

4 Identifying Projects

Glendale will build pedestrian improvement projects to make walking safer for all and to complete connections to transit, schools, and other community destinations.

Chapter 4 identifies specific pedestrian infrastructure projects in the following categories: (1) safety projects along high collision corridors; (2) first last mile transit access projects; (3) grant-ready projects; (4) Safe Routes to School (SRTS) projects; (5) projects or connections identified by the city's Pedestrian Safety Advisory Committee (PSAC); and (6) projects that close gaps in the pedestrian network. These projects complement the policies and programs presented in the following chapter and reflect Glendale residents' input on what would enable them to walk more.

This chapter describes the toolbox of improvements considered, the approach to identifying the right improvements for a particular location, and detail on each project type described above. Chapter 6 prioritizes projects to establish the city's roadmap for implementation, and includes costs and potential funding sources.

Types of Pedestrian Projects

Pedestrian improvement projects change streets and sidewalks to make walking easier, safer, and more comfortable by addressing specific challenges, and by completing connections to key destinations. The Pedestrian Plan infrastructure improvements are focused in locations where there have been the most collisions involving pedestrians, and where routes to transit and schools can be more comfortable for people of all ages and abilities.

The types of projects recommended in this chapter include safety enhancements on the high collision network, first last mile connections to support access to transit, and sidewalk and curb ramp projects to fill gaps in the pedestrian network. Also included are pedestrian projects identified in other plans, such as Glendale's ongoing Safe Routes to School program implementation and Metro's Active Transportation and First Last Mile Strategic (FLMSP) Plans. In select locations, project types may overlap; however, the recommendations included in this chapter do not conflict, and each serves different purposes.

As the city invests in projects to make walking safer and easier in Glendale, it will be possible to quantify the benefits associated with pedestrian projects. These can include lives saved; injuries prevented; reductions in traffic congestion, vehicle miles traveled (VMT), and greenhouse gas emissions; and improved community health, neighborhood livability, and enhanced recreational opportunities. Some of these benefits can be monetized and calculated over a project's expected lifetime—which is required for many grant-funding sources—using tools such as the California Active Transportation Program Benefit/Cost Calculator.

Figure 4-1 Pedestrian Plan Project Types



Safety Corridor Projects

These projects focus on Glendale’s 17 high collision corridors and are designed to reduce the number of pedestrian collisions and eliminate traffic-related injuries and fatalities. A safety improvement project implements design solutions to address the most common collision types at that location.



First Last Mile Transit Access Projects

Three transit nodes in Glendale were chosen for a First Last Mile Analysis consistent with Metro’s First Last Mile Strategic Plan with the goal of making it easy, pleasant, and safe for people to access these transit stops. The recommendations focus on traffic calming, enhanced bicycle connections, wayfinding, and streetscape elements such as lighting, trees, and more amenities at bus stops.



Grant-Ready Projects

In line with the Pedestrian Plan’s goal to organize for implementation, three priority projects were developed to a greater level of design and costing to become “grant-ready” projects. In order to position the city to seek grant funding for these high priority projects, the project sheets outline existing problems at the selected locations and propose solutions, including concept diagrams, cost estimates, and project benefits.



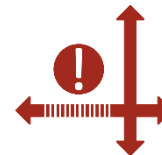
Safe Routes to School Projects

The city has made considerable progress implementing the engineering component of Glendale’s Safe Routes to School program with safety-enhancing projects at or near Glendale’s 32 elementary, middle, and high schools, and one private school. Improvements include constructing new or improving existing sidewalks, trails, bicycle facilities, and street crossings near schools. Funded by Safe Routes to School grants, these improvements make it easier for students and families to walk and bicycle to and from school safely.



PSAC-Identified Projects

Glendale’s Pedestrian Safety Advisory Committee (PSAC) includes community members, stakeholders, and city staff who have been integral in guiding the development of the Pedestrian Plan. This group’s input on pedestrian improvement projects reflects their local knowledge of Glendale’s walking environment and locations where infrastructure improvements would benefit people walking and rolling throughout the city.



Closing Network Gaps

While the projects identified in this chapter cover many of highest priorities for pedestrian improvements in Glendale, gaps remain in Glendale’s overall walking network, with certain streets lacking sidewalks, marked crossings, or curb ramps. The city can focus sidewalk construction and curb ramp resources to fill these gaps, beginning in the highest priority areas identified in Chapter 3.

Toolbox of Elements

The projects described below were developed using a toolbox of design solutions, all of which are already in use in Glendale. Each project must respond to the conditions of a particular location and apply design solutions that can help to address a specific problem, as different solutions achieve different goals. For example, safety projects and projects that enhance transit connections apply elements of this toolbox in different ways to achieve specific outcomes, whether that is addressing common collision types or improving a key connection to a bus stop.

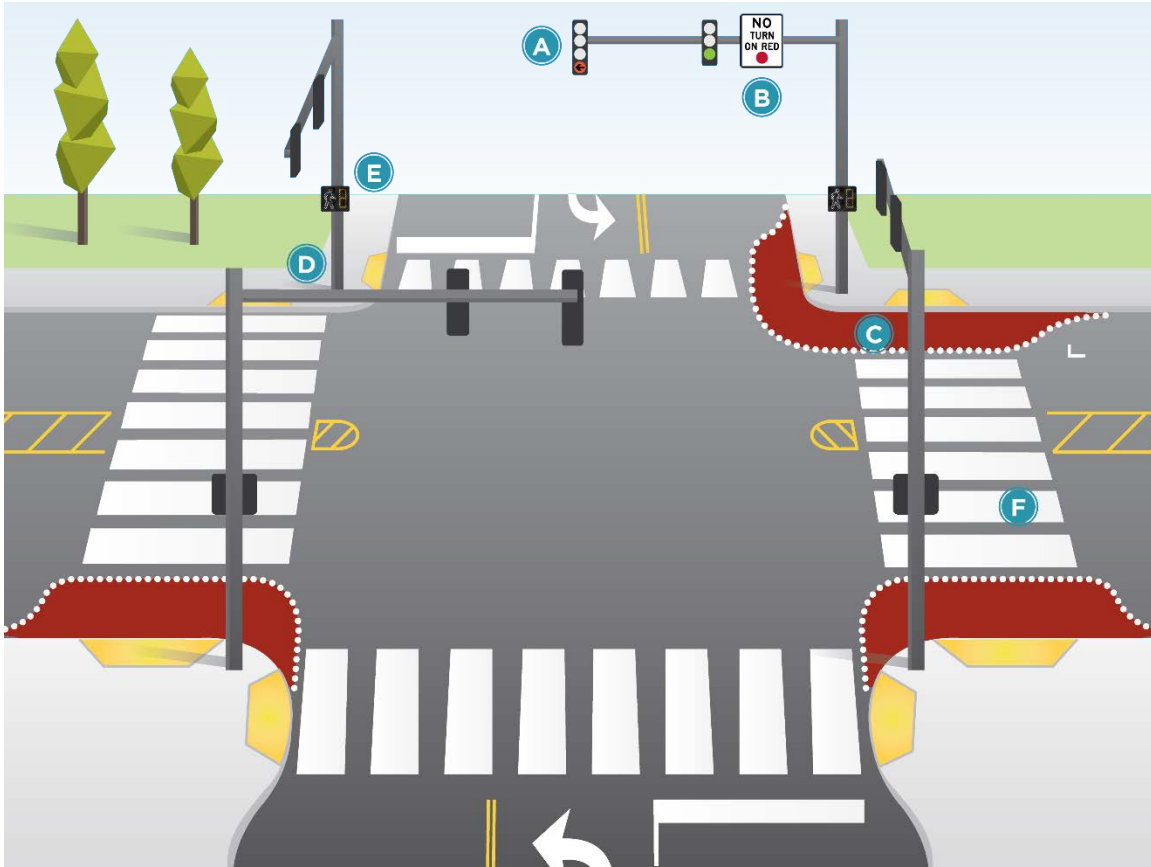
Design solutions must also be context-sensitive and reflect other plans and programs. For example, the design of curb extensions at intersections should not extend into the space needed for planned bikeways, and curb ramps must be designed to account for existing utilities and other infrastructure needs.

Figure 4-2 and Figure 4-3 illustrate select solutions in the toolbox of design solutions, focusing (respectively) on an intersection and a transit stop:

- High visibility zebra-stripe crosswalk markings, with advanced warning signs
- Curb extensions to shorten crossing distances and increase visibility
- Flashing beacons, including HAWK signals or Rectangular Rapid Flash Beacons (RRFBs), to increase yielding rates at unsignalized intersections or mid-block crossing locations
- Median refuge islands to make crossings on larger roadways easier and safer
- Traffic control and signal changes to separate walking movements from vehicle turning movements (e.g., leading pedestrian intervals or protected left-turn phases)

Following each graphic is a more detailed description of the elements and information on the expected benefits associated with the improvements, drawn from a variety of national sources.

Figure 4-2 Sample Intersection Improvements to Enhance Pedestrian Safety



ELEMENT	DESCRIPTION	BENEFITS
A	Exclusive vehicular left-turn phase reduces potential conflicts between pedestrians with right-of-way in the crosswalk and turning vehicles by providing separate signal phases for walking movements and vehicle turning movements.	Exclusive left-turn phases have been shown to decrease pedestrian crash rates by 33%. ⁱ
B	No Right-on-Red at intersections with high pedestrian volumes eliminates potential conflicts between people in the crosswalk and vehicles turning right during the dedicated walk phase.	“No Turn on Red” signage has been shown to increase the percentage of drivers who come to a complete stop before making a right turn from by as much as 60%. ⁱ
C	Curb extensions can take the place of right-turn lanes, street parking, or unused roadway space to shorten crossing distances, increase visibility and slow turning vehicles. Curb extensions and median islands can be piloted with low-cost materials including pavement markings and delineator posts, as shown in the facing graphic.	Studies have shown that curb extensions can reduce overall collision severity, increase both motorist yielding (from 61% to 82% compliance) and motorist yielding distance. ⁱ



Tight curb radii, which can be created with curb extensions, improve safety as motorists slow to make sharper turns as well as maximize pedestrian space at the corner.

Default walk phases at signalized intersections ensure that a walk signal occurs every cycle without requiring a person to push a button.

Evidence shows that the chance of a collision increases by 6% for every additional 3 feet of crossing distance.ⁱⁱ

Studies have shown the longer someone is required to wait for right-of-way, the more likely they are to cross illegally. The installation of exclusive pedestrian signal phases has been shown to reduce pedestrian collisions by 63%.ⁱⁱⁱ



Pedestrian head starts give pedestrians a three- to seven-second head start before vehicles are permitted turn at an intersection, allowing pedestrians to establish their right-of-way in the crosswalk.

Walk phase timing should accommodate walking speeds of 2.8-3.0 feet per second (from the traditional 3.5 feet per second) in select locations like Downtown, transit stops, hospitals, and within a half-mile of schools and senior activity and residential centers.

Pedestrian head starts, also called leading pedestrian intervals, have been shown to reduce pedestrian-involved collisions by as much as 60%.ⁱ

Pedestrian head starts also increase yielding by left-turning drivers by 9% to 18%.ⁱ

Since the establishment of a Safe Streets for Seniors program that focusses safety investments in Senior Pedestrian Focus Areas, including changes to walk phase timing and pedestrian head starts, New York City has seen senior pedestrian fatalities decrease by 16% citywide.^{iv}



High visibility crosswalks clearly delineate the pedestrian zone and make people crossing more visible.



Fewer turn lanes, especially right-turn lanes or parking lanes that drivers use as right-turn lanes, shorten pedestrian crossing distances and slow vehicle speeds.

Installation of high-visibility crosswalks has been shown to:

- Increase in the proportion of pedestrians who look for vehicles before beginning to cross,ⁱ
- Significantly increase the distance at which drivers yield to pedestrians,ⁱ and
- Reduce pedestrian collisions up to 48%.ⁱ

Figure 4-3 First Last Mile Transit Access Toolbox



ELEMENT	DESCRIPTION	BENEFITS
	<p>Enhanced transit stations include amenities for people waiting for the bus, making it more attractive and comfortable to travel by transit.</p>	<p>Well-designed bus stops can decrease by half the amount of time customers perceive they have been waiting for the bus.^v</p> <p>Better amenities, such as benches, shelters, and real-time departure information, have been found to increase ridership.^{vi}</p>
	<p>Safe and continuous sidewalks provide dedicated space away from traffic for people walk between destinations.</p> <p>Landscaped buffers between the street and sidewalk make streets more comfortable for people walking and waiting for transit by creating separation from passing traffic. Trees along the street can calm traffic by narrowing the optical width of the street for people driving.</p>	<p>Pedestrian collisions are more than twice as likely to occur in places without sidewalks; streets with sidewalks on both sides have the fewest crashes.^{vii}</p> <p>Lateral separation between pedestrians and traffic has shown to be one of the primary factors affecting pedestrians' sense of safety. As the level of separation increases, a pedestrian's level of comfort increases.^{viii}</p>



Enhanced pedestrian crossings include striped crosswalks, special paving or paint, safety islands, advanced yield lines, rectangular rapid flashing beacons, and in-roadway flashing lights at crosswalks. These elements make it safe and more comfortable for people to cross the street. Raised crosswalks, median refuge islands and curb extensions can calm traffic and make pedestrians more visible.

A study on the effectiveness RRFBs found that drivers were over 50% more likely to yield to people crossing (up to 56% during daylight hours and up to 65% during nighttime hours). The beacons reduced overall conflicts between pedestrians and vehicles by 5.5%.ⁱ

In Pasadena, a before-and-after study found that drivers yielded for pedestrians significantly more often—80% instead of 50% of the time—after the installation of in-roadway flashing lights at crosswalks.^{ix}



Pedestrian lighting illuminates walking paths and crossings, increasing safety and comfort for people walking at all hours of the day.

Improved lighting has been shown to reduce nighttime pedestrian fatalities at crossings by 78%.^x



Wayfinding includes signs, kiosks, or smart technology, increasing people's awareness and understanding of nearby destinations and the best routes to reach them.

The installation of comprehensive wayfinding systems in major cities has shown to decrease the number of pedestrians getting lost on a journey by 65%.^{xi}



Enhanced bikeways include physical separation or buffering from traffic making it comfortable for all people riding bicycles, from ages 8 to 80 years old.

Streets where protected bikeways were implemented between saw a 40% decrease in total traffic injury rates, with pedestrian injury rates falling 22%.^{xii}



Traffic calming treatments including speed limit signs and enforcement, reduced numbers of travel lanes, raised crosswalks and curb extensions, and speed humps and traffic circles decrease vehicle speed and improve safety.

Speed humps have been found to decrease speeds by 22% (on average) and decrease collisions by 11%.ⁱ

Traffic circles have been found to reduce 85th percentile travel speeds by an average of 11%, and to reduce collisions by an average of 73%.^{viii}



Connections across or through barriers include tunnels, bridges, pathways, and stairways, which knit together the pedestrian realm and make it easier for people to cross built or natural obstacles, such as freeways or rivers. To improve conditions for people walking across or through bridges and underpasses, lighting, trees, public art, and wide sidewalks play an important role.

For bridges and underpasses that are used by a large portion of people walking and bicycling, studies found that pedestrian collisions decreased by 91%.^{xiii}



Placemaking and public art improve connections to transit by making the walk, bike ride, or wait fun and inspiring. Public art and placemaking features include wayfinding, creative and decorative crosswalks, plazas, parklets, and many more elements designed to facilitate social interaction and improve quality of life.

50% of transit riders reported that a renewed transit and pedestrian environment including public art makes them more likely to take transit.^{xiv}

Placemaking creates quality public spaces that contribute to peoples' health, happiness, and well-being by building on community assets.^{xv}

Developing Safety Corridor Projects

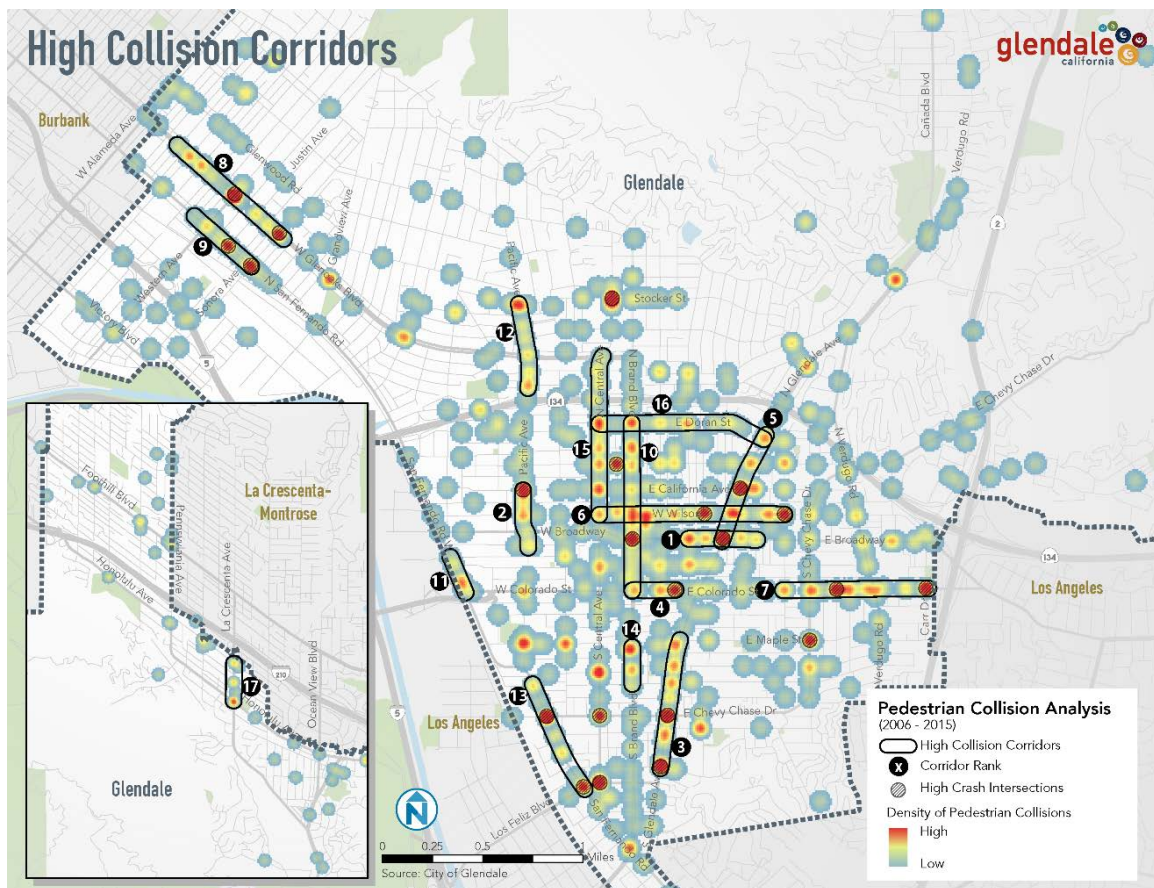
Safe places to walk are critical for people of all ages and abilities. By improving safety, walking in Glendale will become more pleasant and comfortable, encouraging people to walk more while reducing the number of pedestrian collisions.

Today, more than 40% of people involved in traffic collisions in Glendale are pedestrians. The total number of pedestrian collisions has remained relatively constant over time, with nearly 100 reported collisions per year. These trends are unacceptable and can be changed with strategic safety improvements along high collision corridors. The improvements needed at each location are shaped by the collision history, including the most common collision types at an intersection and along the corridor. The process for developing safety corridor projects is described in the following sections.

Identify High Collision Corridors

A hot spot analysis conducted in the first phase of the Pedestrian Plan revealed that 40% of all pedestrian injury collisions occur on 17 high collision corridors. These corridors encompass just 2% of Glendale's street network (9 miles); see Figure 4-4. Implementing safety projects on these corridors will target resources in locations where they can have the greatest impact on pedestrian safety.

Figure 4-4 Glendale's High Collision Corridors



Identify Citywide Collision Patterns

Along Glendale’s high collision corridors, certain types of collisions are more common than others. Safety projects are designed to implement improvements that address the most common collision types in each location. For example, collisions are most common at signalized intersections (40% of pedestrian collisions) and primarily involve turning vehicles that fail to yield the right-of-way to people in the crosswalk. Examples of solutions to this problem include a dedicated signal phase for left-turning vehicles (green turn arrow then red turn arrow) or elimination of right turns on red lights. Both of these solutions play a role in eliminating potential conflicts between turning vehicles and people in a crosswalk.

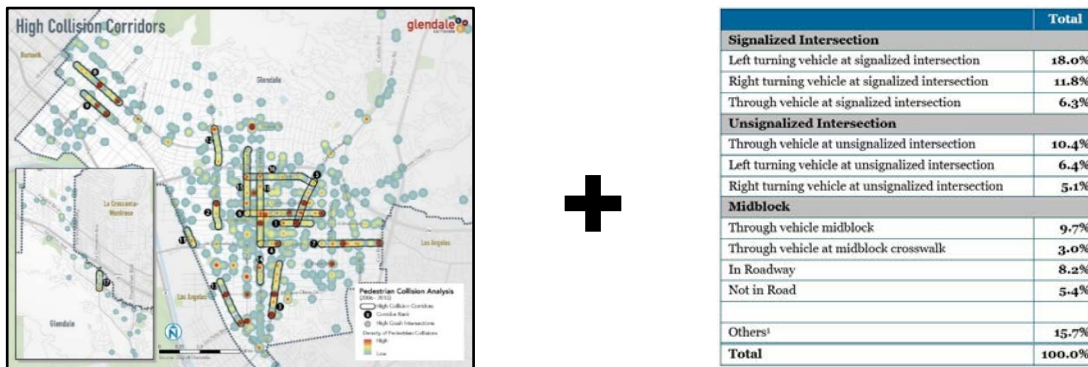
Figure 4-5 Top Collision Types in Glendale



Identify Collision Types by Location

Safety projects are shaped by the on-the-ground conditions and historic collision patterns along each high collision corridor. In addition to citywide patterns, a review of collision type data by location informed the development of intersection-specific safety project solutions; an example of this approach is shown in Figure 4-6.

Figure 4-6 Historic Collision Patterns by Intersection Inform Safety Projects¹



¹ Approximately 85% of pedestrian collisions fall into the 10 collision types identified in this table. The remaining 15% represent a variety of types of collisions that do not have a prominent pattern

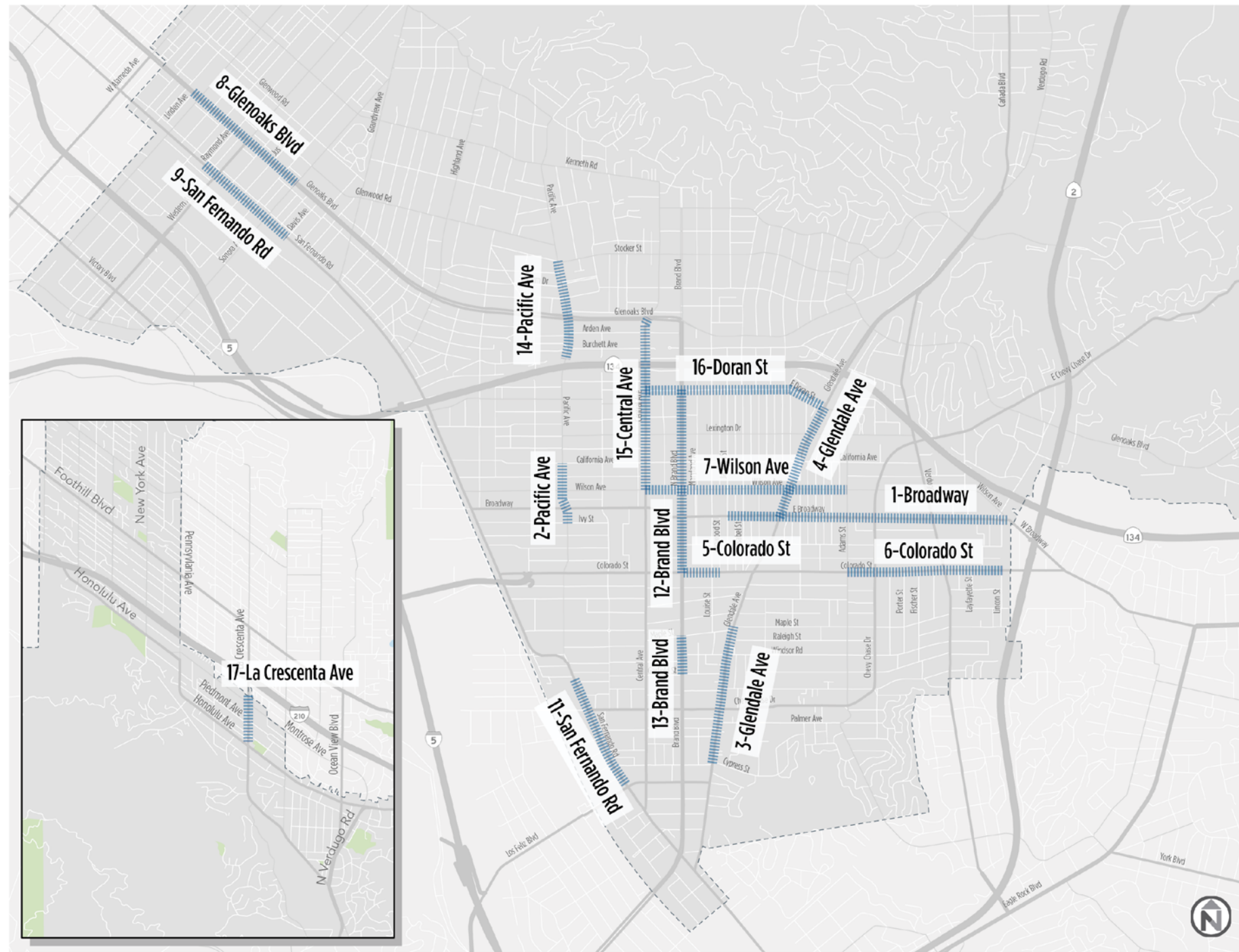
Develop Safety Project Recommendations

Recommendations for safety corridor improvements address the underlying collision patterns over time, respond to current conditions, and anticipate future projects. These recommendations are preliminary, and all will require further study (including detailed traffic analysis), community and stakeholder outreach, and additional design. Additionally, changes to signal timing will require review for conformity with the California Manual on Uniform Traffic Control Devices. Proposed projects could result in changes to traffic patterns or travel speeds; these changes play an important role in improving pedestrian safety and must be evaluated using standards that prioritize the movement of people and goods by many modes of transportation.

The figures on the following pages identify the specific design solutions and improvements recommended for each high collision corridor. These solutions come from the toolboxes presented above and follow design guidance included in the Caltrans Complete Streets Guidelines, the NACTO Urban Street Design Guide, the Manual on Uniform Traffic Control Devices, and other state and national references certified for use in California.

The figures depict the existing and recommended street configuration, identify improvements with icons, and provide a high-level description of each improvement. (More detailed descriptions and costs for the safety corridor projects are available in the prioritized project lists provided in Chapter 6 and in Appendix A.)

Figure 4-7 Map of Safety Corridor Project Locations and Individual Corridor Project Sheets



Corridor	Page
1. Broadway, Jackson St to Cedar St	4-12
2. Pacific Ave, California Ave to Ivy St	4-13
3. Glendale Ave, Maple St to Cypress St	4-14
4. Glendale Ave, Doran St to Broadway	4-15
5. Colorado St, Brand Blvd to Kenwood St	4-16
6. Colorado St, Adams St to Lincoln Ave	4-17
7. Wilson Ave, Central Ave to Adams St	4-18
8. Glenoaks Blvd, Linden Ave to Sonora Ave	4-19
9. San Fernando Rd, Raymond Ave to Davis Ave	4-20
11. San Fernando Rd, Garfield Ave to Los Feliz Rd	4-21
12. Brand Blvd, Doran St to Colorado St	4-22
13. Brand Blvd, Maple St to Garfield St	4-23
14. Pacific Ave, Stocker St to Burchett St	4-24/25
15. Central Ave, Glenoaks Blvd to Wilson Ave	4-26
16. Doran St, Central Ave to Glendale Ave	4-27/28
17. La Crescenta Ave, Montrose Ave to Honolulu Ave ..	4-29

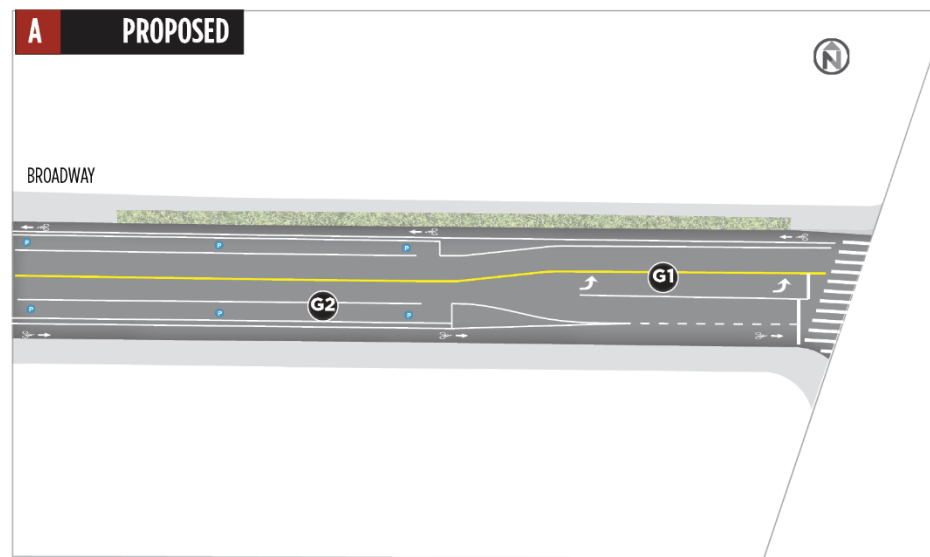
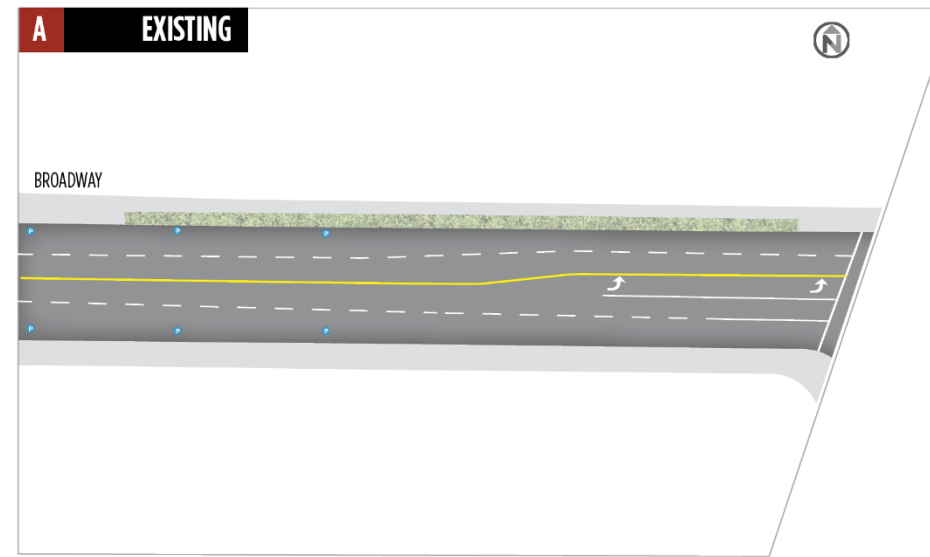
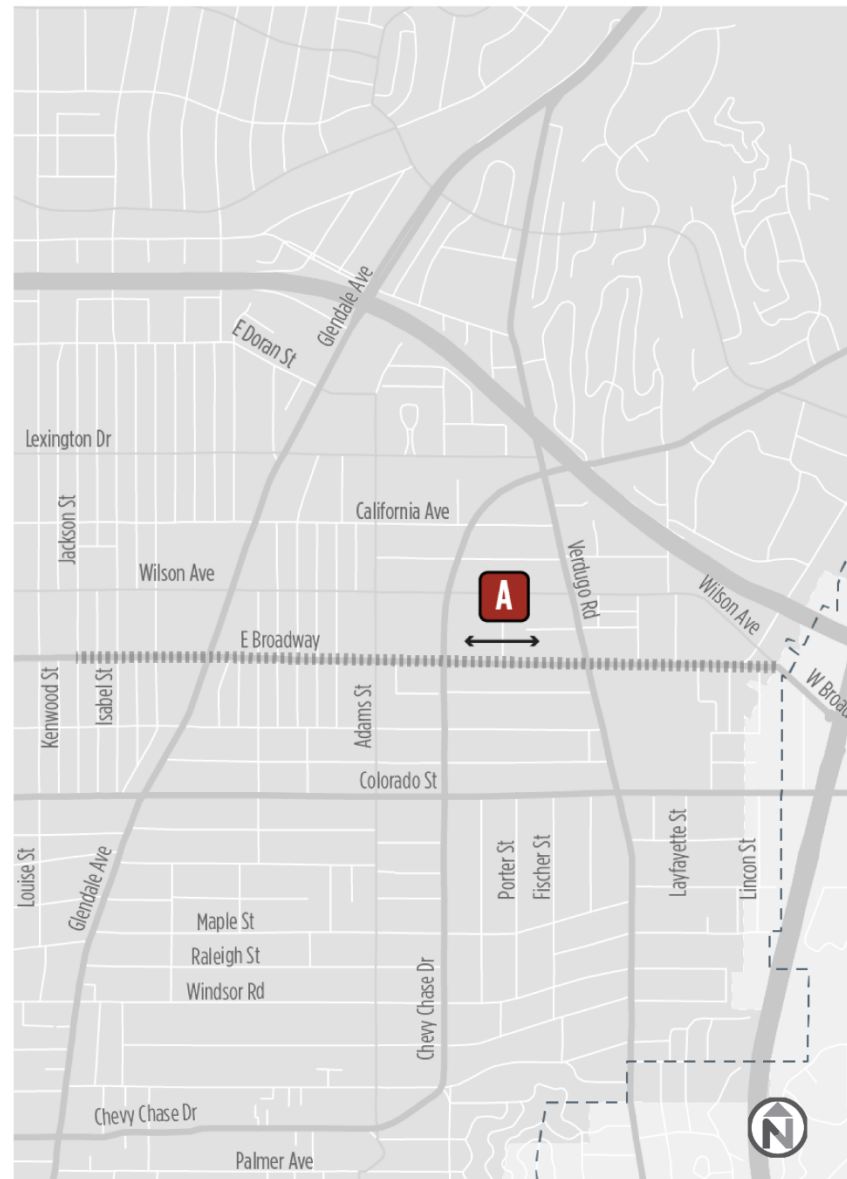
Note: Corridors are not listed in order of priority.

corridor extents

Project Corridor Atlas

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-8 Safety Corridor Project 1: Broadway, Jackson St to Wilson Ave



- G1** Propose 4-2 road rechannelization maintaining left turns at intersections
- G2** Add buffered bike lanes; continue non-buffered bike lanes through transition at intersection approach

GLENDALE PEDESTRIAN PLAN

Data Sources: City of Glendale, Nelson\Nygaard

1 Broadway

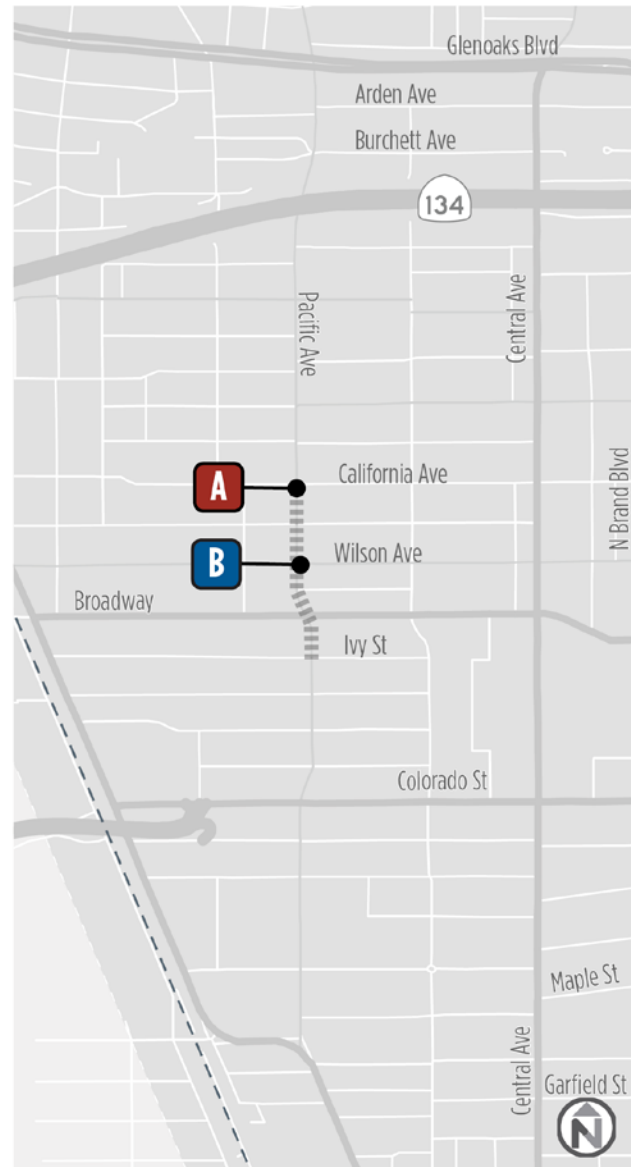
Jackson St to Wilson Ave

Project recommendations also included in Broadway and Glendale Ave First Last Mile Analysis (Study Area 2).

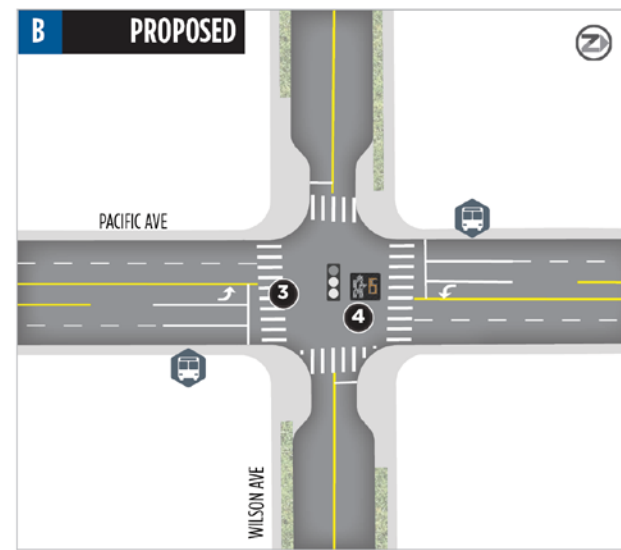
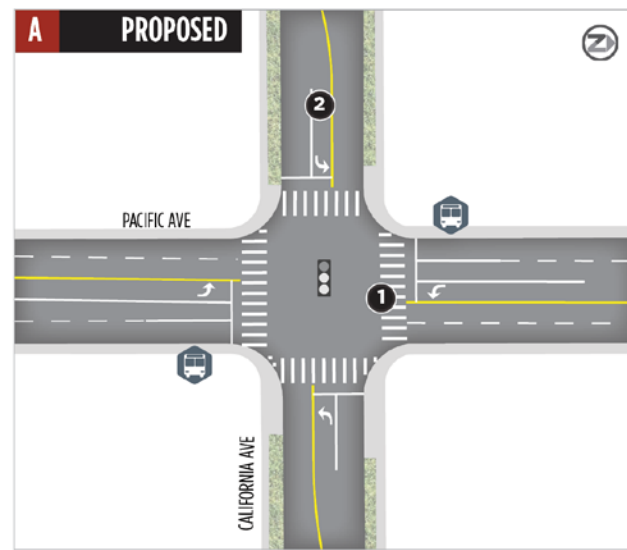
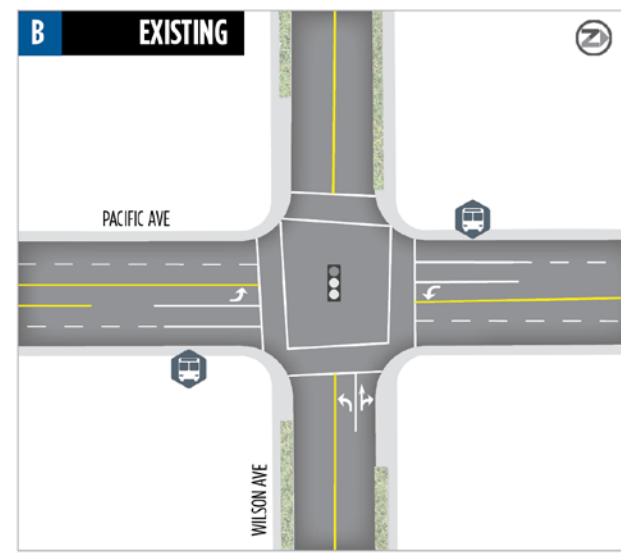
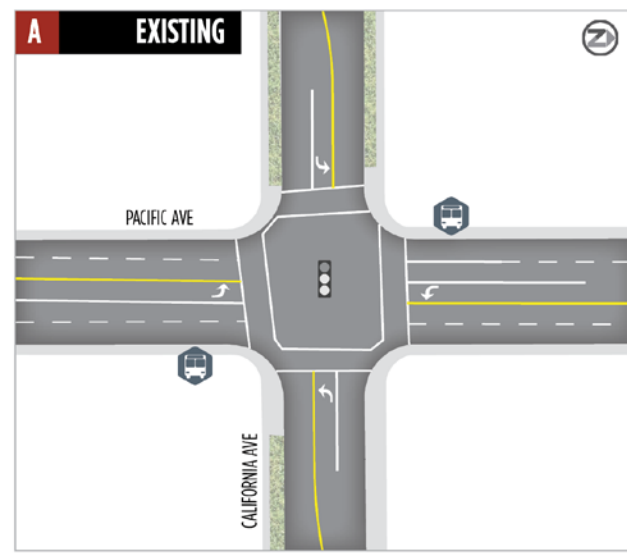
- corridor extents
- curb extension
- on-street parking
- zebra crosswalk
- turn pocket removal
- bus stop
- median refuge island
- signal enhancement
- Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-9 Safety Corridor Project 2: Pacific Ave, California Ave to Ivy St



G1 Evaluate additional arterial traffic calming measures along Pacific Ave



- 1** Add zebra crosswalks at all approaches
- 2** Optional: Remove left-turn pockets from California Ave and add curb extensions

- 3** Add zebra crosswalks at all approaches
- 4** Add pedestrian head starts to all crossings and consider curb extensions

2 Pacific Ave

California Ave to Ivy St

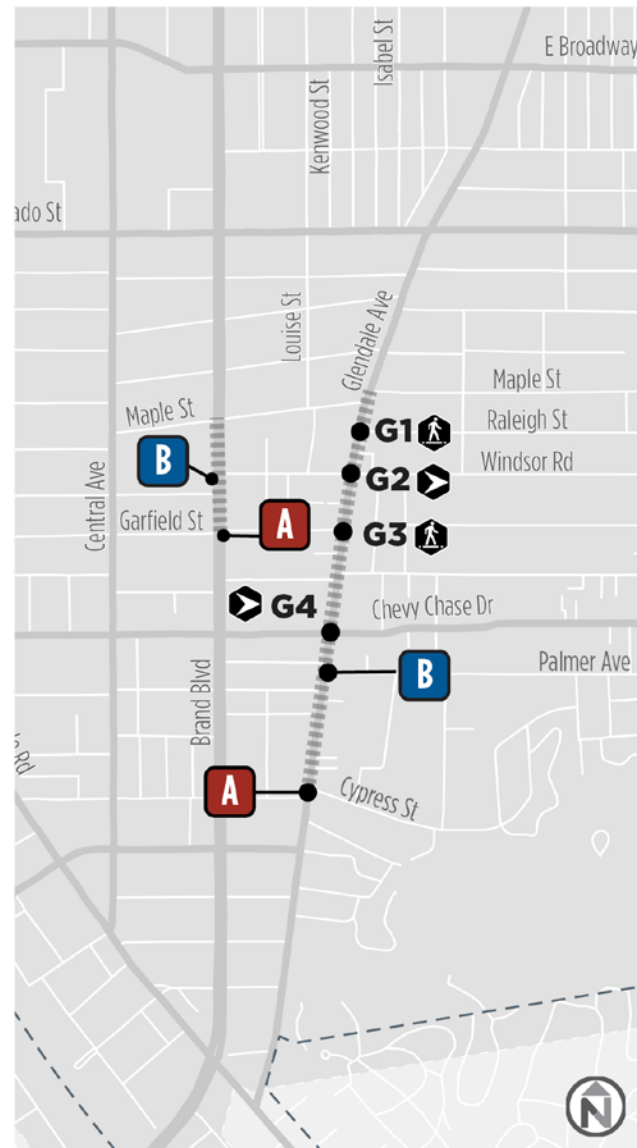
- corridor extents
- zebra crosswalk
- median refuge island

- curb extension
- turn pocket removal
- signal enhancement

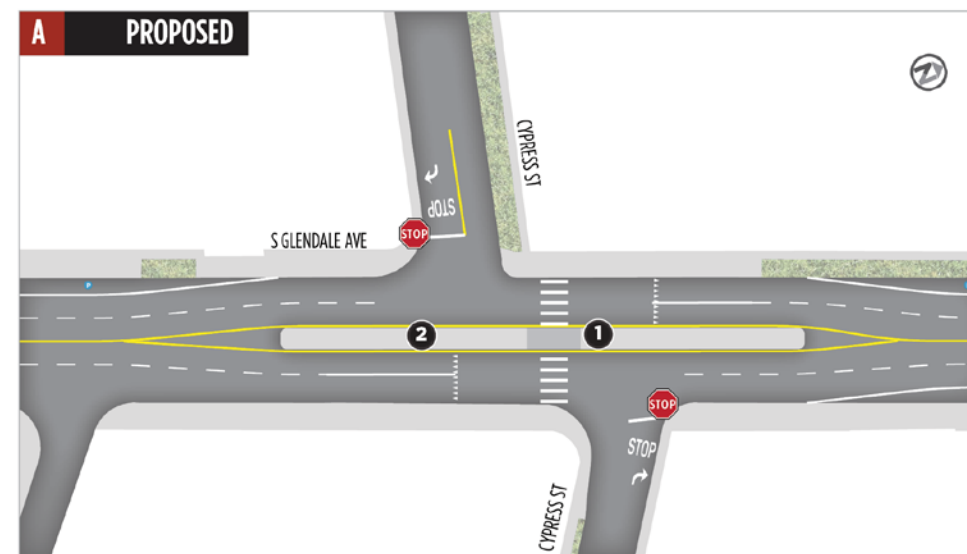
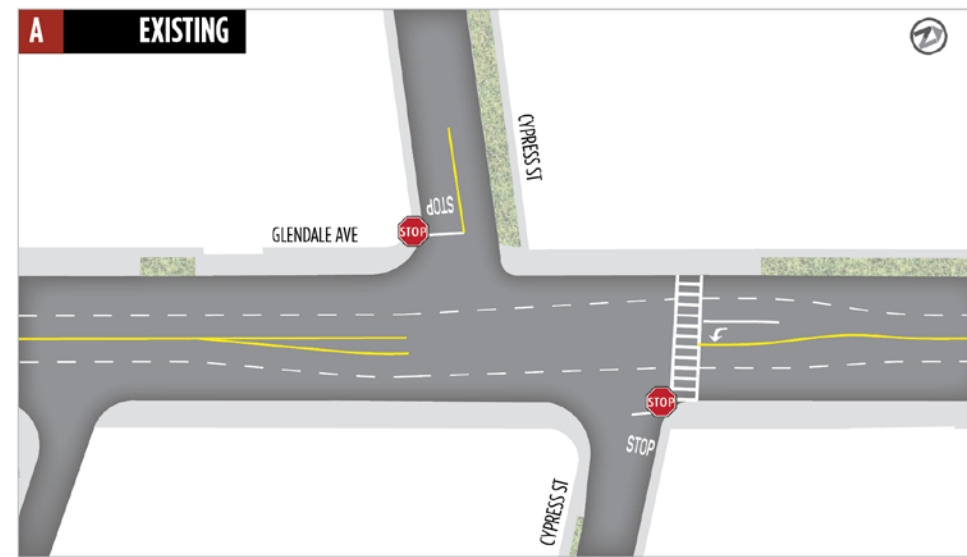
- on-street parking
- bus stop
- Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

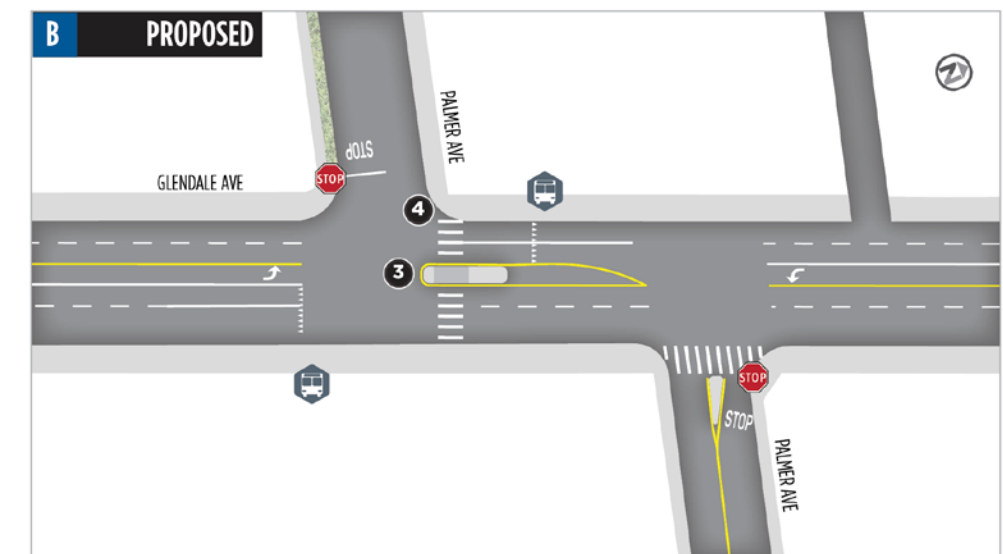
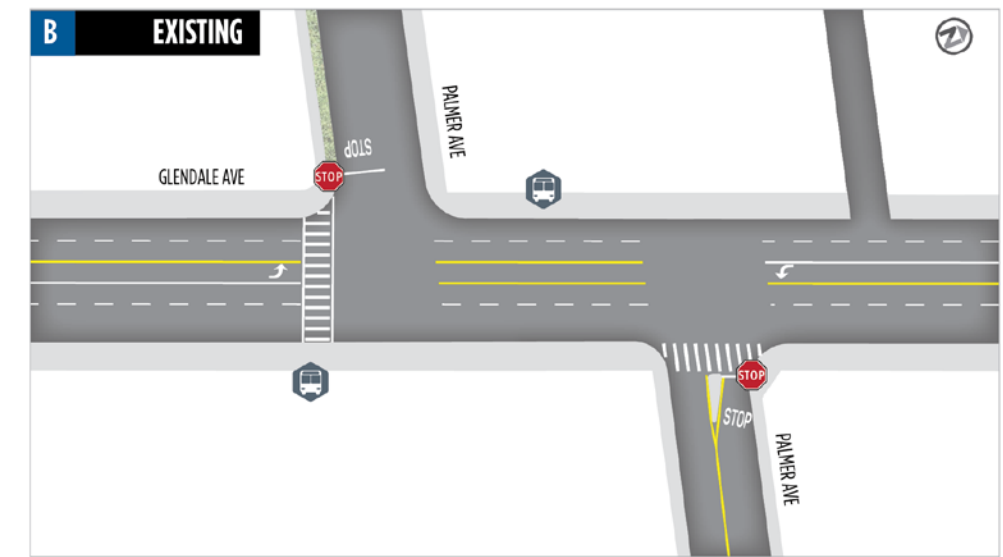
Figure 4-10 Safety Corridor Project 3: Glendale Ave, Maple St to Cypress St



- G1** Upgrade zebra crossing at Raleigh St to median refuge island
- G2** Add curb extension across S Glendale at Windsor
- G3** Upgrade zebra crossing at Garfield to median refuge island; move to north leg to maintain left turns
- G4** Add curb extensions across S Glendale Avenue at Chevy Chase Blvd or consider rechannelization



- 1** Upgrade marked ladder crosswalk to median refuge island
- 2** Extend concrete island to restrict left turning movements



- 3** Upgrade marked ladder crossing at Palmer Ave to median refuge island
- 4** Move crossing to north leg to maintain northbound left turn

GLENDALE PEDESTRIAN PLAN

Data Sources: City of Glendale, Nelson\Nygaard

3 Glendale Ave

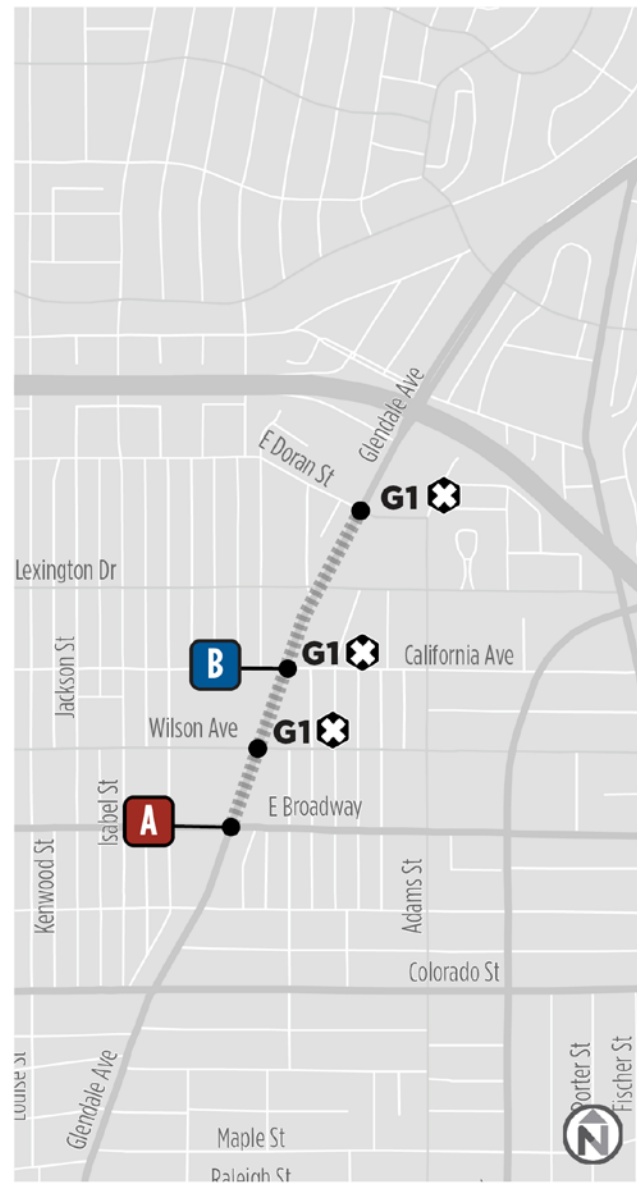
Maple St to Cypress St

Project recommendations also included the Glendale Ave & Cypress St Grant Ready Project.

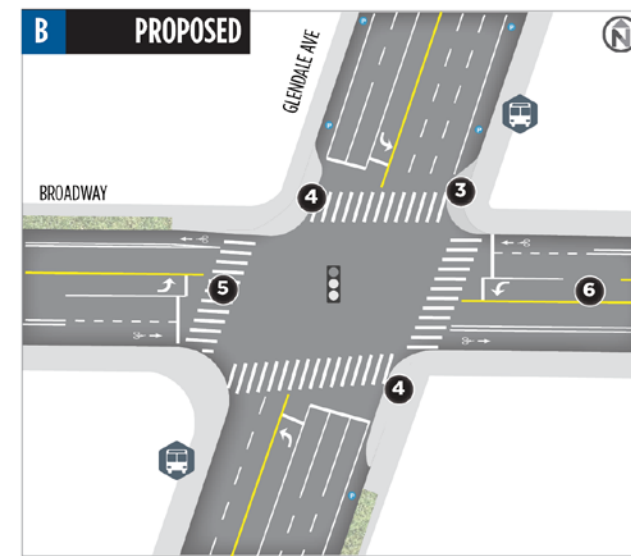
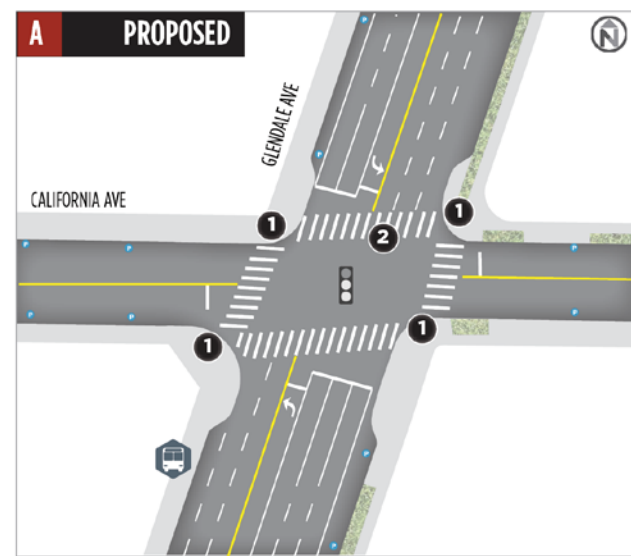
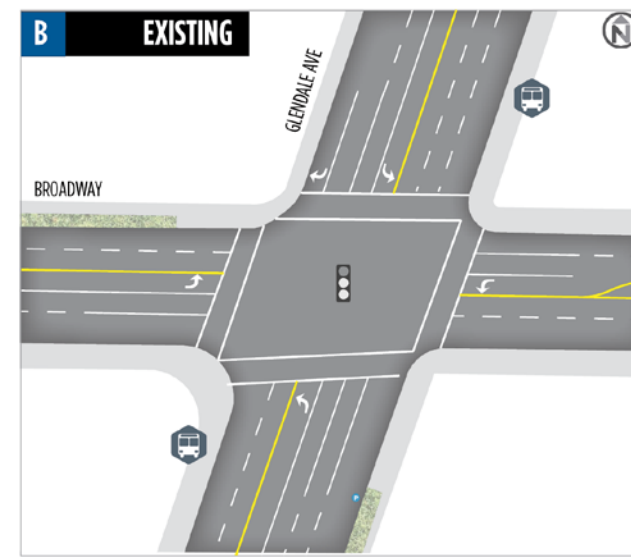
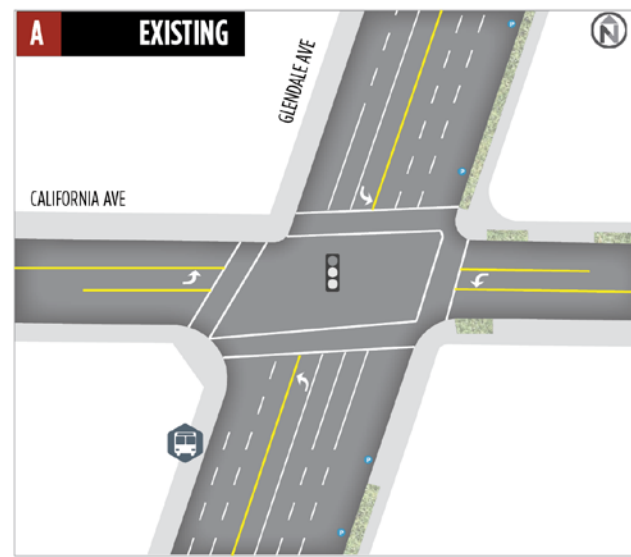
- corridor extents
- zebra crosswalk
- median refuge island
- curb extension
- turn pocket removal
- signal enhancement
- on-street parking
- bus stop
- Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-11 Safety Corridor Project 4: Glendale Ave, Doran St to Broadway



G1 Evaluate removal of left-turn pockets from cross streets at signalized intersections (Doran St, California Ave, Wilson Ave)



- 1 Add curb extensions on Glendale Ave
- 2 Add zebra crosswalk on all approach legs

- 3 Add curb extension
- 4 Remove right-turn pocket and add curb extension
- 5 Add zebra crosswalk to all approach legs
- 6 E Broadway configuration see Corridor No. 1

GLENDALE PEDESTRIAN PLAN

Data Sources: City of Glendale, Nelson\Nygaard

4 Glendale Ave

Doran St to Broadway

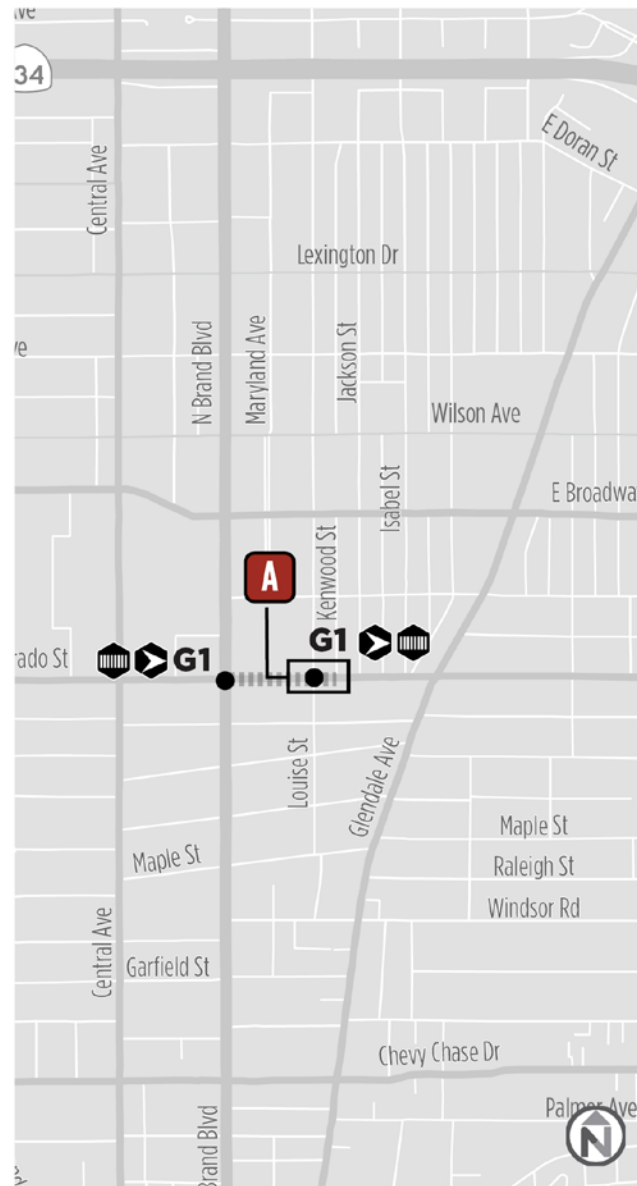
Project recommendations also included in Broadway and Glendale Ave First Last Mile Analysis (Study Area 2).

- |||| corridor extents
- ▬ zebra crosswalk
- ⚠ median refuge island
- ➡ curb extension
- ⊗ turn pocket removal
- 📶 signal enhancement

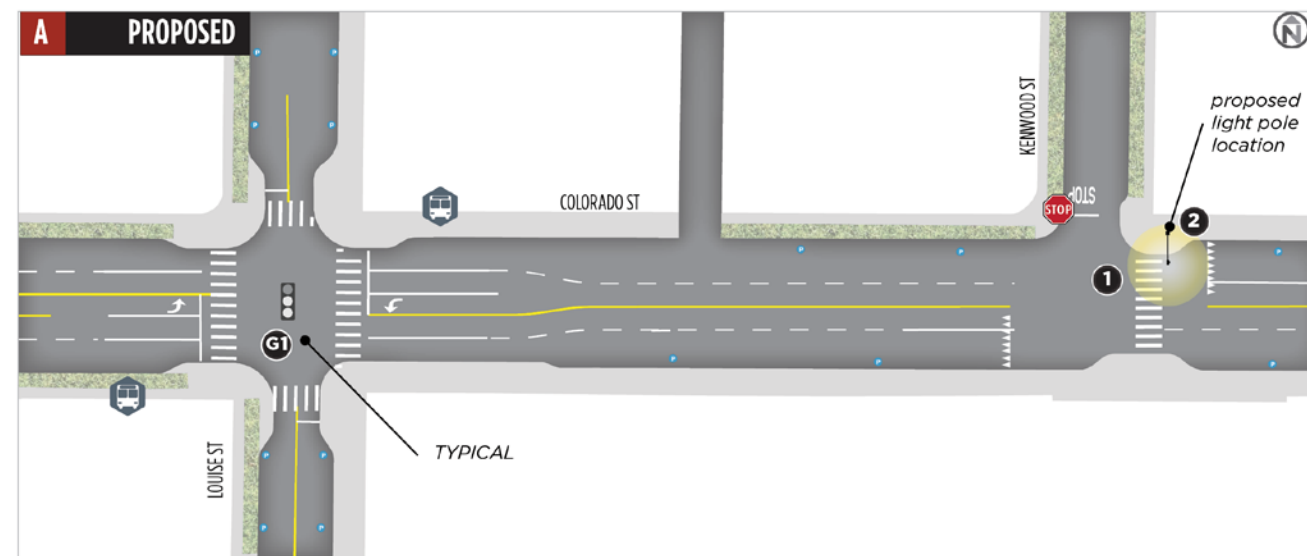
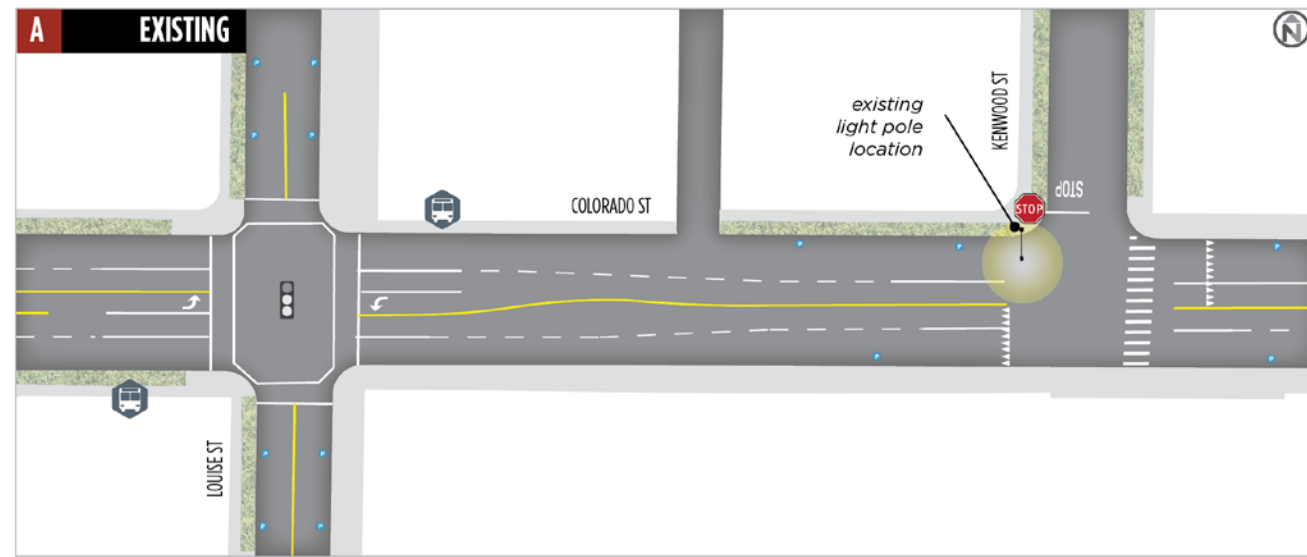
- P on-street parking
- 🚌 bus stop
- 👤 Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-12 Safety Corridor Project 5: Colorado St, Brand Blvd to Kenwood St



G1 Add high visibility crosswalk and curb extensions across Colorado St at all signalized intersections












1 Add curb extensions to crosswalk at Kenwood Street
2 Move light pole to NE corner

GLENDALE PEDESTRIAN PLAN

Data Sources: City of Glendale, Nelson\Nygaard

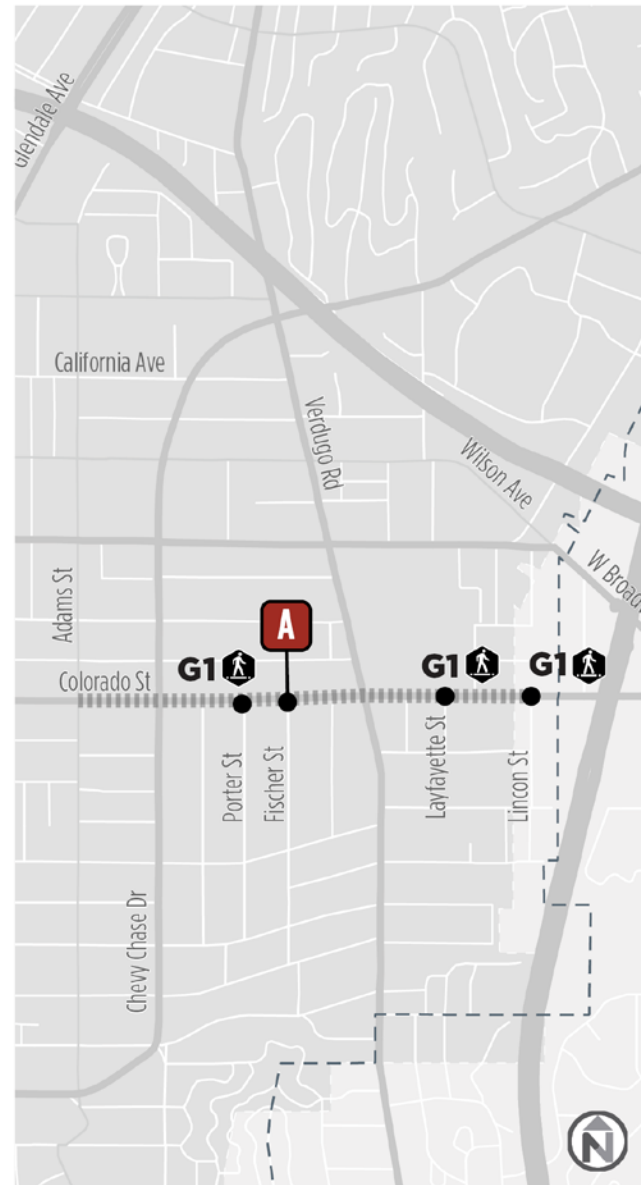
5 Colorado St

Brand Blvd to Kenwood St

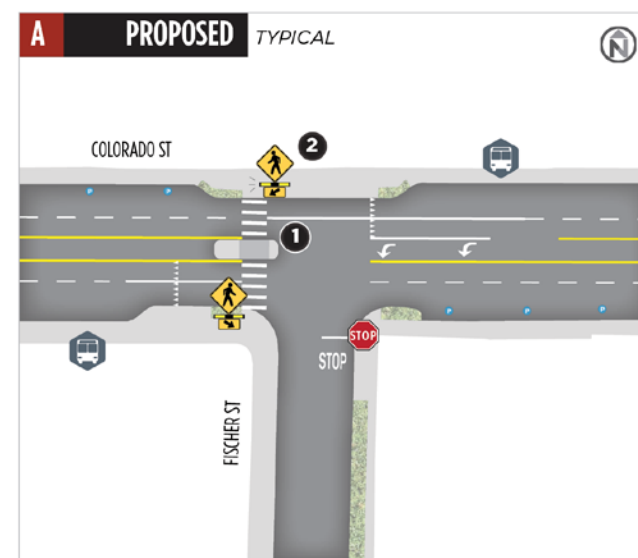
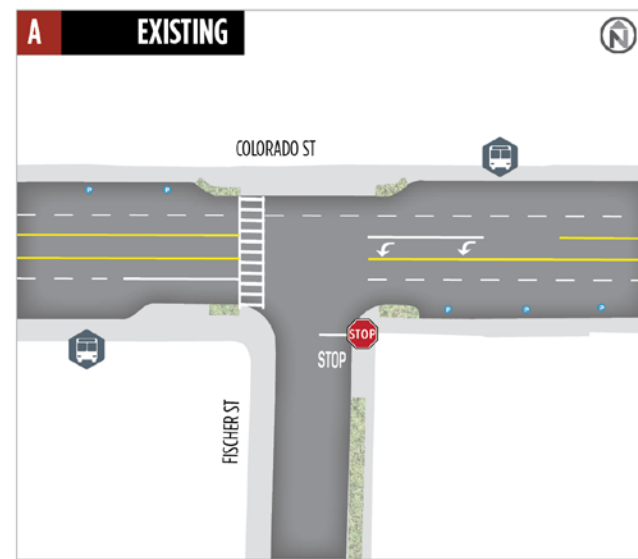
-  corridor extents
-  curb extension
-  on-street parking
-  zebra crosswalk
-  turn pocket removal
-  bus stop
-  median refuge island
-  signal enhancement
-  Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-13 Safety Corridor Project 6: Colorado St, Adams St to Lincoln Ave



G1 Upgrade marked ladder crossing to median refuge island at Porter St, Lincoln St, Fischer St, and Lafayette St



- 1** Upgrade marked ladder crossing to median refuge island
- 2** Replace existing circular flashing beacon system with rectangular rapid flashing beacons (RRFB)

GLENDALE PEDESTRIAN PLAN

Data Sources: City of Glendale, Nelson\Nygaard

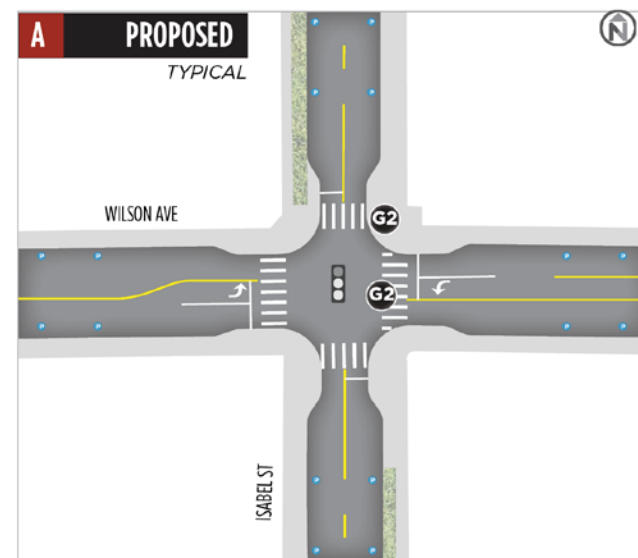
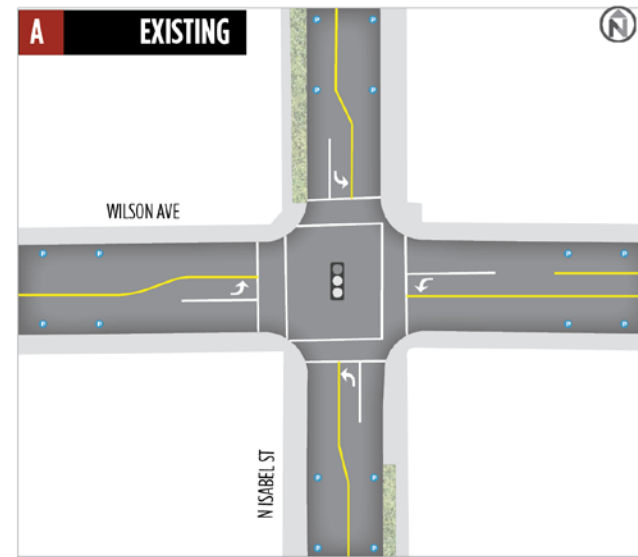
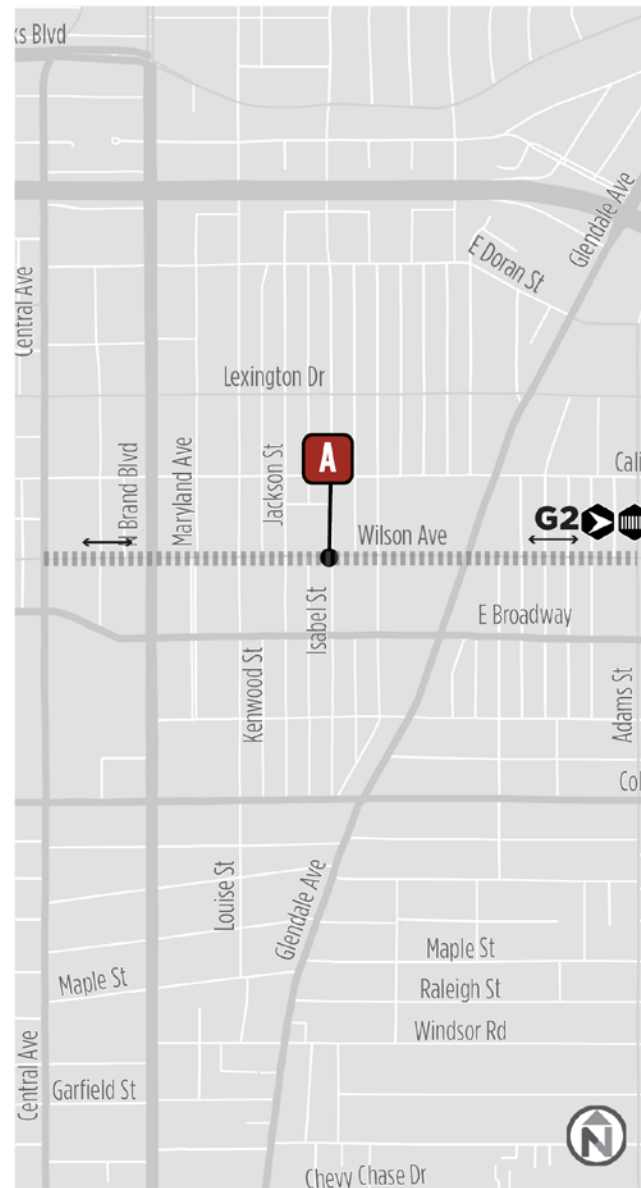
6 Colorado St

Adams St to Lincoln Ave

- corridor extents
- zebra crosswalk
- median refuge island
- curb extension
- turn pocket removal
- signal enhancement
- on-street parking
- bus stop
- Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-14 Safety Corridor Project 7: Wilson Ave, Central Ave to Adams St



- G1** Designate Wilson Ave as a pedestrian priority street
- G2** Add curb extensions and zebra crosswalk across all feasible legs

GLENDALE PEDESTRIAN PLAN

Data Sources: City of Glendale, Nelson\Nygaard

7 Wilson Ave

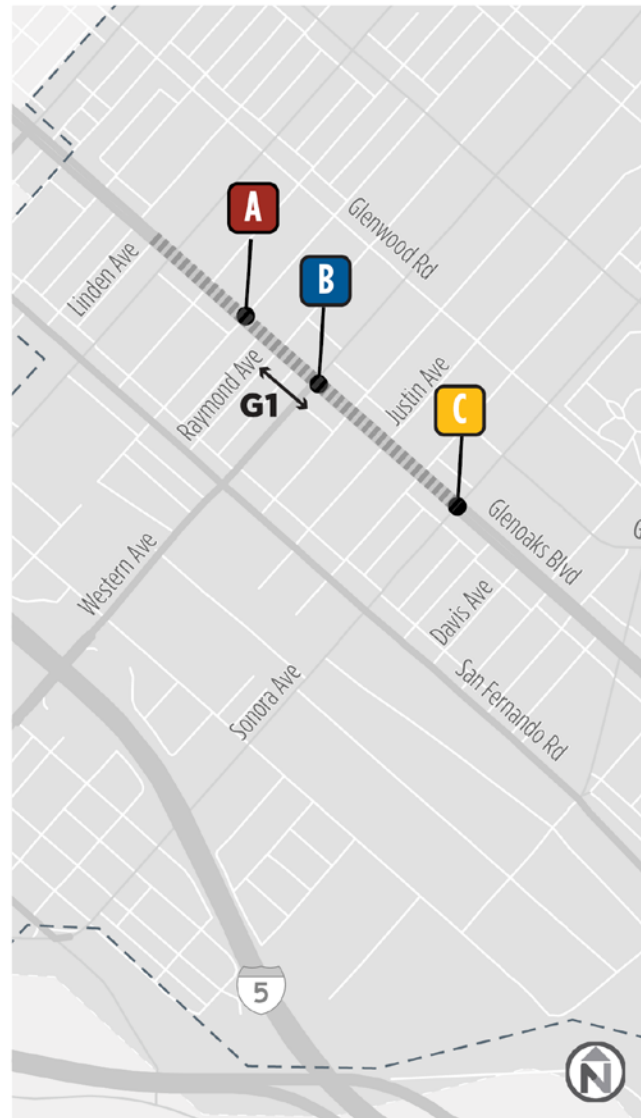
Central Ave to Adams St

Project recommendations also included in Broadway and Glendale Ave First Last Mile Analysis (Study Area 2).

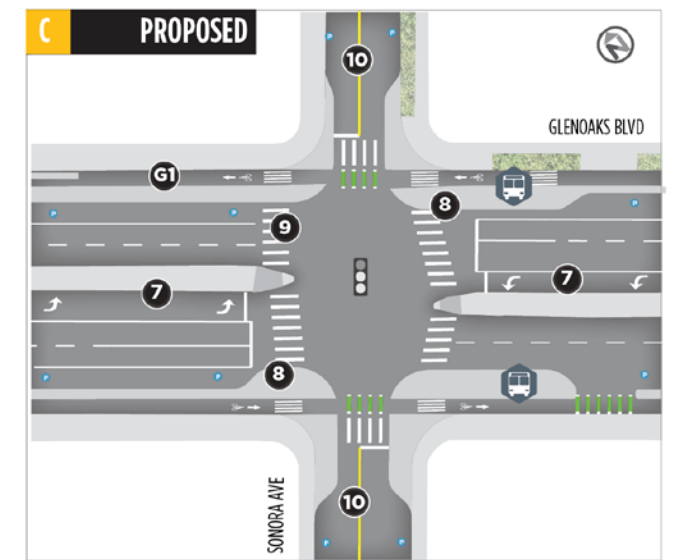
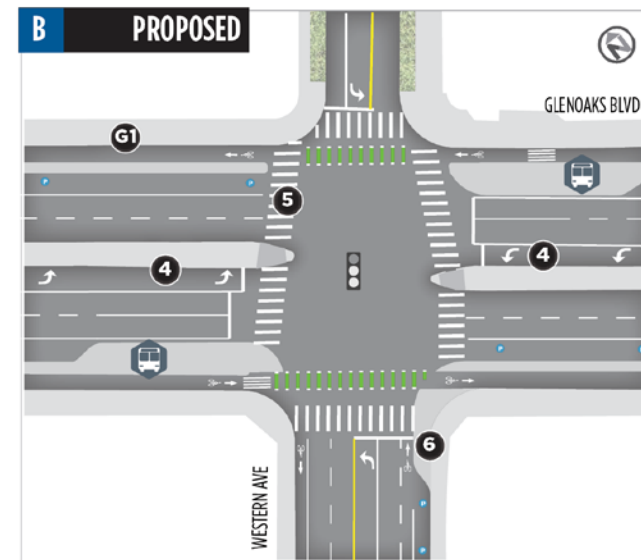
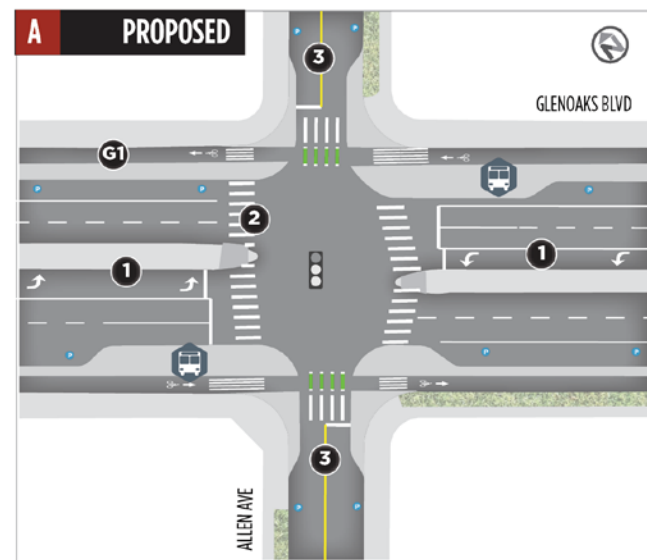
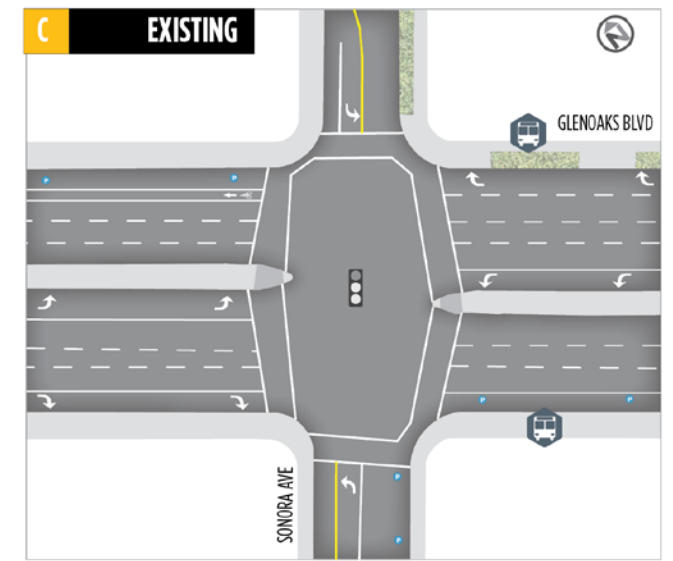
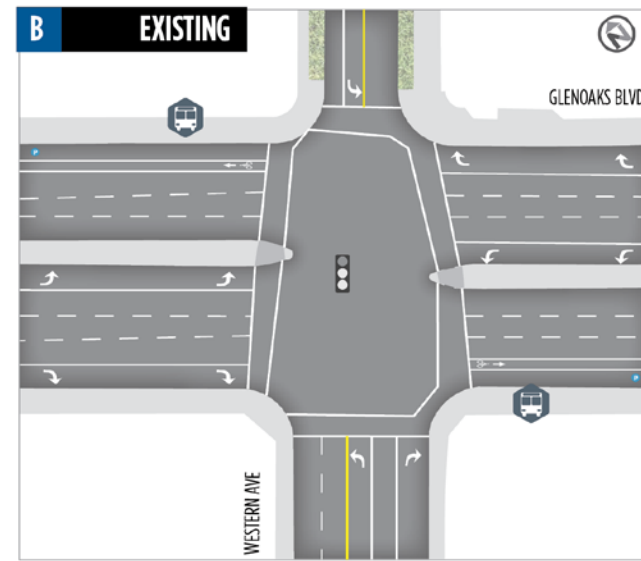
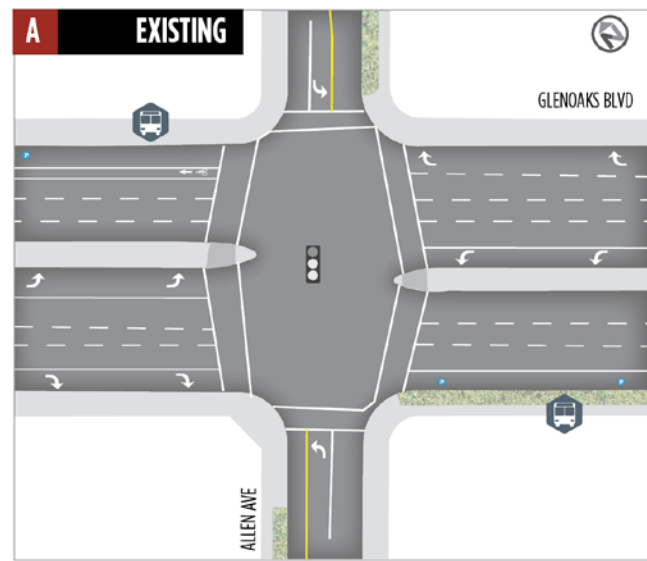
- corridor extents
- curb extension
- on-street parking
- zebra crosswalk
- turn pocket removal
- bus stop
- median refuge island
- signal enhancement
- Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-15 Safety Corridor Project 8: Glenoaks Blvd, Linden Ave to Sonora Ave



G1 Protected bike lanes, Bus Rapid Transit (BRT), and streetcar could all be feasible with lane reduction; project drawings show one option



- 1** Maintain fully protected left-turn phase
- 2** Add zebra crosswalk to all approach legs
- 3** Consider removing left-turn pockets from Allen Ave and add curb extensions (design to accommodate bike lanes)

- 4** Maintain fully protected left-turn phase
- 5** Add zebra crosswalk to all approach legs
- 6** Remove Western Ave northbound right-turn lane and add curb extension (design to accommodate bike lanes)

- 7** Maintain fully protected left-turn phase
- 8** Remove eastbound and westbound right-turn lane; add curb extensions
- 9** Add zebra crosswalk to all approach legs
- 10** Evaluate left-turn pocket removal from Sonora Ave and add curb extensions

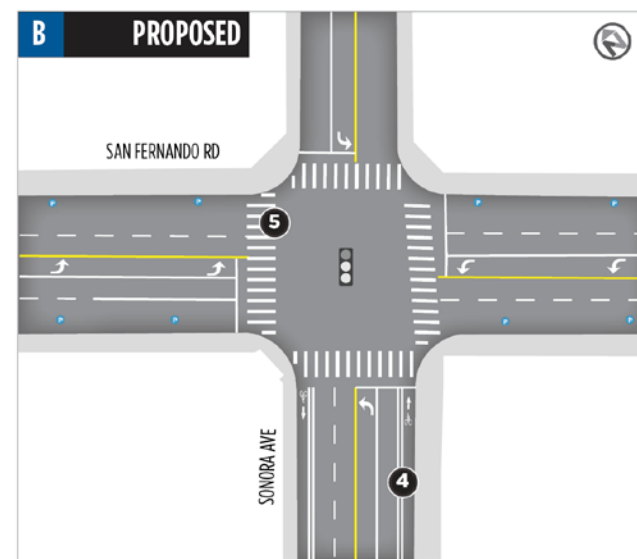
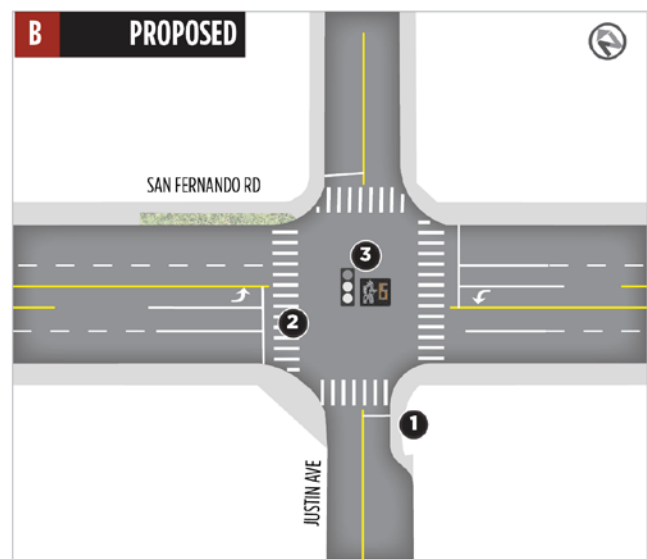
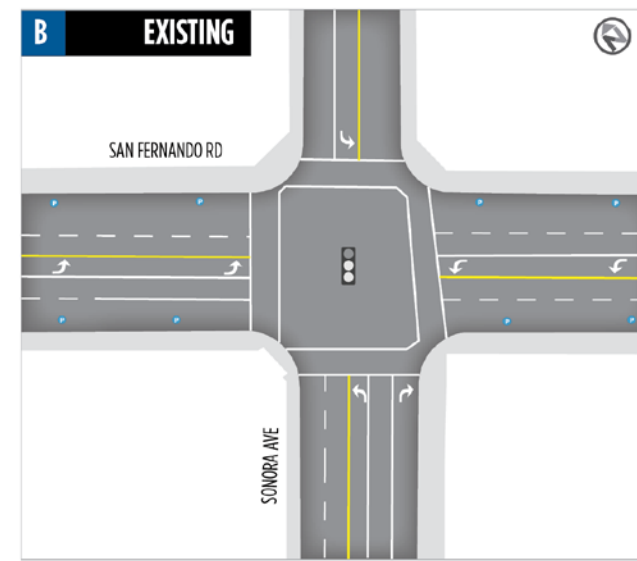
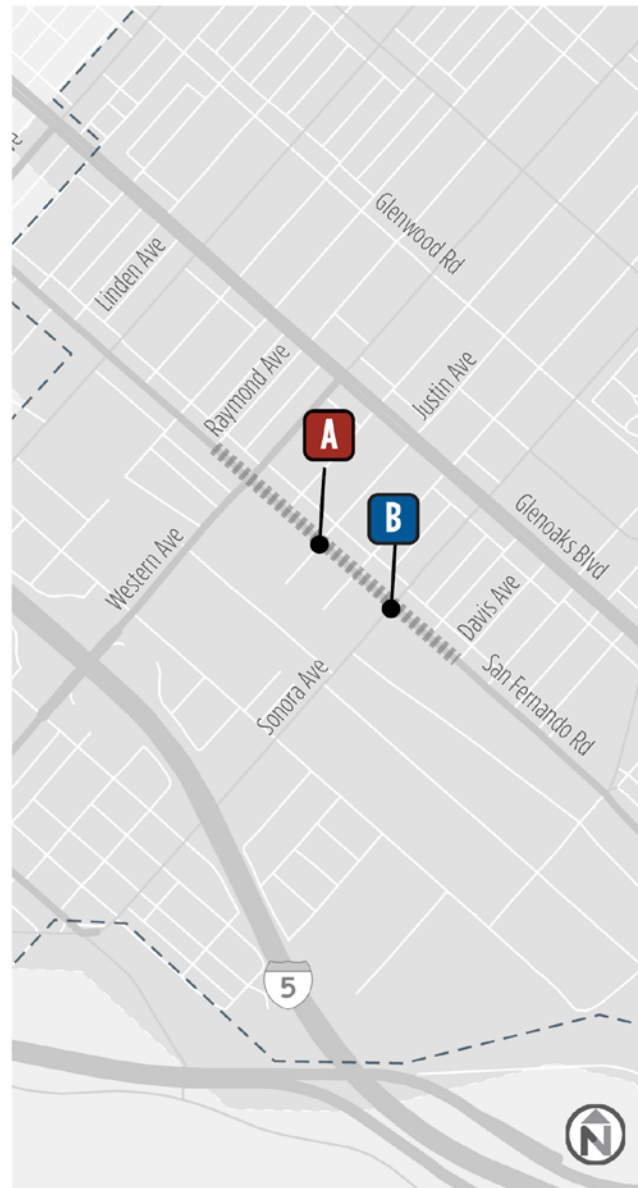
8 Glenoaks Blvd

Linden Ave to Sonora Ave

- corridor extents
- zebra crosswalk
- median refuge island
- curb extension
- turn pocket removal
- signal enhancement
- on-street parking
- bus stop
- Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-16 Safety Corridor Project 9: San Fernando Rd, Raymond Ave to Davis Ave



- 1 Reconstruct curb ramp on south leg of Justin Ave and align crosswalks
- 2 Add zebra crosswalk to all approach legs
- 3 Add protected left turns off San Fernando Ave or pedestrian head start signal treatment

- 4 Evaluate opportunities to install continuous, safe bicycle facility through intersection
- 5 Add zebra crosswalk to all approach legs

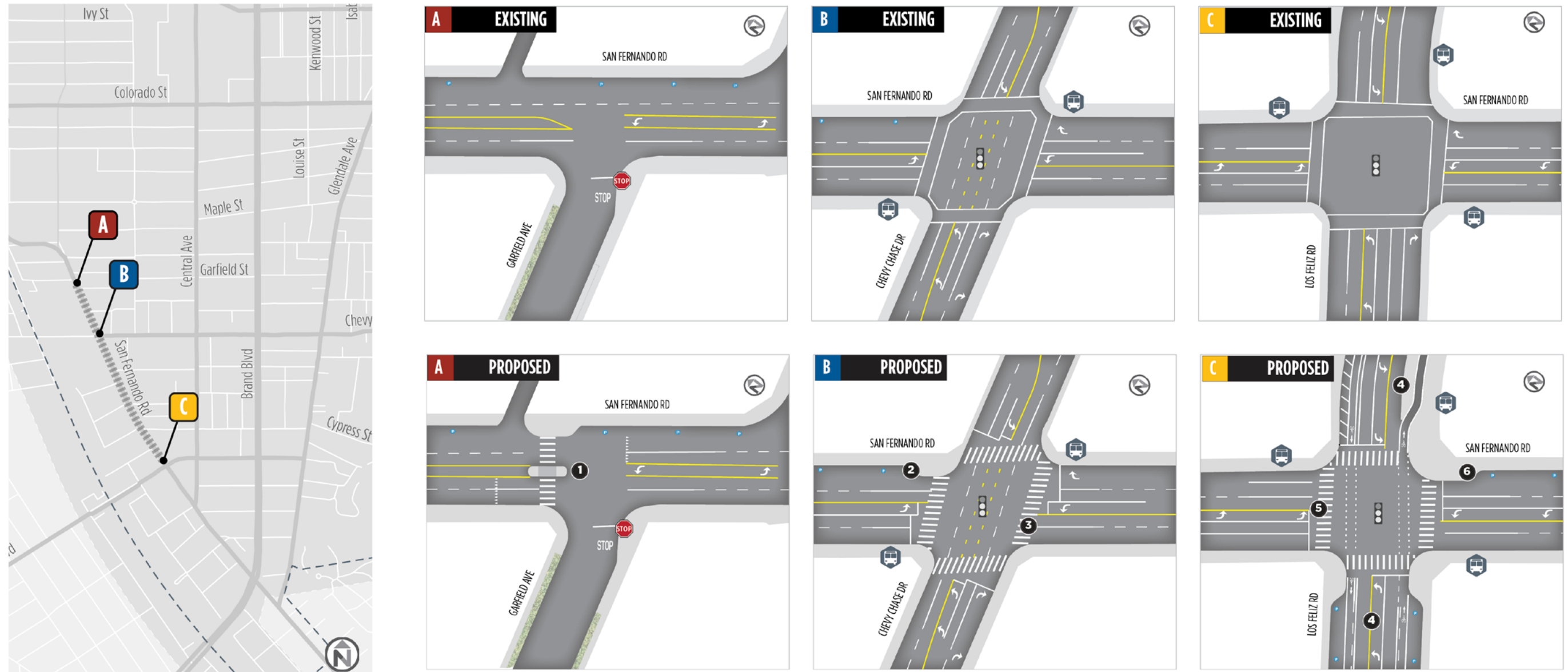
9 San Fernando Rd

Raymond Ave to Davis Ave

- ||||| corridor extents
- ▣ curb extension
- P on-street parking
- ▣ zebra crosswalk
- ✕ turn pocket removal
- 🚌 bus stop
- 🚶 median refuge island
- 📶 signal enhancement
- 🚶 Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-17 Safety Corridor Project 11: San Fernando Rd, Garfield Ave to Los Feliz Rd



1 Add curb extension and median refuge island across San Fernando Ave at Garfield Ave (north leg to maintain turning movements off of San Fernando Ave)

2 Add curb extensions
3 Add zebra crosswalk to all approach legs

4 Make Los Feliz Rd a complete street that emphasizes transit and adds a buffered bike lane, converting five lanes to three lanes from city limit to Glendale Ave
5 Add zebra crosswalk to all approach legs
6 Add curb extension across San Fernando Rd (design for proposed buffered bike lanes on Los Feliz Rd)

11 San Fernando Rd

Garfield Ave to Los Feliz Rd

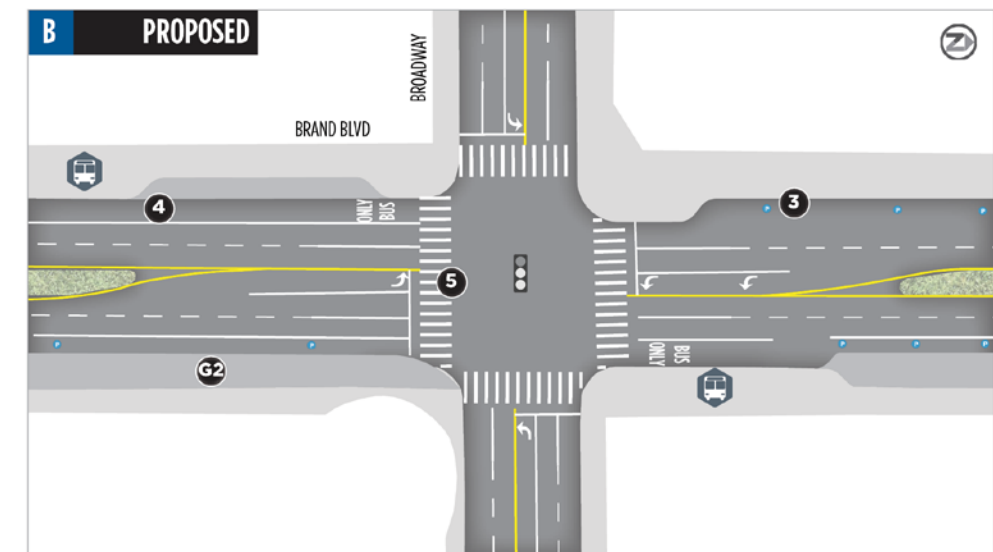
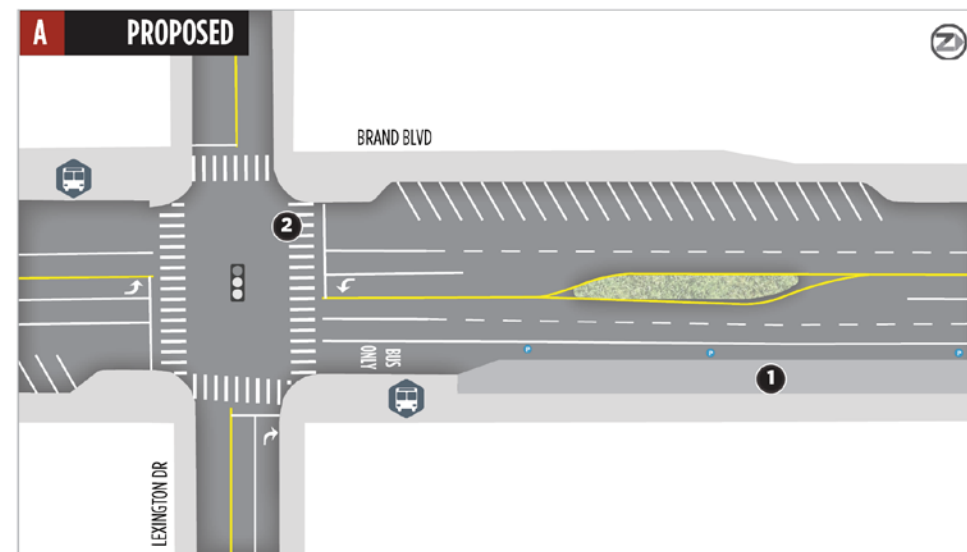
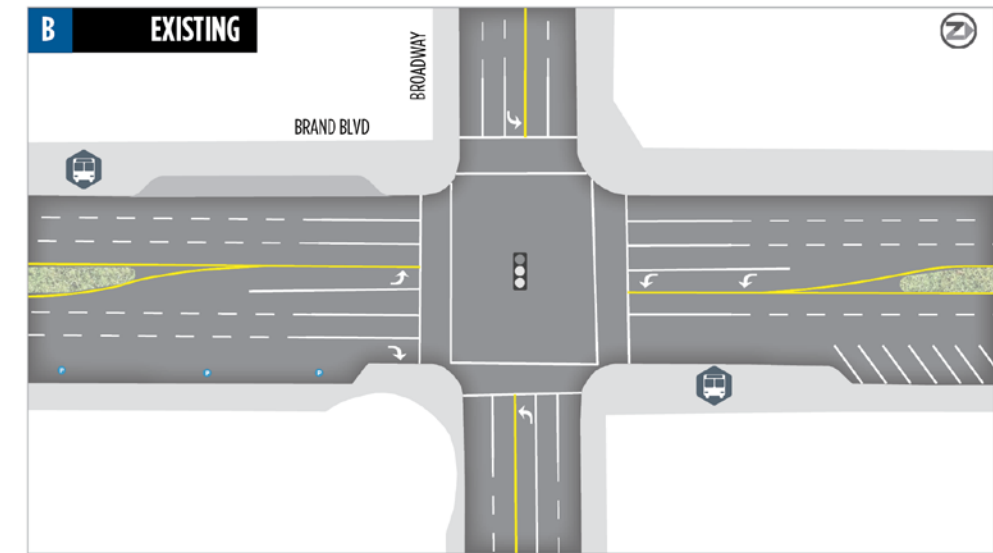
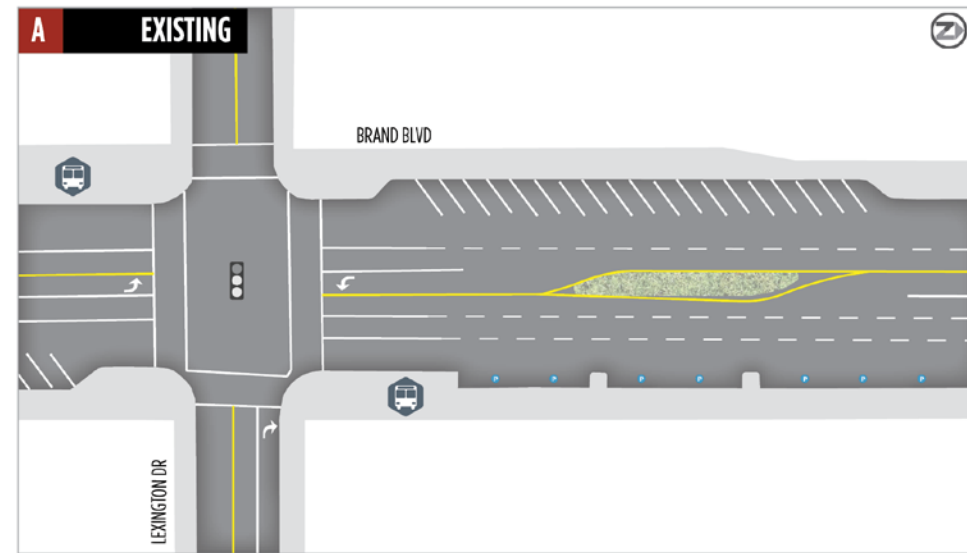
- corridor extents
- zebra crosswalk
- median refuge island
- curb extension
- turn pocket removal
- signal enhancement
- on-street parking
- bus stop
- Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-18 Safety Corridor Project 12: Brand Blvd, Doran St to Colorado St



- G1** Make Brand Ave consistently two lanes each way plus median or turn pockets at intersections
- G2** Add new pedestrian space and eliminate right-turn lanes
- G3** Add zebra crosswalk at all mid-block crossings; add curb extensions
- G4** Add protected left-turn phase at Caruso Ave



- 1** Expand sidewalk space between Lexington St and Milford St and eliminate northbound lane
- 2** Add zebra crosswalk to all approach legs

- 3** Replace third southbound lane north of Broadway Blvd with parallel parking
- 4** Replace third southbound lane with bus lane to bus stop (from Wilson to Colorado)
- 5** Add zebra crosswalk markings to all approach legs

GLENDALE PEDESTRIAN PLAN

Data Sources: City of Glendale, Nelson\Nygaard

12 Brand Blvd

Doran St to Colorado St

Project recommendations also included in Brand Blvd and 134 Freeway First Last Mile Analysis (Study Area 1).

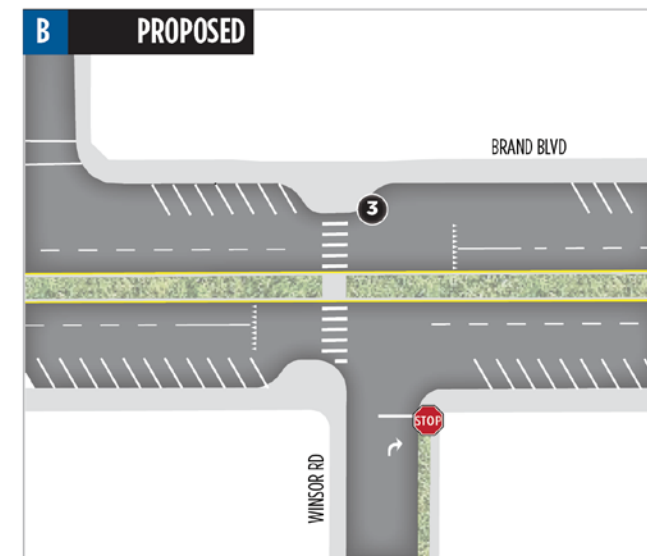
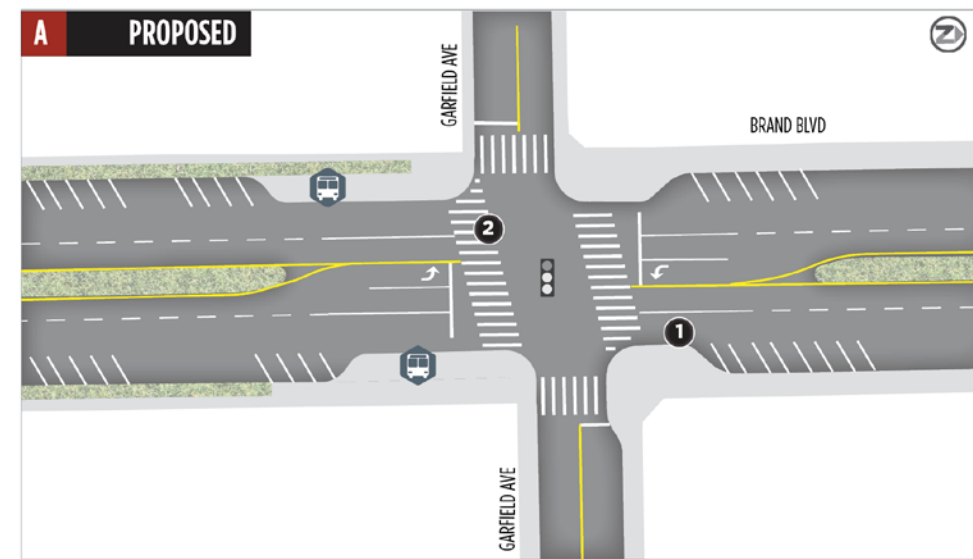
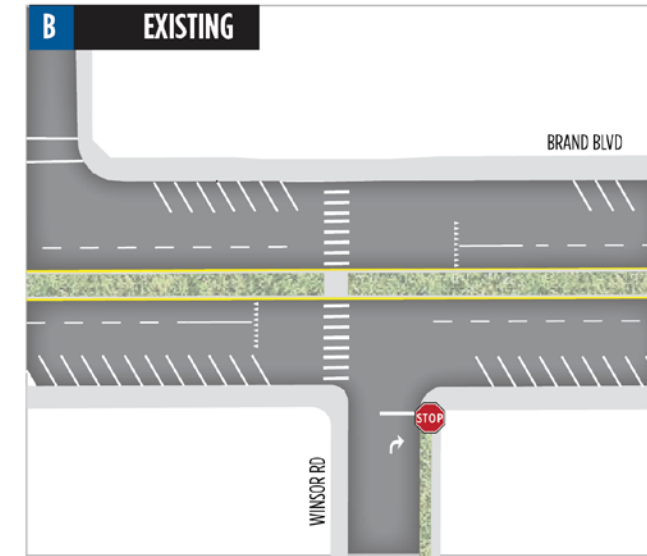
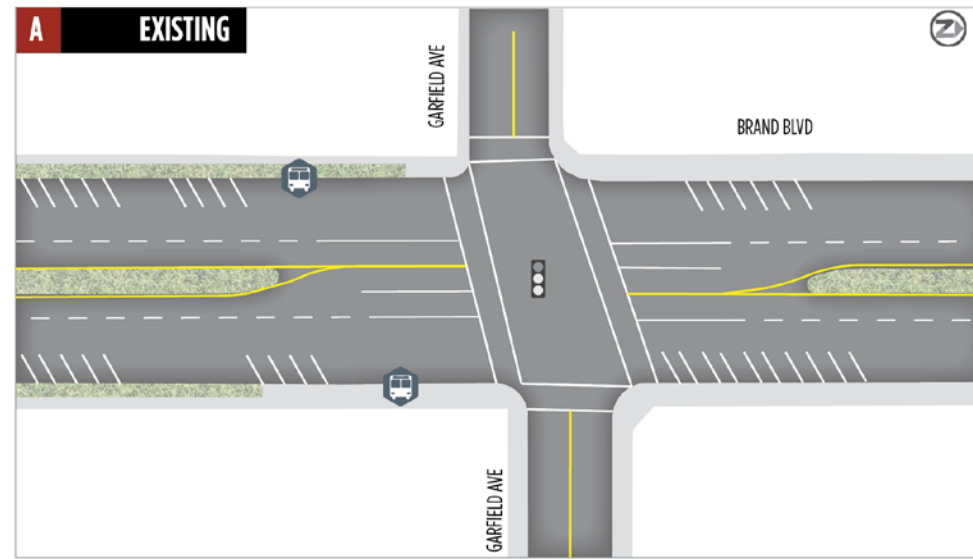
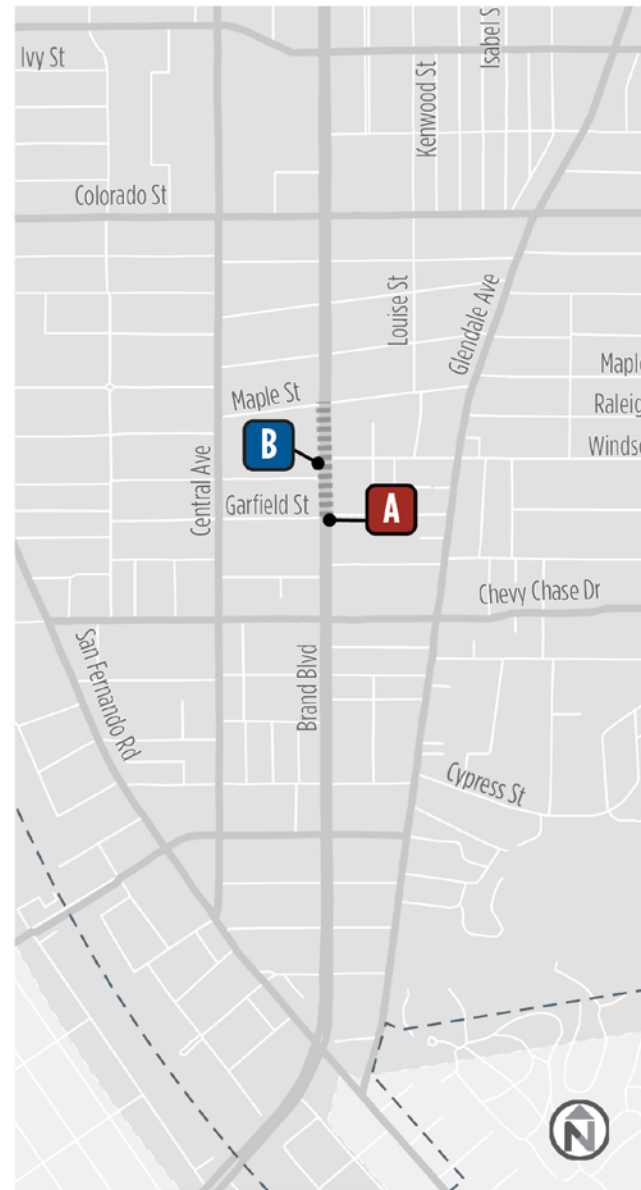
- ▬▬▬ corridor extents
- ▬▬▬ zebra crosswalk
- ▬▬▬ median refuge island

- ▬▬▬ curb extension
- ▬▬▬ turn pocket removal
- ▬▬▬ signal enhancement

- P on-street parking
- ▬▬▬ bus stop
- ▬▬▬ Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-19 Safety Corridor Project 13: Brand Blvd, Maple St to Garfield St



- 1 Add curb extensions across all feasible legs
- 2 Add zebra crosswalk to all approach legs

- 3 Add curb extensions to mid-block crosswalk

GLENDALE PEDESTRIAN PLAN

Data Sources: City of Glendale, Nelson\Nygaard

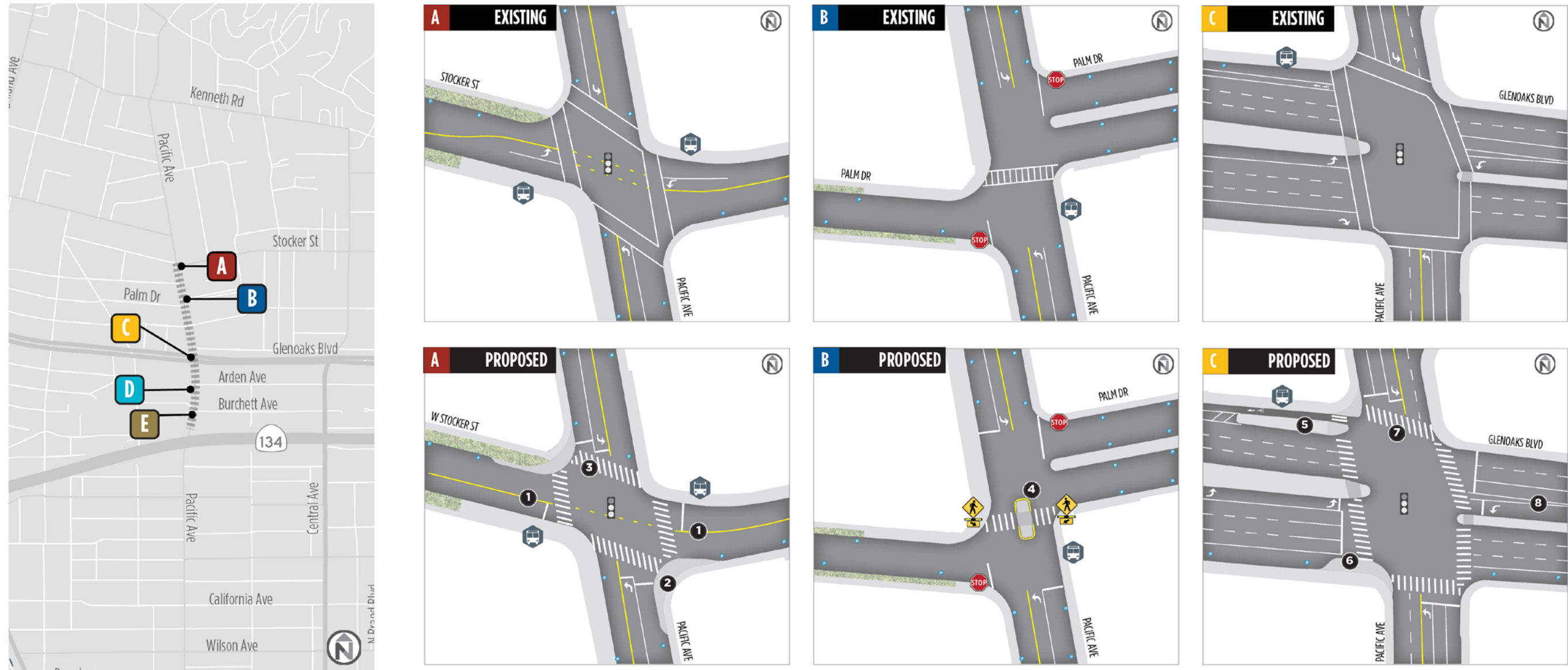
13 Brand Blvd

Maple St to Garfield St

- corridor extents
- zebra crosswalk
- median refuge island
- curb extension
- turn pocket removal
- signal enhancement
- on-street parking
- bus stop
- Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-20 Safety Corridor Project 14: Pacific Ave, Stocker St to Burchett St



- 1 Remove left-turn pocket and add curb extension
- 2 Remove parking near intersection corners and replace with curb extensions
- 3 Add zebra crosswalk at all approach legs

- 4 Add median refuge island and Rectangular Rapid Flash Beacon (RRFB)

- 5 Add curb extension with floating bus stop (or add curb extension at northwest corner and move bus stop westbound)
- 6 Remove eastbound right-turn pocket and add curb extension
- 7 Add zebra crosswalk at all approach legs
- 8 See Corridor No. 8 for full extent of Glenoaks Blvd improvements, pending streetcar feasibility study

GLENDALE PEDESTRIAN PLAN

Data Sources: City of Glendale, Nelson\Nygaard

14 Pacific Ave

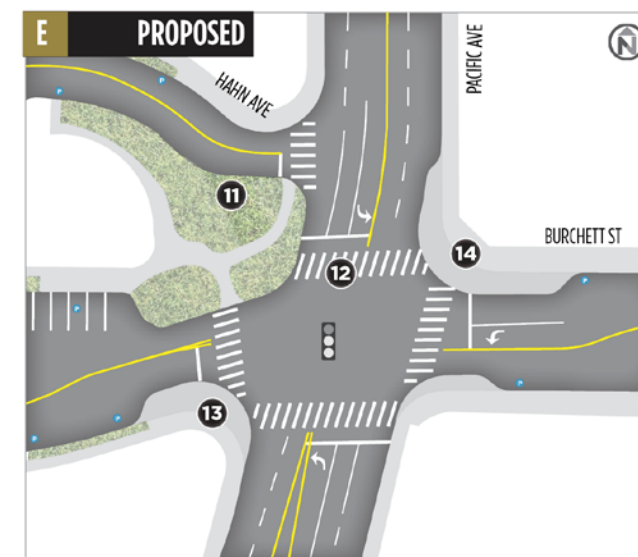
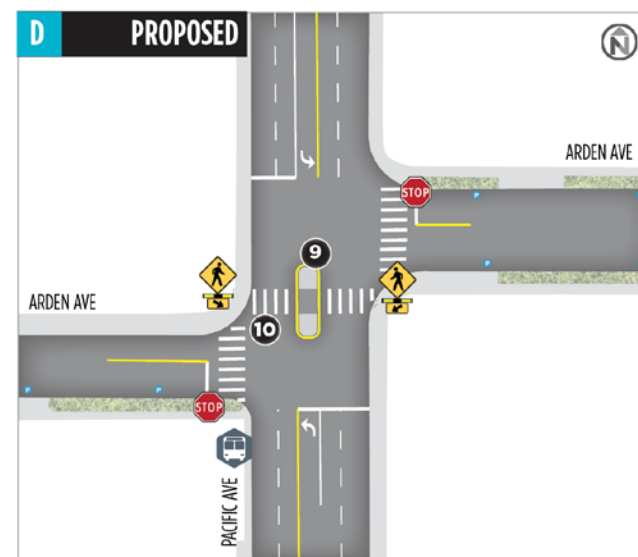
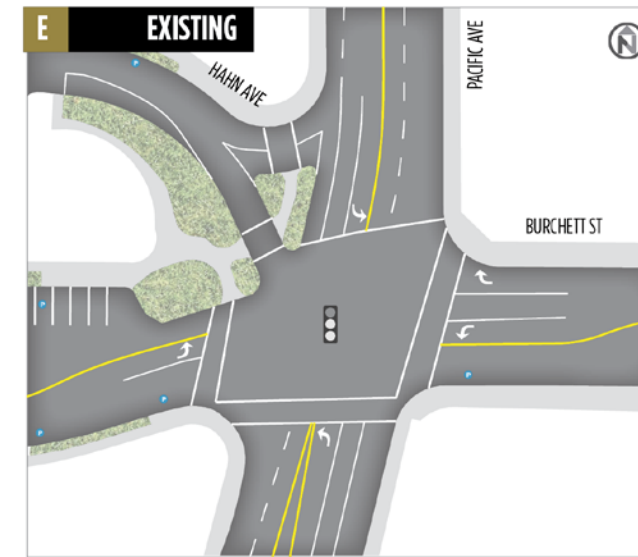
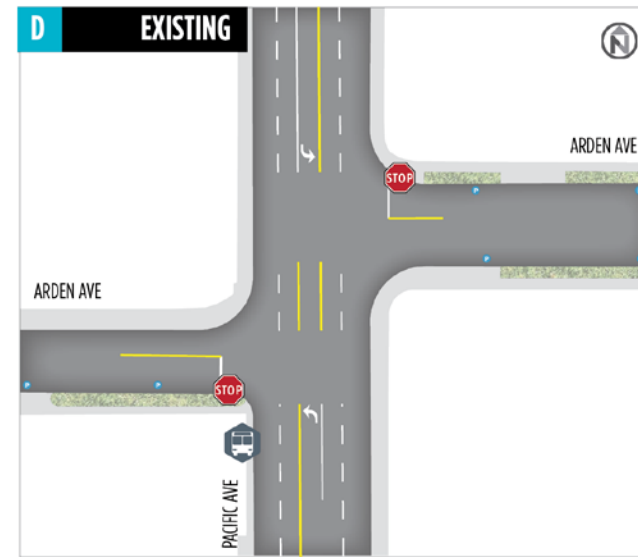
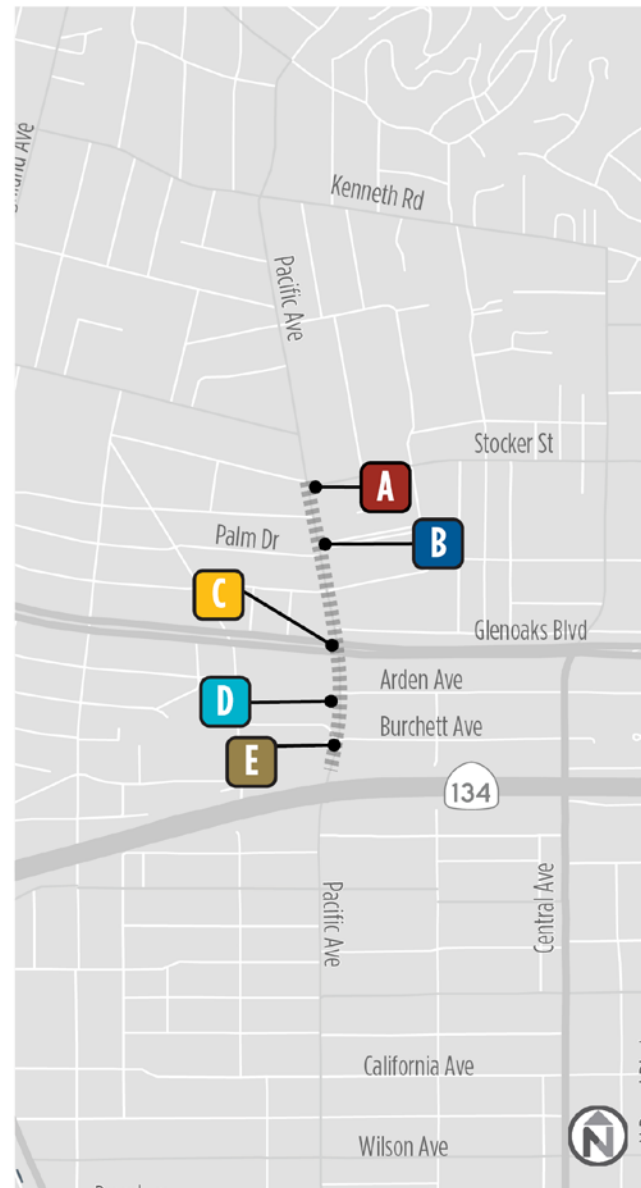
Stocker St to Burchett St

Project recommendations also included in Stocker St & Pacific Ave Grant Ready Project.

- ▬▬▬ corridor extents
- ▬▬▬ zebra crosswalk
- ▬▬▬ median refuge island
- ▬▬▬ curb extension
- ▬▬▬ turn pocket removal
- ▬▬▬ signal enhancement
- P on-street parking
- bus stop
- Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-21 Safety Corridor Project 14: Pacific Ave, Stocker St to Burchett St cont.



- 9** Add median refuge island and Rectangular Rapid Flash Beacon (RRFB)
- 10** Add zebra crosswalk

- 11** Close northbound slip lane onto Hahn Ave and replace with landscaping; install "No Left Turn" sign
- 12** Add zebra crosswalk to all approach legs
- 13** Remove eastbound left-turn pocket and add curb extension
- 14** Remove westbound right-turn pocket and add curb extension

GLENDALE PEDESTRIAN PLAN

Data Sources: City of Glendale, Nelson\Nygaard

14 Pacific Ave

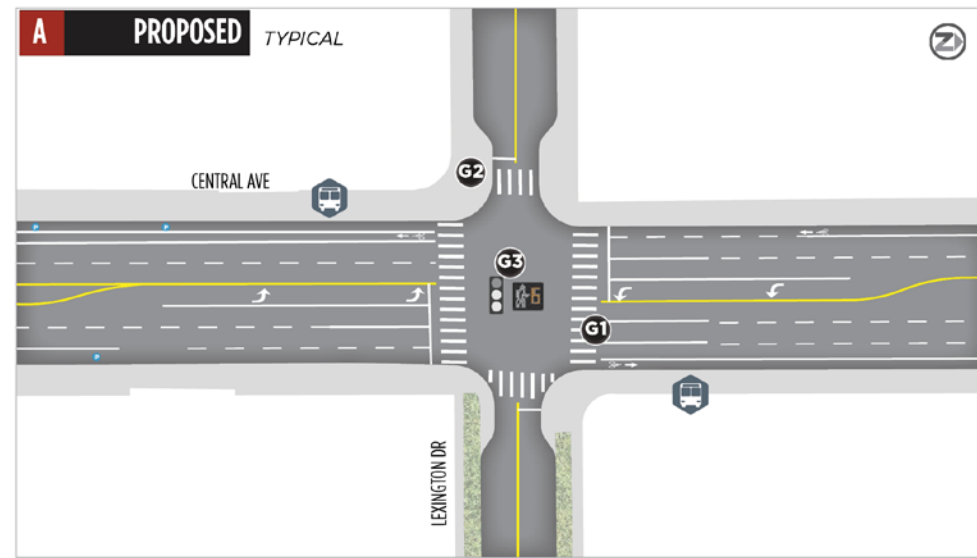
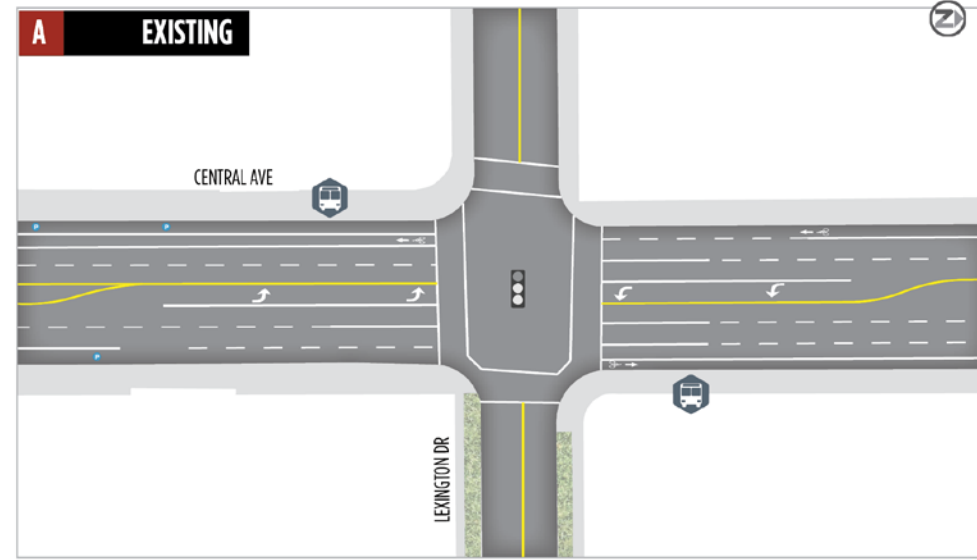
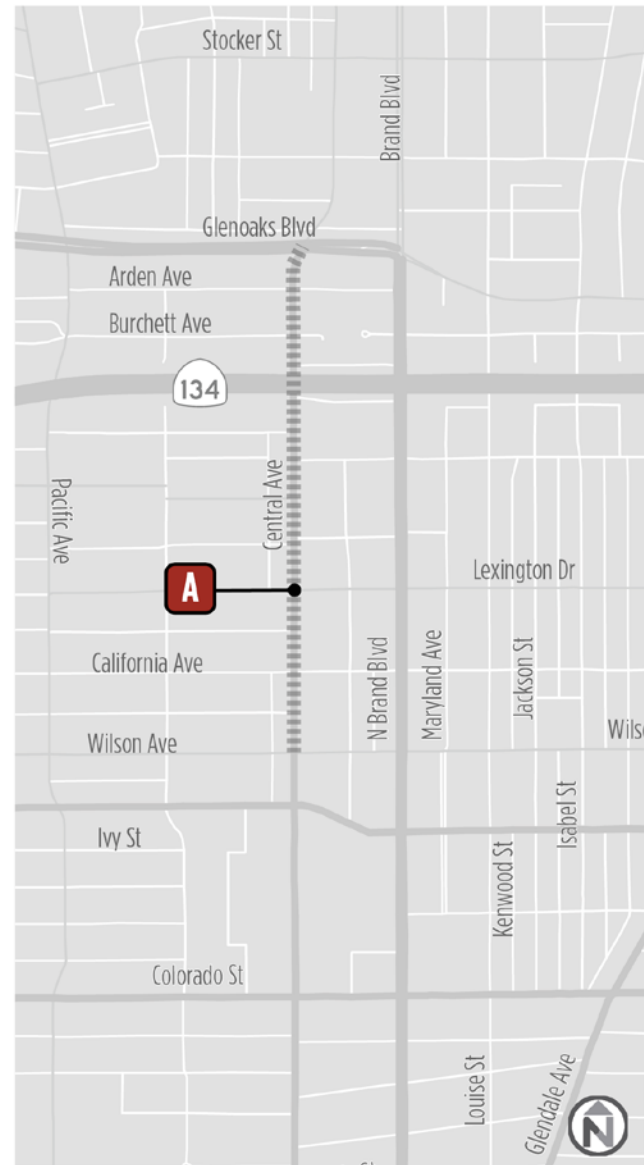
Stocker St to Burchett St

Project recommendations also included in Stocker St & Pacific Ave Grant Ready Project.

- corridor extents
- zebra crosswalk
- median refuge island
- curb extension
- turn pocket removal
- signal enhancement
- on-street parking
- bus stop
- Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-22 Safety Corridor Project 15: Central Ave, Glenoaks Blvd to Wilson Ave



- G1** Add zebra crossing at all legs at all signalized intersections
- G2** Consider curb extension at cross street with on-street parking
- G3** Install pedestrian head starts at intersections with high pedestrian volumes










GLENDALE PEDESTRIAN PLAN

Data Sources: City of Glendale, Nelson\Nygaard

15 Central Ave

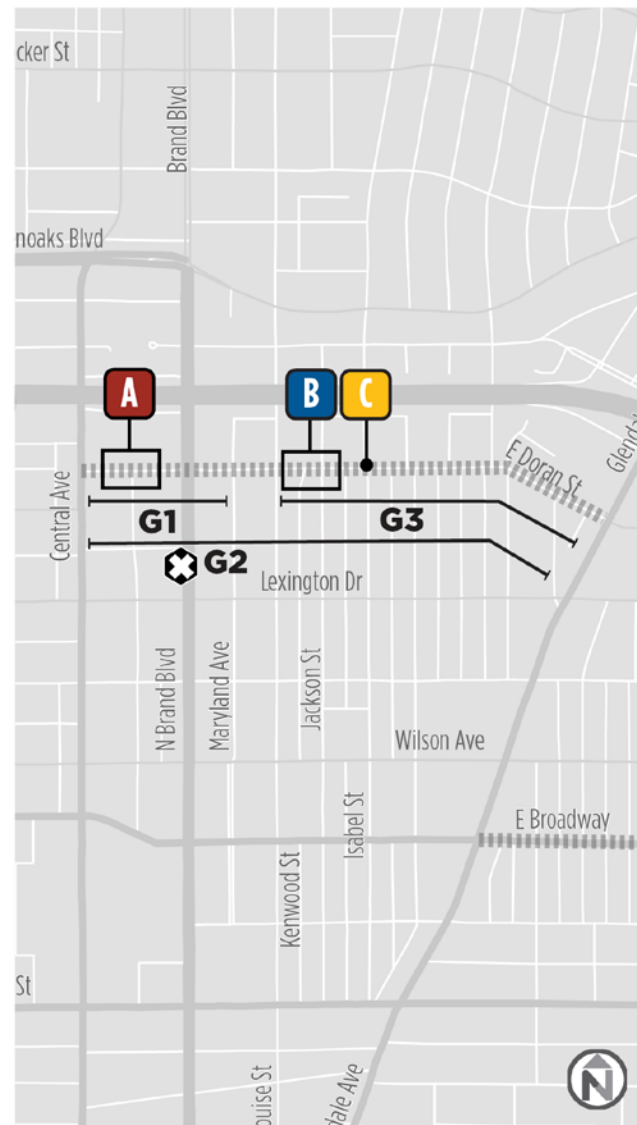
Glenoaks Blvd to Wilson Ave

Project recommendations also included in Brand Blvd and 134 Freeway First Last Mile Analysis (Study Area 1).

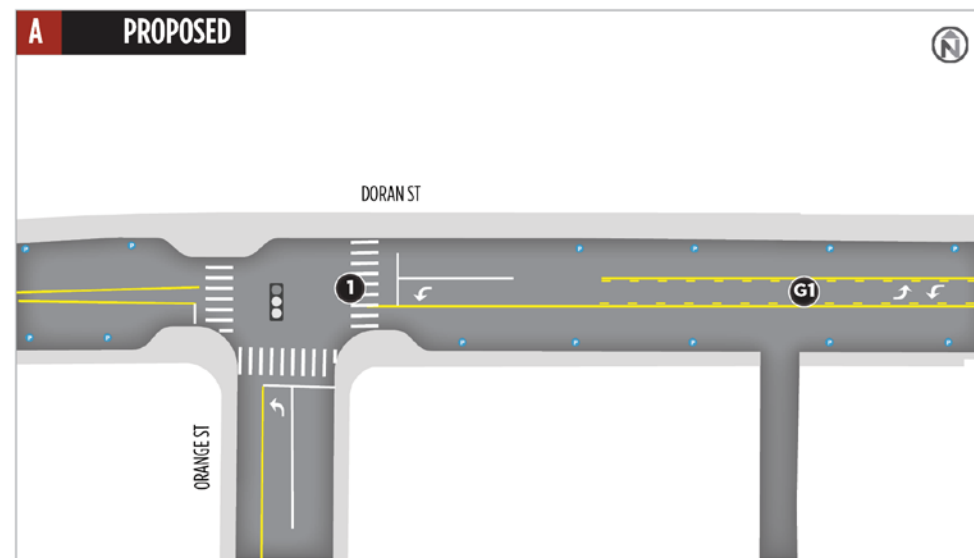
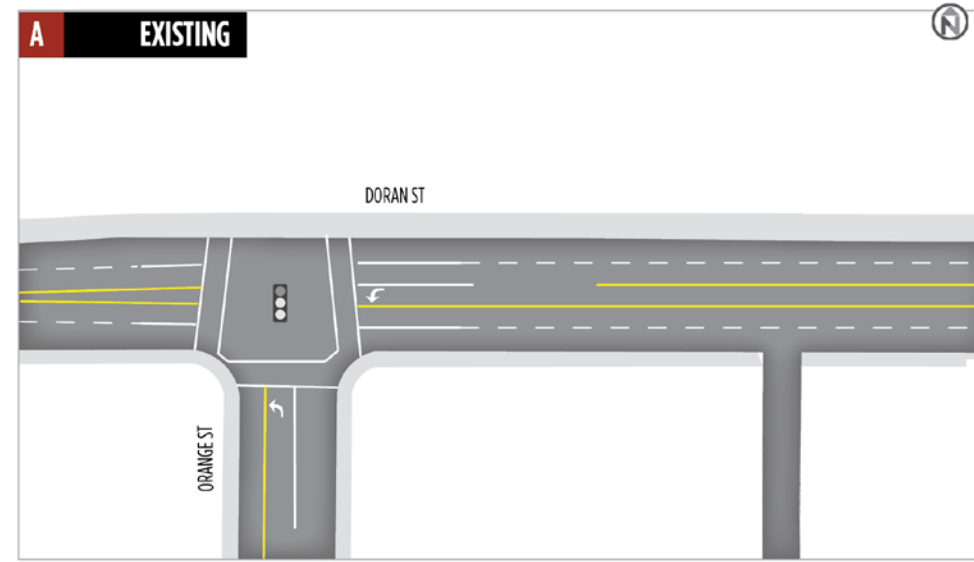
-  corridor extents
-  zebra crosswalk
-  median refuge island
-  curb extension
-  turn pocket removal
-  signal enhancement
-  on-street parking
-  bus stop
-  Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-23 Safety Corridor Project 16: Doran St, Central Ave to Glendale Ave



- G1** From Central Ave to Maryland Ave, three-lane cross section with on-street parking and curb extensions at intersections
- G2** Study removal of left-turn pockets on all approaches of all cross streets
- G3** From Louise Ave to Glendale Ave, evaluate addition of speed humps, per City of Glendale Neighborhood Traffic Calming Guidelines, to minimize cut through traffic and slow speeds



- 1** Add zebra crosswalk to all approach legs

GLENDALE PEDESTRIAN PLAN

Data Sources: City of Glendale, Nelson\Nygaard

16 Doran St

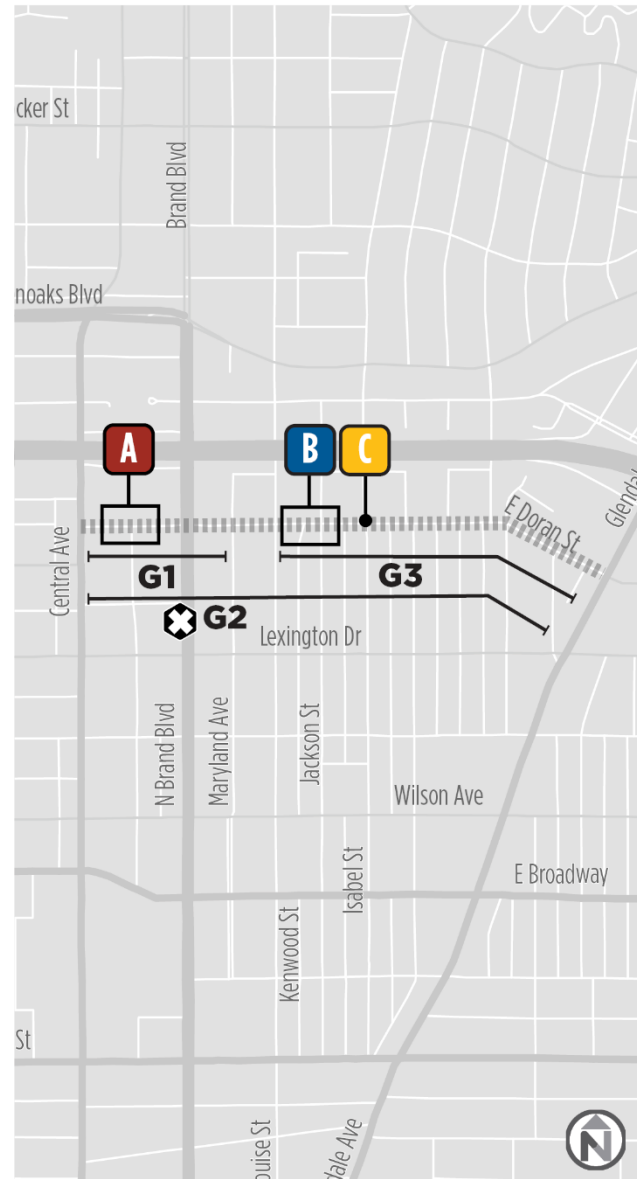
Central Ave to Glendale Ave

Project recommendations also included in Brand Blvd and 134 Freeway First Last Mile Analysis (Study Area 1).

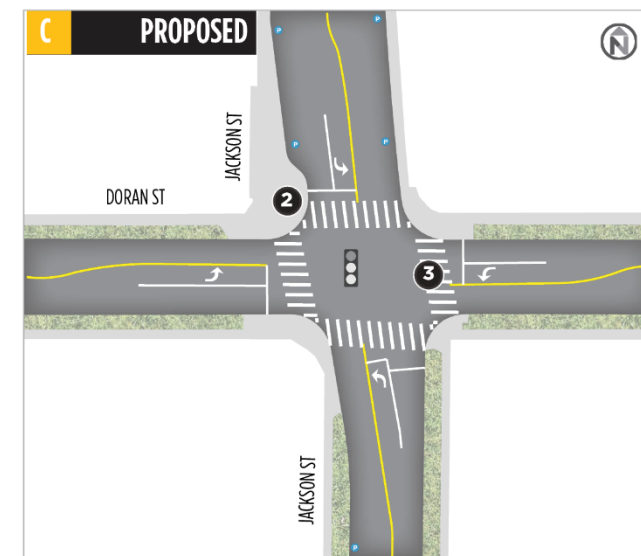
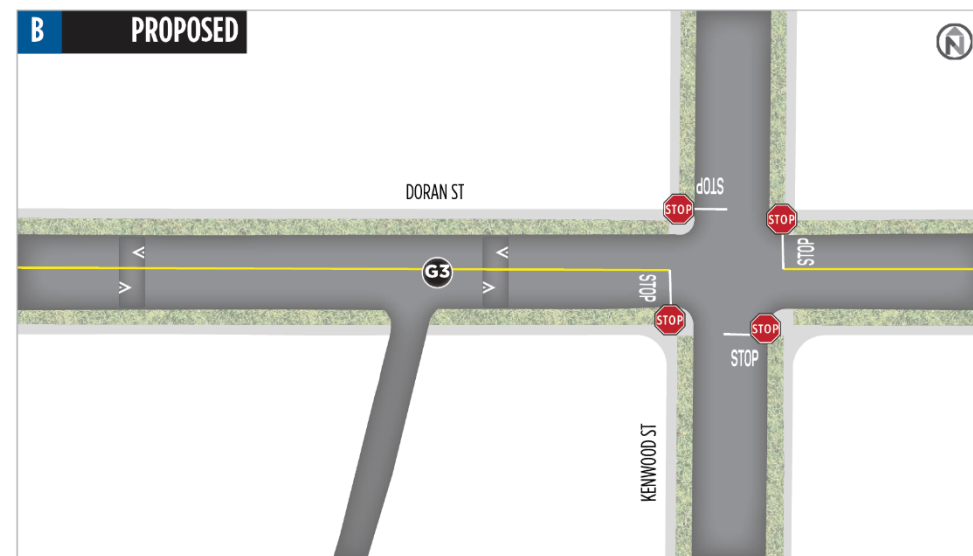
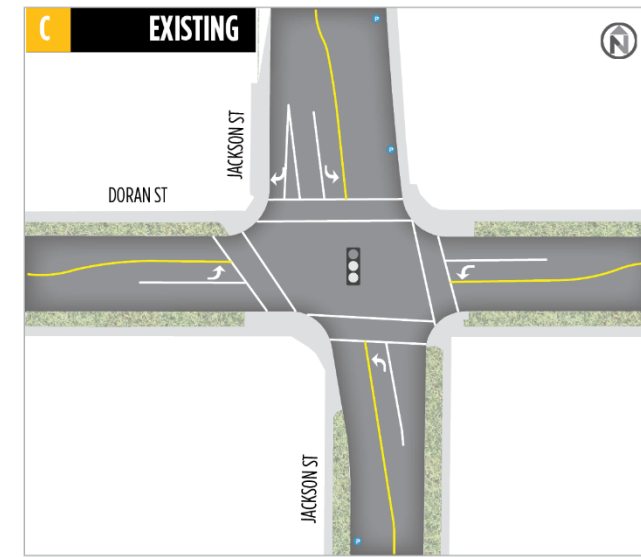
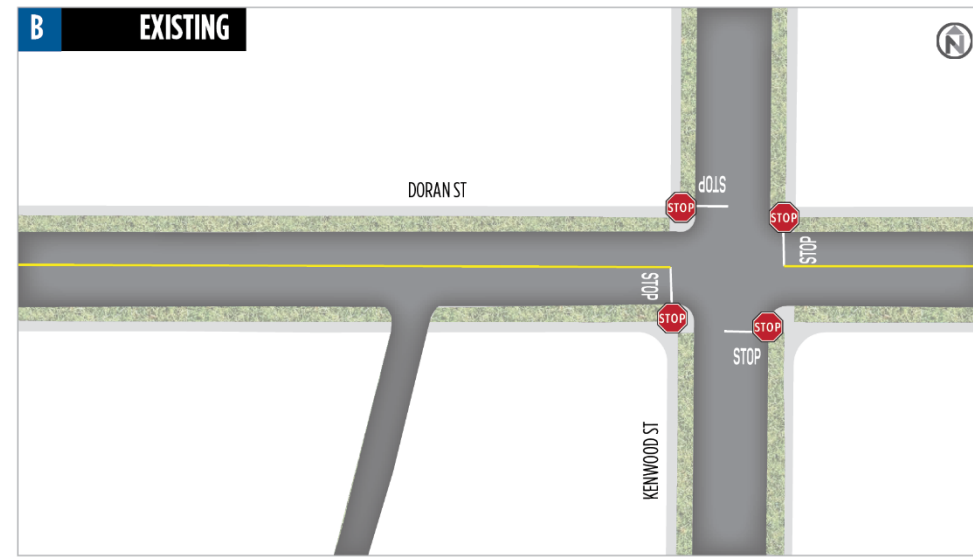
- ▬▬▬▬ corridor extents
- 🚶 zebra crosswalk
- 🚶 median refuge island
- ➡️ curb extension
- ✖️ turn pocket removal
- 🚦 signal enhancement
- P on-street parking
- 🚌 bus stop
- 🚶 Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-24 Safety Corridor Project 16: Doran St, Central Ave to Glendale Ave cont.



- G1** From Central Ave to Maryland Ave, three-lane cross section with on-street parking and curb extensions at intersections
- G2** Study removal of left-turn pockets on all approaches of all cross streets
- G3** From Louise Ave to Glendale Ave, evaluate addition of speed humps, per City of Glendale Neighborhood Traffic Calming Guidelines, to minimize cut through traffic and slow speeds



- 2** Remove and replace southbound right-turn pocket with curb extension
- 3** Add zebra crosswalk to all approach legs

GLENDALE PEDESTRIAN PLAN

Data Sources: City of Glendale, Nelson\Nygaard

16 Doran St

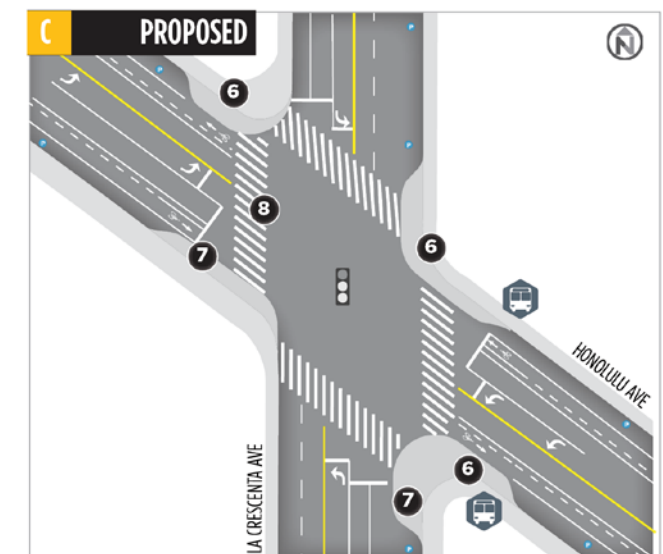
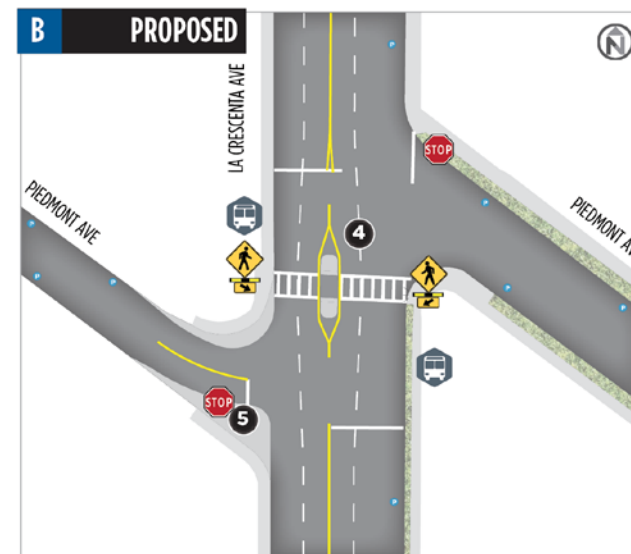
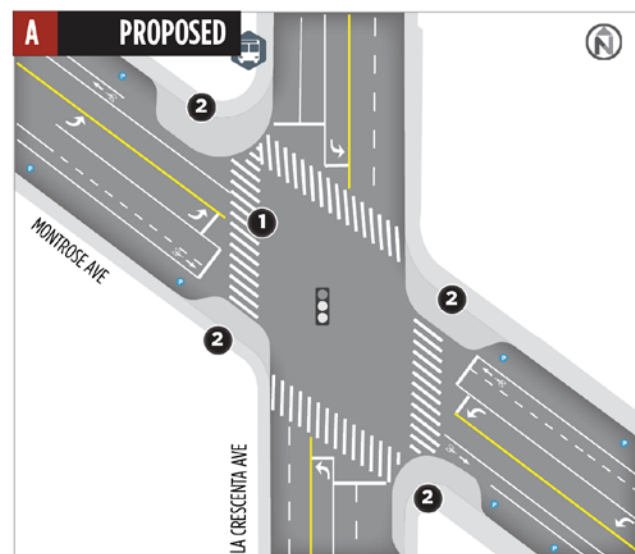
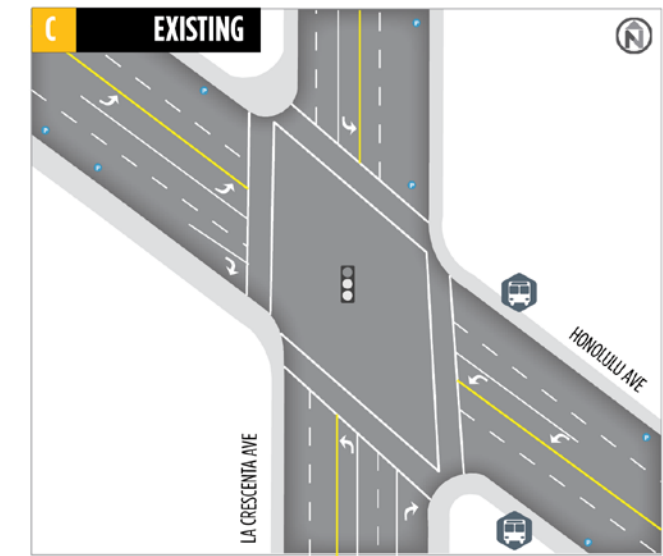
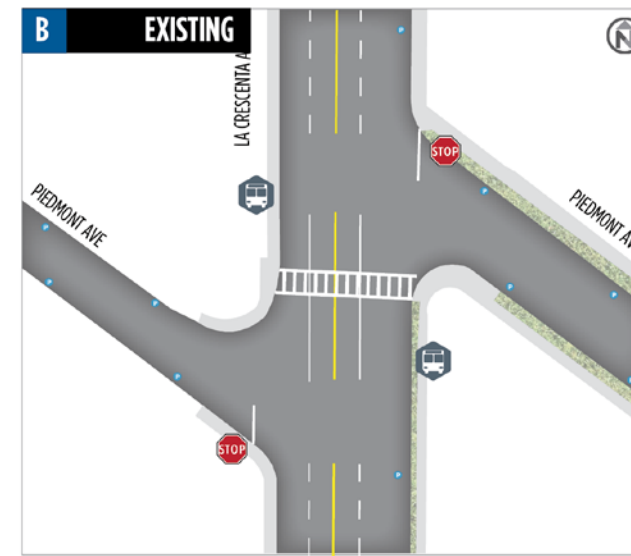
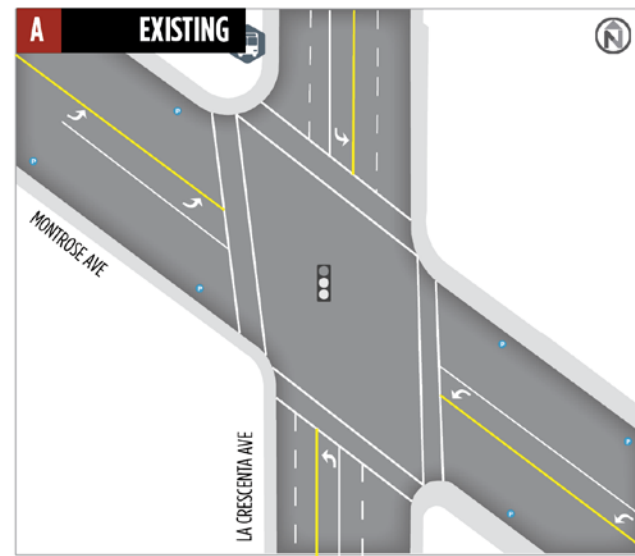
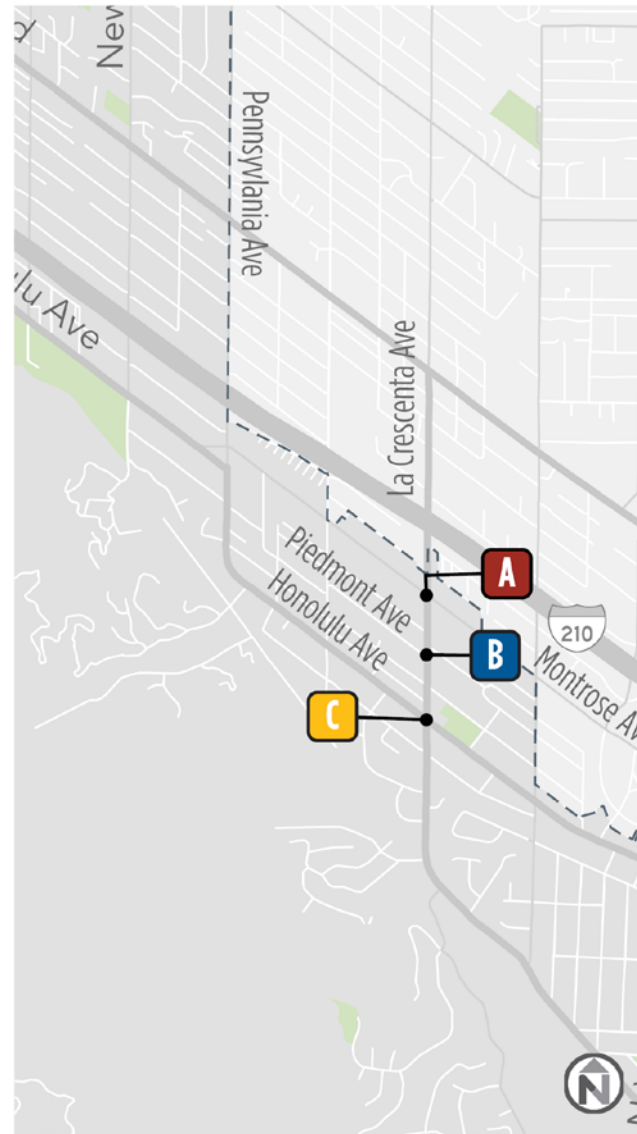
Central Ave to Glendale Ave

Project recommendations also included in Brand Blvd and 134 Freeway First Last Mile Analysis (Study Area 1).

- corridor extents
- zebra crosswalk
- curb extension
- on-street parking
- median refuge island
- turn pocket removal
- signal enhancement
- bus stop
- Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

Figure 4-25 Safety Corridor Project 17: La Crescenta Ave, Montrose Ave to Honolulu Ave



- 1 Add zebra crosswalk at all approach legs
- 2 Add curb extension on Montrose Ave (design for future bike lanes on Montrose Ave and La Crescenta Ave, including evaluation of back-in angle or parallel parking on Montrose Avenue)

- 4 Add median refuge island and Rectangular Rapid Flash Beacon (RRFB); requires gradual lane shift
- 5 Reconfigure west leg of Piedmont Ave to shorten crossing distance

- 6 Add curb extensions (design for future bike lanes on Honolulu Ave and La Crescenta Ave)
- 7 Remove eastbound and northbound right-turn lane
- 8 Add zebra crosswalk at all approach legs
- 9 Lane reduction on Honolulu Ave (Las Palmas Ave to western city limits); add buffered bike lane

GLENDALE PEDESTRIAN PLAN

Data Sources: City of Glendale, Nelson\Nygaard

17 La Crescenta Ave

Montrose Ave to Honolulu Ave

Project recommendations also included the Honolulu Ave & La Crescenta Ave Grant Ready Project.

- ▬▬▬ corridor extents
- ▬▬▬ zebra crosswalk
- ▬▬▬ median refuge island
- ▬▬▬ curb extension
- ▬▬▬ turn pocket removal
- ▬▬▬ signal enhancement

- P on-street parking
- Bus stop
- Pedestrian Head Start

Traffic studies will be required to assess potential impacts of all proposed changes, including lane and turn pocket removals. Additionally, community and business outreach will be needed as projects advance.

First Last Mile Transit Access Projects

Glendale is served by Metro buses, the Glendale Beeline, and Amtrak/Metrolink. The nine Glendale Beeline routes are key connectors, getting people to local destinations and complementing the regional transit services provided by Metro. To help achieve the Pedestrian Plan's goal to create connected and complete communities, the city will seek funding to build projects that improve access to transit stops and stations and make the walk (or bike ride) more pleasant and easier to navigate.

The First Last Mile Analysis approach to pedestrian improvements suggests that **helping people get through the first (or last) mile before (or after) their transit trip is a critical piece of a complete transportation system**. There are often obstacles at the beginning or end of a transit trip that discourage people from using public transit. These can include missing crosswalks or a lack of signs, sidewalks, or lighting.

The First and Last Mile in Glendale

As part of the Citywide Pedestrian Plan, three transit stops in Glendale were selected for a First Last Mile Analysis using the methodology in Metro's First Last Mile Strategic Plan. The FL MSP describes how Metro and its partners can make improvements to transit-adjacent areas so that it is easier and more pleasant to access Metro transit.² The plan describes how to conduct this analysis, beginning with a "walk audit" and review of findings, to lay out a First Last Mile Pathway Network.

Typically, the First Last Mile Analysis is applied to rail and dedicated right-of-way bus facilities, but the bus stops below were chosen for study because of the heavy concentration of surrounding points of interest and their central location in the city. The three areas of study are the following:

- **Study Area 1: Brand Blvd and 134 Freeway** — This downtown central area sits at the site of a potential future transit hub in Glendale. With a concentration of retail activity, many people access this area daily.
- **Study Area 2: Broadway and Glendale Ave** — Adjacent to Glendale's Civic Center and near the Glendale Fashion Center, both Glendale Ave and Broadway are busy mixed-use transit corridors.
- **Study Area 3: Verdugo Rd and Cañada Blvd** — Glendale Community College and Verdugo Park surround this transit node with residential areas to the north and 2 Freeway to the east.

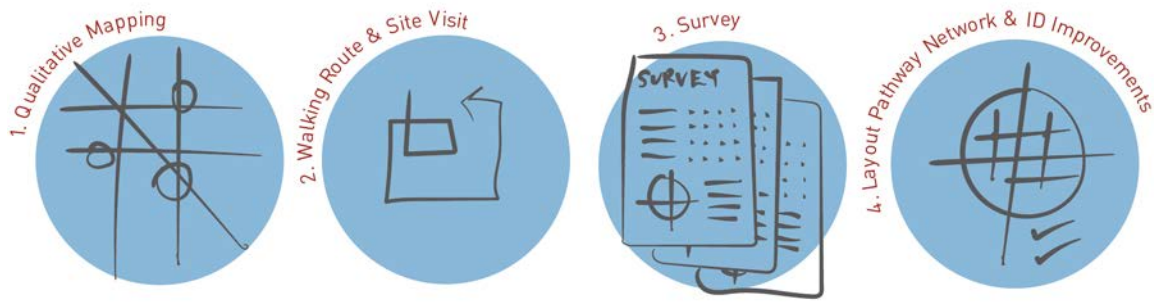
More detail about each of these areas and the recommended First Last Mile Analysis improvements are described in Figure 4-26 through Figure 4-37. (Original drawings are providing in Appendix D.) To develop recommendations, the analysis applied elements of the toolbox including traffic calming, enhanced bicycle connections, wayfinding, and streetscape elements such as the addition of lighting, trees, and improved bus stops. Enhancing connections over the 134 Freeway also rose to the top as a key first last mile solution that is unique to Glendale.

² Los Angeles County Metropolitan Transportation Authority – Metro and Southern California Association of Governments – SCAG, First Last Mile Strategic Plan & Planning Guidelines, March 2014.

First Last Mile Analysis Methodology

More information about the specific approach to investigating challenges and developing solutions is provided in the following sections, but the First Last Mile Analysis includes the four steps shown in Figure 4-26.

Figure 4-26 The First Last Mile Analysis Process



Investigating the Transit Areas (Steps 1-3)

The process begins with a set of maps that show existing conditions, such as land use, collision rates and locations, vehicular speeds, and points of interest. With maps in hand, the team selects a walking route within the 1/2-mile “pedestrian shed” or walkable area around the transit stop. On the walking tour, the team identifies access barriers and opportunities for improvement and also completes a “walk audit,” which is a survey about safety, aesthetics, and accessibility. Qualitative notes identify areas where heavy traffic interacts with pedestrians, areas where bike connections could be made, and areas that could use better lighting, more trees, or signage that enhances the transit stop.

Visualizing Improvements (Step 4)

With the existing conditions documented, the Pathway Network is then visualized. The network is a series of streets where First Last Mile improvements will be concentrated, and suggests highlighted pathways where people will be walking, biking, or rolling to transit.

STUDY AREA 1

Downtown Core: Brand Blvd & 134 Freeway

Situated in the Downtown Core, this study area at Brand Blvd and the 134 Freeway represents a *future* transit node, which could take the form of a bus rapid transit stop, rail station, or other regional connection point. This would also be the future home of Space 134, a freeway cap park atop the 134 Freeway, envisioned by the city as a 25+ acre green space that would reconnect north and south Glendale within Downtown. This study area also includes Safety Corridor Projects 12, 15, and 16.

Figure 4-27 Downtown Core (Study Area 1)

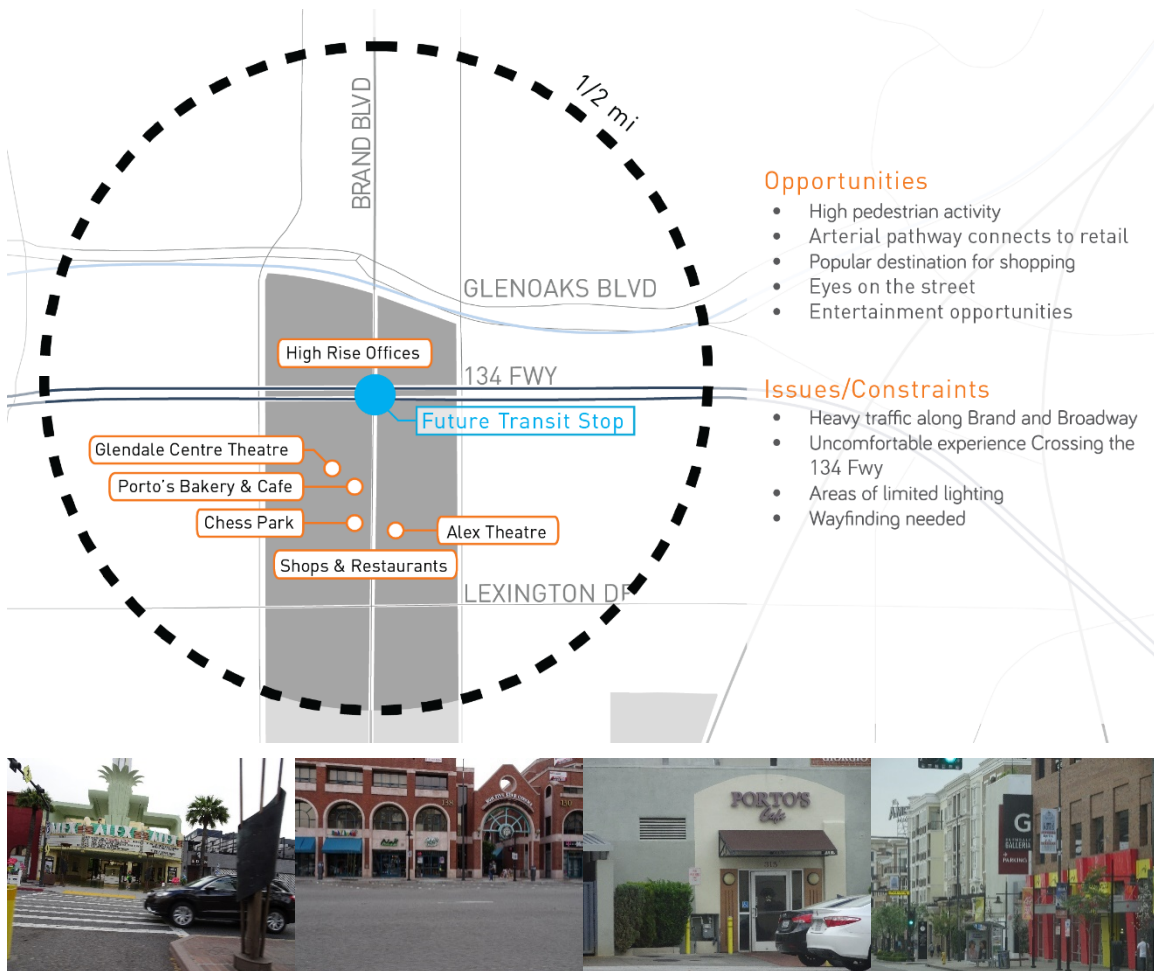
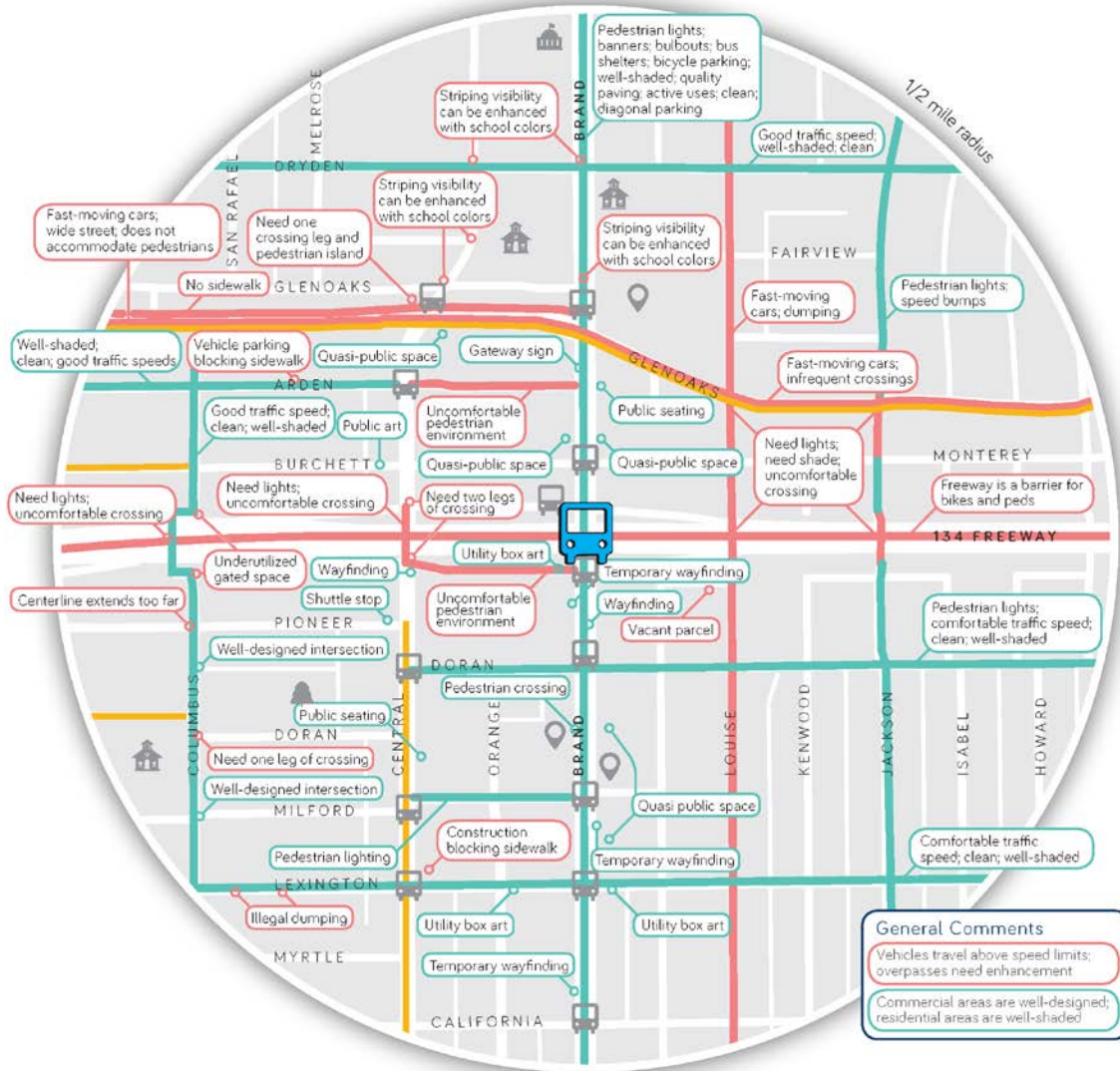


Figure 4-28 Existing Conditions, Downtown Core (Study Area 1)



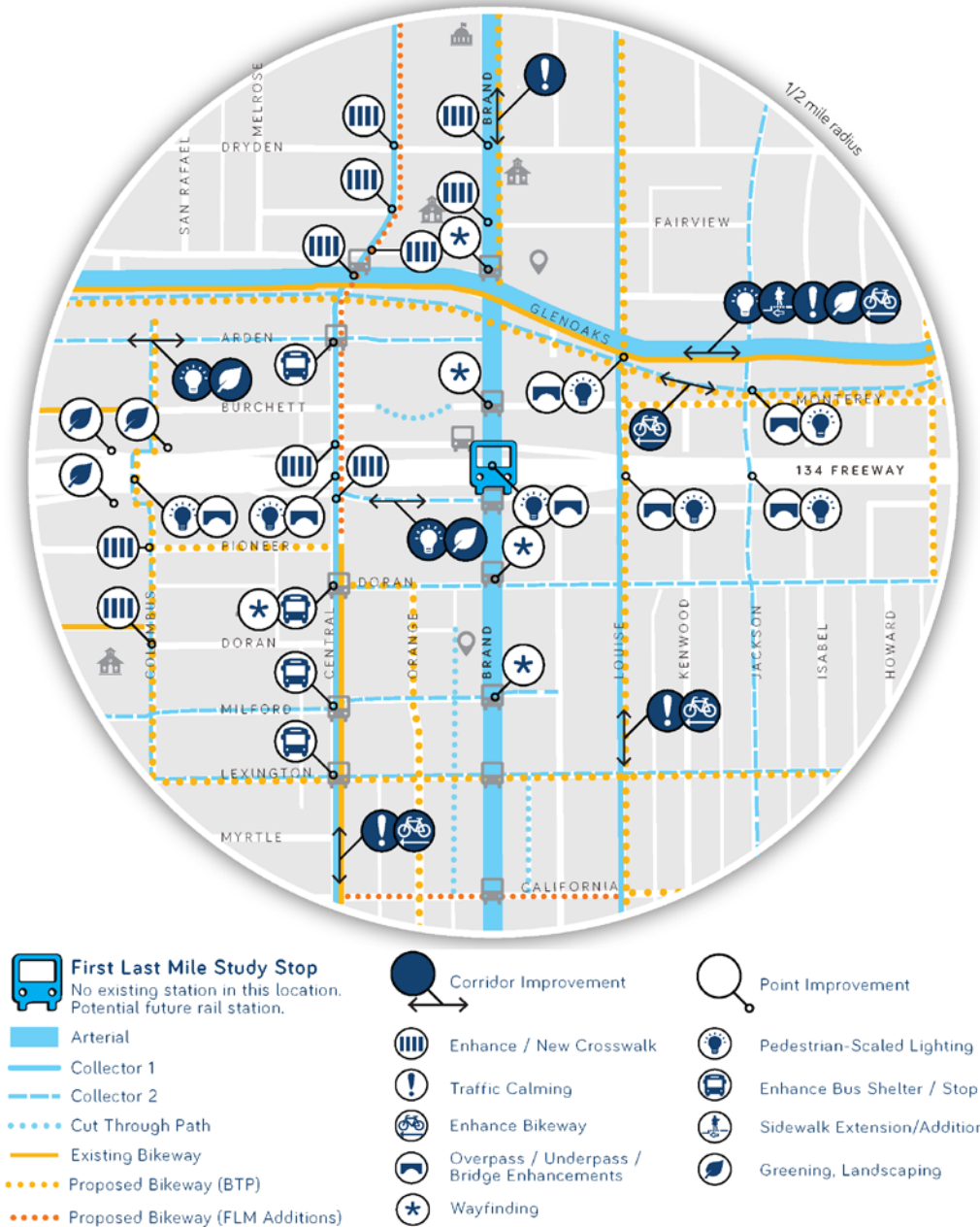
 **First Last Mile Study Stop**
No existing station in this location. Potential future rail station.

- | | | | |
|---|---|--|---|
|  Strength at Point |  Strength Along Corridor |  Existing Bikeway |  Existing Transit Stop |
|  Barrier at Point |  Barrier Along Corridor |  School/University |  Retail/Commercial Destination |
| | |  Public Institution |  Open Space |

First Last Mile Recommendations

The following pages present the recommended first and last mile “Pathway Network” for this transit study area. These recommendations also incorporate the improvements from Safety Corridor Projects 12, 15, and 16. Brand Blvd is identified as the main arterial where most first last mile improvements would be clustered, and may include traffic calming, crosswalk enhancements, wayfinding, and bus stop enhancements. Glenoaks Blvd, Central Ave, and Louise St are identified as collectors, which are secondary pathway streets. In this area, improved bicycle and pedestrian connections over the 134 Freeway are critical for first last mile access.

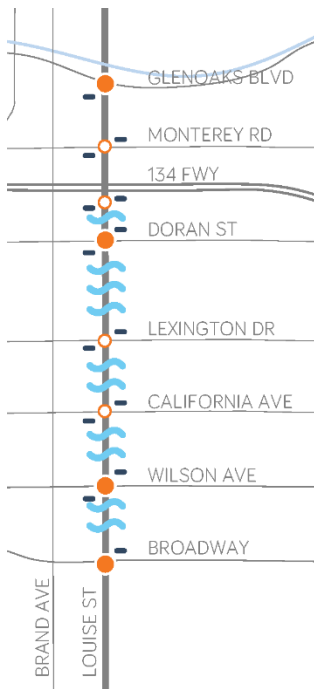
Figure 4-29 First Last Mile Recommendations, Downtown Core (Study Area 1)



Louise St Detail: Transforming Louise St into a Greenway

Within Study Area 1, Louise St presents a special opportunity for enhancement as a greenway or bicycle boulevard (an enhanced street for bicycles and pedestrians) because of its connection to Glenoaks Blvd and areas to the south, along with its more narrow right-of-way and pleasant tree canopy. This page presents three potential configurations for the street—all of which would require additional study to ensure feasibility—that would aim to calm traffic and add amenities for bicyclists and pedestrians, without reducing lanes.

Figure 4-30 Louise St Detail (Study Area 1)



- Major Intersection
 - Minor Intersection
 - Wayfinding / ID signs
 - ~ Mid-block improvement
(See scenario options, right)
- ① Corner bulb-outs
 - ② Enhanced crosswalks
 - ③ Small splitter island at intersections
 - ④ Bike box at major intersections
 - ⑤ Pedestrian-scaled lighting
 - ⑥ Trees
 - ⑦ Greenway wayfinding and ID signs
 - ⑧ Mid-block Chicanes
 - ⑨ Mid-block Chokers
 - ⑩ Mid-block Center Choker

Scenario 1: Regularly-placed “chicanes” (staggered mid-block bulb-outs shown in orange, right) cause vehicles to slow, thereby making it more pleasant for cyclists. In addition, corner bulb-outs shorten crossing distances and add green space to the sidewalks, while pathway identification and wayfinding signage, bike boxes at major intersections, and enhanced crosswalks complete the Greenway.



Scenario 2: In this configuration, “chokers” (bulb-outs added mid-block to narrow and tighten the roadway, shown in orange, right), accomplish the desired traffic calming. All other improvements stay the same, compared to Scenarios 2 and 3.



Scenario 3: Here, the choker is placed in the center of the street (orange, right), similar to a median island. Variable in width depending on design, this would require vehicles to slow as they approached. The center choker may fit better on a street such as Louise compared to Scenarios 1 and 2, with several driveways fronting the street. If desired, parking could be removed adjacent to the choker (depicted) to accommodate a wider center median with room for planting.



STUDY AREA 2

Civic Center: Broadway & Glendale Ave

At the intersection of Broadway and Glendale Ave sits Glendale City Hall, the Post Office, Police Department, and Courthouse. Additionally, one block to the north is the Glendale Fashion Center, a regional shopping destination. Both Glendale Ave and Broadway are busy streets with substantial amounts of vehicular traffic; Glendale Ave is a major north-south connector in the city. Safety Corridor Projects 1, 4, and 7 all intersect First Last Mile Study Area 2.

Figure 4-31 Civic Center (Study Area 2)

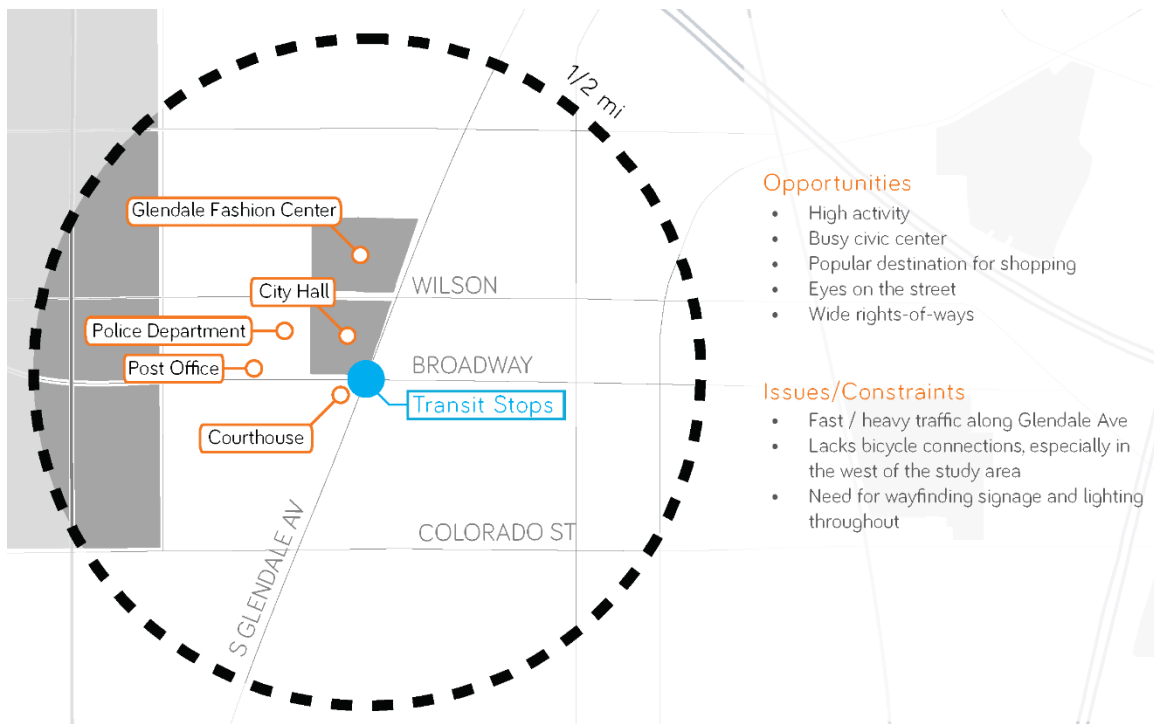
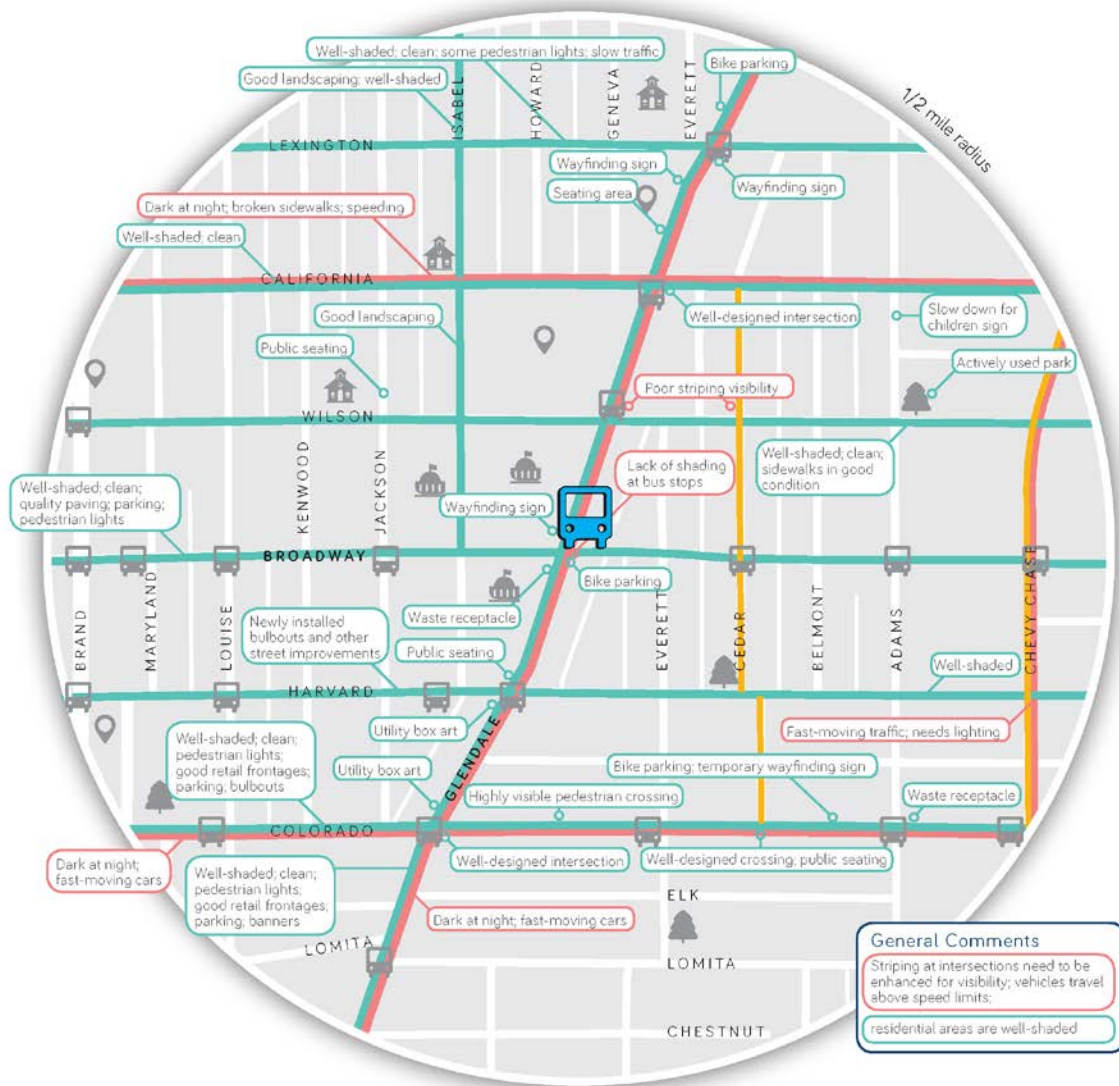


Figure 4-32 Existing Conditions, Civic Center (Study Area 2)



First Last Mile Study Stop
Buses: 3, 4, 31, 32, 90/91, 180/181, 201, 780

First Last Mile Recommendations

The following pages present the recommended first last mile “Pathway Network” for Study Area 2. Glendale Ave and Broadway are identified as locations where first last mile improvements should be concentrated. These improvements include traffic calming and lighting along Glendale Ave, bicycle improvements, and traffic calming along Broadway. The transit area would also benefit from wayfinding signage and the addition of enhanced crossings in key areas. These recommendations also incorporate the improvements from Safety Corridor Projects 1, 4, and 7.

Figure 4-33 First Last Mile Recommendations, Civic Center (Study Area 2)



Broadway Detail: Reconfiguring the Street

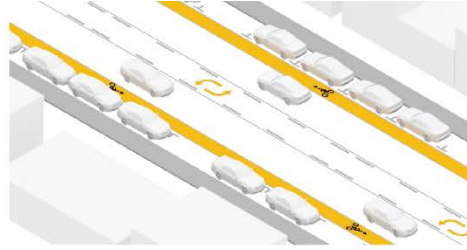
Within Study Area 2, from Brand to Chevy Chase, Broadway is a main thoroughfare for Glendale residents. Currently, Broadway is a fast-paced roadway that can be improved for motorists, bicyclists, transit riders, and pedestrians alike. A series of options are detailed below. The improvements may include reconfiguring the street to accommodate protected facilities for bicyclists and pedestrians, adding outboard transit stops, or calming traffic.

Figure 4-34 Broadway Detail (Study Area 2)



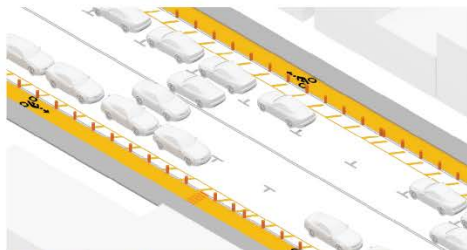
Existing Street Configuration

- Four lanes in each direction
- Parking on both sides
- Bike sharrow marking throughout



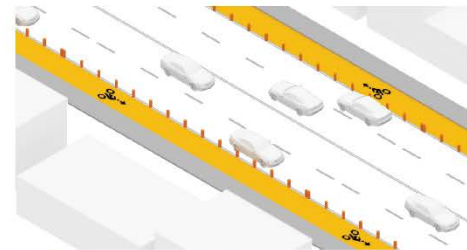
1. Bicycle Lanes

- Addition of 4 ft bike lanes on both sides of the street
- One travel lane in each direction
- Center turn lane added
- Parking retained on both sides of the street
- 4-to-3 lane "road diet"



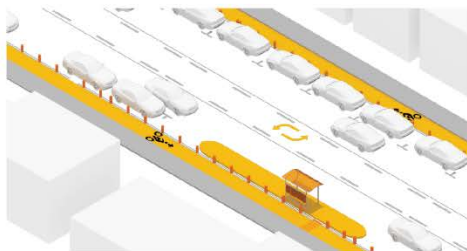
2. Buffered Bicycle Lane with Parking

- Addition of bike lanes with a painted buffer on both sides of the street adjacent to sidewalk
- Parking outboard of bike lanes
- One lane in each direction



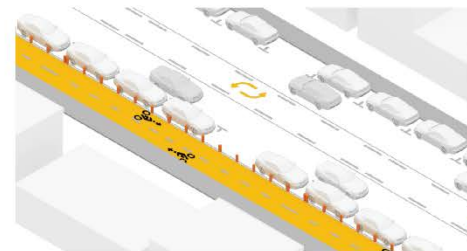
3. Buffered Bicycle Lane, No Parking

- Addition of bike lanes on both sides of the street with painted or vertical buffer
- Two travel lanes in each direction (no reduction in lanes)
- Parking removed in order to retain existing lane configuration



4. Cycle Track with Outboard Bus Platforms & Parking

- Separated cycle tracks added, both sides
- One lane in each direction
- Center turn lane added
- Parking & transit platforms outboard of bike lanes
- 4-to-3 lane "road diet"



5. Two-Way Cycle Track on One Side, with Parking (both sides)

- Two-way separated cycle track added
- One lane in each direction
- Center turn lane added
- 4-to-3 lane "road diet"

STUDY AREA 3

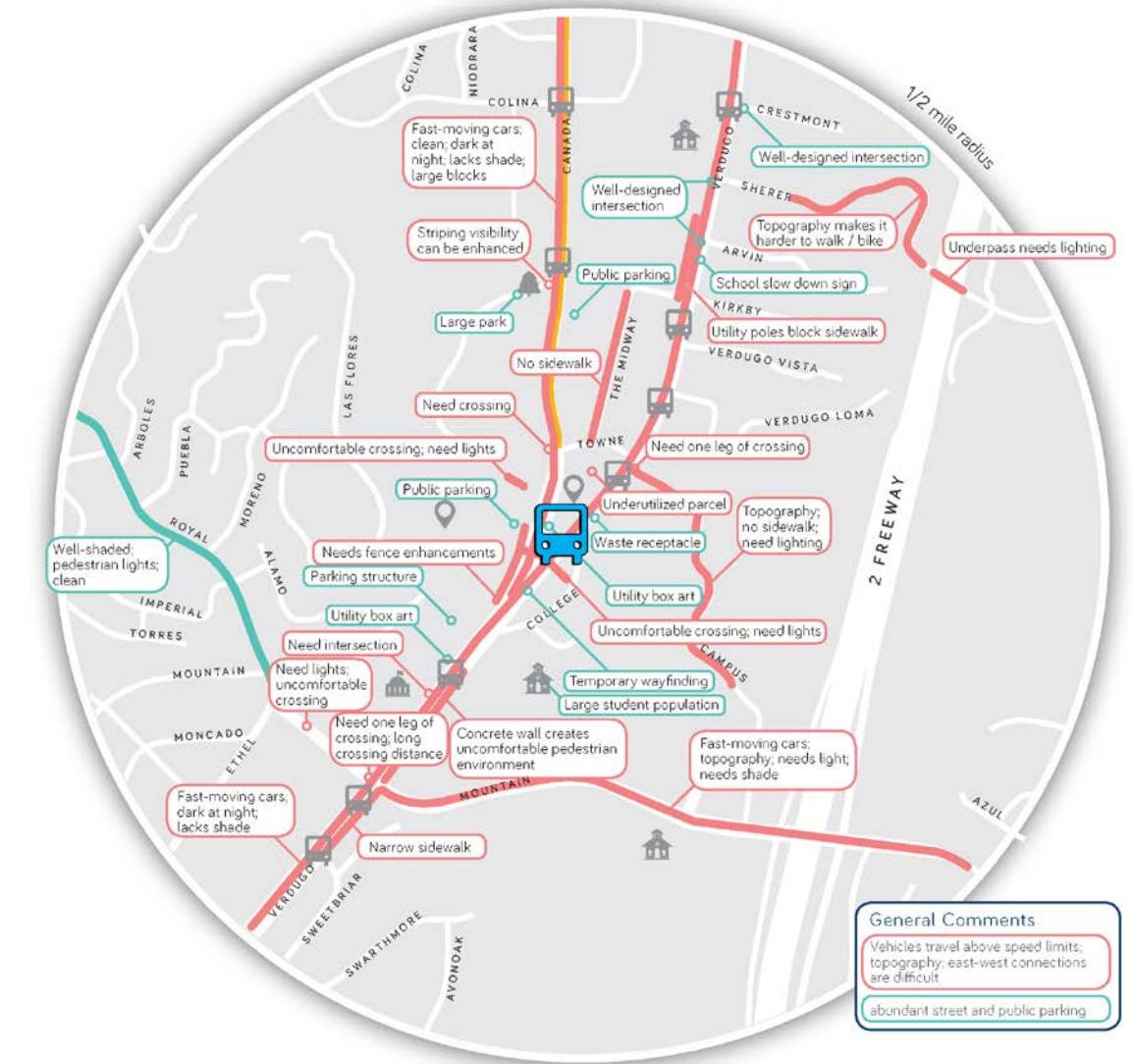
Educate and Recreate: Verdugo Rd & Cañada Blvd

The area surrounding the intersection of Verdugo Rd and Cañada Blvd boasts many educational institutions and recreational opportunities. Schools include Glendale Community College, College View School, and Verdugo Woodlands Elementary. Passive and active recreational areas include Verdugo Park, multiple sports fields, and a skate park.

Figure 4-35 Educate and Recreate (Study Area 3)



Figure 4-36 Existing Conditions, Educate and Recreate (Study Area 3)



First Last Mile Study Stop

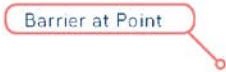
Buses: 90/91, 685



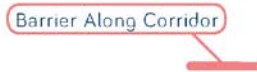
Strength at Point



Strength Along Corridor



Barrier at Point



Barrier Along Corridor

Existing Bikeway

School/University

Public Institution

Existing Transit Stop

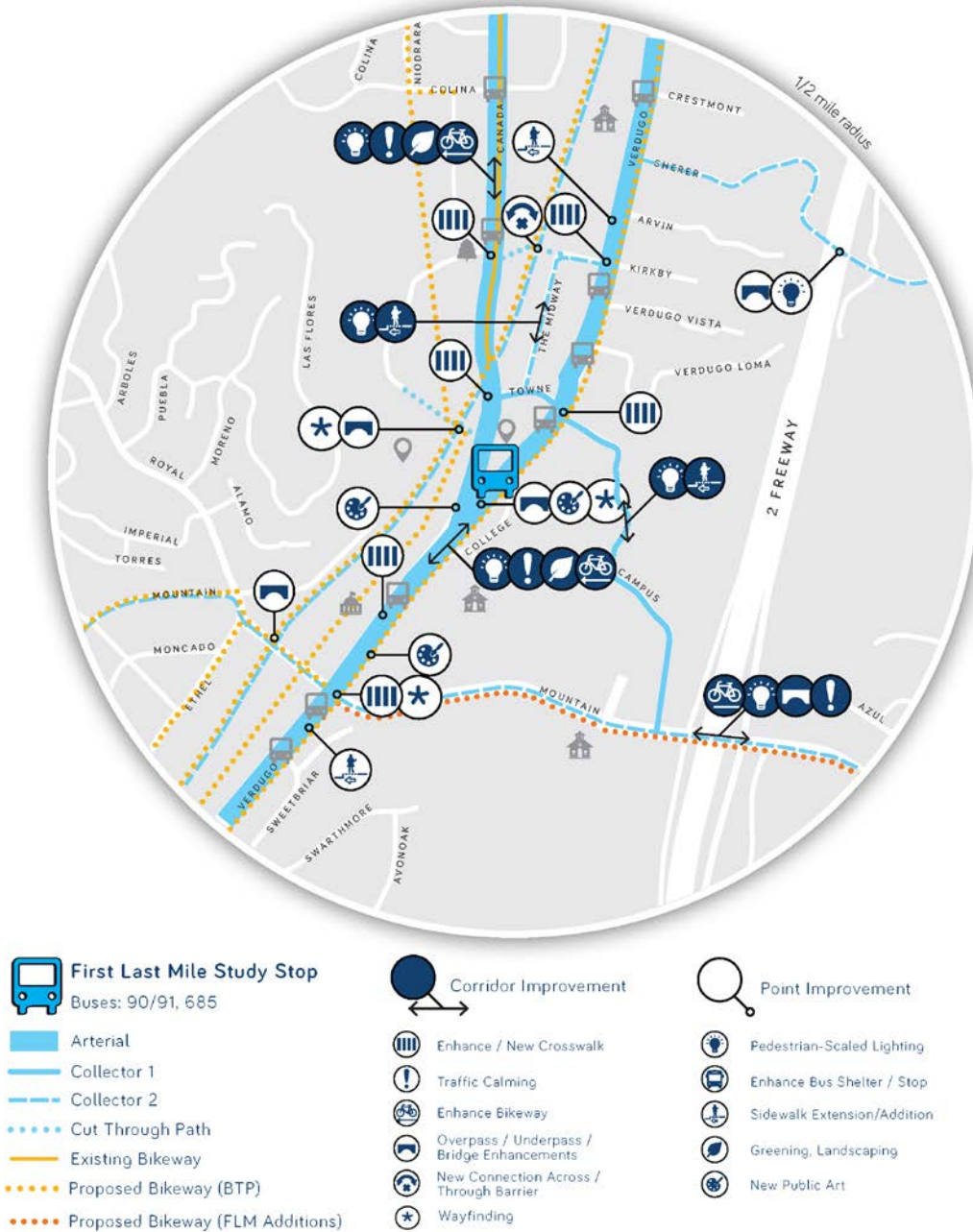
Retail/Commercial Destination

Open Space

First Last Mile Recommendations

Figure 4-37 presents the recommended first last mile Pathway Network for Study Area 3. First last mile improvements are clustered on Verdugo Rd and Cañada Blvd, the network arterials. Arterial improvements include traffic calming, enhancing lighting and crosswalks, and improving the bicycle infrastructure. Providing safe crossings and reducing traffic speeds are essential in increasing safety in this area with a high percentage of students.

Figure 4-37 First Last Mile Recommendations, Educate and Recreate (Study Area 3)



Grant-Ready Projects

In line with the Pedestrian Plan’s goal to organize for implementation, three safety corridor locations were identified for an advanced level of project development, making them Grant-Ready Projects. These projects are at some of the highest-priority locations and demonstrate a variety of pedestrian safety improvements.

The grant-ready project sheets outline existing problems at each location and propose detailed solutions, including schematic designs, cost estimates, and an assessment of project benefits. These project sheets position the City of Glendale for rapid implementation of this plan through competitive funding applications.

The three locations selected for grant-ready project sheet development were the following:

- Glendale Ave & Cypress St
- Honolulu Ave & La Crescenta Ave
- Stocker St & Pacific Ave

The full grant-ready project sheets can be found in Appendix C for use in future grant applications. This section consolidates information consistent across all three grant-ready projects before presenting the location-specific recommendations and data. All three project sheets detail similar Pedestrian Plan goal alignment, documentation of community outreach completed to date, and consistency with regional plans.

Consistency with Pedestrian Plan Vision and Goals

The grant-ready projects align with the vision and goals vision established for the Glendale Pedestrian Plan.



Vision:

Glendale will be a great place to walk, leading to a community that is safer, healthier, more sustainable, and economically vibrant.



Goal 1:

Make Walking Safer
Reduce number of crashes and eliminate injuries with speed reduction, education, and design strategies.



Goal 2:

Create Connected and Complete Communities
Provide seamless connections to transit, enhanced streetscaping, and activated frontages, ensuring access to community assets.



Goal 3:

Build Walkable Places for All
Make walking a part of everyday life, with investments that serve people of all ages and abilities and prioritize projects in critical areas.

Consistency with Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and other Regional Plans

The grant-ready projects are consistent with regional plans and support implementation of those plans' recommendations:

- These projects support transit integration by improving first/last mile access to the Glendale (Metrolink) Station in a High Quality Transit Area, consistent with Transit, Passenger Rail, and Active Transportation strategies in the 2016-2040 Southern California Association of Governments (SCAG) RTP/SCS.
- These projects encourage short trip-making by investing in quality sidewalks and crossing treatments to make walking attractive to people 8-80 years old consistent with Active Transportation strategies in the 2016-2040 SCAG RTP/SCS.
- These projects advance the goals of safety and public health consistent with Metro's Active Transportation Strategic Plan.
- These projects improve safety and access to transit consistent with the goals of Metro's Complete Streets Policy.
- These projects promote Healthy Neighborhoods and Community Development as principles of Metro's Countywide Sustainability Policy.

Community Outreach

Over 400 participants helped inform the Pedestrian Plan during four in-the-field "pop-up" community events from April to July 2016. The events were located around the community and in different settings: Montrose at the Arts and Crafts Festival, Downtown Glendale at Cruise Night, Central Park for the Earth Day festival, and Fire Services Day at Fire Station 21.

At each pop-up, community members participated in an art activity, which asked "What would make you walk more in Glendale?" Through this activity, the community identified speeding vehicles as a top concern, and reported feeling unsafe crossing the street, especially when walking with children. Community members also identified solutions including more traffic enforcement, more destinations within safe and accessible walking distance, and safer and more visible crosswalks as high priorities.

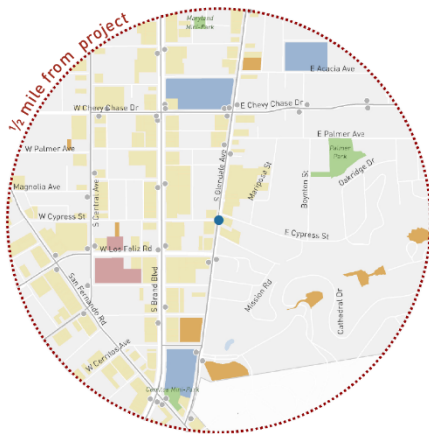
GLENDALE AVE & CYPRESS ST






Project Scope


The intersection of South Glendale Avenue and East Cypress Street—part of Safety Corridor Project 3—has one of the highest rates of pedestrian-involved collisions in the City of Glendale, with four pedestrian-involved collisions in the last five years. Consistent with the improvements recommended in Safety Corridor Project 3, installing a raised median with pedestrian refuge and a newly aligned high visibility crosswalk will decrease crossing distances for people walking, make people walking more visible to drivers, and reduce vehicle-turning movements to lower the risk of pedestrian-involved collisions. By enhancing the safety and comfort of people walking at this location, residents in this High Quality Transit Area (HQT) will have safer, more affordable transportation options.

The project intersection, located in a high-need/disadvantaged community, is used by people of all ages to access the nearby Glendale (Metrolink) station, schools, places of worship, parks, health centers, and local retail establishments, as well as local bus stops. Local transit in this area serves the greater Glendale and Burbank-Los Angeles corridors, including the North Hollywood Red and Orange Line Stations. In addition, increased short trips by walking can contribute to reductions in vehicle miles traveled (VMT) and improve public health outcomes.

Key Connections



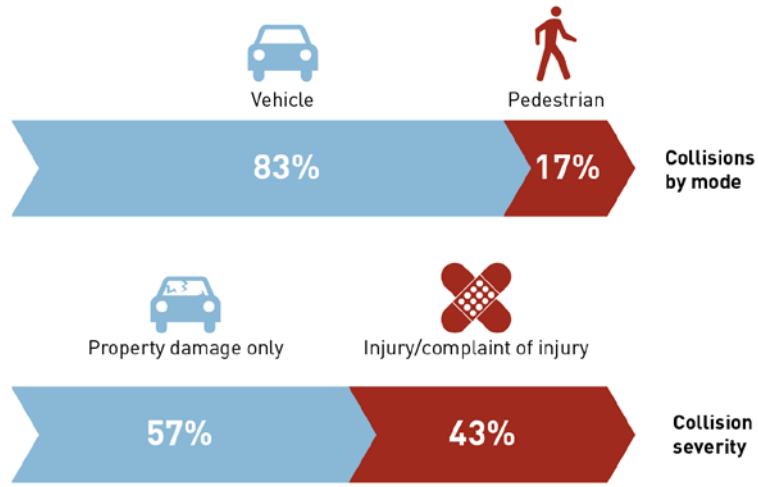
- 
 Cerritos Elementary School
 Theodore Roosevelt Middle School
 Horace Mann Elementary School
- 
 Glendale Memorial Hospital and Health Center
- 
 Palmer Park
 Cerritos Mini-Park
 Maryland Mini-Park
- 
 Armenian Church of the Nazarene
 Armenian Ecclesiastical
 Glendale Japanese Free Methodist Church
 Faith Center Church
 Forest Lawn Memorial Park
- 
 Beeline Routes 1, 2, and 4 connecting to Glendale Galleria and Glendale Transportation Center

 Metro Lines 90/91, 92, and 183 connecting to Sylmar Station, Los Angeles Mission College, Discovery Cube, Glendale Community College, Glendale (Metrolink) Station, downtown Burbank, downtown Los Angeles, and the North Hollywood Red and Orange Line Stations
- 
 Brand Boulevard of Cars
 Mariposa neighborhood retail

Project Area Collisions

23

collisions took place at
Glendale Ave & Cypress St
from 2011–2015

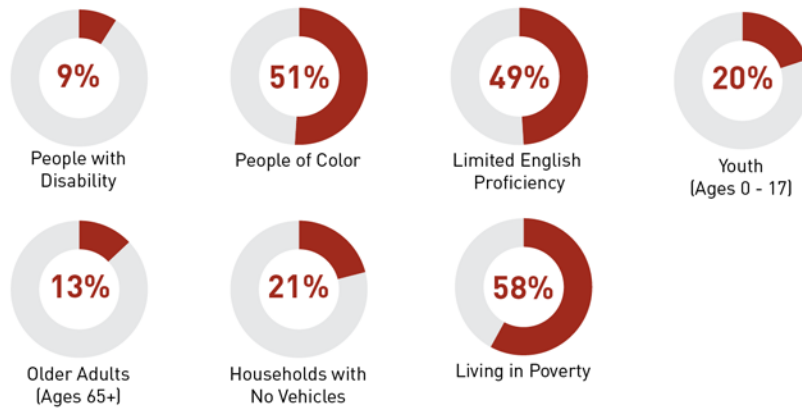


Source: Statewide Integrated Traffic Records System (SWITRS), Transportation Injury Mapping System (TIMS)

Project Area Demographics

18,270

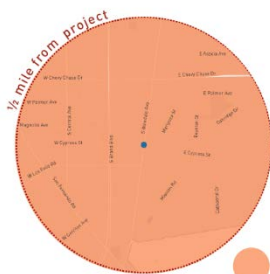
people live within
one-half mile of
Glendale Ave &
Cypress St



Source: US Census Bureau ACS 2009-2013 & 2010-2014 5-Year Estimates

Note: The denominator differs across some of the above metrics, depending on data source and sample size.

Disadvantaged Communities



CES 25% Most Disadvantaged

CalEnviroScreen

100%

of the neighborhoods in this project area are in the top quartile (25%) of CES-designated disadvantaged communities.

Free and Reduced Price Lunch

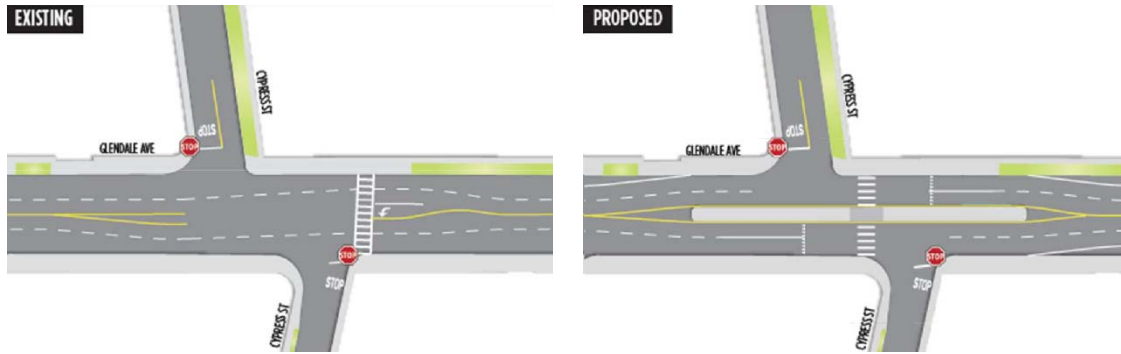
86%

of students attending schools in this project area are eligible for free and reduced lunches.

Project Description

Install a raised median with pedestrian refuge island and newly aligned high visibility crosswalk at the intersection of South Glendale Avenue and East Cypress Street. This change will prevent left turning movements onto East Cypress Street and increase the comfort and safety of people crossing while reducing the risk of pedestrian-involved collisions. These recommendations also incorporate the improvements from Safety Corridor Project 3.

Recommended Improvements



Benefits and Costs

The California Active Transportation Program Benefit/Cost calculator provides a simple way of quantifying the costs and benefits of active transportation projects.³ The City of Glendale can compare the cost of the project against monetized project benefits that are expected to accrue over a 20-year period based on the forecasted number of pedestrians who will be walking through the intersection after the project is completed. Benefits include those related to improvements in health, reductions in VMT and greenhouse gas emissions, enhanced recreational opportunities, and improved safety outcomes. The tables below outline the costs, benefits, and Benefit-Cost-Ratio for the proposed project at Glendale Avenue and Cypress Street.

20-Year Investment Summary Analysis	
Total Costs	\$79,000.00
Net Present Cost	\$75,961.54
Total Benefits	\$2,836,838.47
Net Present Benefit	\$1,878,780.01
Benefit-Cost Ratio	24.73

20-Year Itemized Savings	
Mobility	\$279,812.32
Health	\$96,012.41
Recreational	\$107,752.76
Gas and Emissions	\$7,653.40
Safety	\$2,346,607.58

³ More information about this tool, including the calculator itself, is available from the California Department of Transportation: <http://www.dot.ca.gov/hq/tpp/offices/eab/atp.html>.

HONOLULU AVE & LA CRESCENTA AVE

Project Scope

The intersection of Honolulu Avenue and La Crescenta Avenue—part of Safety Corridor Project 17—has one of the highest rates of pedestrian-involved collisions in Glendale. Upgrading the intersection to include high visibility crosswalks and curb extensions and removing right-turn lanes on Honolulu Avenue will decrease crossing distances for people walking, make pedestrians more visible to vehicles, and slow turning vehicles to reduce the risk of pedestrian-involved collisions.

In addition, as many as 23 bicyclists per hour have been observed at this location. Converting travel lanes to buffered bike lanes on Honolulu Avenue will create a buffer for people walking while encouraging more people of all ages and abilities to bicycle along the corridor and reducing the risk of bicycle-involved collisions.

By enhancing the friendliness of active transportation options at this location, residents will have access to affordable transportation options that serve people of all ages and abilities and connect to nearby destinations like schools, places of worship, parks, local bus stops serving the greater Glendale area, and local retail establishments. In addition, increased short trips by bicycling and walking can contribute to reductions in VMT and improve public health outcomes.

Key Connections



Rockhaven Historic Sanitarium



Crescenta Valley Church
Antioch Presbyterian Church
Crescenta Valley United Methodist Church
Holy Gate Evangelical Church
La Crescenta Presbyterian Church
Unity Church of the Valley



Beeline Route 3/31/32, connecting to Jet Propulsion Laboratories in Pasadena, Town Center La Cañada Flintridge, Glendale Community College, and Glendale Fashion Center.
Metro Line 90/91, connecting to Sylmar Station, Los Angeles Mission College, Discovery Cube, Glendale Community College, and Glendale (Metrolink) Station.

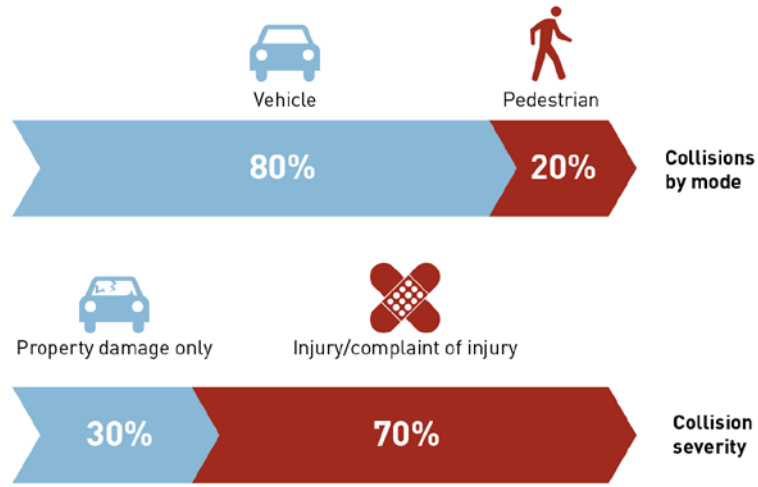


Montrose neighborhood retail

Project Area Collisions

10

collisions took place at Honolulu Ave & La Crescenta Ave from 2011–2015

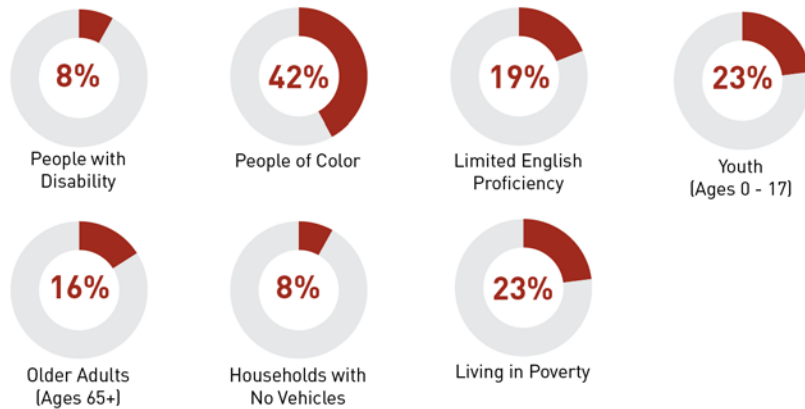


Source: Statewide Integrated Traffic Records System (SWITRS), Transportation Injury Mapping System (TIMS)

Project Area Demographics

12,460

people live within one-half mile of Honolulu Ave & La Crescenta Ave



Source: US Census Bureau ACS 2009-2013 & 2010-2014 5-Year Estimates

Note: The denominator differs across some of the above metrics, depending on data source and sample size.

Disadvantaged Communities



CES 25% Most Disadvantaged

CalEnviroScreen

0%

of the neighborhoods in this project area are in the top quartile (25%) of CES-designated disadvantaged communities.

Free and Reduced Price Lunch

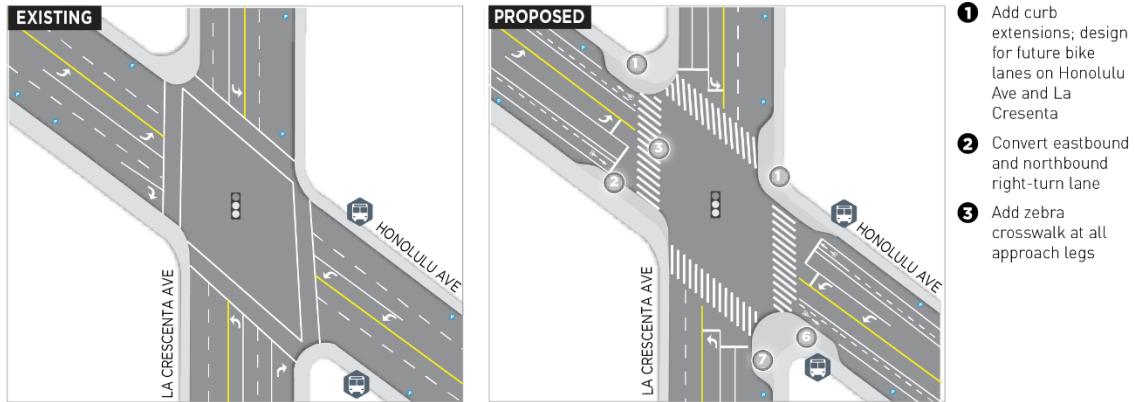
N/A

There are no grade schools in this project area.

Project Description

Install high visibility crosswalks and curb extensions at the intersection of Honolulu Avenue and La Crescenta Avenue and buffered bike lanes on Honolulu Avenue to increase the comfort and safety of people walking and biking, and reduce the risk of pedestrian- and bicycle-involved collisions. These recommendations also incorporate the improvements from Safety Corridor Project 17.

Recommended Improvements



Benefits and Costs

The California Active Transportation Program Benefit/Cost calculator provides a simple way of quantifying the costs and benefits of active transportation projects.⁴ The City of Glendale can compare the cost of the project against monetized project benefits that are expected to accrue over a 20-year period based on the forecasted number of pedestrians who will be walking through the intersection after the project is completed. Benefits include those related to improvements in health, reductions in VMT and greenhouse gas emissions, enhanced recreational opportunities, and improved safety outcomes. The tables below outline the costs, benefits, and Benefit-Cost-Ratio for the proposed project at Honolulu Avenue and La Crescenta Avenue.

20-Year Investment Summary Analysis	
Total Costs	\$93,500.00
Net Present Cost	\$89,903.85
Total Benefits	\$1,693,746.63
Net Present Benefit	\$1,121,733.70
Benefit-Cost Ratio	12.48

20-Year Itemized Savings	
Mobility	\$154,895.73
Health	\$53,340.23
Recreational	\$59,862.64
Gas and Emissions	\$4,251.89
Safety	\$1,421,396.13

⁴ More information about this tool, including the calculator itself, is available from the California Department of Transportation: <http://www.dot.ca.gov/hq/tpp/offices/eab/atp.html>.

STOCKER ST & PACIFIC AVE

Project Scope

The intersection of West Stocker Street and North Pacific Avenue—part of Safety Corridor Project 14—has one of the highest rates of pedestrian-involved collisions in Glendale. Upgrading the intersection to include high visibility crosswalks and curb extensions and removing left-turn pockets on Stocker Street will require people to cross fewer lanes, make people walking more visible to drivers, and slow turning vehicles to reduce the risk of pedestrian-involved collisions.

By enhancing the safety and comfort of people walking at this location, residents in this High Quality Transit Area (future Bus Rapid Transit service) will benefit from increased affordable transportation options that serve people of all ages and abilities. This project will encourage walking to nearby destinations like schools, places of worship, parks, and local retail establishments, as well as local bus stops currently serving the greater Glendale and Burbank-Los Angeles corridors. In addition, increased short trips by walking can contribute to reductions in VMT and improve public health outcomes.

Key Connections

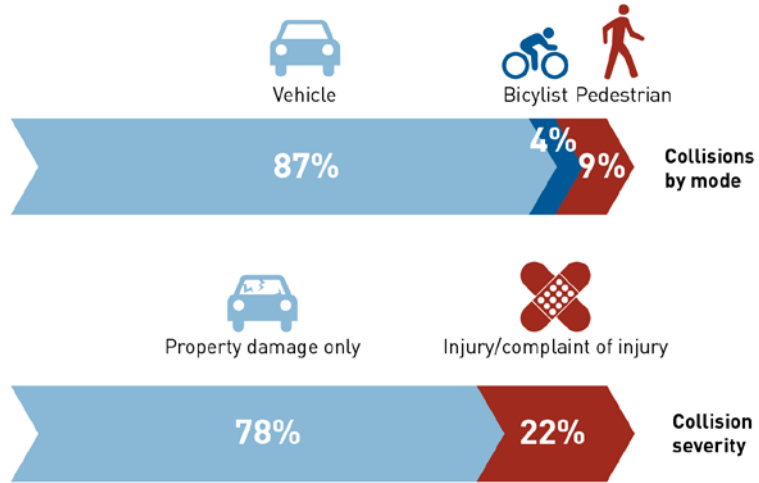


- Hoover High School
Toll Middle School
Mark Keppel Visual and Performing Arts Magnet
Grandview House Preschool
- Casa Adobe de San Rafael
Fremont Park
- Church for the Nations
First German United Methodist
St Peter Armenian Church
Temple Sinai of Glendale
The Church of Jesus Christ of Latter-day Saints
- Beeline Routes 1, 2, 5, and 7, connecting to Glendale Community College, Glendale [Metrolink] Station, Glendale Galleria and Americana malls, Pacific Community Center and Park, and the Riverside Rancho neighborhood.
Metro Line 92, connecting to downtown Burbank and downtown Los Angeles
- Glenwood neighborhood retail

Project Area Collisions

23

collisions took place at Stoker St & Pacific Ave from 2011-2015

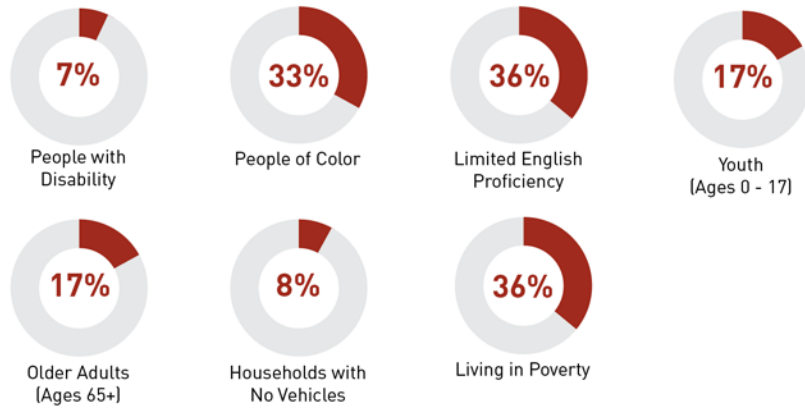


Source: Statewide Integrated Traffic Records System (SWITRS), Transportation Injury Mapping System (TIMS)

Project Area Demographics

27,830

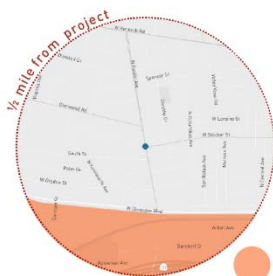
people live within one-half mile of Stoker St & Pacific Ave



Source: US Census Bureau ACS 2009-2013 & 2010-2014 5-Year Estimates

Note: The denominator differs across some of the above metrics, depending on data source and sample size.

Disadvantaged Communities



CES 25% Most Disadvantaged

CalEnviroScreen

19%

of the neighborhoods in this project area are in the top quartile (25%) of CES-designated disadvantaged communities.

Free and Reduced Price Lunch

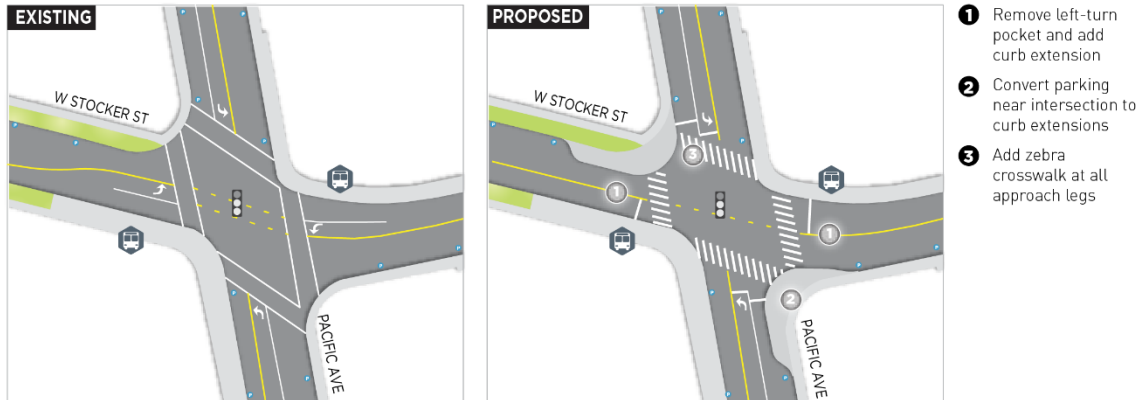
57%

of students attending schools in this project area are eligible for free and reduced lunches.

Project Description

Install high visibility crosswalks and curb extensions at the intersection of West Stocker Street and North Pacific Avenue, decreasing crossing distances on Stocker Street in order to increase the comfort and safety of people walking and reduce the risk of pedestrian-involved collisions. These recommendations also incorporate the improvements from Safety Corridor Project 14.

Recommended Improvements



Benefits and Costs

The California Active Transportation Program Benefit/Cost calculator provides a simple way of quantifying the costs and benefits of active transportation projects.⁵ The City of Glendale can compare the cost of the project against monetized project benefits that are expected to accrue over a 20-year period based on the forecasted number of pedestrians who will be walking through the intersection after the project is completed. Benefits include those related to improvements in health, reductions in VMT and greenhouse gas emissions, enhanced recreational opportunities, and improved safety outcomes. The tables below outline the costs, benefits, and Benefit-Cost-Ratio for the proposed project at Stocker Street and Pacific Avenue.

20-Year Investment Summary Analysis	
Total Costs	\$53,000.00
Net Present Cost	\$50,961.54
Total Benefits	\$1,928,067.73
Net Present Benefit	\$1,276,919.76
Benefit-Cost Ratio	25.06

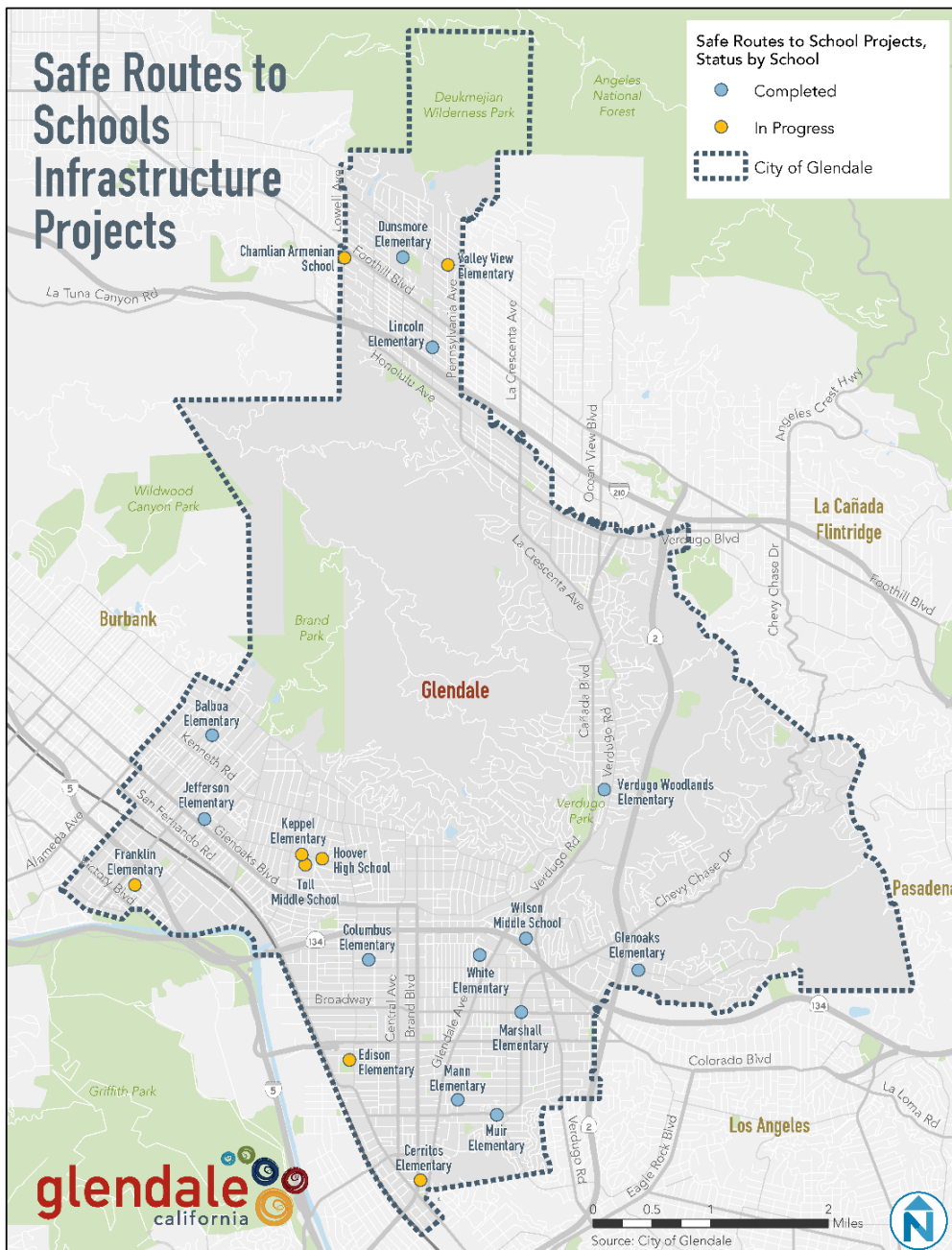
20-Year Itemized Savings	
Mobility	\$609,256.55
Health	\$209,804.90
Recreational	\$235,459.74
Gas and Emissions	\$16,724.09
Safety	\$856,822.45

⁵ More information about this tool, including the calculator itself, is available from the California Department of Transportation: <http://www.dot.ca.gov/hq/tpp/offices/eab/atp.html>.

Safe Routes to School Projects

Closely related to the Pedestrian Plan’s goals of making walking safer and creating connected, walkable places for all, the goal of Glendale’s Safe Routes to School (SRTS) program is to reduce traffic-related injuries and fatalities to school children and encourage walking and bicycling among students. The city is working toward this goal by constructing safety-enhancing infrastructure improvements near Glendale’s public and private elementary, middle, and high schools, as well as implementing education, enforcement, and encouragement programs.

Figure 4-38 Schools with Safe Routes Infrastructure Projects Completed or In Progress



Funded by Safe Routes to School grants, the city is making considerable progress implementing the engineering component of Glendale’s Safe Routes to School program. Improvements include construction or enhancement of sidewalks, trails, bicycle facilities, and street crossings near schools.

Figure 4-39 Sample Safe Routes to School Improvements in Glendale



Source: Nelson\Nygaard

Figure 4-40 Safe Routes to School Projects Underway in Glendale

School	Project Elements
Hoover High School Toll Middle School Keppel Elementary School	<ul style="list-style-type: none"> ▪ Realignment of intersection of Stocker St, Kenilworth Ave, and Concord St by extending curb returns and constructing bulb-outs and median island ▪ Realignment of intersection of Virginia Ave and Palm St ▪ Concord St between Glenwood Rd and Glenoaks Blvd and Kenilworth Ave between Concord St and Glenoaks Blvd <ul style="list-style-type: none"> – Partial removal and replacement of deteriorated asphalt pavement – Construction of new and replacement of damaged curb and gutters, sidewalks, and non-compliant ADA curb ramps – Adjustment of valve covers, manhole covers, utility boxes, and vaults to the new finish grade where necessary – Planting of trees in parkways and tree wells – Installation of traffic striping and pavement markings including installation of bike lanes or shared lane pavement markings
Cerritos Elementary School	<ul style="list-style-type: none"> ▪ Brand Blvd at San Fernando Rd <ul style="list-style-type: none"> – Bulb-out ▪ Brand Blvd at Cerritos Ave <ul style="list-style-type: none"> – Bulb-out – Pedestrian push buttons

School	Project Elements
Thomas Edison Elementary School	<ul style="list-style-type: none"> ▪ Pacific Ave at Riverdale Dr <ul style="list-style-type: none"> – Zebra-stripe crosswalks ▪ Riverdale Dr at Kenilworth Ave <ul style="list-style-type: none"> – Bulb-out NW corner – Reduce curb return radius on NE corner – Zebra-stripe crosswalks ▪ Vine St at Kenilworth Ave <ul style="list-style-type: none"> – Zebra-stripe crosswalks – Bulb-out SW corner – Advanced stop bars – Reduce curb return radius on NE corner – Advanced yield bars and signs – Mid-block bulb-outs – Pedestrian crosswalk sign ▪ Pacific Ave at Vine St <ul style="list-style-type: none"> – Advanced stop bars – Pedestrian countdown signals – Audible pedestrian signals – Zebra-stripe crosswalks ▪ Pacific Ave at Riverdale Dr <ul style="list-style-type: none"> – Advanced stop bars – Audible pedestrian signals – Zebra-stripe crosswalks
Valley View Elementary School	<ul style="list-style-type: none"> ▪ Orange Ave at Pennsylvania Ave <ul style="list-style-type: none"> – Advanced stop bars – Bulb-outs – Zebra-stripe crosswalks – Catch basin throat extensions ▪ Santa Carlotta St / Orange Ave at Maryland Ave <ul style="list-style-type: none"> – Relocate catch basin – Mini traffic circle – Perpendicular curb ramps – Bulb-outs to NW, SE, and SW corners

School	Project Elements
Franklin Elementary School	<ul style="list-style-type: none"> ▪ Winchester Ave at Randall St <ul style="list-style-type: none"> – Advanced stop bars – Zebra-stripe crosswalks – Perpendicular curb ramps with truncated domes – Add sidewalk ▪ Winchester Ave at Lake St <ul style="list-style-type: none"> – Advanced stop bars – Reduced curb return on SW corner – Throat extension on NW corner – Zebra-stripe crosswalks ▪ Randall St at Justin Ave <ul style="list-style-type: none"> – Add perpendicular ramps with truncated domes on NW and SW corners – Replace stop control with mini traffic circle – Widen sidewalk on west side and add sidewalk on east side of Justin Ave. – Zebra-stripe crosswalks ▪ Garden St at Justin Ave <ul style="list-style-type: none"> – Replace stop control with mini traffic circle – Safe-haven ramps on NE/SE corners – Zebra-stripe crosswalks – Perpendicular ramps with truncated domes on NW and SW corners ▪ Lake St at Justin Ave <ul style="list-style-type: none"> – Zebra-stripe crosswalks – Bulb-outs – Advanced stop bars
Chamlan Armenian Elementary School	<ul style="list-style-type: none"> ▪ Abella St at Lowell Ave <ul style="list-style-type: none"> – Advanced pedestrian crosswalk signs – Advanced yield bars and signs – Crossing islands – Curb extensions – Advanced stop bar – Perpendicular curb ramps with truncated domes ▪ Lowell Ave at Foothill Blvd <ul style="list-style-type: none"> – Pedestrian countdown signals – Audible pedestrian signals – Advanced stop bars – Bulb-out on NW corner – Zebra-stripe crosswalks – Reduced curb return on SE corner – Upgrade NW, SE, and SW ramps to ADA compliance

School	Project Elements
Balboa Elementary School	<ul style="list-style-type: none"> ▪ Bel Aire Dr at Allen Ave <ul style="list-style-type: none"> – Curb extensions, ADA curb ramps, new pavement, striping, signage, catch basin modifications ▪ Bel Aire Dr at Irving Ave <ul style="list-style-type: none"> – Curb extensions, ADA curb ramps, new pavement, striping, signage ▪ Bel Aire Dr at School Entrance <ul style="list-style-type: none"> – ADA curb ramps ▪ Kenneth Rd at Allen Ave and Irving Ave <ul style="list-style-type: none"> – ADA curb ramps, striping, signage
Columbus Elementary School	<ul style="list-style-type: none"> ▪ Columbus Ave at Doran St and Milford St <ul style="list-style-type: none"> – Curb extensions, ADA curb ramps, new pavement, striping, signage, catch basin modifications
Dunsmore Elementary School	<ul style="list-style-type: none"> ▪ Dunsmore Ave at School Entrance, Los Olivos Ln, and Los Amigos St <ul style="list-style-type: none"> – Curb extensions, ADA curb ramps, new pavement, striping, signage, catch basin modifications ▪ Lauderdale Ave at Los Olivos Ln <ul style="list-style-type: none"> – Curb extensions, ADA curb ramps, new pavement, striping, signage, catch basin modifications
Lincoln Elementary School	<ul style="list-style-type: none"> ▪ New York Ave at Altura Ave <ul style="list-style-type: none"> – Bulb-outs to all crossing faces to reduce skew – Yellow zebra-stripe crosswalks to all crossings – Advanced stop bars to all approaches – Curb ramps to meet ADA guidelines
Horace Mann Elementary School	<ul style="list-style-type: none"> ▪ Garfield Ave at Mariposa St <ul style="list-style-type: none"> – Zebra-stripe crosswalks – Advanced yield bars and signs to both approaches – Pedestrian crossing warning signs to both approaches – Bulb-outs to both crossing faces ▪ Garfield Ave from Mariposa St to Adams St <ul style="list-style-type: none"> – Speed tables interspersed to slow traffic near the school
Marshall Elementary School	<ul style="list-style-type: none"> ▪ Broadway at Chevy Chase Dr <ul style="list-style-type: none"> – Traffic signal upgrade – Pedestrian countdown signals at all crossings – ADA curb ramps ▪ Broadway at Verdugo Rd <ul style="list-style-type: none"> – Pedestrian countdowns signals at all crossings

School	Project Elements
Muir Elementary School	<ul style="list-style-type: none"> ▪ Garfield Ave at Chevy Chase Dr <ul style="list-style-type: none"> – Traffic signal upgrade – Add countdown signals to all crossings ▪ Garfield Ave at Porter St <ul style="list-style-type: none"> – Advanced stop bar – Zebra-stripe crosswalks – Bulb-outs to NW corner – Large curb extension on NE corner – Advanced yield bars – Pedestrian crossing warning signs
Jefferson Elementary School	<ul style="list-style-type: none"> ▪ Justin Ave at Glenoaks Blvd <ul style="list-style-type: none"> – Bulb-out on SW corner – Reduced curb return on NE corner – Wide curb ramp on NE corner – Yellow zebra-stripe crosswalks – Advanced stop bars – Pedestrian countdown signals ▪ Fifth St at Justin Ave and Ruberta Ave <ul style="list-style-type: none"> – New and wider sidewalks – Tree wells – ADA curb ramps – Zebra-stripe crosswalks
Glenoaks Elementary School	<ul style="list-style-type: none"> ▪ Mid-Block Glenoaks Blvd at School Entrance <ul style="list-style-type: none"> – Yellow zebra-stripe crosswalks – User-activated flashing beacons – School zone signs – Two-way left-turn lane – Advanced yield bars and signs – Pedestrian crossing warning signs
Verdugo Woodlands Elementary School	<ul style="list-style-type: none"> ▪ Verdugo Rd at Crestmont Ct <ul style="list-style-type: none"> – Curb extensions, ADA curb ramps, new pavement, striping, signage ▪ Verdugo Rd at Kirkby Rd <ul style="list-style-type: none"> – ADA curb ramps, new pavement, striping, signage ▪ Verdugo Rd at Sherer Ln <ul style="list-style-type: none"> – Curb extensions, ADA curb ramps, new pavement, striping, signage, catch basin modifications

School	Project Elements
R.D. White Elementary School	<ul style="list-style-type: none"> ▪ Doran St at Geneva St, Balboa Ave, and Everett St <ul style="list-style-type: none"> – Curb extensions, ADA curb ramps, new pavement, striping, signage, catch basin modifications ▪ Lexington Dr at Geneva St and Everett St <ul style="list-style-type: none"> – ADA curb ramps, striping, signage
Wilson Middle School	<ul style="list-style-type: none"> ▪ Monterey Rd at Adams St <ul style="list-style-type: none"> – Curb extensions, ADA curb ramps, new pavement, striping, signage, catch basin modifications ▪ Monterey Rd at Naranja Dr <ul style="list-style-type: none"> – Curb extensions, ADA curb ramps, new pavement, striping, signage ▪ Monterey Rd at Galer Pl <ul style="list-style-type: none"> – Curb extensions, ADA curb ramps, new pavement, striping, signage, catch basin modifications, flashing beacon installation

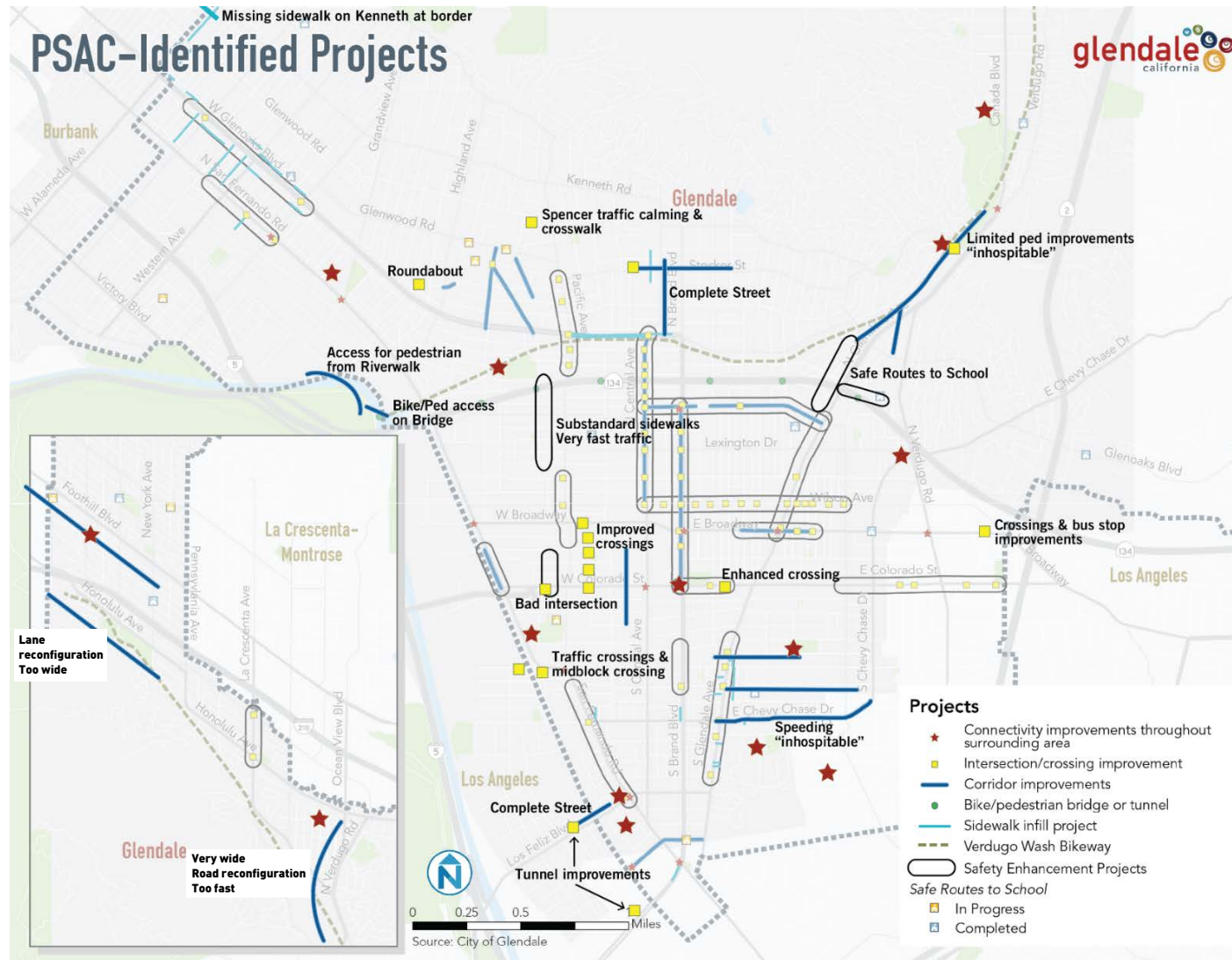
PSAC-Identified Projects

Glendale’s Pedestrian Safety Advisory Committee (PSAC) is comprised of community advocates and stakeholders who have guided the development of the Pedestrian Plan. This group’s input on key pedestrian improvement projects reflects their local expertise and knowledge of Glendale’s walking environment and locations where infrastructure improvements would benefit people walking and rolling throughout the city.

On May 18, 2017, the PSAC reviewed the preliminary project locations and identified additional locations that should be considered for future project development. The committee recommended a focus on “hot spots” of attraction and key destinations, such as Montrose and Downtown Glendale. They suggested a focus for projects on some of Glendale’s “speedways,” very wide streets, and freeway on- and off-ramps where drivers routinely travel too fast.

PSAC members also identified specific pedestrian-priority areas, or locations where people walking or rolling should be given priority over people driving. The PSAC suggestions were added to the comprehensive project map and are presented in Figure 4-41.

Figure 4-41 Projects, Priorities, and Connections Identified by PSAC Members



Closing Network Gaps

While the overall approach and projects identified in this chapter cover many of highest priority areas in Glendale, key pedestrian network gaps remain. Basic features of Glendale's pedestrian network include sidewalks, clearly marked crossings, and accessible curb ramps. All of Glendale's streets should include these supports for people walking or using mobility devices.

While most streets in Glendale have sidewalks, areas without sidewalks include neighborhoods with hilly terrain and undeveloped parts of the city (such as the Verdugo Mountains). Similarly, most intersections lacking curb ramps are on roads without sidewalks or in areas where topographic challenges may make curb ramp installation difficult (e.g., areas with very steep slopes).

The City of Glendale's Sidewalk Infill and Curb Ramp Installation Programs can target these gaps in the pedestrian network that are not addressed under another project type. While the need for improvements may outweigh available resources and capacity, the city can use the prioritization process outlined in Chapter 3 to select priority areas for sidewalks, safe crossings, and curb ramps based on demand, equity, and safety. Figure 4-42 and Figure 4-43 below identify the sidewalk infill and curb ramp projects within the highest priority areas of Glendale and within 1/2-mile of the highest ridership transit stops in the city.

Figure 4-42 Pedestrian Gaps in High Priority Areas

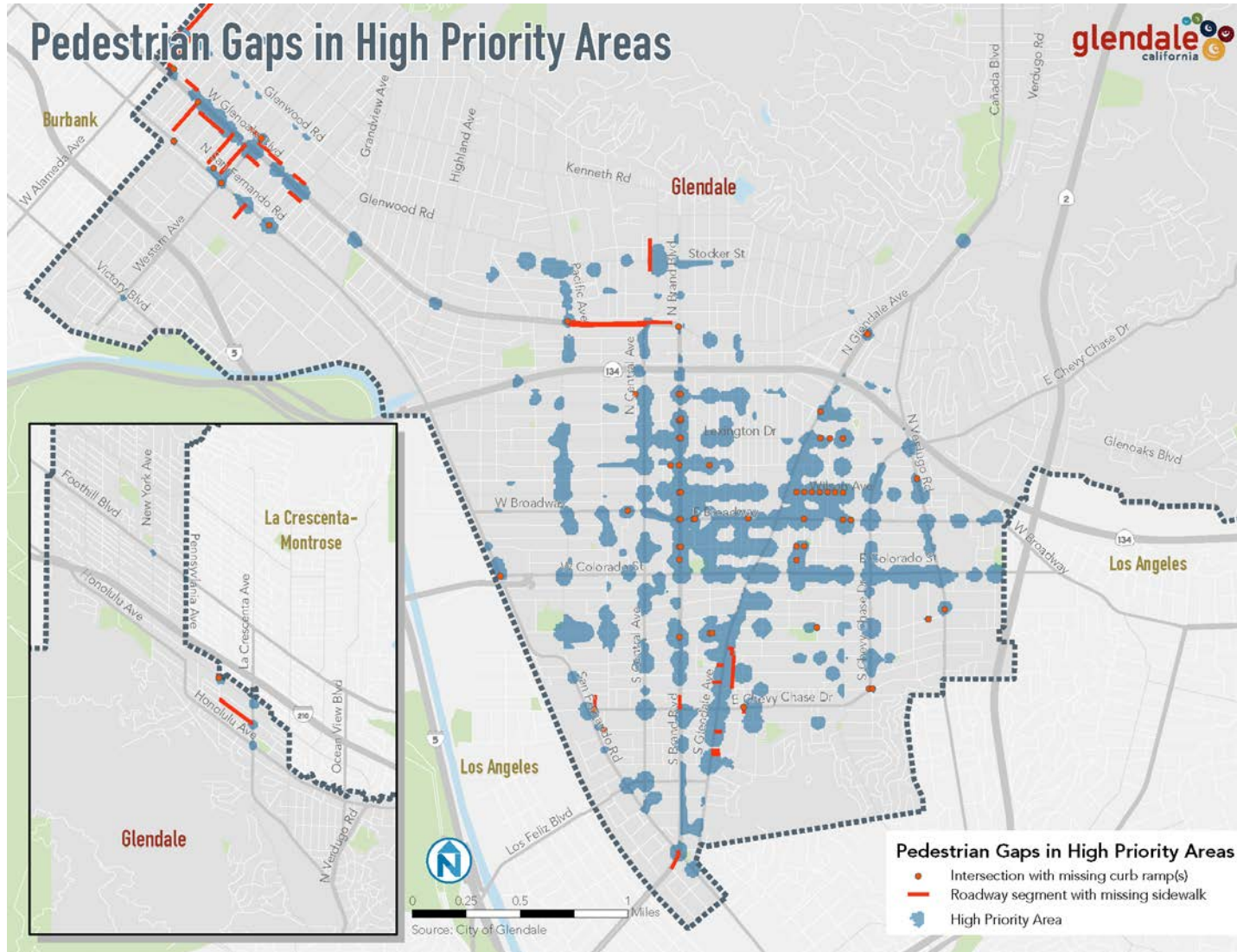
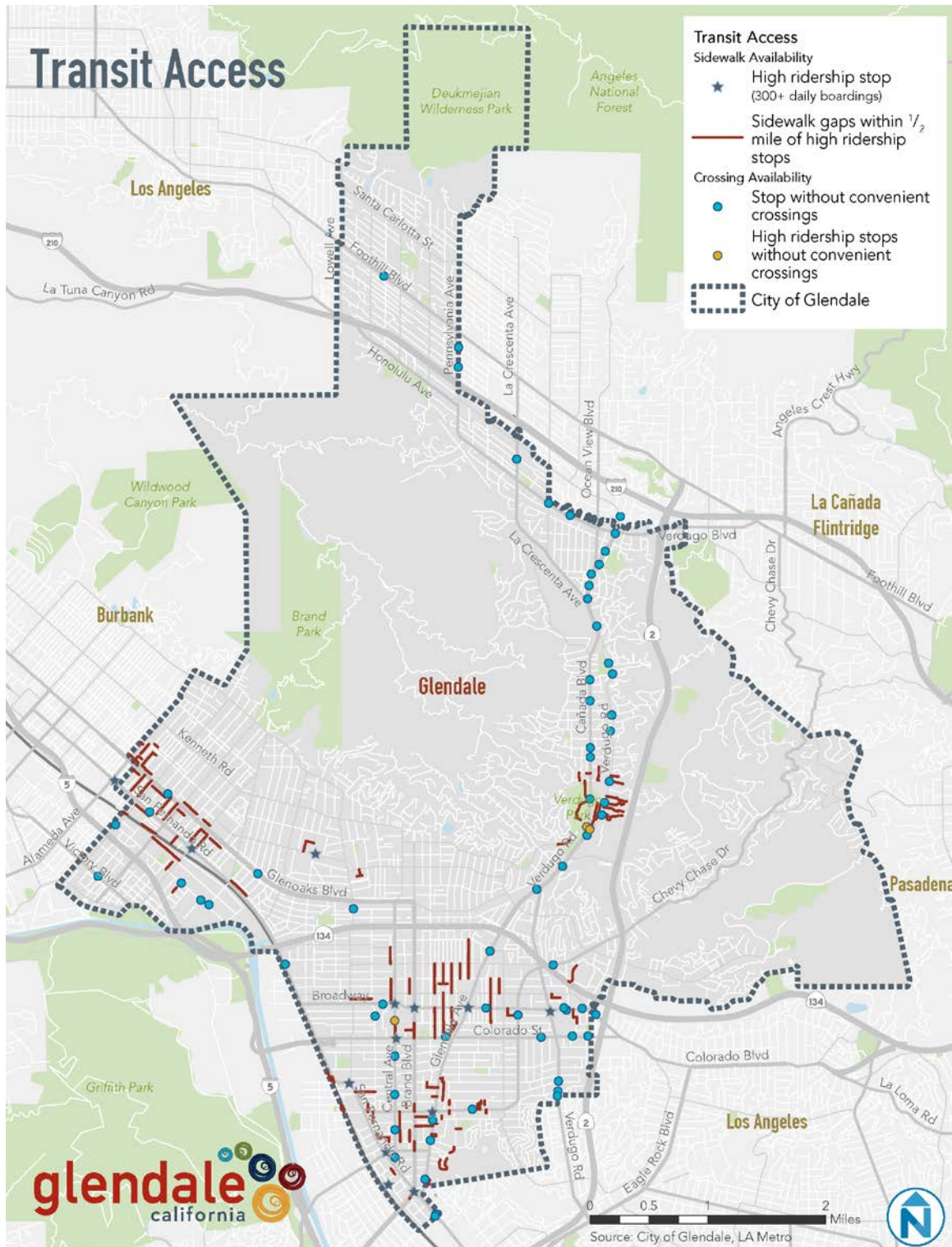


Figure 4-43 Missing Sidewalks within Half-Mile of High Ridership Transit Stops



Using This Information

This chapter provides a comprehensive look at the types of projects that can help to improve pedestrian safety and comfort in Glendale and identifies the benefits that may be realized. While more projects may be needed, these represent improvements in line with the goals of the Pedestrian Plan. Chapter 6 includes more detail on the projects, including costs and the prioritized order for implementation.

ⁱ Pedestrian and Bicycle Information Center's Evaluation of Pedestrian-Related Roadway Measures: A Summary of Available Research prepared for the FHA (2014). Retrieved from http://www.pedbikeinfo.org/cms/downloads/PedestrianLitReview_April2014.pdf

ⁱⁱ Duduta et al. (2015) "Traffic Safety on Bus Priority Systems: Recommendations for Integrating Safety into the Planning, Design, and Operation of Major Bus Routes." Washington DC: EMBARQ/ World Bank Group. Retrieved from <http://publications.wri.org/citiessafer/>

ⁱⁱⁱ Vaziri, Bijan. (1996) "Exclusive Pedestrian Phase for the Business District Signals in Beverly Hills, 10 Years Later: City of Beverly Hills, California. Retrieved from http://pedbikesafe.org/PEDSAFE/casestudies_detail.cfm?CM_NUM=47&CS_NUM=23

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^x FHWA, Desktop Reference for Crash Reduction Factors, FHWA, Washington, DC, September 2007.

^{xi} PentaCityGroup. (2014) Case Study: WalkNYC Pedestrian Wayfinding. Retrieved from <http://www.aiga.org/case-study-walknyc-pedestrian-wayfinding>

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^{xiii} Safe Routes to School Online Guide. (2015) Engineering: Pedestrian and Bicycle Bridges and Tunnels. Retrieved from http://guide.saferoutesinfo.org/engineering/pedestrian_and_bicycle_bridges_and_tunnels.cfm

^{xiv} Transport Canada: Case Study Library. (2011) Public Art and Design in Transit. TP 15130 E. Retrieved from https://fcm.ca/Documents/case-studies/GMF/Transport-Canada/PublicArtDesignTransit_EN.pdf

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