



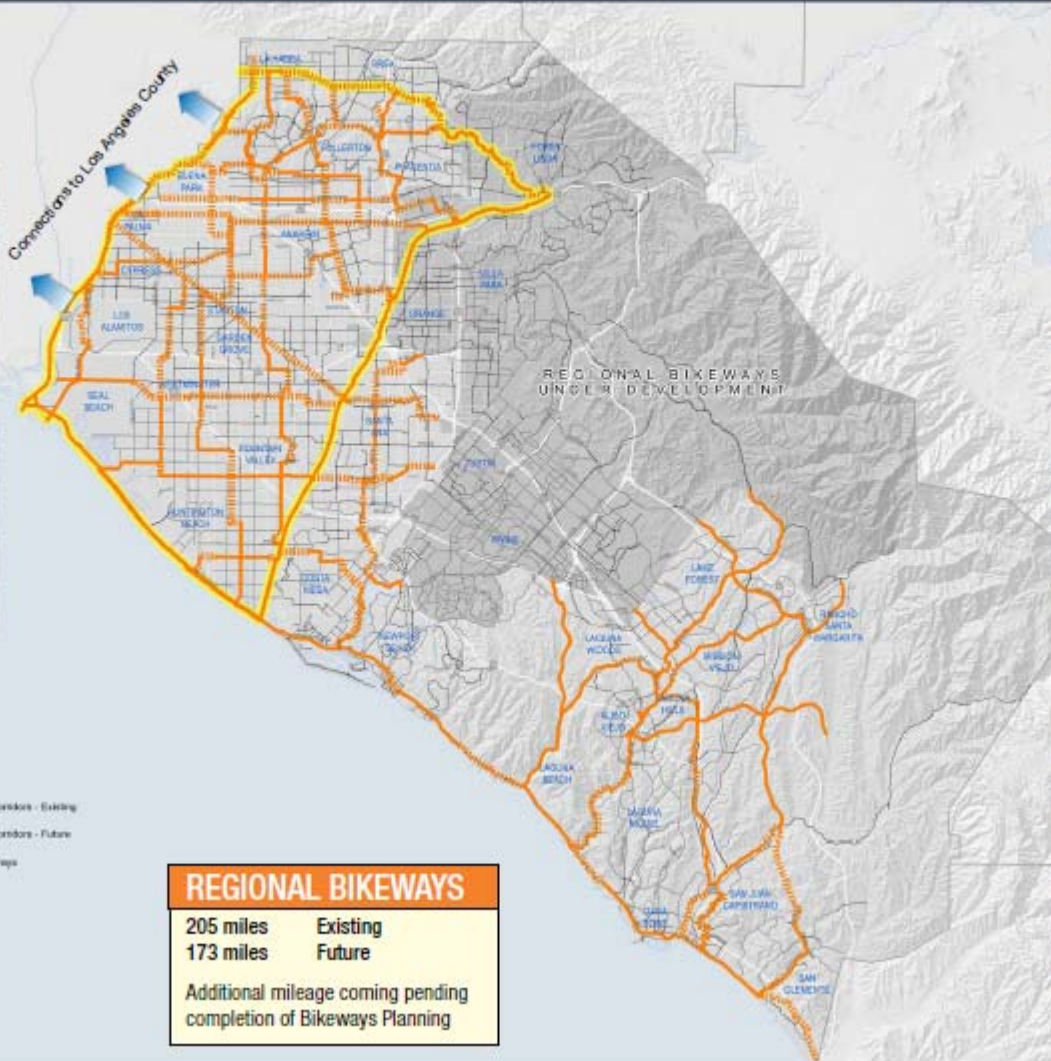
# OC FOOTHILLS

## BIKEWAYS COLLABORATIVE





# Active Transportation



Increasing Transportation Choices



Context Sensitive Design

- OC Loop
- Regional Bikeway Corridor - Existing
- Regional Bikeway Corridor - Future
- Local Planned Bikeways
- Existing Bikeways

REGIONAL BIKEWAYS	
205 miles	Existing
173 miles	Future
Additional mileage coming pending completion of Bikeways Planning	



Diverse User Needs



Future Rail Adjacent Trail Opportunity



OC Loop Recreation

**So...**  
**Why are better  
bikeways  
important?**

# Rationale for Better Bikeways

Walkable, bikable, transit-oriented communities are associated with healthier populations that have:



**LOWER RATES  
OF TRAFFIC  
INJURIES**



**IMPROVED  
MOBILITY FOR  
NON-DRIVERS<sup>1</sup>**



**LESS AIR  
POLLUTION**



**MORE  
PHYSICAL  
ACTIVITY**



**LOWER  
BODY  
WEIGHT**

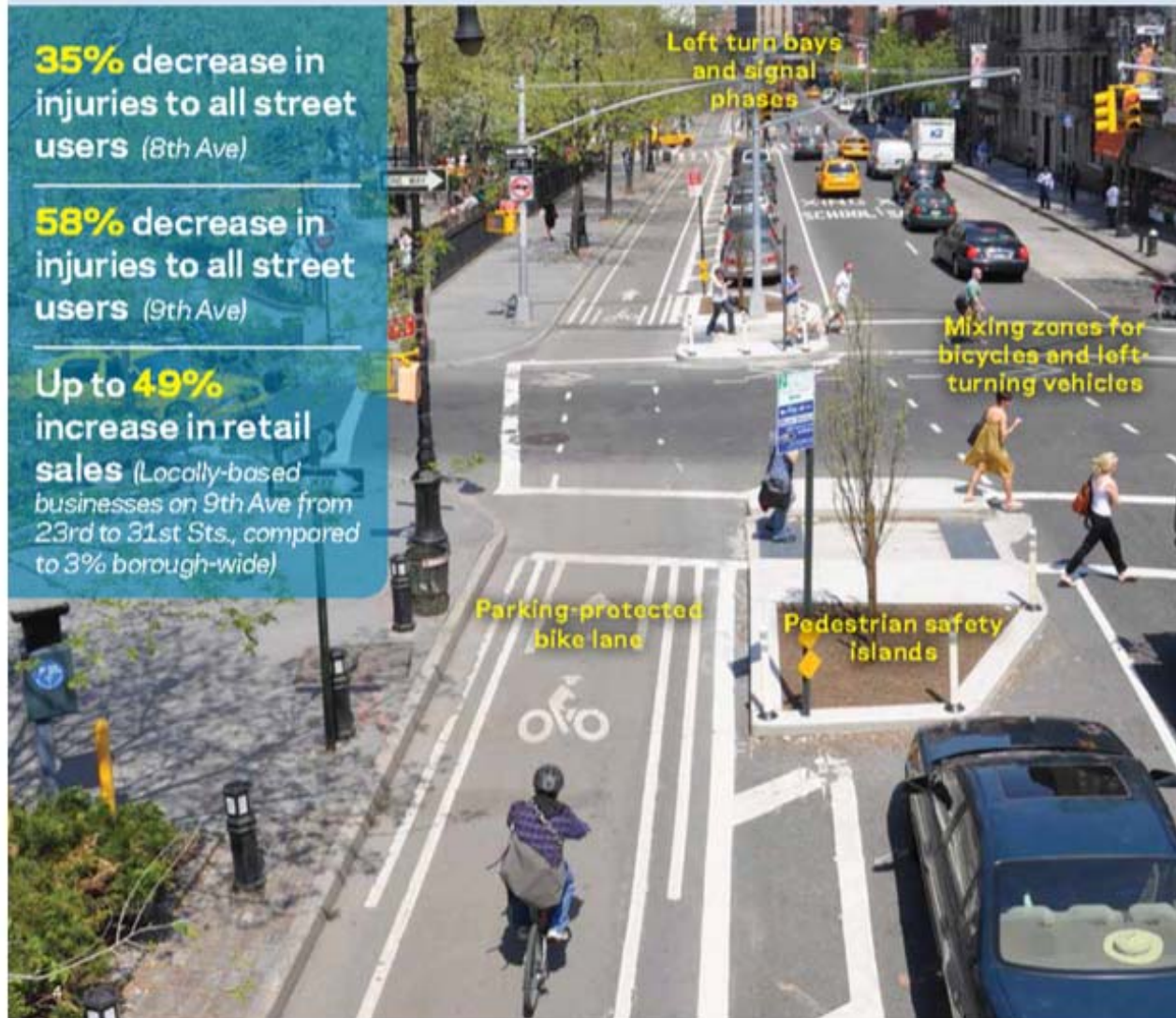
# Safety Benefits

First protected bicycle lane in the US:  
8th and 9th Avenues (Manhattan)

**35% decrease in injuries to all street users** (8th Ave)

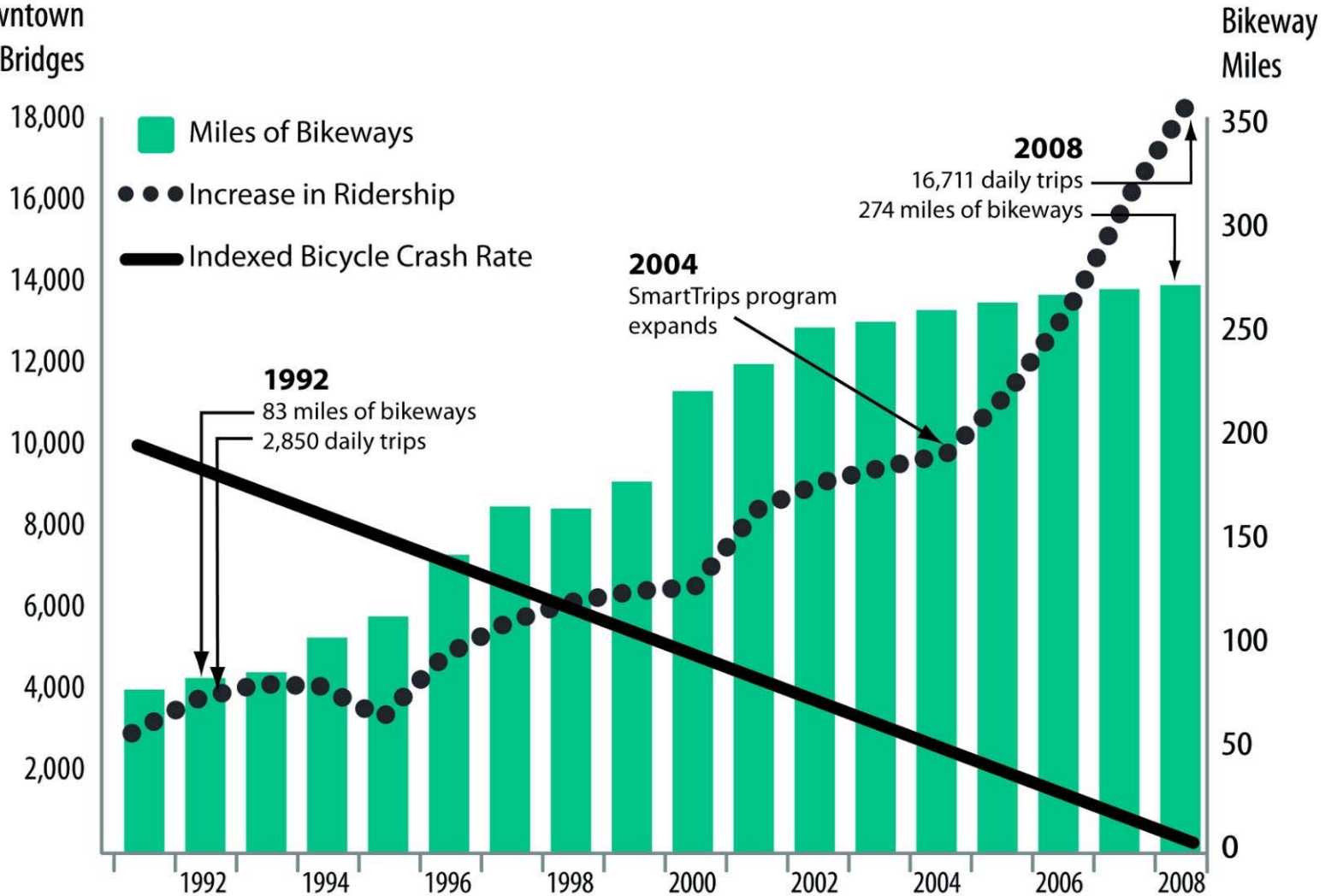
**58% decrease in injuries to all street users** (9th Ave)

**Up to 49% increase in retail sales** (Locally-based businesses on 9th Ave from 23rd to 31st Sts., compared to 3% borough-wide)



# Safety Benefits

Cyclists/Day  
on Four  
Downtown  
Bridges



# Mobility & Livability Benefits

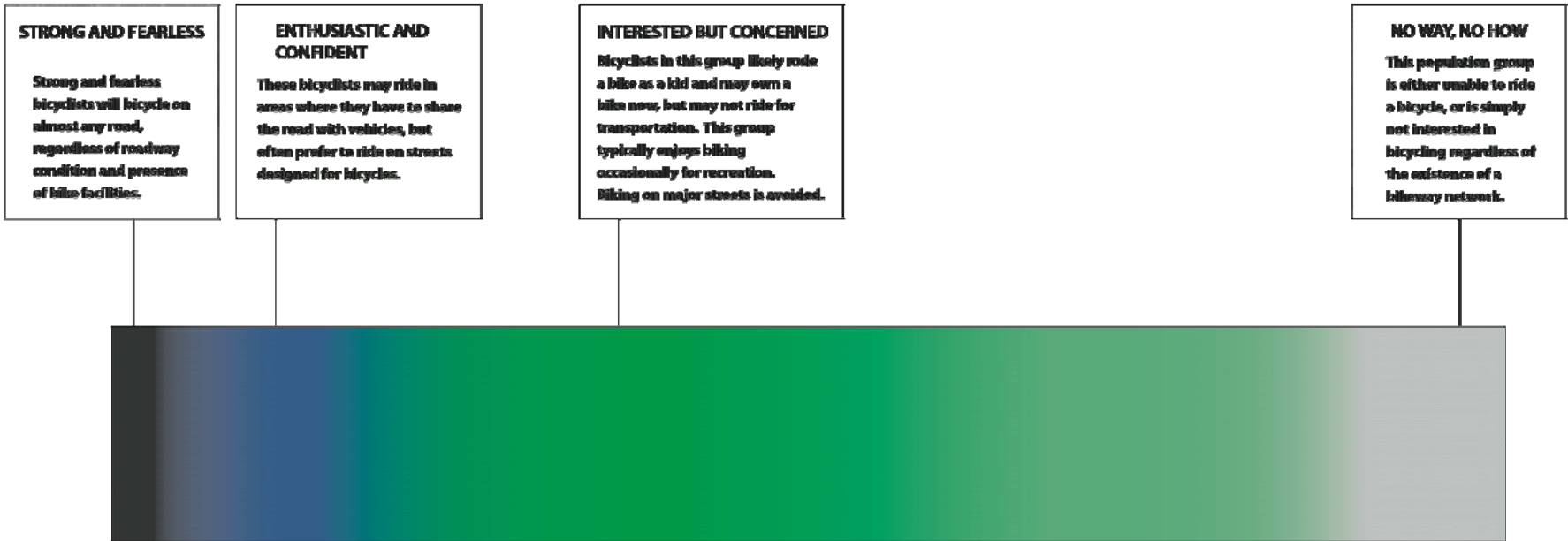


- Social interaction
- More 'eyes on the street'
- Reduce isolation for non-driving children & seniors



# Who are we planning for?

## TYPES OF CYCLISTS

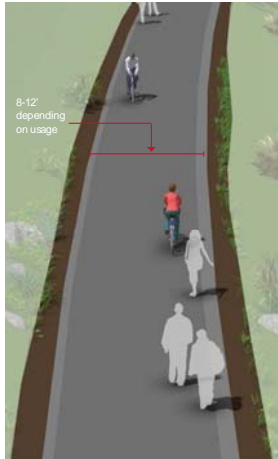


## WHERE DO YOU PLACE YOURSELF ON THE SPECTRUM?

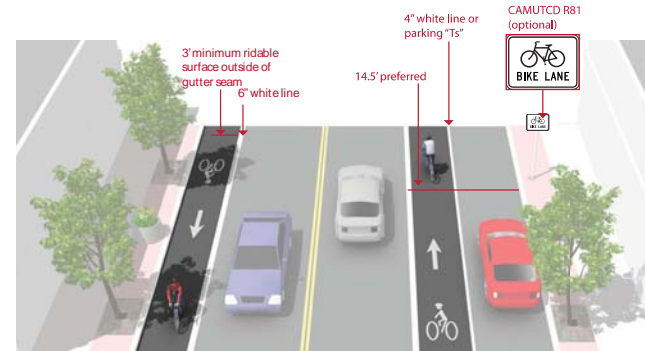
PLACE STICKERS HERE



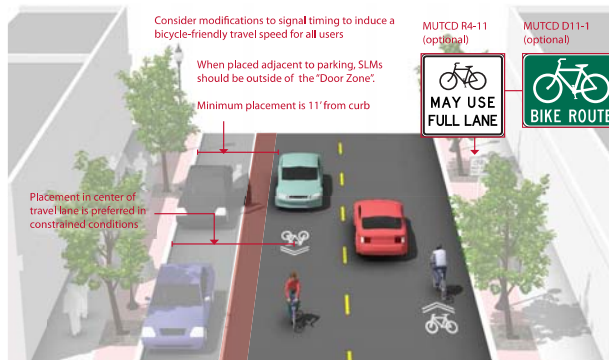
# BICYCLE FACILITY TYPES



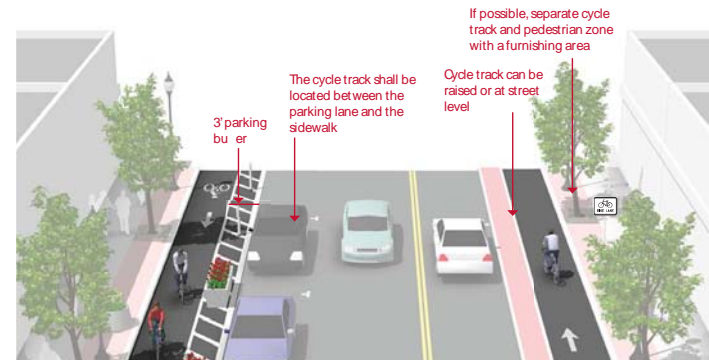
**CLASS I  
SHARED USE PATH**



**CLASS II  
BIKE LANE**



**CLASS III  
BICYCLE BOULEVARD**



**CLASS IV  
BUFFERED BIKE LANE**



# On-Street Marked Bikeway Continuum

least protected

most protected

Shared Lane Markings	Shoulder Bikeway	Bike Lane	Buffered Bike Lane	Cycle Track: One- or two-way, at-grade, protected with parking	Cycle Track: One- or two-way, raised with mountable curb	Cycle Track: One- or two-way, curb separated
Travel Lane   Side-Walk	Travel Lane   Shoulder	Travel Lane   Bike Lane   Side-Walk	Travel Lane   Bike Lane   Side-Walk	Parking Lane   Bike Lane   Side-Walk	Travel Lane   Bike Lane   Side-Walk	Travel Lane   Bike Lane   Side-Walk
<b>TYPICAL APPLICATION</b> Additional ROW*: None Traffic Volume: <= 3,000 ADT Traffic Speed: <= 30 mph Context: Urban/Suburban	<b>TYPICAL APPLICATION</b> Additional ROW*: 12' Traffic Volume: <= 10,000 ADT Traffic Speed: No Restriction Context: Rural	<b>TYPICAL APPLICATION</b> Additional ROW*: 8' - 14' Traffic Volume: >= 3,000 ADT Traffic Speed: >= 25mph Context: Urban, Suburban, Rural	<b>TYPICAL APPLICATION</b> Additional ROW*: 14' - 20' Traffic Volume: >= 10,000 ADT Traffic Speed: >= 25mph Context: Urban, Suburban, Rural	<b>TYPICAL APPLICATION</b> Additional ROW*: 14' - 20' Traffic Volume: >= 10,000 ADT Traffic Speed: >= 40mph Context: Urban/Suburban	<b>TYPICAL APPLICATION</b> Additional ROW*: 13' - 17' Traffic Volume: >= 10,000 ADT Traffic Speed: >= 40mph Context: Urban/Suburban	<b>TYPICAL APPLICATION</b> Additional ROW*: 12' - 14' Traffic Volume: >= 10,000 ADT Traffic Speed: >= 40mph Context: Urban/Suburban

# Sidewalks provide comfort level to many users, but...



# **'State of the Art'**

## **Bike Facilities**

# Class I

## Transportation Corridors

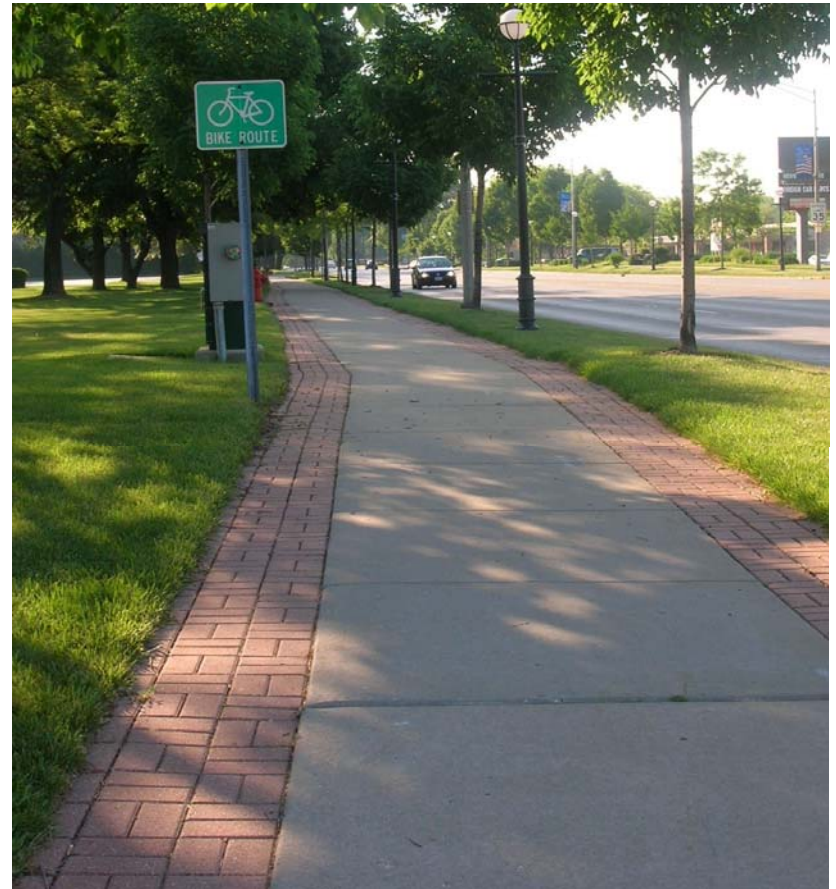


## Utility Rights-of-Way



# Class I

## Sidepaths



# Class II

## Bike Lanes



## Green Bike Lanes



# Class II

## Buffered Bike Lanes



## Buffered Green Bike Lanes





# Class II



**Green Paint at  
Conflict Points**



# Class III

## Green Enhanced Sharrows



## Green Sharrow Lanes



# Class III

## Bike Boulevards



## Bike Friendly Streets



# Class IV

## Protected Bike Lanes



## Elevated Bike Lanes



# Other On-Street Treatments

## Bike Boxes



## Bike Signal Detection



# Bike Parking

## On-Street Corrals



## Transit Station Bike Lockers



# **The OC Foothills Bike Collaborative Process**

# Target Audiences



Parents

Schools

Bicycle commuters

Bicycle shops

Bicycle advocates

Walking groups

Multicultural communities

Disadvantaged communities



# Public Participation



## ROUNDTABLE DISCUSSION

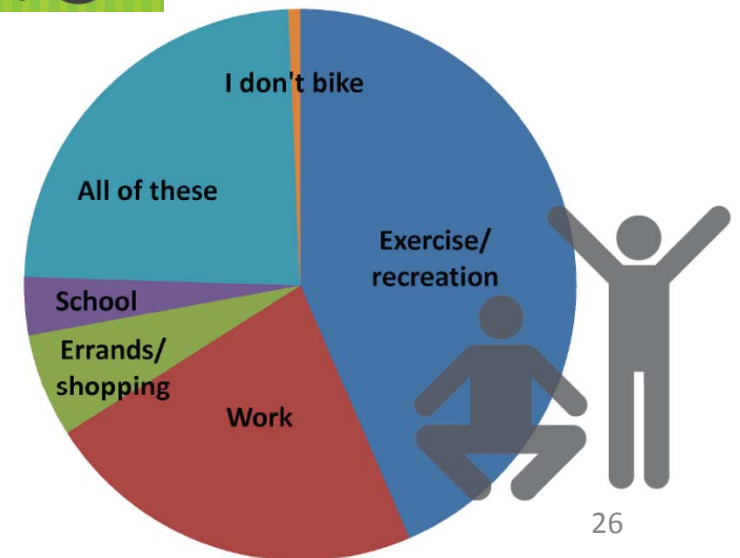
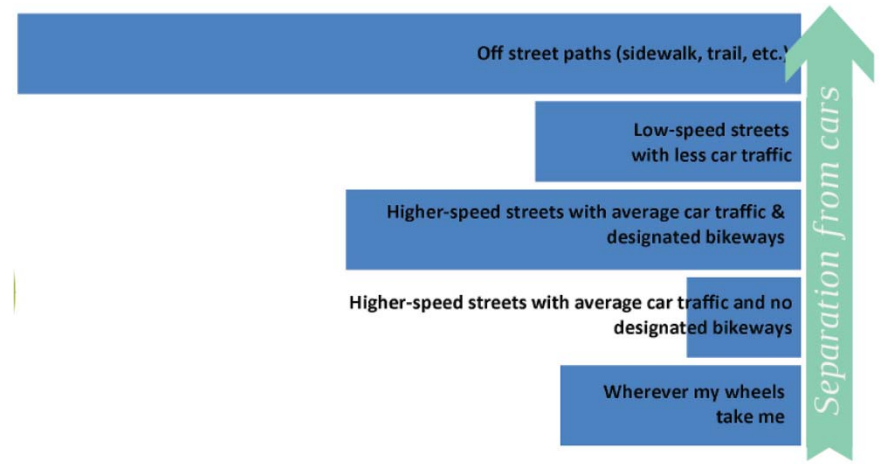
IMAGINE YOUR COMMUNITY BY BIKE

June 4, 5:30-7:30pm  
Irvine City Hall  
1 Civic Center Plaza, Irvine, CA 92606

Please join us for a community roundtable discussion about efforts to improve regional connectivity for bicycling in the foothills areas of Orange County\*. Provide feedback on the proposed regional bikeways network and how projects should be prioritized. To RSVP and keep up-to-date on this planning effort, please visit [www.octa.net/bikeways](http://www.octa.net/bikeways).

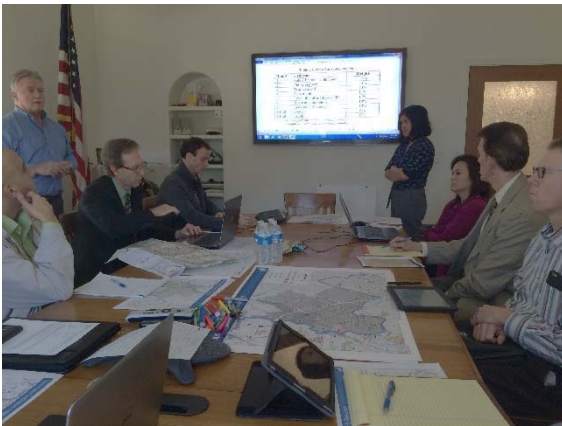
**\*STUDY AREA INCLUDES:**  
ANAHEIM HILLS,  
IRVINE, ORANGE,  
TUSTIN, VILLA PARK,  
AND YORBA LINDA.



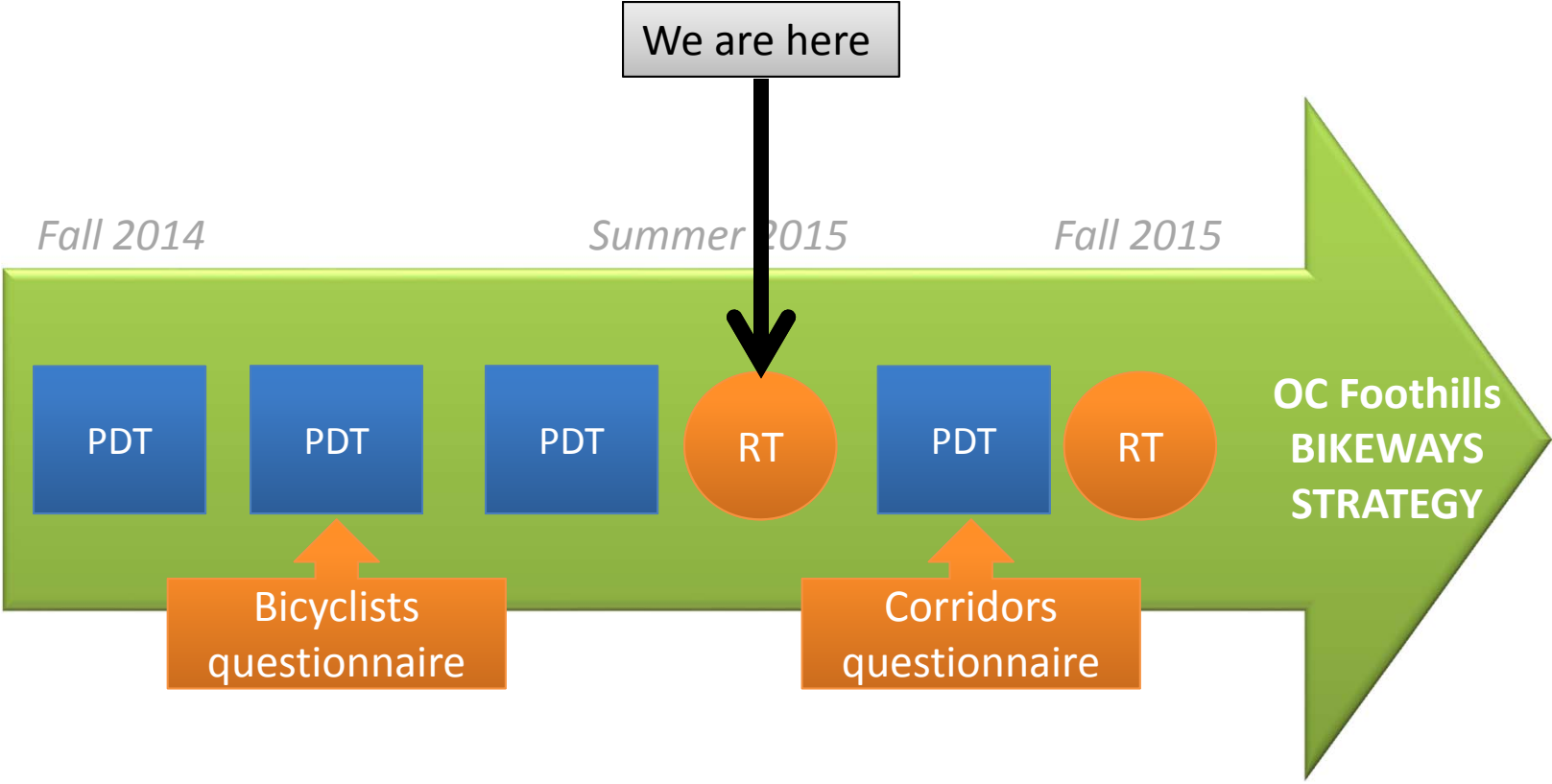


# Project Development Team

- City / Agency Planners and Engineers
  - Technical perspective
  - Potential project sponsors



# Schedule

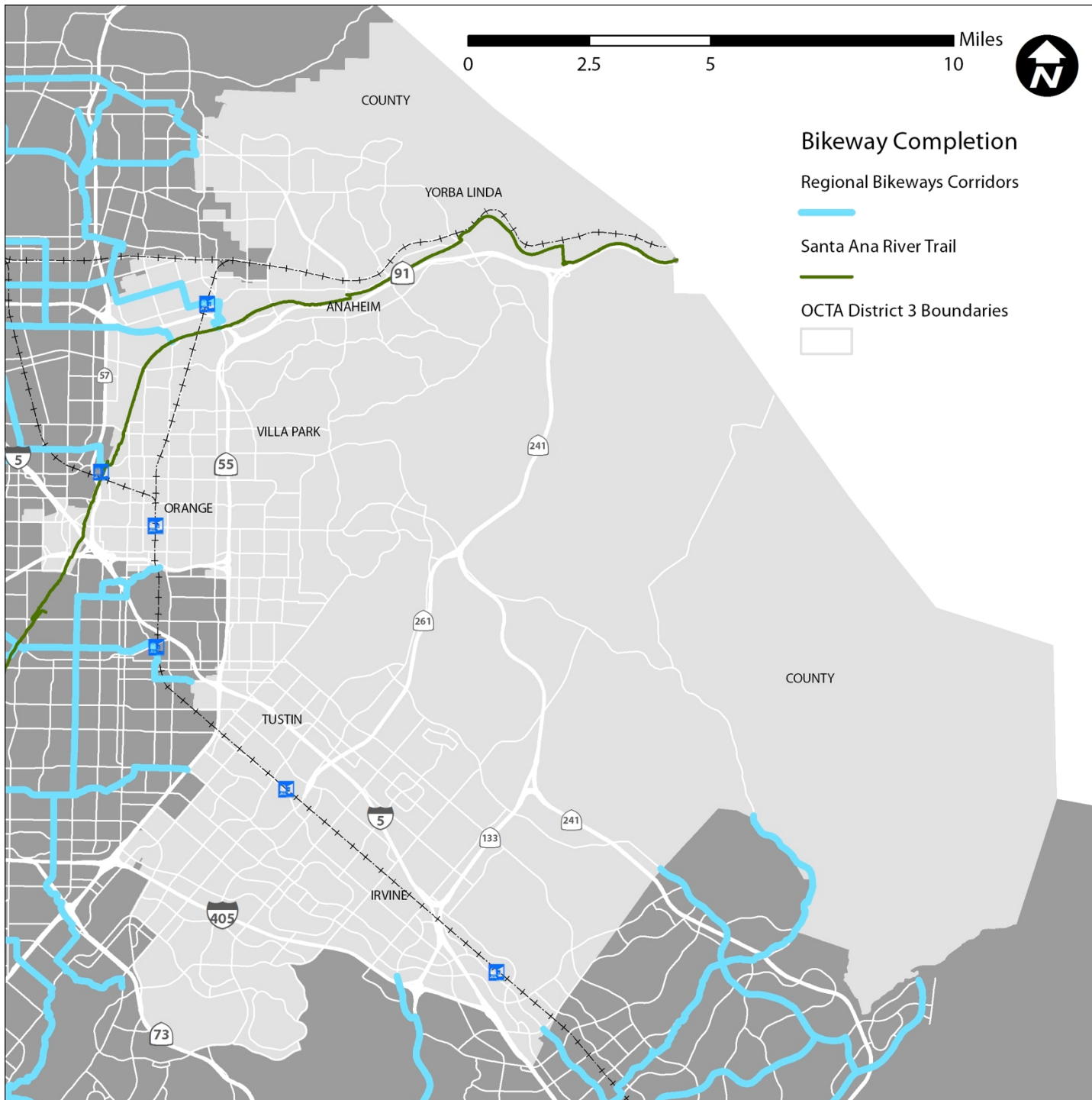


PDT: project development team  
RT: public roundtable discussion

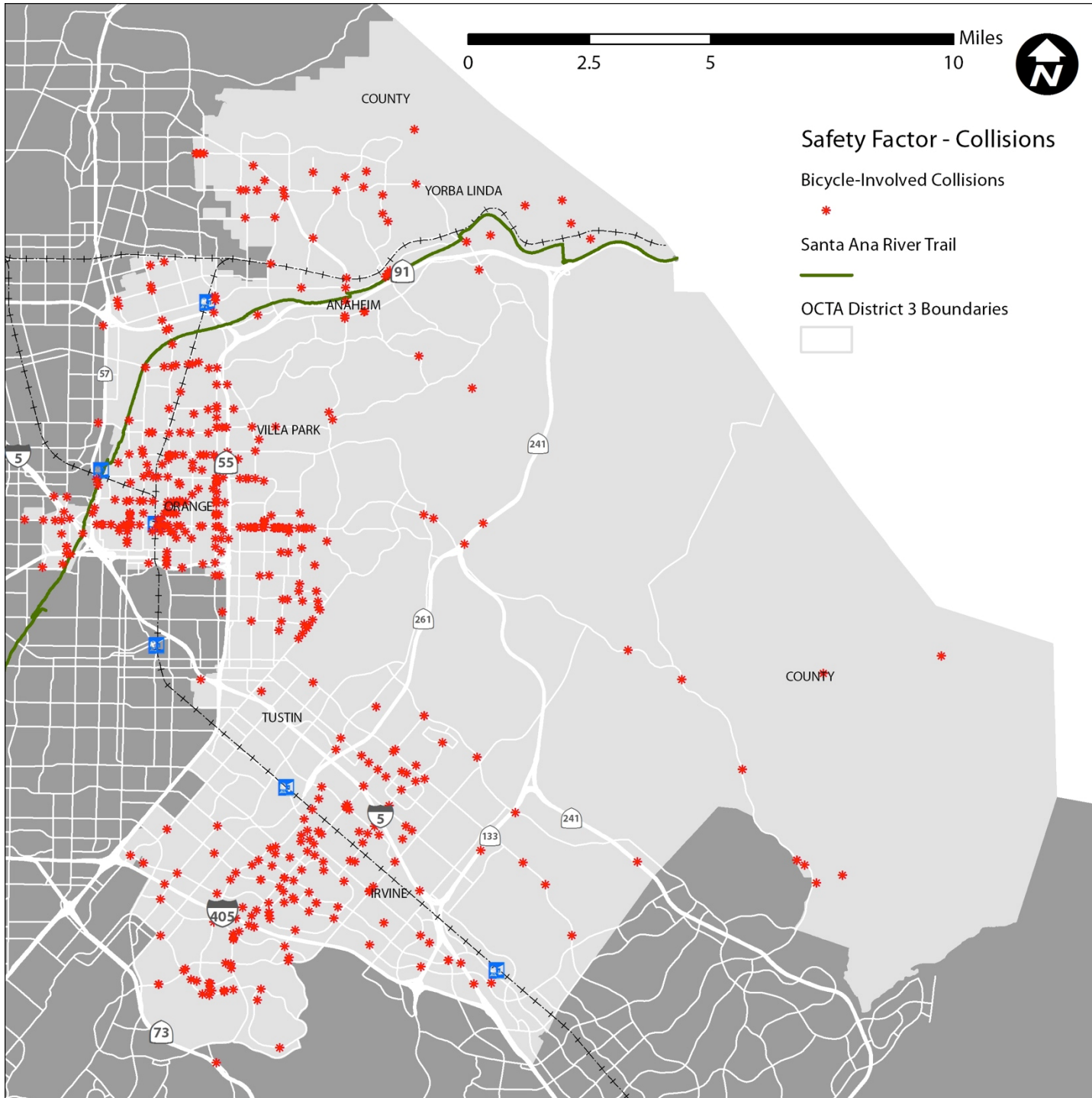
# **Developing the Draft Corridors**

# Evaluation Criteria

- Safety Needs
  - (Collisions & Traffic Stress)
- Public support
- Trip Demand
- Ease of Implementation
- Bikeway Completion
- Cost per Benefits
- Avoids Steep Hills
- Socially Disadvantaged Areas

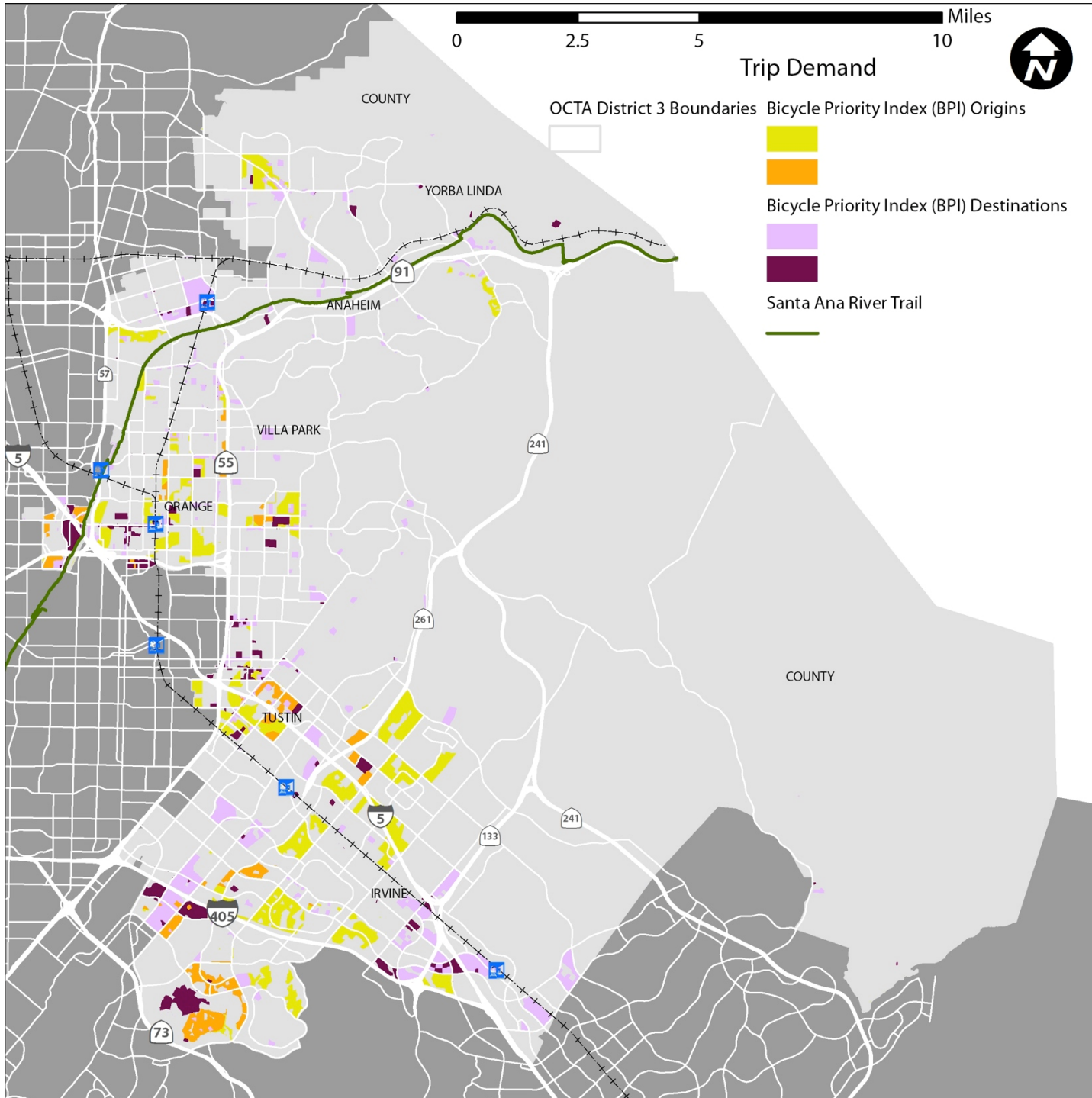


# Bikeway Completion

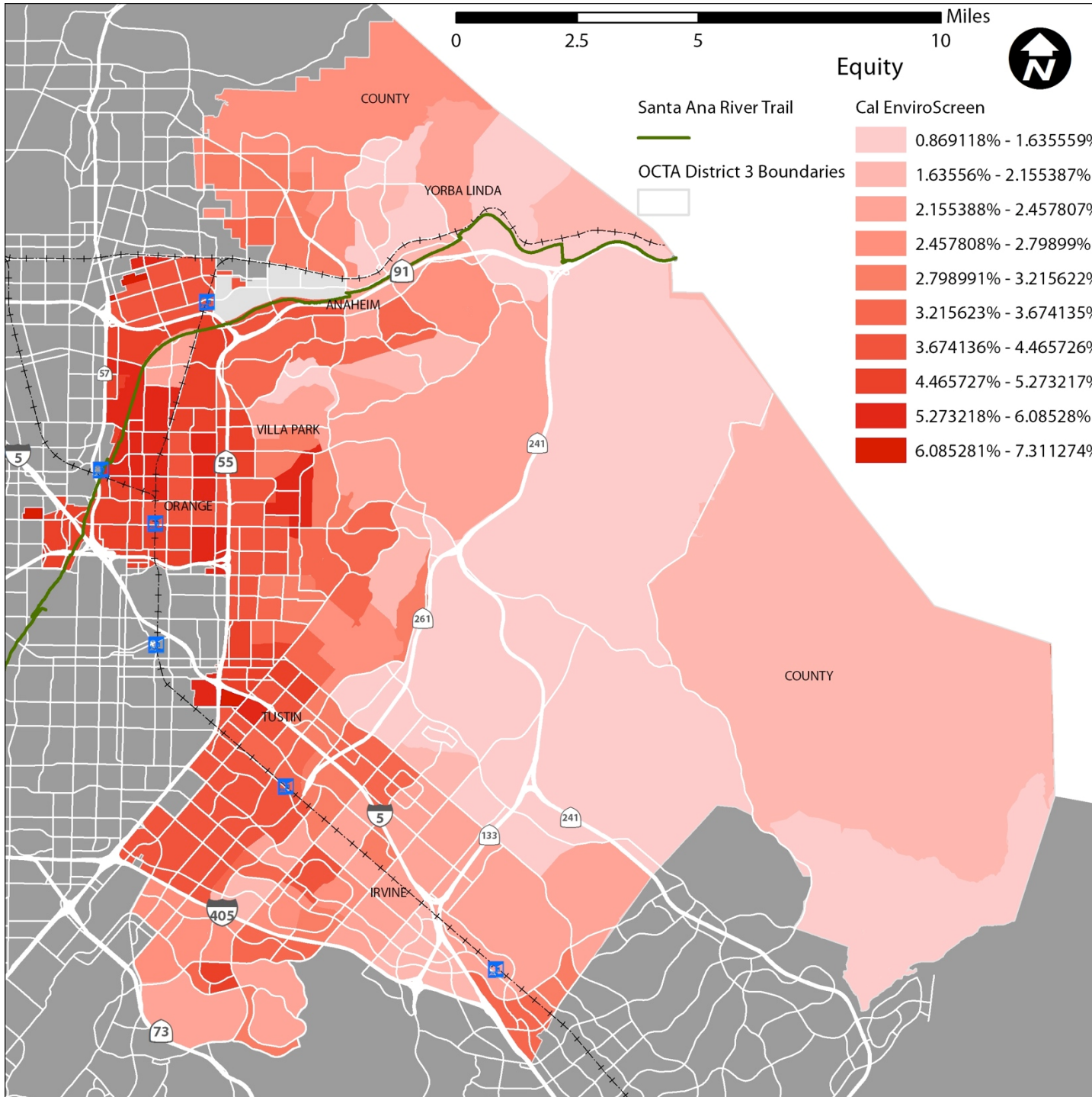


# Bicycle-Involved Collisions





# Trip Demand



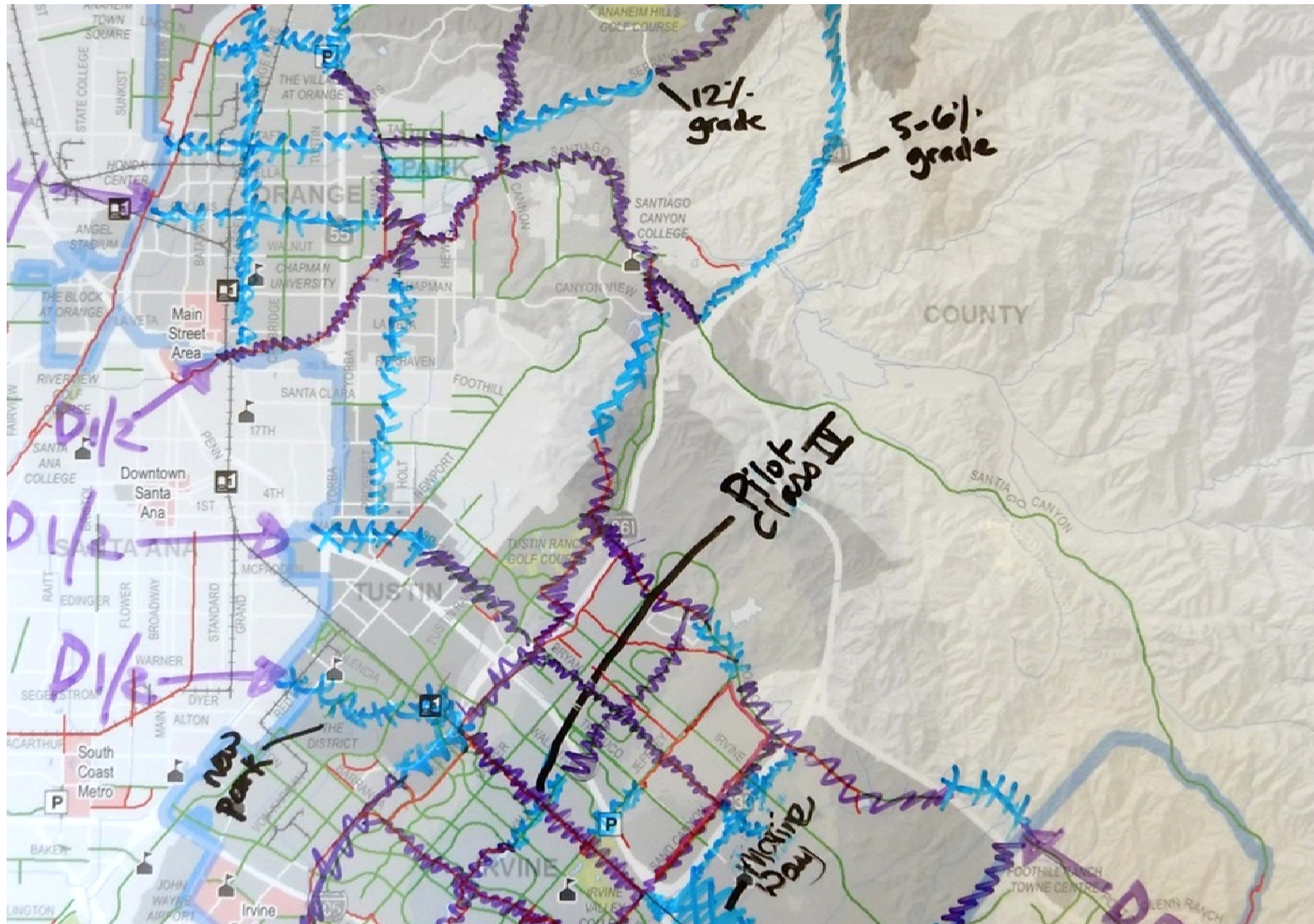
## Disadvantaged Areas

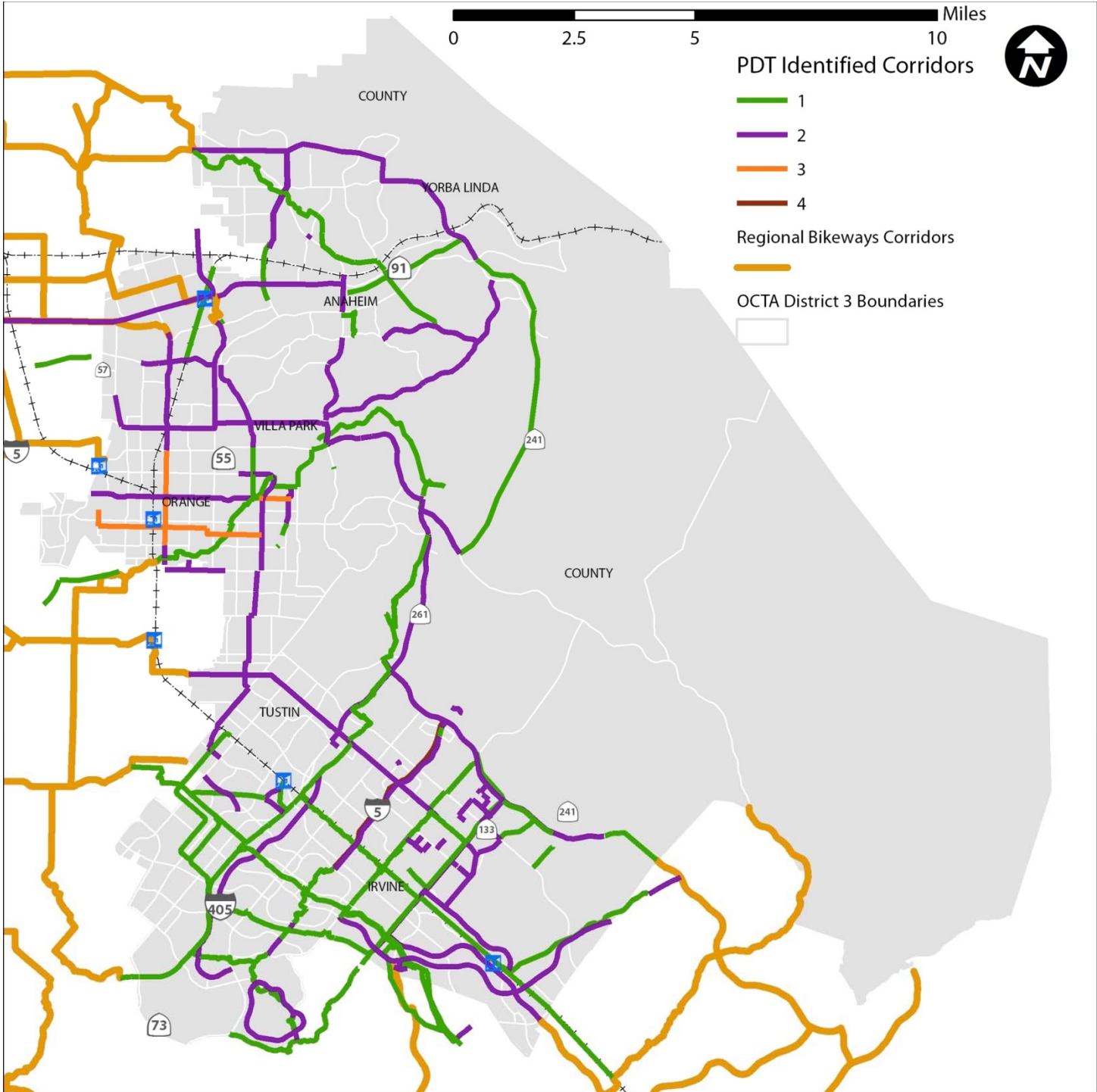
# Why Weight?

# Draft Evaluation Criteria

Rank	Criterion	Weight
1	Safety Needs (Collisions & Traffic Stress)	29%
2	Public support	14%
3	Trip Demand	13%
4	Ease of Implementation	11%
5	Bikeway Completion	10%
6	Cost per Benefits	10%
7 (tie)	Avoids Steep Hills	6%
7 (tie)	Disadvantaged Areas	6%

# Working Maps



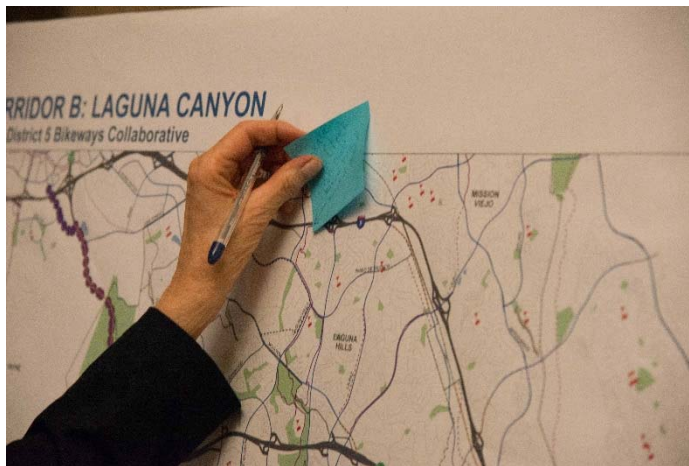




# Breakout Discussion



- Are there other key destinations that are popular in the community?
- Are there intersections or barriers that are difficult to cross?
- What type of facility would you like to see along each corridor?





# Next Steps

- Finalize regional bike corridors and criteria
- Review draft ranking of corridors at another Roundtable Discussion in Fall 2015
- Support regional bikeway implementation!



[www.octa.net/bikeways](http://www.octa.net/bikeways)