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Glendale
Bicycle Transportation Plan (BTP)

City Council

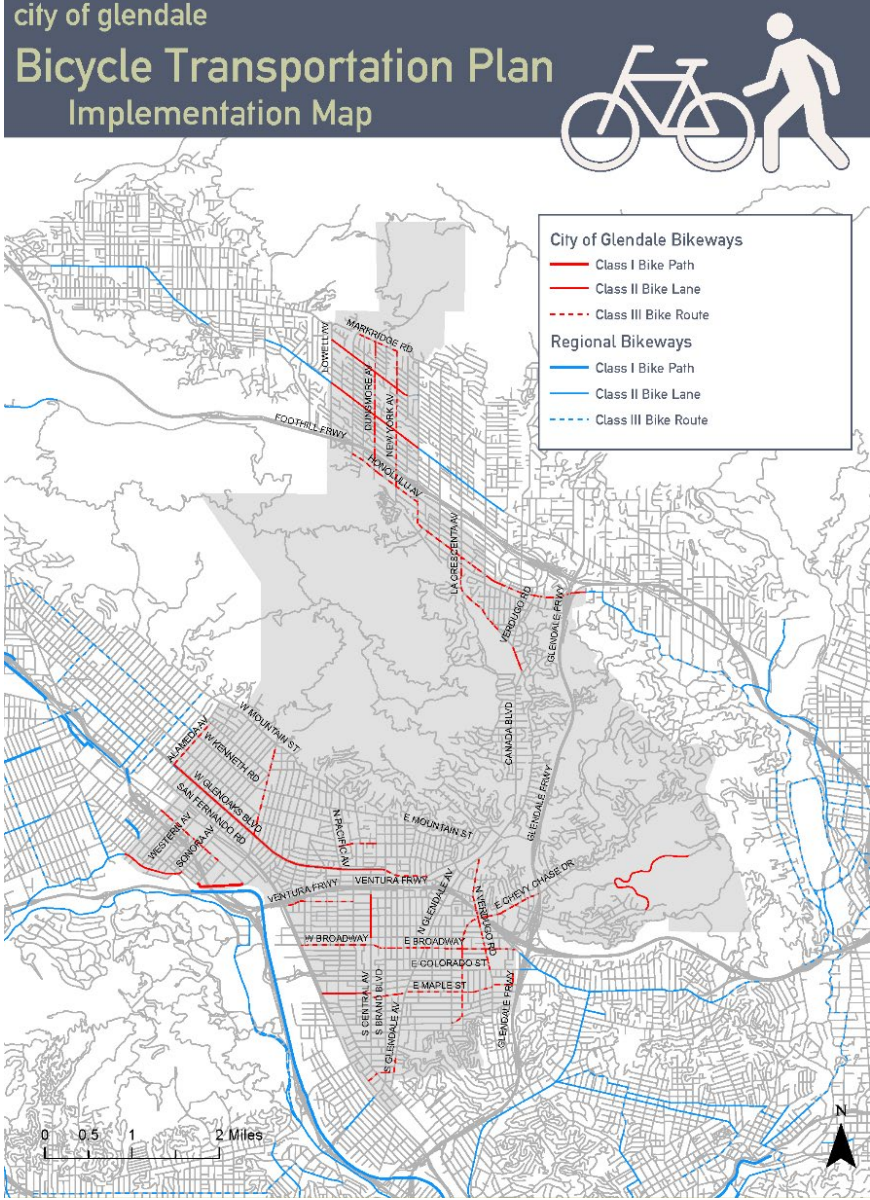
9 January 2024

Collaboratively create a 20-year vision for the planning, development, design, and maintenance of a safe, convenient, and inviting bike network for all of Glendale.

PROJECT CONTEXT

Project Context

- 2012 Bicycle Transportation Plan
- Freeways and heavy commuter traffic contribute to uncomfortable and unsafe biking conditions, especially downtown
  - Network mostly sharrows
  - Constrained by mountains
- Verdugo Wash and Metro BRT projects will form spine of upgraded network
- Diverse communities
- Climate change



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Context

- Great weather
- Dense
- Street grid
- Mixed-use
- Short distances

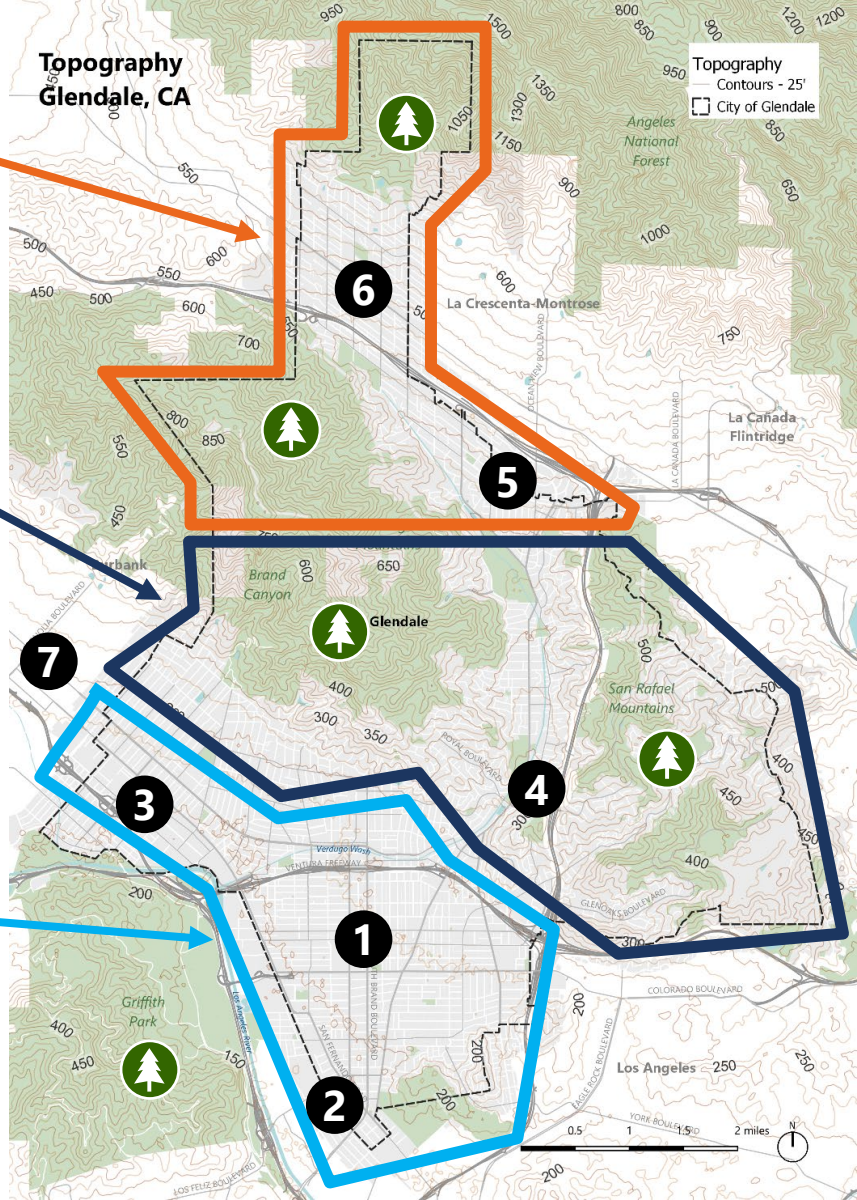
- Residential with popular commercial streets
- Lower density
- Hilly

- Mostly residential
- GCC
- Low density
- Very Hilly

- Downtown
- Dense
- Mixed-use
- Transit
- Major employers and destinations
- Flat
- Connects to LARP

Key Destinations

1. City Center
2. Glendale Transportation Center
3. West Glendale
4. Glendale Community College
5. Honolulu Ave
6. Foothill Blvd
7. Burbank
- Parks + Open Space



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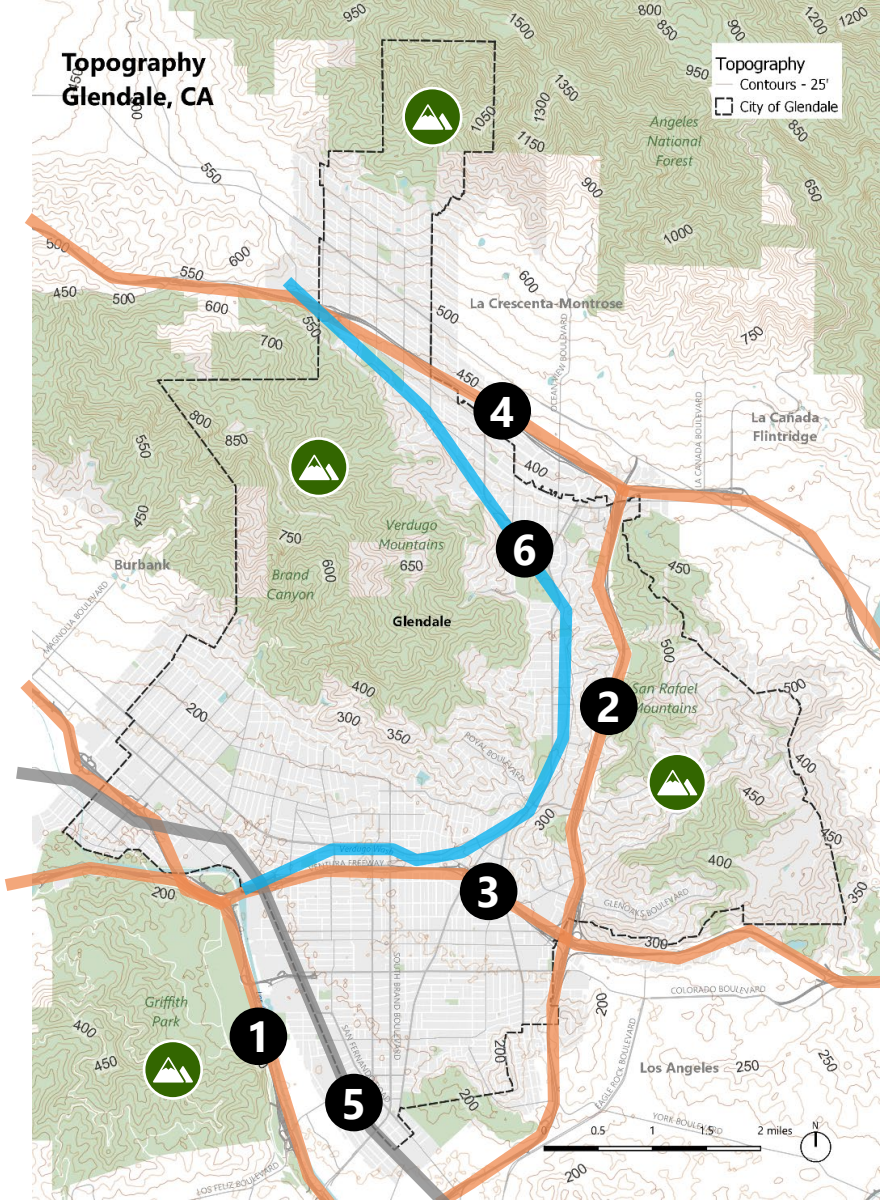
Barriers

1. I-5 Golden State Fwy
2. 2 Glendale Fwy
3. 134 Ventura Fwy
4. I-210 Foothill Fwy
5. Railroad
6. Verdugo Wash (future connector)
7. Mountains



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Existing Network

- Relies heavily on sharrows (Class III)
- Disconnected
- Low coverage
- Doesn't feel safe or enjoyable to use

Facility Type	Length (mi)
Bike Lanes (Class II)	9.7
Climbing Lane (Class II)	-
Bike Blvd (Class III)	-
Sharrows (Class III)	40.1
Cycle Track (Class IV)	<1

Note: lengths are centerline and measure one direction only

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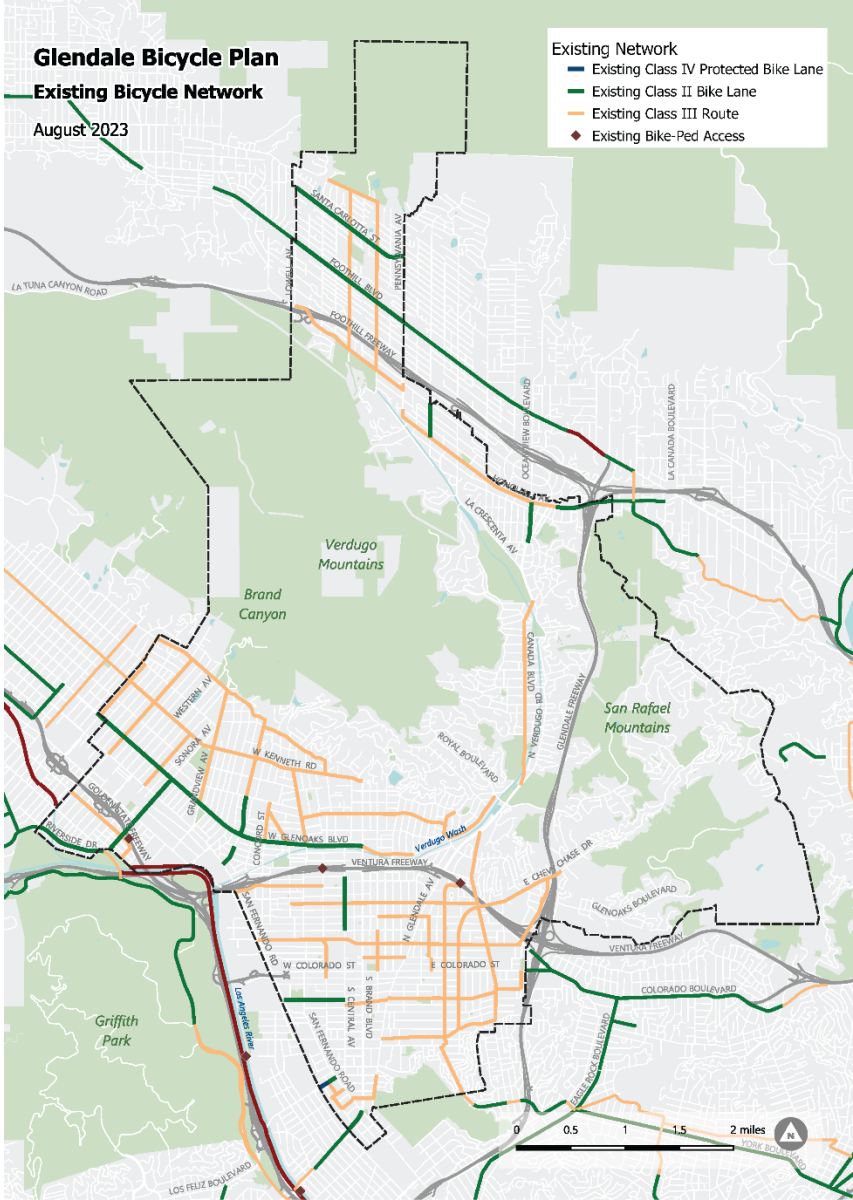
Glendale is about 10 miles long

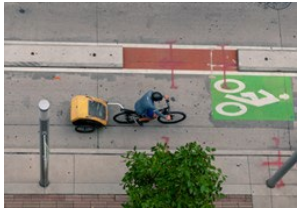


Bike Lane Types

Class I Multi-Use Path

An off-street facility with exclusive space for bicyclists and pedestrians, with minimal crossings by vehicle traffic.

Class IV Protected Bike Lane



Bike lanes that are physically separated from vehicle traffic and parking lanes using vertical and horizontal features, such as bollards, planters, and parked vehicles.

Class II Bike Lane

A conventional striped bike lane denoted by pavement markings.

Class II Climbing Lane

A striped bike lane in the uphill direction that provides separation between bicyclists and vehicles for bicyclists ascending steep hills.

Class III Bike Boulevard

Low-stress, marked bikeways located on low-volume, low-speed local streets that operate as shared streets. These require traffic calming features such as neighborhood traffic circles, chicanes, and traffic diverters to maintain low vehicle speeds and volumes.

Class III Bike Routes

Signed bike routes on low-stress streets that use a shared lane, designated through shared lane markings and signage.

Bike Boulevard

Bicycle boulevards are streets with **low motorized traffic volumes and speeds**, designated and designed to give **bicycle travel priority**.

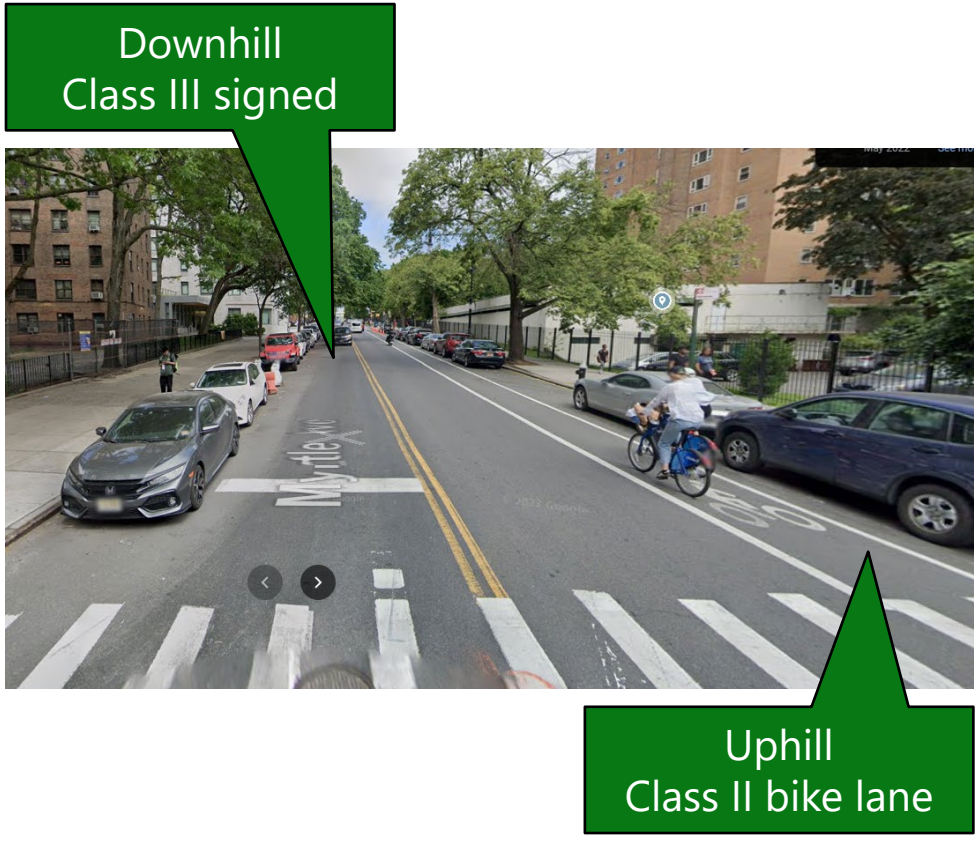
Bicycle boulevards discourage through trips using:

- Signs
- Pavement markings
- Speed and volume management

And create safe, convenient bicycle crossings of busy arterial streets.

Climbing Lanes

- Provides dedicated space for bicyclists going uphill while reducing the amount of space allocated to dedicated biking facilities
  - Uphill: Class II bike lane
  - Downhill: Class III signed route/sharrows



SAFETY ANALYSIS & EXISTING CONDITIONS

Bicycle Crash Analysis

Purpose: Identify hotspots and areas of concern to inform bike facility recommendations and prioritization

- 10-year time period to align with Pedestrian Study methodology. 2012-2021.
- Includes both injury/fatality and property damage only (PDO) crashes
  - 50 PDO (11%)
  - 375 injury (84%)
  - 18 severe (4%)
  - 2 fatalities (0.4%)

The corridors with the greatest density of crashes (when weighted for severity) create a list of crash density corridors, also referred to as the *High Injury Network* (HIN). AB43 allows localities to reduce speed limits on designated *Safety Corridors*, so the streets in the HIN are also referred to as Safety Corridors.

Source: UC Berkeley's Transportation Injury Mapping System (TIMS), California's Statewide Integrated Traffic Records System (SWITRS)

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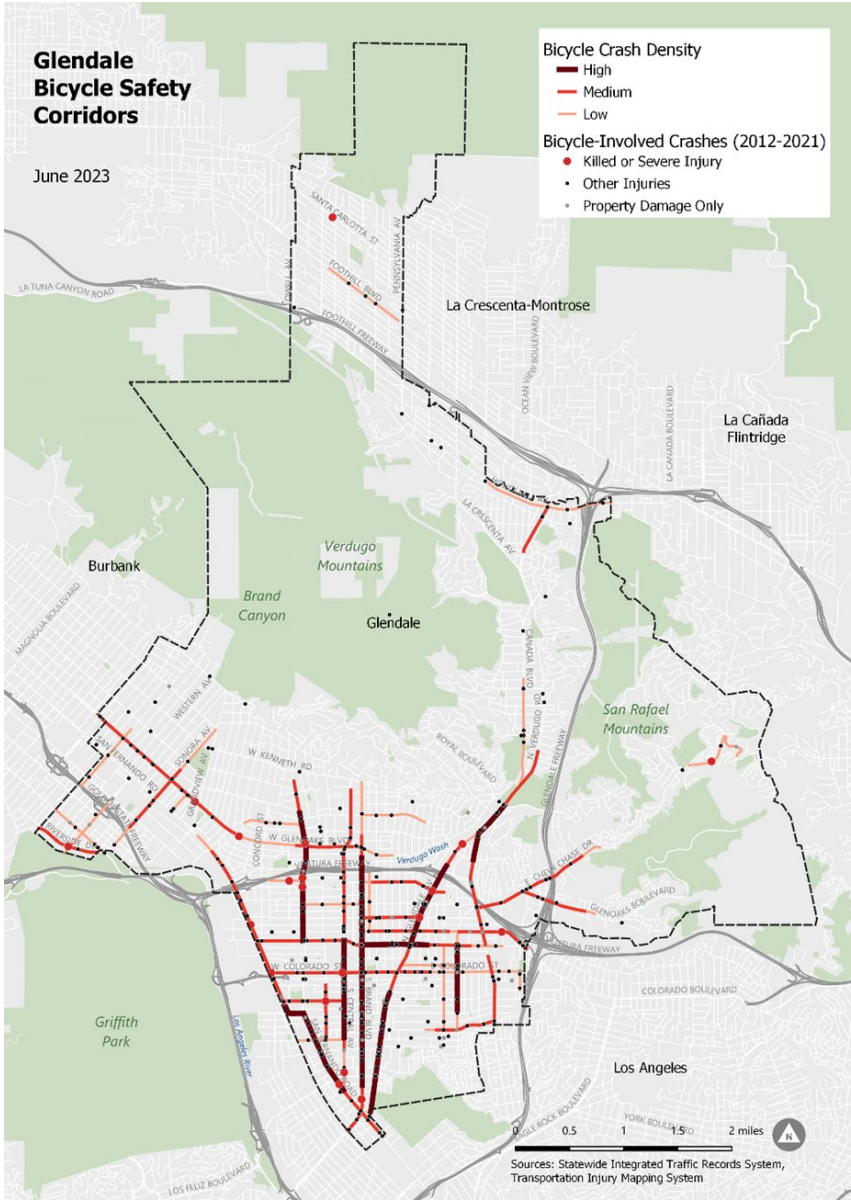
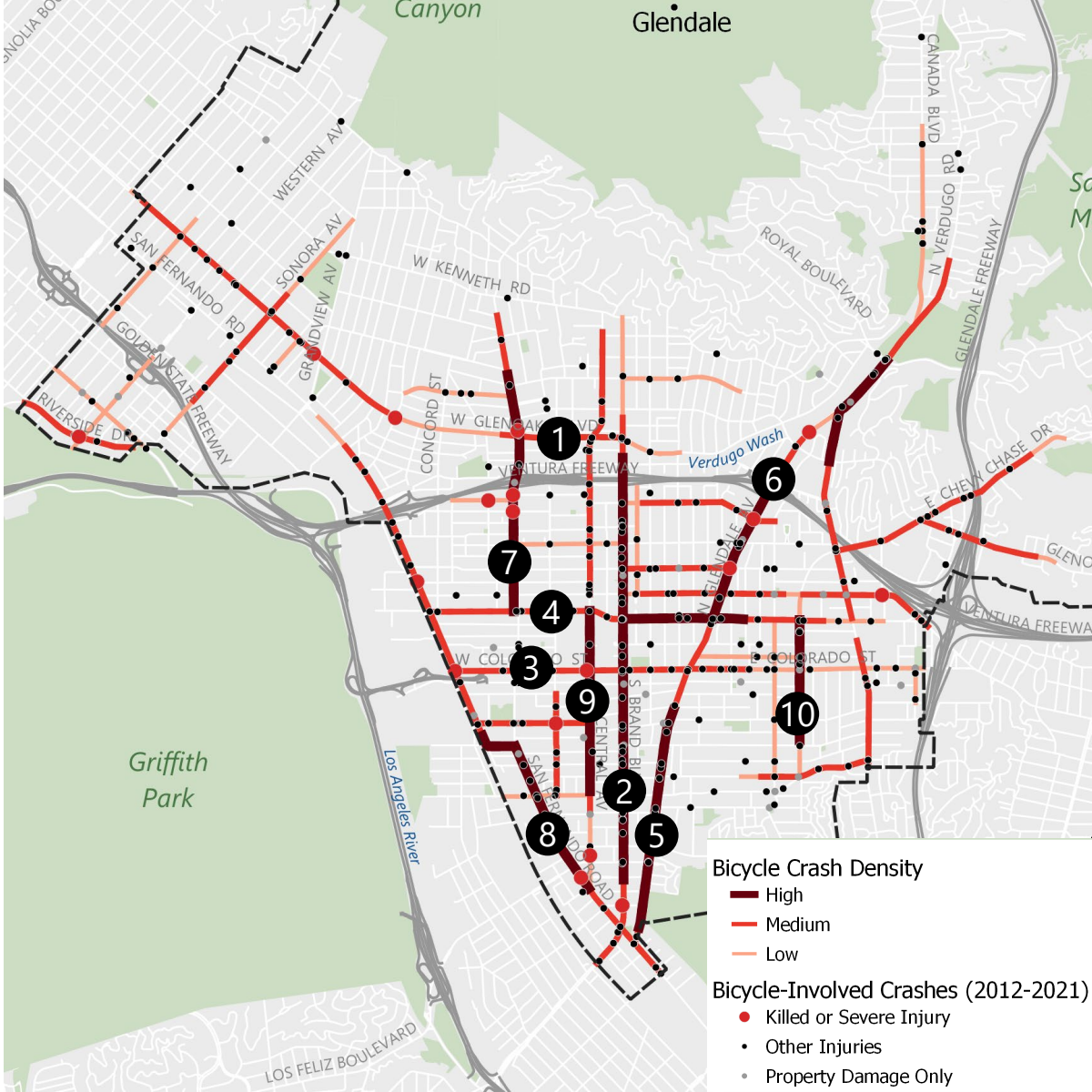


Safety Corridors

1. Glenoaks Blvd
2. S Brand Blvd
3. Colorado St
4. Broadway
5. S Glendale Ave
6. N Glendale Ave / Verdugo Rd
7. Pacific Ave
8. San Fernando Rd
9. S Central Ave
10. Chevy Chase Dr



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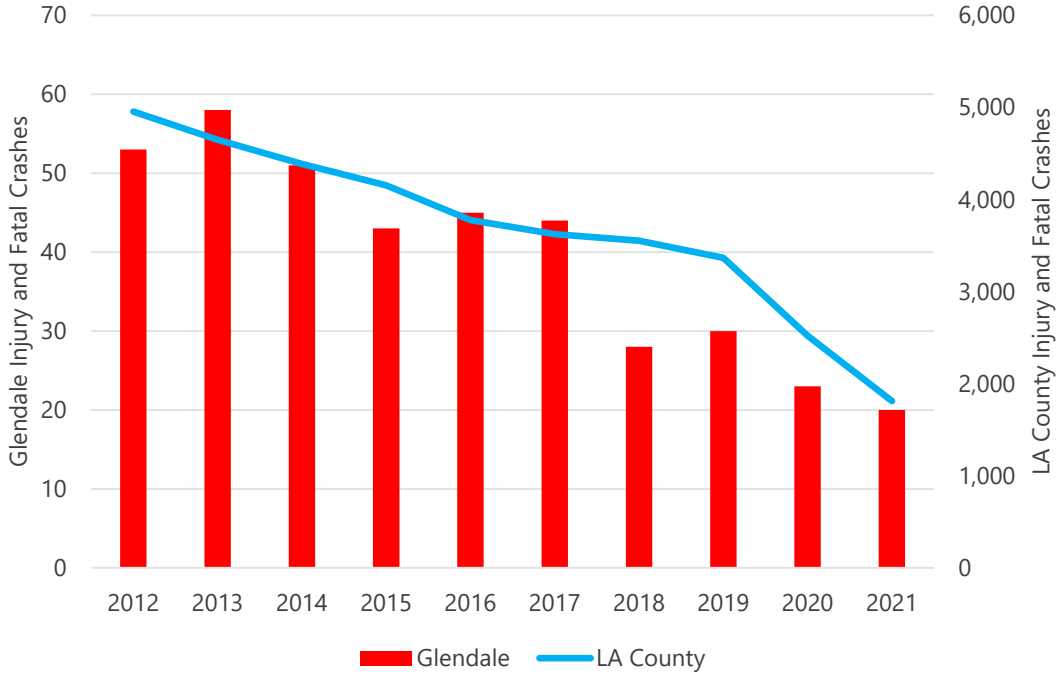
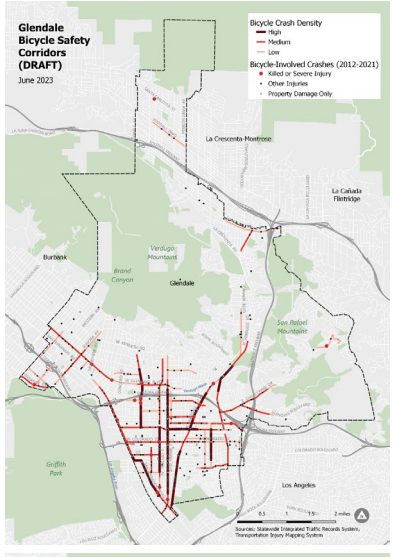
Crashes Over Time

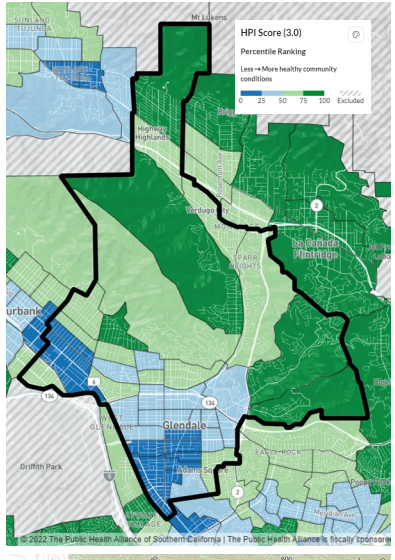
- Glendale crash patterns follow a similar trend for LA County
- Decline in crashes could be due to a variety of potential factors:
  - Citywide Safety Education Initiative (2018)
  - Decline in overall bike commuting (ACS data, LA Metro bike share)
  - Other changes due to the pandemic

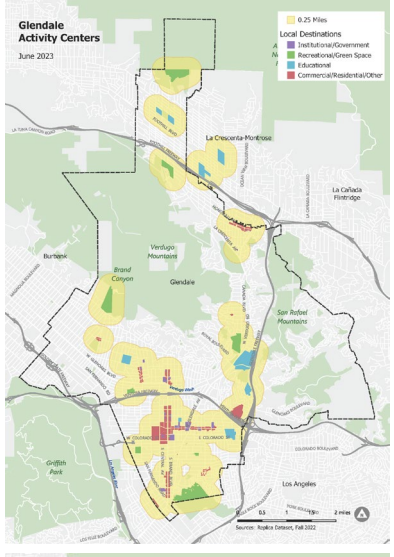


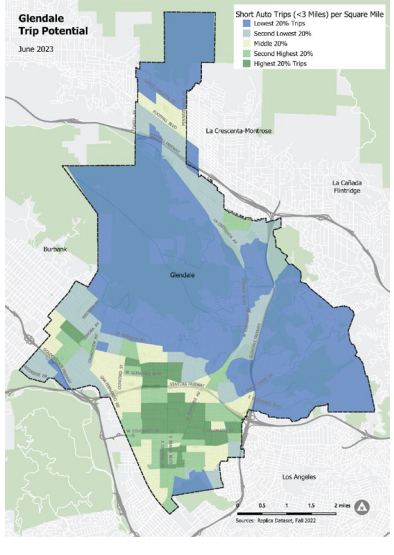
Summary

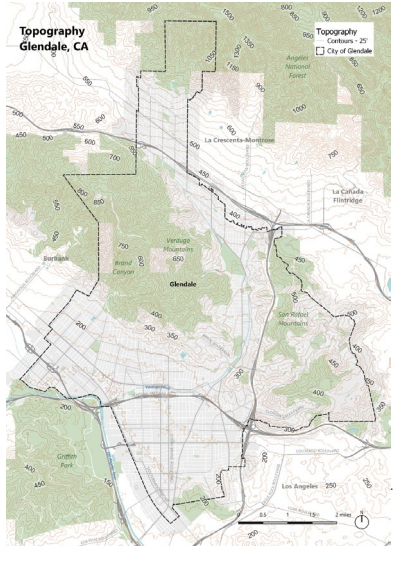
- Downtown and West Glendale represent the majority of the factors explored:
  - Crashes
  - Equity Areas
  - Destinations
  - Trip Potential
- This area is also flat, mixed-use, and relatively well served by transit

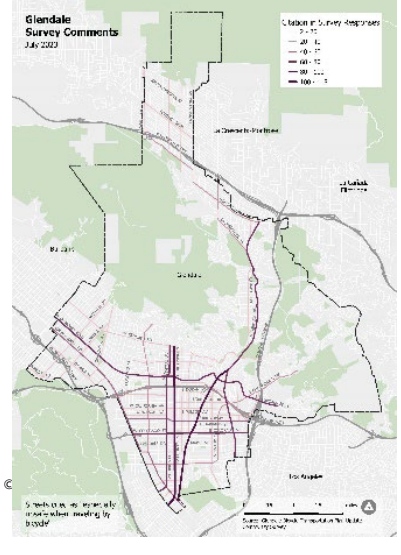












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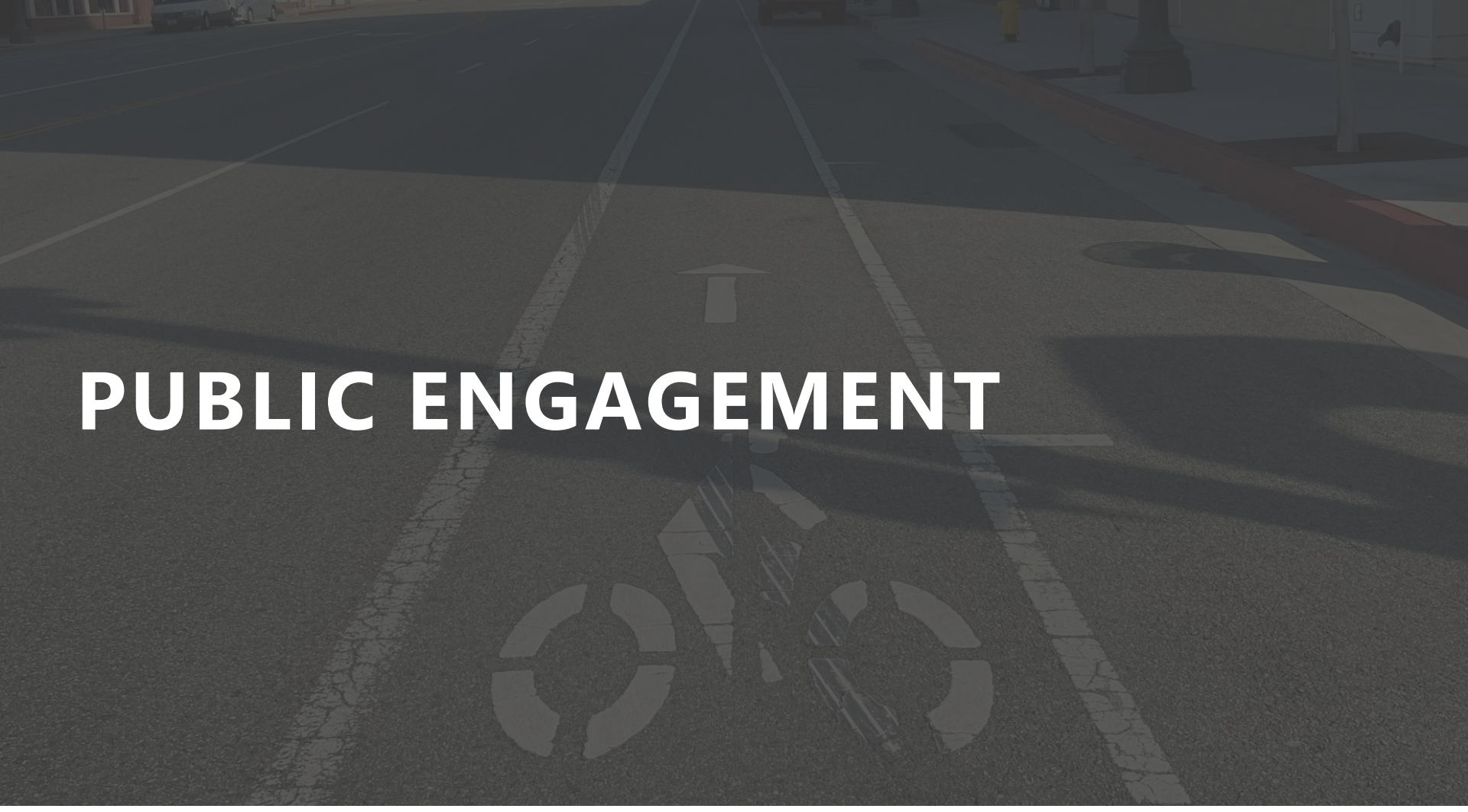

PUBLIC ENGAGEMENT

BTP Outreach Overview

Engagement opportunities include:

- Project Development Team (PDT)
- Community survey available online and in-person
- Pop-up events
- Community Open Houses
- Interactive, online draft bike network map for review and comment

Information shared through multi-lingual flyers distributed at:

- Community locations
- Email
- Community e-newsletters
- The project email interest list
- PDT's contact lists
- Press releases
- Social media
- Project web page*

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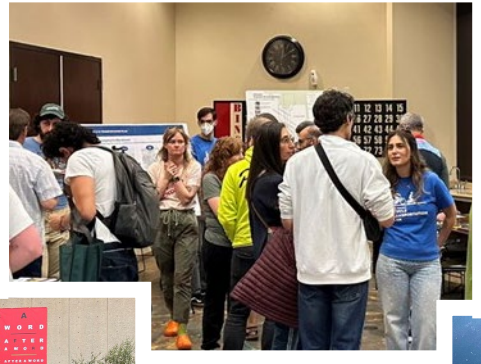
*https://www.glendaleca.gov/government/departments/community-development/planning/plans-for-mobility/bicycle-transportation-plan

Outreach Summary

14 Outreach Events	Online survey and webmap	4 languages	4 PDT meetings
Reached over 600 people in person	Reached over 500 people online	English, Armenian, Spanish, Korean	March, June, Sept, Jan



Consistent Themes

- Importance of **safety**
- Need for greater **connectivity** and continuity of bike facilities
  - Connections to local destinations
- Desire for **usable bike infrastructure** throughout the city, including bike lanes and parking
  - Strong routes to and through downtown
- **Accessible** bike network that people of all-ages and all-abilities can use

Help us create a safer, more connected and active community! The City of Glendale is working on an updated Bicycle Transportation Plan to identify opportunities for people of all ages to bike more safely and efficiently for school, work and/or recreation. **Please take our brief survey** and help create a plan that will benefit people ages 8 to 80. The survey will take about 5 minutes to complete.

GOALS

Project Goals

1. Safety

Create a bike network that feels safe and encourages people to ride.

Decrease frequency and severity of crashes while increasing biking overall.

2. Connectivity

Create a connected bike network across the city.

Create a bike network that links major destinations to primary bike corridors.

3. Accessibility

Create an all-ages, all-abilities bike network that is easy and enjoyable to use.

4. Equity

Prioritize bike infrastructure in areas of equity concern.

5. Implementable

Create a plan that is ambitious yet implementable, phased to meet current and future challenges.

6. Public Health

Increase public health by encouraging active transportation.

7. Environment

Reduce single occupancy vehicle trips for local trips.

NETWORK DEVELOPMENT & RECOMMENDATIONS

Process

Goals

- Safety
- Connectivity
- Public Input

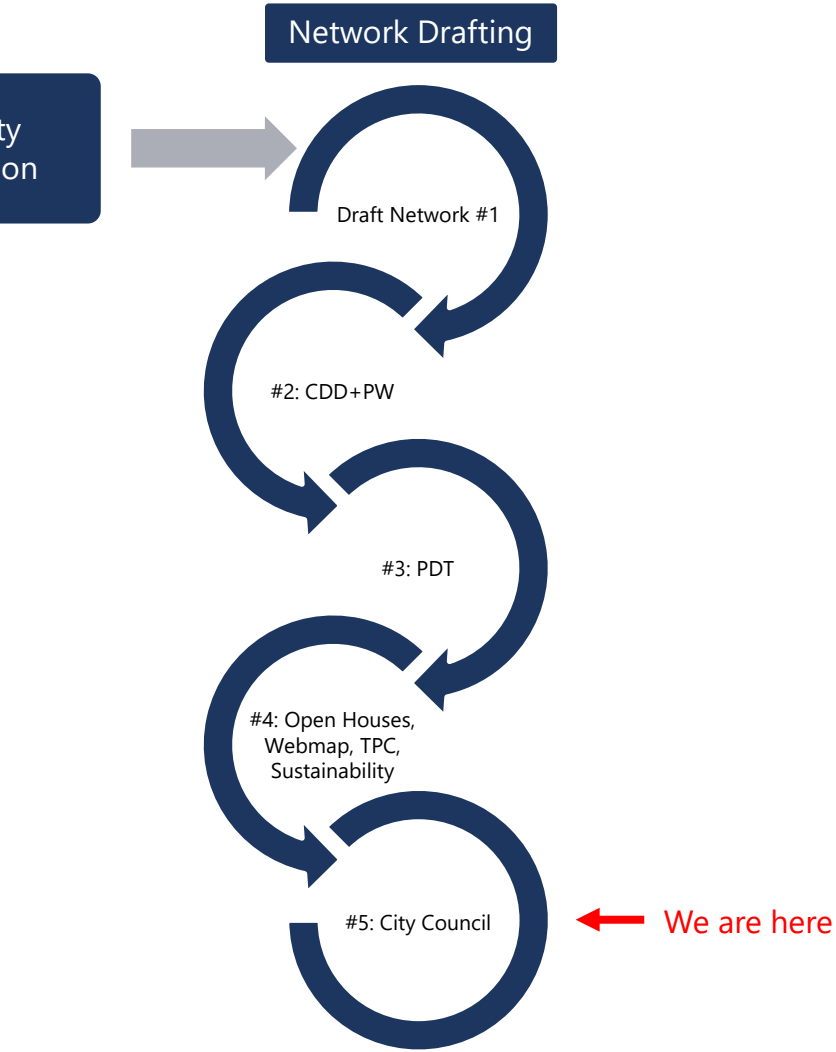
Network Principles

- Spiderweb
- Connected Neighborhood

Facility Selection

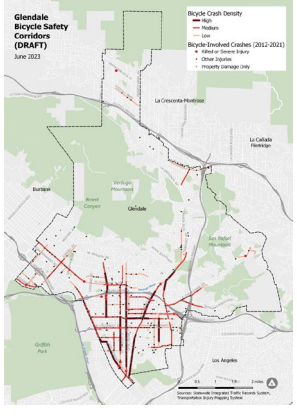
- FHWA
- NACTO
- Caltrans

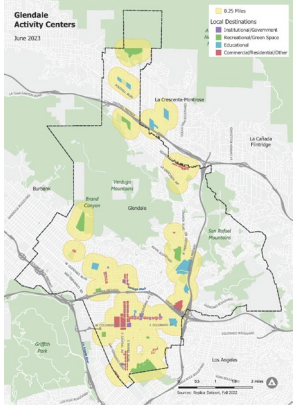
(PDT + Public Input)

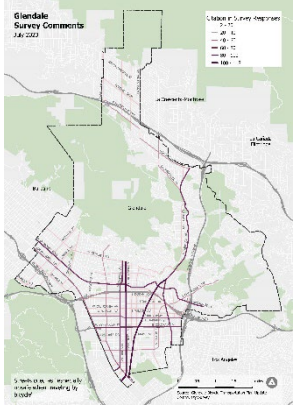


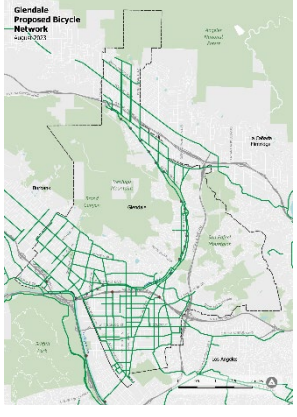
Network Selection

Safety + Connectivity + Public Input = Draft Network









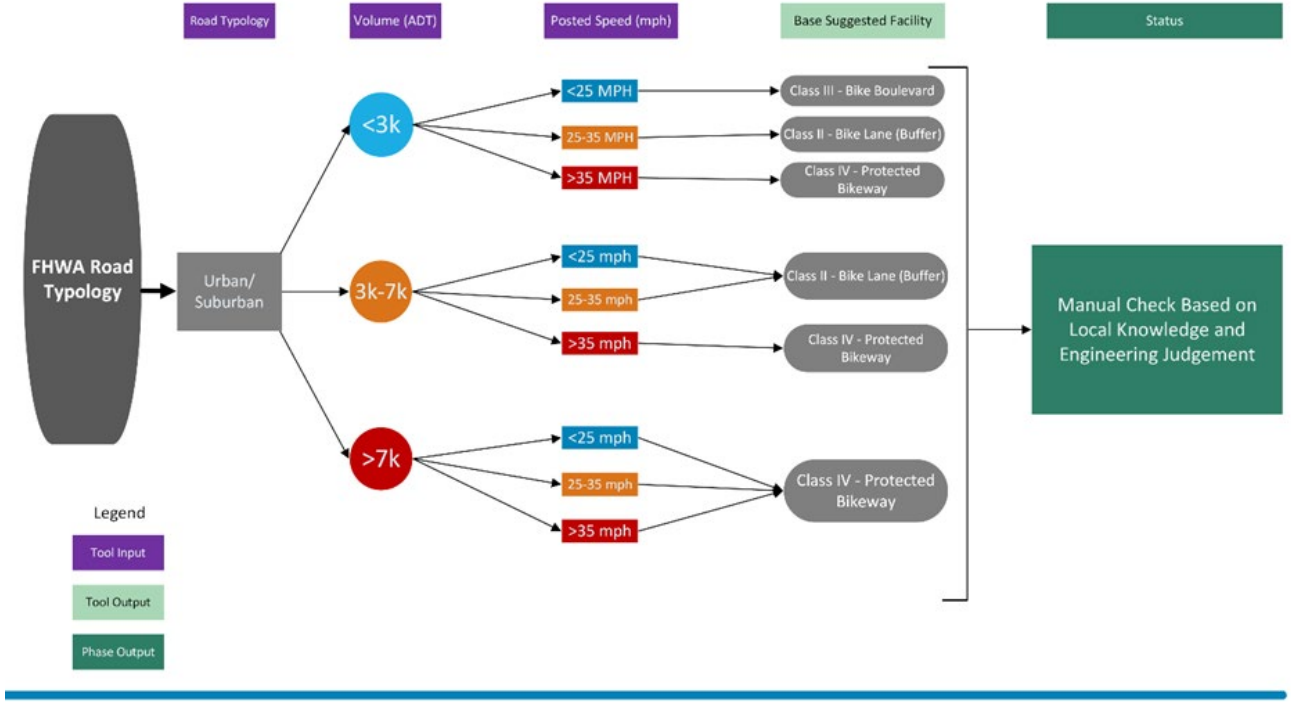
Guidance

Guidance

- FHWA
- NACTO
- Caltrans

Sets the floor for what is an acceptable and safe facility type based on the type of road

- Speed
- ADT
- Width
- Context



Existing Network

- Relies heavily on sharrows (Class III)
- Disconnected
- Low coverage
- Doesn't feel safe or enjoyable to use

Facility Type	Length (Miles)	Percent of Network
Class I Multi-Use Path	<1	1%
Class IV Protected Bike Lane		
Class IV Protected Bike Lane - Future Focus		
Class II Bike Lane	9.7	19%
Class II Climbing Lane		
Class III Bike Boulevard		
Class III Bike Route	40.1	79%
Total	**50.5**	**100%**

Note: lengths are centerline and measure one direction only

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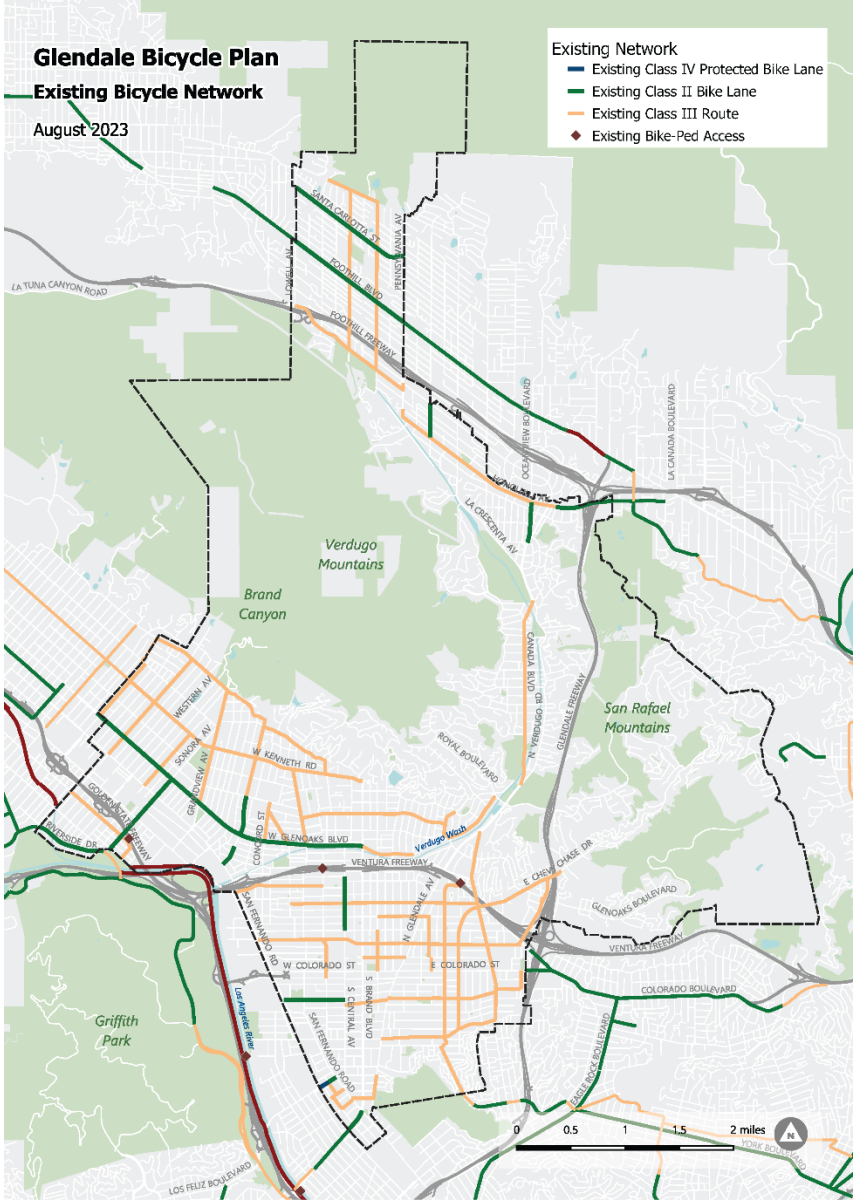

Preliminary Network

- Safe and Connected network
- Bike Boulevards require extensive traffic calming to create a comfortable biking environment
  - Chicanes, speed bumps, traffic circles (ex., Maple St), diverters, curb extensions, etc.

Proposed Facility Type	Length (Miles)	Percent of Proposed Network
Class I Multi-Use Path	0.3	0%
Class IV Protected Bike Lane	39.7	47%
Class IV Protected Bike Lane - Future Focus	6.2	7%
Class II Bike Lane	13.9	16%
Class II Climbing Lane	3.5	4%
Class III Bike Boulevard	19.0	22%
Class III Bike Route	1.9	2%
Total	**84.5**	**100%**

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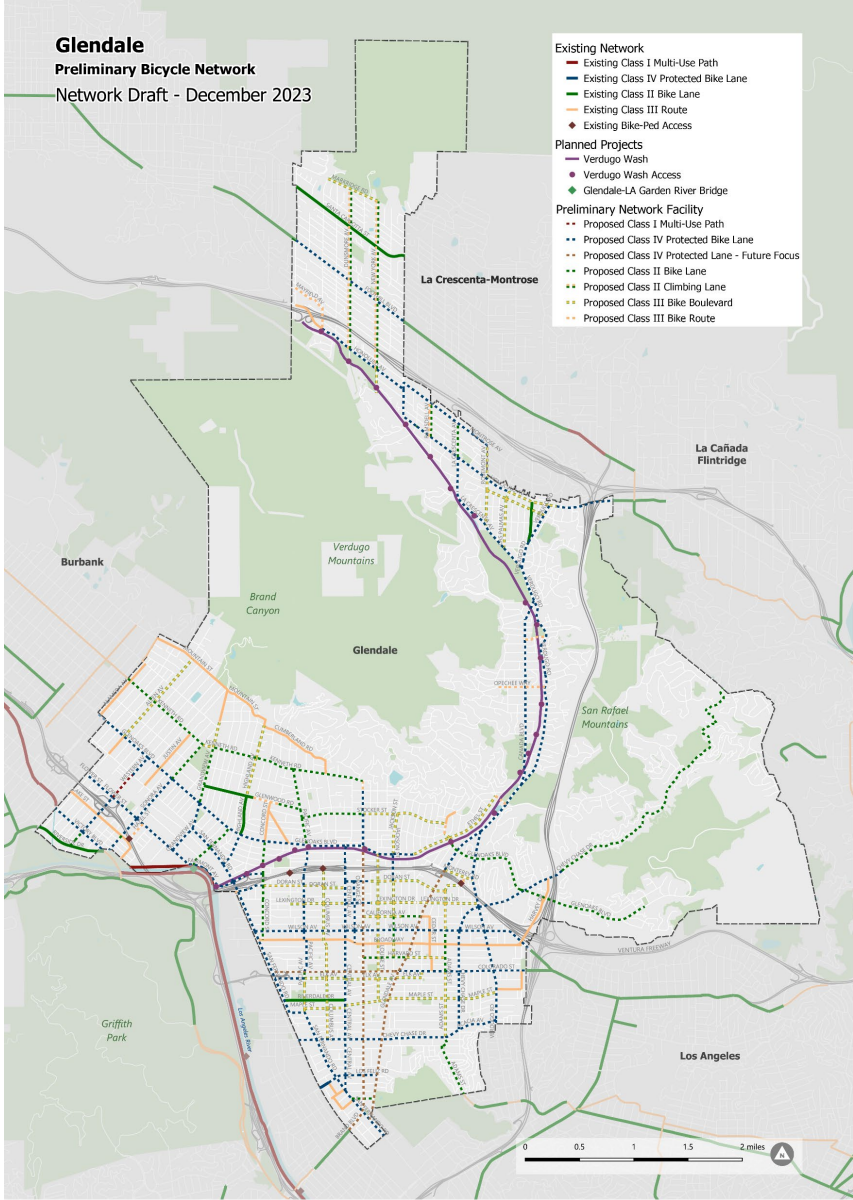

Phasing

Criteria

Project priorities and phasing will be determined through a selection criteria that reflects project goals:

1. Safety
2. Connectivity
3. Community Support
4. Trade-Offs
5. Trip Potential
6. Social Equity
7. Geographic Equity

Phasing (potential)

- **Quick Wins** (0-2 years): show progress and start to build a safe and connected network. Can use demonstration projects for fast implementation. *Will likely include 2-4 high impact projects that are not low hanging fruit.*
- **Near-Term** (2-5 years): maintain progress with high priority corridors
- **Mid-Term** (5-10 years): build out the network
- **Long-Term** (10-20 years): lower priority and capital-intensive projects

Policy Recommendations (draft)

1. **Lower speed limits on high-crash corridors**: Slower speeds have been proven to save lives by reducing the likelihood and severity of crashes.
2. **No turn on red lights**: Prohibiting right turns at red lights promotes pedestrian and bike safety by reducing conflicts with crossing traffic.
3. **Legalize sidewalk riding**: Allowing cyclists to ride on sidewalks (when not disruptive to pedestrians) provides a safe alternative to street riding, often where there is no safe bike infrastructure.
4. **Education campaign**: Public campaign to educate all road users about their rights and responsibilities to keep everyone safe. Education on how to use new biking infrastructure (including signage) and classes for new riders.

Bicycle Support Facilities Recommendations (draft)

1. **Bike parking**: Provide secure bicycle parking at key destinations such as parks, schools, public facilities, shopping centers, transit hubs, and large employers.
2. **Bicycle wayfinding**: Provide signage and maps throughout the city that directs riders to comfortable biking routes and identifies key destinations.
3. **End of trip amenities**: Encourage the provision of showers and changing rooms, water fountains, fix-it stations, and secure bike parking at places of employment and other major destinations.
4. **Bike activated traffic signals**: Install sensors that detect the presence of bicycles at intersections, allowing for the automatic adjustment of traffic lights to prioritize safe passage for cyclists. Pavement markings can indicate where cyclists should rest in order to be detected by the signal.
5. **Bike boxes**: Delineate designated areas at intersections where cyclists can position themselves in front of motor vehicles during a red light, enhancing their visibility and safety while providing a head start when the light turns green.

NEXT STEPS

Next Steps