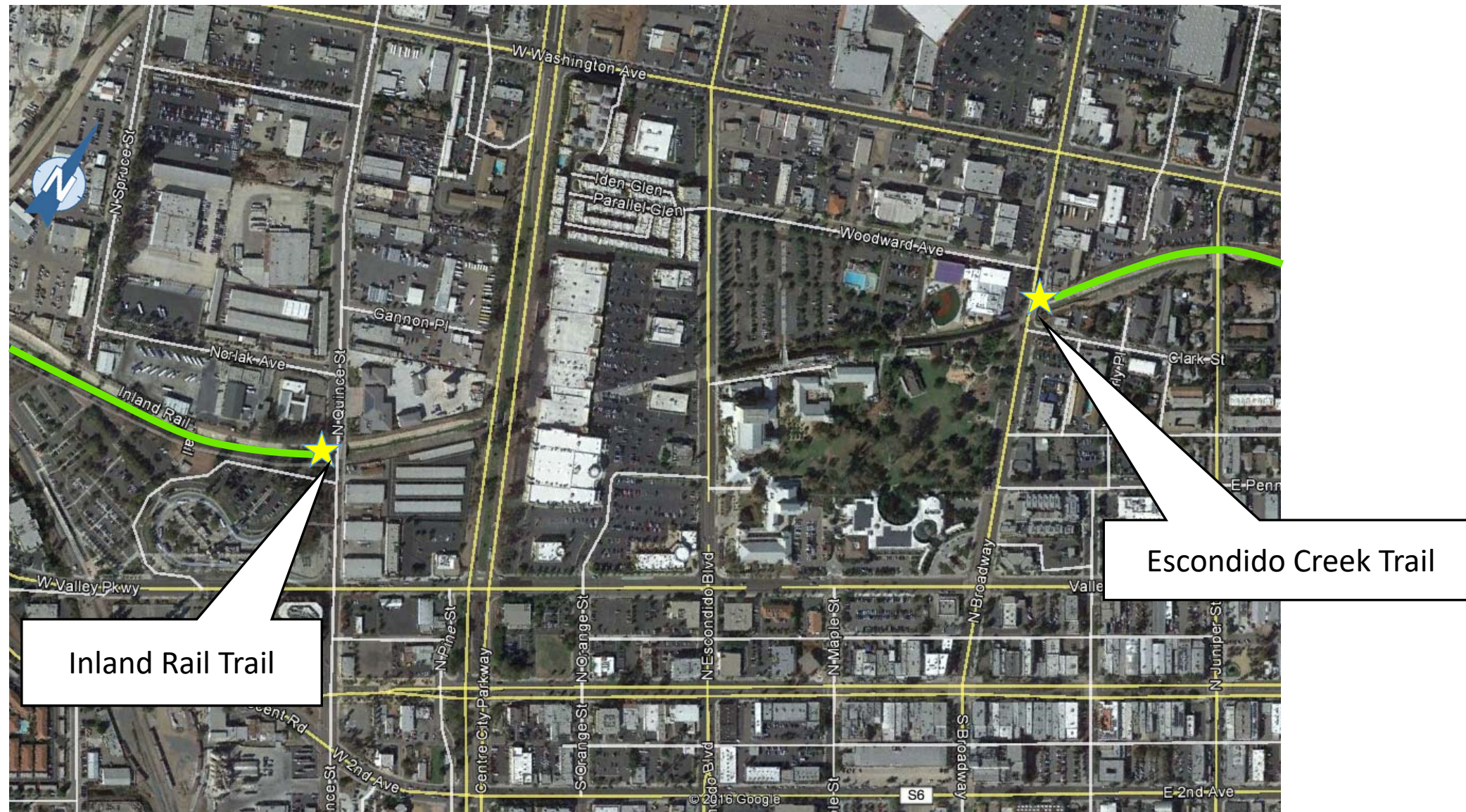
Initial Project Alternatives – SANDAG Grant returned

Figure 7.1 Missing Link

Alternate Alignments
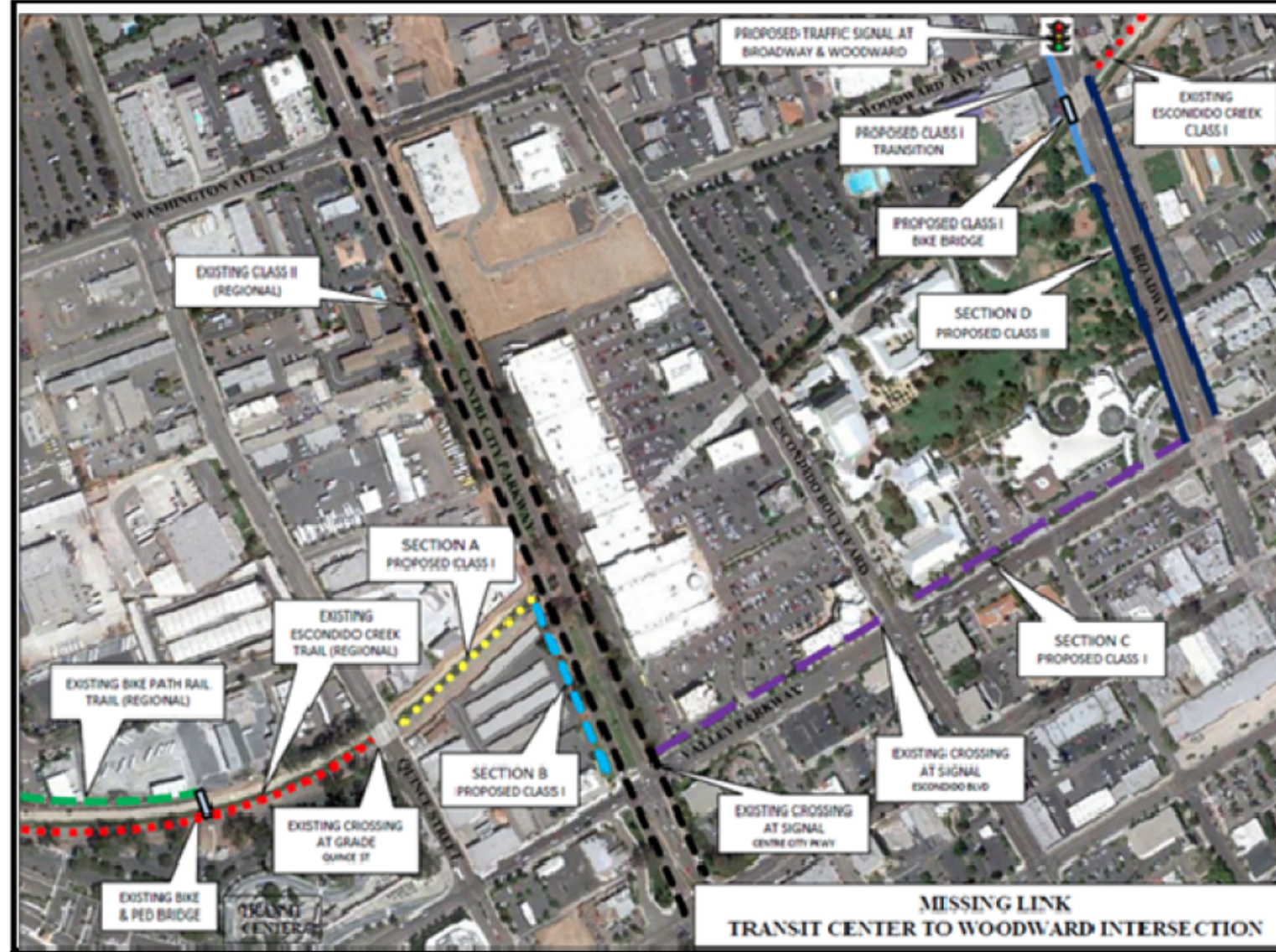

Figure 7.3 Alternative Routes and Preferred Route

Existing Creek Trails: ⟶
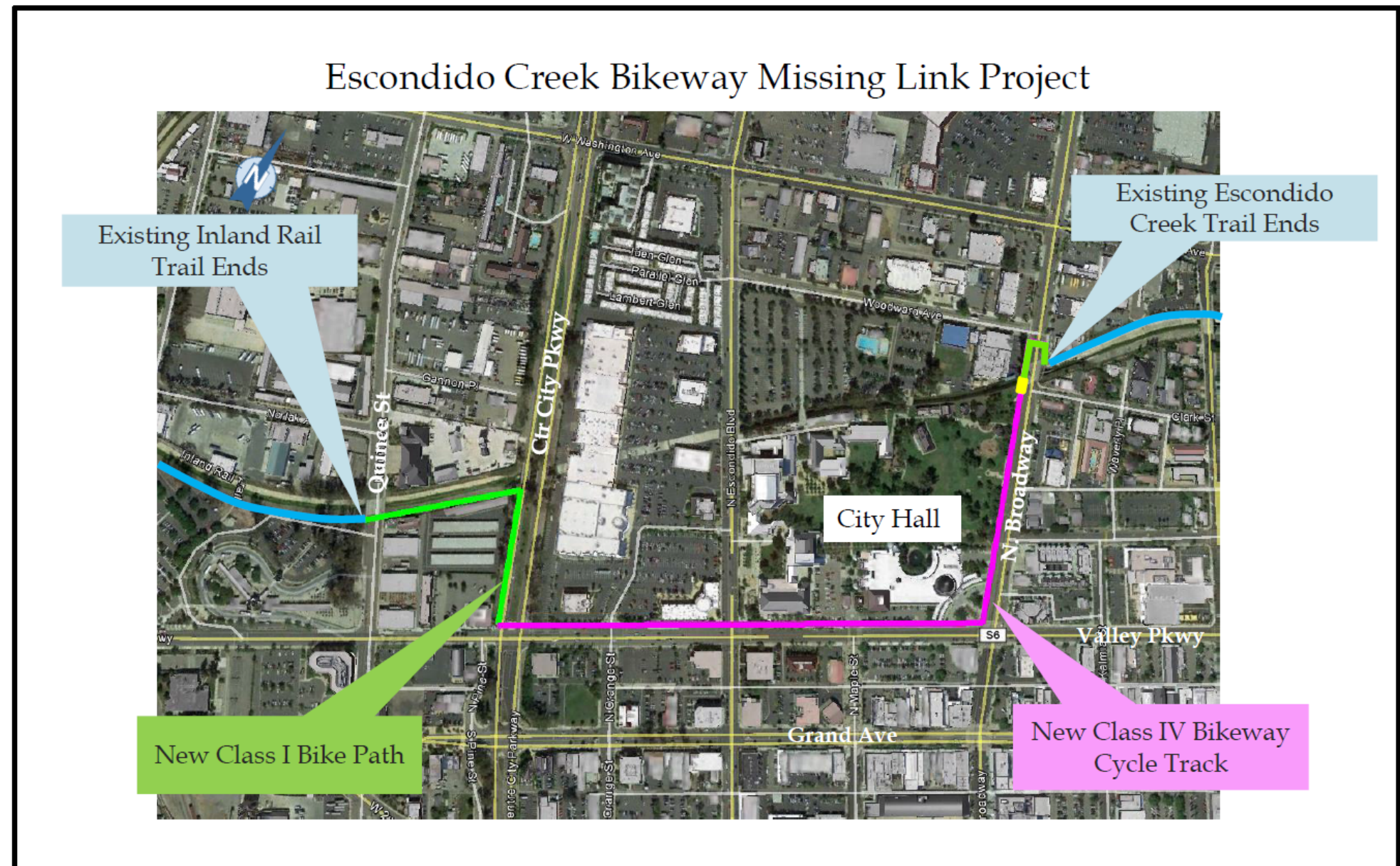
Preferred Route: ⟶

Alternate Route: ⟶

Preferred Route
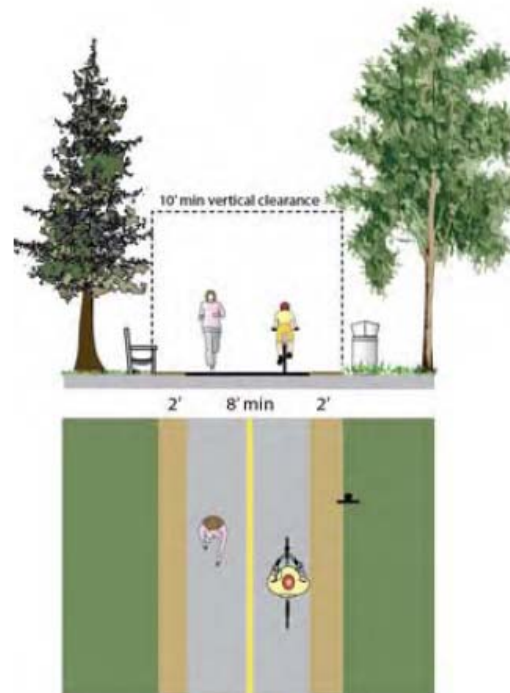

Figure 7.2 Preferred Route

Cost Estimate **$1,092,540** – Initial cost estimates for each section of the proposed project includes the following:
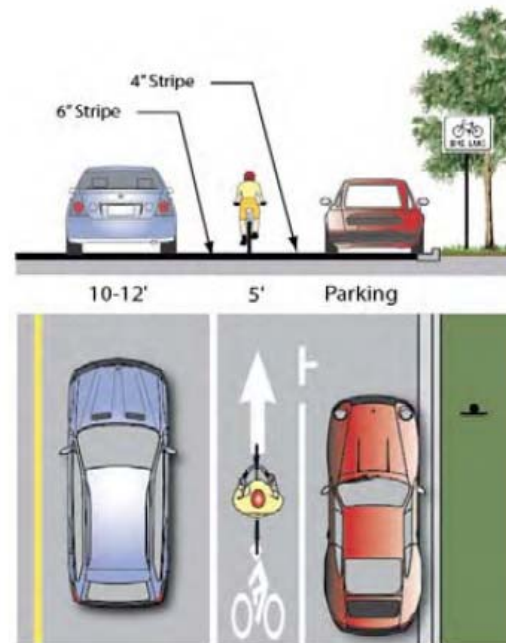
Final Project Alignment

- New Class I and Class IV bike facilities through the city core

Escondido Creek Bikeway Missing Link Project

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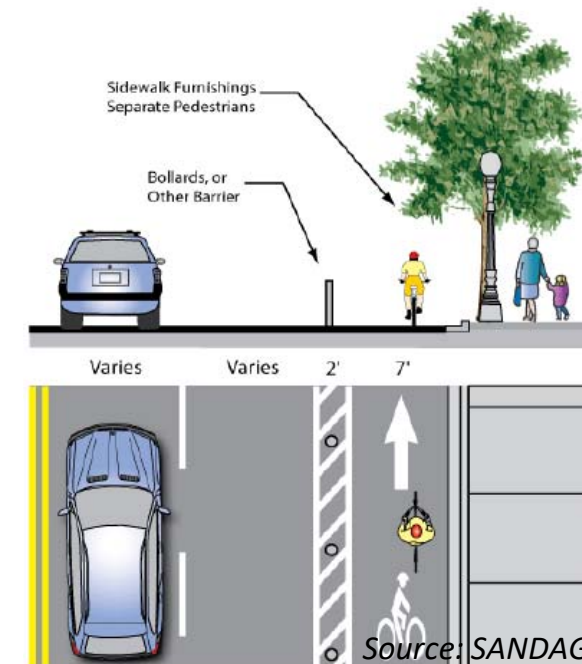# Bicycle Facility Classifications

Class I
Bike Path

Class II
Bike Lane

Class III
Bike Route

Class IV
Bikeway (Cycle Tracks)

Class IV Bikeway (Cycle Tracks) adopted in CA in September 2014

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Class IV Bikeway (Cycle Tracks)

- Characteristics:
  - An exclusive bike facility located on the roadway that has separation from vehicular traffic and is distinct from sidewalk
  - Can be one-way or two-way
  - Two-way Cycle Track allows bicycle movements in both direction on one side of the street
- Benefits:
  - Dedicated space for bicyclists
  - Reduce risk of "dooring" compared to a bike lane
  - Relatively low implementation cost when using existing pavement and drainage
  - More attractive to a wide range of bicyclists at all levels and ages

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Class IV Bikeway (Cycle Tracks)

- The separation may include grade-separation, flexible posts/bollards, inflexible barriers, or on-street parking

Project Timeline – Miriam Jim
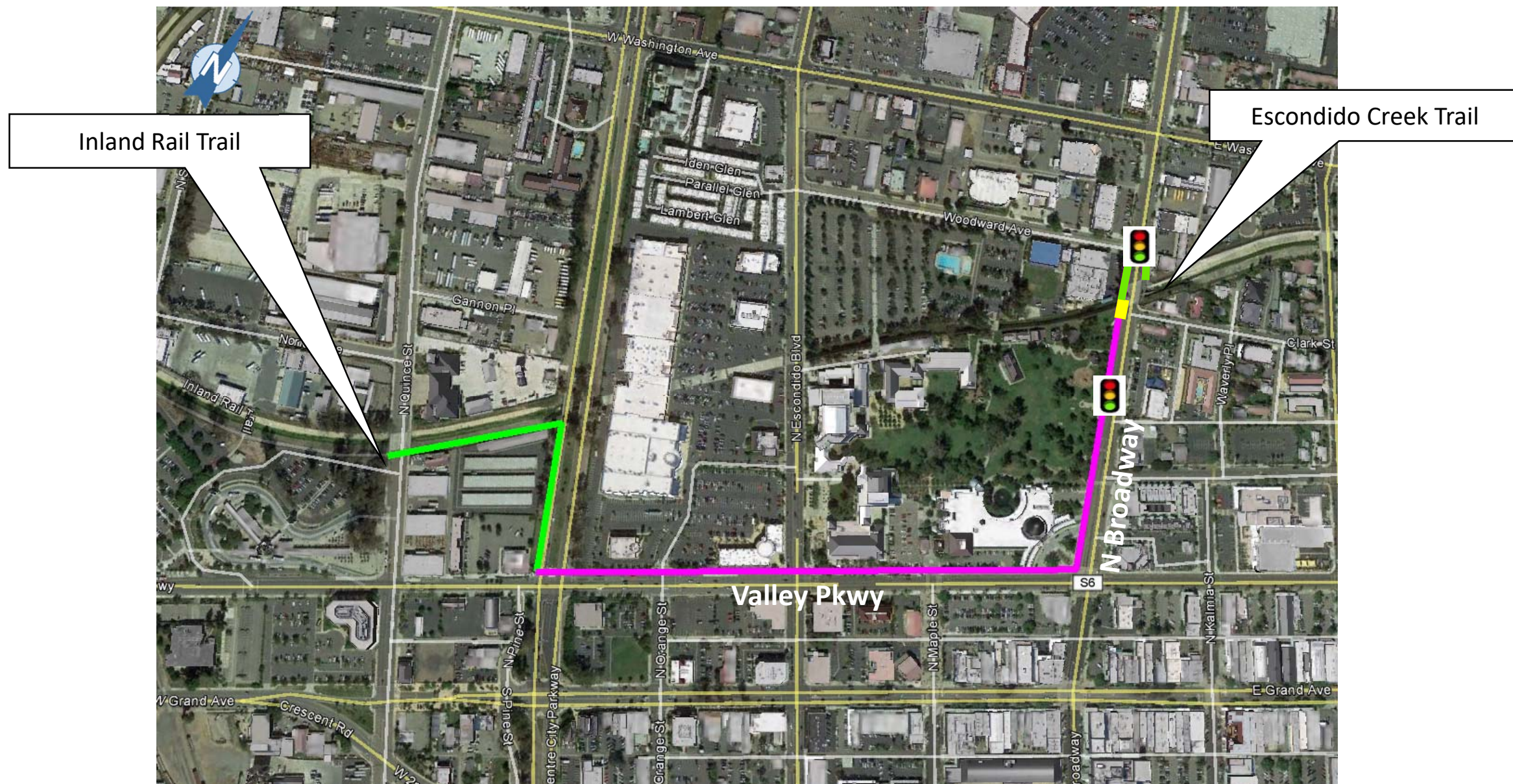
- April 2016   Began PS&E
- June 2016   Public Outreach
- October 2017   Completed PS&E
- December 2017   Project Out to Bid
- February 2018   New pavement and Striping (Pavement Rehab.)
- June 2018 - May 2019   Project Construction

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Community Outreach
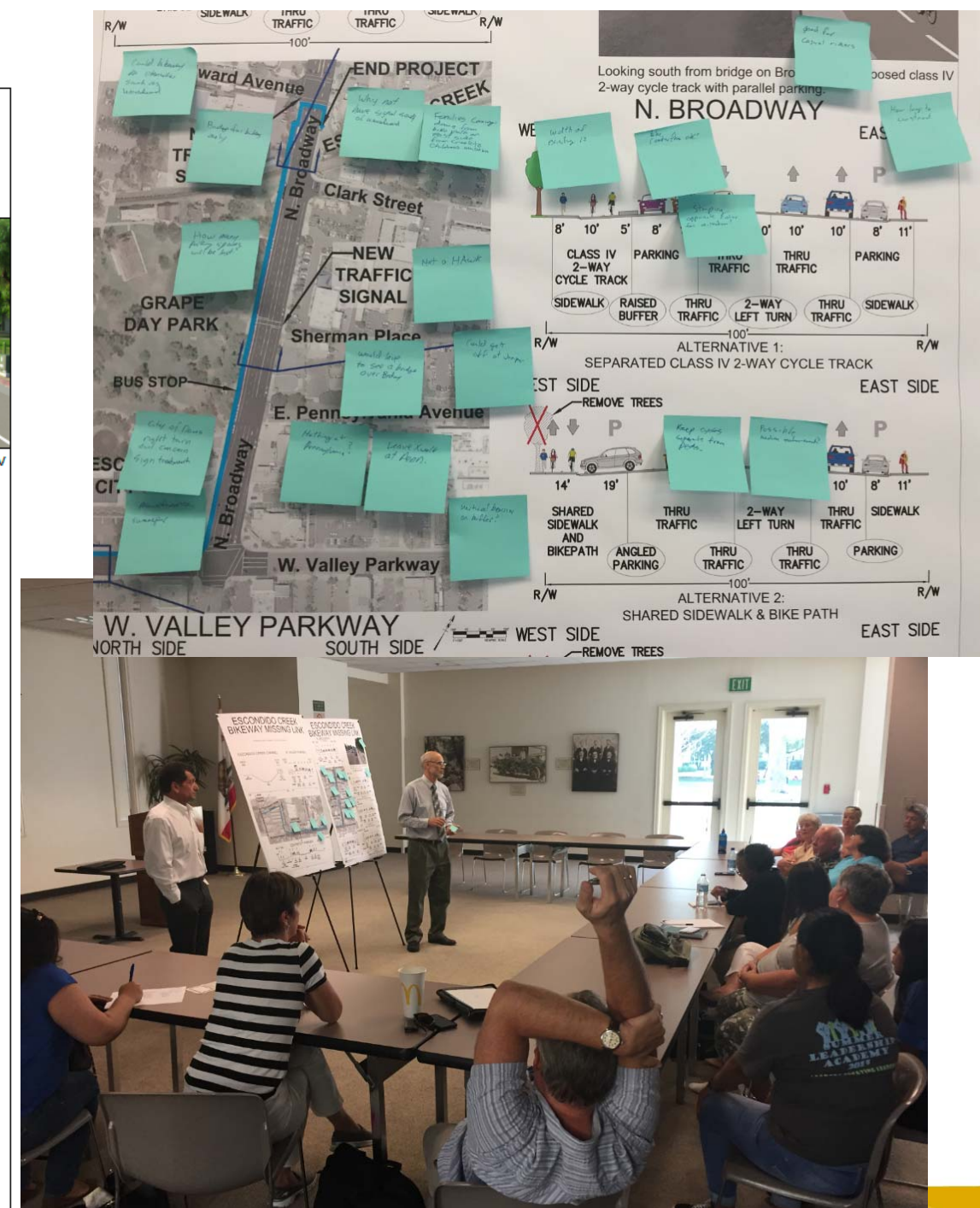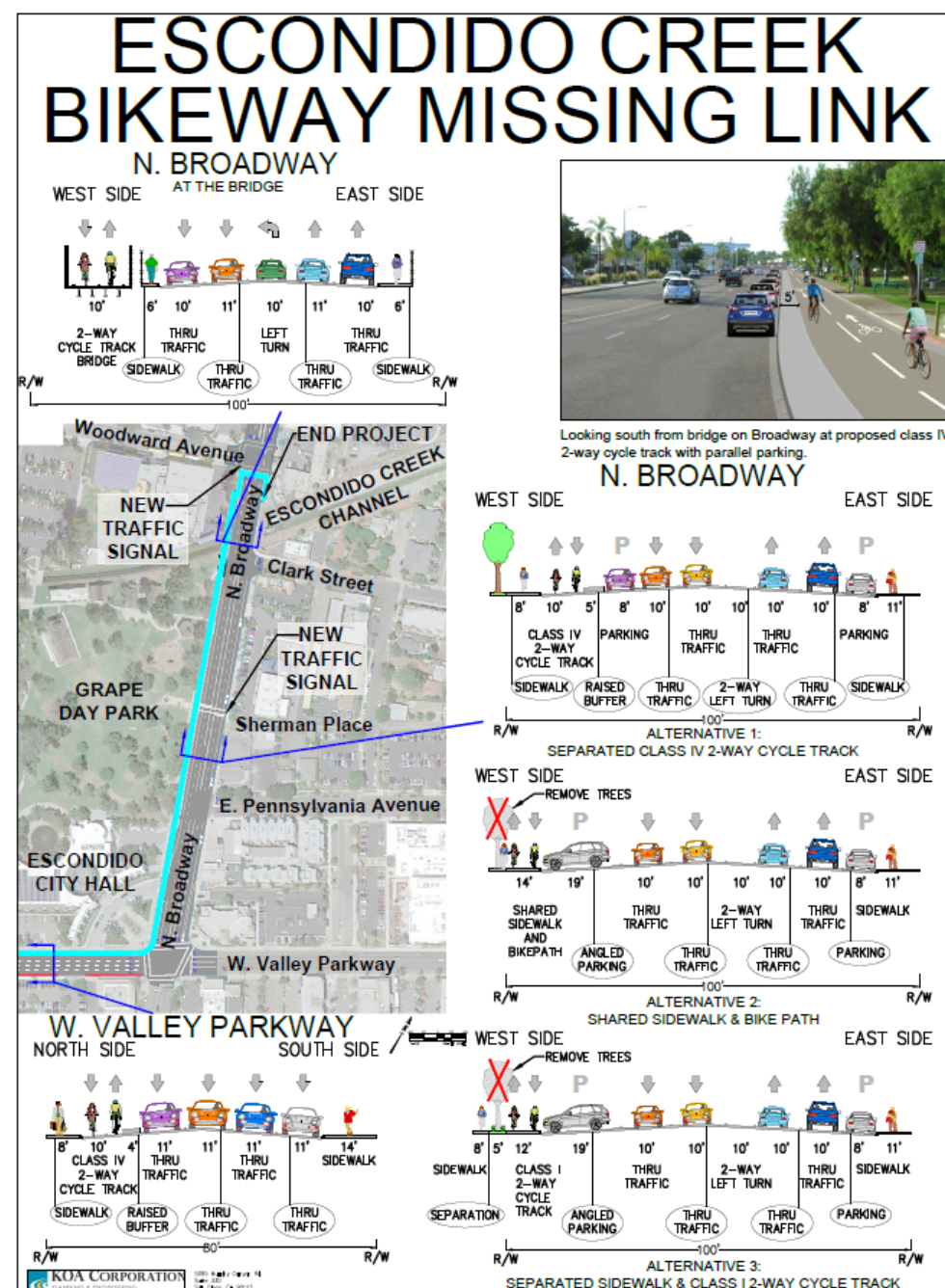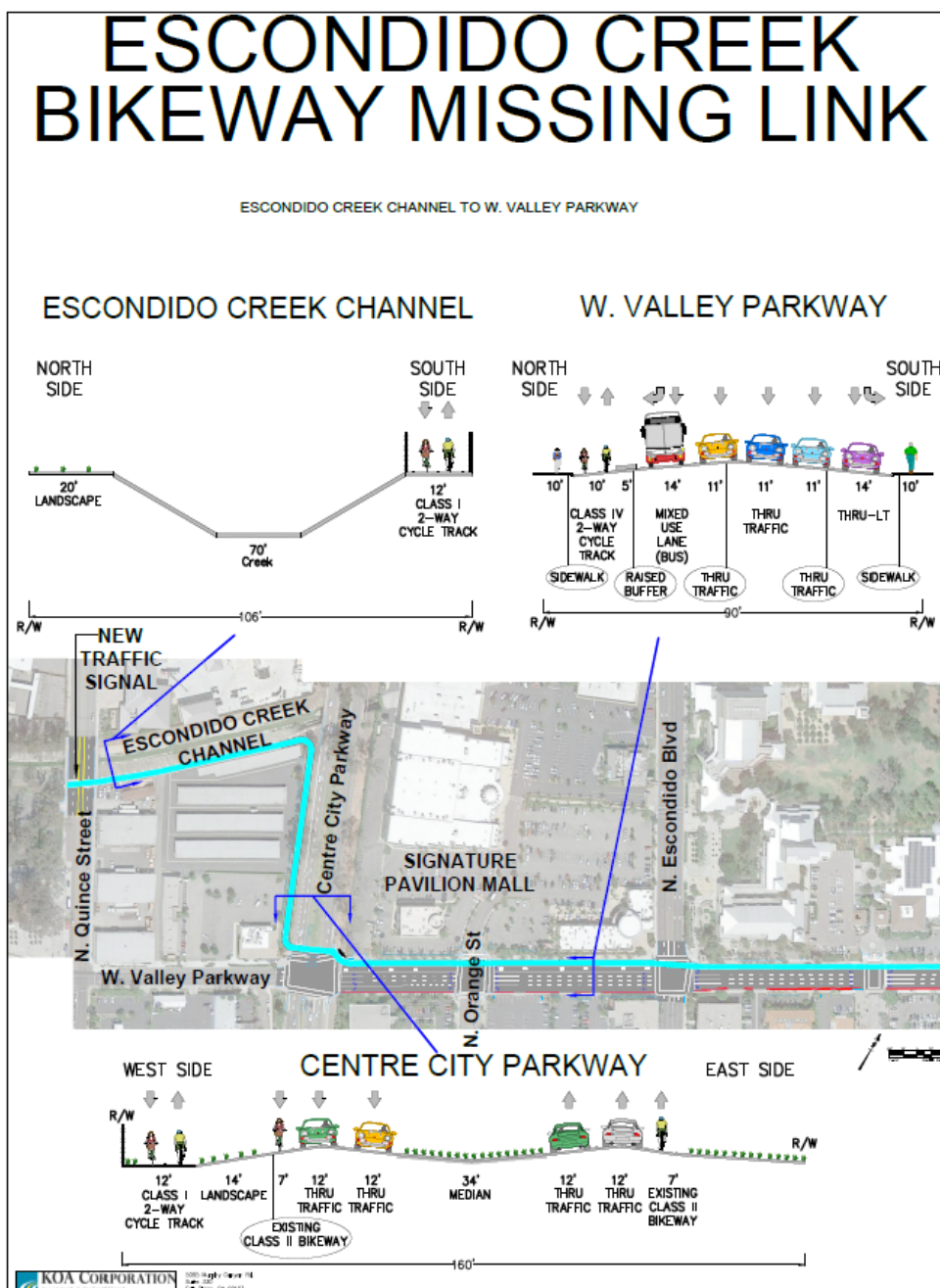
Project Features

Pavement Rehab. and Interim Striping

- Pavement Rehabilitation project repaved and installed interim striping with bike lane

Interim Striping

- Challenges:
  - Wider than usual bike lane (10')
  - Being used as right-turn lane at intersections
  - Being used parking lane on N. Broadway

- Installed temporary cones and temporary delineators as separation

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Temporary Delineators

- Installed for about a few months
- Observed drivers behavior
- Allowed to adjust ultimate green bollards locations

Separation: Flexible Bollards

- Cost effective compare to fixed barriers or raised medians

- Minimal impact to existing drainage systems

- K-72 Flexible Bollards

  - Anchor to the pavement

  - Flex and re-bound itself upon impact

  - Relatively low maintenance

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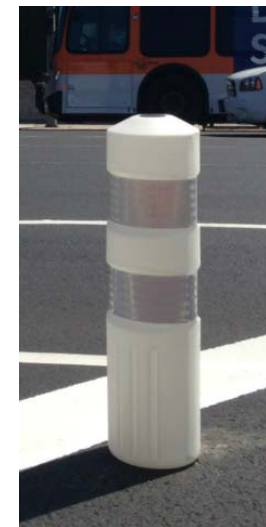
Flexible Bollards

Diagonal to Parallel Parking on N. Broadway

Before

Diagonal Parking

After

Parallel Parking

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Diagonal to Parallel Parking on N. Broadway

As Constructed

Photo-simulation

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New Pedestrians/Bike Bridge

New Pedestrian/Bike Bridge

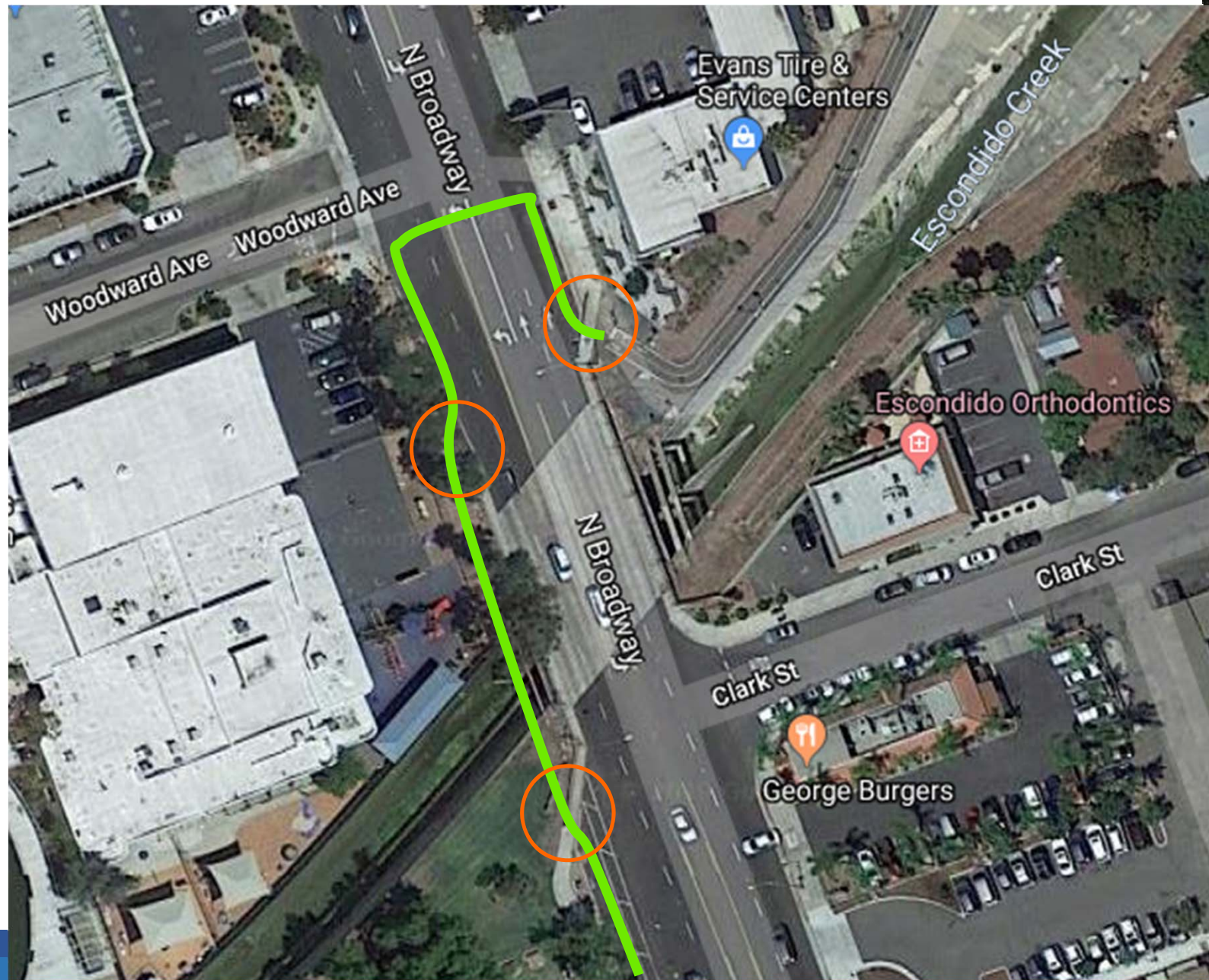# Yield to Bike and Pedestrian Signage

Traffic Signal Modification

- New signal heads for contra-flow bikeway

- No-Turn-On-Red on the side street conflicting with the bikeway

Pedestrian Crossings

Bus Stop Treatments

After

Bus Stop Improvements

- Improvements to accommodate visual-impaired community
  - Paint yellow curb where bikeway grade transition
  - Add pedestrian crossing signage
  - Install strips of truncated domes

Bike Crossing Activation at Signal

- Bike push button installed on the right side of bikeway (per CAMUTCD Section 4D.105(CA))

- Not ideal location – prone to be hit by vehicles

➢ Install bike loop and push button on the left side

Street Sweeping

- 10' wide bikeway
- 2'-5' wide buffer
- Street sweeper was able to negotiate the turn at N. Broadway and W. Valley Pkwy.

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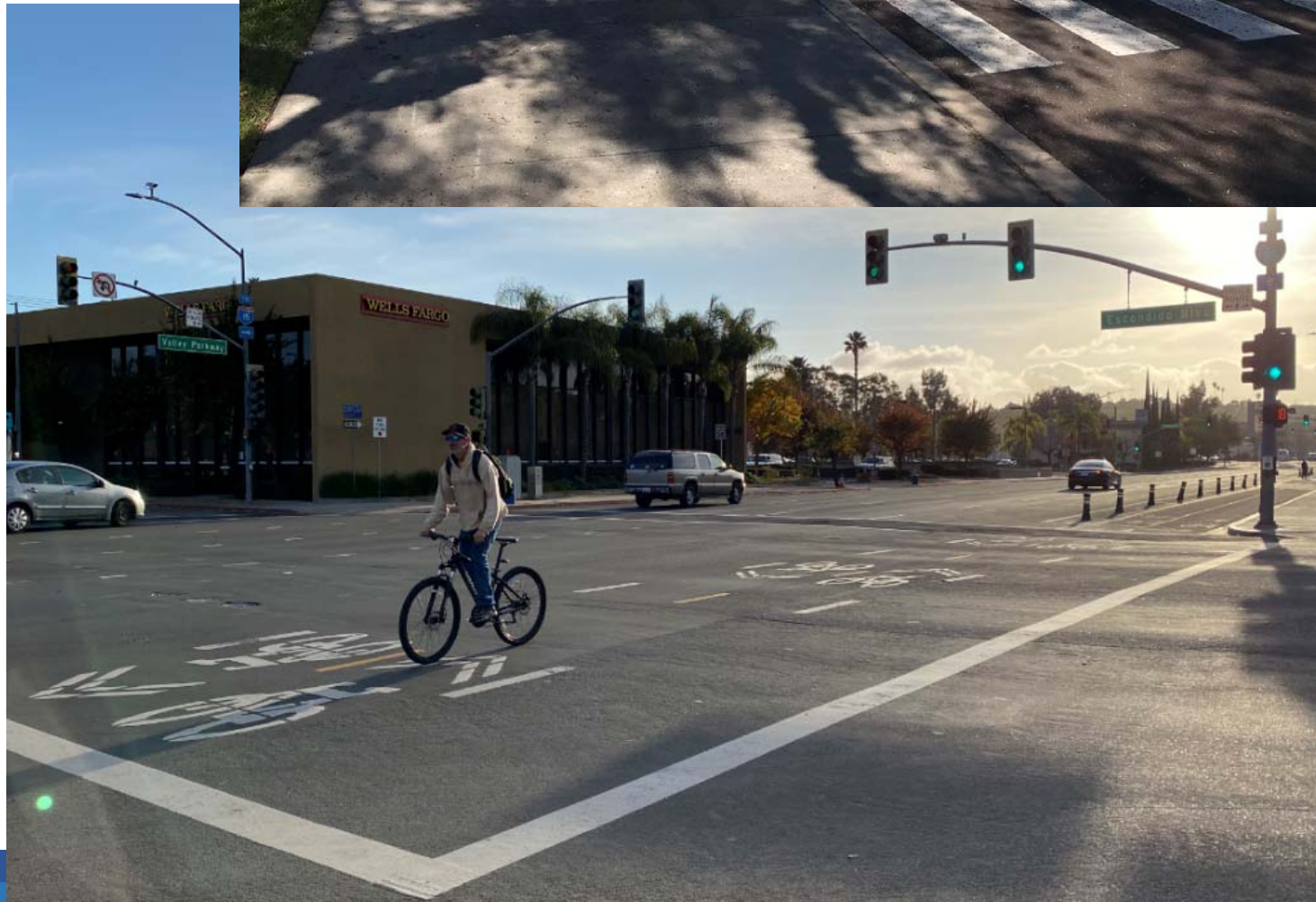
Any Questions before the Self-guided Walking Tour