Next stop: connected communities.

GOLD LINE FOOTHILL EXTENSION 2B FIRST/LAST MILE PLAN

6/20/2019

Metro

Metro

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Foothill Gold Line

Table of Contents

1. Introduction

How to Read This Plan

The Gold Line Foothill Extension Phase 2B First/Last Mile Plan (hereafter FLM Plan) is organized by first describing the policy framework underpinning the development of this plan (Chapter 1 - Introduction). Chapter 2 summarizes the planning process including community engagement approach and results. This chapter also describes the prioritization methodology for the project lists.

High-level regional and programming recommendations applicable to the suburban context are provided in Chapter 3 - Regional Recommendations. Also included in this chapter is a map of the five station areas showing the regional connections to each station and among stations.

Possible approaches to implement the projects in this plan are explored in Chapter 4 - Implementation Strategies.

FLM planning addresses the needs of a wide variety of pathway users who differ in their transportation mode, age and ability.

Chapters 5 through 9 are dedicated to each station with the specific pathway networks and project ideas laid out: Glendora (Chapter 5), San Dimas (Chapter 6), La Verne/Fairplex (Chapter 7), Pomona North (Chapter 8), Claremont (Chapter 9).

Four appendices are provided (Appendix A - Walk Audit Summary Memo, Appendix B - Community Engagement Memo, Appendix C - Pedestrian and Bicycle Barriers, Appendix D - Cost Range Factors).

What is First/Last Mile?

Every transit trip involves at least three parts:

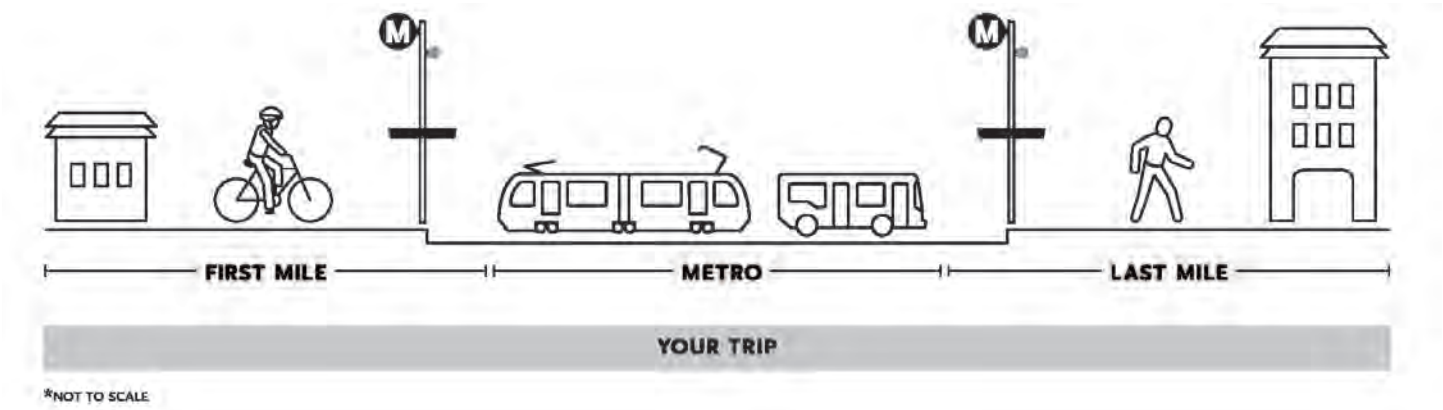
> First – from the point of origin (such as a residence) to a station or stop,

> Ride – on a public transit vehicle, and

> Last – from the destination station or stop to the final destination point, such as a place of employment.

The term "first/last mile" (FLM) refers to the first and last part of these trips, independent of the actual distance traveled. Individuals may use a number of transportation modes to make FLM journeys; they may walk, bicycle, skateboard, or ride in a wheelchair or stroller, for example.

Though the streets and infrastructure that comprise FLM fall outside the boundaries of Metro's jurisdiction and control, they remain critical components of an effective public transportation system. Simply put, all Metro riders must contend with the first/last mile challenge, and the easier it is to access the system, the more likely people are to use and benefit from it.

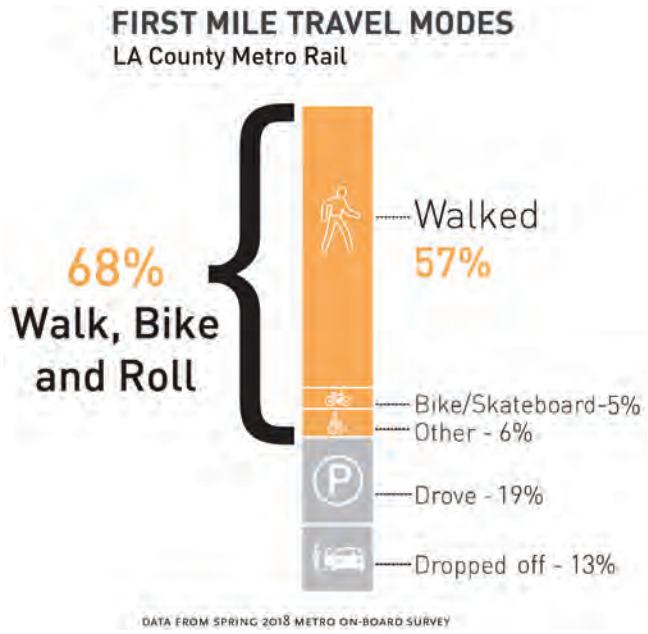


First/Last Mile (FLM) refers to the first and last leg of a transit trip.

Metro's First/Last Mile Policy and Strategic Plan

In May and June 2016, the Metro Board passed Motions 14.1 and 14.2, respectively, establishing policy direction related to First/Last Mile access for Metro station areas. These policies affirm the agency's commitment to FLM improvements, and instruct Metro to conduct FLM planning for existing rail and busway stations as well as future transit corridor projects. It is within this context that Metro has undertaken this plan for the Gold Line Foothill Extension 2B stations in LA County. Further, the policy allows local jurisdictions to count first/last mile improvements toward their 3% local contribution to the transit corridor project.

The 2014 FLM Strategic Plan and Planning Guidelines is the guiding document establishing the direction and methodology for the Gold Line Foothill Extension 2B First/Last Mile Plan. It establishes that specific FLM projects should be identified along **pathways**, which are streets that provide for safe, intuitive, universally accessible, efficient and pleasant access by walking, biking and rolling modes[1]. Table 1-1 provides the characteristics of different types of pathways, while the following pages describe the different project types.



Data show that countywide, the majority of Metro Rail riders walk, bike or roll to stations, with pedestrian access constituting the absolute majority. Access modes vary by station. Recent intercept surveys on station access mode for certain existing Gold Line stations indicated that walking, biking, skateboarding, public transit or other non-driving modes was 46%."[2]

Including this Plan, Metro's First/Last Mile program has completed four plans covering 32 stations in LA County. To view Metro's other completed FLM plans, please visit metro.net/firstlastmile. Previous FLM plans established community-based planning as the appropriate and desired approach to carry out the methodology from the FLM Strategic Plan. Other first/last mile plans are in development including the Purple Line Extension Phases 2 and 3, and the East San Fernando Valley Transit Corridor.

1 *"Rolling" is a general term which refers to lower-speed human or electric-powered wheeled transportation. Examples of rolling modes include strollers, skateboards, wheelchairs and e-scooters. Rolling modes with a speed of less than 12.5 mph generally use the sidewalk, while those that travel faster than 12.5 mph are considered "on-street rolling modes" and use bicycle facilities. For more discussion, see Metro's Slow Speed Network Strategic Plan for the South Bay.*

2 *Accessed 6/18/2019: https://foothillgoldline.org/wp-content/uploads/converted-images/uploads/files/2018-01-09_-_TAC_Reports.pdf. Pg 13 of 45.*

Table 1-1. Pathway Types and Characteristics.

PATHWAY ARTERIALS	PATHWAY COLLECTORS
Main routes that extend from station entrances	Feeder routes into pathway arterials
Highest volumes of pedestrians, cyclists, etc.	
Should radiate in at least four directions from the station	Other streets that provide permeability to the station area
Should connect a minimum of 1/2 mile from station and integrate into regional bicycle network for connections up to 3 miles away	
Highest priority for providing safest facilities for walking, biking and rolling	Secondary priority for providing facilities for walking, biking and rolling

Project Types

This FLM Plan classifies the wide array of potential FLM improvements into fifteen project types which are described below. Types represented with a blue icon represent those which primarily serve pedestrians. Types represented with a gray icon serve those being picked up or dropped off in private vehicles or arriving via bus. Finally, types represented with a green icon represent those oriented to bicycles and other on-street rolling modes.

NEW/IMPROVED SIDEWALKS

This project type includes all types of repair and construction in order to create comfortable and context-appropriate sidewalks. At a minimum, all sidewalks, driveways and curb ramps should be repaired, constructed or upgraded to current ADA standards. Sufficient space for tree wells, lighting, utility poles or parkways should be reserved separate from the path of travel.

NEW/IMPROVED CROSSINGS

This project types represents intersection treatments to facilitate the safe crossing of streets by people biking and walking. Potential projects may include: high-visibility crosswalks, curb extensions, advanced pedestrian signals, protected turn signals, bike boxes and lane markings through the intersection. Bidirectional ramps are recommended for major intersections. Special consideration is needed for intersections where a separated bikeway is present.

WALKWAY OR SHARED STREET

Walkways are areas for pedestrian travel that are not adjacent to a roadway. They generally accommodate bicycles and other rolling modes, but are designed with a primary focus on pedestrians.

Shared streets are roads that retain many of the characteristics of walkways while allowing for some through vehicular movement. They are often designed without curbs, inviting pedestrians to cross the street at any point. Vehicular access is intended to be local only and speeds are slowed greatly by the use of special paving treatments, objects in the roadway, and curves or breaks in the vehicular path of travel.

PLAZA

Plazas are public open spaces generally located in town centers or urban areas. Often, they will be located at or very close to the entrance to stations in order to accommodate walking and rolling mode movement, help with station wayfinding, increase the viability of adjacent land uses and signify that the transit station is the "center" of the town or neighborhood.

Plazas require activity and movement to be successful. Public programming ranging from performance to farmers markets support safety, social cohesion and economic vitality. Their surfaces may be made out of concrete, brick, grass, decomposed granite and/or other materials.

STREET TREES/SHADE

The provision of shade is particularly important for the valley environments in which the 2B cities are located. Street trees with good shade canopy enhance the street visually and provide urban cooling benefits. Shade structures can also be used where tree planting is not practical.

SIDEWALK LIGHTING

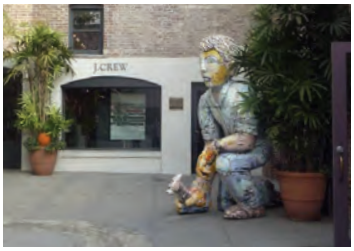
Pedestrian-scale lighting can provide a sense of security and produces less light pollution than street lights designed for cars. Areas with specific lighting needs identified through walk audits and community engagement processes are mapped and included in project lists in this Plan. However, pedestrian lighting may be needed more broadly across station areas and cities.

STREET FURNITURE

Street furniture can add to a sense of place, provide seating, or visual enhancement to a corridor.

VISUAL ENHANCEMENTS

Visual Enhancements improve the public experience of place, perception of safety, sense of ownership and access, and ultimately stewardship. Graffiti abatement and debris removal, supergraphic paving, façade improvements, landscaping, architecture, banners and public art are among numerous strategies that strengthen a sense of place while encouraging people to walk, bike and roll to stations. Commissioned artworks are slated for installation at all new 2B stations. Metro should be consulted regarding public artworks immediately adjacent to the station for operational impacts.



Kneeling Man with Hammer, Viola Frey

Portrait of Karl Benjamin, David Flores

PICK UP/DROP OFF

Transit stations generate lots of activity, and well designed pick up/drop off areas keep traffic moving and reduce conflicts between cars and people walking or biking. Pick up/drop off areas may be located off-street or in a parallel configuration on-street.

ENHANCED BUS STOP

Enhancing bus access by creating an additional stop along pre-existing lines, or moving or enhancing existing stops can increase ridership, safety, and comfort. Common upgrades to existing stops are seating, lighting, shelters, real time signage and adjacent bike parking and bike share.

SHARED USE PATH

A shared use path (Class I bikeway) can provide a safe and direct route for people walking, biking, or scooting/rolling. No automobiles are permitted on shared use paths.

BIKE LANE

Bike lanes (Class II bikeways) provide a dedicated space for on-street rolling and are proven to reduce conflicts and collisions. However, unprotected bike lanes are generally recommended only for streets of operating speeds of 30 MPH or lower (see Chapter 2, Table 2-1). Green paint is sometimes used to more clearly define the bike lane, and buffers are sometimes added to provide extra separation.

BIKE BOULEVARD

A bike boulevard (a type of Class III Bike Route, also known as a neighborhood greenway)uses signage, traffic calming/diversion, and intersection treatments to provide a safe corridor for people biking. Typical bike boulevard elements may include speed humps or other means to calm traffic, loop detectors at signalized crossings, sharrows and signage. Sharrows and signage alone are insufficient on all but very calm roadways. While bike boulevards can be a good alternative to major arterials, they often require new signals or other treatments that provide for the safe and effective crossing of arterial streets. Additionally, bike boulevards often need to be connected to commercial areas and other key destinations via arterial streets.

SEPARATED BIKEWAY

Separated bikeways (Class IV bikeways) use physical objects to separate traffic from people riding bikes. These bikeways have been shown to improve safety for all street users. They often require special considerations at intersections to facilitate safe crossings.

The type of physical separation used in a separated bikeway depends upon the cost and needs of the corridor for on-street parking, beautification, and sidewalk width, among other considerations. In rough descending order of cost and level of physical protection, separation can come from:

> Raising the bikeway (placing it on or adjacent to the sidewalk),

> In-street curbs, often with landscaping,

> Planters, and

> Flexible posts, often with parked vehicles.

BIKE PARKING AND BIKE SHARE

Bike parking that is secure and located conveniently is key to providing efficient and feasible trips for cyclists. Included in each station's Project List are general destinations where community members requested bike parking; however, this is not meant to be an exhaustive or specific identification of locations.

The same general areas that have been identified by community members for bike parking may also be suitable for bike share stations/kiosks if and when a functional bike share system operates in the 2B cities. Further study will be required.

The FLM Strategic Plan lays out the rationale behind the prioritization of walking, biking and rolling modes in FLM planning. Key findings include:

> 85% of all Metro riders walk, bike or roll to access stops or stations. For Metro Rail riders, the figure is 68%.[3] However, this percentage does vary across stations as a function of station area density, demographics, and active transportation infrastructure, among other factors.

> 72% of all Metro riders do not have a vehicle available to make their Metro trips.[3]

> Trips made by walking, biking and rolling plus light rail generate much less greenhouse gas emissions per trip than trips made by driving to light rail stations.

> Walking, biking and rolling modes face significant barriers across the county. Pedestrian and bicycle fatalities have been increasing in recent years.

3 Data from the FLM Strategic Plan has been updated with data from the Spring 2018 Metro On-Board Customer Satisfaction Survey where available.

Gold Line Foothill Extension 2B

The Metro Gold Line[4] is an existing light rail line connecting San Gabriel Valley communities including Azusa, Monrovia and Pasadena to Downtown Los Angeles and the rest of the Metro system. The Gold Line Foothill Extension 2B will extend the line from its current terminus at APU/Citrus Station 12.3 miles to the east, with stops in Glendora, San Dimas, La Verne, Pomona, Claremont and Montclair[5]. Estimated travel time will be 40 minutes from Montclair to Pasadena and 75 minutes from Montclair to Los Angeles Union Station.

As of the time of this writing, a funding shortfall has been identified for the project; however, the Metro Board has affirmed its commitment to complete the line as a first priority project. Due to current funding availability, it is possible that the line may be constructed in phases, with the first phase temporarily terminating in Pomona in 2024.

4 On December 6, 2018, the Metro Board adopted a resolution "authorizing the CEO to establish a Transit Line Operational Naming Convention to change the current naming convention to a color and letter designation for rail lines and bus rapid transit lines." It is anticipated that by the time of opening, the light rail line serving the Foothill Extension cities will be known as the "A" line, with a blue color associated.

5 Montclair is located in San Bernardino County and therefore was not included in the FLM Plan.

Gold Line Foothill Extension 2B Project Map

Construction of the Foothill Extension is managed by the Foothill Gold Line Construction Authority, an independent agency created in 1998 by the California State Legislature. As of January 30, 2019, the Construction Authority has released 30% design plans (Advanced Conceptual Engineering) for the main rail line and stations; however, station parking area design will take place at a later date prior to the opening of the line.

In accordance with Metro board policy (Motion 14.2), this FLM Plan identifies projects that cities may count toward their local contribution to the Gold Line Foothill Extension. These projects consist of pedestrian improvements within a ½-mile radius from each station and biking/rolling improvements within a 3-mile radius of each station. Consistent with the funding agreement, first/last mile criteria and procedures (FLM Guidelines) are being developed and may have bearing on the arrangements to satisfy the 3% local contribution through first/last mile improvements.

First/Last Mile in the Suburban Context

The first/last mile challenge is particularly acute in lower-density suburban contexts such as the Gold Line Foothill Extension 2B cities. In such areas, there are typically fewer people within the ½ mile walking distance of stations, and a greater proportion of riders will have a longer FLM journey. These factors require FLM planning to consider a broad array of transportation modes. Major considerations for each mode include the following:

Pedestrian Planning

Pedestrian planning begins with the establishment and maintenance of basic infrastructure including sidewalks and crosswalks. However, pedestrian planning in suburban areas is most successful through the holistic creation of transit-oriented communities (TOCs) appropriate to the suburban context, with pedestrian priority design, station area public spaces, and transit-oriented land use. Metro's Transit-Supportive Planning Toolkit gives more detail about TOC characteristics.

Planning for Rolling Modes

Bicycles and micromobility (such as bike share and e-scooters, see Chapter 3, page 23) extend the access shed beyond what is accessible to people walking, thereby unlocking more destinations for transit riders. The suburban context of the stations in this plan means that key locations in the community are often outside of a comfortable walking distance, but can still be reached with micromobility options.

The creation of a low-stress bicycle network, as well as the provision of secure bicycle parking, is necessary to entice people of a wide variety of ages and abilities to use these modes for their FLM journeys.

Bus Connections

Certain station areas will handle a significant amount of bus to rail transfers. Permanent bus infrastructure within or adjacent to the station footprint provides an integrated and convenient transfer experience.

Shuttles

Public and private entities often operate shuttles between stations and surrounding locations. FLM planning must also consider transfers from and space for shuttles, vans and similarly-sized vehicles.

MicroTransit, Ridesourcing and Ridesharing

Metro and partners in the region are in the process of experimenting with MicroTransit, ridesourcing and ridesharing as means to get people to and from stations in areas where population density and/or ridership is insufficient to establish frequent bus service. The business and policy ecosystem around these modes is highly dynamic and subject to change. However, it is clear that all of these modes are leading to a higher usage of pick up/drop off facilities in suburban locations.

Consistency with Local Plans

Each of the five FLM Plan cities possesses their own guiding planning documents, including General Plans, Specific Plans and Active Transportation Plans or Bicycle Master Plans. FLM projects that are derived from existing local plans are noted in each station's Origin of Project Types map (Figure 5-4, 6-4, 7-4, 8-4, 9-4) and Project List (Table 5-1, 6-1, 7-1, 8-1, 9-1).

2. Planning Process

Consistent with the Metro First/Last Mile Strategic Plan adopted in March 2014, the Gold Line Foothill Extension 2B First/Last Mile Plan follows the process of network identification, design and implementation. The major steps in the process are shown in the graphic on this page and described in detail throughout this section.

Implementing the Metro Equity Platform Framework

On February 15, 2018, the Metro Board approved the Equity Platform Framework, which calls on the agency to address equity in multiple ways. One of the Equity Platform's specific suggestions is to actively develop and invest in a Community Based Organization (CBO)-oriented public engagement program. CBOs, according to federal law, are "public or private nonprofit organizations of demonstrated effectiveness that: (A) are representative of a community or significant segments of a community; and (B) provide educational or related services to individuals in the community."[1]

Early in the planning process, Bike SGV (now ActiveSGV), a CBO engaged in multiple issues, primarily active transportation, was brought on to the team to serve as a voice for the community and increase access to youth, active transportation users and low-income residents. Engagement processes were designed to maximize input opportunities for these groups, while at the same time also recognizing the right of all members of the community to participate in FLM planning, and engaging community leaders and officials who would be key for project implementation. ActiveSGV staff arranged for focus group meetings, conducted outreach to increase participation at workshops, facilitated discussions and walk audits, led community intercepts and provided overall comment and guidance to the Plan.

1 *20 USCA § 7801 (6)*

STATION AREA DEFINITION
MAY 2018

ANALYZE EXISTING CONDITIONS
MAY-SEP 2018

COMMUNITY ENGAGEMENT PH. 1
COLLECT INFO & INPUTS
AUG-SEP 2018

LAYOUT DRAFT PATHWAY NETWORK AND PROJECT TYPES
SEP-OCT 2018

COMMUNITY ENGAGEMENT PH. 2
SOLICIT NEW INPUTS & FEEDBACK
OCT 2018 - JAN 2019

REFINE PATHWAYS & PROJECT TYPES
DEVELOP PROJECT IDEAS
PRIORITIZE PROJECTS
DEC 2018 - MAR 2019

DRAFT PLAN
APR 2019

PLAN ADOPTION
JUN 2019

Coordination with cities throughout.

Station Area Definition

Each city's station area is defined as connections to the future Gold Line station within the ½-mile pedestrian and 3-mile bike radius from the future station platform. This is consistent with Metro's FLM planning methdology and Federal Transit Administration policy and corresponds to federal funding guidelines.

Analyze Existing Conditions

The station area was analyzed at a macro and micro level to determine the existing conditions and characteristics to inform the pathway network routes and improvements. This process began with quantitative analysis and was then followed by a qualitative process of community engagement and city coordination to provide a comprehensive solution to first/last mile access.

City Coordination

The backbone of the process was close coordination with each 2B city, including meetings to check in with city staff to provide updates and receive feedback. City staff provided valuable input and coordination that informed the plan, including:

> Site data

> Existing plans and policies

> Key stakeholder identification

> Walk audit and community engagement coordination

> Review throughout the process

Station Area Analysis

The station area analysis is a data-driven process using GIS mapping, traffic/collision data, and measurements to understand constraints and opportunities. Key data was analyzed and grouped in the following manner:

> Pedestrian destinations – local land use and points of interest

> Pedestrian barriers – streets over 35 mph speed limits and pedestrian-involved collision locations

> Bicycle destinations – land use and points of interest within biking distance

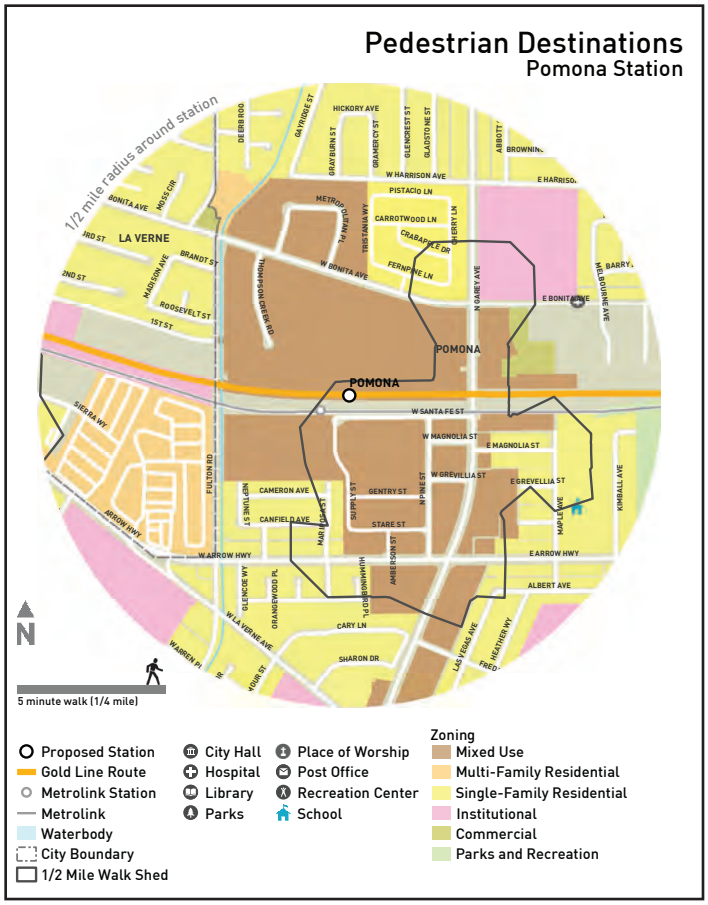
> Bikeways – existing and planned

> Bicycle barriers – freeways and major roads, streets over 35 mph speed limits and bicycle-involved collision locations

> Local transit – existing transit routes and stops

Review Plans & Projects

In coordination with the 2B cities, existing and in-process plans and projects were reviewed to identify components that could be incorporated into the FLM Plan. Types of plans reviewed included local (General and Specific Plans, active transportation plans, proposed new development, Master Plans), regional (County and Council of Governments) and key Metro documents including the Transfers Design Guide and Active Transportation Strategic Plan. Specifically, plans that provided policy support and impact first/last mile planning were documented, as well as projects that provide opportunities for streamlining infrastructure projects for inclusion in the Plan.



Station Area Analysis maps were used to identify holes in the pedestrian network, streets that functioned as barriers, and key existing and future destinations to connect to, among other attributes.

Community Engagement Phase 1: Collecting Information and Input

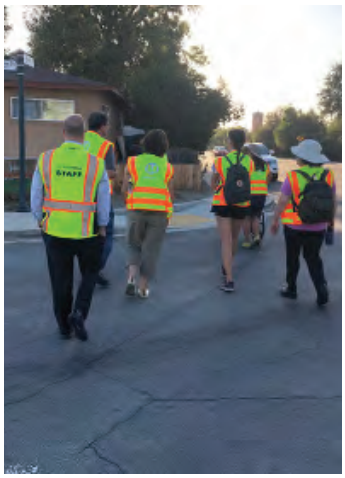
The first phase of community engagement occurred mainly in August and September 2018, with stakeholder interviews and walk audits aimed at gathering information and input from the community.

Stakeholder Interviews

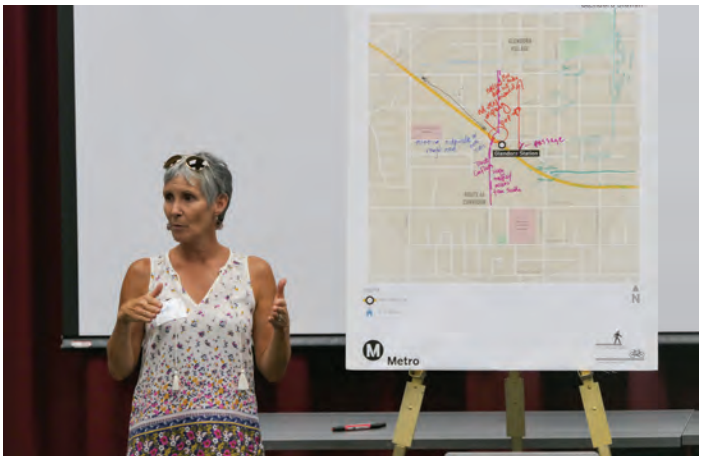
Stakeholder interviews were conducted prior to development of the draft pathway network. Stakeholders included some of the points of interest identified during the station area analysis: key employers, educational institutions and recreational/entertainment destinations. The information gathered from the stakeholders included future expansion/ development plans, current and projected transit ridership, and suggested improvements to the proposed station area that would support increased ridership. In all, nine interviews were conducted.

Walk Audits

In addition to station site visits by the consultant team, walk audits were completed in September 2018 with 2B city staff and community members. Each audit was attended by approximately 20-40 city/community members, with support from the consultant team and Metro staff. The Metro walk audit app was used to log data on barriers, strengths, and ideas for improving the walking and rolling environment around the future station. Walk audit participants summarized their evaluation of routes walked by completing checklists related to the following variables: safety, accessibility and aesthetics. The events concluded with an opportunity for groups to share their qualitative observations and priorities for the various routes that were walked.



Highlights from the walk audits held in September 2018



Draft Pathway Network and Project Types

Layout Pathway Network

Per FLM methodology, an important step was to identify the main pathways to the station. The pathway network was drafted based upon existing conditions, walk audit results (checklist scores, strengths, barriers and ideas), and stakeholder interviews and city staff input. Development and refinement were completed in a charrette-like format with later, iterative review.

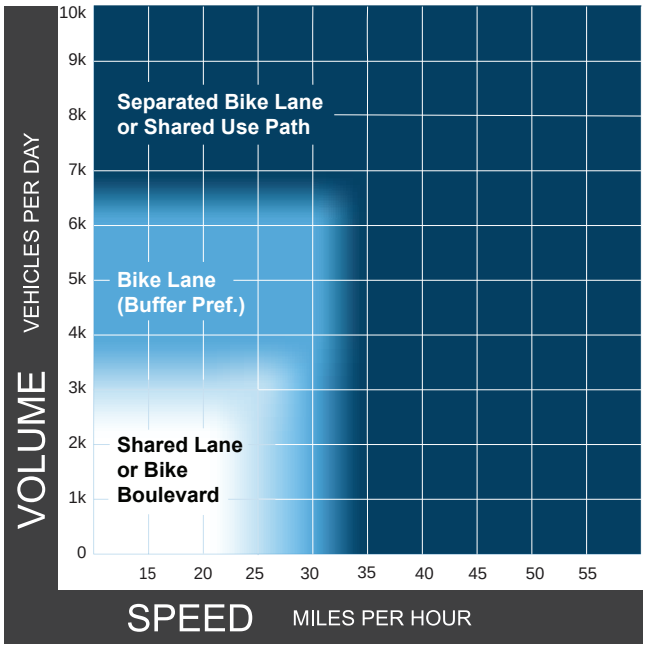
Determine Project Types

Once the initial pathways were defined, project types (see Chapter 1, page 3) were assigned to different locations and segments along pathways. The project type list was derived from previous FLM plans, consultant team experience and discussion with Metro.

Table 2-1 provides overarching principles used to select project types and develop them into FLM project concepts.

Table 2-1. Principles for Project Type Selection and Design.

ALL MODES	> Accommodate all transportation modes at station entrances, with the highest priority assigned to pedestrian access. Other transportation modes may be prioritized based on expected use and public benefit. Ensure adequate access for buses, shuttles and standard-size vehicle pick up/drop off.
	> Prioritize active transportation modes and calm traffic to a greater degree as one approaches the station.
PEDESTRIAN PLANNING	> Create strong, safe, comfortable and accessible connections along all pathways. The strongest connections should connect stations to downtowns, universities and other high-traffic areas.
	> Consider the comfort and security of the pedestrian environment for all abilities, at all times of day and in all seasons.
	> Design intuitive pedestrian connections, with the best connections being along line-of-sight with recognizable landmarks. Include paving treatments or vertical elements such as trees, station pylons, banners and public art, especially where pathways involve turns.
BICYCLE/ ROLLING MODES PLANNING	> Create a low-stress FLM network for bicycles and other rolling modes. Adhere to the guidelines below for the selection of bicycle facility type, except in extenuating circumstances.



Notes

1 Chart assumes operating speeds are similar to posted speeds. If they differ, use operating speed rather than posted speed.
2 Advisory bike lanes may be an option where traffic volume is <3K ADT.
3 See page 32 for a discussion of alternatives if the preferred bikeway type is not feasible.

Source: FHWA Bikeway Selection Guide (February 2019)

Community Engagement Phase 2: Solicit New Input and Feedback

The second phase of community engagement involved going out to the community in various event formats, both formal and informal, and engaging a wide range of people, including historically underrepresented groups and local decision-makers. Pop-up events were designed to solicit general preferences and input from potential transit riders, while events which allowed for deeper engagement were structured to present the draft pathway network and project ideas and solicit feedback on them through discussion.

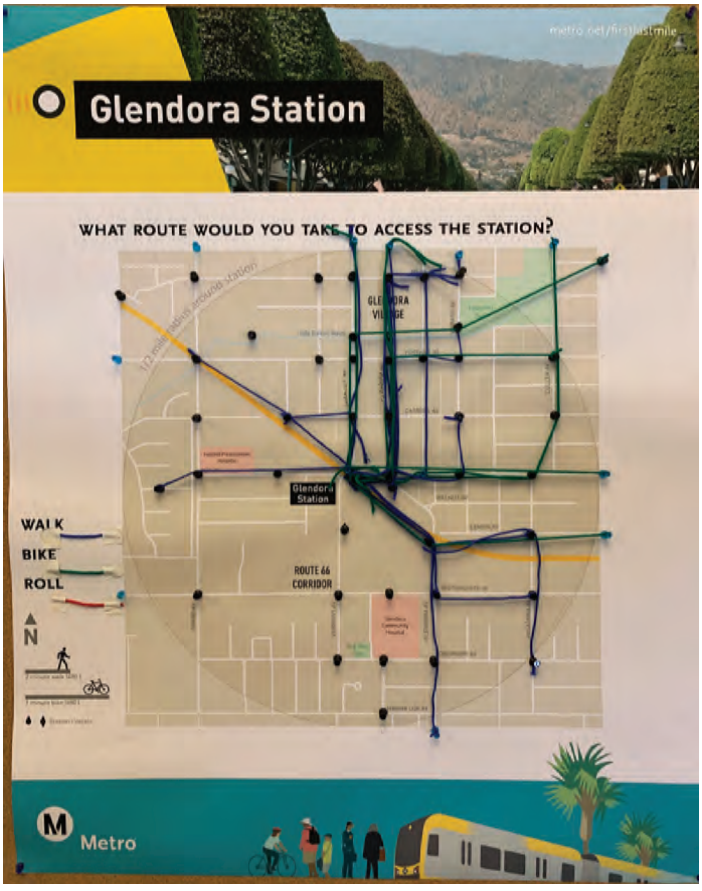
Pop-Up Events

The project team attended existing public events to reach a wide range of visitors and input, especially from individuals and families that may not attend a public meeting. Event types included art shows, holiday and other street fairs. At each event the public was asked to map where they lived, worked or attended school, what routes they would take to access the station by walking or biking, and what improvements could be made to encourage active transportation to the proposed station.

Community Intercepts

ActiveSGV led community intercepts, one-on-one conversations with residents, at Women, Infants and Children (WIC) offices, parks and Metrolink stations. The format was a questionnaire regarding existing usage, access and ideas for the future Gold Line station. Conversations were held in English and Spanish.

Highlights from Pop-Up Events



Focus Group Meetings

Specific meetings were scheduled with relevant organized community groups, including students and bike advocacy groups. Due to the small size of many of these groups, detailed discussion of pathways and improvements could be completed in many cases. Other meetings were structured around general input activities similar to those used at pop-up events.

Public Workshops

Public workshops were held to receive in-depth feedback on the draft pathway network. Workshops ranged in attendance from 10 to 25 and provided an overview of the data analysis, draft pathway network, and break out groups to add comments on the pathway network, agreeing or disagreeing with pathways and project types, and proposing new ones.

Council & Commission Meetings

The most formal of the public engagement types, the council and commission meetings consisted of a formal agendized presentation where council/commission as well as public comments were received. Council/commission meetings occurred in cities where requested by staff.

Table 2-2 presents a list of the community engagement events conducted in Phases 1 and 2. Figure 2-1 summarizes the results of the outreach.

Highlights from public workshops and focus group meetings. Bottom left photo courtesy of Pomona Valley Daily Bulletin.

Table 2-2. Community Engagement Events.

LOCATION	DATE	TYPE	EVENT/GROUP
Glendora	Aug. 24, 2018	Interview	Foothill Presbyterian Hospital
	Sep. 17, 2018	Walk Audit	
	Nov. 16, 2018	Pop-Up	Glendora Holiday Stroll
	Nov. 26, 2018	Public Workshop	
	Dec. 4, 2018	Intercept	Finkbiner Park
	Dec. 4, 2018	Council/Commission	Planning & Community Services Commissions Joint Session
	Jan. 8, 2019	Council/Commission	City Council
San Dimas	Aug. 13, 2018	Interview	Gilead Sciences[1]
	Sep. 19, 2018	Walk Audit	
	Nov. 27, 2018	Interview	Bonelli Park
	Dec. 1, 2018	Pop-Up	San Dimas Holiday Extravaganza
	Dec. 10, 2018	Public Workshop	
La Verne	Aug. 14, 2018	Interview	Fairplex
	Aug. 15, 2018	Interview	University of La Verne
	Sep. 18, 2018	Walk Audit	
	Nov. 14, 2018	Focus Group	La Verne Bicycle Coalition
	Dec. 1, 2018	Pop-Up	La Verne Holiday Stroll
	Dec. 5, 2018	Focus Group	Damien High School Road & Mountain Biking Team[1]
	Dec. 5, 2018	Council/Commission	General Plan Advisory Committee
Pomona	Aug. 11, 2018	Interview	Casa Colina Hospital
	Aug. 14, 2018	Interview	Fuller Theological Seminary
	Aug. 17, 2018	Interview	Cal Poly Pomona (administration)
	Sep. 13, 2018	Walk Audit	
	Nov. 6, 2018	Focus Group	Pomona Valley Bicycle Coalition
	Nov. 10, 2018	Pop-Up	Pomona Chalk Festival
	Nov. 14, 2018	Focus Group	Cal Poly Pomona (students and faculty)
	Nov. 27, 2018	Public Workshop	
	Dec. 13, 2018	Intercept	Pomona North Metrolink Station
	Dec. 14, 2018	Intercept	Women, Infants & Children (WIC) Office
Claremont	Sep. 4, 2018	Interview	Pomona College
	Sep. 10, 2018	Walk Audit	
	Oct. 27, 2018	Pop-Up	Village Venture
	Oct. 31, 2018	Focus Group	Claremont Bicycle Pedestrian Advisory Committee
	Nov. 15, 2018	Public Workshop	
	Dec. 3, 2018	Council/Commission	Traffic & Transportation Commission
	Dec. 4, 2018	Intercept	Claremont Colleges
	Dec. 12, 2018	Intercept	Claremont Metrolink Station
	Dec. 12, 2018	Council/Commission	Architectural Commission
	Dec. 18, 2018	Council/Commission	Planning Commission

1 *These events covered both the San Dimas and La Verne/Fairplex station areas.*

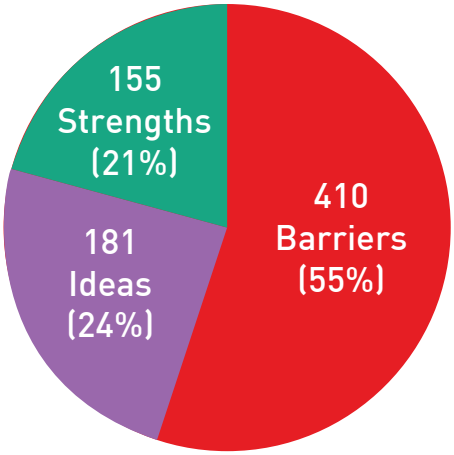
Overall Community Outreach

30 Events

1504 People Engaged

3040 Individual Comments

Walk Audit Conditions



Most Requested Project Types

1. SIDEWALK LIGHTING
2. NEW/IMPROVED CROSSINGS
3. SHARED USE PATH
4. PLAZA
5. BIKE PARKING/BIKE SHARE

Overarching Themes

- Pathways should avoid high-traffic major roadways where possible.
- Provide station amenities (bike parking, pick up/drop off, enhanced bus stops).
- Expand bicycle connections beyond the 1/2 mile radius.
- Re-envision the overall street environment in key station-adjacent areas.

Figure 2-1. Summary of Community Outreach Inputs.

Refine Pathways and Project Types, Develop Project Ideas and Prioritize Projects

After receiving feedback and new input from the community, the pathways and project types were refined, developed and prioritized in order to produce the FLM Plan.

Extend Pathway Network

In response to community requests, the team developed a network of bicycle and rolling mode pathway arterials and collectors which extend beyond the ½ mile radius surrounding each station, up to a maximum of three miles. Pathway arterials with bicycle facilities within ½ mile of the future stations were extended, connecting to the planned San Gabriel Valley Regional Greenway Network, Active Transportation Strategic Plan corridors and other planned bikeways in the 2B cities. Additional recommendations by the FLM planning team consisted of gap closures, upgrades of existing or planned facilities, and additional connections to pathway arterials. Facility types were chosen based on a general suitability analysis.

The projects included in the extended pathway network were developed in response to general community directives only and require additional vetting by the public, along with substantial technical analysis.

Development of Project Ideas

The team conducted high-level feasibility analysis for any future efforts around 3 miles of community-supported project types and developed concept-level designs for key projects which are presented in each city's Station Package (Chapters 5-9). Projects will still require a more detailed feasibility study, cost estimation and community outreach prior to implementation.

Prioritization Methodology

Projects for each station were prioritized based on the criteria in Table 2-3. Some project types were omitted from prioritization; these include: projects that are contingent on redevelopment of private property and projects that are planned as part of the Foothill Gold Line Construction Authority's work.

Each station's project list is prioritized independently from the other stations. Linear and point projects are prioritized separately. Bikeways are considered to be one project, even when the facility type changes along the bikeway's length.

It is advisable that multiple projects with overlapping geographic extents be implemented at the same time. For instance, a separated bikeway project would also give the implementing agency the opportunity to implement new/improved crossings projects along the same corridor. Implementing agencies can choose the highest-scoring projects and then use the Pathway Network and Projects map or full (unprioritized) Project List in order to determine other projects that can be implemented at the same time for cost efficiencies and greater impact.

Cost Estimates

A cost range is provided for each project in the station areas. Cost ranges were determined by multiplying factors of size by high and low unit costs observed in other projects of the same type, with some adjustment for known project factors. The unit costs are given in Appendix D. One project in each station area was analyzed at a slightly greater, feasibility level of detail. More detailed cost estimates will be required by implementing agencies to guide detailed decision making and tradeoffs.

Table 2-3. Project Prioritization Criteria

CATEGORY	RATIONALE	CRITERIA	SCORE
1. Safety	Safety is a core goal of the FLM Plan. This criterion prioritizes pedestrian- and bicycle-involved collision locations and corridors as identified through publicly-available SWITRS data. Only projects which specifically address corridor safety will be eligible to receive points in this category.	1.1 – Within the past five years: the following number of pedestrian- and/or cyclist-involved collisions have occurred within 500 feet of the project:	
		More than 5	**20**
		4-5	15
		2-3	10
		1	5
		1.2 – Within the past five years, at least one collision within 500 feet of the project resulted in a pedestrian and/or bicycle rider fatality	**5**

Table 2-3. Project Prioritization Criteria (Cont.)

CATEGORY	RATIONALE	CRITERIA	SCORE
2. Demand	Projects in areas of high demand provide benefit to a greater number of people. This criterion uses data about pedestrian and bicycle activity generators to prioritize areas of higher demand.	2.1 – Project is located within 1/4 mile of a school	**5**
		2.2 – Project is located within 1/4 mile of a senior center, park, hospital and/or library	**5**
		2.3 – Project is located within an area zoned for commercial or multi-family residential use	**5**
3. Pathway Type	Pathway arterials and collectors have been designated in order of priority.	3.1 – Project is located on a pathway arterial	**10**
4. Proximity to Station	Connecting to future Gold Line stations is the purpose of the Plan. One of our principles for project type selection and design is to increase the prioritization of active transportation modes with station proximity.	4.1 – Project is located within the following distance of a future Gold Line station:	
		1/8 mi.	**10**
		1/4 mi.	7
		1/2 mi.	4
5. Equity	More disadvantaged communities are often transit-dependent and disproportionately represented in severe and fatal injuries from traffic collisions. Cal EnviroScreen measure the level of demographic disadvantage and environmental burden experienced by residents of each census tract.	5.1 – CalEnviroScreen 3.0 score	
		90-100%	**10**
		80-90%	9
		70-80%	8
		60-70%	7
		50-60%	6
		40-50%	5
		30-40%	4
		20-30%	3
		10-20%	2
		0-10%	1
6. Implementation	This criterion prioritizes lower-cost and less-complex projects that are anticipated to be more easily implementable.	6.1 – Project will not require any of the following: > Elimination of traffic lanes or parking > Moving of curbs > Acquisition of additional right-of-way and Project is not located on an existing flood control channel or waterway	**5**
MAXIMUM TOTAL POINTS			**75**

The maximum number of points available per criterion is shown in **bold**.

3. Regional Recommendations

The FLM planning process is built around defining specific pathways with infrastructure improvements connecting to rail stations. These pathways and projects are detailed in each city's Station Packages (Chapters 5 through 9).

However, there are several recommendations that can be made at the regional level, across the five cities. These recommendations were developed in response to stakeholder feedback requesting a wider regional perspective on mobility further informed by suburban FLM case study research.

Regional Bicycle/Rolling Mode Facilities

Because of the adjacency of the five cities along the route, there is a strong desire to connect bicycle and on-street rolling mode facilities across city boundaries. Figure 3-1 shows the overall pathway network across the FLM Plan cities.

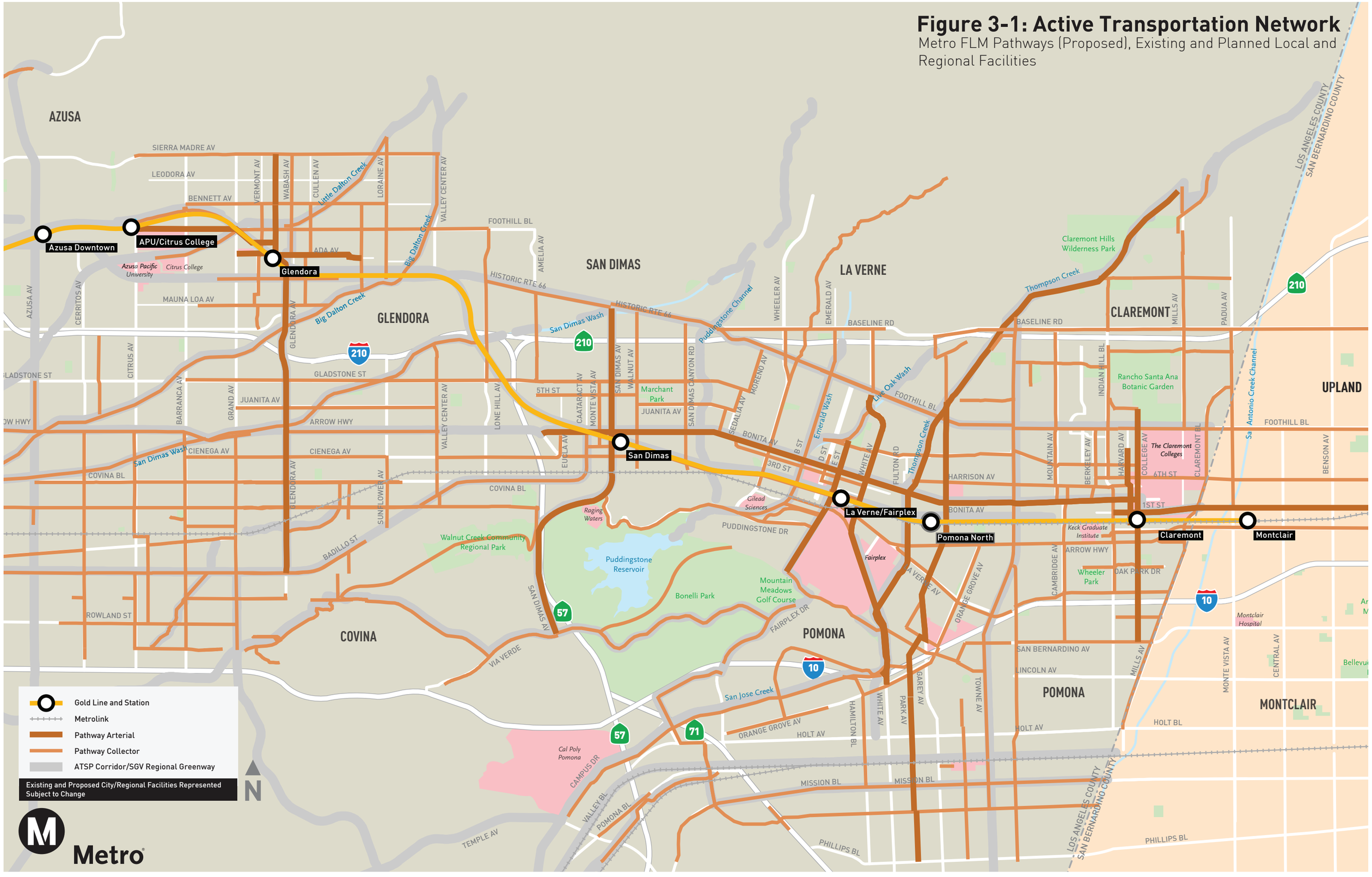
As Figure 3-1 shows, many key pathways intersect with regional bicycle corridors identified in Metro's Active Transportation Strategic Plan and the San Gabriel Valley Council of Governments' Regional Greenway Network. Among these is the east-west pathway arterial along Bonita Avenue, which has been known in parts and at times as the "Citrus Regional Bikeway" and connects to San Bernardino County's 25-mile Pacific Electric Trail. Arrow Highway has also been proposed as the primary east-west connection between San Dimas and Claremont; however, the FLM pathway design process and community outreach revealed a strong preference to strengthen Bonita Avenue first. The buildout of bicycle facilities along Bonita Avenue would ideally provide a consistent level of traffic stress across the corridor, and the corridor can be branded consistently as the Citrus Regional Bikeway. Banners, signage and public art can be coordinated among cities to reflect the historic citrus theme.

The Citrus Regional Bikeway and Regional Greenway Network can be seen as the backbone of a coordinated regional system of bikeways. This network should be perceivable to the user with route and directional signage including paths and travel times to Metro stations. A numbered system for bicycle routes can be considered, with even numbers corresponding to east-west routes and odd numbers corresponding to north-south routes.

Transport for London, a regional agency coordinating transportation improvements across thirty-three municipalities, has established a numbered- and lettered system of regional bikeways designated as Cycle Superhighways and Quietways. Signage shows route number and time distance to major destinations and public transit stations.

Figure 3-1: Active Transportation Network

Metro FLM Pathways (Proposed), Existing and Planned Local and Regional Facilities



Wayfinding Signage

Wayfinding signage design for the regional bicycle and on-street rolling mode network can be integrated with general program(s) of station wayfinding signage oriented toward pedestrians and other pathway users. Such signage programs may be initiated by cities or the San Gabriel Valley Council of Governments. Metro can provide guidance; in particular, the agency's Trailblazing Standards provide design standards for integrating directions to Metro into local wayfinding signage designs.

Specific locations for wayfinding signage have not been identified as a part of this FLM Plan; however, streets identified as pathways can be taken as a starting point, with initial directional signage at key origin points along pathways, "reassurance" signage mid-pathway and the station identifier forming the final marker that a pathway user has arrived.

Sidewalk Lighting

As the most requested project type at FLM Plan pop-up events, sidewalk lighting is a need across all five station areas. Key areas where lighting is needed have been identified in each station's Project List, but there may be a need for cities to examine needs for pedestrian-scaled lighting more generally across station areas through a lighting study.

FLM-Supportive Programs

Research of suburban first/last mile case studies revealed a number of programs that support convenient access for transit riders. In addition to the case study research, community comments indicated the desire for programming elements to facilitate ridership. This section describes recommended programs that work in concert with infrastructure-focused FLM project types. Station-specific recommendations are provided in each city's Station Package (Chapters 5 through 9).

Secure Bicycle Parking

People engaged as a part of the project placed a high priority on secure bicycle parking at stations. The Construction Authority plans to create the following number of secured parking locations within a bicycle room or fenced area at each station:

- Glendora: 32 spaces
- San Dimas: 32 spaces
- La Verne/Fairplex: 64 spaces
- Pomona North: 32 spaces
- Claremont: 64 spaces
- Montclair: 96 spaces

Consideration should also be given to establishing a staffed bicycle hub at a station where high demand is anticipated. Staffed bicycle hubs offer repair and retail services, as well as amenities such as restrooms and water stations. This type of

An un-staffed modular secure bicycle parking system may be implemented at each station. Source: Velodome Shelters.

Metro Bike Hubs are now in operation at Union Station, Hollywood/ Vine, Culver City and El Monte. A similar facility might be established somewhere in the 2B cities.

secure bicycle parking may be considered for high demand stations where there is strong community support to activate the space and offer education/encouragement programs.

Carshare

The FLM Strategic Plan identifies carshare as a potential plug-in component that can be used as a FLM improvement. Carsharing services provide vehicles that are available for hourly rental. Metro reserves or is in the process of reserving parking spaces for carshare in approximately 33 of its station parking lots. Lessons learned from Metro's current carsharing program should be used to determine whether the program should be extended to the Gold Line Foothill Extension 2B. Additionally, consideration could be given to limited informal carshare such as shared company vehicles.

The City of La Verne has State authorization to allow golf carts along public roads with a 25 mph speed limit. This is an opportunity to consider implementing Neighborhood Electric Vehicles in a carsharing program in the station area.

Shuttle Service and Facilities

Stakeholder interviews conducted with large employers, universities and other institutions in the area revealed that several are planning to operate shuttles to the Gold Line when it opens. Cities may also operate shuttles. The current station designs accommodate a pick up/drop off area for shuttles within the automobile pick up/drop off facilities planned for each station.

While privately operated shuttles are a straightforward solution to FLM challenges for large institutions located beyond walking or biking distance, efficiencies of scale can be gained by serving multiple destinations. A more optimal solution may be for transit agencies to operate services which serve multiple destinations and which are partially funded by these institutions, or simply to encourage or supplement regular bus service along routes. This can have the benefit of also providing improved service to the general public.

The effective management of shuttle programs requires a flexible approach, and care should be given to identifying the appropriate agency and department to implement such a program. One option is to establish a new regional Transportation Management Agency (TMA) which could also undertake other Transportation Demand Management (TDM) programs.

Carshare can be an important last-mile solution for travel to remote locations or shopping destinations.

Neighborhood electric vehicles (NEVs) are a lower-impact alternative to standard cars for a carshare program. NEVs, however, are restricted to travel on certain types of streets. Above, a rendering of an NEV-friendly bicycle boulevard.

Source: Metro Slow Speed Network Strategic Plan for the South Bay

iShuttle is a partnership between the City of Irvine and the Orange County Transportation Authority to provide Metrolink last-mile connections. Routes are chosen to serve multiple employers who provide discounted monthly Metrolink passes to employees. Source: OCTA

Ridehailing Programs

Ridehailing platforms such as Uber and Lyft connect riders with drivers through mobile technology. In 2017, the Gold Line Foothill Extension 2A city of Monrovia implemented a program to use dial-a-ride funds to subsidize Lyft rides to and from the Gold Line station and around the city (see "GoMonrovia," next page). Given the popularity of this program, 2B cities may consider implementing a similar program. Dial-a-ride services are currently provided in San Dimas, La Verne, Pomona and Claremont by Pomona Valley Transportation Authority. The City of Glendora has a separate dial-a-ride program.

While some studies show ridehailing services can have a detrimental effect on public transit ridership, the long distances that will be traveled by many Gold Line riders increase the chances that ridehailing and Gold Line ridership will be complementary and that ridehailing will be used as a FLM transportation mode. The effect of ridehailing on active transportation access, however, should be monitored.

Micromobility (Bike Share, Scootershare, etc.)

Micromobility is a rapidly developing area in transportation that provides individual mobility through small, shared devices such as bicycles or scooters. The term applies to both public and private systems, docked and dockless, smart bike and smart dock.

In 2017, the San Gabriel Valley Council of Governments (SGVCOG) was awarded by the California Transportation Commission (CTC) a Greenhouse Gas Reduction Fund Grant to expand bike share throughout the San Gabriel Valley. In February 2019 the Council of Governments selected Gotcha Mobility to launch a regional bike share program under the grant consisting of at least 1,000 E-bikes placed around 12 cities in the San Gabriel Valley, including La Verne and San Dimas among the 2B cities. Other cities may have the opportunity to join the bikeshare program as well. Operation of the system is anticipated to be self-sustaining.

Micromobility is a promising FLM strategy that has the potential to dramatically expand access to bicycles and other devices with similar sizes and speeds. However, it is important to note that the market, funding, and policy environment for micromobility is rapidly shifting, and that programs in place today may not be the same ones as those in operation at the Gold Line's opening. It is recommended that public agencies undertake pilot programs and adjust strategies based on experience. Since the usefulness of these services depends upon their density of vehicles and range of possible travel, programs coordinated across municipal boundaries, such as the SGVCOG program, are strongly preferred.

GoMonrovia

The City of Monrovia implemented the GoMonrovia program, a public/private partnership between the City of Monrovia, Lyft, and Lime to improve mobility and reduce parking demand at the City's Gold Line station and around the city.

Lyft Line

The program provides $1.00 Lyft Line (shared) rides throughout the City and $0.50 rides to the station. It handles over 2,000 daily rides, including approximately 400 rides daily to and from the station, lessening station parking demand.

The City of Monrovia used an existing funding source, dial-a-ride funds, to implement this new service. The public subsidy involved is less than $4 per ride. Wheelchair-bound passengers have an accessible van option provided by Empire Transportation.

Keys to the popularity of the GoMonrovia Lyft program have been a strong outreach campaign, training and signage. City staff conducted trainings with seniors on how to use the Lyft app and launched a simple, yet highly visible campaign to encourage behavior change.

Lime Bike

Lime Bike is a dockless bikeshare service operated by Lime. Bicycles were available and could be parked throughout the service area, but the City established specific marked parking areas in high-traffic locations such as the Gold Line station and Old Town Monrovia. These parking areas were visible on the map in the Lime app and were highly effective in addressing concerns about the potential blockage of sidewalks by parked bicycles.

During the four-month period from March to July 2018, approximately 80 rides were completed per day. However, usage declined to about 40 rides per day in February 2019. In March 2019, Lime removed its bicycles from Monrovia, part of a company-wide strategy to move toward electric scooters.

Bicycle usage may have been inhibited by several factors, including the City's sloping terrain, a lack of on-street bicycle facilities, and a citywide prohibition on sidewalk riding. The City is now pursuing the creation of additional bicycle infrastructure and is considering whether to allow electric scooter companies to operate in the City.

Source: City of Monrovia

4. Implementation Approaches

Implementation of first/last mile projects presents an opportunity to focus on transit customers' entire trip and provide safe and convenient ways to access the planned stations. To provide a seamless experience for the customer requires coordination among multiple jurisdictions such as Metro, the Foothill Gold Line Construction Authority, local cities, local transit providers, and even private property owners. This chapter outlines a few approaches that could be taken to facilitate next steps for the projects identified in this plan. It should be noted that implementation has not been solidified for this plan and the approaches presented here require agreement, action, and funding identification on the part of many agencies.

Adopt the FLM Plan

City staff have been involved throughout the development of this plan. Cities could consider adopting the FLM Plan by resolution and specifying that their adoption is related to the chapter and recommendations for their city only. Adoption may strengthen city-led applications for grant funding and allow for other implementation opportunities.

Integrate into Existing Local Plans

In addition to or instead of adopting the Plan, cities could consider incorporating recommendations into existing city plans. A suggested list of city plans to update is shown in Table 4-2.

Table 4-1. Possible Implementation Approaches

ACTION	FOR CONSIDERATION BY	TIMELINE
Adopt the FLM Plan	Cities	Short-Term
Integrate the FLM Plan into existing plans	Cities	Short-Term
Integrate FLM projects into existing local programs, including Capital Improvement Programs	Cities	Ongoing
Consider opportunities to implement via Construction Authority activities		
> Projects on station footprint	Construction Authority Metro	Short-Term
> Projects on city streets which are being modified or crossed by Gold Line Construction Authority	Cities Construction Authority Metro State elected officials	Short- to Medium-Term
> Projects on station parking sites	Construction Authority	Medium-Term
Implement FLM projects through conditions of development	Cities	Ongoing, Long-Term
Initiate or modify MicroTransit, shuttle, ridesourcing and/or micromobility programs informed by evolving best practices	Cities Metro Other Transit Agencies SGVCOG	Medium-Term
Pursue external funding sources	Cities	Ongoing

Timeframe assumptions: Short-Term: Within 1 year, Medium-Term: Before line opening, Long-Term: After line opening.

Table 4-2. Potential Actions to Integrate FLM Projects into Local Plans

PLAN	POTENTIAL UPDATES FOR FLM PROJECT INCLUSION
GLENDORA	
SGV Regional Pedestrian and Bicycle Master Plan/Active Transportation Initiative	> Incorporate FLM Plan recommendations.
Route 66 Specific Plan (Revised 2017)	> Evaluate recommended cut-throughs in the context of development standards and identify opportunities for implementation. > Refine the street furniture, lighting and tree palette for specific streets. > Prepare urban design plan developing project ideas and addressing connections.
SAN DIMAS	
Bicycle Master Plan (2011)	> Update with new Active Transportation Plan, including recommendations consistent with FLM Plan.
LA VERNE	
General Plan Circulation Element (in progress)	> Include goals and policies related to FLM. > Adopt roadway classifications consistent with FLM pathways and projects.
Active Transportation Plan (in progress)	> Evaluate consistency with FLM Plan.
Old Town La Verne Specific Plan (2013)	> Evaluate recommended setback on White Av. south of 1st St.
Arrow Corridor Specific Plan (2006)	> Review setbacks, development standards and sidewalk provisions based on updated section plans and community input.
EIFD Infrastructure Financing Plan (2018)	> Consider including additional projects within the EIFD area.

Integrate into Existing Local Programs

Some FLM projects may simply be included in existing City programs without external coordination or funding. These include:

Street resurfacing program

Restriping projects could be done as part of resurfacing the road. The cities' resurfacing projects are an opportunity to implement other spot improvements concurrently, such as bulb outs.

Sidewalk maintenance program

Spot sidewalk issues, such as cracked pavement, have been identified on the walk audits. These should be integrated in the regular sidewalk maintenance program.

Urban forestry

Street tree maintenance and gap filling issues can be forwarded to the local department responsible for urban forestry for follow-up.

Percent for public art programs

La Verne, Pomona and Claremont manage existing public and/or private percent for art policies and programs which have the potential to facilitate recommendations for new public art.

Table 4-2. Potential Actions to Integrate FLM Projects into Local Plans (Cont.)

PLAN	POTENTIAL UPDATES FOR FLM PROJECT INCLUSION
POMONA	
Active Transportation Plan (2012)	> Include recommendations consistent with FLM Plan.
Pomona Corridors Specific Plan (2014)	> Update Transit-Oriented District vision plan and development standards integrating planned station footprint and facilities, including: • Modified setbacks and street regulations. • Define the street furniture, lighting and tree palette for specific streets. • Identify locations and implement mechanisms for the creation of new streets and station access pathways within the Transit-Oriented District.
CLAREMONT	
General Plan Circulation Element (2009)	> Update bicycle network.
Village South Specific Plan (in progress)	> Consider setbacks, frontage standards and internal roadway standards consistent wth the FLM Plan. > Define the street furniture, lighting and tree palette for identified pathway streets.

Integrate in Local Capital Improvement Programs

Cities could consider adding FLM projects to their capital improvement programs to allow for integration with planned city projects and assist in grant applications.

Consider Opportunities to Implement Via Construction Authority Activities

The community identified FLM-supporting projects near station entrances or within the vicinity of the station and parking facilities. These projects include pick-up / drop-off locations for private vehicles as well as shuttles, conveniently located secure bicycle parking, pedestrian walkways from station entrances to nearby streets, among others. These projects vary in implementation complexity and expected order of magnitude costs and should be reviewed and considered on a project-by-project basis. It should be noted that these projects confer benefits to the transit rider and, as described throughout this plan, contribute to accessbility, safety, and convenience. This is an ongoing discussion, with specific opportunities under consideration.

Through coordination with the Construction Authority, it was determined that FLM projects that traverse the rail tracks and would require modification to current grade-crossing plans may be challenging and costly to accommodate now or in the future.

Conditions of Development

Projects which involve private property can only be implemented through cooperation with property owners. The most feasible time for local governments to implement these projects is when entitlements are sought for new development or facility expansion. Development conditions are best specified in advance of entitlement applications through zoning codes, Specific Plans, Streetscape Plans, Transportation Impact Analyses, etc. Specific recommendations for these plans are discussed in Figure 4-2.

This Plan mainly identifies FLM projects to be implemented through conditions of development only in those areas where zoning capacity that significantly exceeds existing densities is in place. Projects have also been identified for the Claremont Village South Specific Plan area, where the City is currently undertaking a Specific Plan to stimulate transit-supportive redevelopment.

Local jurisdictions are also encouraged to adopt policy incentives for developers to fund or construct active transportation improvements as part of mitigation requirements under the State's new Vehicle Miles Traveled (VMT) guidelines brought about under Senate Bill 743. A local example of this is the City of Pasadena's 2015 Transportation Impact Analysis Guidelines.

Initiate or Modify MicroTransit, Shuttle, Ridehailing and/or Micromobility Programs Informed by Evolving Best Practices

Implementation or expansion of MicroTransit, shuttle services, ridesourcing or micromobility programs would be informed by evolving best practices. A discussion of this implementation item can be found in Chapter 3 - Regional Recommendations.

Pursue External Funding Sources

The following is a partial list of grants and other funding sources that could be used to fund first/last mile improvements:

Active Transportation Program (ATP)

Administered by the CA Transportation Commission, the program recently awarded Cycle 4 grants. Eligible projects include Safe Routes to Schools, active transportation/trail plans, complete streets, pedestrian improvements, and bike network completion/gap closure. La Verne and Pomona have been recipients of ATP grants.

Strategic Growth Council (SGC)

SGC administers the Greenhouse Gas Reduction Fund with two main grant programs: Transformative Climate Communities (TCC), which extends a small number of very large grants, and Affordable Housing and Sustainable Communities (AHSC), which requires the linkage of active transportation improvements with affordable housing development. Both grants are focused on demonstrating greenhouse gas reduction with an emphasis on disadvantaged communities.

Measure M Subregional Funds

These funds are allocated from the Measure M ½ cent sales tax to projects prioritized by the San Gabriel Valley Council of Governments and approved by Metro. A new program of projects is produced every five years, with the next cycle beginning in fiscal year 2022-2023. The 2017-2022 cycle includes projects under the Active Transportation Program and First Last Mile and Complete Streets Program categories.

Urban Greening Program

This program is administered by the California Natural Resources Agency and may fund active transportation improvements or the planting of street trees.

Open Space Grants

Potentially applicable open space-related grant programs include those under Los Angeles County Proposition A and State Proposition 68.

Express Lanes Net Toll Revenue Sharing

Projects that provide direct mobility benefits (including active transportation) to users within 3 miles of the I-10 and I-110 Express Lanes are eligible for grant funds.

Local fees on ridehailing

Some larger municipalities have imposed taxes on ridehailing services such as Uber and Lyft. Recent examples such as New York City and Washington, DC have used the revenue to fund transit operations. Metro is studying this as a potential source of income for transit project acceleration countywide.

Local fees on micromobility services

Many cities are pursuing agreements with micromobility companies to enable them to operate legally while charging fees to be used for the creation of new bicycle/rolling lanes and parking areas. However, caution is advised while the local market for such services is unproven.

Public/Private Partnerships

Examples include Development Impact Fees for new transit-oriented development, parking in-lieu fees, and tax increment financing districts authorized by State legislation that use taxes from new development to fund improvements of community-wide benefit. La Verne is one of the first communities in California to adopt an Enhanced Infrastructure Financing District (EIFD), which it will use to construct some of the FLM improvements identified in this plan.

Project-Specific Implementation Considerations

The FLM Project Lists within each city's Station Package (Tables 5-1, 6-1, 7-1, 8-1, and 9-1) give important considerations for the implementation of each project in the FLM Plan.

Planning-level cost ranges have been provided based on the project type and geographic extent of projects.

Each project has also been assigned an implementation complexity level relating to the level of technical complexity and interagency/inter-organizational coordination it will require. Criteria are given in Table 4-3. This level was then adjusted for a few projects with unique considerations.

The project list also states whether the project received support during the FLM Plan's engagement process. Project ideas which did not generate community support were removed from the Plan. Projects which generated support but to which reservations were also expressed are noted in the project list and will likely require further outreach. Projects which received no comments at all are also noted in the list. Further community outreach may also be required for projects which are noted as having received community support during the FLM Plan depending on the project's specific nature.

Table 4-3. Implementation Complexity Criteria

CRITERIA	POINTS	NOTES
Traffic or parking study required	2	Study required to determine project feasibility
Project located on waterway	1	Would require hydrology study and coordination with Flood Control District
Curb and gutter replacement	1	Construction of new curb and gutter for linear projects only
Additional ROW to be acquired	2	
Consider for GLCA implementation (DB2)	2	Potential implementation through Design/Build 2 contract, with modifications and subject to additional funding
Consider for GLCA implementation (DB3)	1	Potential implementation through Design/Build 3 contract (station parking facilities), subject to additional funding
CPUC grade crossing modification required	2	
Condition of development	1	
Agreement with property owner required	1	Project is located on private property and is not likely to be implemented through condition of development.
Extensive design consideration required	1	Further design is necessary to determine project feasibility.
ASSIGNED COMPLEXITY LEVEL	**NO. POINTS**	
Low	0	
Medium	1	
High	2 or 3	
Very High	4+	

5. Glendora Station Package

This chapter presents the Station Package for the future Glendora Station, which will be located southeast of the corner of Vermont Avenue and Ada Avenue, between the Glendora Village and the Route 66 corridor. This chapter describes the results of the FLM planning process described in Chapter 2 for the station area.

Existing Conditions and Walk Audit Summary

Figure 5-1 presents a summary of existing conditions and walk audit results, highlighting primary strengths, barriers, ideas and issues raised during the initial stages of the planning process for the Glendora station area.

Summary of Comments

In Glendora, seven community events were held, engaging 400+ people and yielding approximately 712 discrete comments. Figure 5-2 summarizes the comments received about different pathways, streets and districts in the station area from community engagement activities.

Pathway Network and Projects

Figure 5-3 graphically depicts the pathway network and projects for Glendora Station. These pathways and projects are described in the Project List (Table 5-1) and in the narrative and graphic description beginning on page 43.

Origin of Project Types

Figure 5-4 traces each project type to its origin within the FLM planning process among one of four categories:

> Existing Plan – projects identified by:

- Construction Authority's Jan. 30, 2019 30% design documents
- Metro's Active Transportation Strategic Plan
- City of Glendora's Route 66 Specific Plan

> City Staff/Consultant Team – projects identified by City staff or the Metro consultant team.

Walk audit participants at the site of the future station near Ada and Vermont Avenues

> Walk Audit – projects that directly address barriers identified during the walk audit, are based on ideas posited at the walk audit, or that directly address comments generated during the walk audit debriefing session.

> Engagement Events – ideas from community engagement events, including stakeholder interviews, pop-up events, community intercepts, public workshops and Council/ Commission meetings.

Also noted on this map are projects for which additional outreach is recommended for one of the following reasons:

> No Comments Received – transformative projects to which specific public input was not registered, either because they emerged late in the planning process, or because community event discussion focused elsewhere.

> Some Reservations Expressed – projects that garnered a mixed reaction during community engagement, or which would benefit from further conceptual design to address reservations expressed with aspects of these projects during the planning process.

Three-Mile Connections

Figure 5-5 presents the first/last mile connections for Glendora Station. This map shows existing, planned and new FLM proposed bikeways within a three-mile radius of the station.

New proposed bikeways consist of the following:

> The extension of pathway arterials from the pathway network (1/2 mile radius) map

> Connections to the San Gabriel Valley Regional Greenway Network

> Regional gap closures

> Upgrades of existing or planned facilities based on our Principles for Project Type Selection and Design (Table 2-2)

> Additional connections to pathway arterials

Locations where new/improved crossings are needed along these bikeways are also noted in Figure 5-5.

Project List

The project list for Glendora Station is shown in Table 5-1. Information given in the project list consists of:

> Location: streets and extents

> Type – categorization of the project into the types described in Chapter 1 (pages 3-6)

> Description – characterization of project elements

> Prioritization Score – score of the project based on the methodology defined in Chapter 2 (pages 17 and 18)

> Percent within ½ mile radius – percent of the project area within ½ mile of the station platform

> Cost Range – gives a range of costs that projects of this type and size generally fall into. Often there is a wide range of costs because of the variety of implementation options for similar projects.

> Implementation Complexity – level of complexity determined through the methodology described in Chapter 4 (Table 4-3), with key considerations enumerated

> Origin – where the project was first identified within the FLM planning process

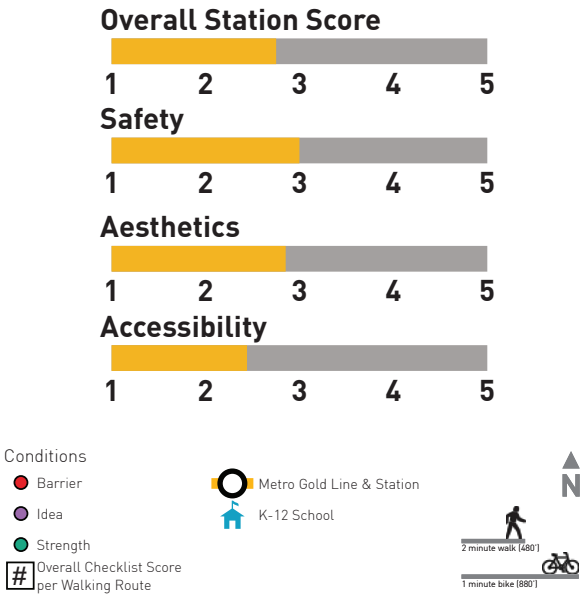
> Community Support – categorizes if the project received community support during the FLM Plan's engagement process. See Chapter 4 for more information.

Prioritized Projects

Tables 5-2 and 5-3 show the ten highest prioritized linear and point projects, respectively, within the Glendora station area. Projects that require property redevelopment are not included, nor are projects which are already planned to be implemented by the Construction Authority. Projects which are recommended to be implemented through conditions of development but may be implemented through other means remain on the list. Bikeways are listed as one project, though their facility type may change along the corridor length. The prioritization methodology is described in more detail in Chapter 2 (pages 17 and 18).

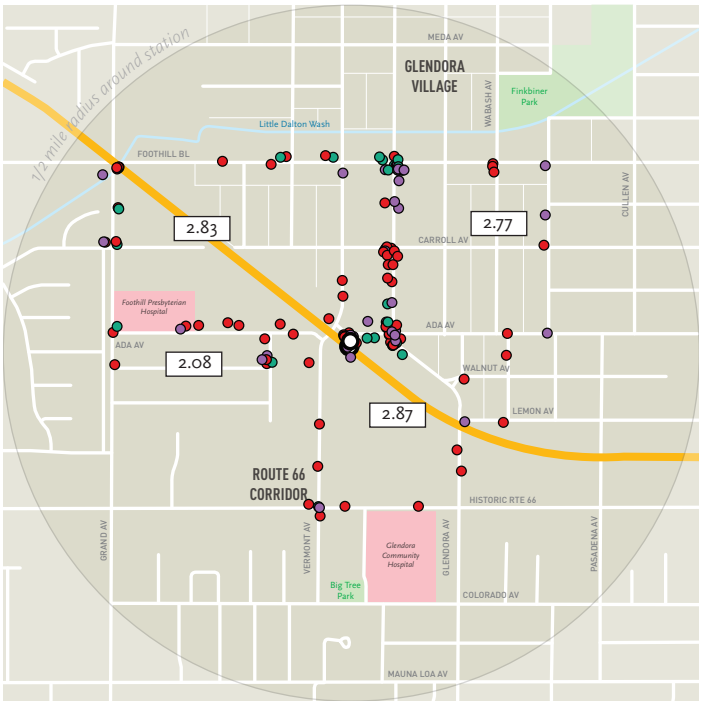
Figure 5-1: Walk Audit and Existing Conditions

CHECKLIST RESULTS



Walk Audit Conditions

Glendora



STRENGTH:

> Tree cover in select areas

BARRIERS:

> No bikeways

> Lack of crosswalks/long blocks without crossings

IDEA:

> Interest in extending the feel of the Village further south toward the station

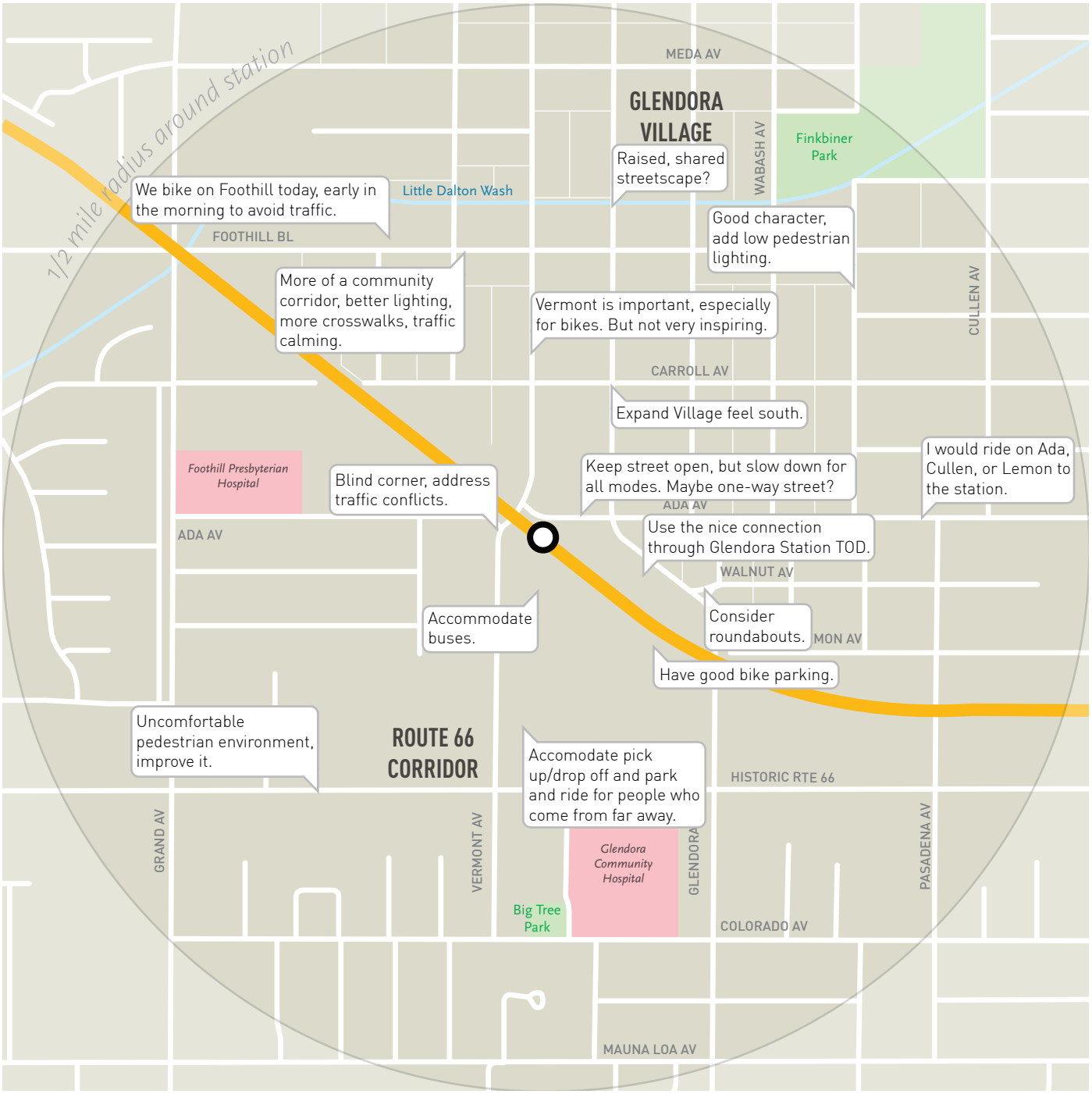
ISSUES:

> Uncertainty about station portals and pathways

> Need to establish intuitive connections to station portals

Figure 5-2: Community Engagement Comments

Glendora



Legend

Metro Gold Line & Station

K-12 School

N

2 minute walk (480')

1 minute bike (880')

Figure 5-3: Pathway Network and Project Ideas

Glendora

Pathway Network & Project Types

- New/Improved Sidewalks
- New/Improved Crossings
- Walkway/Shared Street
- Plaza
- Street Trees
- Sidewalk Lighting
- Street Furniture
- Visual Enhancements
- Pick Up/Drop Off
- Enhanced/New Bus Stop
- Shared Use Path
- Bike Lane
- Bike Boulevard
- Separated Bikeway
- Bike Parking/Bike Share
- K-12 School
- Pathway Arterial
- Pathway Arterial Cut-Through
- Pathway Collector
- Community-Identified Pathway on Private Property Further Coordination Required
- Station Entrances (Point to Direction of Exit)
- Metro Gold Line & Station

N

2 minute walk (480')

1 minute bike (880')

Figure 5-4: Origin of Project Types

Glendora

Pathway Network & Project Types

- New/Improved Sidewalks
- New/Improved Crossings
- Walkway/Shared Street
- Plaza
- Street Trees
- Sidewalk Lighting
- Street Furniture
- Visual Enhancements
- Pick Up/Drop Off
- Enhanced/New Bus Stop
- Shared Use Path
- Bike Lane
- Bike Boulevard
- Separated Bikeway
- Bike Parking/Bike Share
- K-12 School
- Pathway Arterial
- Pathway Arterial Cut-Through
- Pathway Collector
- Community-Identified Pathway on Private Property Further Coordination Required
- Station Entrances (Point to Direction of Exit)
- Metro Gold Line & Station

Identified by/at

- Existing Plan
- City Staff/Consultant Team
- Walk Audit
- Engagement Events
- No Comment Received
- Some Reservations Expressed

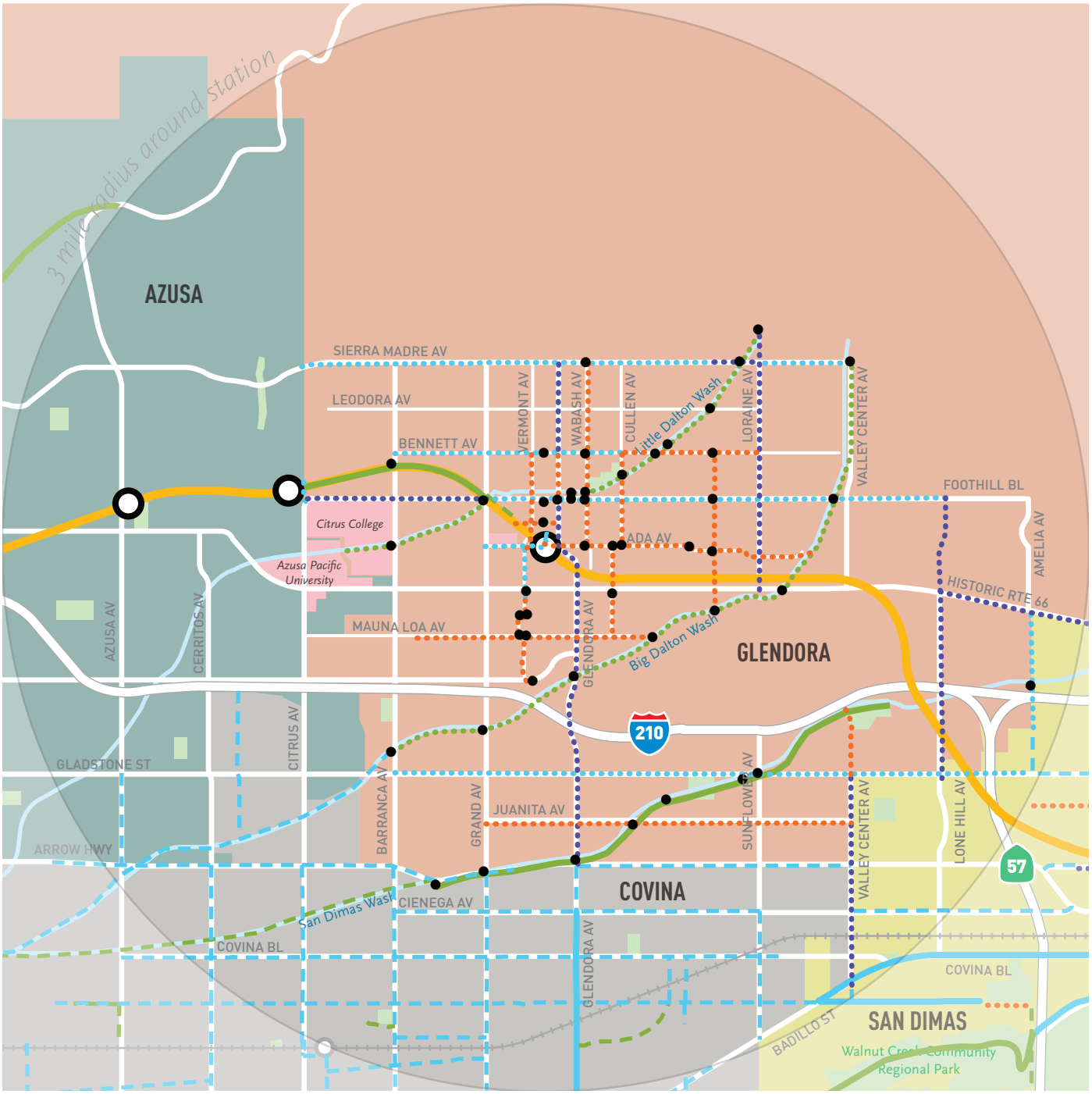
N

2 minute walk (480')

1 minute bike (880')

Figure 5-5: Three-Mile Connections

Glendora: Existing, Planned and Proposed*



Facility Type

- Shared Use Path
- Bike Lane
- Bike Boulevard
- Separated Bikeway
- Proposed New/Improved Crossings

Facility Status

- Existing/Funded Bikeways
- City or Regional Plan Bikeways
- FLM Proposed Bikeways

Rapid Transit

- Metro Gold Line & Station
- Metrolink & Station

N

*Due to the process for identifying proposed facilities, further public input should be sought on proposed bikeways if selected for implementation.

5 minute bike (4,400')

Table 5-1: First/Last Mile Project List - Glendora

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
STATION AMENITIES AND PATHWAY ARTERIAL STATION APPROACHES												
Station				Bike Parking/Bikeshare	New secure bike parking at station, and consider a bike share station/kiosk	35	100%	$ 5,000	$ 100,000	Low • Planned by GLCA	Construction Authority DB2	Yes
Station (South Side, Vermont Av access)				Pick-Up/Drop-Off	Pick-up/drop-off area on station parking site, accommodating shuttles	35	100%	n/a	n/a	Low • Planned by GLCA	Construction Authority	Yes
Ada Av	Vermont Av			Plaza	New plaza at station entrance	35	100%	$ 500,000	$ 1,500,000	Low • Planned by GLCA	Walk Audit	Yes
Gold Line ROW, south side		Vermont Av	Glendora Av	Shared-Use Path	Planned shared-use path	30	100%	$ 233,000	$ 1,165,000	Low • Planned by GLCA	Construction Authority	Yes
PATHWAY ARTERIAL: GLENDORA AV												
Glendora Av	Glendora Village Plaza (250 ft. south of Meda Av)			New/Improved Crossings	Improvement to existing crosswalk with bulb-outs and signage.	27	100%	$ 50,000	$ 500,000	Low	Engagement Events	Yes
Glendora Av	375 ft. north of Foothill Bl			New/Improved Crossings	Improvement to existing crosswalk with bulb-outs and signage.	27	100%	$ 50,000	$ 500,000	Low	Engagement Events	Yes
Glendora Village				Bike Parking/Bikeshare	New bike parking, explore area for bike station/kiosk opportunity.	27	100%	$ 1,000	$ 5,000	Low	Consultant Team	Yes
Glendora Av	Foothill Bl			New/Improved Crossings	Crosswalk upgrades to high-visibility or with decorative/high-visibility design. Create bulb-outs to reduce crossing distance across Glendora Av. Install bicycle loop detectors at intersection.	34	100%	$ 50,000	$ 500,000	Low	Walk Audit	Yes
Glendora Av		Foothill Bl	Route 66	Lighting	New pedestrian-scale lighting	60	100%	$ 218,400	$ 491,400	Medium • Condition of development where applicable	Walk Audit	Yes
Glendora Av		Foothill Bl	Route 66	Street Furniture	New seating, trash receptacles, bike racks and other relevant furniture	40	100%	$ 10,920	$ 109,200	Medium • Condition of development where applicable	Walk Audit	Yes
Glendora Av	Carroll Av			New/Improved Crossings	New crosswalk with RRFB & bulb-outs across Glendora Avenue	27	100%	$ 50,000	$ 500,000	Low	Walk Audit	Yes
Glendora Av	Ada Av			Enhanced/New Bus Stop	Shelter at northbound bus stop, real-time signage at north- and southbound stops.	35	100%	$ 5,000	$ 15,000	Medium • Transit agency coordination	Consultant Team	Yes
Glendora Av	Ada Av			Visual Enhancements	New mural on Verizon building.	35	100%	n/a	n/a	Medium • Agreement with current property owner required	Walk Audit	Yes
Glendora Av	Ada Av			New/Improved Crossings	New raised (curbless) intersection, roundabout or striping improvements.	35	100%	$ 50,000	$ 500,000	Low	Walk Audit	Yes
Glendora Av		Ada Av	Route 66	Street Trees	New street trees.	40	100%	$ 35,880	$ 269,100	Medium • Condition of development	Route 66 Specific Plan	Yes
Glendora Av	Gold Line ROW			New/Improved Crossings	Planned crosswalk implementation with median refuge and signage.	37	100%	$ 50,000	$ 500,000	Low • Planned by GLCA	Construction Authority DB2	Yes

Table 5-1: First/Last Mile Project List - Glendora (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
Glendora Av	Route 66			New/Improved Crossings	New high-visibility crosswalks and accessible pedestrian signals to all four legs of intersection. Potential for artistic gateway treatment.	49	100%	$ 50,000	$ 500,000	Low • Potential condition of development	Consultant Team	Yes
Glendora Av		Gold Line ROW	Colorado Av	New/Improved Sidewalks	Sidewalk extension by a minimum of 7' on west side	52	100%	$ 109,225	$ 192,750	Medium • Condition of development	Route 66 Specific Plan	Yes
Glendora Av		**Sierra Madre Av**	**Arrow Hwy**	**Bikeway**		**60**	**37%**	**$ 2,104,900**	**$ 5,704,000**			
		Sierra Madre Av	Bennett Av	Separated Bikeway	Separated bikeway narrowing road and improving crossings. No lane reconfiguration. Possible swale dividers.	27	0%	$ 126,000	$ 1,512,000	Low	Consultant Team	No Comments Received
		Bennett Av	Foothill Bl	Bike Boulevard	Existing parking to back-in angled parking, and paint sharrows on the pavement.	37	93%	$ 6,400	$ 192,000	Low	Consultant Team	Yes
		Foothill Bl	Route 66	Separated Bikeway	Raised separated bikeway north of Ada Av, in-street south of Ada Av. Reduce traffic lanes to one in each direction, with on-street parking and center turn lane in appropriate places.	55	100%	$ 1,585,000	$ 2,450,000	Medium • Curb and gutter replacement	Walk Audit	Yes
		Route 66	Arrow Hwy	Separated Bikeway	Conversion of one travel lane in each direction to separated bikeway with flexible posts. Traffic study recommended before implementation.	54	15%	$ 387,500	$ 1,550,000	High • Traffic study required	Metro ATSP Corridor	Some Reservations Expressed
PATHWAY COLLECTOR: VERMONT AV												
Vermont Av	Foothill Bl			New/Improved Crossings	High-visibility crosswalks and accessible pedestrian signals on all four legs of intersection, bicycle loop detectors at all intersection approaches	37	0%	$ 50,000	$ 500,000	Low	Engagement Events	Yes
Vermont Av	South of Gold Line ROW			Enhanced/New Bus Stop	Potential future bus stop along Vermont Av on far side of tracks	35	100%	$ 5,000	$ 15,000	Medium • Transit agency coordination	Consultant Team	Yes
Vermont Av		Gold Line ROW	150 ft. south of Route 66	Street Trees	New shade trees	40	100%	$ 33,360	$ 250,200	Medium • Condition of development	Walk Audit	Yes
Vermont Av		Gold Line ROW	150 ft. south of Route 66	Lighting	New pedestrian-scale lighting	45	100%	$ 8,340	$ 250,200	Medium • Condition of development	Walk Audit	Yes
Vermont Av		Gold Line ROW	150 ft. south of Route 66	Street Furniture	New seating, trash receptacles, bike racks and other relevant furniture	40	100%	$ 5,560	$ 55,600	Medium • Condition of development	Walk Audit	Yes
Vermont Av	Route 66			New/Improved Crossings	High-visibility crosswalks and accessible pedestrian signals on all four legs of intersection, bicycle loop detectors at all intersection approaches	39	100%	$ 100,000	$ 500,000	Low • Potential condition of development	Walk Audit	Yes
Vermont Av/Pennsylvania Av/Jenifer Av		**Bennett Av**	**Baseline Rd**	**Bikeway**		**60**	**81%**	**$ 54,675**	**$ 945,250**			
Vermont Av		Bennett Av	Gold Line ROW	Bike Boulevard	New bike boulevard with traffic calming elements, signage, increased lighting, and street trees.	48	97%	$ 12,575	$ 377,250	Low	Walk Audit	Yes
Vermont Av		Gold Line ROW	150 ft. south of Route 66	Bike Lane	Buffered bike lane created through removal of on-street parking	40	100%	$ 27,800	$ 139,000	Low	Engagement Events	Yes
Vermont Av/Pennsylvania Av/Jenifer Av		Route 66	Baseline Rd	Bike Boulevard	Signage and pavement markings, including clear wayfinding indicating turns along the bike boulevard as well as traffic calming elements to reduce volume and speed of traffic.	47	54%	$ 14,300	$ 429,000	Low	Consultant Team	Yes

Table 5-1: First/Last Mile Project List - Glendora (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
PATHWAY ARTERIAL: ADA AV												
Foothill Presbyterian Hospital				Bike Parking/Bikeshare	New secure bike parking, and consider a bike share station/kiosk.	34	100%	$ 10,000	$ 100,000	Medium • Agreement with current property owner required	Engagement Events	Yes
Ada Av		Grand Av	Vermont Av	New/Improved Sidewalks	Gap closure on missing sidewalks on both sides of street, uniform sidewalk width.	39	100%	$ 33,788	$ 238,500	Low	Walk Audit	Yes
Ada Av	Vermont Av			Plaza	At new cul de sac west of tracks, elements of plaza treatment can continue east across Vermont Av, connecting to station plaza.	35	100%	$ 500,000	$ 3,000,000	Very High • Consider for GLCA Implementation (DB2) • CPUC grade crossing modification required	Walk Audit	Yes
Ada Av	Vermont Av			New/Improved Crossings	Blind curve requires traffic calming or signal to accommodate safe crossing of Vermont Av. New raised crossing/plaza (see above), or signalized crossing.	30	100%	$ 50,000	$ 500,000	Very High • Consider for GLCA Implementation (DB2) • CPUC grade crossing modification required	Walk Audit	Yes
Ada Av	Vermont Av			Visual Enhancements	New visual enhancement/public art installation on the side of post office building.	35	100%	n/a	n/a	Medium • Agreement with current property owner required	Walk Audit	Yes
Ada Av		Vermont Av	Glendora Av	Walkway/Shared Street	New shared street/plaza with very low traffic speed that allows for pick-up drop-off of passengers as well as pedestrian/bicycle access throughout.	35	100%	$ 113,000	$ 2,825,000	Medium • Curb and gutter replacement	Consultant Team	Yes
Ada Av		Vermont Av	Glendora Av	Pick-Up/Drop-Off	Existing on-street parking spaces to loading zones.	30	100%	$ 10,000	$ 150,000	Low	Consultant Team	Yes
Ada Av		Glendora Av	Cullen Av	New/Improved Sidewalks	Repaired sidewalks throughout corridor, ensuring adherance to ADA standards.	40	100%	$ 299,200	$ 528,000	Low	Walk Audit	Yes
Ada Av		Glendora Av	Cullen Av	Lighting	Pedestrian scale lighting to mitigate light pollution.	45	100%	$ 10,560	$ 316,800	Low	Walk Audit	Yes
Ada Av		**Grand Av**	**Big Dalton Wash**	**Bikeway**		**49**	**48%**	**$ 45,500**	**$ 1,365,000**			
Ada Av		Grand Av	Vermont Av	Bike Boulevard	New bike boulevard with traffic calming elements, signage, and increased lighting.	44	100%	$ 7,950	$ 238,500	Low	Walk Audit	Yes
Ada Av		Vermont Av	Big Dalton Wash	Bike Boulevard	Includes a short Shared-Use Path connection through Williams Educational Center and vacant lot on E. Walnut.	50	37%	$ 37,550	$ 1,126,500	Low	Engagement Events	Yes
PATHWAY COLLECTOR: WABASH AV												
Wabash Av	Foothill Bl			New/Improved Crossings	New traffic diverter/median refuge island that restricts left-turn and through automobile movements, yet allows through movement of bicycles.	24	100%	$ 100,000	$ 500,000	Low	Consultant Team	Yes
Wabash Av		Sierra Madre Av	Ada Av	Bike Boulevard	New bike boulevard with traffic calming elements and signage. Minnesota Av is a potential alternative.	26	44%	$ 25,100	$ 753,000	Low	Consultant Team	Yes
PATHWAY COLLECTOR: PASADENA AV												
Pasadena Av		Ada Av	Mauna Loa Av	Bike Boulevard	New bike boulevard with traffic calming elements and signage.	29	71%	$ 12,550	$ 376,500	Low	Consultant Team	Yes

Table 5-1: First/Last Mile Project List - Glendora (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
PATHWAY COLLECTOR: CULLEN AV												
Cullen Av		Little Dalton Wash	Ada Av	Bike Boulevard	New bike boulevard with traffic calming elements and signage.	37	69%	$ 9,625	$ 288,750	Low	Walk Audit	Yes
PATHWAY COLLECTOR: LEMON AV												
Lemon Av		Glendora Av	Big Dalton Wash	Bike Boulevard	New bike boulevard with traffic calming elements and signage. Connect to Big Dalton Wash through City Yard entrance.	27	26%	$ 29,975	$ 899,250	Medium • City yard coordination required	Engagement Events	Yes
PATHWAY ARTERIAL: CARROLL AV/NEW GOLD LINE BIKE PATH												
Grand Av	Foothill Bl			New/Improved Crossings	Existing crossings to high visibility crosswalks. Railroad/sidewalk interface to ADA standards. Consider bulb-outs or curb extensions that tighten turning radii and shorten crossing distances. Ensure bicycle maneuverability in crosswalk, bicycle path of travel markings to station NW to SE, visibility improvements, bicycle waiting area on NE corner, gas station sign removal.	38	100%	$ 100,000	$ 500,000	High • Consider for GLCA implementation (DB2).	Consultant Team	Yes
Gold Line ROW		Foothill Bl	Carroll Av	Shared-Use Path	New bicycle/pedestrian path along Gold Line right-of-way.	38	100%	$ 152,250	$ 203,000	High • Consider for GLCA implementation (DB2).	City Staff	Yes
Carroll Av		Gold Line ROW	Glendora Av	Bike Boulevard	New bike boulevard with traffic calming elements and signage.	37	100%	$ 6,050	$ 181,500	Low	City Staff	Yes
PATHWAY ARTERIAL/COLLECTOR: FOOTHILL BL												
Foothill Bl		Grand Av	Glendora Av	Street Trees	New street trees in areas where missing	38	0%	$ 49,773	$ 99,545	Low		Yes
Foothill Bl		**Citrus Av**	**Vista Bonita Av**	**Bikeway**		**53**	**38%**	**$ 347,000**	**$ 3,145,500**			**Yes**
		Citrus Av	Grand Av	Separated Bikeway	New separated bikeway. Requires conversion of traffic lanes or parking in portions. Traffic study recommended.	48	9%	$ 250,000	$ 3,000,000	High • Traffic and parking study required	Engagement Events	Some Reservations Expressed
		Grand Av	Vista Bonita Av	Bike Lane	Street reconfiguration to one traffic lane and one buffered bike lane in each direction. Traffic study recommended.	33	100%	$ 97,000	$ 145,500	High • Traffic study required	Consultant Team	No Comments Received
PATHWAY COLLECTOR: LITTLE DALTON WASH												
Little Dalton Wash		West City Limit	Grand Av	Shared-Use Path	Little Dalton Wash access road to shared-use path.	38	19%	$ 900,000	$ 4,500,000	Medium • Project located on waterway	Metro ATSP Corridor	Yes
Little Dalton Wash		Wabash Av	Sierra Madre Av / Loraine Av	Shared-Use Path	Little Dalton Wash access road to shared-use path.	36	16%	$ 1,410,000	$ 7,050,000	Medium • Project located on waterway	Metro ATSP Corridor	Yes
PATHWAY COLLECTOR: ROUTE 66												
Route 66		Santa Fe Av	Glendora Av	New/Improved Sidewalks	Sidewalk widening to 15' and ramp and crossing upgrades to meet ADA standards.	37	100%	$ 16,150	$ 28,500	Medium • Condition of development	Walk Audit	Yes
Route 66	Glendora Comm Hospital			New/Improved Crossings	With construction of pedestrian walkway north of Route 66, new signalized crossing connecting walkway to Glendora Community Hospital. Crossing may be located mid-block or at Santa Fe Av.	22	100%	$ 50,000	$ 500,000	High • Traffic study required • Condition of development	Consultant Team	No Comments Received
Glendora Community Hospital				Bike Parking/Bikeshare	New bike parking, explore the area for bike-share station/kiosk opportunity.	39	100%	$ 1,000	$ 5,000	Medium • Agreement with current property owner required	Consultant Team	Yes

Table 5-1: First/Last Mile Project List - Glendora (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
Route 66	Vermont Av			Enhanced/New Bus Stop	New bus shelter, real time signage.	34	100%	$ 5,000	$ 15,000	Low • Potential condition of development	Walk Audit	Yes
Route 66		Grand Av	Pasadena Av	Street Trees	New street trees to corridor.	29	100%	$ 24,480	$ 183,600	Low • Potential condition of development	Walk Audit	Yes
Route 66		Grand Av	Pasadena Av	Lighting	New lighting to corridor.	44	100%	$ 6,120	$ 183,600	Medium • Condition of development	Walk Audit	Yes
Route 66		Grand Av	Pasadena Av	Street Furniture	New street furniture to corridor.	29	100%	$ 4,080	$ 40,800	Medium • Condition of development	Walk Audit	Yes
Route 66	Glendora Ave			Enhanced/New Bus Stop	This will likely be a major transfer point and can be enhanced with amenities and to handle more riders.	34	100%	$ 5,000	$ 15,000	Medium • Transit agency coordination	City Staff	No Comments Received
Route 66	Pasadena Av			New/Improved Crossings	Crossing upgrades to high visibility crosswalks. Ensure sufficient crossing times for wide intersection legs. Add bicycle loop-detectors on all intersection approaches.	15	100%	$ 50,000	$ 500,000	Low	Consultant Team	Yes
PATHWAY COLLECTOR: MAUNA LOA AV												
Mauna Loa Av		West City Limit	Big Dalton Wash	Bike Boulevard	New bike boulevard with traffic calming elements and signage.	44	12%	$ 32,575	$ 977,250	Low	Engagement Events	Yes
OTHER BIKEWAY CONNECTIONS												
San Dimas Wash		Arrow Hwy	Pompei Park	Shared-Use Path	Existing access road to Class I Shared-Use Path.	0	0%	$ 3,572,000	$ 17,860,000	Medium • Project located on waterway • Project is funded from Pompei Park to Grand Avenue	SGV Greenway Network	No Comments Received
Auto Centre Dr		Lone Hill Av	Amelia Av	Bikeway	Auto Center Dr to Lone Hill Dr. with a Class II or Class IV bike facility. Lane re-configuration or narrowing of existing median required.	41	0%	$ 51,900	$ 1,557,000	High • Traffic study required	Consultant Team	No Comments Received
Lone Hill Av		Foothill Bl	Gladstone St	Separated Bikeway	Class IV Separated Bikeway. Lane re-configuration or narrowing of existing median required.	21	0%	$ 386,250	$ 4,635,000	High • Traffic study required	Consultant Team	No Comments Received
Elwood Av		Bennett Av	Big Dalton Wash	Bike Boulevard	New bike boulevard with traffic calming elements and signage.	37	0%	$ 21,500	$ 645,000	Low	Consultant Team	No Comments Received
Big Dalton Wash		Barranca Av	Sierra Madre Av	Shared-Use Path	Existing access road to Class I Shared-Use Path.	26	0%	$ 3,735,000	$ 18,675,000	Medium • Project located on waterway	Metro ATSP Corridor	No Comments Received
Sierra Madre Av		West City Limit	Valley Center Av	Bikeway	Buffered bike lane for the entire length, with a small portion between Northridge Avenue and Loraine Avenue upgraded to a Class IV separated bikeway. Lane re-configuration.	22	0%	$ 293,800	$ 440,700	High • Traffic study required	Consultant Team	No Comments Received
Vista Bonita Av		Little Dalton Wash	Foothill Bl	Bike Boulevard	New bike boulevard with traffic calming elements and signage.	22	100%	$ 950	$ 28,500	Low	Consultant Team	No Comments Received

Table 5-1: First/Last Mile Project List - Glendora (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
Loraine Av		Little Dalton Wash	Route 66	Bikeway	A buffer/bike lane exists along much of this stretch but is not signed well and many cars park in it. Parking restriction enforcements and better signage/lane marking implementation. Lane re-configuration to allow for Class IV separated facility.	32	0%	$ 141,900	$ 4,257,000	High • Traffic study required	Consultant Team	No Comments Received
Gladstone St		Barranca Av	Lone Hill Av	Bike Lane	Class II Bike Lanes. Lane re-configuration where parking is allowed.	41	0%	$ 300,400	$ 450,600	High • Traffic study required	Consultant Team	No Comments Received
Bennett Av		Barranca Av	Loraine Av	Bikeway	Class II Bike Lanes & Class III Bicycle Boulevard. Lane re-configuration.	39	0%	$ 50,100	$ 1,503,000	High • Traffic study required	Consultant Team	No Comments Received

Table 5-2: Prioritized Project List - Linear Projects - Glendora

Rank	Street A	From	To	Type	Prioritization Score
T1	Glendora Av	Foothill Bl	Route 66	Lighting	60
T1	Glendora Av	Sierra Madre Av	Arrow Hwy	Bikeway	60
T1	Vermont Av/Pennsylvania Av/Jenifer Av	Bennett Av	Baseline Rd	Bikeway	60
4	Foothill Bl	Citrus Av	Vista Bonita Av	Bikeway	53
5	Glendora Av	Gold Line ROW	Colorado Av	New/Improved Sidewalks	52
6	Ada Av	Grand Av	Big Dalton Wash	Bikeway	49
T7	Vermont Av	Gold Line ROW	150 ft. south of Route 66	Lighting	45
T7	Ada Av	Glendora Av	Cullen Av	Lighting	45
T9	Ada Av	Grand Av	Vermont Av	Bike Boulevard	44
T9	Route 66	Grand Av	Pasadena Av	Lighting	44
T9	Mauna Loa Av	West City Limit	Big Dalton Wash	Bike Boulevard	44

Table 5-3: Prioritized Project List - Point Projects - Glendora

Rank	Street A	Street B	Type	Prioritization Score
1	Glendora Av	Route 66	New/Improved Crossings	49
T2	Vermont Av	Route 66	New/Improved Crossings	39
T2	Glendora Community Hospital		Bike Parking/Bikeshare	39
4	Grand Av	Foothill Bl	New/Improved Crossings	38
5	Vermont Av	Foothill Bl	New/Improved Crossings	37
T6	Glendora Av	Ada Av	Enhanced/New Bus Stop	35
T6	Glendora Av	Ada Av	Visual Enhancements	35
T6	Glendora Av	Ada Av	New/Improved Crossings	35
T6	Vermont Av	South of Gold Line ROW	Pick-Up/Drop-Off	35
T6	Vermont Av	South of Gold Line ROW	Enhanced/New Bus Stop	35
T6	Ada Av	Vermont Av	Plaza	35
T6	Ada Av	Vermont Av	Plaza	35
T6	Ada Av	Vermont Av	Visual Enhancements	35
T6	Station		Bike Parking/Bikeshare	35

The following sections describe the recommended improvements to pathways within one-half mile of the future Glendora Station.

Station Amenities and Entrances

Glendora Station will be located just east of Vermont Avenue along the rail right-of-way currently occupied by a freight rail line, with the closest street corner to the station at Vermont Avenue and Ada Avenue.

Station Entrances

Figure 5-7 shows the Construction Authority's plan for station construction, including connections to the street system. The platform's west side will be accessed from a station plaza facing Ada Avenue just east of Vermont Avenue. Pedestrians may access this plaza via Ada Avenue or by walking through the Glendora Station transit-oriented development to a walkway just north of the tracks. The platform's east side will be accessed via a pedestrian undercrossing to a new shared use path running south of the tracks between Vermont Avenue and Glendora Avenue.

The project team also identified the opportunity to use future development to create a unique public space directly connecting the path south of the station and Route 66. One concept for this walkway is shown in Figure 5-6.

Secure Bicycle Parking

The Construction Authority is planning to install 32 secure bicycle racks and additional open bicycle racks within the station plaza at Vermont Av and Ada Av. Once the station opens, usage should be monitored to determine if there is need to increase bicycle parking or modify its format.

Pick Up/Drop Off

The Construction Authority is planning for a pick up/drop off area on parking facility grounds south of the tracks. This facility will be of sufficient size to accommodate shuttle buses as well as automobiles.

Detailed design of this facility will occur as a part of the Construction Authority's Design/Build 3 bid. Attention should be paid to providing adequate space for shuttle needs as well as anticipated automobile activity.

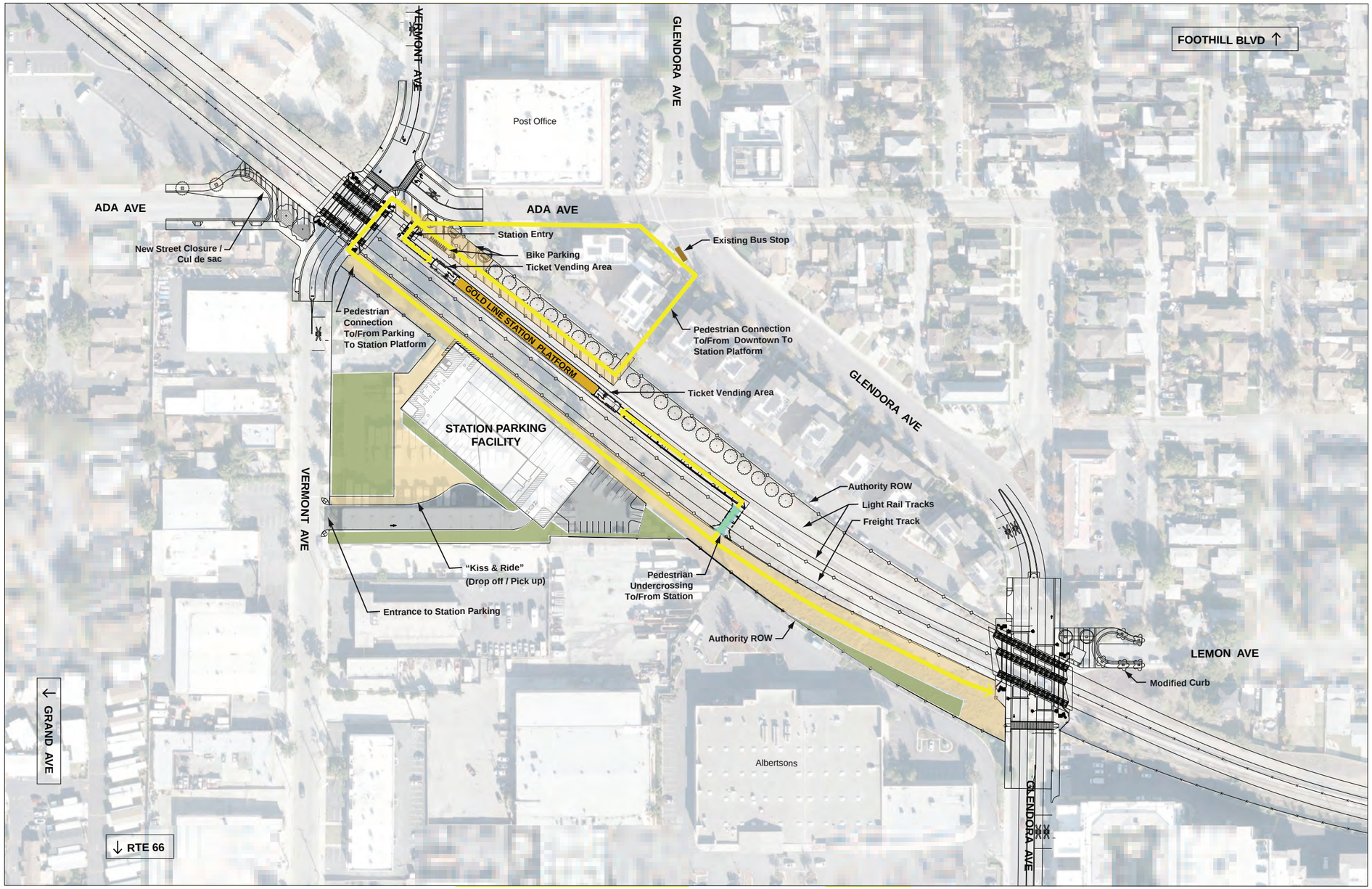
Bus Interfaces

The bus lines that currently operate in the immediate vicinity of the station are Foothill Transit Routes 284 and 851, which stop along Glendora Av at Ada Av. Real-time arrival signage and a shelter at the northbound stop would be useful enhancements.

The City of Glendora operates shuttle service to APU/Citrus College Station. With the opening of Glendora Station, this service may be restructured to connect outlying areas of the City to the station; these services will need stops at or near the station with amenities similar to those proposed for the stops at Glendora Av and Ada Av (if stopping at other locations). One potential location for a new bus stop is on Vermont Av.

Figure 5-6. Illustrative Concept for walkway south of the station with future development per the City's Route 66 Specific Plan. Most of the property shown is private, and market conditions will ultimately determine how the property develops over time.

Glendora Station Site Plan (Fig 5-7)



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Foothill Gold Line

Glendora Av – Pathway Arterial

Glendora Avenue was chosen as the north-south pathway arterial for Glendora Station for the following reasons:

> Glendora Avenue is the most intuitive connection to the Village and Civic Center.

> Much of the street has transit-supportive and pedestrian-friendly land use. Other portions of the street are zoned to transition into more active uses. In public workshops and Council/ Commission meetings, community members expressed a strong desire to calm traffic and remake the streetscape as part of a larger transit-supportive community strategy.

> Glendora Avenue received the greatest response to the question, "How would you walk/bike/ roll to the station?" at pop-up events.

> Glendora Avenue and Grand Avenue are the only streets that provide for potential connections south of the 210 Freeway.

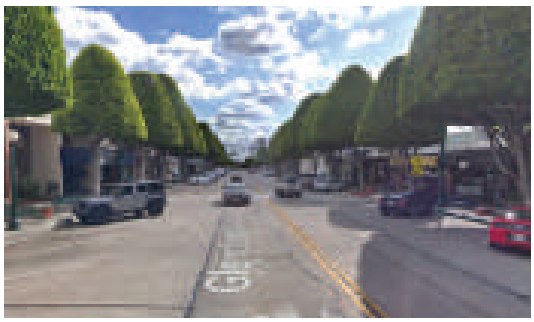
North Segment: Glendora Village (Bennett Av to Foothill Bl)

Glendora Village is the City's pedestrian-friendly downtown. While the Village environment is pleasant, three recommendations are made to improve pedestrian- and bicycle-friendliness.

> Upgrade mid-block crossings with curb extensions. Pedestrians starting to cross the street are difficult for motorists to see behind diagonally parked vehicles. Upgrading safety signage and installing decorative painting on the crosswalk may also be considered.

> Convert existing diagonal parking to back-in diagonal parking. Back-in diagonal parking requires no more space than traditional diagonal parking and is much safer for cyclists sharing the roadway. The essence of the change is that back-in diagonal parking places the driver closer to the center of the road, giving him or her a much better view onto oncoming bicycle or vehicular traffic.

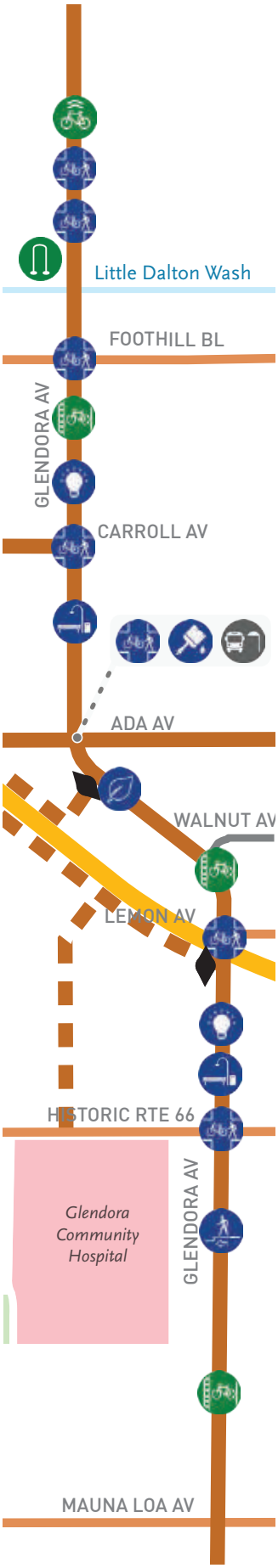
> Upgrade the crossing at Glendora Avenue and Foothill Boulevard, which is the gateway to the Village.



The Glendora Village is very walkable; however, mid-block crossings need upgrades.

Source, right: Google Maps Street View

Recommended changes in the Village include back-in diagonal parking and the shortening of the gateway crossing at Foothill Bl.



North-Central Segment: Foothill Bl to Ada Av

This segment of Glendora Avenue includes the Civic Center and forms the key connection between the station and Glendora Village. Walk audit participants had many comments about this area. While it has good tree cover and sidewalks, the area is dark and feels very inactive. The width of the roadway and lack of crossings, particularly at Carroll Avenue, inhibits pedestrian-friendliness and there are no bicycle facilities.

As expressed in community engagement events and previous planning efforts, community members and the City would like to see the Village feel continue south, with increased business activity in this area. The overall activation of the street through public-facing businesses is a significant element of both first mile connections (creating a safer and more attractive environment for Glendora residents) and last mile connections (drawing people from other communities to visit Glendora via the Gold Line).

The primary strategy resulting from community engagement to both improve access and encourage economic development on this segment is to calm traffic. Figure 5-8 shows the existing and recommended cross-section, while Figure 5-9 illustrates the future vision for this area. Traffic is calmed through the retention of diagonal parking and a reduction of the curb-to-curb width of the street. One of the two northbound traffic lanes would be eliminated, and the additional right-of-way used for on-curb separated bikeways, which provide the greatest possible level of comfort and traffic calming.

Some community members expressed support for replicating Glendora Village's diagonal parking on both sides of the street; however, this would either require removing the separated bikeway or removing the existing street trees. A cross-section retaining three moving lanes and converting diagonal parking to parallel parking was also analyzed, but found to not implement the community's goals to calm traffic.

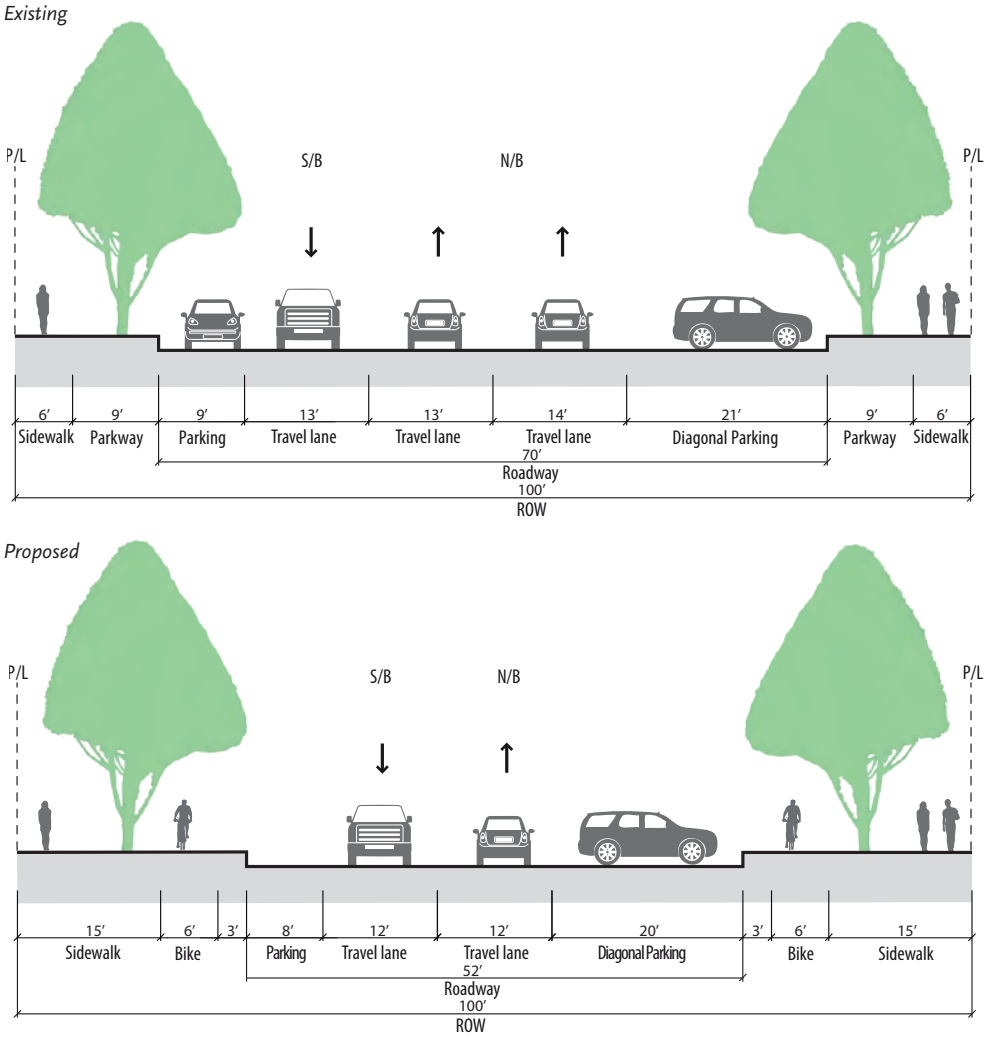


Figure 5-8. Typical Cross-Section for Glendora Avenue, Foothill Boulevard to Ada Avenue.

Existing

Future Concept

Figure 5-9. Proposed Character - Glendora Av, Foothill Bl to Ada Av, southbound view just south of Carroll Av. Building changes illustrative only.

South-Central Segment: Ada Avenue to Route 66

This segment makes a transition from the more auto-oriented character of Glendora Avenue south of Route 66 (two traffic lanes in each direction) to the pedestrian-oriented character envisioned north of Ada Avenue (one traffic lane in each direction). Community members expressed their desire for traffic calming in this portion of the street as well, with particular attention to the intersection of Glendora Avenue, Walnut Avenue and Vista Bonita Avenue whose odd angles create pedestrian and bicycle safety issues.

Figure 5-10 shows the recommended cross-section for this stretch of roadway, with one through travel lane in each direction, one two-way left turn lane, parallel parking and a separated bikeway in each direction. Variations of this cross-section will be required at the curve at Walnut Avenue and at the railroad tracks. North of Walnut Avenue, the center turn lane may be eliminated.

The pedestrian environment would continue to be enhanced with widened sidewalks, street trees, lighting and furniture as adjacent development proceeds. New development should be oriented toward the street with direct entries onto the sidewalk. Independently of development, however, the City may consider placing an artistic gateway element at Route 66 and addressing the east side sidewalk where it is adjacent to low-density residential uses.

The decision was made to recommend that this entire segment consist of one travel lane in each direction for the following reasons:

> Narrowing the roadway at Route 66 encourages drivers to use Route 66 to access other north-south routes, whereas narrowing it further north raises the likelihood of cut-through traffic on Vista Bonita Avenue, Ada Avenue, Wabash Avenue and other residential streets.

> This configuration allows for the separated bikeway to continue to Route 66 without additional right-of-way acquisition.

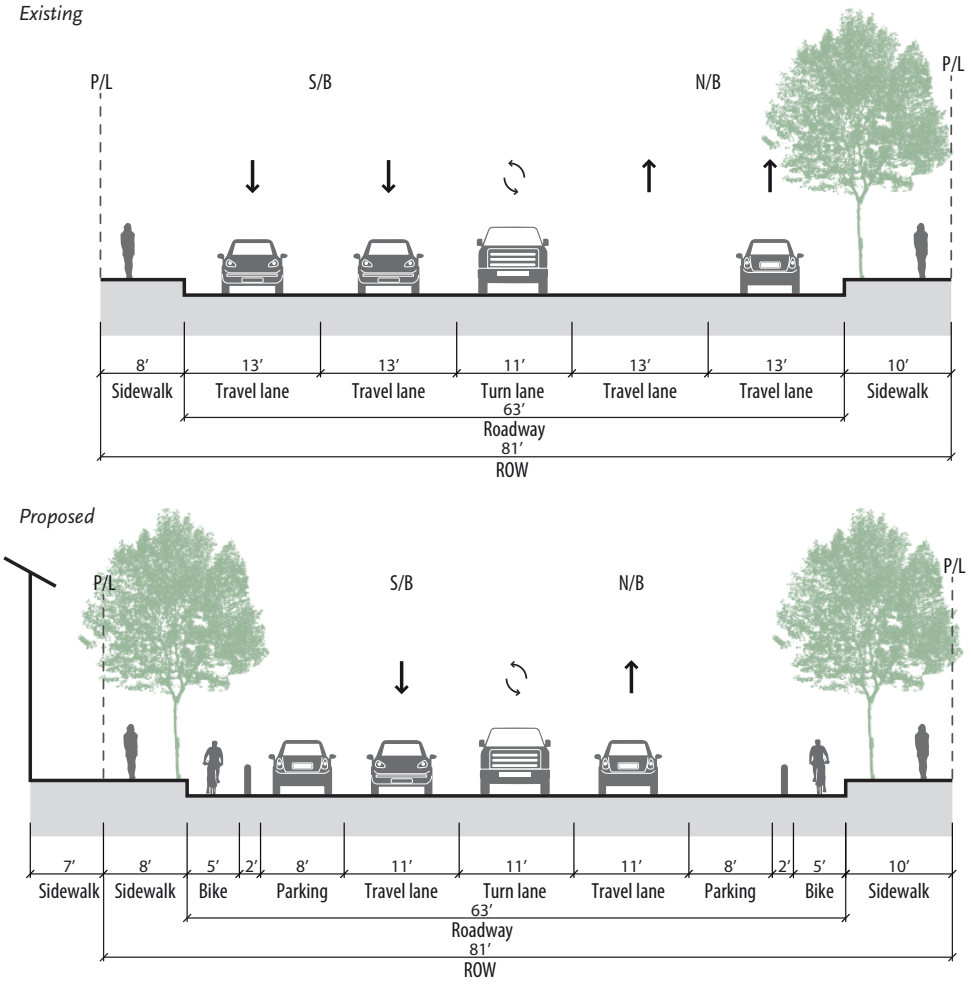


Figure 5-10. Typical Cross-Section for Glendora Avenue, Ada Avenue to Route 66.

> Narrowing the roadway creates a safer midblock crossing at the railroad tracks.

Previous planning efforts in the area have recommended that traffic circles be established at Ada Avenue and Walnut Avenue. A feasibility determination of such circles would require more detailed engineering to ensure that there is sufficient space to accommodate traffic lanes, a separated bikeway and pedestrian crossings in a format that complies with best safety practices.

Reducing traffic lanes will increase the safety of the intersection at Glendora Avenue, Vista Bonita Avenue and Walnut Avenue. A roundabout can also be explored.

Reducing traffic lanes will increase the safety of the new crosswalk to be located at the Gold Line tracks.

Landscaped curb extensions would be helpful on the north leg of the Glendora Avenue and Route 66 intersection. They would protect pedestrians and cyclists at intersections and serve as a gateway treatment. Beyond the gateway, bike lanes can be protected by lower-cost solutions such as bollards.

South Segment: Route 66 to Arrow Highway

South of Route 66, Glendora Avenue becomes a high-speed roadway. Community engagement has not reflected a desire to change the character of this segment of the street. However, it appears to be the only viable bicycle connection route which crosses the 210 freeway, providing active transportation access to the station for residents of southern Glendora, as well as communities such as Charter Oak and Covina. The planning team studied alternative connection possibilities through Jenifer Avenue and Big Dalton Wash, but concluded that these potential routes were impractical.

Figure 5-11 shows the potential cross-section for this stretch of Glendora Avenue. A traffic study, pilot project and/or community engagement process could be conducted before implementing changes, as these modifications may cause traffic congestion if traffic is not diverted to alternate routes.

View of Glendora Avenue at the 210 Freeway overpass. Source: Google Maps Street View

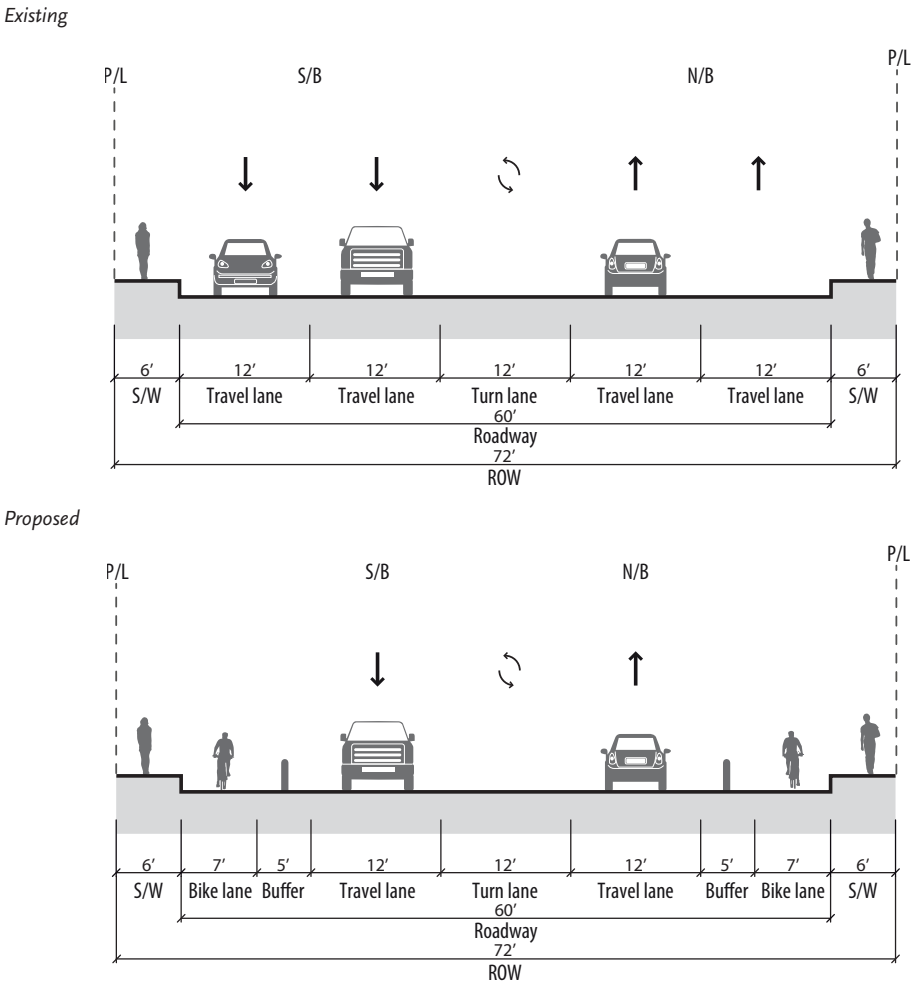


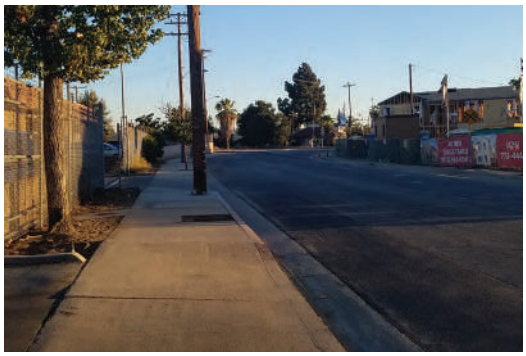
Figure 5-11. Typical Cross-Section for Glendora Avenue, Ada Avenue to Route 66.

Vermont Avenue – Pathway Collector

Vermont Avenue is a key north-south connection route within the station area which serves the planned station plaza directly. Some community engagement participants felt that it was as important of an access route as Glendora Avenue; however, for the reasons mentioned in the description of Glendora Avenue above, the decision was made to classify Vermont Avenue as a pathway collector.

North Segment: Bennett Avenue to Gold Line ROW

Vermont Avenue has a mixed residential, industrial and commercial character north of the station. The quality of the pedestrian environment is variable with narrow sidewalks and missing street trees in portions. However, it is a fairly good bicycle street despite the lack of any physical infrastructure improvements. The street would be designated a bicycle boulevard and efforts made to lower vehicular speeds to approximately 25 miles per hour.



Vermont Avenue has variable character. Residential areas tend to be fairly walkable, while industrial and commercial areas are more stark.

Source, left: Google Maps Street View

At the Gold Line Right-Of-Way

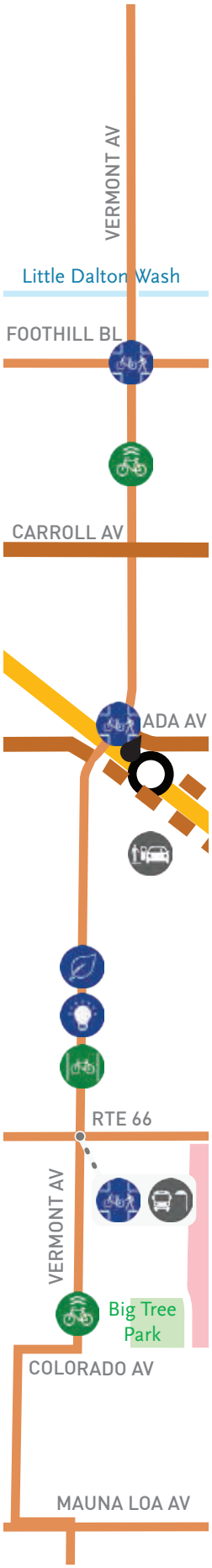
Recommended improvements are discussed in the section describing Ada Avenue on page 55.

Central Segment: Gold Line ROW to Route 66

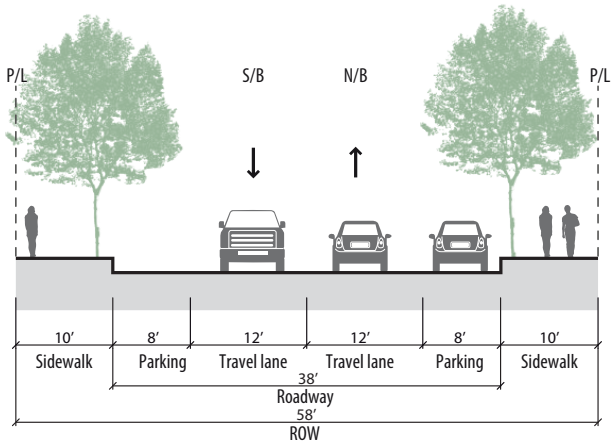
South of the Gold Line ROW, the street becomes industrial in character; however, this may change in the future. First, the Gold Line parking facility will be built on the east side of the street. Second, both sides of the street lie within the City's Route 66 Specific Plan Town Center Mixed Use district, allowing properties to be redeveloped into housing, office, retail or combinations thereof.

Given the likely future land use changes and increase in automobile trips along the street, it is both appropriate and necessary to protect cyclists accessing the station with a buffered bicycle lane (see Figure 5-12). This requires the elimination of parking on both sides of the street. Pedestrian amenities can be added as conditions of future development.

The intersection of Vermont Avenue and Route 66 is a key station access point and could be improved with high-visibility crosswalks, bicycle loop detectors, enhancement of the bus stop which will be an important bus-rail transfer point, and wayfinding signage.



Existing



Proposed

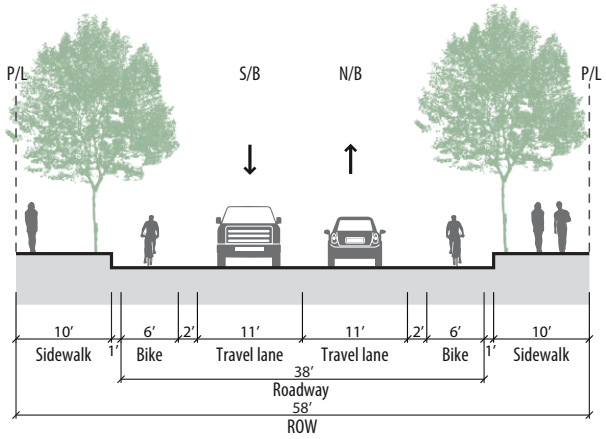


Figure 5-12. Typical Cross-Section for Vermont Avenue, Ada Avenue to Route 66.

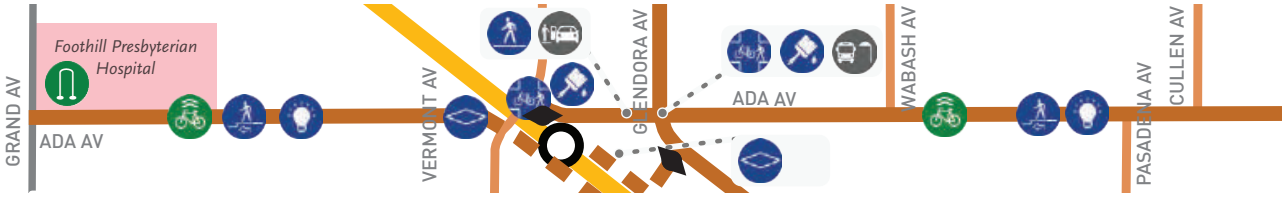
South Segment: Along Vermont Av, Pennsylvania Av and Jenifer Av from Route 66 to Baseline Rd

South of Route 66, the bicycle boulevard follows Vermont Avenue, Colorado Avenue, Pennsylvania Avenue, Mauna Loa Avenue and Jenifer Avenue until Baseline Road. Clear signage and directional sharrows are important to indicate to cyclists how to follow the route to the station.

Directional sharrows and adequate signage will be key to help cyclists and rolling mode users find their way through residential neighborhoods to the station.

Source, left: NACTO

Ada Avenue – Pathway Arterial



Ada Avenue is an east-west pathway arterial that serves the station directly at the plaza entrance just east of Vermont Avenue. In community engagement events, large numbers of people indicated that they would use Ada Avenue for at least some portion of their FLM journey.

West Segment: Grand Avenue to Vermont Avenue

This segment of Ada Avenue will be separated from the rest of the street by a cul-de-sac just west of Vermont Avenue, restricting vehicular traffic to local traffic only and creating an opportunity for a more pedestrian- and bicycle-friendly street. The street is a key connection to Foothill Presbyterian Hospital, which employs approximately 1,000 people.

Key considerations for street design are security and comfort. The space around the cul-de-sac could be designed as a plaza with curb cuts for bicycles and other rolling devices. Gaps in the sidewalk can be filled in, and good pedestrian lighting installed to encourage employees with nighttime shifts to use the station.

Portions of Ada Avenue near Foothill Presbyterian Hospital have no sidewalks. Source: Google Maps Street View

Central Segment: Vermont Avenue to Glendora Avenue

We anticipate that the segment of Ada Avenue between Vermont Avenue and Glendora Avenue will be used by the majority of riders making FLM journeys north of the station. Based on current construction plans, the shortest path of travel from Glendora Avenue and Ada Avenue to the platform will be along Ada Avenue. Therefore, it is a key segment that could be designed to be part of the Village experience coming down Glendora Avenue. It must make an intuitive connection in order to signal the station location to Glendora residents and the Village location to visitors. As discussed in our Principles for Project Type Selection and Design (Table 2-1), vertical elements and paving treatments can help signal paths of travel which involve turns.

The community's preferred alternative for this one-block stretch of roadway is a shared street as shown in Figure 5-13. This shared street is a low-speed, curbless street. On it:

> Drivers can circulate in both directions and access the post office and Glendora Station transit-oriented development driveway.

> Parallel pick up and drop off locations will be provided. Those coming from north of the station will find this location useful, avoiding rail crossings and multiple turns to access the off-street kiss and ride facility. Another reason to provide this facility is that it is likely that some drivers would make pick-ups or drop-offs at this location, even if space is not allocated for it.

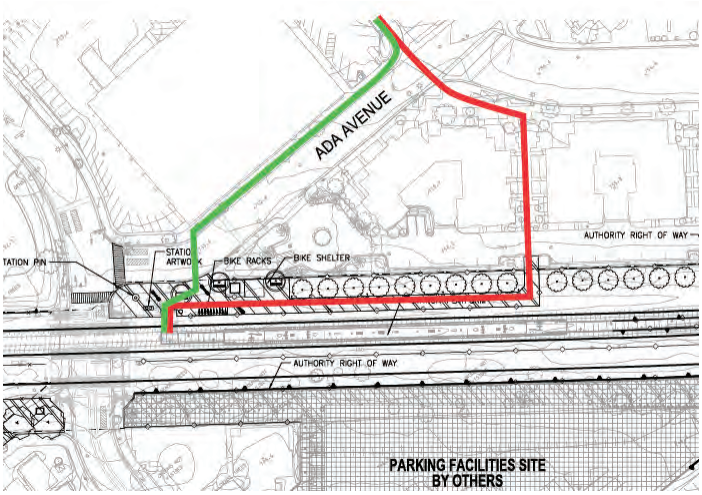
> Cyclists can mix with vehicles due to the very low traffic speed.

> Pedestrians have a separate space within the shared street, but will also feel comfortable crossing the street at any point.

> Planting and special paving treatments will signal to road users that "this is the way to the Gold Line station."

The special paving and curbless condition may also be extended across Vermont and Glendora Avenues to calm these intersections and establish pedestrian priority for crossings. In particular, the extension of the curbless plaza across Vermont Avenue would function as a speed table for northbound vehicles coming around the blind corner just south of the tracks, helping to mitigate safety concerns.

Shared streets use paving, planted medians and subtle turns in the vehicular path to slow vehicles to the point that they can safely share space with pedestrians and cyclists.



Ada Avenue (green) is a shorter path to the station platform from Glendora Avenue than walking through the Glendora Station TOD (red).

Source: Construction Authority ACE drawings, Jan. 30 2019

East Segment: Glendora Avenue to Big Dalton Wash

East of Glendora Avenue, Ada Avenue becomes residential. Recommended project types are bike boulevard, lighting and sidewalk repair. For a complete description of other residential bike boulevard streets, see the "Other Residential Pathways" section at the end of this chapter.

Existing

Proposed Concept

Figure 5-13. Proposed Character - Ada Av, Vermont Av to Glendora Av. Eastbound view from station entrance plaza.

Foothill Boulevard – Pathway Arterial/Collector

Participants at community engagement events were asked whether they preferred Foothill Boulevard or the Little Dalton Wash as a pathway collector in the northern part of the station area between Grand Avenue and Wabash Avenue. The majority favored Foothill Boulevard. Community outreach revealed that the community would like to see it as more of a neighborhood street than an arterial street. Street trees and enhanced crossings are important pedestrian improvements desired by the community.

Foothill Boulevard is also an important bicycle/rolling mode pathway for several reasons:

> Anecdotally, it has higher existing bicycle volumes than other streets in the station area, perhaps because it currently provides Glendorans access to APU/Citrus Station.

> It connects two portions of the Little Dalton Wash, which is an identified future San Gabriel Valley greenway.

> It includes important civic and community destinations.

Given traffic volumes and speeds on the street, the appropriate rolling mode facility would be a separated bikeway. However, due to cost limitations and the high number of curb cuts along portions of the street, a buffered or standard bike lane configuration is recommended along certain segments. In order to accommodate the new bike lanes, right of way space would need to be gained by either eliminating one of the two traffic lanes in each direction or on-street parking. If on-street parking is eliminated, however, intersections need to be widened or right turn pockets eliminated for the bike lane to continue. In particular, the intersection of Foothill Boulevard and Grand Avenue would need to be widened more than is currently anticipated by Construction Authority plans. Given these constraints, we recommend that travel lanes be converted, though this would have operational implications which should be analyzed prior to implementation. Daily traffic volumes along Foothill Boulevard are at the top of the range recommended for this type of reconfiguration.

West Segment: Citrus Avenue to Grand Avenue

This segment connects to Azusa Pacific University, Citrus College and APU/Citrus Station with a separated bike lane through a variety of street configurations. Due to design issues with the existing Gold Line ROW-adjacent shared use path between APU/Citrus Station and Grand Avenue (see section on Gold Line Adjacent Path/Carroll Av), it was determined that Foothill Boulevard was the best connecting route in this area and therefore should be classified as a Pathway Arterial.

A portion of Foothill Boulevard west of Grand Avenue already has only one eastbound lane, due to a narrower right-of-way.

Source: Google Maps Street View

Figure 5-14. Proposed Character - Foothill Bl, Grand Av to Glendora Av. Eastbound mid-block view. Building changes illustrative only.

Central Segment: Grand Avenue to Glendora Avenue

The segment between Grand Avenue and Glendora Avenue is strip commercial in nature, with high vehicular speeds and low volumes. Outreach reflected a desire for this area to be more pedestrian-friendly in streetscape and land use. Figure 5-15 shows the proposed cross-section for this segment, and Figure 5-14 illustrates a vision for its future.

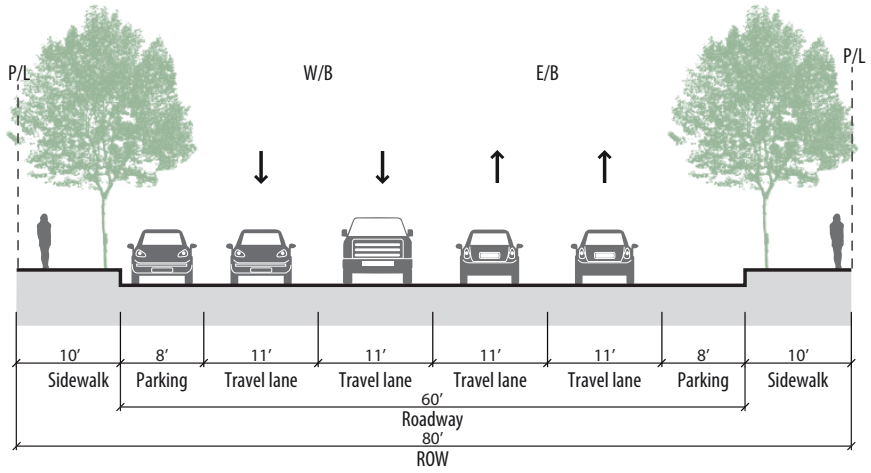
East Segment: Glendora Avenue to Loraine Avenue

The key intersection of Foothill Boulevard and Glendora Avenue is described in the Glendora Avenue pathway description. This portion of the street includes civic and community uses including the County Library, La Fetra Senior Center, access to Finkbiner Park and City Hall. Children and seniors are thus more likely to be using this street. Creating adequate crossings is a top priority.

At Wabash Avenue, a traffic diverter and median refuge island is recommended. This would allow for safe pedestrian crossings, as well as through bicycle movement along Wabash Avenue. Minnesota Avenue may be considered as an alternative location for this improvement.

Traffic diverters with median islands are recommended for crossings on the eastern segment of Foothill Boulevard.

Existing



Proposed

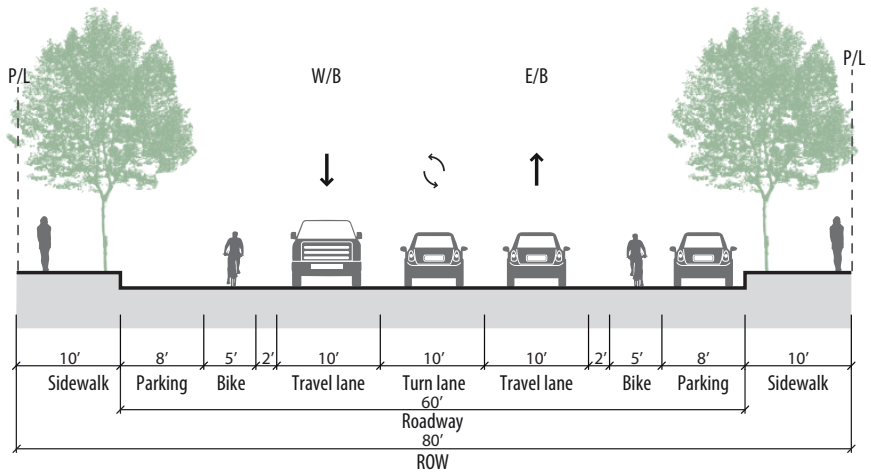
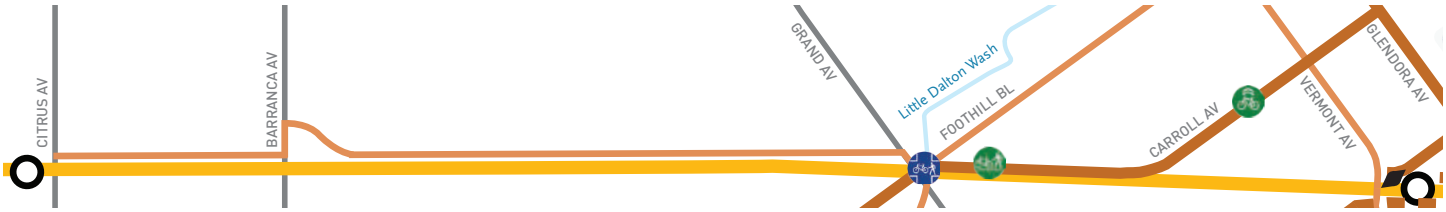


Figure 5-15. Typical Cross-Section for Foothill Boulevard, Grand Avenue to Glendora Avenue.

Gold Line-Adjacent Path/Carroll Avenue – Pathway Arterial/Collector



This route was identified by city staff as a promising connection between APU/Citrus Station, Glendora Station and the City's northwestern neighborhoods.

West Segment: Citrus Avenue to Grand Avenue

Pathway connections have been implemented in this segment by private developers. Between Citrus Avenue and Barranca Avenue, construction a Gold Line-adjacent walking path is underway. This path will connect to the corner of East Promenade and Citrus Avenue in Azusa, very near to APU/Citrus Station. Bicycle connections will likely be made along the adjacent roadway, Elderberry Drive. Between Barranca Avenue and Grand Avenue, another private developer has completed construction of a shared pedestrian/bicycle path. Unfortunately, the two paths do not connect at Barranca Avenue due to turning prohibitions and topography. This limits the usefulness of the path for FLM rolling mode connections.

The intersection of Foothill Bl and Grand Av is key for several of the pathways that cross the intersection. Figure 5-16 illustrates key design considerations.

New Gold Line Adjacent Path: Foothill Bl/Grand Av to Carroll Av

Between the intersection of Foothill Boulevard and Grand Avenue and Carroll Avenue, the Gold Line right-of-way widens on the northeast side of the tracks. This area may be used for construction staging; however, during or after construction, one possibility is that it could be repurposed for a shared use path helping to link toward the station. Metro and the Construction Authority could determine feasibility of this project, including exploring construction of the rail line in a way that does not preclude future implementation of a path.

Carroll Avenue Connection

South of Carroll Avenue, the right-of-way becomes too narrow to contemplate a path connection. The pathway arterial continues onto Carroll Avenue, where pathway users can then continue onto Vermont Avenue to access the station.

The shared use path to APU/Citrus Station provides a very pleasant environment for FLM journeys. However, the crossing at Barranca Avenue does not allow for continuous movement along the path.

Source, bottom: Google Maps Street View

Intersection design must address existing poor visibility and future visibility challenges due to the new Gold Line overpass.

Example of new shared use path character

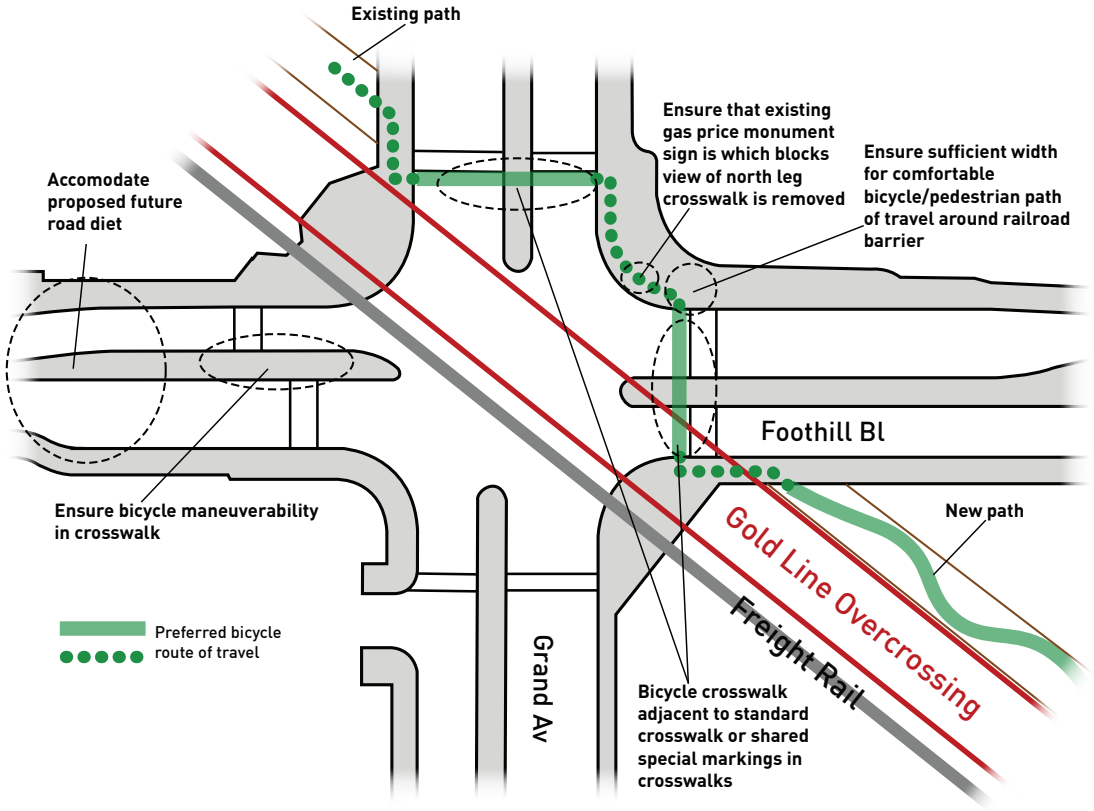


Figure 5-16. Design considerations for intersection of Foothill Bl and Grand Av.

Little Dalton Wash – Pathway Collector

Little Dalton Wash is a channelized waterway and an identified San Gabriel Valley greenway. A trail connection has the potential to connect George Manooshian Park and Goddard Middle School in northeast Glendora to Glendora Village, Azusa Pacific University, Citrus College, and ultimately to the San Gabriel River Bikeway.

During community engagement, people expressed support for the idea of creating a Little Dalton Wash trail. However, they believed that the segment between Grand Avenue and Wabash Avenue, which would need to run behind commercial buildings and through parking lots, would be difficult to maintain and secure. Crossings and parking lot impacts were also concerns. Therefore, Foothill Boulevard was chosen as an alternative in this area.

A shared-use path along Little Dalton Wash could start at Wabash Avenue and continue through Finkbiner Park.

Route 66 – Pathway Collector

Route 66 carries high east-west vehicular loads through the station area. Despite some new retail and residential development, walk audit participants found a noisy and generally unpleasant street environment. They identified needs for street trees, lighting and street furniture including enhanced bus stops. 2017 changes to the Route 66 Specific Plan should help ensure that future development provides adequate sidewalks and sidewalk amenities. However, the City may also consider working with existing property owners to improve the most important spots.

Some participants also wanted to see bicycle improvements, particularly connecting to the west. However, the majority of participants felt that other, lower-speed streets such as Ada Avenue were preferable bicycling streets.

Intersection improvements are key along Route 66 to allow for safe north-south movement of pedestrians and rolling mode users on FLM journeys.

Pedestrian shade trees, lighting and bus shelters are important to address current conditions along Route 66.

Other Residential Pathways

Pathways located in single-family residential areas include Ada Avenue, Wabash Avenue, Cullen Avenue, Pasadena Avenue, Lemon Avenue and Mauna Loa Avenue. These streets require the following treatments:

> The creation of bicycle boulevards. Bicycle boulevards on these roads likely need to involve more than placing bike route signage and painting sharrows. Additional traffic calming measures will likely need to be implemented in order to reduce operating speeds to 25 miles per hour and keeping Average Daily Trips below 3,000 vehicles. A specific study would be required to identify the appropriate types of traffic calming for each street.

> Friendly crossings of major roadways for cyclists and pedestrians.

> Filling in sidewalk gaps.

> Addressing deficient curb ramps and driveway crossings.

> Pedestrian lighting in key locations. Low, bollard-style lighting was suggested by walk audit participants in order to preserve the “dark sky” while improving pedestrian safety.

Bike boulevards generally involve traffic calming measures to keep traffic volumes and speeds low.

6. San Dimas Station Package

This chapter presents the Station Package for the future San Dimas Station, which will be located off the east side of San Dimas Avenue, just south of Bonita Avenue and Downtown San Dimas. This chapter describes the results of the FLM planning process described in Chapter 2 for the station area.

Existing Conditions and Walk Audit Summary

Figure 6-1 presents a summary of existing conditions and walk audit results, highlighting primary strengths, barriers, ideas and issues raised during the initial stages of the planning process for the San Dimas station area.

Summary of Comments

In San Dimas, four community events were held, engaging approximately 267 people and yielding approximately 514 discrete inputs. Figure 6-2 summarizes the comments received about different pathways, streets and districts in the station area from community engagement activities.

Pathway Network and Projects

Figure 6-3 graphically depicts the pathway network and projects for San Dimas Station. These pathways and projects are described in the Project List (Table 6-1) and in the narrative and graphic description beginning on page 79.

Origin of Project Types

Figure 6-4 traces each project type to its origin within the FLM planning process among one of four categories:

> Existing Plan - projects identified by:

- the Construction Authority's Jan. 30, 2019 30% design documents
- Metro's Active Transportation Strategic Plan
- San Gabriel Valley Council of Governments Measure M Subregional funding plan

> City Staff/Consultant Team - projects identified by City staff or the Metro consultant team

View of the future station location from San Dimas Avenue.

> Walk Audit – projects that directly address barriers identified during the walk audit, are based on ideas posited at the walk audit, or that directly address comments generated during the walk audit debriefing session.

> Engagement Events – projects that emerged as ideas during community engagement events, including stakeholder interviews, pop-up events and public workshops.

Also noted on this map are projects for which additional outreach is recommended for one of the following reasons:

> No Comments Received – transformative projects to which specific public input was not registered, either because they emerged late in the planning process, or because community event discussion focused elsewhere.

> Some Reservations Expressed – projects that garnered a mixed reaction during community engagement, or which would benefit from further conceptual design to address reservations expressed with aspects of these projects during the planning process.

Three-Mile Connections

Figure 6-5 presents the first/last mile connections for San Dimas Station. The FLM Bicycle Connections show existing, planned and new FLM proposed bikeways within a three-mile radius of the station. New proposed bikeways consist of the following:

> The extension of pathway arterials from the pathway network (1/2 mile radius) map

> Connections to the San Gabriel Valley Regional Greenway Network

> Regional gap closures

> Upgrades of existing or planned facilities based on our Principles for Project Type Selection and Design (Table 2-2)

> Additional connections to pathway arterials.

Locations where new/improved crossings are needed to serve these bikeways are also noted on Figure 6-5.

Project List

The project list for San Dimas Station is shown in Table 6-1. Information given in the project list consists of:

> Location: streets and extents

> Type – categorization of the project into the types described in Chapter 1 (pages 3-6)

> Description – characterization of project elements

> Prioritization Score – score of the project based on the methodology defined in Chapter 2 (pages 17 and 18)

> Percent within ½ mile radius – percent of the project area within ½ mile of the station platform

> Cost Range – gives a range of costs that projects of this type and size generally fall into. Often there is a wide range of costs because of the variety of implementation options for similar projects.

> Implementation Complexity – level of complexity determined through the methodology described in Chapter 4 (Table 4-3), with key considerations enumerated

> Origin – where the project was first identified within the FLM planning process

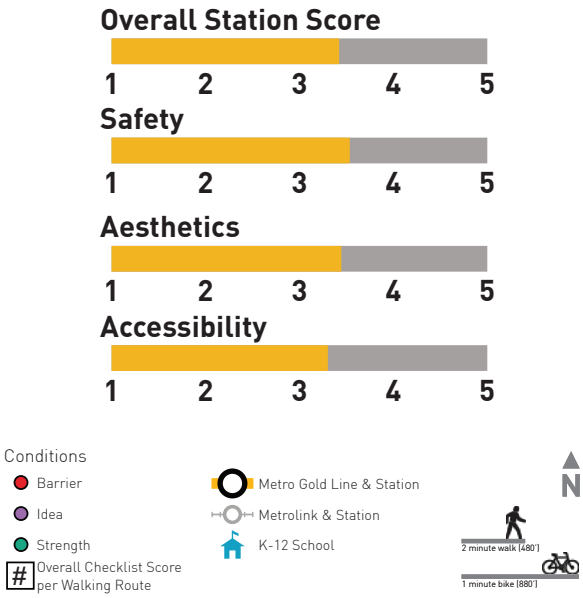
> Community Support – categorizes if the project received community support during the FLM Plan's engagement process. See Chapter 4 for more information.

Prioritized Projects

Tables 6-2 and 6-3 show the ten highest prioritized linear and point projects, respectively, within the San Dimas station area. Projects that require property redevelopment are not included, nor are projects which are already planned to be implemented by the Construction Authority. Projects which are recommended to be implemented through conditions of development but may be implemented through other means remain on the list. Bikeways are listed as one project, though their facility type may change along the corridor length. The prioritization methodology is described in more detail in Chapter 2 (pages 17 and 18).

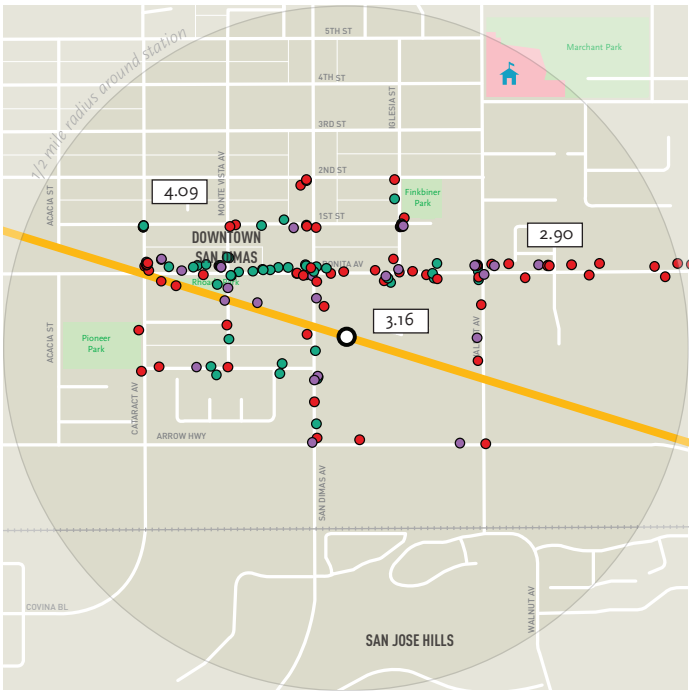
Figure 6-1: Walk Audit and Existing Conditions.

CHECKLIST RESULTS



Walk Audit Conditions

San Dimas



STRENGTH:

> High visibility continental crosswalks

IDEA:

> Bikeway on Bonita Avenue

BARRIER:

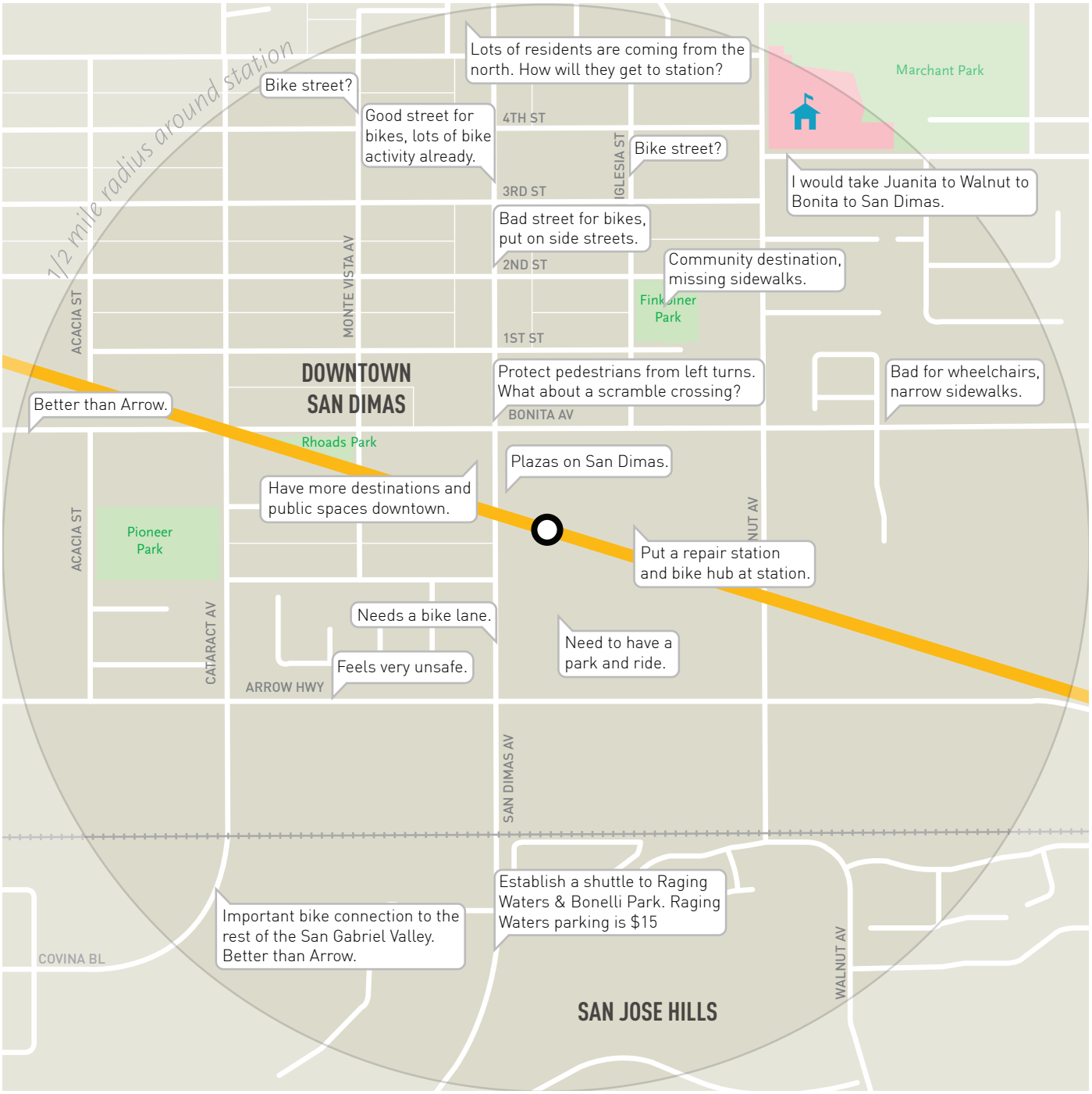
> Non-ADA compliant crosswalks, ramps and driveways

IDEA:

> Connect to Bonelli Park and Raging Waters

Figure 6-2: Community Engagement Comments

San Dimas



Legend

- Metro Gold Line & Station
- Metrolink & Station
- K-12 School

N

2 minute walk (480')

1 minute bike (880')

Figure 6-3: Pathway Network and Project Ideas

San Dimas

Pathway Network & Project Types

- New/Improved Sidewalks
- New/Improved Crossings
- Walkway/Shared Street
- Plaza
- Street Trees
- Sidewalk Lighting
- Street Furniture
- Visual Enhancements
- Pick Up/Drop Off
- Enhanced/New Bus Stop
- Shared Use Path
- Bike Lane
- Bike Boulevard
- Separated Bikeway
- Bike Parking/Bike Share
- K-12 School
- Pathway Arterial
- Pathway Collector
- Pathway Collector Cut-Through
- Station Entrances (Point to Direction of Exit)
- Metro Gold Line & Station
- Metrolink

N

2 minute walk (480')

1 minute bike (880')

Figure 6-4: Origin of Project Types

San Dimas

Pathway Network & Project Types

- New/Improved Sidewalks
- New/Improved Crossings
- Walkway/Shared Street
- Plaza
- Street Trees
- Sidewalk Lighting
- Street Furniture
- Visual Enhancements
- Pick Up/Drop Off
- Enhanced/New Bus Stop
- Shared Use Path
- Bike Lane
- Bike Boulevard
- Separated Bikeway
- Bike Parking/Bike Share
- K-12 School
- Pathway Arterial
- Pathway Collector
- Pathway Collector Cut-Through
- Station Entrances (Point to Direction of Exit)
- Metro Gold Line & Station
- Metrolink

Identified by/at

- Existing Plan
- City Staff/Consultant Team
- Walk Audit
- Engagement Events
- No Comment Received
- Some Reservations Expressed

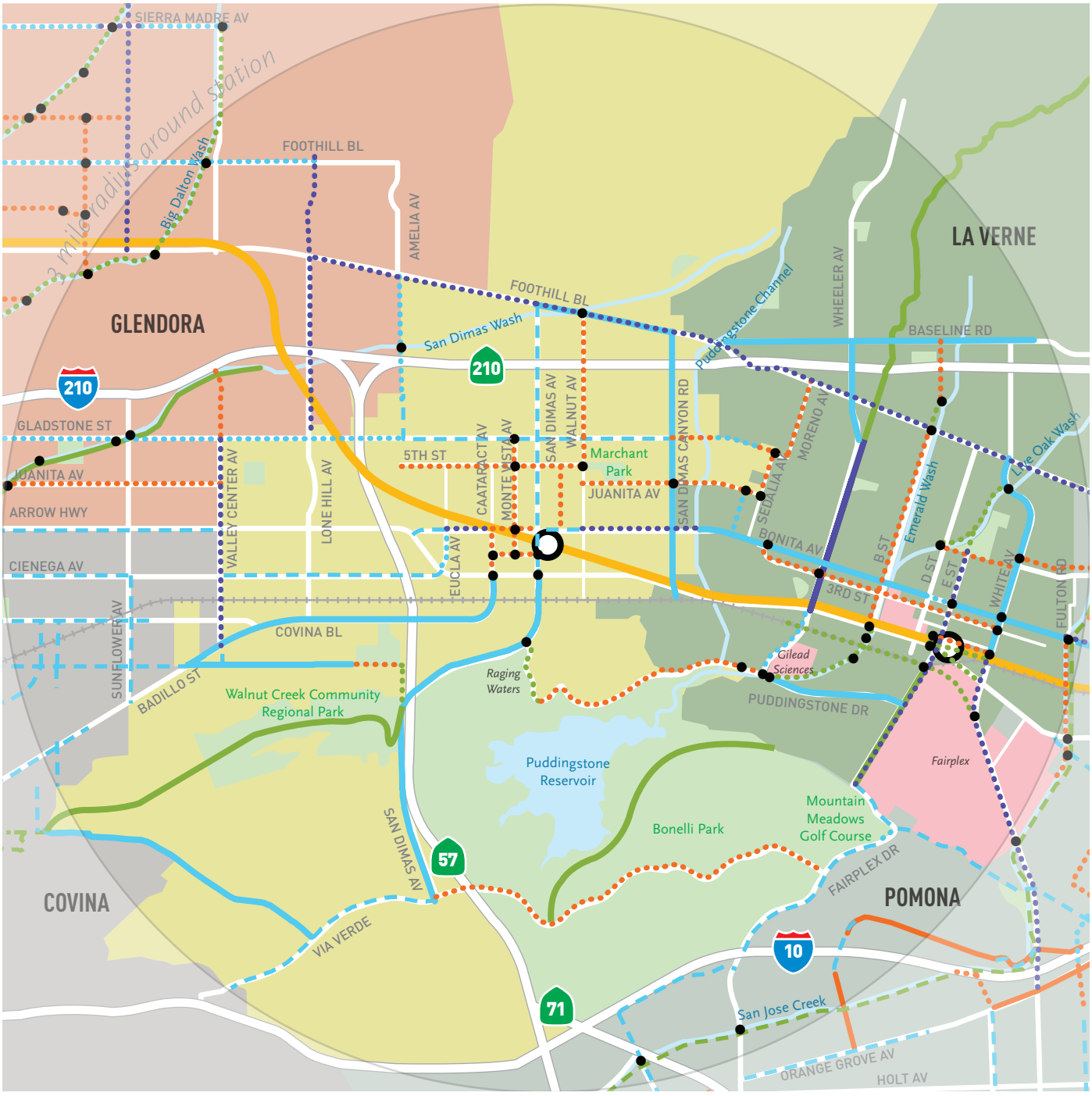
N

2 minute walk (480')

1 minute bike (880')

Figure 6-5: Three-Mile Connections

San Dimas: Existing, Planned and Proposed*



Facility Type

- Shared Use Path
- Bike Lane
- Bike Boulevard
- Separated Bikeway
- Proposed New/Improved Crossings

Facility Status

- Existing/Funded Bikeways
- City or Regional Plan Bikeways
- FLM Proposed Bikeways

Rapid Transit

- Metro Gold Line & Station
- Metrolink & Station

N

*Due to the process for identifying proposed facilities, further public input should be sought on proposed bikeways if selected for implementation.

5 minute bike (4,400')

Table 6-1: First/Last Mile Project List - San Dimas (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
STATION AMENITIES & ENTRANCES												
Gold Line ROW, south side		East Platform Entrance	Walnut Av	Pedestrian Street/Walkway	New pedestrian pathway through city yard.	35	100%	$ 262,000	$ 1,310,000	Low • Planned by GLCA	Construction Authority	Yes
Gold Line ROW, south side		East Platform Entrance	Walnut Av	Sidewalk Lighting	Pedestrian-scale lighting to ensure safety and security	35	100%	$ 262,000	$ 1,310,000	Low • Planned by GLCA	Consultant Team	Yes
Mid-block between San Dimas Av and Walnut Av		Gold Line ROW	Arrow Hwy	Pedestrian Street/Walkway	New pedestrian pathway parallel to potential station parking entrance.	25	100%	$ 131,000	$ 655,000	Low • Planned by GLCA	Construction Authority	Yes
Mid-block between San Dimas Av and Walnut Av		Gold Line ROW	Arrow Hwy	Pick-Up/Drop-Off	New pick-up/drop-off area to serve cars and small buses.	25	0%	n/a	n/a	Low • Planned by GLCA	Construction Authority	Yes
Station or Station Plaza				Bike Parking/Bikeshare	New secure bicycle parking. Explore station or station-adjacent areas for new bike share station.	40	100%	$ 5,000	$ 100,000	Low • Planned by GLCA	Construction Authority	Yes
PATHWAY ARTERIAL: BONITA AV												
Bonita Av		Arrow Hwy	Cataract Av	Street Trees	Street trees throughout corridor.	39	0%	$ 15,000	$ 450,000	Low • Planned by GLCA (Acacia to Cataract)	Consultant Team	Yes
Bonita Av	Cataract Av			New/Improved Crossings	Well-marked crossings and pedestrian lighting. Some improvements already planned as part of Gold Line construction.	39	100%	$ 50,000	$ 500,000	Low • Planned by GLCA	Walk Audit	Yes
Bonita Av	Cataract Av			Visual Enhancements	Architectural enhancements for Gold Line bridge	34	100%	n/a	n/a	Low • Planned by GLCA	City Staff	Yes
Bonita Av		San Dimas Av	East City Limit	Street Trees	New trees to increase shade. Currently, some palms provide a small canopy.	45	61%	$ 27,000	$ 810,000	Low	Walk Audit	Yes
Bonita Av	Iglesia St			New/Improved Crossings	New crosswalk on east side of intersection and elimination of large westbound right turn pocket.	38	100%	$ 100,000	$ 500,000	High • Curb and gutter replacement, traffic study recommended	Walk Audit	Yes
Civic Center				Bike Parking/Bikeshare	New bicycle parking. New location for new bike share station/kiosk.	37	100%	$ 2,500	$ 10,000	Low	City Staff	Yes
Bonita Av		Walnut Av	East City Limit	New/Improved Sidewalks	Regrading and reconstruction of driveways and curb ramps to ADA standards. Explore widening the sidewalk.	54	45%	$ 546,550	$ 964,500	Low/High with sidewalk widening	Walk Audit	Yes
Post Office				Bike Parking/Bikeshare	New bicycle parking. New location for new bike share station/kiosk.	34	100%	$ 2,500	$ 10,000	Medium • Agreement with property owner required	Consultant Team	Yes
Bonita Av		**Arrow Hwy**	**East City Limit**	**Bikeway**	**Segments described below**	**60**	**61%**	**$ 349,425**	**$ 3,841,950**			
		Arrow Hwy	200' East of Cataract Av	Separated Bikeway	New Class IV parking protected bikeway. No reconfiguration required; however, medians may need to be narrowed.	54	44%	$ 129,250	$ 1,551,000	Medium • New curb	Walk Audit	Yes
		200' East of Cataract Av	San Dimas Av	Bike Boulevard	Consider removal of center turn lane or left turn lane to extend bike lanes through this segment. If not feasible, new bike route signage and pavement markings.	50	100%	$ 5,275	$ 158,250	Low	Walk Audit	Yes
		San Dimas Av	Iglesia St	Bike Lane	New Class II buffered bike lane. No reconfiguration required.	50	100%	$ 25,200	$ 37,800	Low	Walk Audit	Yes
		Iglesia St	Walnut Av	Bike Lane	New Class II buffered bike lane. Reduce to one traffic lane in each direction, and convert to back-in angled parking on north side.	42	100%	$ 24,200	$ 108,900	Low	Walk Audit	Yes
		Walnut Av	East City Limit	Separated Bikeway	New Class IV parking-protected bikeway. No reconfiguration required, however medians may need to be narrowed.	54	45%	$ 165,500	$ 1,986,000	Medium • Median/curb adjustment	Walk Audit	Yes

Table 6-1: First/Last Mile Project List - San Dimas (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
PATHWAY ARTERIAL: SAN DIMAS AV												
San Dimas Av	Bonita Av			New/Improved Crossings	Left turns from permitted to protected, installing leading pedestrian interval. Include bicycle path of travel markings and westbound bike box. Acquisition of easement needed in order to retain existing sidewalk width on NW corner.	50	100%	$ 50,000	$ 250,000	Very High • Consider for GLCA implementation (DB2) • Additional ROW to be acquired	Walk Audit	Yes
San Dimas Av		Bonita Av	Gold Line ROW	Plaza	New plaza spaces at the southeast corner of Bonita Av & San Dimas Av (gateway plaza) and northeast corner of Gold Line ROW & San Dimas Av (bike plaza).	35	100%	$ 500,000	$ 2,500,000	High • Agreement with property owner required • Potential condition of development	Engagement Events	Yes
San Dimas Av		Bonita Av	Gold Line ROW	New/Improved Sidewalks	**West Side**: Rearrangement of landscaping and pedestrian lighting to create clear path of travel. Easement required to maintain sidewalk width on NW corner **East Side: Option 1:** New downtown sidewalk in conjunction with new public-serving uses. **Option 2:** New promenade sidewalk. **Option 3:** Widen existing sidewalk to minimum of 12'.	45	100%	$ 61,000	$ 638,352	Very High • Additional ROW to be acquired • 8' SW planned by GLCA • Consider for GLCA implementation (DB2) • Potential condition of development	Walk Audit	Yes
San Dimas Av		Bonita Av	Gold Line ROW	Visual Enhancements	New public art in plaza spaces and along new/improved sidewalks.	35	100%	n/a	n/a	High • Consider for GLCA implementation (DB2)	Walk Audit	Yes
San Dimas Av	RR Track			New/Improved Crossings	Existing plan implementation for a signed crossing with median.	50	100%	$ 50,000	$ 500,000	Low • Planned by GLCA	Construction Authority DB2	Yes
San Dimas Av	South of Gold Line ROW			Plaza	New small station entry plaza at entrance to platform.	35	100%	$ 200,000	$ 1,000,000	Low • Planned by GLCA	Construction Authority DB2	Yes
San Dimas Av	South of Gold Line ROW			Visual Enhancements	Public art in small station entry plaza. Other pedestrian improvements (wayifinding, lighting, etc.) for safety and security.	40	100%	n/a	n/a	High • Consider for GLCA implementation (DB2)	City Staff	Yes
San Dimas Av	Commercial St			New/Improved Crossings	Planned signalization implementation of this intersection.	40	100%	$ 50,000	$ 500,000	Low • Planned by GLCA	Construction Authority DB2	Yes
San Dimas Av		Metrolink RR	Ave Domingo	New/Improved Sidewalks	Gap closure in sidewalk, or soft walking path, by incising the hillside.	43	11%	$ 2,000,000	$ 5,000,000	Medium • Grading required	SGVCOG Measure M Subregional Funds Proposed Project List	Yes
San Dimas Av		**5th St**	**Via Verde**	**Bikeway**	**Segments described below**	**60**	**33%**	**$ 888,100**	**$ 2,514,250**			
		5th St	Bonita Av	Bike Lane	Street reconfiguration to accommodate Class II bike lane by removing parking lane.	45	100%	$ 68,800	$ 103,200	Low	Walk Audit	Some Reservations Expressed
		Bonita Av	Arrow Hwy	Bike Lane	New continuous bike lane in both directions. This treatment would allow for two traffic lanes in each direction as included in current construction plans. Would require small adjustments to medians and widening of the roadway between the northern shopping center driveway and Bonita Av.	45	100%	$ 223,000	$ 400,000	Very High • Consider for GLCA implementation (DB2) • Additional ROW to be acquired • Curb and gutter replacement • CPUC grade crossing modificaiton required	Walk Audit	Yes

Table 6-1: First/Last Mile Project List - San Dimas (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
		Arrow Hwy	Puddingstone Dr	Bike Lane	Gap closure an improvements on existing Class II bike lane.	42	90%	$ 38,000	$ 57,000	Low	SGVCOG Measure M Subregional Funds Proposed Project List	Yes
		Puddingstone Dr	Via Verde	Bike Lane	Gap closure in Bike Lane between Via Verde and Ave Domingo.	44	0%	$ 558,300	$ 1,954,050	Low	SGVCOG Measure M Subregional Funds Proposed Project List	Yes
PATHWAY ARTERIAL: PUDDINGSTONE DR												
Puddingstone Dr	San Dimas Av			New/Improved Crossings	Crosswalk markings.	34	100%	$ 50,000	$ 150,000	Low	Consultant Team	Yes
Puddingstone Dr		San Dimas Av	Puddingstone Lake	Ped/Bike Path	New two-way shared use path along west side of street.	19	0%	$ 327,000	$ 1,635,000	Medium • Agreement with current property owner required	Walk Audit	Yes
PATHWAY COLLECTOR: MONTE VISTA AV												
Monte Vista Av		Gladstone Av	Downtown South Parking Lot Entrance	Bike Boulevard	New Bike Boulevard treatments, including signage, pavement markings, and traffic calming	27	75%	$ 13,563	$ 406,875	Low	Walk Audit	Some Reservations Expressed
Monte Vista Av	Bonita Av			New/Improved Crossings	Allow bikes to activate the motion sensor RRFB crossing (video or loop detector)	37	100%	$ 10,000	$ 100,000	Low	Walk Audit	Yes
Monte Vista Av		Downtown South Parking Lot Entrance	Railway St	Ped/Bike Path	Planned tunnel crossing implementation.	27	100%	$ 48,000	$ 240,000	Low • Planned by GLCA	Construction Authority DB2	Yes
Monte Vista Av		Downtown South Parking Lot Entrance	Railway St	Visual Enhancements	Pedestrian tunnel crossing enhancement with art and lighting.	27	100%	n/a	n/a	High • Consider for GLCA implementation (DB2)	City Staff	Yes
PATHWAY COLLECTOR: 5TH ST												
5th St		Amelia Av	Walnut Av	New/Improved Sidewalks	Gap closure for sidewalk.	34	43%	$ 63,750	$ 375,000	Medium • Additional ROW to be acquired	City Staff	No Comments Received
5th St		Amelia Av	Walnut Av	Bike Boulevard	New Bike Boulevard treatments, including signage, pavement markings, and traffic calming	39	43%	$ 25,000	$ 750,000	Low	City Staff	No Comments Received
5th St	San Dimas Av			New/Improved Crossings	New mid-block crossing with pedestrian- and bicycle-actuated HAWK signal, potential median refuge island.	29	100%	$ 50,000	$ 500,000	Low	City Staff	No Comments Received
5th St	Iglesia St			New/Improved Crossings	Crosswalk striping.	19	100%	$ 50,000	$ 500,000	Low	City Staff	No Comments Received
5th St	Walnut Av			New/Improved Crossings	Crosswalk striping and add advisory signage and pavement markings. Add directional sharrows and signage showing preferred bike route.	30	100%	$ 100,000	$ 500,000	Low	City Staff	No Comments Received
PATHWAY COLLECTOR: JUANITA AV												
Ekstrand Elementary School				Bike Parking/Bikeshare	New bicycle parking.	29	100%	$ 2,500	$ 10,000	Medium • Agreement with property owner required	Consultant Team	No Comments Received
Juanita Av	San Dimas Canyon Rd			New/Improved Crossings	Intersection signalization or stop-control and accommodate cyclists with loop detectors and signage.	39	100%	$ 100,000	$ 400,000	Low	Consultant Team	No Comments Received

Table 6-1: First/Last Mile Project List - San Dimas (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
Juanita Av		Walnut Av	San Dimas Canyon Rd	Street Trees	New shade trees in parkway.	39	31%	$ 60,000	$ 250,000	Low	Engagement Events	Yes
Juanita Av		Walnut Av	San Dimas Canyon Rd	Bike Boulevard	Bike Boulevard treatments with signage, traffic calming, and new street trees.	40	16%	$ 12,500	$ 375,000	Low	Engagement Events	Yes
PATHWAY COLLECTORS: DOWNTOWN SAN DIMAS CUT-THROUGHS												
Gold Line ROW, south side		Cataract Av	Monte Vista Av	Ped/Bike Path	New bike and pedestrian path/signed route on the south side of tracks between Cataract and Monte Vista. This may be developed with the new parking lot.	27	100%	$ 129,000	$ 645,000	High • Consider for GLCA implementation (DB2)	Engagement Events	Yes
Downtown San Dimas				Bike Parking/Bikeshare	New bicycle parking. Explore location for new bike share station/kiosk.	40	100%	$ 2,500	$ 10,000	Low	Engagement Events	Yes
Foothill Transit Park and Ride				Pedestrian Street/Walkway	New walkway through the park and ride facility with artistic paving treatment or other visual enhancement.	27	0%	$ 35,000	$ 210,000	Low	Engagement Events	Yes
PATHWAY COLLECTOR: WALNUT AV												
Walnut Av	Foothill Bl			New/Improved Crossings	New signalized intersection.	19	0%	$ 100,000	$ 500,000	Low	Consultant Team	No Comment Received
Walnut Av		Foothill Bl	5th St	Bike Boulevard	New bike boulevard with traffic calming, signage, and new street trees.	34	2%	$ 21,000	$ 630,000	Low	Walk Audit	Yes
Walnut Av		Juanita Av	Arrow Hwy	New/Improved Sidewalks	Sidewalks to ADA standards. Sidewalks to 10' where deficient.	42	100%	$ 150,000	$ 750,000	Low/High with sidewalk widening • Additional ROW to be acquired • Potential condition of development	Walk Audit	Yes
Walnut Av		Bonita Av	Arrow Hwy	Lighting	New pedestrian-scale lighting.	37	100%	$ 7,500	$ 225,000	Low	Consultant Team	Yes
Walnut Av		Bonita Av	Arrow Hwy	Street Trees	New shade trees.	37	100%	$ 30,000	$ 125,000	Low	Consultant Team	Yes
Sheriff Station				Bike Parking/Bikeshare	New bicycle parking. Explore location for new bike share station.	24	100%	$ 500	$ 5,000	Medium • Agreement with property owner required	Consultant Team	Yes
Walnut Av	RR Track			New/Improved Crossings	New crossing with signage on south side of railroad tracks.	27	100%	$ 50,000	$ 500,000	High • Consider for GLCA implementation (DB2)	Consultant Team	Yes
Walnut Av	Arrow Hwy			New/Improved Crossings	New audible pedestrian signals and high-visibility crosswalks to all four legs of intersection.	24	100%	$ 50,000	$ 500,000	Low	Walk Audit	Yes
PATHWAY COLLECTOR: COMMERCIAL ST												
Commercial St		San Dimas Av	Cataract Av	Bike Boulevard	New bike boulevard with traffic calming and signage	35	100%	$ 6,200	$ 186,000	Low	Walk Audit	Yes

Table 6-1: First/Last Mile Project List - San Dimas (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
PATHWAY COLLECTOR: ARROW HWY												
Arrow Hwy	San Dimas Av			New/Improved Crossings	Northbound and southbound bike lane connections through intersection. Stripe high-visibility crosswalks. New gateway elements.	37	100%	$ 50,000	$ 500,000	Low	Walk Audit	Yes
Arrow Hwy	San Dimas Av			Visual Enhancements	New gateway elements at intersection.	32	0%	n/a	n/a	Low	Walk Audit	Yes
Arrow Hwy	Arrow Hwy Corporate Center			New/Improved Crossings	Intersection signalization for all turning movements in/out of park and ride, stripe new crosswalks.	17	100%	$ 150,000	$ 500,000	Low • Planned by GLCA	Construction Authority	Yes
Arrow Hwy		San Dimas Av	Walnut Av	New/Improved Sidewalks	Greater space for sidewalk through easement. Can be functional for bikes too.	27	100%	$ 106,675	$ 564,750	High • Additional ROW to be acquired • Potential condition of development	Walk Audit	Yes
Arrow Hwy		San Dimas Av	Walnut Av	Lighting	New pedestrian-scale lighting.	32	100%	$ 7,530	$ 225,900	High • Additional ROW to be acquired • Potential condition of development	Consultant Team	Yes
Arrow Hwy		San Dimas Av	Walnut Av	Street Trees	New shade trees.	32	100%	$ 30,120	$ 225,900	High • Additional ROW to be acquired • Potential condition of development	Consultant Team	Yes
PATHWAY COLLECTOR: CATARACT AV/COVINA BL												
Pioneer Park				Bike Parking/Bikeshare	New bicycle parking. Explore location for new bike share station.	24	100%	$ 500	$ 5,000	Low	Consultant Team	Yes
Cataract Av	Commercial St			New/Improved Crossings	New pedestrian and bicycle wayfinding. Explore stop-controlling intersection.	29	100%	$ 25,000	$ 100,000	Low	Consultant Team	Yes
Cataract Av	Arrow Hwy			New/Improved Crossings	Shared northbound through/right turn lane to through lane only. Extend bike lane through intersection. Improve crossings.	24	100%	$ 100,000	$ 500,000	Medium • Traffic study recommended	Engagement Events	Yes
Badillo Street/Covina Boulevard/Cataract Avenue		**Cypress St**	**Bonita Av**	**Bikeway**	**Continuous Class II Bike Lane. Requires lane re-configuration in some places.**	49	11%	$ 55,700	$ 342,750			
Cataract Av		Bonita Av	Arrow Hwy	Bike Boulevard	Significant traffic calming, signage and sharrow markings.	24	100%	$ 25,700	$ 192,750	Low	City Staff	Some Reservations Expressed
Covina Bl	Cliffside Dr			Bike Lane	Bike lane gap closure. Reduce/eliminate center median and close driveway on south side 200' E of Cliffside Dr.	10		$ 30,000	$ 150,000	Medium • Curb replacement	Engagement Events	Yes
PATHWAY COLLECTOR: IGLESIA ST												
Iglesia St		5th St	Bonita Av	New/Improved Sidewalks	Easement space for sidewalks to close gaps.	32	100%	$ 292,400	$ 516,000	High • Additional ROW to be acquired	Walk Audit	Yes
Iglesia St		5th St	Bonita Av	Pedestrian Street/Walkway	Traffic calming for comfortable in-street walking environment where sidewalk construction is not feasible.	32	100%	$ 34,400	$ 103,200	Low	Consultant Team	No Comment Received
Iglesia St		5th St	Bonita Av	Bike Boulevard	Traffic calming measures, clear signage and pavement markings to steer cyclists to this route.	37	100%	$ 8,600	$ 258,000	Low	Walk Audit	Yes

Table 6-1: First/Last Mile Project List - San Dimas (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
OTHER BIKEWAY CONNECTIONS - SAN DIMAS												
SR-57 Sidepath		Cypress St	San Dimas Av	Shared-Use Path	Land adjacent development to the Freeway into a shared-use path.	19	0%	$ 587,000	$ 2,935,000	• Agreement with property owner required	Consultant Team	No Comment Received
Auto Centre Dr/Allen Av		Amelia Av	East City Limit	Bike Lane & Bike Boulevard	New Class II Bike Lane by re-configuring parking lane, or traffic calming and signage elements as part of a Bike Boulevard.	24	0%	$ 44,575	$ 1,337,250	High • Parking study required	Consultant Team	No Comment Received
Cienega Av/Eucla Av		Valley Center Av	Bonita Av	Bike Lane	Class II bike lane striping. Reconfiguration and/or parking removal may be necessary in sections.	36	0%	$ 144,000	$ 216,000	High • Traffic or parking study required	Consultant Team	No Comment Received
Cypress St		Cypress Street Bike Lanes	SR-57 Sidepath	Bike Boulevard	New bike boulevard with traffic calming, and signage.	25	0%	$ 6,250	$ 187,500	Low	Consultant Team	No Comment Received
Foothill Bl		Amelia Av	Canyon Park Ln	Separated Bikeway	New continous Class IV separated bikeway through city. Parking or travel lane re-configuration or narrowing of the existing median necessary.	34	0%	$ 353,500	$ 4,242,000	High • Traffic or parking study required	Consultant Team	No Comment Received
OTHER BIKEWAY CONNECTIONS - COUNTY JURISDICTION												
Via Verde		San Dimas Av	Fairplex Dr	Bike Boulevard	New bike boulevard with traffic calming, and signage.	15	0%	$ 44,575	$ 1,337,250	Low	Consultant Team	No Comment Received

Table 6-2. Prioritized Project List - Linear Projects - San Dimas

Rank	Street A	From	To	Type	Prioritization Score
T1	Bonita Av	Arrow Hwy	East City Limit	Bikeway	60
T1	San Dimas Av	5th St	Via Verde	Bikeway	60
3	Bonita Av	Walnut Av	East City Limit	New/Improved Sidewalks	54
4	Badillo Street/Covina Boulevard/Cataract Avenue	Cypress St	Bonita Av	Bikeway	49
T5	Bonita Av	San Dimas Av	East City Limit	Street Trees	45
T5	San Dimas Av	Bonita Av	Gold Line ROW	New/Improved Sidewalks	45
7	San Dimas Av	Metrolink RR	Ave Domingo	New/Improved Sidewalks	43
8	Walnut Av	Juanita Av	Arrow Hwy	New/Improved Sidewalks	42
9	Juanita St	Walnut Av	Sedalia Av	Bike Boulevard	40
T10	Bonita Av	Arrow Hwy	Cataract Av	Street Trees	39
T10	5th St	Amelia Av	Walnut Av	Bike Boulevard	39
T10	Juanita St	Walnut Av	San Dimas Canyon Rd	Street Trees	39
T10	San Dimas Canyon Av	Foothill Bl	Arrow Hwy	Bike Boulevard	39

Table 6-3. Prioritized Project List - Point Projects - San Dimas

Rank	Street A	Street B	Type	Prioritization Score
T1	San Dimas Av	Bonita Av	New/Improved Crossings	50
T2	San Dimas Av	South of Gold Line ROW	Visual Enhancements	40
T2	Downtown San Dimas		Bike Parking/Bikeshare	40
T4	Juanita St	Walnut Av	New/Improved Crossings	39
T4	Juanita St	San Dimas Canyon Rd	Bike-Friendly Intersection	39
T6	Civic Center		Bike Parking/Bikeshare	37
T6	Monte Vista Av	Bonita Av	New/Improved Crossings	37
T6	Arrow Hwy	San Dimas Av	New/Improved Crossings	37
T9	Bonita Av	Cataract Av	Visual Enhancements	34
T9	Post Office		Bike Parking/Bikeshare	34
T9	Puddingstone Dr	San Dimas Av	New/Improved Crossings	34

The following sections describe the recommended improvements to pathways within one-half mile of the future station in San Dimas.

Station Amenities and Entrances

The San Dimas station will be located just east of San Dimas Avenue along the rail right-of-way currently occupied by a freight rail line, between Bonita Avenue and Arrow Highway.

Station Entrances

Figure 6-6 shows the Construction Authority's plan for station construction, including connections to San Dimas Avenue and Walnut Avenue.

Most people spoken to at the pop-up booth at the San Dimas Holiday Extravaganza said that they would use the entrance at San Dimas Avenue. Platform access will be from the south side of the tracks through a small plaza connecting to a new crosswalk with median refuge. Visual enhancements that do not obstruct pedestrian movement, such as pavement art, would be a helpful addition to this primary entrance point.

The arrangement of station parking facilities and entrances on the east side of the station is still being finalized. Community engagement has revealed that the community desires access points to the station from both Arrow Highway and Walnut Avenue. Both may be connected to the platform entrance ramp through pleasant, shaded and well-lit pathways for pedestrians and cyclists.

Bicycle Parking

Since the only connection between the west (San Dimas Avenue) and east (Walnut Avenue/Arrow Highway) station entrances is the platform itself, secure bicycle parking may be located on both sides of the station. On the east side of the station, secure bicycle parking can be included as part of the parking facility. On the west side of the station, there does not appear to be space on station grounds, so an alternative location is proposed in a plaza space just north of the station on the east side of San Dimas Avenue (see Figure 6-8).

Pick Up/Drop Off

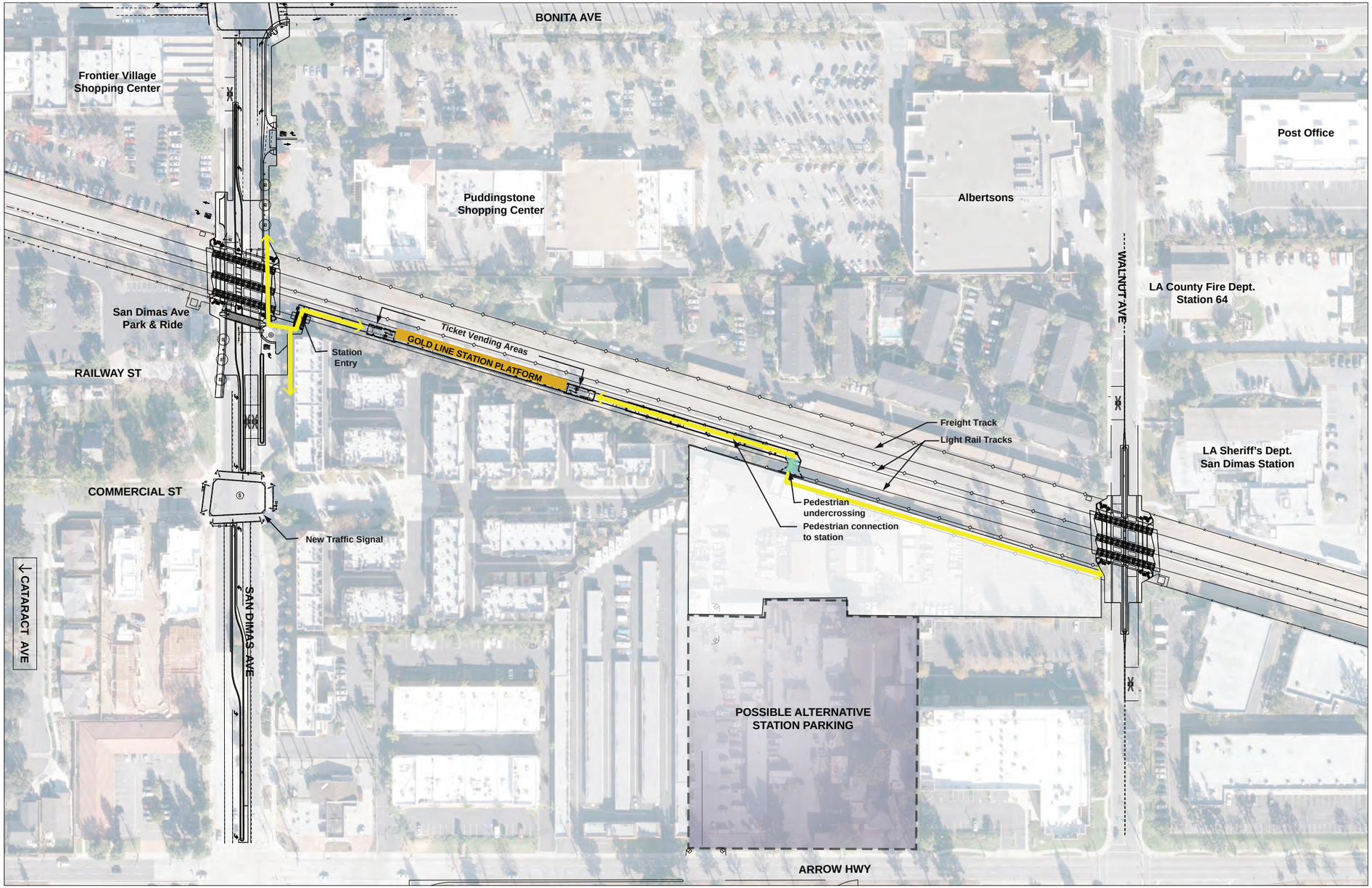
Comments in community engagement meetings indicated that automobile access, both park and ride and pick up/drop off, would be an important component of station access in this community. The ideal place for pick up/drop off would appear to be from Arrow Highway, as it already serves a high number of vehicles. The pick up/drop off facility could be designed to accommodate potential shuttles to Raging Waters, remote employers, retail districts or even Cal Poly Pomona.

Station Entrance Crossings

With a signalized intersection at Arrow Highway allowing for all types of vehicular turns from the pick up/drop off point, a crosswalk could be added to allow for direct pedestrian access to the office development on the south side of the street. Similarly, a crossing could be added at the Walnut Avenue entrance to the station. Both Arrow Highway and Walnut Avenue currently have approximately one-quarter mile between crossing points.

Location of the future station entry plaza and mid-block crossing on San Dimas Avenue.

San Dimas Station Site Plan (Fig. 6-6)



Advanced Conceptual Engineering - February 2019

Foothill Gold Line

San Dimas Av: Pathway Arterial

San Dimas Avenue is a north-south street that directly serves the main station entrance. Mapping of San Dimas residents' anticipated routes to the station showed that most would use San Dimas Avenue for some part of the journey; therefore, it has been designated as a pathway arterial.

North Segment: 5th St to Bonita Av

This portion of San Dimas Avenue has a mix of uses, including single-family residential, multi-family residential, churches, commercial uses and the historic Walker House. Despite their diversity, the buildings integrate well together and fit within a residential street character established by common setbacks and excellent tree canopy. Walk audit participants found this portion of the street very pedestrian-friendly.

San Dimas Avenue is also highly used by confident cyclists despite its lack of specific facilities. However, to make it appealing as a FLM pathway for a wider variety of users, bike lanes would need to be striped on the street. Figure 6-7 shows the existing and proposed cross-section which would accommodate bike lanes by eliminating on-street parking between 5th Street and Bonita Avenue.

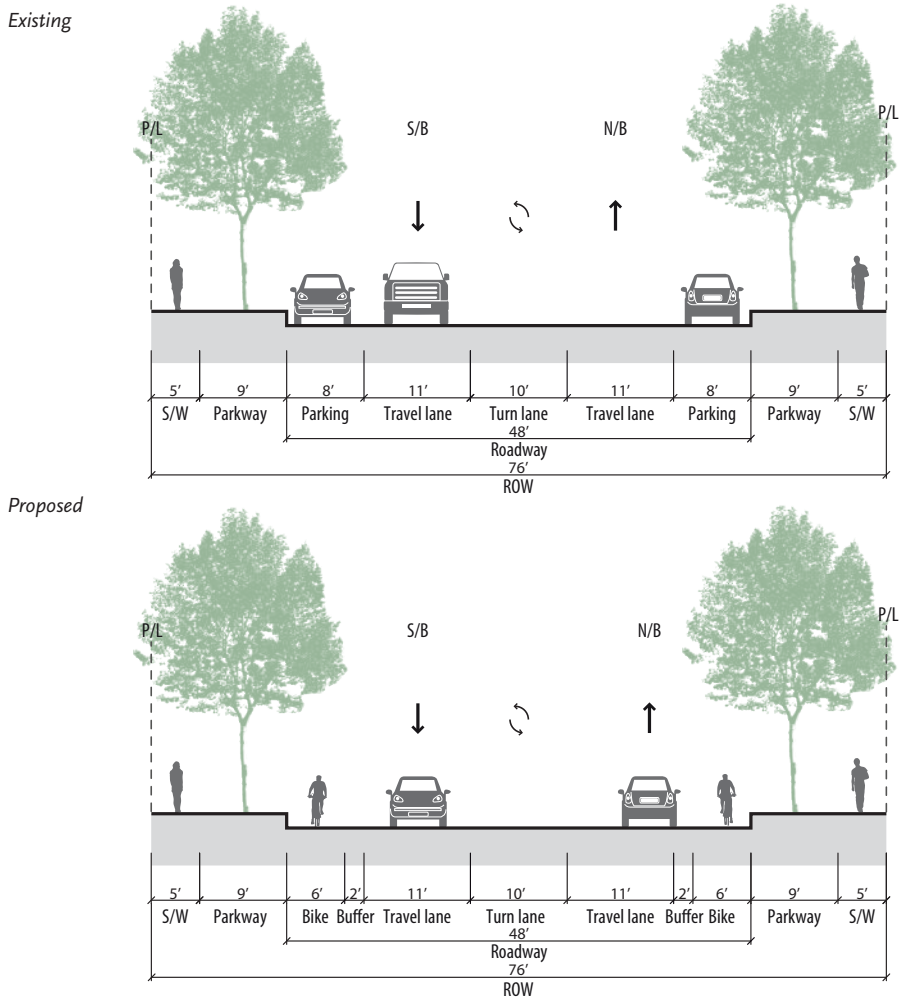
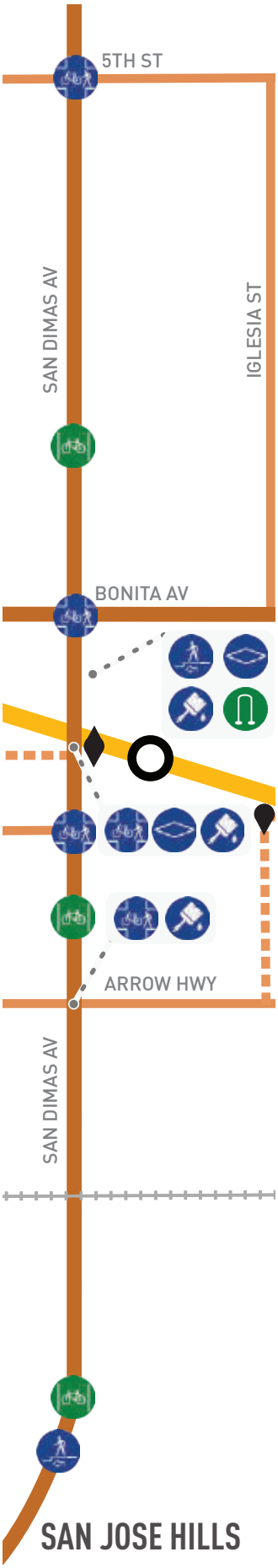


Figure 6-7. Typical Cross-Section for San Dimas Av, 5th Street to Bonita Avenue.



San Dimas Avenue's tree canopy and environment make it a popular walking and biking route.

The choice of bicycle routes north of Bonita Avenue generated significant discussion at walk audits and community engagement meetings, with some favoring San Dimas Avenue because of its high existing bicycle volumes, direct connectivity north and south, and apparent possibility that on-street parking could be prohibited due to the off-street parking that most properties along this segment enjoy. Others preferred Monte Vista Avenue and Iglesia Street, less traveled streets which could function as bike boulevards but have limited connectivity.

North-Central Segment: Bonita Av to Gold Line ROW

This short segment of San Dimas Avenue is an area of key connection potential. It is likely to handle the highest FLM journey volumes in the station area. The street connects the station to the pedestrian-friendly downtown and Civic Center; however, the pedestrian experience at the station entrance is one of being "in the back of the house," with no buildings fronting on the street, a lack of activity, and narrow sidewalks with no street trees or pedestrian lighting.

Minor pedestrian modifications could be made to the west side of the street, but there is more potential for improvement on the east side of the street. Several options are given below.

All options have the potential of including a bicycle/shared mobility device plaza just north of the tracks. Since there will be no room in the plaza at the station entrance on the south side of the tracks, this may be the best option for bicycle parking and/or a bike share hub. It is important that the plaza be designed for high visibility, in order to discourage theft.

On the west side of the street, pedestrian lighting and landscaping would be relocated to ensure a clear and comfortable path of travel along the sidewalk.

OPTION 1: DOWNTOWN SIDEWALK

One design solution is to extend the feel of Downtown San Dimas (Bonita Avenue) along San Dimas Avenue to the station. This would consist of creating an approximately 20' sidewalk serving pedestrian-friendly retail or other public-serving uses. Like Bonita Avenue, this sidewalk would be enhanced with street furniture, pedestrian lighting, artistic elements/historic monuments and outdoor dining. Figure 6-8 shows a concept for this option, including the bike plaza.

This option has several advantages. First, it may potentially be implemented as a condition of development of the retail space and therefore avoid or lessen the need for public investment. The City would likely need to give the shopping center a variance from minimum parking requirements in order to permit the new development. Second, it provides eyes on the street and bike plaza, potentially addressing concerns about public spaces near transit being attractive spaces for transients, and concerns about the security of bicycle parking.

OPTION 2: PROMENADE SIDEWALK

If it is not possible due to market, property owner or regulatory factors to develop additional leaseable area on San Dimas Avenue, a promenade sidewalk is recommended. A promenade sidewalk is a pedestrian space focused more on movement than on lingering. It would have excellent lighting and shade through a double row of trees. This would make a strong connection between the station and Bonita Avenue, creating its own unique environment separate from the parking lots, street and building sides adjacent to it. Right-of-way would need to be obtained from the shopping center to implement this sidewalk.

A promenade sidewalk would create a strong link between the station and Bonita Avenue.

OPTION 3: MINIMUM ADEQUATE SIDEWALK

If option 1 and option 2 are not feasible for implementation, the existing sidewalk could be widened to at least 12' wide, including space for new street trees or potted plants to shield pedestrians from the roadway. Consideration could be given to working around existing trees on the parking lot buffer. This option would require obtaining a lesser amount of right-of-way from the shopping center.

At a minimum, the existing sidewalk could be widened.

Central Segment Bikeway: Bonita Av to Arrow Hwy

San Dimas Avenue has an existing bike lane south of Arrow Highway. A key need expressed in community outreach has been to extend the bike lane to the station and to the proposed bikeway on Bonita Avenue.

A separated or buffered bike lane would be an appropriate solution for this stretch of roadway in order to encourage new riders to use bicycles to access the station. There is sufficient room within the roadway to add a separated or buffered bike lane if the street retains its current configuration; however, traffic analysis has determined that a second northbound travel lane will need to be added to the street. Given this reconfiguration, the best bicycle facility that can be established on the corridor will be a standard bike lane. Figure 6-9 shows a conceptual striping plan for this bike lane. Minor modifications to medians will be necessary, as well as the widening of the roadway by a few feet north of the tracks. Roadway widening would not be done at the expense of existing sidewalks, but only if the sidewalk is also widened through one of the three options as proposed above.

Figure 6-8. Proposed Character - San Dimas Av between Bonita Av and Gold Line ROW (option 1). View looking southeast toward station.

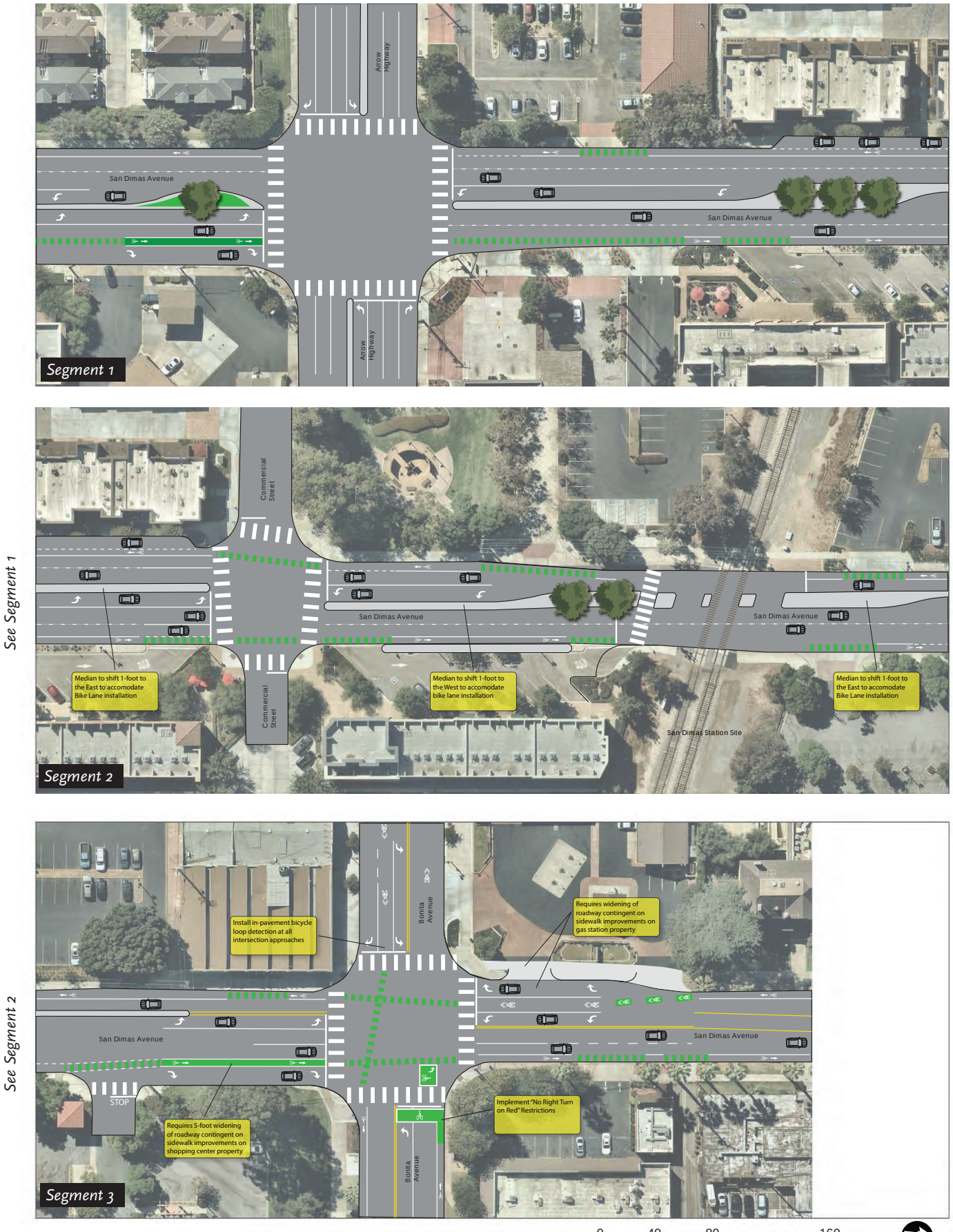


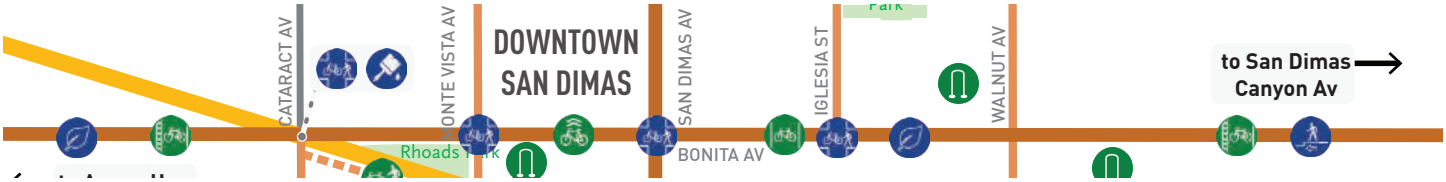
Figure 6-9. Roadway Striping Concept for San Dimas Avenue, Arrow Highway to Bonita Avenue.

South Segment: Arrow Highway to Via Verde

South of Arrow Highway, the environment along San Dimas Avenue becomes largely rural as it passes between Bonelli Park and Walnut Creek. The goal of FLM projects in this corridor is to address the piecemeal, incomplete walking path and bikeway and ensure that pedestrians and cyclists have a consistent path of travel.

San Dimas Avenue south of Arrow Highway needs continuous bicycle and pedestrian facilities.

Bonita Av: Pathway Arterial



Bonita Avenue was chosen as the east-west pathway arterial in the San Dimas station area for the following reasons:

> Land uses which may attract a high number of pedestrians and rolling mode users including Downtown San Dimas, City Hall, the Senior Center, Damien High School and multi-family housing are concentrated along Bonita Avenue.

> The current street environment varies considerably but is less auto-oriented than Arrow Highway.

> Community members strongly agreed with the project team's prioritization of Bonita Avenue over Arrow Highway.

> Bonita Avenue has been chosen to be a bicycle/rolling mode pathway arterial in the four contiguous cities of San Dimas, La Verne, Pomona and Claremont. Bike lanes are existing in Pomona and Claremont, with bike lanes in La Verne to be installed in the very near future.

West Segment: Arrow Highway to Cataract Avenue

This segment of Bonita Avenue provides the most direct and safe route for active transportation access to the large retail environment near the CA-57/Arrow Highway interchange. At the west end of this segment, enhanced bicycle connections are recommended along Eucla Avenue and Cienega Avenue and pedestrian improvements along Arrow Highway to bridge the barrier created by the CA-57 freeway and provide access to the jobs and shopping opportunities located to the west of the freeway. Bus or shuttle connections could also be considered to serve this area.

Figures 6-10 and 6-11 show the before and after configurations for Bonita Avenue along this western segment. The right-of-way is sufficient along this street to create a new strip for planting street trees and a separated bikeway without removing traffic lanes or on-street parking.

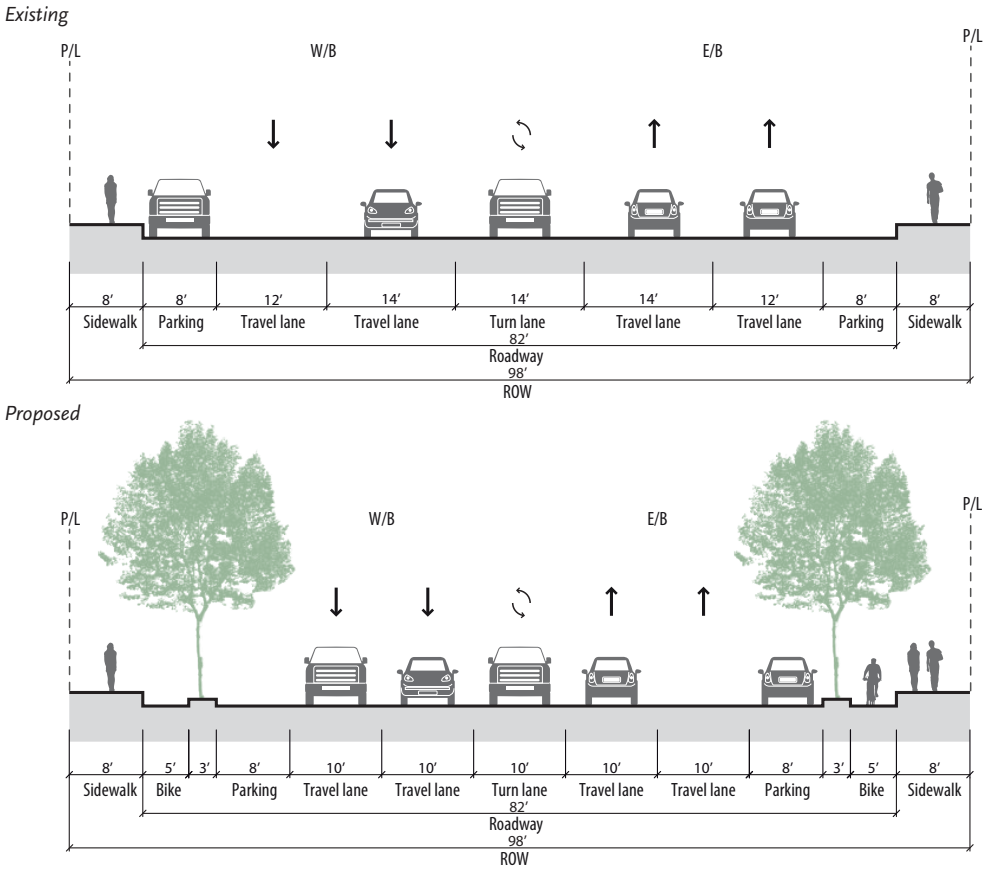


Figure 6-10. Typical Cross-Section for Bonita Avenue, Arrow Highway to Cataract Avenue and Walnut Avenue to East City Limit

Figure 6-11. Proposed Character - Bonita Av. Westbound view near Acacia St.

The separated bikeway may be implemented in different manners based on the availability of funding. The bikeway could be separated from the parking lane through simple bollards if funding was not available for landscaping and new curbs. If more funding became available, perhaps through adjacent development, the bike lane could be constructed on the curb. Street trees could be placed between pedestrian and bicycle circulation areas, which would increase the amount of shade in the pedestrian space.

Downtown Segment: Cataract Avenue to San Dimas Avenue

The Gold Line will cross the intersection of Bonita and Cataract Avenues aerially and at a diagonal, creating a new signalized intersection with crosswalks on three of the four legs of the intersection (none on the east). Design could recognize this location as a gateway to downtown. In particular, pedestrian lighting could be installed below the overpass, and the eastbound separated bikeway could transition safely into a bike route at this location. Cyclists who feel uncomfortable using the shared lane through Downtown could be given an alternative for station access. Two alternatives that have been identified is for a path just south of the Gold Line bridge and on a bike lane south on Cataract Avenue to Commercial Avenue.

Downtown San Dimas is pedestrian-friendly with street-fronting businesses and wide sidewalks with a full suite of pedestrian amenities. The primary comment received during public outreach for this area was to create more destinations here. One way to use street space to bring more Gold Line riders to this area is to hold more community events where the street can be closed entirely to cars.

Downtown San Dimas has a pleasant pedestrian environment.

This segment of Bonita Avenue is shown as a Bike Boulevard (or, more appropriately for this segment, bike route). Though traffic is much calmer on this segment of Bonita Avenue than others, it should be noted that volumes are much higher than recommended for a bike boulevard. Consideration may be given to eliminating the center turn lane and replacing it with a standard bike lane. The unknown traffic impact of placing left turning vehicles in the through lane and the need to adequately serve off-street Downtown parking lots would need to factor into this study.

The pathway arterial intersection of Bonita Avenue and San Dimas Avenue is key to pedestrian and bicycle movement. With the construction of the Gold Line, new traffic lanes and turn pockets will be added at this intersection. Pedestrian and bicycle safety measures that may be implemented at this intersection include:

> Bicycle markings

> Adjusting left-turn signal phasing from permitted to protected

> Implementing a leading pedestrian interval

East-Central Segment: San Dimas Av to Walnut Av

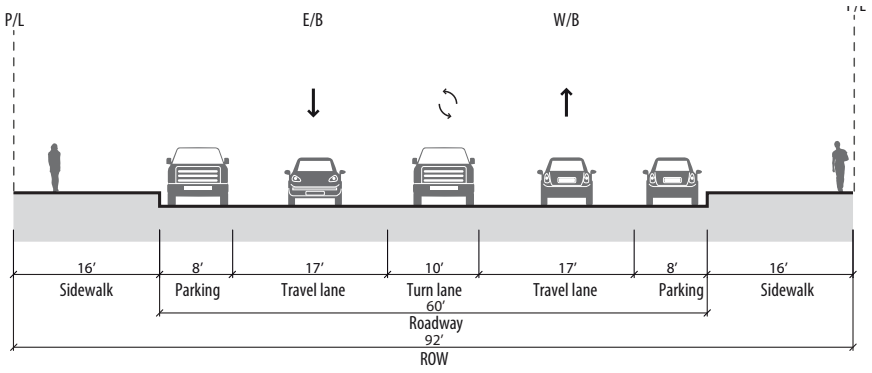
This is a transitional segment between Downtown and the more open environment east of Walnut Avenue. The stretch is planted with palm trees but needs shade trees to complement the palms. A standard bike lane is the best approach in this segment to transition between the bike route west of San Dimas Avenue and separated bikeway east of Walnut Avenue. Back-in diagonal parking can be created in front of the Senior Center and City Hall, creating a more consistent roadway environment of one traffic lane in each direction. Best practice is to implement the diagonal parking in a back-in configuration for bicyclist safety. Figures 6-12 and 6-13 show the existing and proposed cross-sections for this area.

East Segment: Walnut Av to East City Limit

East of Walnut Avenue, the street returns to a similar configuration as west of Cataract Avenue. Figure 6-12 shows the existing and proposed cross-section which includes a separated bikeway connecting to La Verne.

Walk audits uncovered significant issues with the pedestrian environment in this section, including ramps that do not meet current ADA standards. Upgrades are highly recommended.

Existing



Proposed

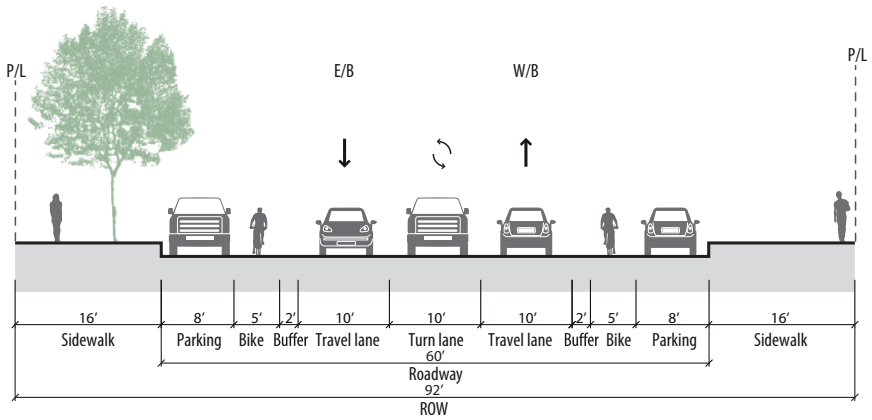
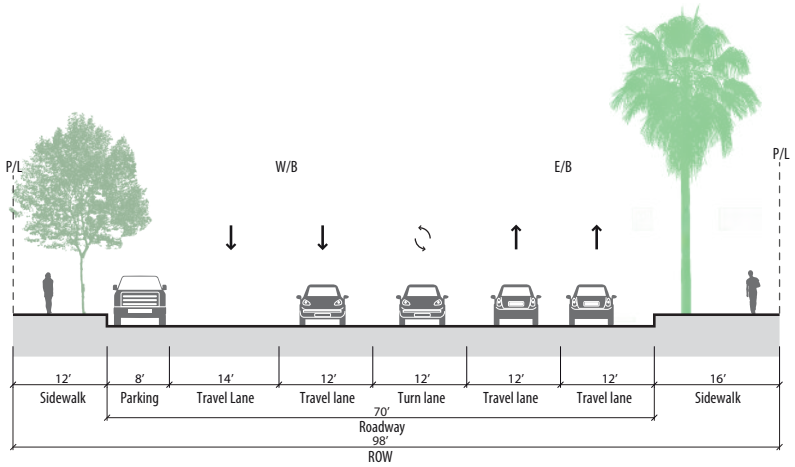


Figure 6-12. Typical Cross-Section for Bonita Avenue, San Dimas Avenue to Iglesia Street

Existing



Proposed

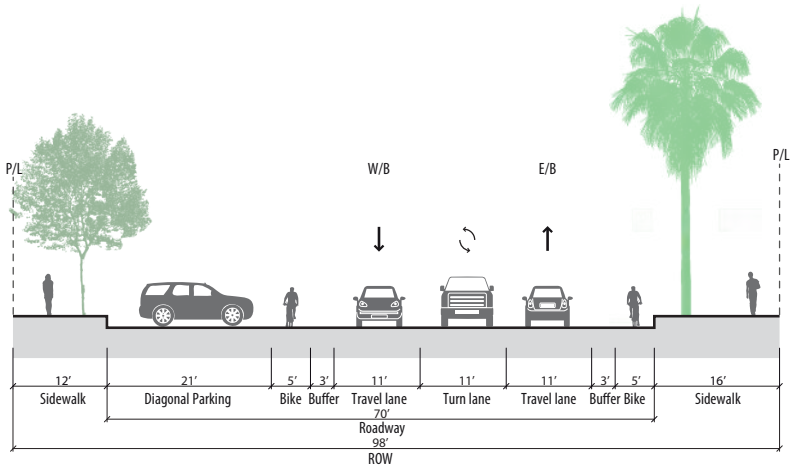


Figure 6-13. Typical Cross-Section for Bonita Avenue, Iglesia Street to Walnut Avenue

Arrow Hwy: Pathway Collector

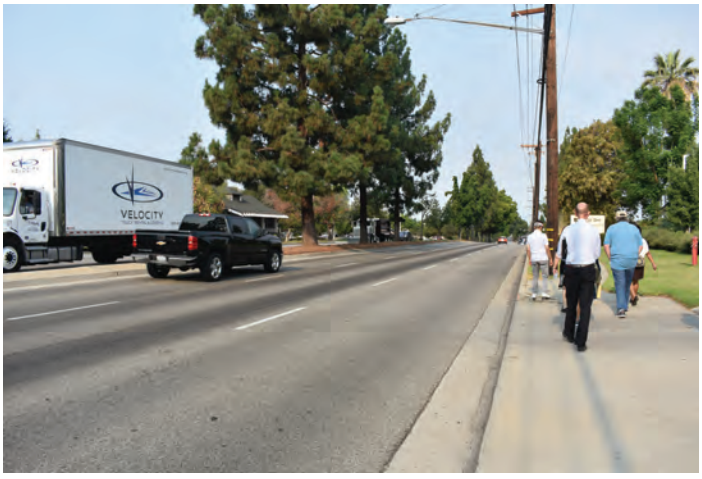
Arrow Highway is a six-lane Major Highway which carries approximately 30,000 daily trips through the station area. Community outreach demonstrated a near-unanimous view among San Dimas residents to continue to emphasize vehicular movement along Arrow Highway, while prioritizing Bonita Avenue for active transportation. Still, the corridor serves job centers in proximity to transit that are potential ridership generators. The FLM Plan goals for the corridor are therefore to:

> Upgrade pathway crossings of Arrow Highway for pedestrians and cyclists

> Create an adequate pedestrian environment along the street to serve job centers

As described in other sections of this chapter, intersection improvements are recommended where Arrow Highway intersects Cataract Avenue, San Dimas Avenue, the future park-and-ride station and pedestrian pathway, and Walnut Avenue. Along the corridor, sidewalk conditions vary from being designed as meandering paths, to narrow minimum sidewalks against the curb, to being non-existent. Traffic noise is high and makes for an unpleasant environment.

Implementation of sidewalk improvements identified at the walk audit including widening, pedestrian lighting and street trees will in many cases require right-of-way acquisition or sidewalk dedication as a condition of development.



Pedestrians on Arrow Highway walk very close to noisy and fast moving vehicular and truck traffic. The sidewalk is impeded by utility poles and ramps are often substandard.

Puddingstone Dr: Pathway Arterial

The first half-mile of roadway on Puddingstone Drive south of San Dimas Avenue serves two major destinations: Raging Waters theme park and Bonelli Park. These destinations create active transportation demand which is anticipated to increase with the Gold Line.

Despite these characteristics, Puddingstone Drive neither contains a continuous sidewalk/walking path or any sort of bicycle facility or signage. We would recommend the creation of a physically separated pathway for pedestrians and less experienced cyclists, such as children. This path would follow the west side of the roadway from San Dimas Avenue to the Raging Waters parking lot exit driveway. Figure 6-14 illustrates one way which this could be implemented at a low cost and in keeping with the rural character of this area.

South of the parking lot exit, consideration could be given to repurposing the existing side driveway for active transportation access. Many experienced and recreational cyclists who use this route could continue to use the primary roadway, with bike route signage and pavement markings to enhance their safety.

Discussions can be held to continue the pedestrian and bicycle path onto the side driveway used by Raging Waters' shuttles.

Figure 6-14. Proposed Character - Puddingstone Dr

Cataract Av/Covina Bl: Pathway Collector

Community engagement activities highlighted the key role that Cataract Avenue and Covina Boulevard play in regional active transportation movement. Covina Boulevard has existing bike lanes which serve San Dimas High School, employers such as Gilead Sciences ADP and other companies with a large employment base. The bike lanes cross CA-57 and provide access to the rest of the San Gabriel Valley.

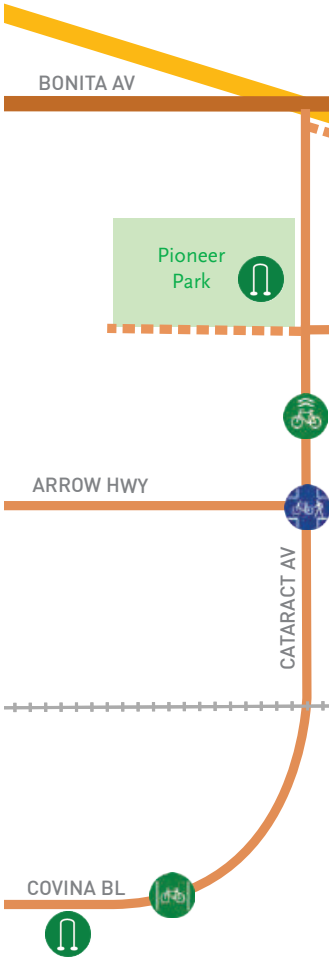
The City or local transit agencies can initiate dialogue with existing and prospective employers in this section of the community as to potential transit or shuttle connections to the Gold Line. Bikeshare stations could also be placed in this area.

The bicycle/rolling mode connection to the station may be enhanced in several ways:

> The gap in the eastbound Covina Boulevard bike lane at Cliffside Drive could be filled as shown in Figure 6-15.

> The northbound Cataract Avenue bike lane at Arrow Highway could be restriped to protect cyclists and encourage them to continue straight, rather than turn onto Arrow Highway. In order to do this, the center through-right lane could be converted to through only. Next to it would be the bike lane, and the right-turn lane would be next to the curb.

> The portion of Cataract Avenue north of Arrow Highway does not have sufficient right-of-way for a bike lane without removing parking. The creation of a bicycle boulevard with effective traffic calming measures is recommended in order to connect the existing Covina Boulevard/ Cataract Avenue bike lane to the station via Commercial Street. Further consideration may also be given to establishing bike lanes after further consultation with the community.



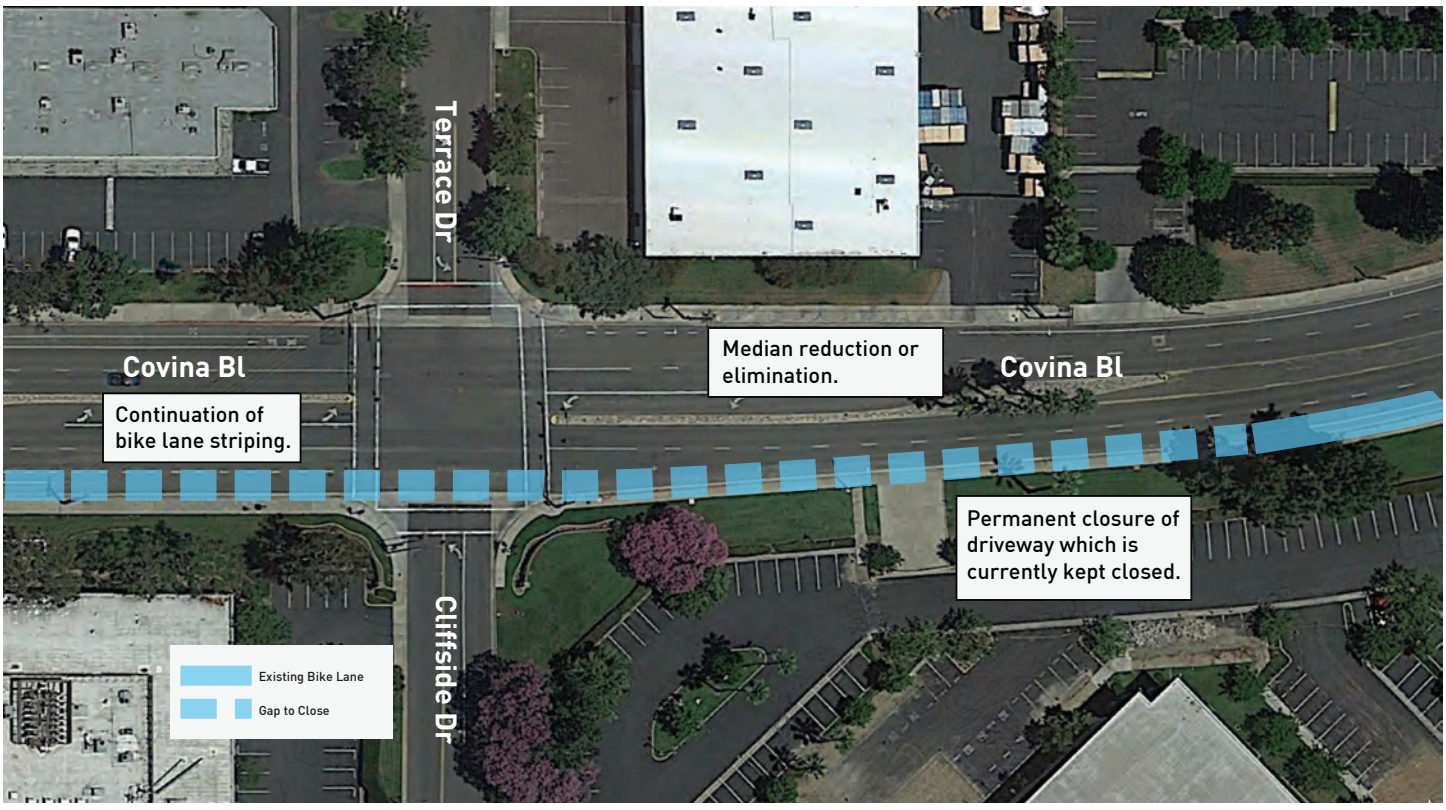


Figure 6-15. Covina Bl Bike Lane Gap Closure Concept.

Downtown Cut-Throughs: Pathway Collectors

Monte Vista Avenue Tunnel

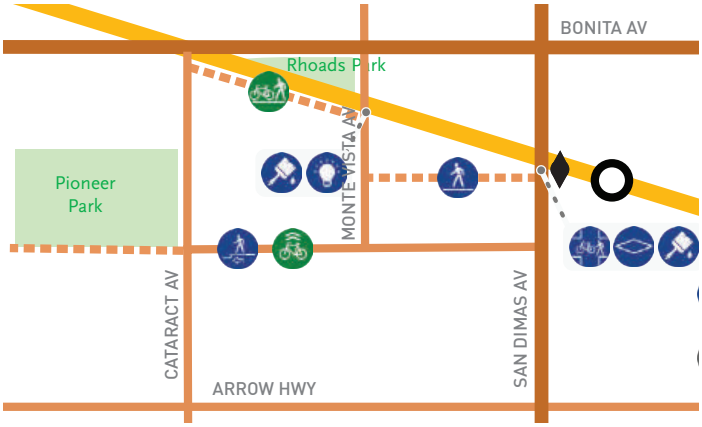
Monte Vista Avenue will be closed to automobile traffic at the Gold Line right-of-way due to the new overpass at Bonita Avenue and Cataract Avenue. Pedestrians and cyclists will be able to use a small tunnel to circulate north-south across the right-of-way. Lighting and visual enhancements are important to making the tunnel an attractive addition to the downtown.

Gold Line Right-Of-Way South Side Path

A short path along the south side of the Gold Line right-of-way between Cataract Avenue and Monte Vista Avenue will allow eastbound cyclists an alternative to merging into traffic on Bonita Avenue in Downtown San Dimas. This area is envisioned as a future Downtown parking lot; however, the path and parking lot should be able to co-exist through appropriate design.

Walkway in Park-and-Ride

A walkway or sidewalk could be established through the San Dimas (Foothill Transit) park and ride facility. This walkway would serve pedestrians arriving via the Gold Line ROW south side path (see above) and would connect to the crosswalk planned at the Gold Line ROW on San Dimas Avenue.



A parking lot path like this one in Oceanside could be created south of the Gold Line ROW between Cataract Av and Monte Vista Av.

Source: Google Maps Street View

Walnut Av: Pathway Collector

Walnut Avenue is an important north-south street in the station area which is anticipated to have a station entrance between Bonita Avenue and Arrow Highway. This station entrance will serve the San Dimas Sheriff Station, U.S. Post Office, City Hall, multi-family housing on Bonita Avenue, and a large portion of the City's residential areas in the northern and eastern part of the City. It is the street in the station area with the most favorable active transportation access across the 210 freeway. Some visitors may also use it as an additional, albeit hilly, route into Bonelli Park.

Walnut Avenue is a proposed bike boulevard from its northern terminus to 5th Street. South of 5th Street, traffic volumes are too high for a bike boulevard (over 6,000 ADT). However, community members considered parking removal to be able to stripe bike lanes infeasible on this street. Therefore, cyclists will be encouraged to use 5th Street to bike lanes on San Dimas Avenue to complete their FLM journey on a safer route.

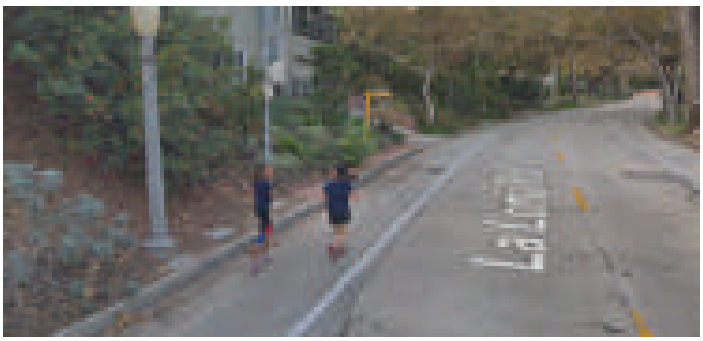
The pedestrian environment could be improved between Bonita Avenue and Arrow Highway with pedestrian lighting, infill street trees, and widened sidewalks as opportunities allow.

Residential Pathway Collectors: Commercial Av, Monte Vista Av, Iglesia St, 5th St, Juanita Av

Several residential streets within the station area have similar character and recommended treatments. These are Commercial Avenue, Monte Vista Avenue, Iglesia Street, 5th St and Juanita Avenue. The treatments recommended for these streets include:

> Fill in sidewalk gaps wherever they exist.

> If sidewalks cannot be added on all segments, a residential shared street may be created where pedestrians feel safe walking in the roadway. The safety of such a residential shared street is dependent upon the degree to which traffic is calmed.



Sidewalk gaps should be filled. In circumstances where this is not possible but traffic is calmed, an area for walking in the street can be explored.

Source: Google Maps Street View

Crossings of major streets should be highly visible and safe. A HAWK signal is suggested for the intersection of 5th Street and San Dimas Avenue.

> Create bicycle boulevards. Bicycle boulevards calm vehicular traffic so that volumes are no more than 3,000 daily trips and average operating speeds are no higher than 25 miles per hour. Cyclists share the roadway with vehicles but are prioritized in the design of the street and intersections. Through vehicular traffic is discouraged through the use of diverters, traffic control or low operating speeds.

> All intersections of bicycle boulevards with larger roadways need to have special features to ensure for safe crossing of these roadways.

> Clear wayfinding signage directing cyclists to pathways. In particular, it would be important for the preferred bicycle route in the northern part of the station area located along San Dimas Avenue, 5th Street and Walnut Avenue to be well signed, with directional sharrows and bike lane markings. Naming or numbering this bike route would be particularly helpful. For further discussion, see Chapter 3 – Regional Recommendations.

Bike boulevards generally involve traffic calming measures to keep traffic volumes and speeds low.

Branding, signage and pavement markings can help guide cyclists along the San Dimas Av/5th St/Walnut Av bikeway.

Source: NACTO

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7. La Verne/Fairplex Station Package

This chapter presents the Station Package for the future La Verne/Fairplex Station, which will be located on the northeast corner of Arrow Highway and E Street, proximate to the University of La Verne and Old Town La Verne. This chapter describes the results of the FLM planning process described in Chapter 2 for the station area.

Existing Conditions and Walk Audit Summary

Figure 7-1 presents a summary of existing conditions and walk audit results, highlighting primary strengths, barriers, ideas and issues raised during the initial stages of the planning process for the La Verne/Fairplex station area.

Summary of Comments

In La Verne, seven community events were held, engaging approximately 191 people and yielding approximately 394 discrete comments. Figure 7-2 summarizes the comments received about different pathways, streets and districts in the station area from community engagement activities.

Pathway Network and Projects

Figure 7-3 graphically depicts the pathway network and projects for La Verne/Fairplex Station. These pathways and projects are described in the Project List (Table 7-1) and in the narrative and graphic description beginning on page 115.

Origin of Project Types

Figure 7-4 traces each project type to its origin within the FLM planning process among one of four categories:

> Existing Plan – projects identified by:

- the Construction Authority's Jan. 30, 2019 30% design documents
- Metro's Active Transportation Strategic Plan
- the Old Town La Verne Specific Plan
- the Enhanced Infrastructure Financing District (EIFD) Infrastructure Plan
- the Regional Bicycle Commuter Gap Closure project 90% design documents.

View of the future La Verne/Fairplex station site

> City Staff/Consultant Team – projects identified by City staff or the Metro consultant team.

> Walk Audit – projects that directly address barriers identified during the walk audit, are based on ideas posited at the walk audit, or that directly address comments generated during the walk audit debriefing session.

> Engagement Events – projects that emerged as ideas during community engagement events, including stakeholder interviews, pop-up events and focus groups.

Also noted on this map are projects for which additional outreach is recommended for one of the following reasons:

> No Comments Received – transformative projects to which specific public input was not registered, either because they emerged late in the planning process, or because community event discussion focused elsewhere.

> Some Reservations Expressed – projects that garnered a mixed reaction during community engagement, or which would benefit from further conceptual design to address reservations expressed with aspects of these projects during the planning process.

Three-Mile Connections

Figure 7-5 presents the first/last mile connections for La Verne/Fairplex Station. The FLM Bicycle Connections shows existing, planned and new FLM proposed bikeways within a three-mile radius of the station. New proposed bikeways consist of the following:

> The extension of pathway arterials from the pathway network (1/2 mile radius) map

> Connections to the San Gabriel Valley Regional Greenway Network

> Regional gap closures

> Upgrades of existing or planned facilities based on our Principles for Project Type Selection and Design (Table 2-1)

> Additional connections to pathway arterials.

Locations where new/improved crossings are needed to serve these bikeways are also noted in Figure 7-5.

Project List

The project list for La Verne/Fairplex Station is shown in Table 7-1. Information given in the project list consists of:

> Location: streets and extents

> Type – categorization of the project into the types described in Chapter 1 (pages 3-6)

> Description – characterization of project elements

> Prioritization Score – score of the project based on the methodology defined in Chapter 2 (pages 17 and 18)

> Percent within ½ mile radius – percent of the project area within ½ mile of the station platform

> Cost Range – gives a range of costs that projects of this type and size generally fall into. Often there is a wide range of costs because of the variety of implementation options for similar projects.

> Implementation Complexity – level of complexity determined through the methodology described in Chapter 4 (Table 4-3), with key considerations enumerated

> Origin – where the project was first identified within the FLM planning process

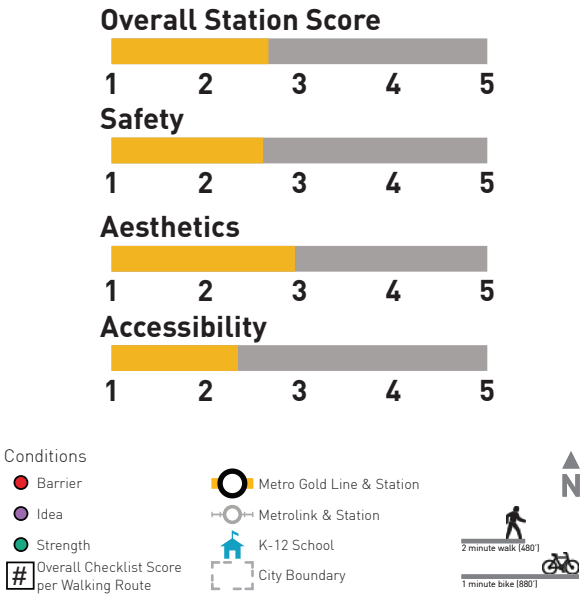
> Community Support – categorizes if the project received community support during the FLM Plan's engagement process. See Chapter 4 for more information.

Prioritized Projects

Tables 7-2 and 7-3 show the ten highest prioritized linear and point projects, respectively, within the La Verne/Fairplex station area. Projects that require property redevelopment are not included, nor are projects which are already planned to be implemented by the Construction Authority. Projects which are recommended to be implemented through conditions of development but may be implemented through other means remain in the list. Bikeways are listed as one project, though their facility type may change along the corridor length. The prioritization methodology is described in more detail in Chapter 2 (pages 17 and 18).

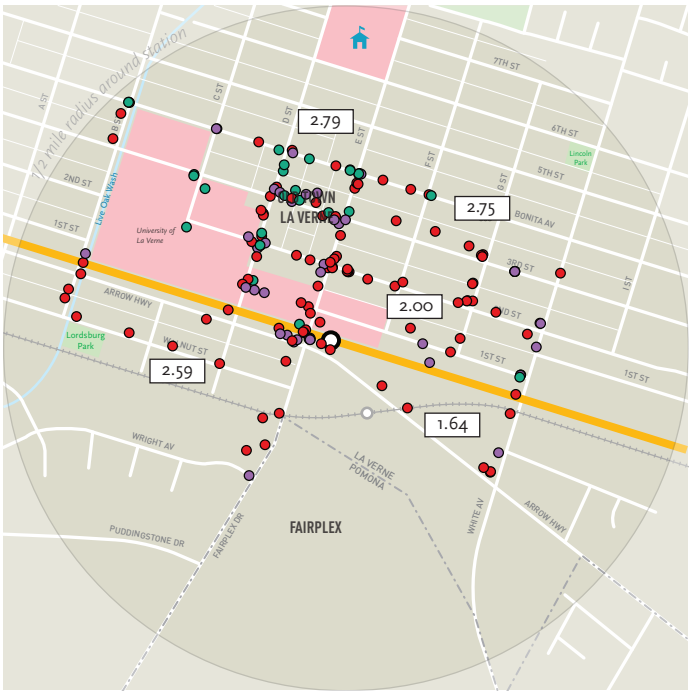
Figure 7-1: Walk Audit and Existing Conditions.

CHECKLIST RESULTS



Walk Audit Conditions

La Verne



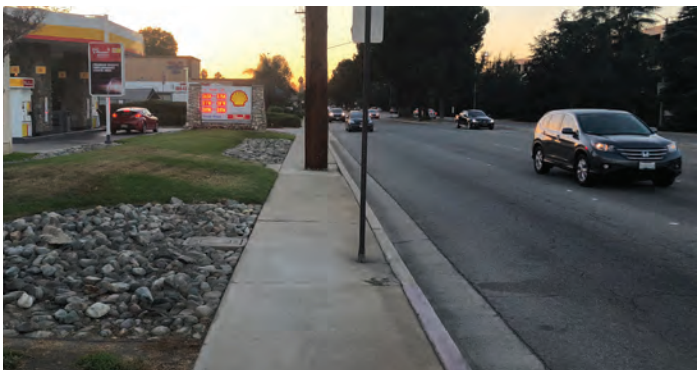
STRENGTH:

> Lots of pedestrian activity near the campus which adds safety and vibrance

BARRIERS:

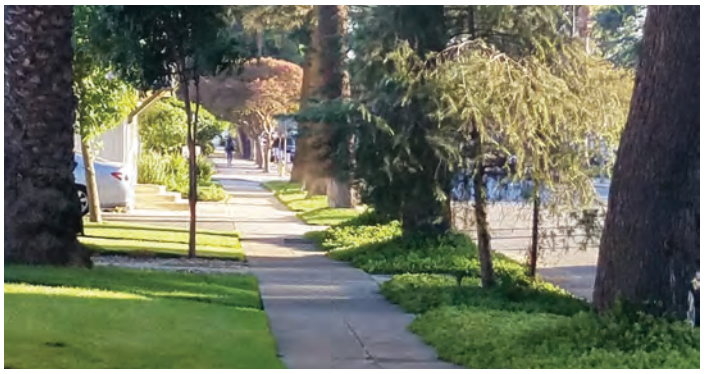
> High speeds on major streets

> Accessibility/ADA issues



STRENGTH:

> Many streets with abundant greenery and trees

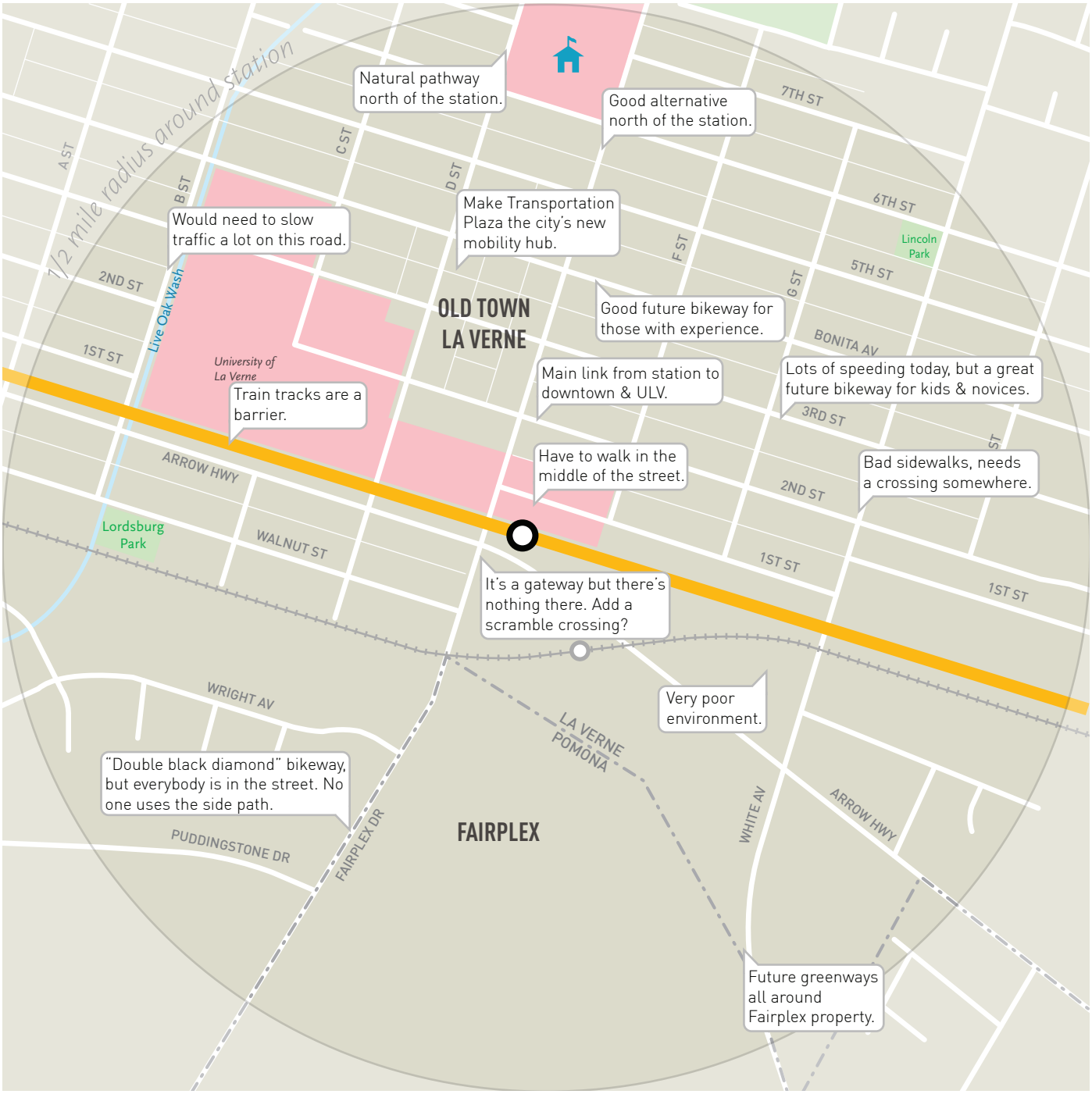


IDEA:

> Changes coming to Fairplex and Fairplex property with opportunity to reshape area south of the station

Figure 7-2: Community Engagement Comments

La Verne



Legend

- Metro Gold Line & Station
- Metrolink & Station
- K-12 School

N

2 minute walk (480')

1 minute bike (880')

Figure 7-3: Pathway Network and Project Ideas

La Verne/Fairplex

Pathway Network & Project Types

- New/Improved Sidewalks
- New/Improved Crossings
- Walkway/Shared Street
- Plaza
- Street Trees
- Sidewalk Lighting
- Visual Enhancements
- Pick Up/Drop Off
- Enhanced/New Bus Stop
- Shared Use Path
- Rolling Lane
- Bike Boulevard
- Separated Bikeway
- Bike Parking/Bike Share
- K-12 School
- Pathway Arterial
- Pathway Arterial Cut-Through
- Pathway Collector
- Community-Identified Pathway on Private Property Further Coordination Required
- Station Entrances (Point to Direction of Exit)
- Metro Gold Line & Station
- Metrolink & Station

N

2 minute walk (480')

1 minute bike (880')

Figure 7-4: Origin of Project Types

La Verne/Fairplex

Pathway Network & Project Types

- New/Improved Sidewalks
- New/Improved Crossings
- Walkway/Shared Street
- Plaza
- Street Trees
- Sidewalk Lighting
- Visual Enhancements
- Pick Up/Drop Off
- Enhanced/New Bus Stop
- Shared Use Path
- Rolling Lane
- Bike Boulevard
- Separated Bikeway
- Bike Parking/Bike Share
- K-12 School
- Pathway Arterial
- Pathway Arterial Cut-Through
- Pathway Collector
- Community-Identified Pathway on Private Property Further Coordination Required
- Station Entrances (Point to Direction of Exit)
- Metro Gold Line & Station
- Metrolink & Station

Identified by/at

- Existing Plan
- City Staff/Consultant Team
- Walk Audit
- Engagement Events
- No Comment Received
- Some Reservations Expressed

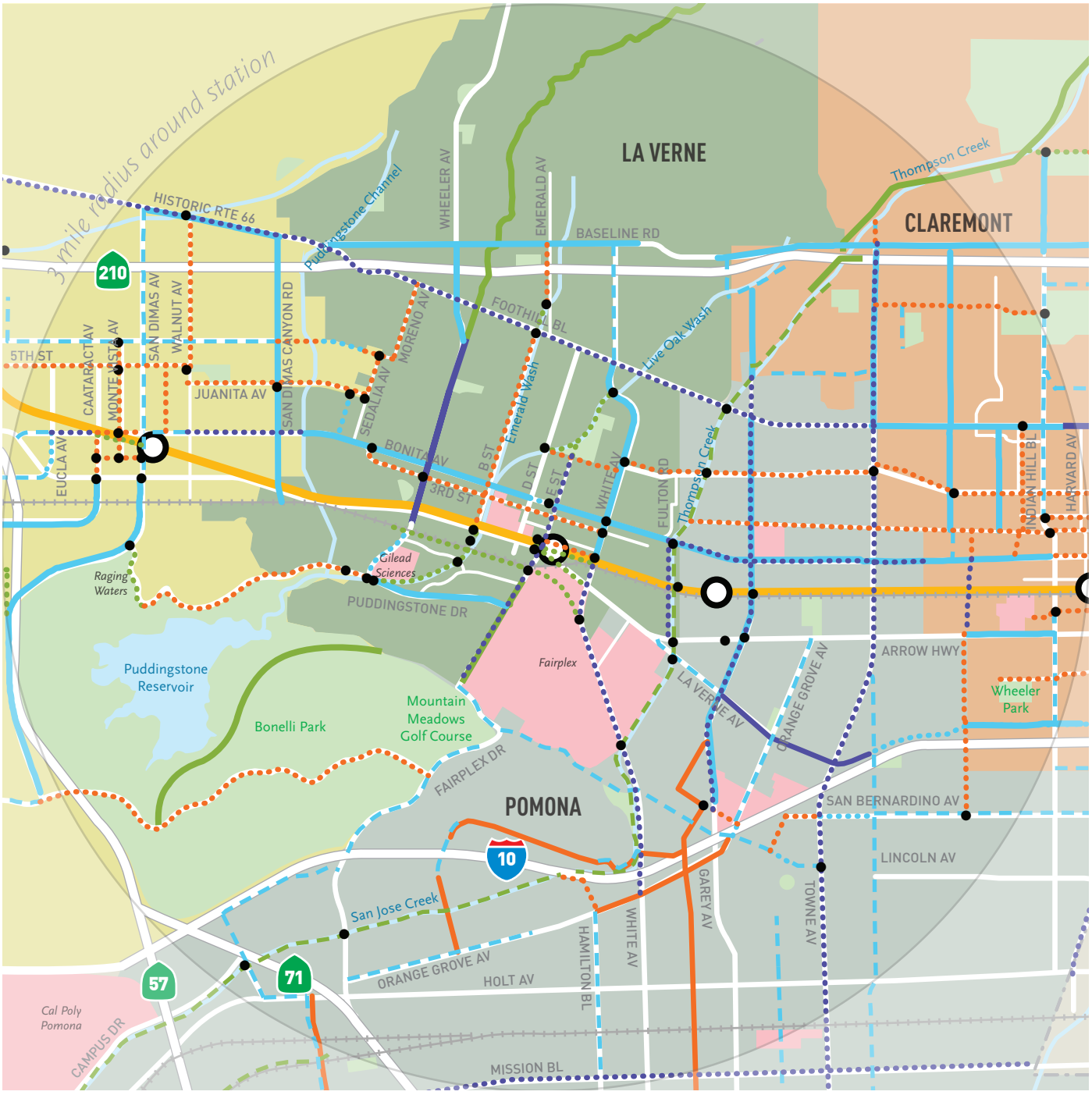
N

2 minute walk (480')

1 minute bike (880')

Figure 7-5: Three-Mile Connections

La Verne: Existing, Planned and Proposed*



Facility Type

- Shared Use Path
- Bike Lane
- Bike Boulevard
- Separated Bikeway
- Proposed New/Improved Crossings

Facility Status

- Existing/Funded Bikeways
- City or Regional Plan Bikeways
- FLM Proposed Bikeways

Rapid Transit

- Metro Gold Line & Station
- Metrolink & Station

N

*Due to the process for identifying proposed facilities, further public input should be sought on proposed bikeways if selected for implementation.

5 minute bike (4,400')

Table 7-1: First/Last Mile Project List - La Verne/Fairplex

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
STATION AMENITIES AND ENTRANCES												
Just south of Gold Line RR		Station	White Av	Shared-Use Path	Through property taken for Gold Line construction, adjacent to station parking. Lighting required.	31	100%	$ 320,000	$ 1,600,000	Medium • Consider for GLCA implementation (DB3)	Consultant Team	Yes
Station				Plaza	New Station Plaza as planned.	25	100%	$ 500,000	$ 5,000,000	Low • Planned by GLCA	Construction Authority	Yes
Station				Pick-Up/Drop-Off	New pick-up/drop-off area as planned.	25	100%	n/a	n/a	Low • Planned by GLCA	Construction Authority	Yes
Station				Enhanced/New Bus Stop	New bus stop on north and south sides of street with shelters, seating and real-time signage.	25	100%	$ 5,000	$ 15,000	Low • Planned by GLCA	Construction Authority	Yes
Station				Bike Parking/Bikeshare	High capacity, secure bike parking facilities. Consider a Metro Bike Hub facility.	25	100%	$ 32,000	$ 128,000	Low • Planned by GLCA	Construction Authority	Yes
PATHWAY ARTERIAL: D ST												
D St	Bonita Av			Stop	New shelter and lighting to the stop	24	100%	$ 5,000	$ 15,000	Low	Walk Audit	Yes
D St	Bonita Av			Visual Enhancements	New public art within the Transportation Plaza. Potentially part of a "mobility hub".	24	100%	n/a	n/a	Low	Walk Audit	Yes
D St	Bonita Av			Bike Parking/Bikeshare	New within the Transportation Plaza. Potentially part of a "mobility hub".	24	100%	$ 2,500	$ 10,000	Low	Engagement Events	Yes
PATHWAY ARTERIAL: SECOND ST												
Second St		D St	E St	Visual Enhancements	Art on pavement, help with wayfinding	38	100%	n/a	n/a	Low	Consultant Team	Yes
Second St		D St	E St	New/Improved Sidewalks	Improvement to deficient sidewalk on south side	53	100%	$ 42,500	$ 75,000	Medium • Agreement with property owner required	Walk Audit	Yes
University of La Verne				Bike Parking/Bikeshare	New high-capacity, secure bike parking on the University's campus. Consider implementing a bikeshare program.	24	100%	$ 50,000	$ 500,000	Medium • Agreement with property owner required	Engagement Events	Yes
PATHWAY ARTERIAL: FAIRPLEX DR/E ST/LIVE OAK WASH												
Live Oak Wash	White Av			New/Improved Crossings	HAWK signal to facilitate connection between Live Oak Wash's future shared-use path and bike lanes along White Avenue.	44	0%	$ 100,000	$ 500,000	Low	Consultant Team	No Comment Received
Live Oak Wash		White Av	D St	Shared-Use Path	New shared-use path along the flood control channel's access road.	40	0%	$ 533,000	$ 2,665,000	Medium • Hydrology study required	Consultant Team	Yes
Live Oak Wash	D St			New/Improved Crossings	RRFB crossing across D Street.	29	0%	$ 100,000	$ 500,000	Low	Consultant Team	No Comment Received
E St		Eighth St	Arrow Hwy	Separated Bikeway	Parking-protected separated bikeway	60	95%	$ 337,000	$ 548,000	Low	Walk Audit	Yes
E St	Bonita Av			New/Improved Crossings	New bicycle-sensitive loop detectors to trigger the signals.	49	100%	$ 100,000	$ 150,000	Low	Consultant Team	Yes
E St	Third St			New/Improved Crossings	New curb extensions on all four corners, and stripe crosswalks on all legs	47	100%	$ 50,000	$ 500,000	Low	Walk Audit	Yes
E St	Second St			New/Improved Crossings	New curb extensions on all four corners, and stripe crosswalks on all legs	42	100%	$ 50,000	$ 500,000	Low	Walk Audit	Yes

Table 7-1: First/Last Mile Project List - La Verne/Fairplex (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
E St		Second St	Arrow Hwy	New/Improved Sidewalks	New paving treatments on sidewalk. Consider widening the sidewalk.	51	100%	$ 96,475	$ 170,250	Low/High with sidewalk widening • Additional ROW to be acquired	Walk Audit	Yes
E St		Second St	Arrow Hwy	Visual Enhancements	Art on pavement to help with wayfinding.	41	100%	n/a	n/a	Low	Walk Audit	Yes
E St	First St			New/Improved Crossings	Raised crossing across First St	45	100%	$ 50,000	$ 500,000	High • Consider for GLCA implementation (DB2)	Consultant Team	Yes
Fairplex Dr		Arrow Hwy	Puddingstone Dr	Separated Bikeway	One-way separated bikeway on each side. Lane reconfiguration likely required south of Metrolink right-of-way.	38	41%	$ 90,000	$ 150,000	High • CPUC grade crossing modification required	Walk Audit	Yes
Fairplex Dr		Arrow Hwy	Metrolink ROW	New/Improved Sidewalks	ADA compliance along this segment.	41	100%	$ 60,000	$ 120,000	High • Additional ROW may be required	EIFD Infrastructure Plan	Yes
Fairplex Dr		Arrow Hwy	Metrolink ROW	Street Trees	New shade trees along the pedestrian facilities.	36	100%	$ 12,000	$ 90,000	Low	EIFD Infrastructure Plan	Yes
Fairplex Dr		Arrow Hwy	Metrolink ROW	Sidewalk Lighting	Downward-directed pedestrian lighting preferred	41	100%	$ 2,940	$ 88,200	Low	EIFD Infrastructure Plan	Yes
Fairplex Dr	Metrolink RR			New/Improved Crossings	If a path is constructed along the rail right-of-way, new convenient and safe interchange between the path and future separated bikeways along Fairplex Drive (long-term).	40	100%	$ 100,000	$ 500,000	High • CPUC grade crossing modification required	Consultant Team	Yes
PATHWAY ARTERIAL: BONITA AV												
Bonita Av	Glenfield Av			New/Improved Crossings	New RRFB crossing with median refuge.	45	0%	$ 100,000	$ 500,000	Low	Consultant Team	No Comments Received
Bonita Av		B St	East City Limit	Sidewalk Lighting	Downward-directed pedestrian lighting preferred.	59	68%	$ 18,120	$ 543,600	Low	Walk Audit	Some Reservations Expressed
Bonita Av		**West City Limit**	**East City Limit**	**Bikeway**	**Segments described below**	**55**	**38%**	**$ 325,000**	**$ 487,500**			
Bonita Av		West City Limit	D St	Bike Lane	Identified in funded Bicycle Gap Closure project.	60	19%	$ 183,200	$ 274,800	Low	Bicycle Gap Closure project	Yes
Bonita Av		D St	E St	Bike Lane	Provides bike lane continuity with removal of north side parking or center turn lane.	50	100%	$ 21,100	$ 31,650	High • Traffic or parking study required	Consultant Team	Some Reservations Expressed
Bonita Av		E St	East City Limit	Bike Lane	Identified in funded Bicycle Gap Closure project.	55	73%	$ 120,700	$ 181,050	Low	Bicycle Gap Closure project	Yes
PATHWAY ARTERIAL: WHITE AV												
White Av	Grove St			New/Improved Crossings	New HAWK signal to facilitate bicycle travel to/from the future bike boulevard along Grove Street to White Avenue's future bike lanes.	29	0%	$ 100,000	$ 150,000	Low	Consultant Team	No Comments Received
White Av	Bonita Av			New/Improved Crossings	Loop detectors sense bicycles. Bikeway striping through the intersection to increase riders' visibility.	44	100%	$ 100,000	$ 500,000	Low	Consultant Team	Yes
White Av		Bonita Av	First St	Sidewalk Lighting	Pedestrian scale lighting.	49	100%	$ 6,270	$ 188,100	Low	Walk Audit	Yes
White Av		Bonita Av	First St	Street Trees	New shade trees along the corridor.	35	100%	$ 24,600	$ 184,500	Low	Walk Audit	Yes

Table 7-1: First/Last Mile Project List - La Verne/Fairplex (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
White Av	First St			New/Improved Crossings	Signalized, timed crossing to interact with rail (queue cutter). New New/Improved Crossings to facilitate northbound bicycle riders moving from west to east side of street.	24	100%	$ 50,000	$ 500,000	Very High • CPUC grade crossing modification required • Traffic study required	Consultant Team	Some Reservations Expressed
White Av		First St	Arrow Hwy	Sidewalk Lighting	Pedestrian scale lighting.	40	100%	$ 4,650	$ 139,500	Medium • Condition of development • Potential EIFD funding	Walk Audit	Some Reservations Expressed
White Av		First St	Arrow Hwy	Street Trees	New shade trees along the corridor.	30	100%	$ 19,680	$ 147,600	Medium • Condition of development • Potential EIFD funding	Walk Audit	Yes
White Av		First St	Arrow Hwy	New/Improved Sidewalks	New sidewalks where none currently exist within the rail right-of way, and improve the existing narrow sidewalks elsewhere.	35	100%	$ 137,275	$ 242,250	Medium • Planned by GLCA • Condition of development	Walk Audit	Yes
White Av		**Baseline Rd**	**South City Limit**	**Bikeway**	**Segments described below**	**58**	**36%**	**$ 620,500**	**$ 2,118,600**			
White Av/Fruit St		Baseline Rd	Eighth St	Bike Lane	Part of previously funded Bicycle Gap Closure project	60	0%	$ 266,800	$ 400,200	Low	Bicycle Gap Closure project	No Comments Received
		Eighth St	Gold Line ROW	Bike Lane	New buffered bike lane, curb-adjacent.	54	83%	$ 109,000	$ 163,500	Low	City Staff	Yes
		First St	Arrow Hwy	Bike Lane	**Short Term, if Fairplex Greenway is constructed.** Gap closure with buffered bike lanes.	40	100%	$ 16,700	$ 33,400	High • CPUC grade crossing modification required	Walk Audit	Yes
		First St	Arrow Hwy	Separated Bikeway	**Long-term.** New two-way bikeway on-curb as extension of Fairplex Greenway.	35	0%	$ 167,000	$ 501,000	High • Condition of development • CPUC grade crossing modification required	Walk Audit	Yes
		Arrow Hwy	South City Limit	Shared-Use Path	Part of Fairplex Greenbelt - two-way pedestrian and bicycle path on west side of street.	35	82%	$ 337,000	$ 1,685,000	Medium • Agreement with property owner required	Fairplex Master Plan	Yes

Table 7-1: First/Last Mile Project List - La Verne/Fairplex (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
PATHWAY ARTERIAL/COLLECTOR: ARROW HWY												
Arrow Hwy		Wheeler Av	White Av	New/Improved Sidewalks	Sidewalk widening and ADA upgrades.	61	72%	$ 446,250	$ 787,500	Medium • Condition of development • Potential EIFD funding • Consider for GLCA implementation (DB3) - E St to Metrolink RR	Old Town La Verne Specific Plan, Construction Authority	Yes
Arrow Hwy		A St	White Av	Street Trees	New street trees where sidewalk space is sufficient.	41	93%	$ 98,160	$ 736,200	Low • Potential EIFD funding	EIFD Infrastructure Plan	Yes
Arrow Hwy	E St			New/Improved Crossings	High-visibility crosswalk striping. No widening of crossing distance across Arrow Hwy. Bike lane striping across the intersection, immediately adjacent to the crosswalks.	40	100%	$ 50,000	$ 500,000	High • Consider for GLCA implementation (DB2) • Traffic study required	Walk Audit	Yes
Arrow Hwy		E St	White Av	Separated Bikeway	New two-way on-curb separated bikeway on south side.	41	100%	$ 352,000	$ 1,056,000	High • Condition of development • CPUC grade crossing modification required	Old Town La Verne Specific Plan	Yes
Arrow Hwy		E St	White Av	Sidewalk Lighting	Downward-directed pedestrian lighting preferred	41	100%	$ 69,400	$ 312,300	EIFD	EIFD Infrastructure Plan	Yes
Arrow Hwy	Metrolink RR			New/Improved Crossings	New pedestrian bridge linking development and parking facilities/station.	40	100%	$ 3,000,000	$ 5,000,000	EIFD	EIFD Infrastructure Plan	Yes
PATHWAY COLLECTOR: FIRST ST/FIRST ST EXTENSION WALKWAY												
First St Extension/ULV Walkway	D St			New/Improved Crossings	East-west signalized, timed crossing to interact with rail (queue cutter). Long-term, improved with redevelopment of campus area on west side.	37	100%	$ 50,000	$ 500,000	Very High • CPUC grade crossing modification required • Traffic study required	Consultant Team	Some Reservations Expressed
First St Extension/ULV Walkway	E St			New/Improved Crossings	East-west signalized, timed crossing to interact with rail (queue cutter). Long-term, improved with redevelopment of campus area.	45	100%	$ 50,000	$ 500,000	Very High • CPUC grade crossing modification required • Traffic study required	Consultant Team	Some Reservations Expressed
First St		E St	White Av	Bike Boulevard	New bike boulevard with traffic calming elements, signage, and pavement striping.	41	100%	$ 8,250	$ 247,500	Medium • Condition of Development	Old Town La Verne Specific Plan	Yes
First St		E St	White Av	New/Improved Sidewalks	New 10' sidewalk/parkway	36	100%	$ 138,975	$ 981,000	Medium • Condition of Development	Old Town La Verne Specific Plan	Yes

Table 7-1: First/Last Mile Project List - La Verne/Fairplex (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
PATHWAY COLLECTOR: THIRD ST												
Third St		Glenfield Av	White Av	Bike Boulevard	New bike boulevard with traffic calming elements, signage, and pavement striping. Some new signals or other crossing improvements are needed at crossings of major streets, such as Bonita Avenue and White Avenue.	48	50%	$ 35,425	$ 1,062,750	Low	Engagement Events	Yes
Third St	Wheeler Av			New/Improved Crossings	RRFB crossing with median refuge. Sidewalk extension across rail right-of-way.	20	0%	$ 100,000	$ 400,000	Low	Walk Audit	Yes
Third St	F St			New/Improved Crossings	New curb extensions to shorten crossing distances and calm vehicle traffic.	32	100%	$ 50,000	$ 300,000	Low	Walk Audit	Yes
Third St	G St			New/Improved Crossings	New curb extensions to shorten crossing distances and calm vehicle traffic.	14	100%	$ 50,000	$ 300,000	Low	Walk Audit	Yes
Third St	White Av			New/Improved Crossings	RRFB crossing with median refuge	44	100%	$ 50,000	$ 500,000	Low	Engagement Events	Yes
PATHWAY COLLECTOR: B ST/LIVE OAK WASH												
B St	Foothill Bl			New/Improved Crossings	New and updated striping to safely facilitate bicycle rider transitions between Foothill Boulevard and B Street.	29	0%	$ 100,000	$ 500,000	Low	Consultant Team	No Comment Received
B St		Foothill Blvd	Walnut St	Bike Boulevard	New bike boulevard with traffic calming elements, signage, and pavement striping.	43	22%	$ 28,625	$ 858,750	Low	Consultant Team	Yes
B St	Third St			New/Improved Crossings	New curb extension to shorten crossing distance and calm vehicle traffic.	15	100%	$ 50,000	$ 500,000	Low	Walk Audit	Yes
B St	Arrow Hwy			New/Improved Crossings	Crossing to connect community to market; also can connect ULV to parking lot & SW campus	30	100%	$ 50,000	$ 500,000	Very High • Consider for GLCA implementation (DB2) • CPUC grade crossing modification required	Walk Audit	Yes
Live Oak Wash		Walnut St	Puddingstone Dr	Shared-Use Path	New shared-use path along the flood control channel's existing access road.	11	19%	$ 625,000	$ 3,125,000	Very High • Hydrology study required • Agreement with property owner required • CPUC grade crossing modification required	Consultant Team	Yes
Live Oak Wash	Walnut St			New/Improved Crossings	When trail is developed, new crossing with wide crosswalk, HAWK signal, and bicycle loop detectors.	10	100%	$ 100,000	$ 400,000	Low	Consultant Team	No Comment Received
Live Oak Wash	Yeager Av			New/Improved Crossings	When trail is developed, new crossing with wide crosswalk, HAWK signal, and bicycle loop detectors.	20	0%	$ 100,000	$ 400,000	Low	Consultant Team	No Comment Received
Live Oak Wash	Puddingstone Dr			New/Improved Crossings	When trail is developed, new crossing with wide crosswalk, HAWK signal, and bicycle loop detectors.	15	0%	$ 100,000	$ 400,000	Low	Consultant Team	No Comment Received

Table 7-1: First/Last Mile Project List - La Verne/Fairplex (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
PATHWAY COLLECTOR: WRIGHT AV												
Wright Av		Yeager Av	Fairplex Dr	New/Improved Sidewalks	New sidewalk on one side where missing	15	99%	$ 141,383	$ 249,500	High • Agreement with property owner required	Consultant Team	Yes
PATHWAY COLLECTOR: PUDDINGSTONE DR												
Puddingstone Dr	Wheeler Av			New/Improved Crossings	New bike lanes on Puddingstone Drive through the intersection with Wheeler Avenue.	9	0%	$ 50,000	$ 150,000	Low	Consultant Team	Yes
Puddingstone Dr		Wheeler Av	Fairplex Dr	Bike Lane	Part of previously funded Bicycle Gap Closure project	30	24%	$ 150,600	$ 225,900	Low	Bicycle Gap Closure project	Yes
PATHWAY COLLECTOR: CITY BOUNDARY THROUGH FAIRPLEX												
Rear of Fairplex TOD Property		Fairplex Dr	White Av	Shared-Use Path	Part of Fairplex Greenbelt along utility right-of-way	25	33%	$ 422,000	$ 2,110,000	Medium • Agreement with property owner required	Fairplex Master Plan	Yes
PATHWAY COLLECTOR: ADJACENT TO METROLINK ROW, WEST OF FAIRPLEX DR												
Metrolink RR		Wheeler Ave	Fairplex Dr	Shared-Use Path	New shared-use path along the rail right-of-way	46	59%	$ 703,000	$ 3,515,000	High • Agreement with property owner required	Consultant Team	Yes
OTHER BIKEWAY CONNECTIONS												
8th St		D St	White	Bike Boulevard	Bike boulevard with traffic calming elements, signage, and pavement striping. Some new signals or other crossing improvements are needed at crossings of major streets, such as D St and White Av	35	0%	$ 11,190	$ 335,695	Medium • Traffic study required	Consultant Team	No Comment Received
Channel Path		Emerald Av	Foothill Bl	Shared-Use Path	Create a multi-use path along B St channel to connect Emerald Av and Foothill Bl	31	0%	$ 161,730	$ 808,652	Medium • Hydrology study required	Consultant Team	No Comment Received
Damien Av		Juanita Av	Bonita Av	Bike Lane	Class II Bike Lane connecting Ramona Av to Damien Av. Possible without re-configuration as outside lane is 25 ft wide+ in most section. Consider upgrading facility to Class IV with physical protection eventually by re-configuring parking lane.	37	0%	$ 48,292	$ 72,438	Low	Consultant Team	No Comment Received
Emerald Av		Baseline Rd	B St	Bike Boulevard	Bike boulevard with traffic calming elements, signage, and pavement striping.	36	0%	$ 8,400	$ 252,003	Low	Consultant Team	No Comment Received
Foothill Bl		West City Limit	East City Limit	Separated Bikeway	Class IV separated bike facility along Foothill Bl. Parking or travel-lane re-configuration necessary.	38	0%	$ 657,545	$ 7,890,539	High • Traffic study required	Metro ATSP Corridor	No Comment Received

Table 7-1: First/Last Mile Project List - La Verne/Fairplex (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
Gladstone St		Ramona Av	Damien Av	Bike Lane	Class II Bike Lane connecting Ramona Ave to Damien Ave. Possible without re-configuration as outside lane is 33 ft wide. Consider upgrading facility to Class IV with physical protection eventually.	22	0%	$ 47,098	$ 70,647	Low	Consultant Team	No Comment Received
Gladstone St		Sedalia Av	Moreno Av	Bike Boulevard	Bike boulevard with traffic calming elements, signage, and pavement striping.	23	0%	$ 1,986	$ 59,592	Low	Consultant Team	No Comment Received
Grove St		White Av	Fulton Rd	Bike Boulevard	Bike boulevard with traffic calming elements, signage, and pavement striping.	30	0%	$ 7,178	$ 215,334	Low	Consultant Team	No Comment Received
Juanita Av		San Dimas Chanr	Sedalia Av	Bike Boulevard	Bike boulevard with traffic calming elements, signage, and pavement striping. Some new signals or other crossing improvements are needed at crossings of major streets, such as Damien Ave.	16	0%	$ 12,534	$ 376,025	Medium • Traffic study required	Consultant Team	No Comment Received
La Verne Fields Channel		Arrow Hwy	Puddingstone Dr	Shared-Use Path	Path along the channel to connect Puddingstone and Arrow Highway.	20	0%	$ 503,347	$ 2,516,735	Medium • Hydrology study required	Consultant Team	No Comment Received
Moreno Av		Foothill Bl	Gladstone St	Bike Boulevard	Bike boulevard with traffic calming elements, signage, and pavement striping. Some new signals or other crossing improvements are needed at crossings of major streets, such as Foothill Blvd.	33	0%	$ 10,830	$ 324,903	Medium • Traffic study required	Consultant Team	No Comment Received
Puddingstone Dr		Walnut Av	Live Oak Wash	Bike Boulevard	Bike boulevard with traffic calming elements, signage, and pavement striping. Some new signals or other crossing improvements are needed at crossings of major streets, such as Wheeler Ave and Fairplex Dr.	10	0%	$ 14,972	$ 449,170	Low	Consultant Team	No Comment Received
Sedalia Av		Gladstone St	Juanita Av	Bike Boulevard	Bike boulevard with traffic calming elements, signage, and pavement striping. Some new signals or other crossing improvements are needed at crossings of major streets, such as Gladstone St.	18	0%	$ 6,300	$ 189,006	Medium • Traffic study required	Consultant Team	No Comment Received
Wheeler Av		Paseo Av	Bonita Av	Shared-Use Path	Path upgrades. Part of previously funded Bicycle Gap Closure project	38	0%	$ 538,727	$ 2,693,634	Low	Bicycle Gap Closure project	No Comment Received
Wheeler Av		Baseline Rd	Paseo Av	Bike Lane	Part of previously funded Bicycle Gap Closure project	48	0%	$ 247,891	$ 371,836	Low	Bicycle Gap Closure project	No Comment Received
Wheeler Av		Metrolink ROW	Puddingstone	Bike Lane	Class II Bike Lane connecting Bonita Av to Puddingstone Dr. Possible without re-configuration in sections with wide outside lane. Consider upgrading facility to Class IV with physical protection eventually.	31	0%	$ 146,154	$ 219,231	Medium • Traffic study required	Consultant Team	No Comment Received

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Table 7-2. Prioritized Project List - Linear Projects - La Verne/Fairplex

Rank	Street A	From	To	Type	Prioritization Score
1	Arrow Hwy	Wheeler Av	White Av	New/Improved Sidewalks	61
2	E St	8th St	Arrow Hwy	Separated Bikeway	60
3	Bonita Av	B St	East City Limit	Sidewalk Lighting	59
4	White Av	Baseline Rd	South City Limit	Bikeway	58
5	Bonita Av	West City Limit	East City Limit	Bikeway	55
6	2nd St	D St	E St	New/Improved Sidewalks	53
7	E St	2nd St	Arrow Hwy	New/Improved Sidewalks	51
8	White Av	Bonita Av	1st St	Sidewalk Lighting	49
T9	3rd St	Bonita Av	White Av	Bike Boulevard	48
T9	Wheeler Av	Baseline Rd	Bonita Av	Bike Lane	48

Table 7-3. Prioritized Project List - Point Projects - La Verne/Fairplex

Rank	Street A	Street B	Type	Prioritization Score
1	E St	Bonita Av	New/Improved Crossings	49
2	E St	3rd St	New/Improved Crossings	47
T3	E St	1st St	New/Improved Crossings	45
T3	Bonita Av	Glenfield Av	New/Improved Crossings	45
T3	1st St Extension/ULV Walkway	E St	New/Improved Crossings	45
T6	Live Oak Wash	White Av	New/Improved Crossings	44
T6	White Av	Bonita Av	New/Improved Crossings	44
T6	3rd St	White Av	New/Improved Crossings	44
9	E St	2nd St	New/Improved Crossings	42
T10	Fairplex Dr	Metrolink RR	New/Improved Crossings	40
T10	Arrow Hwy	E St	New/Improved Crossings	40
T10	Arrow Hwy	Metrolink RR	New/Improved Crossings	40

Pathways and Projects

The following sections describe the recommended improvements to pathways within one-half mile of the future station in La Verne.

Station Amenities and Entrances

The La Verne/Fairplex station will be located just east of E Street and just north of Arrow Highway, along the rail right-of-way currently occupied by a freight rail line.

Station Entrances

Figure 7-7 shows the Construction Authority's plan for station construction. The station will be oriented to a plaza to the south, along Arrow Highway, with platform entrances on the west, at E Street, and on the east, at the station parking facility.

Community engagement events manifested support from some community members for an additional station entrance connecting to First Street between F and G Streets. However, this entrance location was determined to be too difficult to implement due to the need for an undercrossing of the freight track which will lie just north of the light rail tracks and the need to acquire an easement through an existing industrial property.

Instead of a northern station entrance, FLM journeys directed toward the northeast would be helped by the creation of a shared use path on station grounds between the eastern platform entrance and White Avenue. This shared use path, shown in Figure 7-6, would reduce walking and biking distances by approximately 800 feet and allow pathway users to avoid the hostile environments of southern White Avenue and Arrow Highway.

Bicycle Parking

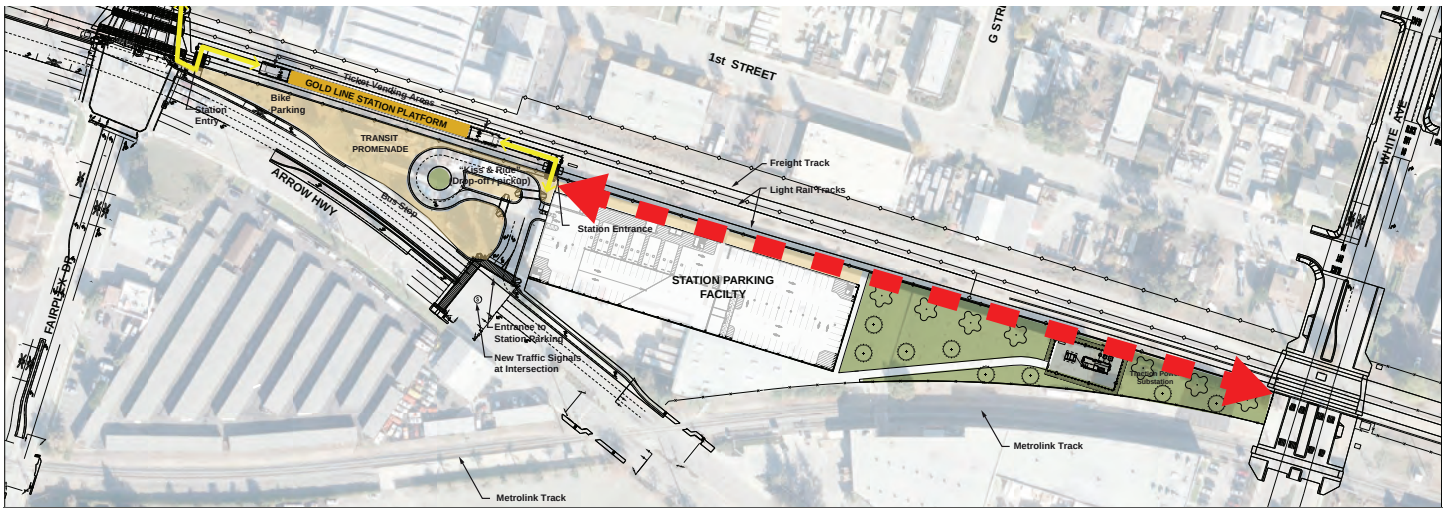
The Construction Authority plans to install 64 secure bike spaces within a bike hub in the station plaza. The La Verne/Fairplex Station is also a potential location for a staffed bike hub, due to its university population, strong cycling culture, and potential space within a potential shared Gold Line/Fairplex TOD parking structure.

Bus Connections

No bus lines currently serve the station directly. The closest regular bus stop is at the corner of Bonita Avenue and D Street. However, the station will be built with a bus turnout for westbound buses. If bus routes eventually do serve this station, an enhanced bus stop could also be established on the south (eastbound) side of the street, allowing for pedestrian crossings at E Street or the station parking entrance.

Pick Up/Drop Off

A circular kiss and ride facility will be included in the station. Access will be provided from a signalized intersection at Arrow Highway which will also allow for pedestrian crossings and vehicular entry to the parking facilities. Pick up/drop off areas will be sized to serve shuttle buses as well as standard-size automobiles. Large institutions near this station that have expressed interest in providing Gold Line access shuttles include Fairplex, the University of La Verne, Gilead and Cal Poly Pomona.

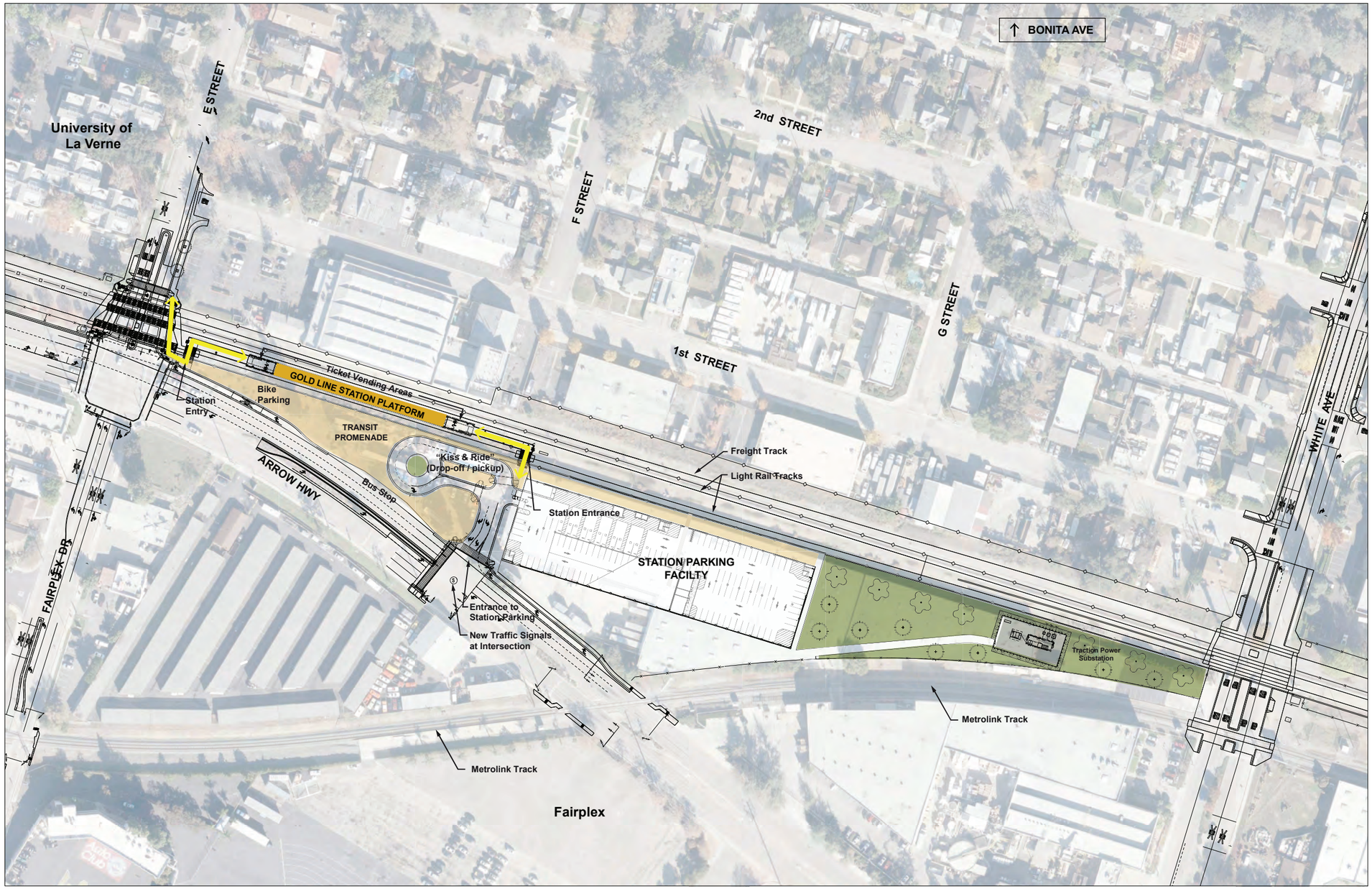


Source: Foothill Gold Line Construction Authority Advanced Conceptual Engineering, February 2019

Proposed White Av connection route

Figure 7-6. Location of proposed shared use path.

La Verne Station Site Plan (Fig. 7-7)



Advanced Conceptual Engineering - February 2019

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Foothill Gold Line

Northern Pathway Arterials: D St/ Second St & E St

The majority of the City of La Verne lies to the north of the future station, including the pedestrian-friendly Old Town, University of La Verne and historic residential districts. Therefore, connections to the north from the station are of critical importance. While the area north of the station is relatively pedestrian- and bike-friendly today, several concerns were raised:

> D Street is the main street of the City's historic center and is the front of Old Town, the University of La Verne, Bonita High School and City Hall. However, the station is located on E Street. An intuitive connection needs to be established between the two streets to guide new transit riders to destinations and vice versa.

> There are no existing bike lanes or separated bikeways in the station area, although that will soon change. There has been extensive discussion about adding bike lanes to D Street; however, the City has not yet decided to move ahead with that project due to concerns about conflicts with pick up/ drop off at Bonita High School.

As a result of these concerns, the project team decided to prioritize the routes of D Street to Second Street to E Street for pedestrian station access and E Street for bicycle station access. D Street already has sufficient amenities for pedestrian movement, but details follow for the other streets prioritized.

Figure 7-8. Potential D-E Street Connections Routes Analyzed.

Second St: Pathway Arterial

The project team considered five routes as pathway arterials to connect D Street with the station entrance at Arrow Highway and E Street. These routes are mapped in Figure 7-8:

1. Arrow Highway – This route was rejected because there was found to be insufficient space to construct a sidewalk on the north side of the street after Gold Line construction.
2. Walkway extension of First Street – This route is promising, but dependent upon implementation of future phases of the University of La Verne's Master Plan and creation of new crossings. As a result, it was selected as a pathway collector cut-through. See the section describing First Street for more details.
3. Alley south of Second Street – This alley would have to be pedestrianized to create a strong connection, but it provides vehicular access to two parking lots.
4. Second Street – This route was ultimately chosen as the pathway arterial because it is the closest existing east-west street north of the station, it leads to the main buildings of the University of La Verne as well as Old Town, and it was the route most commonly suggested during community engagement events.
5. Third Street – This route was rejected because it would elongate the pathway arterial along E Street and shorten it along D Street.

In order to guide pedestrians along the D Street – Second Street – E Street route, the use of artistic paving patterns is recommended. Sidewalk paving patterns could be visually linked to paving or paint patterns in crosswalks, and the design would continue around corners. Wayfinding signage could also be included. At the intersection of Second Street and E Street, curbs could be extended to significantly reduce crossing distance. Figure 7-9 illustrates this concept.

A special paving pattern can be used to guide pedestrians along the pathway.

Existing

Future Concept

Figure 7-9. E Street and 2nd Street intersection concept.

Live Oak Wash/E St/Fairplex Dr: Pathway Arterial

The corridor of Live Oak Wash, E Street and Fairplex Drive offers a unique opportunity to create a bicycle corridor that connects directly to the Gold Line station through shared use paths and separated bikeways.

Live Oak Wash: White Avenue to Las Flores Park

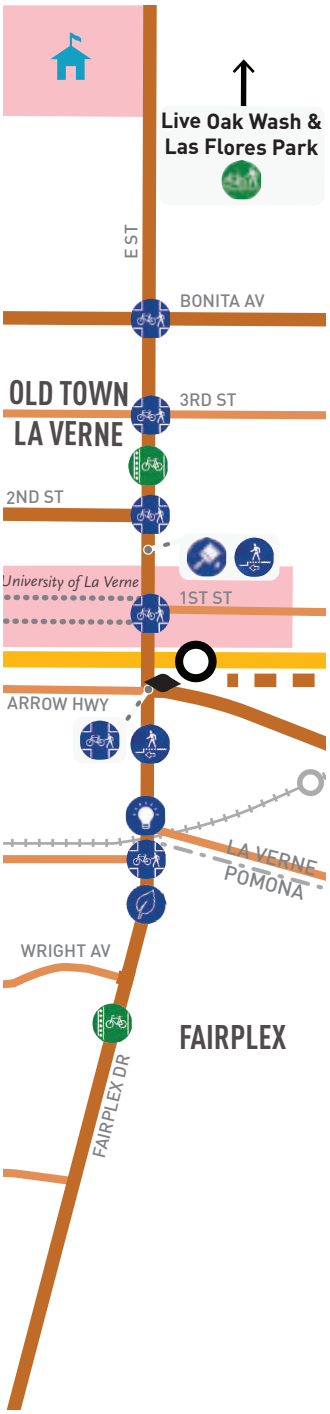
A shared use path can be created along Live Oak Wash from White Avenue to Las Flores Park, connecting to the bike lanes on White Avenue, which are soon to be improved and extended north along Fruit Street to Baseline Road. This shared use path would provide bicycle access from the station and University of La Verne (ULV) to the Foothill Boulevard corridor, which was proven to be the top destination for ULV students during their Spin bikeshare pilot in 2018.

The path would have at least three connection points. At the northern end of the path, a bicycle-friendly crossing would need to be installed for northbound cyclists to continue onto White Avenue. This may be done through the creation of a short two-way cycle track on the west side of the street up to the planned signal at Durward Way. In the middle of the path, a connection into the back of Bonita High School can be established for students and faculty. At the southern end, the path could cut through Las Flores Park to reach the beginning of E Street at Eighth Street.

E Street

We recommend establishing the City of La Verne's first separated bikeway along E Street. While the street has only a moderate traffic volume and speed currently, a separated bikeway would create the maximum comfort for cyclists and rolling mode users of all ages and abilities and likely encourage a significant number of Gold Line riders to ride to the station. Figure 7-10 shows the cross-section for the separated bikeway. A variation on this solution may need to be found between Sixth and Eighth Streets where pick-up and drop-off for Roynon Elementary School takes place.

Intersection improvements similar to those shown in Figure 7-8 can be considered for the intersections of E Street/Third Street and E Street/Bonita Avenue, reducing pedestrian crossing distance and ensuring that the intersections feel as protected to less confident cyclists as the segments do.



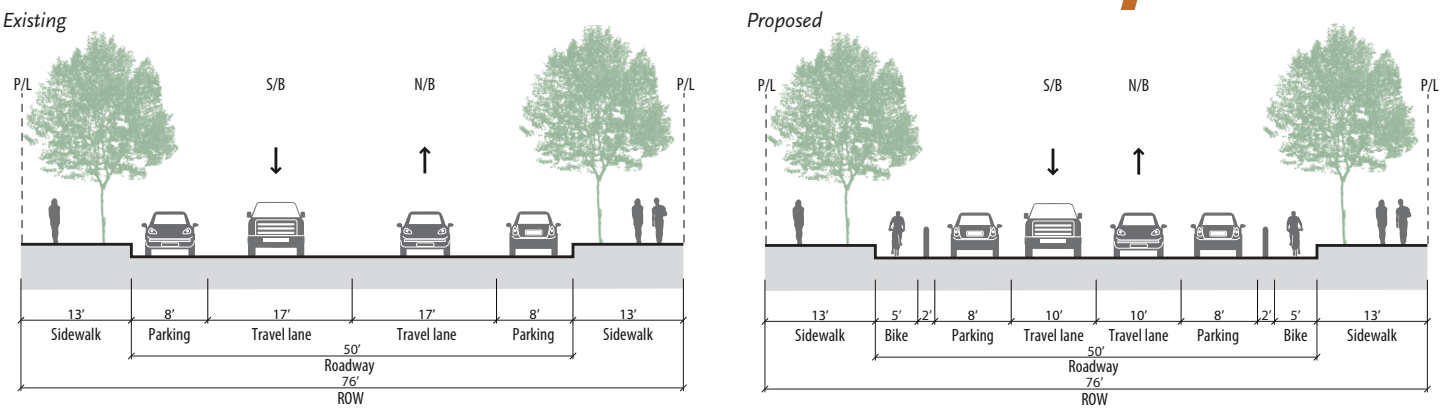


Figure 7-10. Typical Cross-Sections for E Street, Arrow Hwy to Eighth St.

Fairplex Dr

Fairplex Drive is the continuation of E Street south of Arrow Highway. The street has five traffic lanes and a speed limit of 35 to 45 miles per hour. Average daily trips are about 13,000. Observations during walk audits and field visits identified that the street has a high amount of bicycle use, and that both recreational and commuter cyclists used the street instead of the side path which ostensibly exists south of the Metrolink tracks.

Because of the relatively low traffic volumes on the street and the paucity of signalized intersections, the portion of the street between the Metrolink tracks and Puddingstone Drive may be reduced to three traffic lanes (one in each direction with a center turn lane) in order to continue the separated bike lane south to Puddingstone Drive. Figure 7-10 shows the recommended conceptual striping pattern for the street.

Consideration was also given to improving the existing side path and extending it north to Arrow Highway along the west side of the street. However, this option was determined to be less preferable than the one-way separated bikeways on each side of the street for three reasons:

> Cyclists are currently preferring not to use the side path.

> At the crossing of the Metrolink tracks, a two-way side path/ separated bikeway on the west side of the street would require a new crossing gate for northbound cyclists. This would necessitate additional space and likely a more lengthy approval process from the CPUC.

> At Arrow Highway, northbound cyclists would need to be provided a safe manner to cross to the east side of the street to continue north on E Street.

South of Puddingstone Drive, the separated bikeway can continue, or cyclists can transition to and from the side path using the existing crosswalk at Puddingstone Drive.

Figure 7-11 presents the conceptual striping arrangement.

In addition to bicycle improvements, significant pedestrian improvements are necessary between Arrow Highway and the northern limit of the industrial park just south of the Metrolink tracks. ADA improvements, lighting and shade are all very important to mitigate the barrier that this area currently is for potential pedestrian movement between the industrial park and the station.

The existing side path on Fairplex Drive is not used by most cyclists.

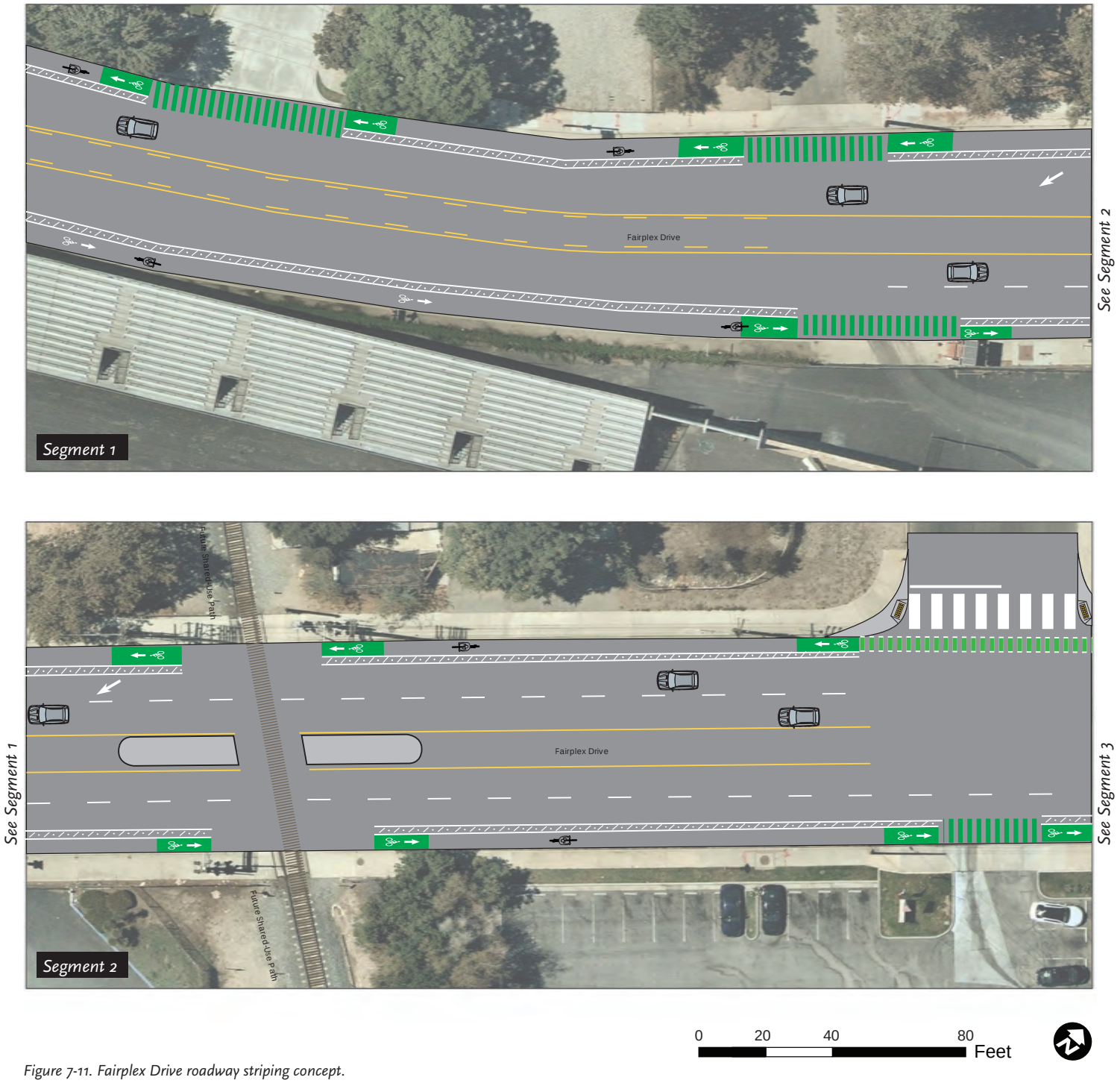


Figure 7-11. Fairplex Drive roadway striping concept.

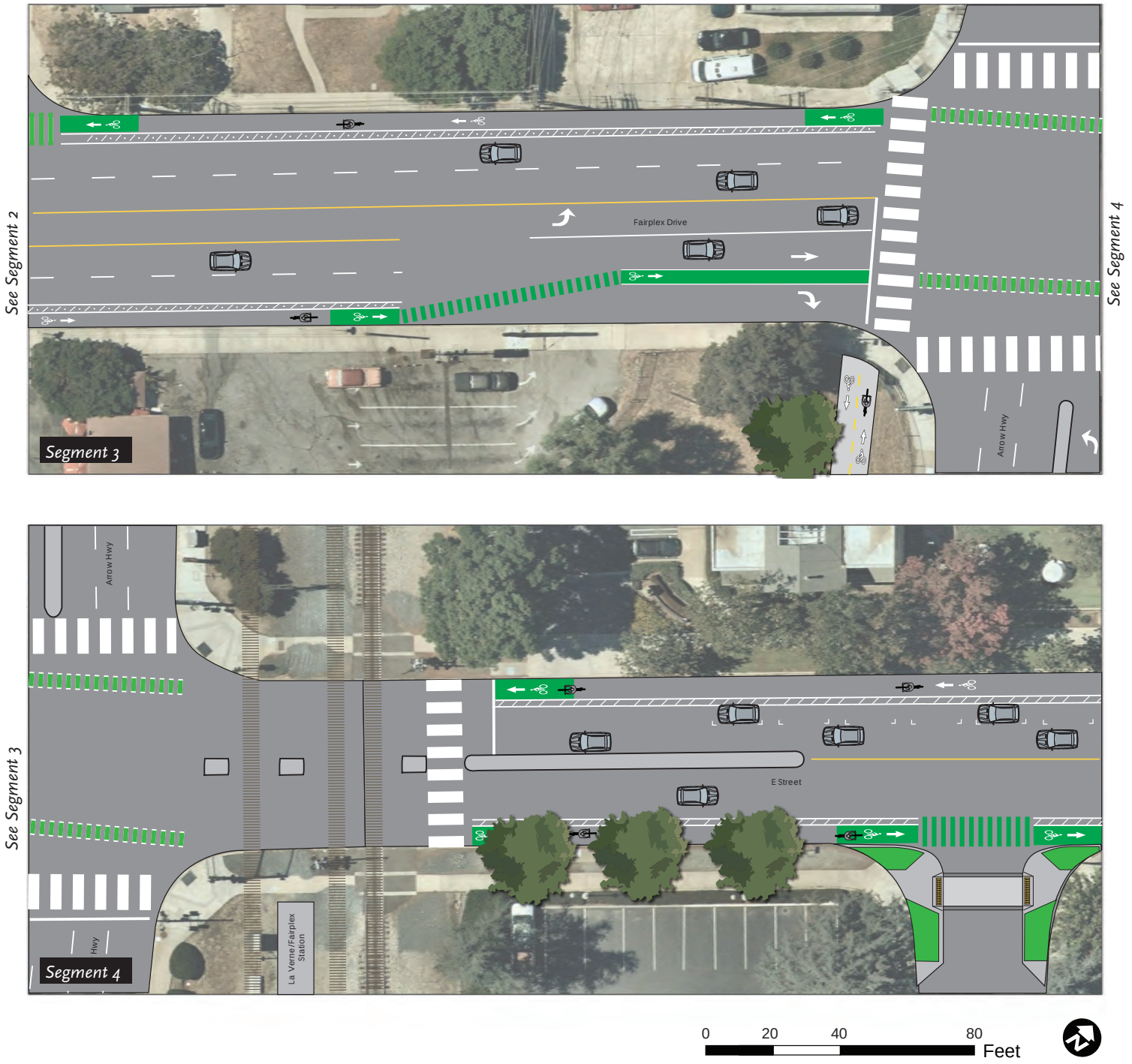


Figure 7-11. Fairplex Drive roadway striping concept. (continued)

Bonita Av: Pathway Arterial

Bonita Avenue was included as a pathway arterial in order to ensure consistency between station areas as to the priority level of the street. It does not directly serve the station, but the City's plans are to make it the primary east-west bikeway in the city. 90% design is now complete for the bikeway, showing standard bike lanes through most of the city, buffered bike lanes in a few portions, and one block of shared lanes (sharrows) between D and E Streets.

The new bikeway will be a major improvement over the existing conditions. Still, consideration should be given to continuing the bike lane between D and E Streets, as shown in Figure 7-12. This would be made possible by eliminating parking on the north side of the street. Also, in the long term, consideration may be given to upgrading the bike lanes west of Wheeler Avenue, where the street is much wider and faster, to separated or buffered lanes.

Figure 7-13 presents an illustration of the new bicycle facility with banners and signage concepts highlighting Bonita Avenue's role as a regional connection. See Chapter 3 – Regional Recommendations (page 19) – for further discussion of this topic.

Within the ½ mile radius of the La Verne/Fairplex station, Bonita Avenue is very walkable, but walk audit participants did note the lack of pedestrian lighting which is important to address. Participants preferred low, bollard lighting which would not detract from the dark sky.

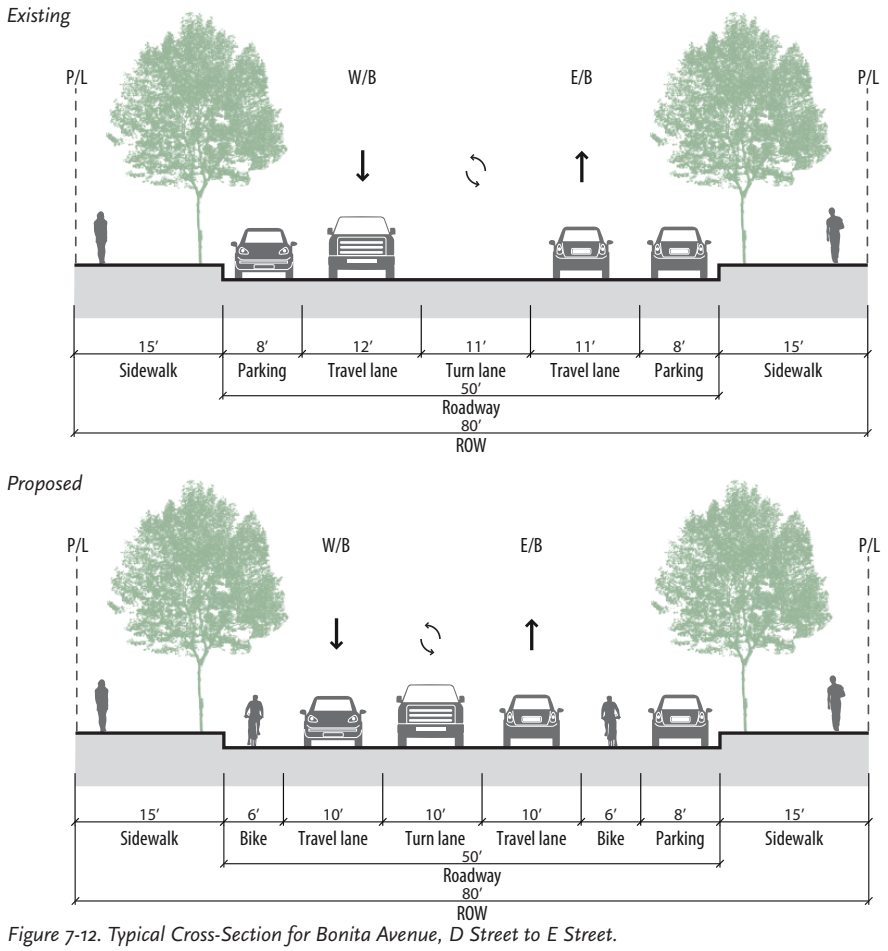


Figure 7-12. Typical Cross-Section for Bonita Avenue, D Street to E Street.

Existing

Future Concept

Figure 7-13. Proposed Character - Bonita Avenue. Eastbound view east of E Street.

White Av: Pathway Arterial

White Avenue (Fruit Avenue north of Foothill Boulevard) is a pathway arterial which runs the length of the City. To the south it will serve Fairplex and many areas of the City of Pomona whose residents recognized that they would be more apt to access the La Verne/Fairplex station via White Avenue than the Pomona North station via Garey Avenue.

North Segment: North of First Street

North of First Street, White Avenue runs through a residential area, but few homes front on it. Despite the existence of parkways, there are few street trees and no pedestrian lighting; therefore, both are recommended as FLM projects.

On-street parking is prohibited, and shoulder areas will be converted into bike lanes soon by the City through the Regional Bicycle Commuter Gap Closure project and in painting stripes on roadway prepared by the Construction Authority.

Central Segment: Arrow Highway to First Street

This area was graded very poorly by walk audit participants. Sidewalks are very narrow with utility poles in the middle, obstructing access for rolling modes. Widening is required for any improvements to be made. Since the west side of the street is zoned for transit-oriented mixed-use development, there is a reasonable chance that properties will redevelop in the future, enabling the creation of a wide sidewalk and two-way separated bikeway continuation of the Fairplex greenbelt as a development condition.

A shorter-term solution is to continue bike lanes south from First Street as one-way buffered or separated lanes. The intersection of Arrow Highway and White Avenue needs to be designed for overall safety, particularly for northbound cyclists coming from the Fairplex greenbelt to be able to cross the street safely.

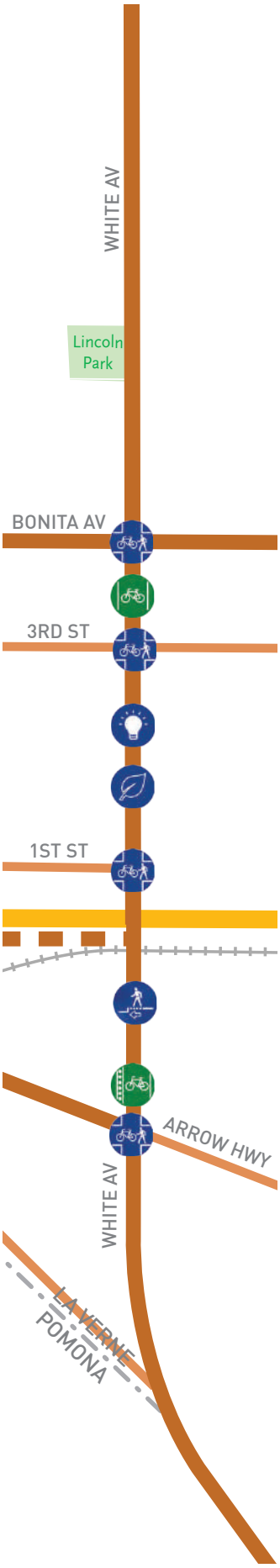
Figure 7-16 shows these cross-section potentials.

South Segment: South of Arrow Highway

South of Arrow Highway, White Avenue abuts Fairplex property. As a part of the institution's Strategic Plan, Fairplex is planning to create a greenbelt with a shared use path around its property. Figure 7-14 shows the anticipated future greenbelt segments within the station area.

A recommended cross-section for this path is shown in Figure 7-15.

People who use wheelchairs and other rolling modes have the most difficulty navigating the environment in older commercial and industrial areas.



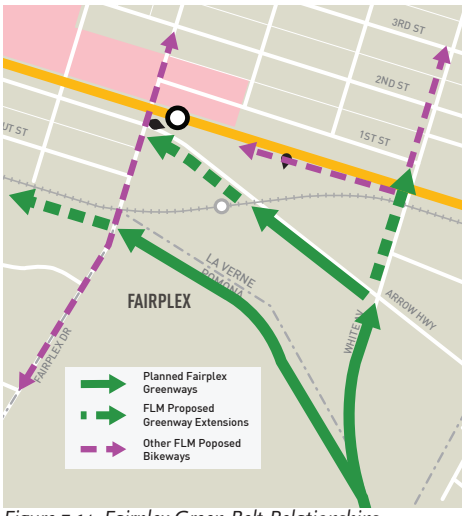


Figure 7-14. Fairplex Green Belt Relationships.

Proposed

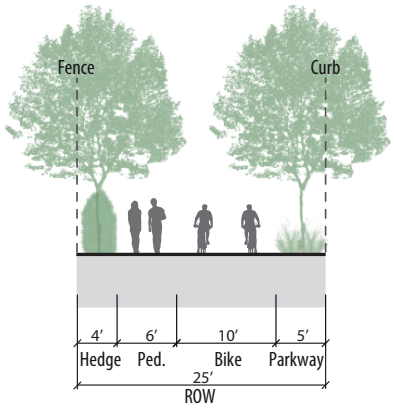
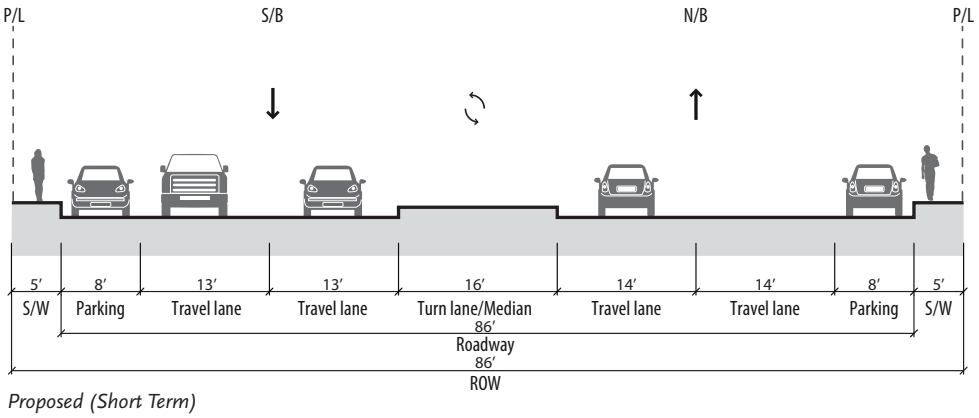
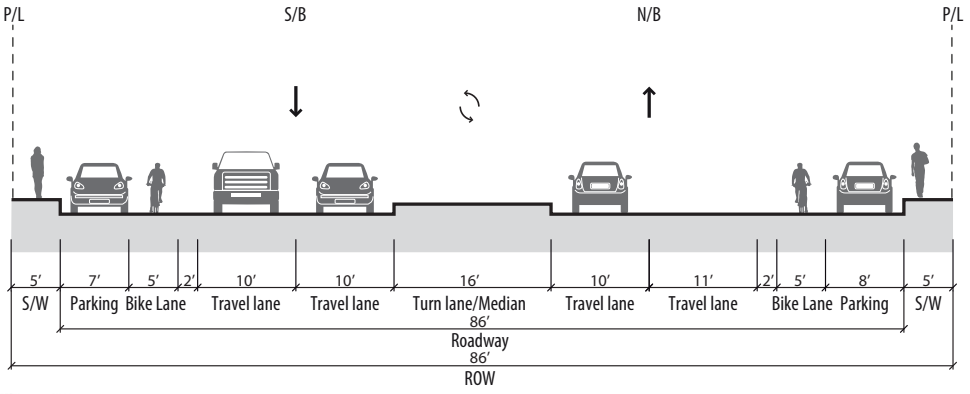


Figure 7-15. Typical Cross-Section for White Avenue, Fairplex Green Belt

Existing



Proposed (Short Term)



Proposed

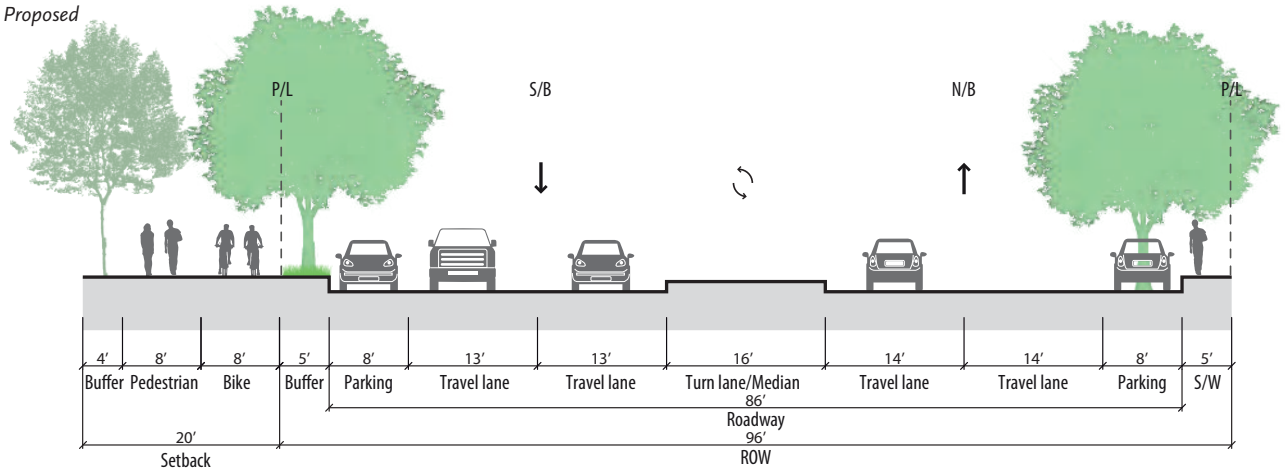


Figure 7-16. Typical Cross-Section for White Avenue, Arrow Highway to First Street.

Arrow Hwy: Pathway Arterial/Collector

Arrow Highway is a six-lane roadway carrying approximately 25,000 daily vehicles through the station area. The pedestrian environment is generally poor, and there are no bicycle facilities.

The long block between Fairplex Drive/E Street and White Avenue has been designated as a pathway arterial, while the rest of the street has been designated as a pathway collector. The reasons for this are the following:

> This block forms a part of the primary connection to Fairplex via White Avenue.

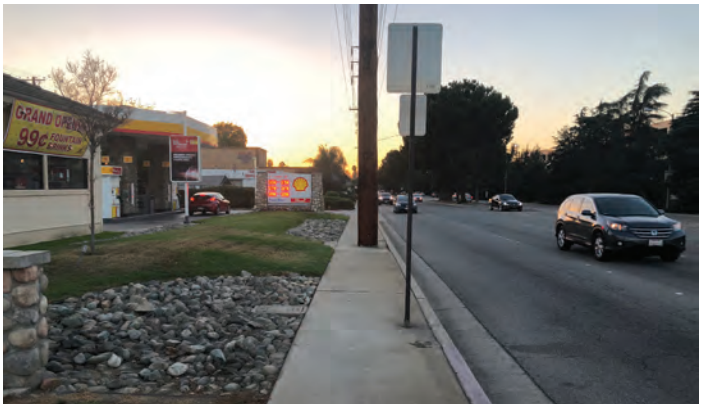
> Transformational changes are envisioned for this block by the Old Town La Verne Specific Plan, and transit-oriented mixed-use zoning increases the likelihood that these changes will come to pass. One large 12-acre parcel owned by Fairplex has already begun the development process.

> Segments of Arrow Highway west of Fairplex Drive and east of White Avenue serve relatively few people due to development patterns and a lack of street connectivity.

West Segment: Wheeler Av to E St/Fairplex Dr

As described in walk audit data, the pedestrian environment in this segment of the street is characterized by a narrow sidewalk on the south side only, utility poles blocking path of travel, no parkways, high noise levels and no lighting or shade. The rail line forms a barrier to the north.

The replacement of existing sidewalks with new ADA-compliant sidewalks along this segment has been included in the City's EIFD Infrastructure Plan.



Existing pedestrian environment on Arrow Highway

Central Segment: E St/Fairplex Dr to White Av

In this segment, several project types have been identified:

> Creation of a new promenade sidewalk and separated bikeway between double rows of trees on the south side of the street. This would be accomplished as a condition of development;

> Creation of a new wide sidewalk with street trees on the north side of the street. This would also be accomplished as a condition of development;

> Pedestrian lighting. This has been identified in the EIFD Infrastructure Plan;

> New crossing at future signalized intersection serving the station parking facility. This will be installed by the Construction Authority; and

> Potential pedestrian bridge linking parking structure on north side of Arrow Highway to new transit-oriented development on the south side of Arrow Highway.

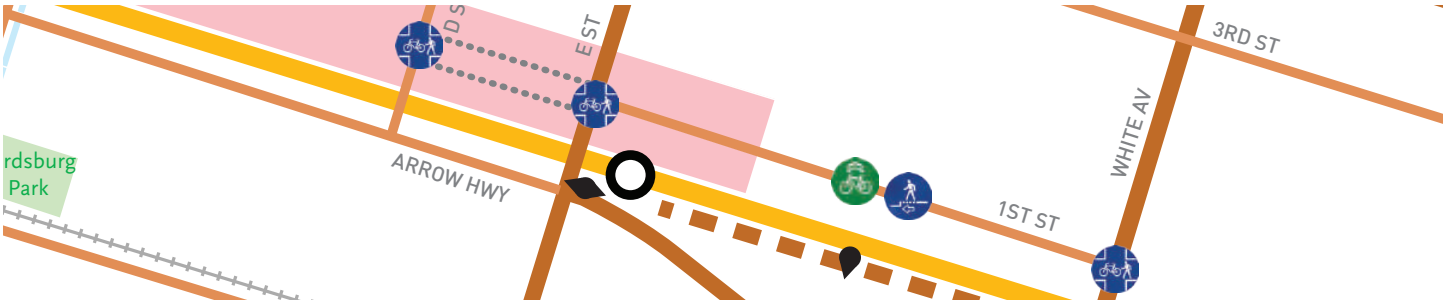
Figure 7-17 offers a vision of the interplay of new development, the new Arrow Highway streetscape and the station grounds, showing FLM connections being made through a variety of transportation modes.

Existing

Future Concept

Figure 7-17. Proposed Character - Arrow Highway, E St to White Av.

First St/First St Extension Walkway: Pathway Collector



First Street is located approximately 200 feet north of the future Gold Line tracks. The segment between E Street and White Avenue has been designated as a pathway collector; in addition, a cut-through between D Street and E Street has been identified which would continue the trajectory of 1st Street west.

This route serves unmarked, but frequently used crossing points in the University of La Verne west of F Street and and future multi-family housing developments east of E Street.

West Segment: Cut-Through between D and E Streets

As discussed in the section describing 2nd Street above, the creation of a cut-through between D Street and E Street following the trajectory of 1st Street was analyzed as a potential pathway arterial, or prioritized route. A wide, shaded pedestrian walkway already exists in the first 250 feet east of D Street, and the University's Master Plan establishes a long-term goal of continuing this walkway out to E Street by demolishing and replacing The Oaks Residence Hall.

This walkway has the potential to be a very intuitive FLM connection because it would be located very near to the station, lined by nonresidential buildings, active at most times of day and night, and car-less. However, its creation is contingent upon the redevelopment of The Oaks, which ULV staff confirmed is not a short-term project. Community outreach activities confirmed clearly that it is not appropriate to encourage the general public to circulate along this walkway in its current state.

If implemented, this walkway would require new pedestrian crossings at D Street and E Street, both of which were requested during walk audits and community engagement requests. Pedestrian crossings have not been desired at these locations to this point due to concerns that they could back up northbound vehicular traffic onto the Gold Line ROW. However, queue cutter (synchronized) signals could be used to coordinate pedestrian crossing times with "gates down" time at the rail crossing.

Images of the route of the D to E Street cut-through to be implemented in the long term.

East Segment: E Street to White Avenue

The segment of First Street between E Street and White Avenue is in a great deal of transition. Currently industrial and institutional (ULV) in nature, it will be transitioning to a mix of University buildings and medium-density transit-oriented housing. There are currently no sidewalks along the street, but sidewalks, street trees and bicycle boulevard features will be built out as the street is developed.

A third queue cutter signal is proposed for the corner of First Street and White Avenue. This signal would address community concerns about the lack of crossings of White Avenue. It would also create a location for the termination of the two-way separated bikeway which is proposed to be created with abutting property redevelopment, and its transition into bike lanes north of first Street. This may be a good place for this transition to occur, as White Avenue's street right-of-way changes considerably at First Street.

New development along First St is anticipated to bring sidewalks and street trees to the street.

Third St: Pathway Collector

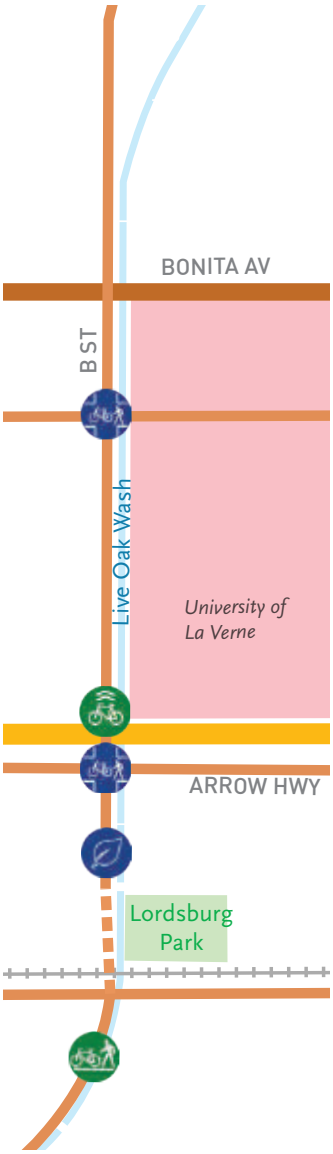
During outreach events, a strong desire was expressed by members of the community and city leaders to create bikeways of differing stress levels for different types of cyclists and rolling mode users. One clear application of this desire which was suggested during Phase 2 Community Outreach events was the creation of parallel bikeways on Bonita Avenue and Third Street. Rather than being duplicative, the goal of this arrangement would be to prioritize longer-distance and faster-speed riders on the standard bike lane (and potentially one block of shared lane) on Bonita Avenue, while Third Street could be a calm neighborhood street catering to local traffic, casual-riding college students and children.

Third Street is a very wide street. There is sufficient space for bike lanes, but a strategy of traffic calming, reduced pedestrian crossing distances and the creation of a bike boulevard would complement the street's character better and provide more holistic benefits. The greatest challenge of the bike boulevard is to establish safe crossings at Wheeler Avenue and White Avenue. High-visibility crossings with bicycle-actuated HAWK signals and median refuges are options for these spots.

A bike boulevard on Third Street would require traffic calming measures to keep vehicular speeds low.

B St/Live Oak Wash: Pathway Collector

B Street provides connectivity between Foothill Boulevard and Walnut Street, one block south of Arrow Highway. The Live Oak Wash runs alongside the street south of 5th Street and then continues southwest to the rear of the campus of Gilead Sciences at Puddingstone Drive and Wheeler Avenue. Establishing a FLM pathway along this route adds permeability to the station area, provides the shortest-possible FLM connection route to Gilead Sciences, and provides an active transportation route between the University of La Verne and the University's remote parking lot at Walnut and A Streets.



North Segment: B Street north of Walnut Street

In this segment, there does not appear to be sufficient space to create a shared use path along the Live Oak Wash; therefore, pedestrians and cyclists should be accommodated on B Street. With traffic calming measures including appropriate curb extensions at intersections, the street can be used as a bike boulevard.

Between Bonita Avenue and Foothill Boulevard, there are portions of the street that are very high-speed; cyclists should either have a dedicated lane in these portions, or very significant traffic calming measures should be implemented.

Community engagement events revealed that local residents have for many years used a makeshift crossing at the Gold Line ROW to access Arrow Highway, where an unsignalized but marked crosswalk allows them to access the market on the southeast corner of Arrow Highway and B Street. The maintenance of such a crossing point would likely require grade separation, as well as the signalization of the intersection, or alternatively, extension of the median to create a refuge for those crossing Arrow Highway.

South Segment: Live Oak Wash

South of Walnut Street, a shared use path could be established along the wash as far south as Puddingstone Drive. It would need an appropriate crossing of the Metrolink tracks.

Puddingstone Dr: Pathway Collector

Puddingstone Drive is a popular current bicycle route for recreational riders. It connects to Bonelli Park and San Dimas. The La Verne Regional Bicycle Commuter Gap Closure Project will install bike lanes along the street.

Wright Av: Pathway Collector

Wright Avenue is a local street which is likely to be used by Gold Line riders accessing jobs within the business park in the southwest portion of the station area. The street is missing a sidewalk on the north side of the street, which should be installed by the property owner. With the Gold Line becoming proximate to the property, property owners may find this to be in their own interest for tenant attraction.

Metrolink ROW Path: Pathway Collector

Between A Street and Fairplex Drive, the Metrolink right-of-way appears to be over 200 feet wide. Metrolink plans to double-track this segment of the San Bernardino Line; however, there will still likely be substantial excess right-of-way once that work is complete. This is a good location for a new shared use path which would respond to community enthusiasm and preference for off-street bikeways, the desires of Gilead Sciences (and perhaps other local employers) for green infrastructure that employees can use on lunch hour or for last-mile connections, and our review of case studies, which indicates that shared use paths are the type of facility most often linked to higher bicycle FLM mode share.

This path would form part of a network of shared use paths and separated bikeways south of the La Verne/Fairplex station. As shown in Figure 7-14, It would connect to the proposed Live Oak Wash path, the Fairplex Drive separated bikeway, and the Fairplex property greenway along the La Verne/Pomona city boundary. Figure 7-18 gives a proposed cross-section.

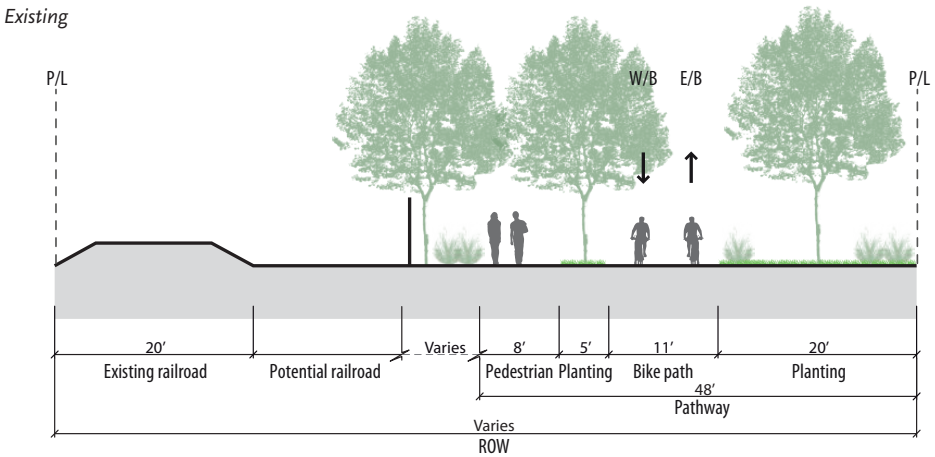


Figure 7-18. Proposed Cross-Section for Metrolink ROW Path.

8. Pomona North Station Package

This chapter presents the Station Package for the future Pomona North Station, which is a potential temporary terminus to the Gold Line. The station will be located in the middle of the large block defined by Bonita Avenue, Garey Avenue, Arrow Highway and Fulton Road. The closest intersection to the station is at Supply Street and Santa Fe Avenue. This chapter describes the results of the FLM planning process described in Chapter 2 for the station area.

Existing Conditions and Walk Audit Summary

Figure 8-1 presents a summary of existing conditions and walk audit results, highlighting primary strengths, barriers, ideas and issues raised during the initial stages of the planning process for the Pomona North station area.

Summary of Comments

In Pomona, 10 community events were held, engaging approximately 247 people and yielding approximately 645 discrete comments. Figure 8-2 summarizes the comments received about different pathways, streets and districts in the station area from community engagement activities.

Pathway Network and Projects

Figure 8-3 graphically depicts the pathway network and projects for Pomona North Station. These pathways and projects are described in the Project List (Table 8-1) and in the narrative and graphic description beginning on page 149.

Supply Street, Stare Street, and Amberson Street form a community-desired pathway; however, they are located on private property and further coordination with the property owner would be needed for any enhancements.

View of the future Pomona North station site

Origin of Project Types

Figure 8-4 traces each project type to its origin within the FLM planning process among one of four categories:

> Existing Plan – projects identified by:

- the Construction Authority's Jan. 30, 2019 30% design documents
- Metro's Active Transportation Strategic Plan
- the Pomona Corridors Specific Plan
- Pomona's Active Transportation Plan

> City Staff/Consultant Team – projects identified by City staff or the Metro consultant team

> Walk Audit – projects that directly address barriers identified during the walk audit, are based on ideas posited at the walk audit, or that directly address comments generated during the walk audit debriefing session.

> Engagement Events – projects that emerged as ideas during community engagement events, including stakeholder interviews, pop-up events and focus groups.

Also noted on this map are projects for which additional outreach is recommended for one of the following reasons:

> No Comments Received – transformative projects on which specific public input was not registered, either because they emerged late in the planning process, or because community event discussion focused elsewhere.

> Some Reservations Expressed – projects that garnered a mixed reaction during community engagement, or which would benefit from further conceptual design to address reservations expressed with aspects of these projects during the planning process.

Three-Mile Connections

Figure 8-5 presents the first/last mile connections for Pomona North Station. This map shows existing, planned and new FLM proposed bikeways within a three-mile radius of the station. New proposed bikeways consist of the following:

> The extension of pathway arterials from the pathway network (1/2 mile radius) map

> Connections to the San Gabriel Valley Regional Greenway Network

> Regional gap closures

> Upgrades of existing or planned facilities based on the Principles for Project Type Selection and Design (Table 2-1)

> Additional connections to pathway arterials.

Locations where new/improved crossings are needed to serve these bikways are also noted in Figure 8-5.

Project List

The project list for Pomona North Station is shown in Table 8-1. Information given in the project list consists of:

> Location: streets and extents

> Type – categorization of the project into the types described in Chapter 1 (pages 3-6)

> Description – characterization of project elements

> Prioritization Score – score of the project based on the methodology defined in Chapter 2 (pages 17 and 18)

> Percent within ½ mile radius – percent of the project area within ½ mile of the station platform

> Cost Range – gives a range of costs that projects of this type and size generally fall into. Often there is a wide range of costs because of the variety of implementation options for similar projects.

> Implementation Complexity – level of complexity determined through the methodology described in Chapter 4 (Table 4-3), with key considerations enumerated

> Origin – where the project was first identified within the FLM planning process

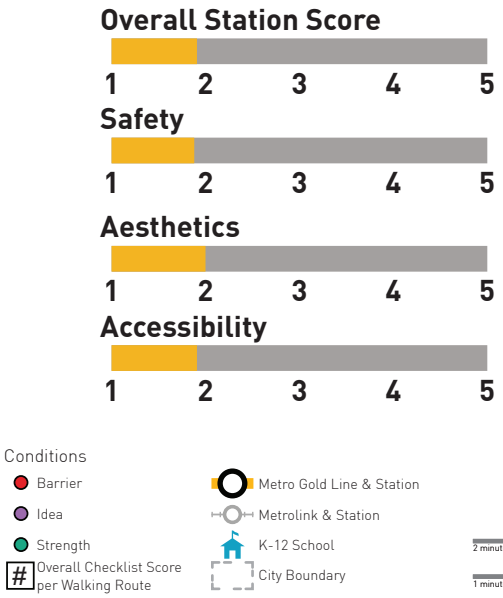
> Community Support – categorizes if the project received community support during the FLM Plan's engagement process. See Chapter 4 for more information.

Prioritized Projects

Tables 8-2 and 8-3 show the ten highest prioritized linear and point projects, respectively, within the Pomona North station area. Projects that require property redevelopment are not included, nor are projects which are already planned to be implemented by the Construction Authority. Projects which are recommended to be implemented through conditions of development but may be implemented through other means remain in the list. Bikeways are listed as one project, though their facility type may change along the corridor length. The prioritization methodology is described in more detail in Chapter 2 (pages 17 and 18).

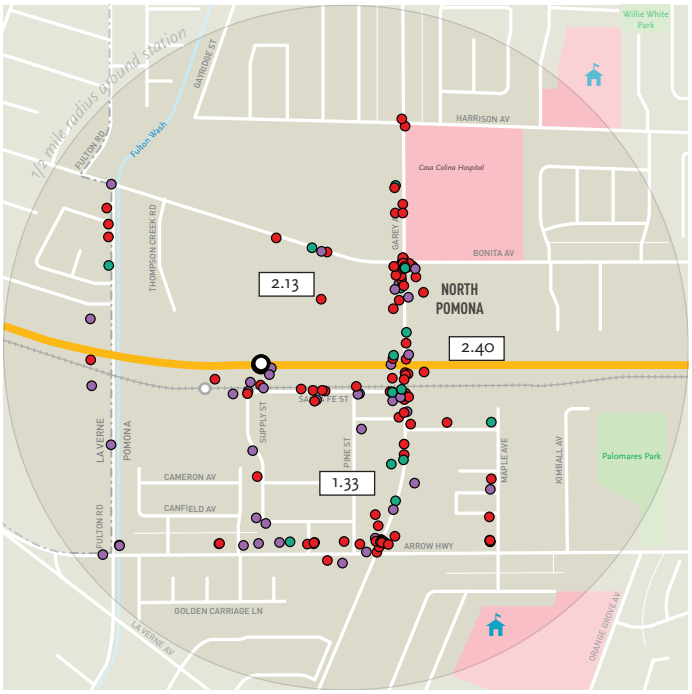
Figure 8-1: Walk Audit and Existing Conditions.

CHECKLIST RESULTS



Walk Audit Conditions

Pomona



STRENGTH:

> Bike lanes on Bonita Avenue

BARRIER:

> High speeds on major streets

BARRIER:

> Accessibility/ADA issues

> Narrow sidewalks, curb cut issues

ISSUES:

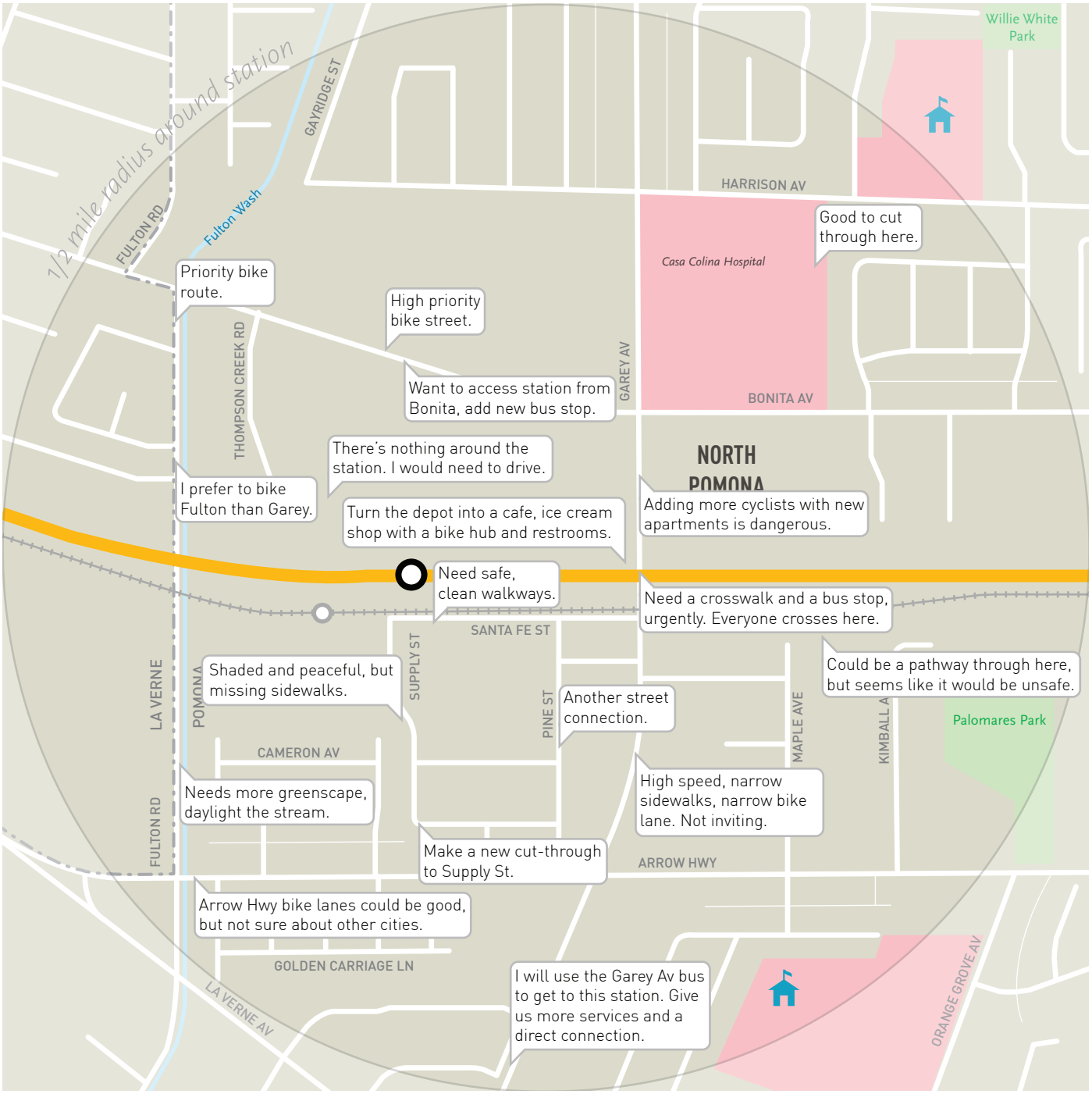
> Uncertainty about future land uses and opportunities within large block defined by Garey Av, Arrow Hwy, Fulton Rd and Bonita Av

> Need to connect outside 1/2 mile radius to most major destinations and active transportation facilities

> Need to improve bus-rail connections

Figure 8-2: Community Engagement Comments

Pomona



Legend

- Metro Gold Line & Station
- Metrolink & Station
- K-12 School

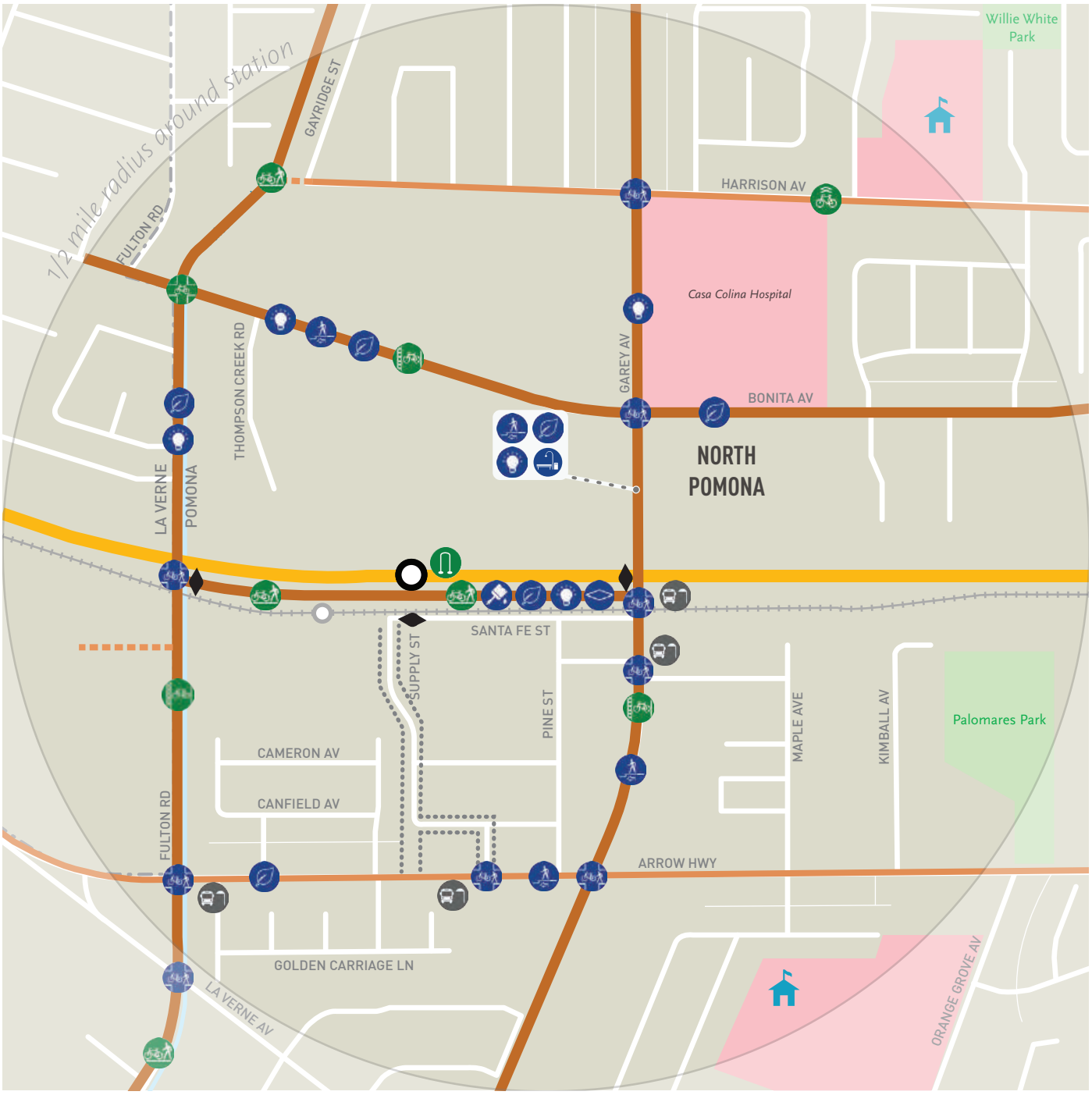
N

2 minute walk (480')

1 minute bike (880')

Figure 8-3: Pathway Network and Project Ideas

Pomona North



Pathway Network & Project Types

- New/Improved Sidewalks
- New/Improved Crossings
- Walkway/Shared Street
- Plaza
- Street Trees
- Sidewalk Lighting
- Street Furniture
- Visual Enhancements
- Enhanced/New Bus Stop
- Shared Use Path
- Separated Bikeway
- Bike Parking/Bike Share
- K-12 School
- Pathway Arterial
- Pathway Arterial Cut-Through
- Pathway Collector
- Pathway Collector Cut-Through
- Community-Identified Pathway on Private Property Further Coordination Required
- Station Entrances (Point to Direction of Exit)
- Metro Gold Line & Station
- Metrolink & Station

N

2 minute walk (480')

1 minute bike (880')

Figure 8-4: Origin of Project Types

Pomona North

Pathway Network & Project Types

- New/Improved Sidewalks
- New/Improved Crossings
- Walkway/Shared Street
- Plaza
- Street Trees
- Sidewalk Lighting
- Street Furniture
- Visual Enhancements
- Enhanced/New Bus Stop
- Shared Use Path
- Separated Bikeway
- Bike Parking/Bike Share
- K-12 School
- Pathway Arterial
- Pathway Arterial Cut-Through
- Pathway Collector
- Pathway Collector Cut-Through
- Community-Identified Pathway on Private Property Further Coordination Required
- Station Entrances (Point to Direction of Exit)
- Metro Gold Line & Station
- Metrolink & Station

Identified by/at

- Existing Plan
- City Staff/Consultant Team
- Walk Audit
- Engagement Events
- No Comment Received
- Some Reservations Expressed

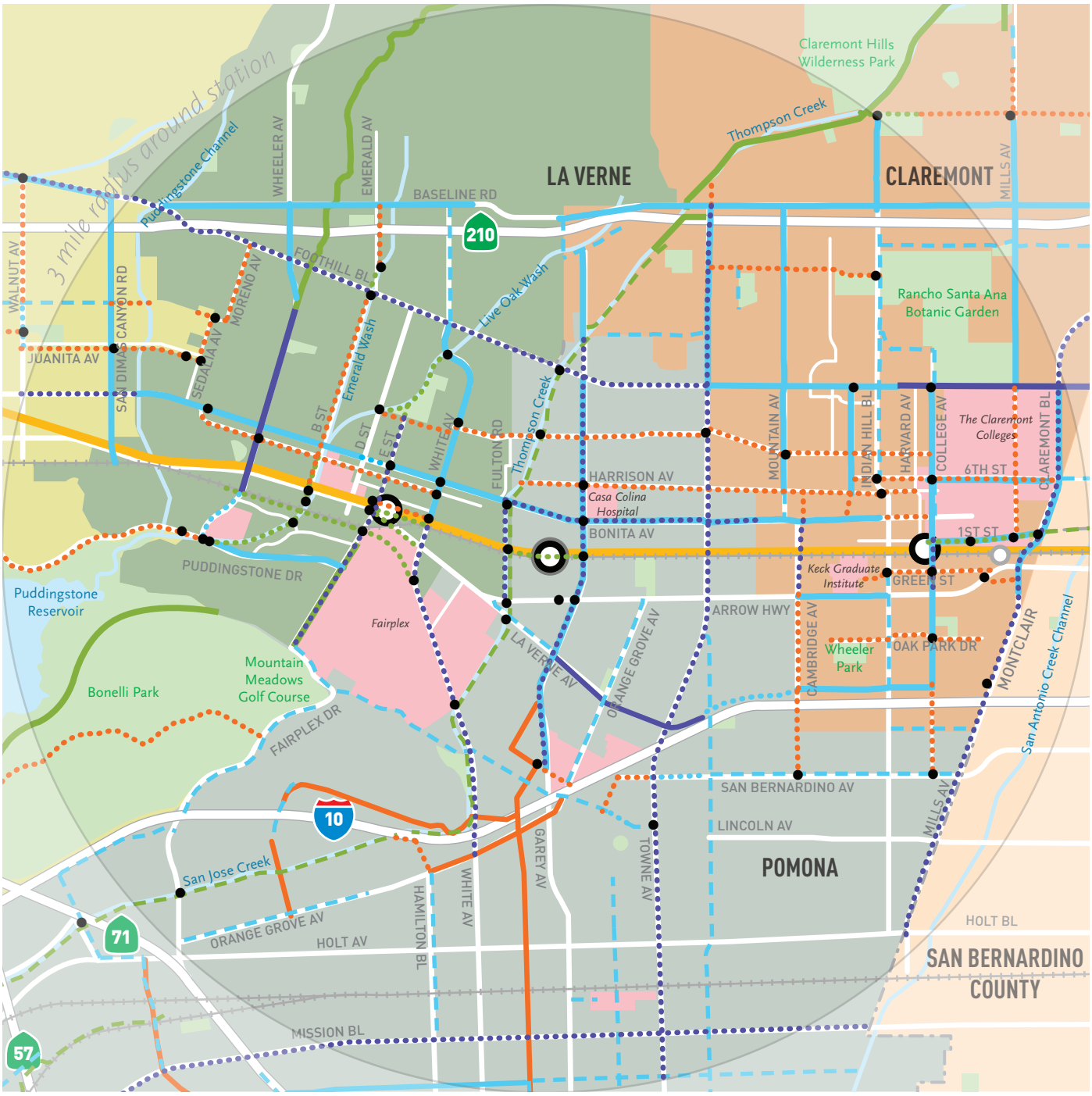
N

2 minute walk (480')

1 minute bike (880')

Figure 8-5: Three-Mile Connections

Pomona: Existing, Planned and Proposed*



Facility Type

- Shared Use Path
- Bike Lane
- Bike Boulevard
- Separated Bikeway
- Proposed New/Improved Crossings

Facility Status

- Existing/Funded Bikeways
- City or Regional Plan Bikeways
- FLM Proposed Bikeways

Rapid Transit

- Metro Gold Line & Station
- Metrolink & Station

N

*Due to the process for identifying proposed facilities, further public input should be sought on proposed bikeways if selected for implementation.

5 minute bike (4,400')

Table 8-1: First/Last Mile Project List - Pomona North

Street A	Street B	From	To	Type	Description	Prioritization Score	% of project within 1/2-mile of station	Cost Range		Implementation Complexity	Origin	Community Support
								Low	High			
PATHWAY ARTERIAL: GAREY AV												
Garey Av		Harrison Av	Bonita Av	Sidewalk Lighting	Pedestrian-scaled lighting in dark areas near fences and walls	52	100%	$37,879	$170,455	Low	Walk Audit	Yes
Garey Av		Bonita Av	Arrow Hwy	New/Improved Sidewalks	Sidewalk widening. Existing corridor upgrade to ADA standards. Specific Plan amendment to require setback.	54	100%	$371,025	$654,750	Medium • Potential condition of development	Walk Audit	Yes
Garey Av		Bonita Av	Arrow Hwy	Street Trees	New trees with sidewalk widening. Specific Plan amendment for shade trees.	39	100%	$52,320	$392,400	Medium • Potential condition of development	Walk Audit	Yes
Garey Av		Bonita Av	Arrow Hwy	Sidewalk Lighting	New lighting with sidewalk widening. Specific Plan amendment for street lighting (currently requirement for palm gateway only).	59	100%	$13,080	$392,400	Medium • Potential condition of development	Pomona Corridors Specific Plan	Yes
Garey Av		Bonita Av	Arrow Hwy	Street Furniture	New street furniture with sidewalk widening. Specific Plan amendment to include furniture palette.	39	100%	$43,600	$218,000	Medium • Potential condition of development	Walk Audit	Yes
Garey Av	Bonita Av			New/Improved Crossings	Protected intersection linking two separated bikeways.	41	100%	$50,000	$500,000	Medium • Traffic study required	Walk Audit	Yes
Garey Av	Arrow Hwy			New/Improved Crossings	New higher visibility crosswalks. Gateway element introduction.	44	100%	$50,000	$500,000	Medium • Traffic study required	Walk Audit	Yes
Garey Av		**White Oak Dr**	**Alameda St**	**Bikeway**	**Segments described below**	59	55%	$513,400	$6,160,795			
Garey Av		White Oak Dr	Harrison Av	Separated Bikeway	Existing Class II Bike Lane to Class IV Separated Bikeway upgrade; one-way in each direction. Parking only where there is demand. Existing bike lane at White Oak Drive connection.	60	5%	$201,610	$2,419,318	Low	Walk Audit	Yes
Garey Av		Harrison Av	La Verne Av	Separated Bikeway	Conversion of Existing Class II Bike Lane to Class IV Separated Bikeway; one-way in each direction. Parking only where there is demand (in front of small businesses south of tracks on west side).	59	93%	$242,424	$2,909,091	High • CPUC grade crossing modification required	Walk Audit	Yes
Garey Av		La Verne Av	Alameda St	Separated Bikeway	Existing Class II Bike Lane to Class IV Separated Bikeway upgrade; one-way in each direction. Parking only where there is demand.	55	0%	$69,366	$832,386	Low	Walk Audit	Yes
PATHWAY ARTERIAL: BONITA AV												
Bonita Av		Fulton Rd	900 ft. west of Garey Av	New/Improved Sidewalks	Gap closure in sidewalk.	44	100%	$318,750	$562,500	Medium • Potential condition of development	Walk Audit	Yes
Bonita Av		Fulton Rd	Garey Av	Sidewalk Lighting	New lighting throughout corridor.	54	100%	$22,150	$398,700	Medium • Condition of development	Walk Audit	Yes
Bonita Av		Fulton Rd	Garey Av	Street Trees	New shade trees.	39	100%	$53,160	$398,700	Medium • Condition of development	Engagement Events	Yes
Bonita Av		Fulton Rd	Carnegie Av	Separated Bikeway	Existing Class II Bike Lane to Class IV Bikeway: one-way in each direction. There is low demand for on-street parking which can be re-purposed.	60	47%	$343,000	$4,116,000	Low	Walk Audit	Yes
Bonita Av		Garey Av	Melbourne Av	Street Trees	New shade trees on north side of street. May be planted on sidewalk or in tree wells in roadway, potentially in coordination with separated bikeway.	52	100%	$20,455	$153,409	Low	Engagement Events	Yes

Table 8-1: First/Last Mile Project List - Pomona North (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	% of project within 1/2-mile of station	Cost Range		Implementation Complexity	Origin	Community Support
								Low	High			
PATHWAY ARTERIAL: THOMPSON CREEK/FULTON RD												
Thompson Creek	White Ave			New/Improved Crossings	Once trail is developed, new signal and crossings for safe movement. New bicycle loop detectors on the trail to actuate signals.	33	0%	$50,000	$500,000	Medium • Traffic study required	Consultant Team	No Comment Received
Fulton Rd	Arrow Hwy			New/Improved Crossings	Intersection signals with loop detectors for bicycles. High-visibility crosswalk.	42	100%	$100,000	$500,000	Medium • Inter-city coordination	Walk Audit	Yes
Fulton Rd	La Verne Av			New/Improved Crossings	Intersection signals with bike-boxes and loop detectors for bicycles. High-visibility crosswalk.	37	100%	$100,000	$500,000	Medium • Inter-city coordination	Consultant Team	Yes
Fulton Rd	Bonita Av			New/Improved Crossings	New intersection signal with bike-boxes and loop detectors for bicycles. High-visibility crosswalk. Curb-side bike lanes extension on Bonita Avenue through intersection for off-set legs of Fulton Road connection and crossing facilitation.	36	100%	$100,000	$500,000	Medium • Inter-city coordination	Walk Audit	Yes
Fulton Rd		Bonita Av	La Verne Av	Street Trees	New street trees along corridor. Planting in parking lane.	40	100%	$75,840	$568,800	Medium • Inter-city coordination	Walk Audit	Yes
Fulton Rd		Bonita Av	La Verne Av	Sidewalk Lighting	New lighting along corridor.	50	100%	$18,960	$568,800	Medium • Inter-city coordination	Walk Audit	Yes
Thompson Creek/Fulton Rd		**Garey Av**	**White Av**	**Bikeway**		55	45%	$3,840,500	$20,746,000			
Thompson Creek		Garey Av	Bonita Av	Shared-Use Path	Class I shared-use path along the Thompson Creek wash access road.	35	24%	$2,220,000	$11,100,000	Medium • Project located on waterway	Walk Audit	Yes
Fulton Rd		Bonita Av	Arrow Hwy	Separated Bikeway	New one-way on-street separated bikeway on each side of street. Parking elimination on both sides, or east side roadway widening to retain parking on west side.	35	100%	$220,500	$2,646,000	High • Inter-city coordination • CPUC grade crossing approval required	Walk Audit	Yes
Thompson Creek		Arrow Hwy	White Av	Shared-Use Path	Class I shared-use path along the Thompson Creek wash access road. Connection to Fairplex and San Jose Creek.	35	32%	$1,400,000	$7,000,000	Medium • Project located on waterway	Walk Audit	Yes
PATHWAY COLLECTOR: ARROW HWY												
Arrow Hwy		La Verne Av	Towne Av	Street Trees	New street trees along corridor where ROW is available.	34	56%	$147,000	$1,102,500	Low	Consultant Team	Yes
Arrow Hwy	Fulton Rd			Enhanced/New Bus Stop	New stop requirement due to relocation of Mariposa stop. Stop would also serve Metro, if bus is not re-routed.	32	100%	$5,000	$15,000	Low	Consultant Team	Yes
Arrow Hwy	Amberson St			New/Improved Crossings	New signalized intersection serving pedestrian crossings and drivers accessing station pick up/drop off and park and ride facilities	42	100%	$50,000	$500,000	Low	Consultant Team	No Comment Received
Arrow Hwy	Amberson St			Enhanced/New Bus Stop	Bus stop relocation from Mariposa, could serve station. Only implement with signalized crossing.	32	100%	$5,000	$15,000	Low	Consultant Team	No Comment Received
Arrow Hwy		Amberson St	Garey Av	New/Improved Sidewalks	Sidewalk and curb ramps to ADA standards.	34	100%	$85,000	$150,000	High • Additional ROW to be acquired	Walk Audit	Yes
PATHWAY ARTERIAL: EAST-WEST CONNECTIONS ALONG GOLD LINE ROUTE												
Fulton Rd	RR Track			New/Improved Crossings	New crosswalk to connect existing west side sidewalk to station.	35	100%	$50,000	$500,000	Low • Planned by GLCA	Construction Authority DB2	Yes
Metrolink Parking Lot				Shared-Use Path	Parking lot upgrade west of the station to include a pedestrian/bicycle path.	43	100%	$428,000	$2,140,000	High • Consider for GLCA implementation (DB2)	Walk Audit	Yes

Table 8-1: First/Last Mile Project List - Pomona North (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	% of project within 1/2-mile of station	Cost Range		Implementation Complexity	Origin	Community Support
								Low	High			
Station				Bike Parking/Bikeshare	New secure bike parking. Santa Fe Depot could be a potential bike hub location.	38	100%	$16,000	$64,000	Low • Planned by GLCA (secure bike parking)	Engagement Events	Yes
Garey Av	RR Track			New/Improved Crossings	New east-west signalized crossing for pedestrians, stopping all traffic north and south of the railroad tracks. Alternatively, new pedestrian bridge with a spiral descent on east side.	39	100%	$500,000	$500,000	Very High • Consider for GLCA implementation (DB2) • CPUC grade crossing modification required	Walk Audit	Yes
Garey Av	RR Track			Enhanced/New Bus Stop	New bus stop with shelter, seating, real time signage. Preferably located between tracks, or if not, on the far side of tracks.	39	100%	$5,000	$15,000	High • CPUC grade crossing modification required	Walk Audit	Yes
PATHWAY COLLECTOR: HARRISON AV												
Harrison Av	Garey Av			New/Improved Crossings	South leg crosswalk striping upgrades. Pedestrian activated signal timing improvement.	42	100%	$50,000	$500,000	Low	Walk Audit	Yes
Harrison Av		Thompson Creek	Towne Av	Bike Boulevard	New Bike Boulevard connecting to Claremont with signage and traffic calming elements.	47	40%	$25,550	$766,500	Low	Consultant Team	Yes
PATHWAY COLLECTOR: MOBILE HOME PARK ENTRANCE												
Open entrance to mobile home park from Fulton Rd near station entrance						28		$0	$0	Medium • Agreement with property owner required	Consultant Team	Yes
OTHER BIKEWAY CONNECTIONS												
Alameda St		Garey Av	Artesia St	Bike Boulevard	Class III Bicycle Boulevard with signage and traffic calming elements.	38	0%	$7,700	$231,000	Low	Pomona Active Transportation Plan	No Comment Received
Artesia St		Alameda St	Orange Grove Av	Bike Boulevard	Class III Bicycle Boulevard with signage and traffic calming elements.	40	0%	$7,700	$231,000	Low	Pomona Active Transportation Plan	No Comment Received
College Av		American Av	San Bernardino Ave	Bike Boulevard	Class III Bicycle Boulevard with signage and traffic calming elements.	24	0%	$6,275	$188,250	Low	Pomona Active Transportation Plan	No Comment Received
Fairplex Dr		McKinley Ave	Murchison Ave	Bikeway	Class IV Separated Bikeway & Class I Shared-Use Path. Parking/travel lane re-configuration required, or a narrowing of the existing median.	35	0%	$304,750	$6,095,000	Medium • Traffic study required	Pomona Active Transportation Plan	No Comment Received
Foothill Av		West City Limit	Towne Av	Separated Bikeway	Class IV Separated Bikeway. Parking/travel lane re-configuration required, or a narrowing of the existing median.	35	0%	$206,000	$2,472,000	Medium • Traffic study required	Consultant Team	No Comment Received
Grove St		Fulton Rd	Towne Av	Bike Boulevard	New Class III Bicycle Boulevard with signage and traffic calming elements.	38	0%	$27,750	$555,000	Low	Consultant Team	Comment Received
Hamilton Bl		Murchison Av	Mission Bl	Bikeway	Class II Bike Lanes & Class III Bicycle Boulevard in narrower sections. No reconfiguration needed due to wide outside parking lane in most places.	55	0%	$27,925	$167,550	Low	Pomona Active Transportation Plan	No Comment Received
Holt Av		Ridgeway St	Humane Wy	Bike Lane	Class II Bike Lanes. Parking or travel lane re-configuration requirement.	35	0%	$23,400	$35,100	Medium • Traffic study required	Consultant Team	No Comment Received
La Verne Av		Arrow Hwy	Mountain Av	Bike Lane	Class II Bike Lanes. No reconfiguration requirement due to wide outside parking lane in most places.	59	20%	$199,600	$299,400	Low	Pomona Active Transportation Plan	No Comment Received

Table 8-1: First/Last Mile Project List - Pomona North (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	% of project within 1/2-mile of station	Cost Range		Implementation Complexity	Origin	Community Support
								Low	High			
McKinley Av		Fairplex Dr	Towne Av	Bike Lane	Class II Bike Lanes. No reconfiguration required due to wide outside parking lane in most places.	45	0%	$197,000	$295,500	Low	Pomona Active Transportation Plan	No Comment Received
Mills Av		American Av	Holt Av	Separated Bikeway	Class IV Separated Bikeway. Parking/travel lane re-configuration requirement, or a narrowing of the existing median.	30	0%	$293,000	$3,516,000	Medium • Traffic study required	Consultant Team	No Comment Received
Mission Bl		Humane Wy	East City Limit	Separated Bikeway	Class IV Separated Bikeway. Parking/travel lane re-configuration requirement, or a narrowing of the existing median.	50	0%	$989,000	$11,868,000	Medium • Traffic study required	Pomona Active Transportation Plan	No Comment Received
Mountain Av		Arrow Hwy	San Jose Av	Bike Boulevard	Existing Class III bike route with sharrows to a bike boulevard with traffic calming elements and route signage and striping.	28	0%	$ 12,720	$ 381,600	Medium • Requires coordination with Claremont	Consultant Team	No Comment Received
Murchison Av		San Jose Creek	Hamilton Bl	Bike Boulevard	Class III Bicycle Boulevard with signage and traffic calming elements.	20	0%	$4,000	$120,000	Low	Pomona Active Transportation Plan	No Comment Received
Murchison Av		Ridgeway St	Fairplex Dr	Bike Lane	Class II bike lanes fit within the current configuration.	40	0%	$71,400	$107,100	Low	Pomona Active Transportation Plan	No Comment Received
Orange Grove Av		Arrow Hwy	McKinley Av	Bike Lane	Class II Bike Lanes. Parking/travel lane reconfiguration requirement only from La Verne Avenue to Tate Street.	45	0%	$118,000	$177,000	Medium • Traffic study required	Pomona Active Transportation Plan	No Comment Received
Park Av		Artesia St	9th St	Bike Boulevard	Create a Class III Bicycle Boulevard with signage and traffic calming elements.	55	0%	$44,600	$1,338,000	Low	Pomona Active Transportation Plan	No Comment Received
Ridgeway St		Murchison Av	Valley Blvd	Bike Lane	Class II bike lanes fit within the current configuration.	40	0%	$50,000	$75,000	Low	Pomona Active Transportation Plan	No Comment Received
Towne Av		Harrison Av	9th St	Separated Bikeway	Class IV Separated Bikeway. Parking/travel lane re-configuration requirement, or a narrowing of the existing median.	48	0%	$830,000	$9,960,000	Medium • Traffic study required	Metro ATSP Corridor	No Comment Received
Via Verde		West City Limit	Fairplex Dr	Bike Boulevard	Create a Class III Bicycle Boulevard with signage and traffic calming elements.	15	0%	$6,850	$205,500	Low	Consultant Team	No Comment Received
White Av		Munster St	Orange Grove Av	Bikeway	Class II Bike Lanes, IV Separated Bikeway. Parking/travel lane re-configuration requirement, or a narrowing of the existing median.	49	7%	$160,200	$4,806,000	Medium • Traffic study required	Consultant Team	No Comment Received

Table 8-2. Prioritized Project List - Linear Projects - Pomona North

Rank	Street	From	To	Type	Prioritization Score
1	Bonita Av	Fulton Rd	Carnegie Av	Separated Bikeway	60
T2	Garey Av	Bonita Av	Arrow Hwy	Sidewalk Lighting	59
T2	Garey Av	White Oak Dr	Alameda St	Bikeway	59
T2	La Verne Av	Arrow Hwy	Mountain Av	Bike Lane	59
T5	Thompson Creek/ Fulton Rd	Garey Av	White Av	Bikeway	55
T5	Hamilton Bl	Murchison Av	Mission Bl	Bikeway	55
T5	Park Av	Artesia St	9th St	Bike Boulevard	55
T8	Garey Av	Bonita Av	Arrow Hwy	New/Improved Sidewalks	54
T8	Bonita Av	Fulton Rd	Garey Av	Sidewalk Lighting	54
T10	Garey Av	Harrison Av	Bonita Av	Sidewalk Lighting	52
T10	Bonita Av	Garey Av	Melbourne Av	Street Trees	52

Table 8-3. Prioritized Project List - Point Projects - Pomona North

Rank	Street A	Street B	Type	Prioritization Score
1	Garey Av	Arrow Hwy	New/Improved Crossings	44
T2	Fulton Rd	Arrow Hwy	New/Improved Crossings	42
T2	Arrow Hwy	Amberson St	New/Improved Crossings	42
T2	Harrison Av	Garey Av	New/Improved Crossings	42
5	Garey Av	Bonita Av	New/Improved Crossings	41
T6	Garey Av	RR Track	New/Improved Crossings	39
T6	Garey Av	RR Track	Enhanced/New Bus Stop	39
T8	Fulton Rd	La Verne Av	New/Improved Crossings	37
T8	Foothill Bl	Thompson Creek	New/Improved Crossings	37
10	Fulton Rd	Bonita Av	New/Improved Crossings	36

Pathways and Projects

The following sections describe the recommended improvements to pathways within one-half mile of the future station in Pomona.

Station Amenities and Entrances

Figure 8-6 shows the Construction Authority's plan for station construction. The Pomona North Gold Line station platform will be located slightly northeast of the existing Pomona (North) Metrolink station platform, near the corner of Santa Fe Street and Supply Street. The Metro and Metrolink stations will share connections to the adjoining street system, with a pedestrian walkway planned to connect through the parking lot to Garey Avenue to the east, vehicular and pedestrian entries from Santa Fe Street just east of the intersection with Supply Street, and a vehicular entrance from Fulton Road. Metrolink's station parking footprint will be modified, and Metro parking may be provided either just north of the station, off of Garey Avenue, or just south of the station, just west of Supply Street. At the time that the Foothill Extension 2B is completed to Claremont, an overpass will be built over Garey Avenue.

Community engagement events results showed interest in the ability of the station environs to handle different FLM access modes and resulted in the following principles for station entrance design.

> Security and cleanliness are major concerns in the station area due to its relatively isolated location. Station areas need to be well lit, secure, and activated.

> Bus connections are extremely important, as a high percentage of people are projected to arrive at the station by bus. If the station serves as a temporary terminus, bus to rail transfer activity may increase further. If the Foothill Transit bus lines currently run on Bonita Avenue, Garey Avenue and Arrow Highway. It is uncertain at this time whether any routes will be modified due to the new station or due to its potential temporary terminus status; however, Figure 8-7 shows preferred areas for new bus stops or enhancement of existing bus stops, as evaluated from a perspective of Gold Line access only.

> Fulton Road and the proposed future Thompson Creek Path (see "Thompson Creek: Pathway Arterial" below) were identified as key FLM access routes to the station. Therefore, a station entrance (from Fulton Road) for pedestrians and cyclists is important.

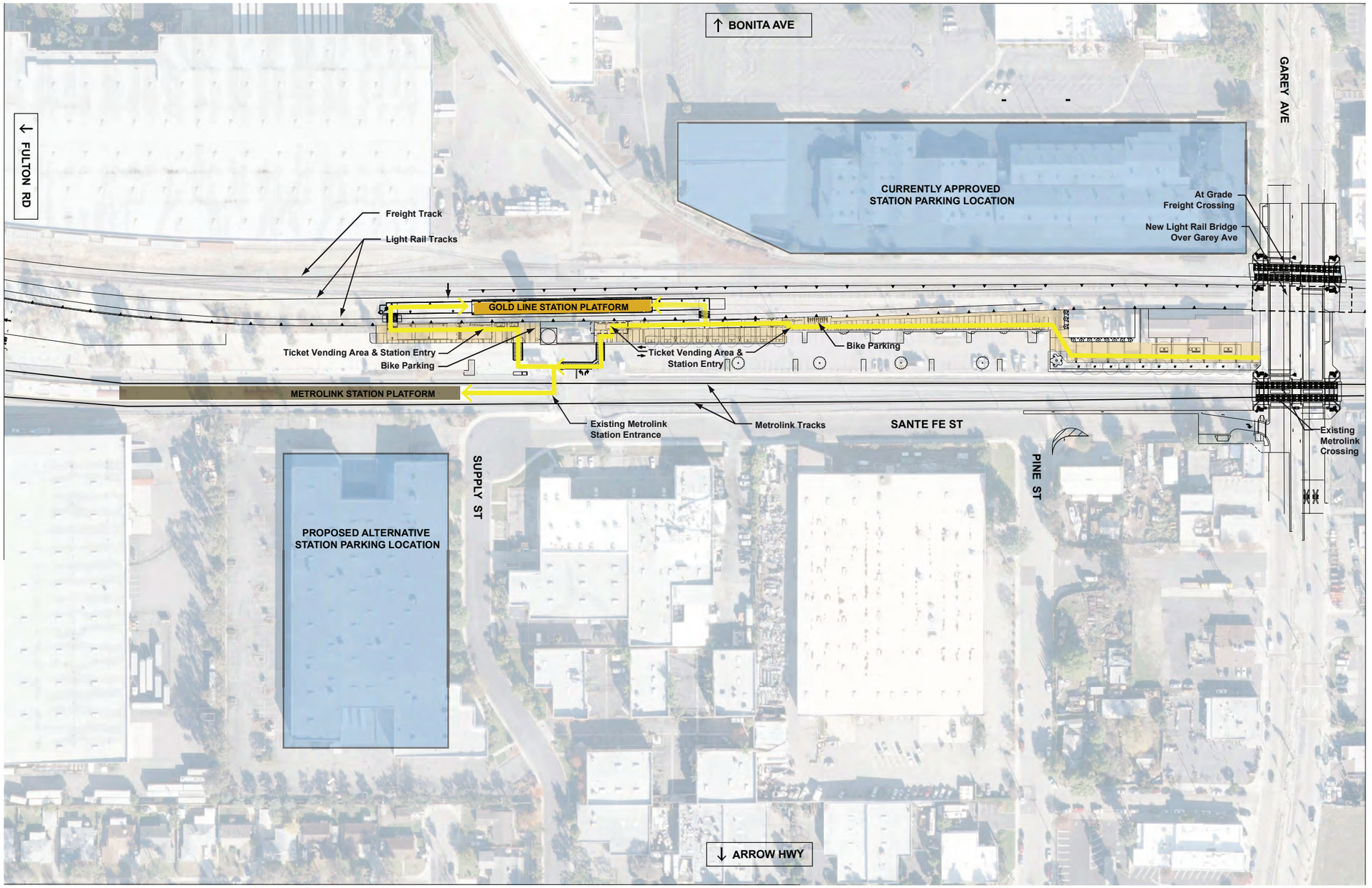
> Cyclists voiced concern about leaving bicycles in the open at the station and thought that bringing a bicycle on the Gold Line may be impractical given the travel time to Downtown Los Angeles of approximately one hour. The Construction Authority is planning to address this issue by placing 64 secured bike racks within a bike hub at the station.

> Fuller Seminary, Cal Poly Pomona and Fairplex, among other large institutions in the City of Pomona, may all run shuttles to this station. As described in Chapter 3 (Regional Recommendations), consolidation of shuttles is encouraged. Sufficient space would be provided for shuttle bus loading and passenger waiting at pick up/drop off zones.

> Many community engagement participants envisioned accessing the station by automobile, either parking at the station or being dropped off. Pick up/drop off facilities can be designed for high and increasing usage as the station serves as a temporary terminus station and ridehailing continues to gain popularity.

Figure 8-7. Alternative potential locations for bus stops serving northbound-southbound buses, numbered in order of desirability.

Pomona Station Site Plan (Fig 8-6)



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Foothill Gold Line

East Station Entrance and Garey Avenue Crossing

The Construction Authority is planning to build a walkway connecting the station platform to Garey Avenue. Lighting, public art, shade and maintenance are all key along this walkway. Through its design, it can also accommodate bicycles.

Community members felt that one of the best methods to ensure a safe environment along this entrance path to the station was to place an active land use along it. In particular, the repurposing of the historic Santa Fe Depot as a café and/or bike hub was suggested.

Community engagement participants also felt very strongly that a new signalized crossing was needed at Garey Avenue and the railroad tracks. This new crossing would serve northbound cyclists and bus riders, as well as the existing offices and retail uses on the east side of Garey Avenue. The preferred location for this is between the Metrolink tracks and the freight and Gold Line tracks with northbound and southbound vehicles stopping outside of the tracks on red lights.

Concerns have been raised by rail construction and operations personnel that the crosswalk not be located near the Gold Line overpass and freight rail at-grade crossing due to visibility issues. However, signalizing this crosswalk would decrease potential conflicts greatly. Furthermore, due to the current uncertainty in funding, there is a chance that the overcrossing of Garey Avenue will not be built before the Gold Line opens to Pomona. In that case, the visibility conflict would be nonexistent, and the crosswalk could be implemented as a temporary measure. Figure 8-8 presents a concept for the east station entrance and crossing based on this temporary assumption.

The BART aerial crossing at Marina Boulevard in San Leandro, CA mimics the proposed Garey Avenue crosswalk, with at-grade freight rail, aerial light rail and a crosswalk in close proximity.

Source: Google Maps Street View

Existing

Future Concept

Figure 8-8. Proposed Character - East Station Entrance and Garey Avenue Crossing. Westbound view between Metrolink ROW and freight ROW.

West Station Entrance to Fulton Road/Thompson Creek

A shared use path can also be extended from the platform to the station's west entrance at Fulton Road. Similar to the east entrance, this entrance must be well lit, secure and maintained. Space can be obtained for the shared use path by modifying the parking lot arrangement from diagonal parking with a median to standard perpendicular parking. Figure 8-9 illustrates the recommended concept for this connection.

Pathway Arterial: Supply Street

Supply Street, Stare Street and Amberson Street connect Arrow Highway to the south station entrance on Santa Fe Street, where a new station parking facility may be constructed. Community members expressed that it would be a likely station access route. Since it is a private street, any potential improvements would need to be coordinated with property owners. It is recommended that the City, Construction Authority and property owners engage in discussion about multimodal station access improvements. Appropriate FLM improvements may include filling in sidewalk gaps, planting street trees and adding pedestrian lighting.

Signalization of the intersection of Amberson Street and Arrow Highway should be considered for two reasons: first, to provide a pedestrian crossing serving properties south of Arrow Highway and eastbound bus stops, and second, to serve vehicular pick up/drop off and shuttle traffic that may emerge from the station at this point.

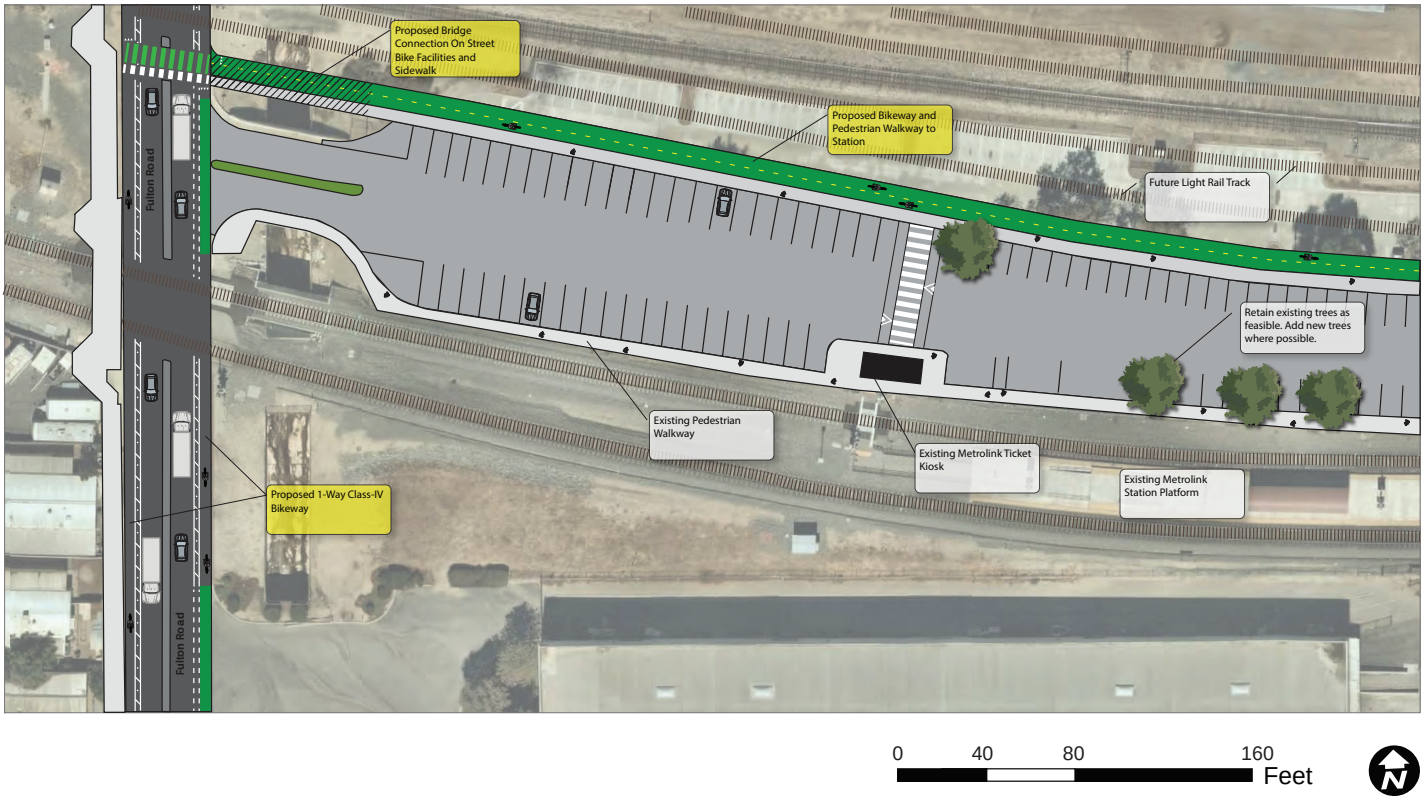


Figure 8-9. West Station Entrance Concept Plan

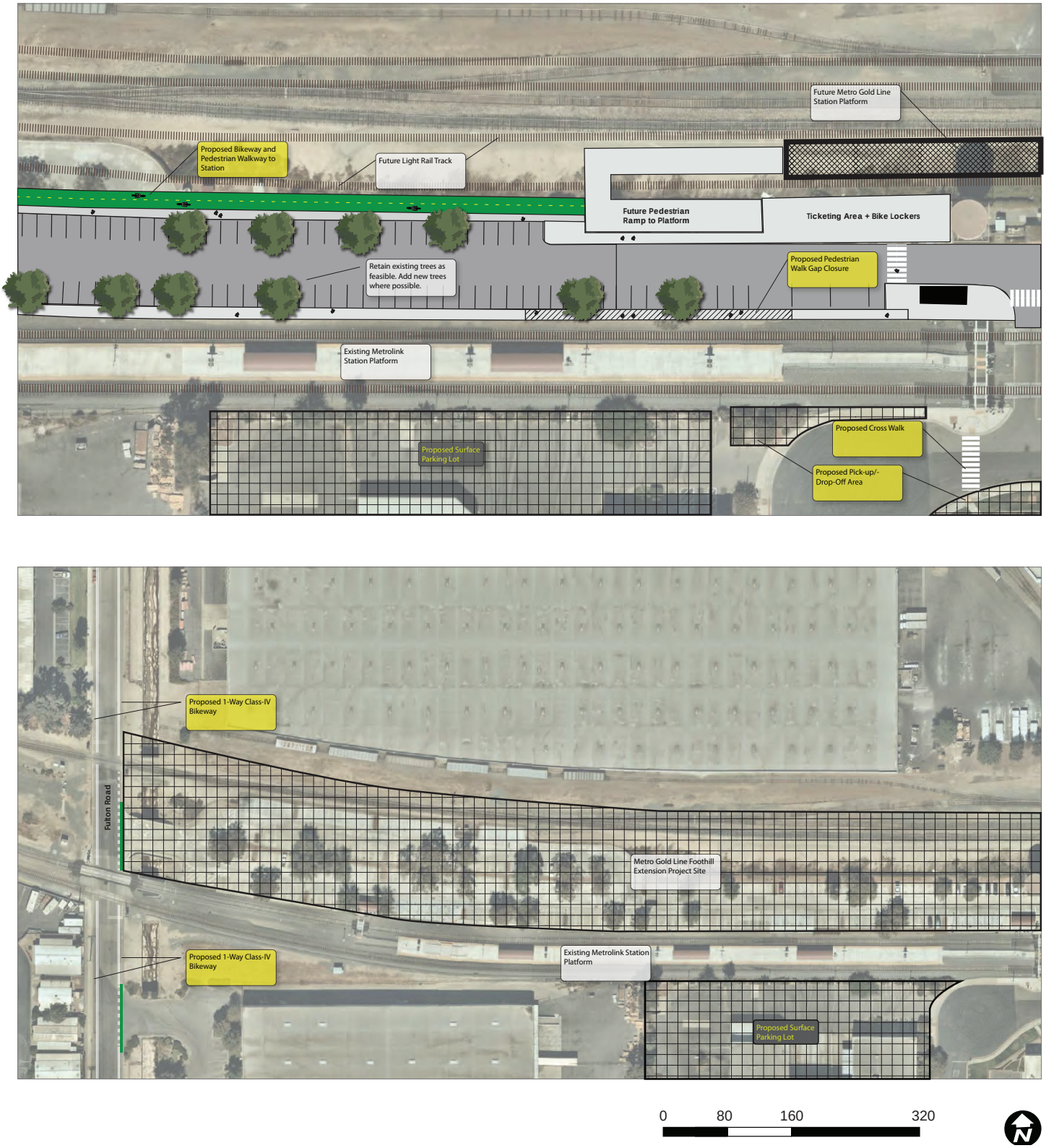


Figure 8-9. West Station Entrance Concept Plan (Cont.)

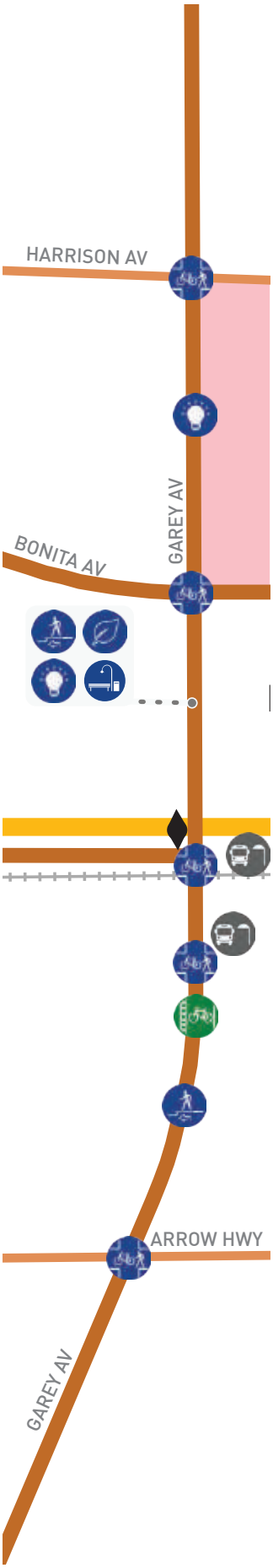
Pathway Arterial: Garey Avenue

Garey Avenue is one of the City of Pomona's most important streets. It connects the station area, Pomona Valley Hospital, the future Fuller Seminary and Downtown Pomona. Many participants in community engagement activities indicated that they would take Garey Avenue, whether on foot, by bike or by bus, to access the station.

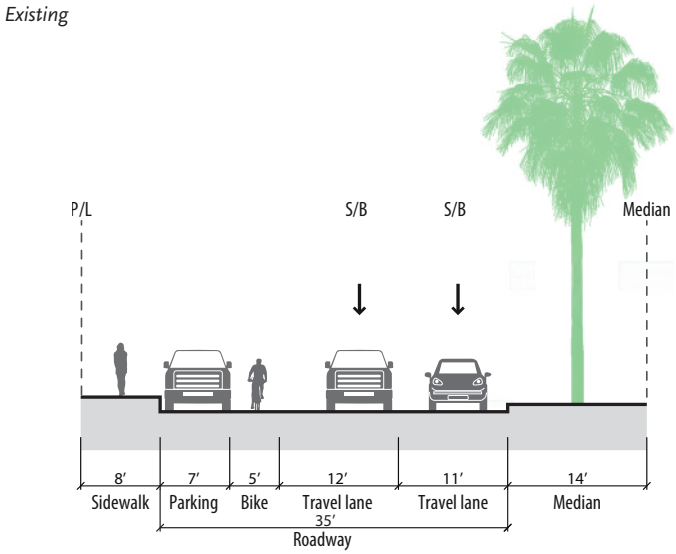
Community walk audits revealed that a recent streetscape improvement project on Garey Avenue had improved the aesthetics of the corridor and added a bike facility, but that both the pedestrian and the bicycle environment retained significant barriers. The bike lane is located in the door zone, sandwiched between parked cars and very fast-moving cars in the second travel lane. It disappears at intersections. There is still a lack of shade trees along the corridor, and not all curb cuts meet ADA requirements.

Community engagement showed strong support for the idea of converting the existing bike lane into a separated bikeway. On-street parking can be retained where necessary, but may be removed where possible. The pedestrian environment can be improved by a combination of ADA spot fixes and comprehensive sidewalk improvements, including sidewalk widening, pedestrian lighting and street furniture, imposed as conditions of development. The planting of new shade trees may be implemented with development or, preferably, in the short-term by the City along the entire corridor. Figure 8-10 gives the existing and proposed cross-sections with and without on-street parking.

The existing bike lane on Garey Avenue is uncomfortable, leading to low usage.



Existing



Proposed

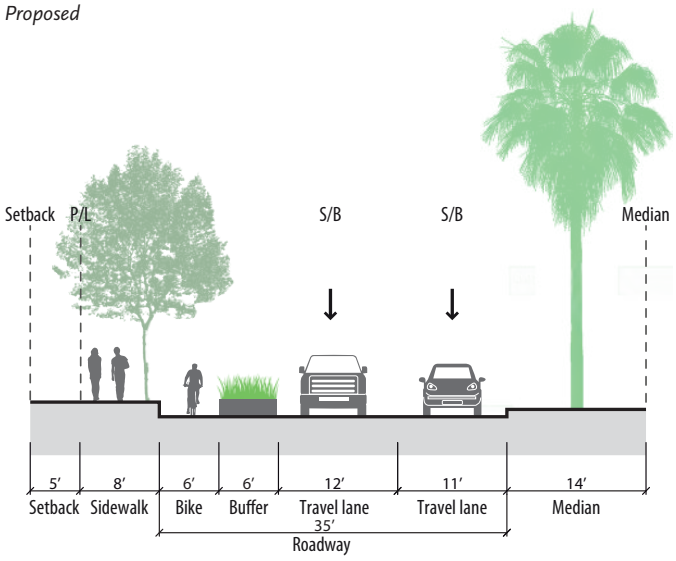


Figure 8-10. Typical Cross-Section for Garey Avenue

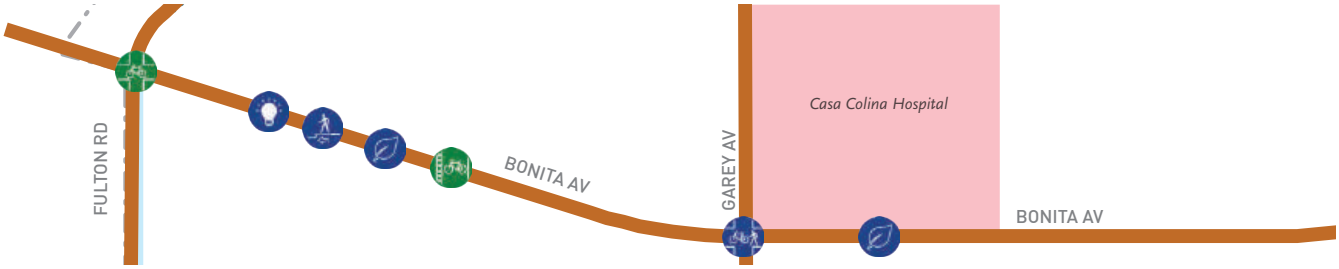
Figure 8-11 presents a future vision of the corner of Garey Avenue and Arrow Highway with pedestrian improvements, an improved bikeway and gateway signage and development signaling the beginning of the station area.

Existing

Future Concept

Figure 8-11. Proposed Character - Garey Avenue and Arrow Highway Intersection

Pathway Arterial: Bonita Avenue



Bonita Avenue is part of the Citrus Regional Bikeway and is prioritized as a pathway arterial along its length between San Dimas and Claremont. However, the land uses within the station area are not pedestrian-friendly, and sidewalks are missing in portions. Zoning is in place to transition the industrial areas on either side of the street to transit-oriented mixed-use, which may present opportunities to address sidewalk and pedestrian amenity deficiencies.

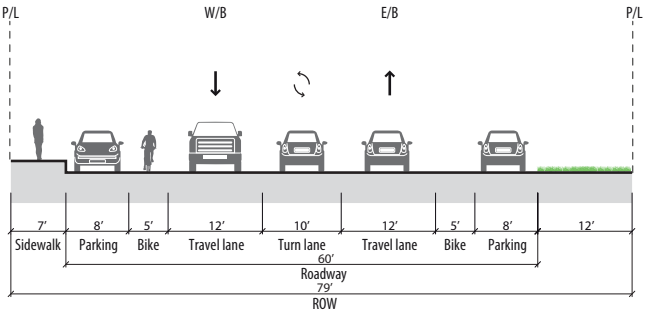
A proposed cross-section to convert the existing bike lane into a separated bikeway is presented in Figure 8-12. The proposed cross-section would create a buffer space that could be used for planters, swales, bus stop islands, and mid-block crossing curb extensions; separated bike lanes can also be made wide enough for "conversation lanes" (bike lanes that allow for riding two abreast). On-street parking is currently underutilized and can be eliminated.

Portions of Bonita Avenue lack sidewalks.

The space gained by eliminating on-street parking can be used for bus bulbs, parklets, planter boxes, trees or swales.

There was significant interest from the community to create a new cut-through from the station to Bonita Avenue through the middle of the block between Fulton Road and Garey Avenue; however, the cut-through was deemed infeasible at this time because of the need to create a grade-separated crossing of the freight rail line just north of the Gold Line and the need to assemble parcels to create a continuous cut-through.

Existing



Proposed

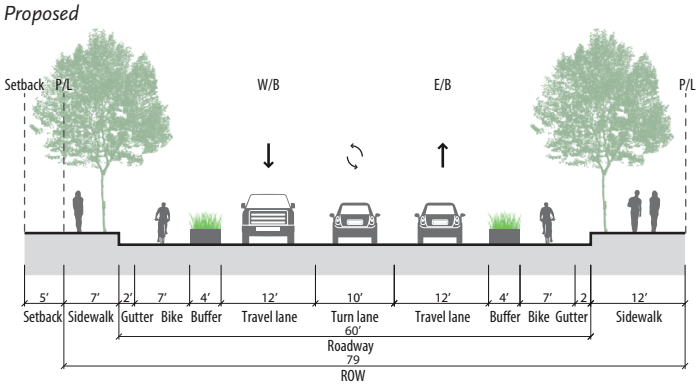


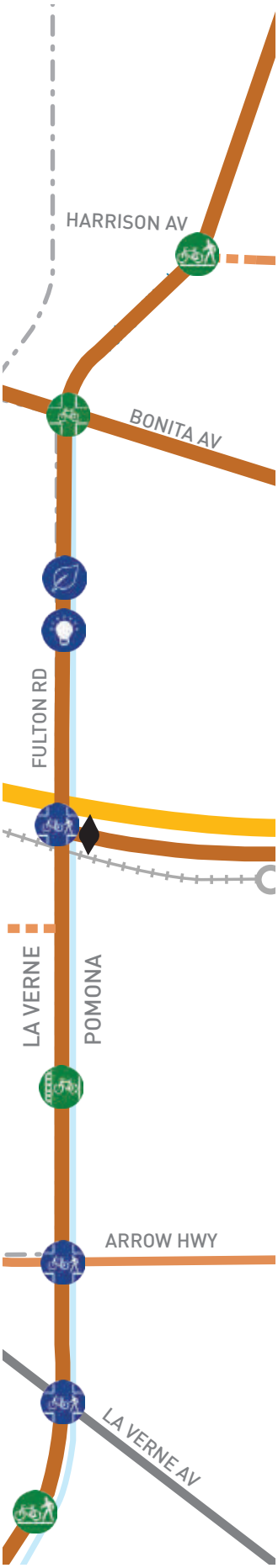
Figure 8-12. Typical Cross-Section for Bonita Avenue

Pathway Arterial: Thompson Creek/Fulton Road

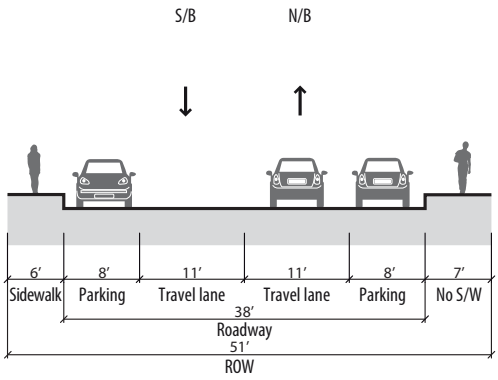
Thompson Creek, also known as Fulton Wash, runs northeast to southwest from the foothills of Claremont to Ganesha Park in Pomona, where it empties into San Jose Creek, a waterway that passes Cal Poly Pomona on its way to the San Gabriel River. There is an existing shared use path along the Claremont portion of the creek. Meanwhile, Pomona has applied for design funding for a shared use path along its portion of San Jose Creek. Filling in the Pomona section of Thompson Creek with a pedestrian/bicycle shared use path would create an approximately ten-mile bikeway feeding riders to the Pomona North Gold Line station from north and south. This would also be an important first/last mile connection to Fairplex, which is approximately one mile south along the path. This connection is conceptually illustrated in Figure 8-14.

Between Bonita Avenue and Arrow Highway, the Thompson Creek path would continue as an unidirectional separated bikeway on each side of Fulton Road, as is shown in Figure 8-13. This would avoid the creation of a new grade crossing and gates for cyclists traveling on Thompson Creek. It would, however, eliminate parking from both sides of the street, unless the roadway could be widened into the dirt area on the east side of the street.

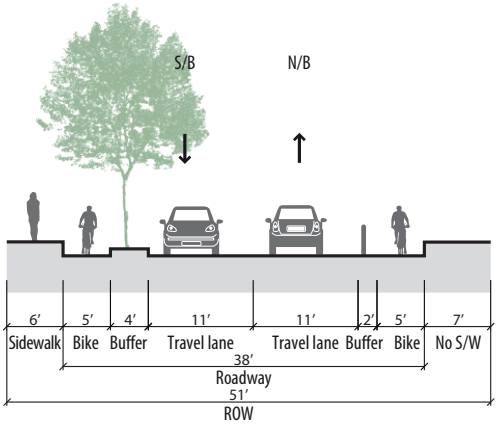
Participants at community outreach events signaled that many chose Fulton Road as their preferred north-south bike route, connecting from Bonita Avenue or La Verne Avenue. These improvements would decrease the level of stress for these riders.



Existing



Proposed



Proposed with Parking (>100 ft. distance from rail ROWs)

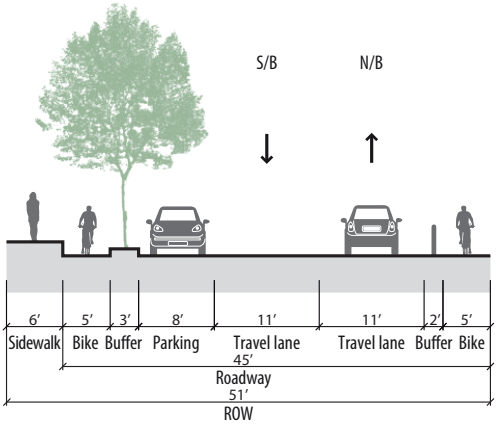


Figure 8-13. Typical Cross-Section for Fulton Road, Bonita Av to Arrow Hwy.

Existing

Future Concept

Figure 8-14. Proposed Character - Thompson Creek Shared Use Path, southbound view south of La Verne Avenue.

Pathway Collector: Arrow Highway

The Pomona North station area is the portion of Arrow Highway with the lowest traffic volumes in the FLM Plan area. Volumes were as low as 11,700 daily vehicles in 2013; the street varies between four and six travel lanes.

Due to these travel characteristics, an opportunity to reduce the width of the street was identified. Members of the community were receptive to the idea, but at the same time cautioned against making any changes to the roadway without regional coordination. Because other communities expressed hesitation toward vehicular capacity reduction on Arrow Highway, the street was classified as a pathway collector in Pomona, with no change to the roadway cross-section. Tree planting, widening of sidewalks with development, and spot fixes to sidewalks can be pursued along with the crossing improvements described previously (see Garey Avenue, Supply Street and Thompson Creek).

Pathway Collector: Harrison Avenue

Harrison Avenue was identified as a good candidate for a bike boulevard in both Pomona and Claremont. Like other residential pathway collectors throughout the FLM Plan cities, the following projects are recommended:

> The creation of bicycle boulevards. Bicycle boulevards on these roads likely need to involve more than placing bike route signage and painting sharrows. Additional traffic calming measures will likely need to be implemented in order to reduce operating speeds to a maximum of 25 miles per hour and keeping Average Daily Trips below 3,000 vehicles. A specific study would be required to identify the appropriate types of traffic calming for each street.

> Friendly crossings of major roadways for cyclists and pedestrians.

> Filling in sidewalk gaps.

> Addressing deficient curb ramps and driveway crossings.

> Pedestrian lighting in key locations. Low, bollard-style lighting was suggested by walk audit participants in order to preserve the “dark sky” while improving pedestrian safety.

Future Pathways

The pathways described above form the backbone of the FLM access network under an assumption of the general continuity of existing land uses, with some changes allowing for improvements to be made to existing streets. However, it is also important that the City capitalize on the opportunity presented by expected future land use change to create a more pedestrian-friendly street grid and finer-grained pathway network.

In the first stages of transit-oriented development in the station area the City’s existing regulatory tools did not lay the framework for a continuous publicly-accessible street grid. A process of amendment of the Pomona Corridors Specific Plan is recommended to define a fuller desired future network of FLM pathways and public spaces and put into place appropriate development standards that ensure that future development contributes to the network.

A bike boulevard on 3rd Street will require traffic calming measures to keep vehicular speeds low.

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9. Claremont Station Package

This chapter presents the Station Package for the future Claremont Station, which will be situated at the location of the current Metrolink station behind the historic Santa Fe Depot adjacent to the Claremont Village. This chapter describes the results of the FLM planning process described in Chapter 2 for the station area.

Existing Conditions and Walk Audit Summary

Figure 9-1 presents a summary of existing conditions and walk audit results, highlighting primary strengths, barriers, ideas and issues raised during the initial stages of the planning process for the Claremont station area.

Summary of Comments

In Claremont, 10 community events were held, engaging approximately 395 people and yielding approximately 775 discrete comments. Figure 9-2 summarizes the comments received about different pathways, streets and districts in the station area from community engagement activities.

Pathway Network and Projects

Figure 9-3 graphically depicts the pathway network and projects for Claremont Station. These pathways and projects are described in the Project List (Table 9-1) and in the narrative and graphic description beginning on page 163.

Watson Drive is a community-desired pathway; however, it is located on private property and further coordination with the property owner would be needed for any enhancements.

Origin of Project Types

Figure 9-4 traces each project type to its origin within the FLM planning process among one of four categories:

> Existing Plan – projects identified by:

- the Construction Authority's May 30, 2018 30% design documents
- Metro's Active Transportation Strategic Plan
- the list of First/Last Mile projects submitted to the San Gabriel Valley Council of Governments (SGVCOG) for funding consideration under the Measure M Subregional Funds.

Claremont Station will be located behind the historic Santa Fe Depot at the current location of the city's Metrolink station.

> City Staff/Consultant Team – projects identified by City staff or the Metro consultant team

> Walk Audit – projects that directly address barriers identified during the walk audit, are based on ideas posited at the walk audit, or that directly address comments generated during the walk audit debriefing session.

> Engagement Events – projects that emerged as ideas during community engagement events, including stakeholder interviews, pop-up events and focus groups.

Also noted on this map are projects for which additional outreach is recommended for one of the following reasons:

> No Comments Received – projects on which specific public input was not registered, either because they emerged late in the planning process, or because community event discussion focused elsewhere.

> Some Reservations Expressed – projects that garnered a mixed reaction during community engagement, or which would benefit from further conceptual design to address reservations expressed with aspects of these projects during the planning process.

Three-Mile Connections

Figure 9-5 presents the first/last mile connections for Claremont Station. The FLM Bicycle Connections shows existing, planned and new FLM proposed bikeways within a three-mile radius of the station. New proposed bikeways consist of the following:

> The extension of pathway arterials from the pathway network (1/2 mile radius) map

> Connections to the San Gabriel Valley Regional Greenway Network

> Regional gap closures

> Upgrades of existing or planned facilities based on our Principles for Project Type Selection and Design (Table 2-1)

> Additional connections to pathway arterials.

Locations where new/improved crossings are needed to serve these bikeways are also noted in Figure 9-5.

Project List

The project list for Claremont Station is shown in Table 9-1. Information given in the project list consists of:

> Location: streets and extents

> Type – categorization of the project into the types described in Chapter 1 (pages 3-6)

> Description – characterization of project elements

> Prioritization Score – score of the project based on the methodology defined in Chapter 2 (pages 17 and 18)

> Percent within ½ mile radius – percent of the project area within ½ mile of the station platform

> Cost Range – gives a range of costs that projects of this type and size generally fall into. Often there is a wide range of costs because of the variety of implementation options for similar projects.

> Implementation Complexity – level of complexity determined through the methodology described in Chapter 4 (Table 4-3), with key considerations enumerated

> Origin – where the project was first identified within the FLM planning process

> Community Support – categorizes if the project received community support during the FLM Plan's engagement process. See Chapter 4 for more information.

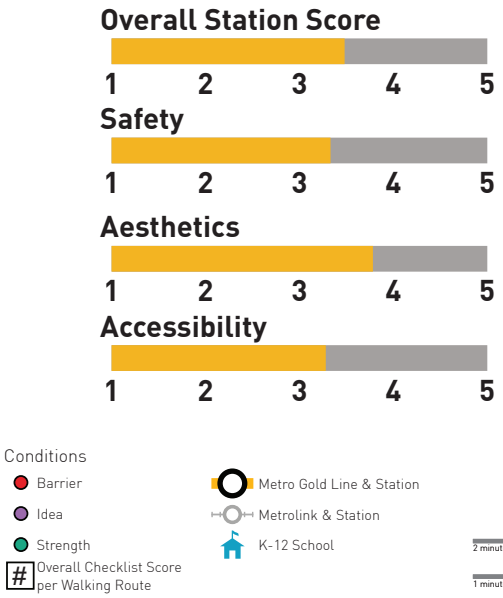
Prioritized Projects

Tables 9-2 and 9-3 show the ten highest prioritized linear and point projects, respectively, within the Claremont station area. Projects that require property redevelopment are not included, nor are projects which are already planned to be implemented by the Construction Authority. Projects which are recommended to be implemented through conditions of development but may be implemented through other means remain in the list. Bikeways are listed as one project, though their facility type may change along the corridor length. The prioritization methodology is described in more detail in Chapter 2 (pages 17 and 18).

In the event that construction of the Gold Line to Claremont is delayed, a higher priority may be considered for the projects that link Claremont and Pomona, principally the bikeway improvement on Bonita Avenue. This would be the primary active transportation connection for Claremont residents to access the Gold Line.

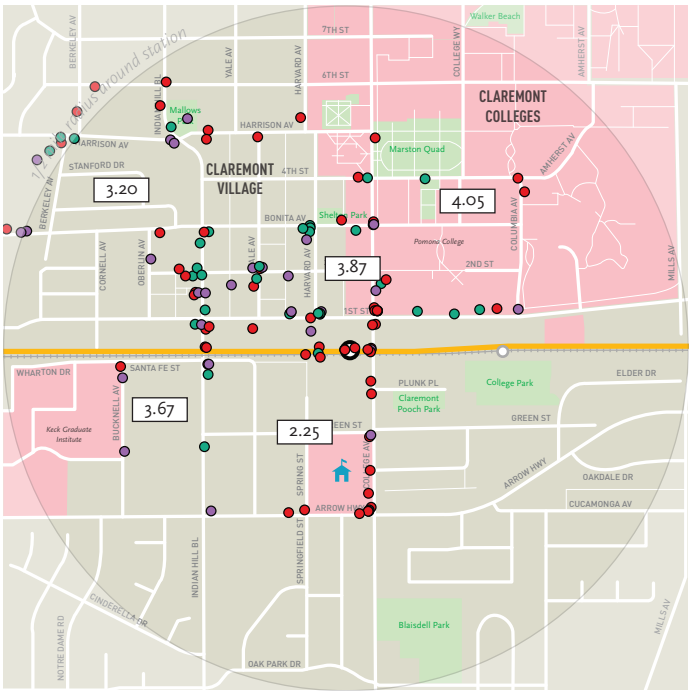
Figure 9-1: Walk Audit and Existing Conditions.

CHECKLIST RESULTS



Walk Audit Conditions

Claremont



STRENGTH:

> Good sidewalks, green infrastructure and shade north of station

BARRIER:

> Lack of facilities for active modes on Indian Hill Boulevard and connecting southwest of station

STRENGTH:

> Well-marked bicycle facilities

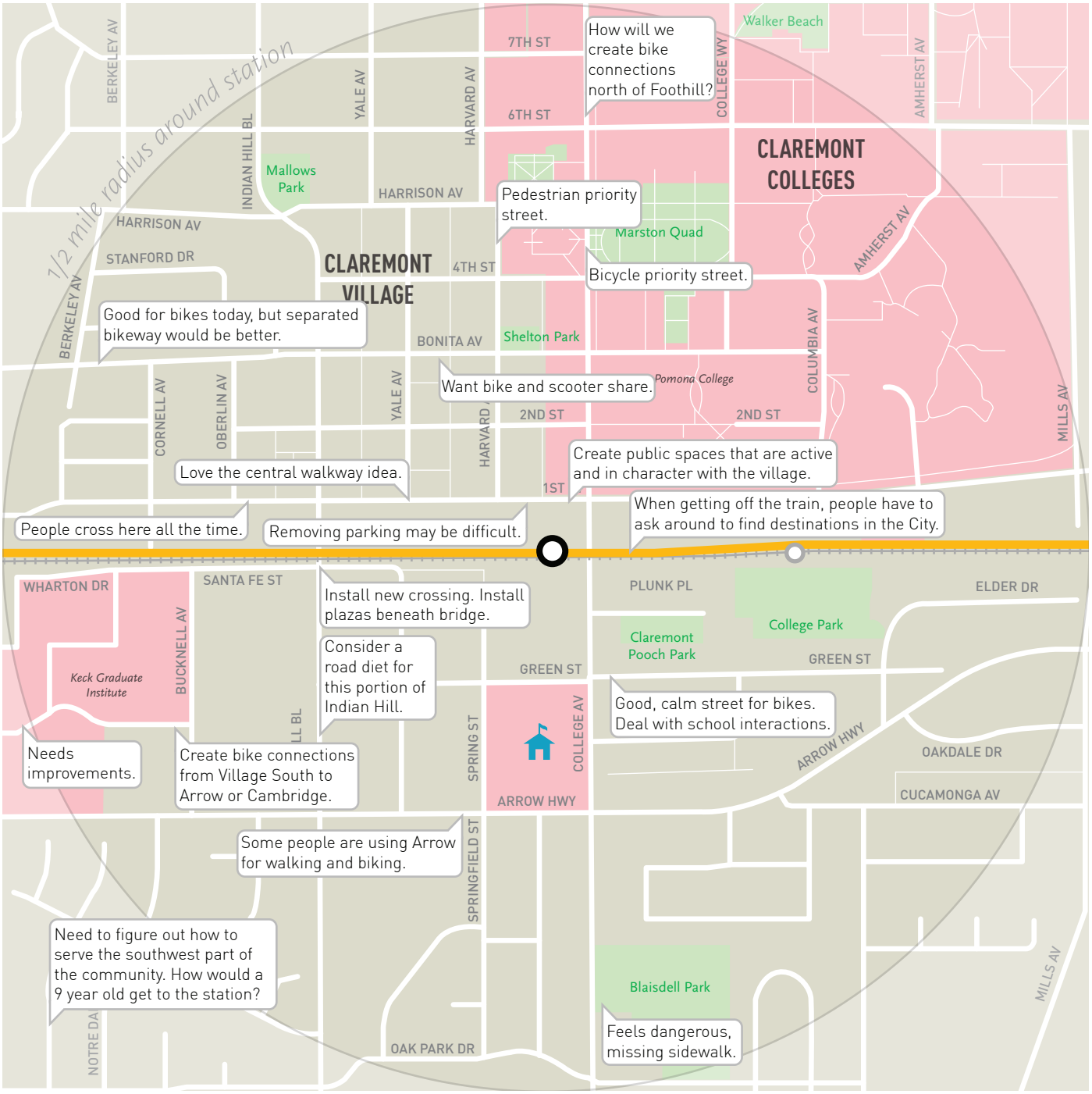
IDEA:

> Desire for 1st St, station entrance and historic depot area to:

- Provide an intuitive and visual Metro-Village connection
- Activate the lawn/plaza and renovated building's facades
- Accommodate and reorganize street for increased bicycle, pedestrian, pick up/drop off and bus activity

Figure 9-2: Community Engagement Comments

Claremont



Legend

- Metro Gold Line & Station
- Metrolink & Station
- K-12 School

N

2 minute walk (480')

1 minute bike (880')

Figure 9-3: Pathway Network and Project Ideas

Claremont

Pathway Network & Project Types

- New/Improved Sidewalks
- New/Improved Crossings
- Walkway/Shared Street
- Plaza
- Street Trees
- Sidewalk Lighting
- Street Furniture
- Pick Up/Drop Off
- Enhanced/New Bus Stop
- Shared Use Path
- Bike Lane
- Bike Boulevard
- Separated Bikeway
- Bike Parking/Bike Share
- K-12 School
- Pathway Arterial
- Pathway Arterial Cut-Through
- Pathway Collector
- Pathway Collector Cut-Through
- Community-Identified Pathway on Private Property Further Coordination Required
- Station Entrances (Point to Direction of Exit)
- Metro Gold Line & Station
- Metrolink & Station

N

2 minute walk (480')

1 minute bike (880')

Figure 9-4: Origin of Project Types

Claremont

Pathway Network & Project Types

- New/Improved Sidewalks
- New/Improved Crossings
- Walkway/Shared Street
- Plaza
- Street Trees
- Sidewalk Lighting
- Street Furniture
- Pick Up/Drop Off
- Enhanced/New Bus Stop
- Shared Use Path
- Bike Lane
- Bike Boulevard
- Separated Bikeway
- Bike Parking/Bike Share
- K-12 School
- Pathway Arterial
- Pathway Arterial Cut-Through
- Pathway Collector
- Pathway Collector Cut-Through
- Community-Identified Pathway on Private Property Further Coordination Required
- Station Entrances (Point to Direction of Exit)
- Metro Gold Line & Station
- Metrolink & Station

Identified by/at

- Existing Plan
- City Staff/Consultant Team
- Walk Audit
- Engagement Events
- No Comment Received
- Some Reservations Expressed

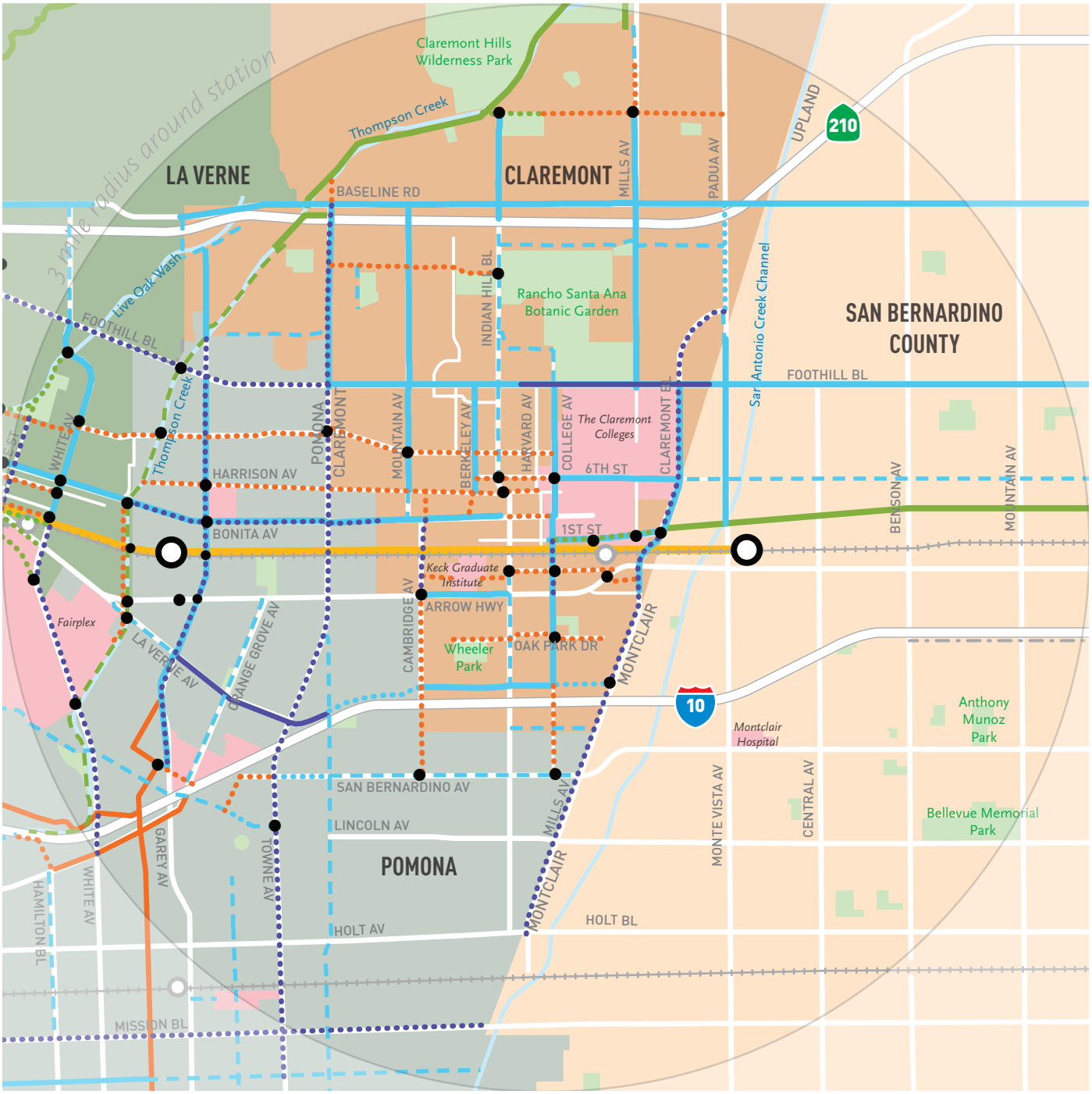
N

2 minute walk (480')

1 minute bike (880')

Figure 9-5: Three-Mile Connections

Claremont: Existing, Planned and Proposed*



Facility Type

- Shared Use Path
- Bike Lane
- Bike Boulevard
- Separated Bikeway
- Proposed New/Improved Crossings

Facility Status

- Existing/Funded Bikeways
- City or Regional Plan Bikeways
- FLM Proposed Bikeways

Rapid Transit

- Metro Gold Line & Station
- Metrolink & Station

N

*Due to the process for identifying proposed facilities, further public input should be sought on proposed bikeways if selected for implementation.

5 minute bike (4,400')

Table 9-1: First/Last Mile Project List - Claremont

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range		Implementation Complexity	Origin	Community Support
								Low	High			
PATHWAY ARTERIAL: COLLEGE AV												
College Av	6th St			New/Improved Crossings	Bulbout modifications for bike lane through movement.	46	100%	$ 50,000	$ 250,000	Low	Consultant Team	No Comment Received
College Av	1st St			New/Improved Crossings	New signalized intersection	51	100%	$ 100,000	$ 500,000	Low • Planned by GLCA	Consultant Team	No Comment Received
College Av		1st St	Arrow Hwy	New/Improved Sidewalks	New ADA-compliant sidewalk in conjunction with Class IV separated bikeway. Parking removal: both sides - 1st St to Plunk Pl, east side - Plunk Pl to Arrow Hwy. Utility undergrounding recommended.	62	100%	$ 1,800,000 *	$ 3,360,000 *	High • Curb and gutter replacement • CPUC grade crossing modification required	Walk Audit	Yes
College Av		1st St	Arrow Hwy	Street Trees	Street trees to be planted in new parkway constructed with new sidewalk. Ensure tree cover north to 1st St.	42	100%	$ 1,800,000 *	$ 3,360,000 *	High • Curb and gutter replacement • CPUC grade crossing modification required	Walk Audit	Yes
College Av		1st St	Arrow Hwy	Sidewalk Lighting	Pedestrian-scaled lighting in new parkway constructed with new sidewalk. Ensure adequate lighting north to 1st St.	62	100%	$ 1,800,000 *	$ 3,360,000 *	High • Curb and gutter replacement • CPUC grade crossing modification required	Walk Audit	Yes
College Av	Green St			New/Improved Crossings	New signal and intersection upgrades with appropriate protections for separated bike lane. New loop detectors for bicycles.	54	100%	$ 400,000	$ 700,000	Low	City Measure M Subregional Matrix Grant Request	Yes
College Av	Arrow Hwy			New/Improved Crossings	Intersection upgrades with appropriate protections for separated bikeway, and new bicycle loop detectors.	56	100%	$ 400,000	$ 500,000	Low	Walk Audit	Yes
College Av	Blaisdell Park	San Jose Av		Sidewalk Lighting	New lighting to intersection and nearby sidewalks.	46	100%	$ 3,000	$ 90,000	Low	Engagement Events	Yes
College Av	Blaisdell Park	San Jose Av		New/Improved Sidewalks	Sidewalk gap closure and ADA standards.	41	100%	$ 21,250	$ 37,500	Medium • Additional ROW to be acquired	Engagement Events	Yes
College Av		Foothill Bl	American Av	Bikeway	Project segments below	62	52%	$ 2,868,775	$ 5,198,250			
		6th St	Bonita Av	Bike Lane	Gap closure in bike lane between Bonita Av and 6th Street. Street widening, parking relocation in between existing trees in parkway. If not possible, potential traffic calming and signage elements to make this corridor bike-friendly.	56	100%	$ 1,000,000	$ 1,200,000	Medium • Curb and gutter replacement	City Measure M Subregional Matrix Grant Request	Yes
		1st St	Arrow Hwy	Separated Bikeway	Class IV separated bikeway, raised to curb level, in conjunction with new ADA-compliant sidewalk.	62	100%	$ 1,800,000 *	$ 3,360,000 *	High • Curb and gutter replacement • CPUC grade crossing modification required	Walk Audit	Yes
		Arrow Hwy	San Jose Av	Bike Lane	Option 1. Existing shared parking/bike lane enhacements by prohibiting parking on both sides.	51	51%	$ 50,000	$ 75,000	High • Traffic or parking study required • Extensive public outreach required	Walk Audit	No Comment Received
		Arrow Hwy	San Bernardino Fwy	Bike Boulevard	Option 2. Traffic calming strategies for vehicular traffic reduction on College Av and new bike boulevard with Sharrows.	56	43%	$ 14,650	$ 439,500	High • Traffic or parking study required • Extensive public outreach required	Walk Audit	No Comment Received
		San Bernardino Fwy	American Av	Bike Boulevard	New traffic calming elements and route signage and striping	32	0%	$ 4,125	$ 123,750	Low	Consultant Team	Yes

**The cost ranges for these project types represent the sum of estimated costs for the project types noted, as they are likely to be implemented together. The low and high ends of the range reflect cost estimates without and with utility undergrounding, respectively.*

Table 9-1: First/Last Mile Project List - Claremont (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range		Implementation Complexity	Origin	Community Support
								Low	High			
PATHWAY ARTERIAL: HARVARD AV												
Harvard Av	1st St			New/Improved Crossings	Speed table crossing connecting across both sides of 1st St and to median.	57	100%	$ 200,000	$ 500,000	Medium • Extensive design consideration required	Consultant Team	Yes
Harvard Av		1st St	Gold Line Station	Pedestrian Street/Walkway	New prominent, intuitive walkway leading to station with harmonious relationships to Depot Plaza and building adjacent to east. No vehicular access except for emergency vehicles south of 1st St.	57	100%	$ 38,800	$ 194,000	Medium • Extensive design consideration required	Walk Audit	Yes
PATHWAY ARTERIAL: 1ST ST												
1st St	Harvard Av			Plaza	Lawn redesign, building facade improvements, public art and cultural programming in front of historic Santa Fe Depot to activate space	44	100%	$ 1,000,000	$ 3,000,000	Medium • Extensive design consideration required	Walk Audit	Yes
1st St		Indian Hill Bl	College Av	Pedestrian Street/Walkway	Center walkway connecting Village West and Village South with Claremont Colleges. Punctuated with activity nodes such as small shops, kiosks, public art and other programming	59	100%	$ 2,000,000	$ 6,000,000	High • Extensive design consideration required • Extensive public outreach required	Walk Audit	Some Reservations Expressed
1st St		Yale Av	College Av	Pick-Up/Drop-Off	Eastbound and westbound curb space relocation for loading zones	39	100%	$ 10,000	$ 30,000	Low	Walk Audit	Yes
1st St	Harvard Av			Enhanced/New Bus Stop	Relocation and/or improvement of east- and westbound bus stops.	44	100%	$ 5,000	$ 30,000	Medium • Extensive design consideration required • Coordination with transit agencies	City Staff	Yes
1st St	Harvard Av			Bike Parking/Bikeshare	Secure parking facility in area of station. Designated docks or painted area for bikeshare/other shared mobility devices.	44	100%	$ 48,000	$ 480,000	Low • Planned by GLCA (secure parking)	Engagement Events	Yes
1st St	Indian Hill Bl			New/Improved Crossings	Right turn on red prohibition. Potential modifications due to 1st St center walkway.	61	100%	$ 50,000	$ 500,000	Low	Walk Audit	Yes
1st St	Village Plaza Walkway			New/Improved Crossings	Crosswalk striping with south side bulb-out. New Rectangular Rapid Flashing Beacons.	38	100%	$ 50,000	$ 500,000	Medium • Parking removal required	Walk Audit	Yes
1st St		College Av	Columbia Av	Sidewalk Lighting	Pedestrian scaled lighting on south side of street near station parking structure	46	100%	$ 3,125	$ 93,750	Medium • Consider for GLCA implementation (DB3)	Consultant Team	Yes
1st St	Claremont Bl			New/Improved Crossings	Realignment of intersection in concert with central ped/bike path, lining up eastbound and westbound vehicular lanes.	32	0%	$ 100,000	$ 500,000	Medium • Curb and gutter replacement	Consultant Team	Yes
1st St	Columbia Av			New/Improved Crossings	New signalized intersection with crosswalks	46	100%	$ 50,000	$ 500,000	Low • Planned by GLCA	Walk Audit	Yes
1st St	Mills Av			New/Improved Crossings	HAWK signal across 1st Street and high-visibility crosswalk on the north leg of the intersection.	27	0%	$ 50,000	$ 500,000	Low	Consultant Team	Yes
1st St		College Av	Pacific Electric Trail	Shared-Use Path	Street and existing walkway/path realignment to create center median path that lines up with future median walkway west of College Av and existing Pacific Electric trail east of Claremont Boulevard.	54	75%	$ 1,176,000	$ 5,880,000	High • Curb and gutter replacement	Consultant Team	Yes

Table 9-1: First/Last Mile Project List - Claremont (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
PATHWAY ARTERIAL: BONITA AV												
Bonita Av	Indian Hill Bl			New/Improved Crossings	Bulb-out on NW corner and elimination of second westbound through lane west of intersection. Potential Leading Pedestrian Interval or prohibition of right turns on red.	48	100%	$ 50,000	$ 500,000	Low	Walk Audit	Yes
Bonita Av		Carnegie Av	Indian Hill Bl	New/Improved Sidewalks	Spot fixes at pinch points or driveways.	53	36%	$ 375,000	$ 750,000	Low	Walk Audit	Yes
Bonita Av		Carnegie Av	Indian Hill Bl	Separated Bikeway	New Class IV parking-protected separated bikeway.	53	36%	$ 186,750	$ 747,000	Low	City Measure M Subregional Matrix Grant Request	Yes
PATHWAY ARTERIAL/COLLECTOR: GREEN ST/ELDER DR/OAKDALE DR												
Green St Extension		Bucknell Av	Indian Hill Bl	Bike Boulevard	When parcel is developed, new cut-through bike boulevard street.	42	100%	$ 2,975	$ 89,250	Medium • Condition of development	City Staff	Yes
Green St Extension		Bucknell Av	Indian Hill Bl	New/Improved Sidewalks	When parcel is developed, new cut-through street with sidewalks.	37	100%	$ 101,150	$ 178,500	Medium • Condition of development	City Staff	Yes
Green St	Indian Hill Bl			New/Improved Crossings	New signalized intersection	37	100%	$ 50,000	$ 500,000	Medium • Condition of development	Consultant Team	Yes
Green St		Indian Hill Bl	College Av	Street Trees	New tree wells with shade trees in parking lane	47	100%	$ 101,200	$ 227,700	Low	Walk Audit	Yes
Green St/Elder Dr/Oakdale Dr		Indian Hill Bl	Mills Av	Bike Boulevard	New bike boulevard with traffic calming elements, signage, and crossing treatments where appropriate.	57	95%	$ 20,675	$ 620,250	Low	Walk Audit	Yes
Oakdale Dr	Arrow Hwy			New/Improved Crossings	New bicycle curb cut on Oakdale Dr. to allow bicycle riders to pass through cul-de-sac. New bicycle loop detectors.	26	100%	$ 50,000	$ 200,000	Low	Consultant Team	No Comment Received
PATHWAY COLLECTOR: ARROW HWY												
Arrow Hwy		Cambridge Av	College Av	New/Improved Sidewalks	Sidewalk widening to 10' where possible, 5' minimum and ADA standards. Right-of-way acquisition possible requirement in spots.	49	67%	$ 629,000	$ 1,110,000	High • Additional ROW to be acquired • Agreement with property owner required • Condition of development (parts)	Walk Audit	Yes
Arrow Hwy		Cambridge Av	College Av	Sidewalk Lighting	New lighting along corridor.	54	67%	$ 22,320	$ 669,600	High • Agreement with property owner required • Condition of development (parts)	Walk Audit	Yes
PATHWAY COLLECTOR: INDIAN HILL BL												
Indian Hill Bl		Santa Fe St	Arrow Hwy	New/Improved Sidewalks	Sidewalk widening on the west side of street to a minimum of 12'.	45	100%	$ 96,050	$ 169,500	Medium • Condition of development	Walk Audit	Yes
Indian Hill Bl		Santa Fe St	Arrow Hwy	Sidewalk Lighting	New lighting on the west side of street.	50	100%	$ 3,390	$ 101,700	Medium • Condition of development	Walk Audit	Yes
Indian Hill Bl		Santa Fe St	Arrow Hwy	Street Furniture	New street furniture on the west side of street.	35	100%	$ 15,000	$ 50,000	Medium • Condition of development	Walk Audit	Yes

Table 9-1: First/Last Mile Project List - Claremont (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range Low	Cost Range High	Implementation Complexity	Origin	Community Support
PATHWAY COLLECTOR: HARRISON AV												
Harrison Av		Towne Av	Harvard Av	Bike Boulevard	New bike boulevard with traffic calming elements, signage, and crossing treatments where appropriate.	52	30%	$ 29,000	$ 870,000	Low	Walk Audit	Some Reservations Expressed
PATHWAY COLLECTOR: 6TH ST												
6th St	Berkeley Av			New/Improved Crossings	Missing leg of crosswalk striping.	24	0%	$ 2,000	$ 10,000	Low	Walk Audit	Yes
6th St		Berkeley Av	College Av	Bike Boulevard	New bike boulevard with traffic calming elements, signage, and crossing treatments where appropriate.	48	84%	$ 10,750	$ 322,500	Low	Consultant Team	Yes
PATHWAY COLLECTOR: MILLS AV												
Mills Av (South)		Arrow Hwy	American Av	Separated Bikeway	Existing Class II bike lanes to a Class IV separated bikeway in each direction. Parking lane would need to be re-configured, however parking appears to be underutilized in this residential area.	17	0%	$ 235,750	$ 2,829,000	Medium • Traffic or parking study required	Consultant Team	No Comment Received
Mills Av (North)		Pomello Dr	1st St	Bikeway		51	0%	$ 634,943	$ 7,760,925			
		Pomello Dr	Foothill Bl	Separated Bikeway	Conversion of Class II bike lanes to Class IV separated bikeway. Curbside bike lanes from Pomello to Alamosa can be easily converted. Alamosa to Base Line Rd. likely requires parking removal, but parking is under-utilized. Base Line to the 210 Freeway, bike lanes are curbside and can be easily converted. From the 210 Freeway to Foothill Bl parking lane would need to be re-configured, but parking appears under-utilized.		0%	$ 627,075	$ 7,524,900	Low	Consultant Team	No Comment Received
		6th St	1st St	Bike Boulevard	New bike boulevard with traffic calming, signage elements, and crossing treatments where appropriate.	32	0%	$ 7,868	$ 236,025	Low	Consultant Team	Yes
PATHWAY COLLECTOR: VISTA DR/OAK PARK DR												
Vista Dr/Oak Park Dr		Guilford Av	Sycamore Av	Bike Boulevard	New bike boulevard with traffic calming elements, signage, and crossing treatments where appropriate.	36	31%	$ 20,850	$ 625,500	Low	Engagement Events	Yes
PATHWAY COLLECTOR: CAMBRIDGE AV												
Cambridge Av		Bonita Av	Arrow Hwy	Separated Bikeway	Parking-protected separated bikeway.	43	0%	$ 103,107	$ 412,429	Low	City Measure M Subregional Matrix Grant Request	Yes
OTHER BIKEWAY CONNECTIONS												
Berkeley Av		Foothill Bl	Bonita Av	Bike Boulevard	New traffic calming elements and route signage and striping	39	21%	$ 18,650	$ 559,495	Low	Consultant Team	No Comment Received
Thompson Creek Greenway		Baseline Rd	Garey Av	Shared-Use Path	New shared-use path along channel maintenance road, to connect with existing path north of Baseline Road	26	0%	$ 949,554	$ 4,747,770	Medium • Project located on waterway	Metro ATSP Corridor	No Comment Received
Miramar Av		Forbes Av	Padua Av	Bike Boulevard	New traffic calming elements and route signage and striping	13	0%	$ 24,881	$ 746,427	Low	Consultant Team	No Comment Received
Monte Vista Av		Baseline Rd	Claremont Bl	Bike Lane	Existing southbound bike lane enhacements with painted buffers, and new bike lane striping in northbound direction. No lane reconfigurartion needed.	36	0%	$ 58,845	$ 88,267	Low	Consultant Team	No Comment Received
Claremont Bl		Monte Vista Av	Arrow Hwy	Separated Bikeway	Existing Class II bike lanes to unidirectional separated bikeways	42	0%	$ 400,475	$ 4,805,701	Medium • Street reconstruction required	Consultant Team	No Comment Received

Table 9-1: First/Last Mile Project List - Claremont (Cont.)

Street A	Street B	From	To	Type	Description	Prioritization Score	Percent within 1/2 mile radius	Cost Range		Implementation Complexity	Origin	Community Support
								Low	High			
Towne Av		Thompson Creek Greenway	Harrison Av	Separated Bikeway	Existing Class II bike lanes to Class IV separated bikeways. One block north of Baseline Road connection to the Thompson Creek Greenway; New bike boulevard on this short segment using Sharrows.	46	0%	$ 425,351	$ 5,104,217	Low	Consultant Team	No Comment Received
Butte St/8th St		Towne Av	College Av	Bike Boulevard	New traffic calming elements and route signage and striping	44	0%	$ 31,954	$ 958,619	Low	Consultant Team	No Comment Received
Mountain Av		Baseline Rd	Bonita Av	Bike Lane	"No Parking" along bike lanes, and upgrade to buffered bike lanes.	39	0%	$ 174,176	$ 261,265	Medium • Parking study required	Consultant Team	No Comment Received
Mountain Av		Arrow Hwy	San Jose Av	Bike Boulevard	Existing Class III bike route with sharrows to a bike boulevard with traffic calming elements and route signage and striping.	28	0%	$ 12,720	$ 381,600	Medium • Requires coordination with Pomona	Consultant Team	No Comment Received
Scripps Dr		Towne Av	Indian Hill Bl	Bike Boulevard	New traffic calming elements and route signage and striping	46	0%	$ 23,617	$ 708,495	Low	Consultant Team	No Comment Received

Table 9-2. Prioritized Project List - Linear Projects - Claremont

Rank	Street A	From	To	Type	Prioritization Score
T1	College Av	1st St	Arrow Hwy	New/Improved Sidewalks	62
T1	College Av	1st St	Arrow Hwy	Sidewalk Lighting	62
T1	College Av	1st St	Arrow Hwy	Separated Bikeway	62
4	1st St	Indian Hill Bl	College Av	Pedestrian Street/Walkway	59
T5	Harvard Av	1st St	Gold Line Station	Pedestrian Street/Walkway	57
T5	Green St/Elder Dr/Oakdale Dr	Indian Hill Bl	Mills Av	Bike Boulevard	57
T7	College Av	6th St	Bonita Av	Bike Lane	56
T7	College Av	Arrow Hwy	American Av	Bikeway	56
T9	1st St	College Av	Pacific Electric Trail	Shared-Use Path	54
T9	Arrow Hwy	Cambridge Av	College Av	Sidewalk Lighting	54

Table 9-3. Prioritized Project List - Point Projects - Claremont

Rank	Street A	Street B	Type	Prioritization Score
1	1st St	Indian Hill Bl	New/Improved Crossings	61
2	Harvard Av	1st St	New/Improved Crossings	57
3	College Av	Arrow Hwy	New/Improved Crossings	56
4	College Av	Green St	New/Improved Crossings	54
5	Bonita Av	Indian Hill Bl	New/Improved Crossings	48
6	College Av	6th St	New/Improved Crossings	46
T7	1st St	Harvard Av	Plaza	44
T7	1st St	Harvard Av	Enhanced/New Bus Stop	44
T7	1st St	Harvard Av	Bike Parking/Bikeshare	44
10	1st St	Village Plaza Walkway	New/Improved Crossings	38

Pathways and Projects

The following sections describe the recommended improvements to pathways within one-half mile of the future station in Claremont.

Station Amenities and Entrances

Figure 9-6 shows the Construction Authority's plan for station construction. The Gold Line station will be at the location of the current Metrolink station, behind the historic Santa Fe Depot between Harvard Avenue and College Avenue. Platform entrances are from the north at both Harvard Avenue and College Avenue. Meanwhile, the Metrolink station will be moved a few hundred feet to the east near the intersection of 1st Street and Columbia Avenue. A joint parking facility will be built on the southeast corner of 1st Street and College Avenue serving both transit services. An overcrossing is planned for the Gold Line across Indian Hill Boulevard.

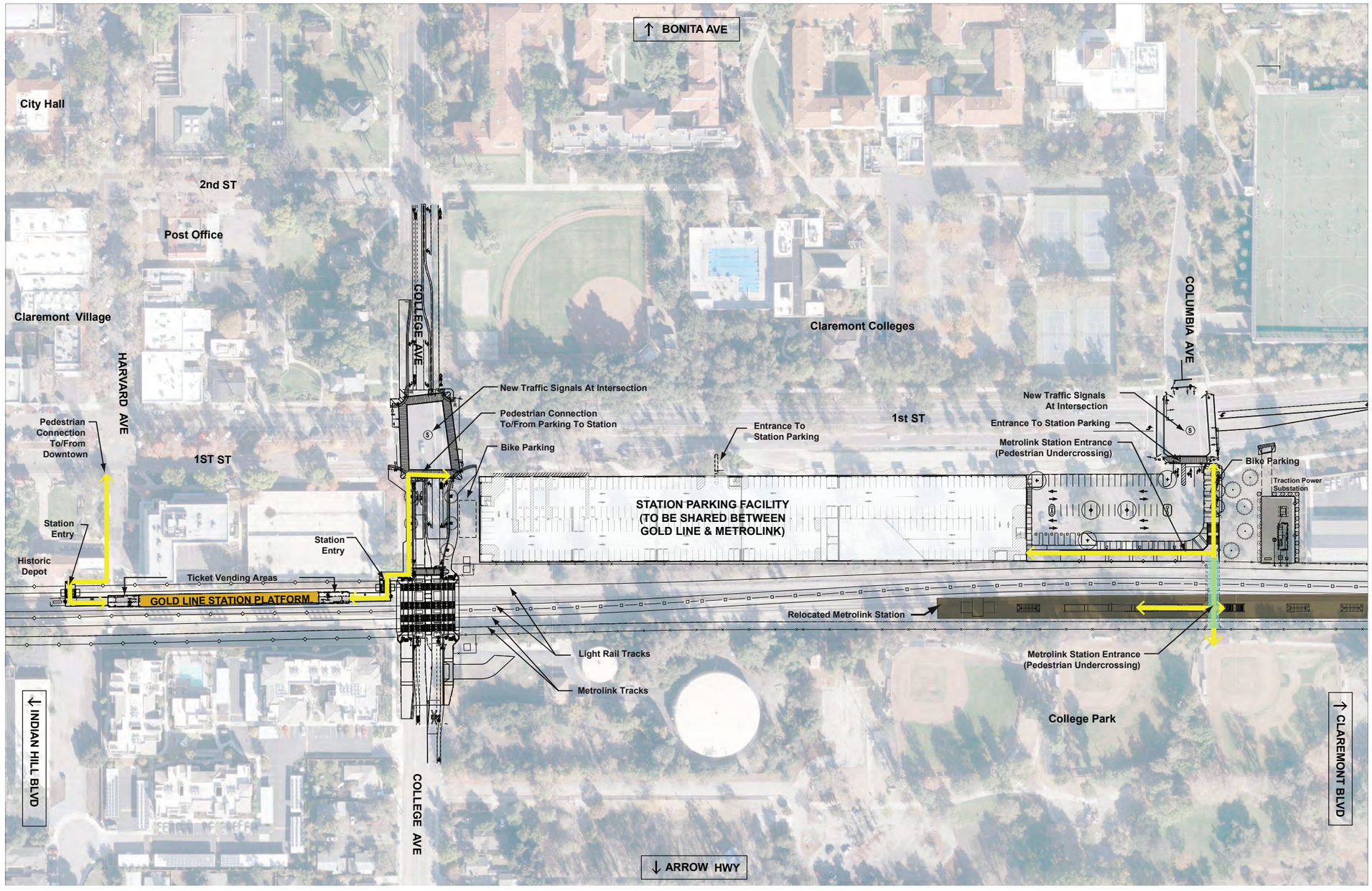
During community outreach activities, a small but significant number of people expressed concern that there would be no Gold Line station entrance from the south, near the northern end of Spring Street. The idea was not pursued further because:

> This is a relatively isolated area at the rear of small offices and apartment buildings

> Spring Street and Santa Fe Avenue, the two streets that would connect directly to the entrance, are missing basic infrastructure, including sidewalks

> A crossing at Indian Hill Boulevard and Santa Fe Avenue would be required; however, this crossing is not feasible due to visibility issues stemming from the future Gold Line overcrossing at that location, and the inability to signalize the intersection due to its proximity to the signal at 1st Street.

Claremont Station Site Plan (Fig 9-6)



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Foothill Gold Line

College Av: Pathway Arterial

College Avenue was chosen as a north-south pathway arterial for several reasons.

> It directly serves a station entrance.

> It provides access to the Claremont Colleges to the north, while connecting all the way to the south city limit, including through a pedestrian/bicycle tunnel under the I-10 freeway.

> Currently provides a good walking and biking environment in some areas.

> Preferred by the community over Indian Hill Boulevard as an active transportation priority street with connectivity through the station area.

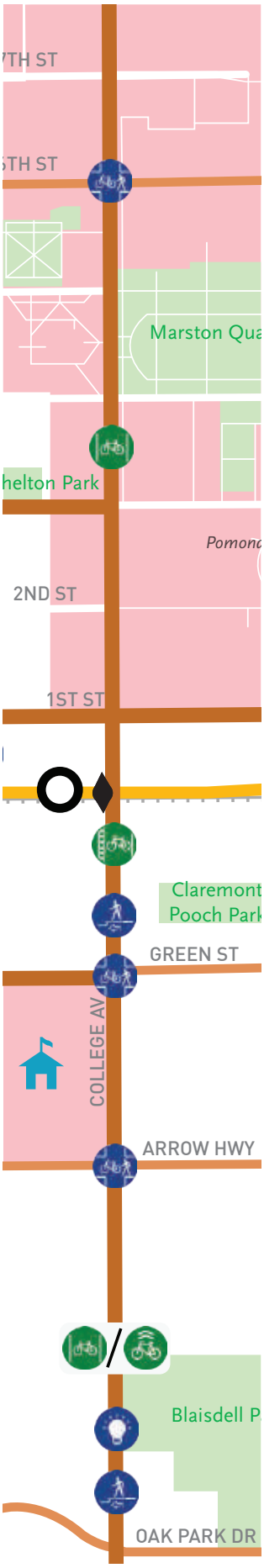
In addition to College Avenue, Harvard Avenue was also classified as a pathway arterial north of the station. Harvard Avenue has an excellent pedestrian environment through the Claremont Village and into residential neighborhoods; however, it was also determined that no changes could be made to the roadway that would enhance bike-friendliness through the Village, so pedestrian movement only was prioritized on this pathway arterial. No pedestrian-related projects are identified for Harvard Avenue in this Plan, except for those located south of 1st Street, which projects are covered in the "1st Street: Pathway Arterial" section.

Pedestrian environment on Harvard Avenue

North Segment: Foothill Bl to 1st St

North of the station, College Avenue is walkable and bikeable. There is a two-block gap in the bike lane which could be filled between Bonita Avenue and 6th Street, which also entails small modifications to the intersection of College Avenue and 6th Street to permit the bike lane to continue through the intersection.

The bike lane on North College Avenue is of the appropriate type and width for the street.



Central Segment: 1st St to Arrow Hwy

Unlike with North College Avenue, walk audit participants and community members identified a high number of barriers on this segment of College Avenue which includes the station entrance. The key observation was that the pedestrian environment was lacking in numerous aspects (e.g. non-ADA compliant driveway ramps and curb ramps, lack of street trees) because the sidewalk was located immediately against the curb and measured only five feet wide in much of this segment.

The best solution to fix these problems is to create a wider on-curb area. It makes sense, therefore, to convert the existing bike lane into an on-curb separated bikeway. This transition would yield two benefits: first, it would create the lowest-possible stress bikeway that would be be comfortable to children as well as adults. Second, it would visually narrow the roadway to a 32' width, narrower than what exists south of Arrow Highway, naturally calming traffic.

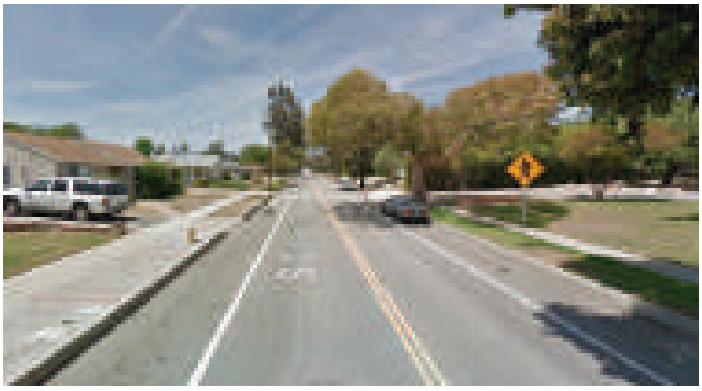
The narrowest cross-section of all is located between 1st Street and Plunk Place, at the station entrance and Gold Line and Metrolink tracks. CPUC approval would need to be obtained for this physical change to the grade crossing. If CPUC approval is not obtainable, the bike lane may transition back to a standard curb-adjacent bike lane north of Plunk Place.

Figures 9-7 and 9-8 show the before and after cross-sections and vision for this portion of College Avenue.

South Segment: Arrow Hwy to San Bernardino Av

South of Arrow Highway, the pedestrian environment is generally good. There are bike lanes, but parking is also allowed in the bike lanes. This once-approved practice is now considered to be unsafe for cyclists, who may have to swerve into the general purpose travel lane in order to avoid parked cars. Therefore, the segment would be converted into either a standard bike lane facility, which would entail the removal of parking on both sides of the street, or a bicycle boulevard.

In order for a bicycle boulevard to be established in accordance with the principles of this plan expressed in Chapter 2, average daily trips would need to be reduced to under 3,000 and average operating speeds reduced to no more than 25 miles per hour. The City does not have recent daily traffic counts for this portion of the street, so a determination is not able to be made at this time. Any potential changes to the road cross-section or access patterns would also be subject to a consultation process with residents.



The existing bike lane on College Avenue south of Arrow Highway doubles as a parking lane.

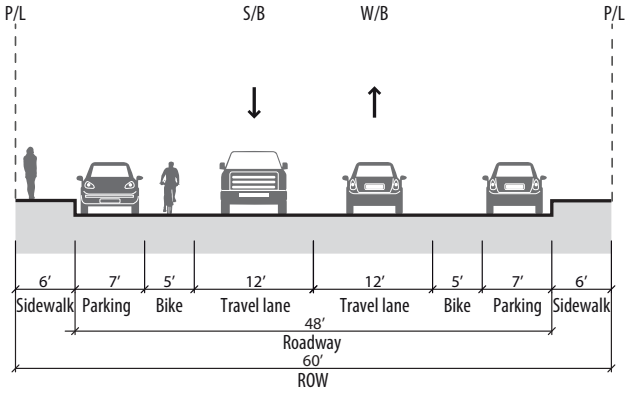
Source: Google Maps Street View

Existing

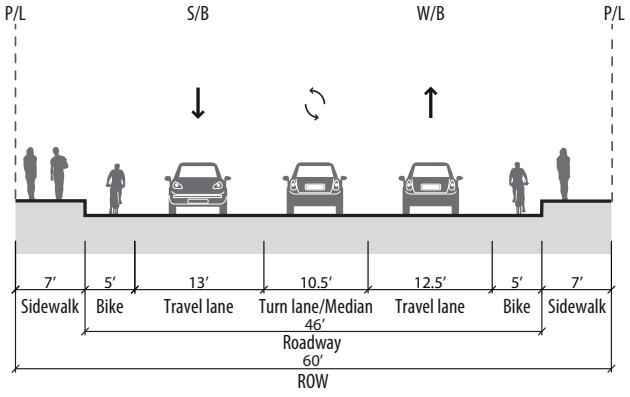
Future Concept

Figure 9-7. Proposed Character - College Avenue, 1st Street to Arrow Highway. Northbound view north of Green Street.

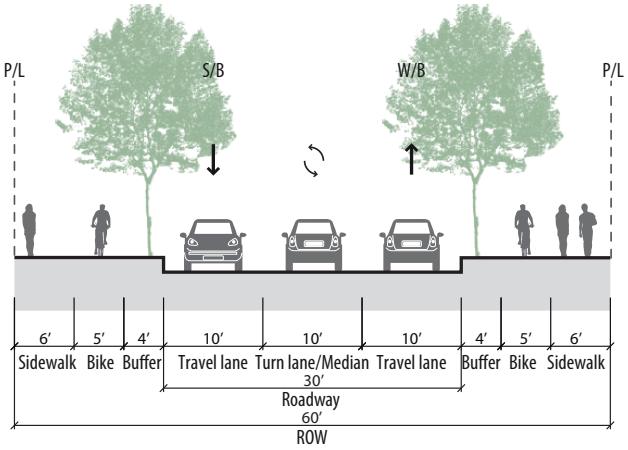
Existing



Proposed - CPUC Approved



Proposed - 1st St. to Plunk Pl.



Proposed - Plunk Pl. to Arrow Hwy.

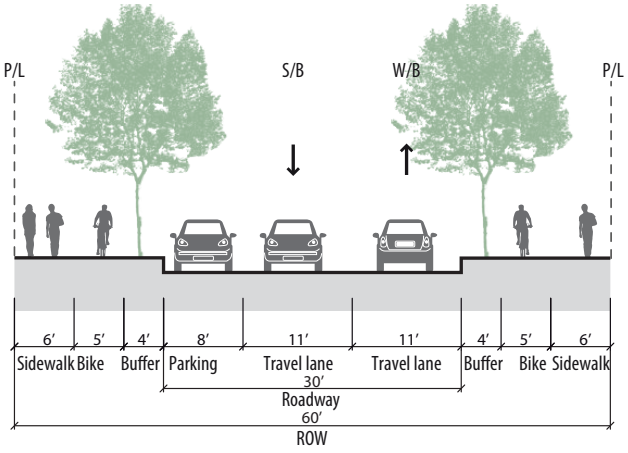
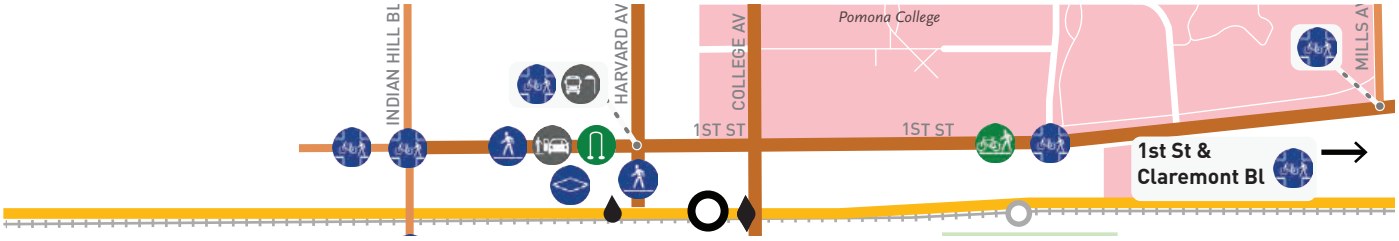


Figure 9-8. Typical Cross-Sections for College Avenue, South of Tracks.

1st St: Pathway Arterial



1st Street was selected as a pathway arterial because it serves an important role both at a regional and at a local level. Regionally, it is the part of the Citrus Regional Bikeway that connects to the Pacific Electric Trail which runs east to Rialto. Locally, 1st Street connects the Claremont Colleges to the largest attractions in the Village, Village Plaza and the Packing House. It also has the opportunity to function as either a connector or a barrier between Claremont Station and the Village.

Central Segment: Indian Hill Bl to College Av

Through discussion with City staff, walk audits and community engagement events, it was agreed that the area near the main station entrance to the Village, encompassing Harvard Avenue south of 1st Street, the Historic Santa Fe Depot's lawn, and 1st Street would benefit from some changes as the Gold Line comes to Claremont. A few key observations were agreed upon:

> Today, the area feels separate from the Village due to the wide right-of-way of 1st Street (100' – 130'), blockage of views and the design of the office buildings that focus inward rather than engaging the street.

> The lawn and area around the historic Santa Fe Depot and station lacks vibrancy except during special events.

> The current Metrolink/future Gold Line station itself is not easily recognizable from the Village.

> 1st Street has been designed to maximize parking resources. The Gold Line will bring a more diverse range of mobility needs to be served in this area, including bicycle circulation, pick up/drop off, buses, shuttles, and increased pedestrian activity.

Figure 9-9 presents an illustrative concept for the area to address the points raised earlier. The concept includes four major elements: a depot plaza, station walkway, speed table and central promenade.

The concept was described in general terms to members of the public and City Commissioners during community outreach. All proposed elements were strongly supported except for the central promenade, which aroused strong sentiments both for and against. The creation of the central promenade would imply the loss of approximately 33 parking stalls. A smaller number of additional parallel parking spaces may also be converted to loading zones or bus stops. Depending upon parking demand, the City may choose to replace these parking spaces by adding on to existing garages or lots in the area.

1st Street currently dedicates a lot of space to parked and moving vehicles and landscaping, but little to pedestrians.

Accommodating bicycles and other rolling modes and designating spaces for pick up/drop off are key challenges.

The main access way to the station is not active and is experienced mostly as a road.

Figure 9-9. 1st St Project Type Precedent Images.

A Depot Plaza

Redesign of the historic depot's yard into a hardscape or softscape depot plaza designed flexibly for concerts, civic events and passive recreation

B Station Walkway

Conversion of driveway that leads to the main entrance of the station into an immediately recognizable station access walkway. Consider slope concerns, and consider providing ADA pick up/drop off access behind office building from College Avenue.

C Speed Table

Speed table plaza that is experienced as a pedestrian priority zone, bridging 1st Street. Allow pick up/drop off on both sides of the street on or adjacent to the speed table.

D Central Promenade

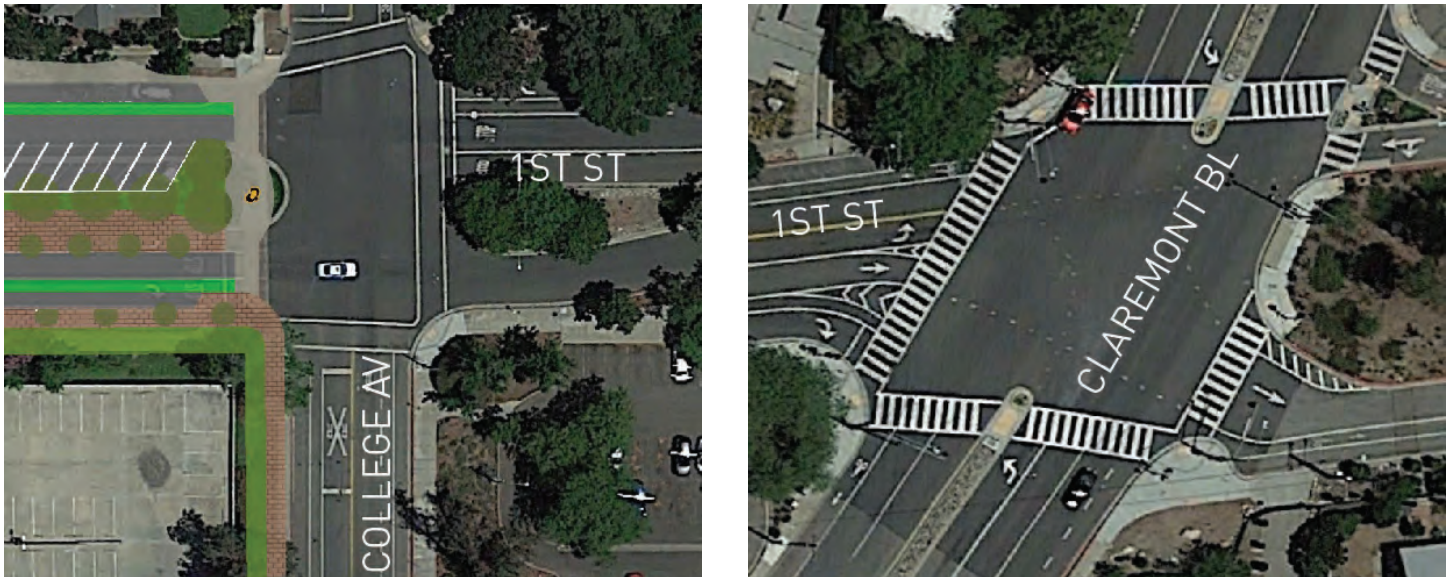
Central walkway punctuated by programmed activity areas such as restaurants with outdoor dining, kiosks, focal public art pieces, interactive spaces and mini-performance spaces. Consider parking needs and replacement options before implementing or determining extent.

Sources: Left column, 4th down - Google, Right column, top - Fred Glick Design, Right column, 2nd down - Google.

East Segment: College Av to Pacific Electric Trail

Early in the process, the intersection of 1st Street and Claremont Boulevard was identified as a problem despite considerable safety improvement efforts that have been made because of the offset between the roadways and paths on the east and west sides of the intersection.

One ambitious, but powerful potential to improving this intersection and connecting the Pacific Electric Trail to the Claremont station in the best possible way would be to realign the roadway so as to continue the trail down the center of 1st Street. It would then connect directly into the proposed central promenade west of College Avenue. This connection would be particularly valuable if Claremont spends any time as a terminus station, as it would help San Bernardino County riders travel long distances to access the Gold Line.



The intersections of 1st Street & College Street and 1st Street & Claremont Boulevard may be better served by realigning the shared use path through the center of the roadway. Left images includes a conceptual central promenade on 1st Street west of College Avenue.

Bonita Av: Pathway Arterial

Bonita Avenue is part of the Citrus Regional Bikeway (see Chapter 3 – Regional Recommendations) and has been prioritized as a pathway arterial across the San Dimas, La Verne, Pomona and Claremont station areas. Today, it is a well-used backbone bikeway that can gather cyclists and rolling mode users from the north and south to provide access to the station.

Community members were interested in a better pedestrian environment, including better crossings west of Indian Hill Boulevard. They also supported the idea of upgrading the bike lane to a parking-protected separated bikeway. However, feedback was also received that curbs with landscaping would be the preferred method to separate the bikeway, and there is insufficient room along some portions of the street to separate the bikeway with more than flexible posts or bollards. Further study can be conducted as this project enters a more detailed design phase.

As shown in Figures 9-10 and 9-11, a significant improvement to the existing bike lane can be made by adding door zone buffers in all sections where the bike lane is adjacent to on-street parking. Conflict zones can also be painted green for high visibility.

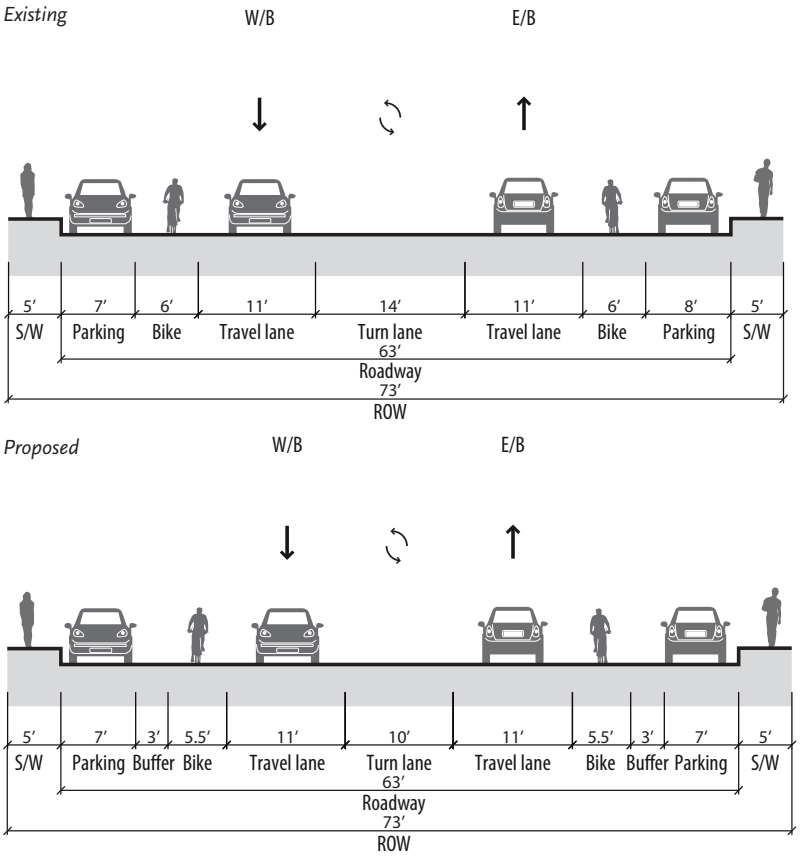


Figure 9-10. Typical Cross-Section for Bonita Avenue, Carnegie Av. to Berkeley Av.

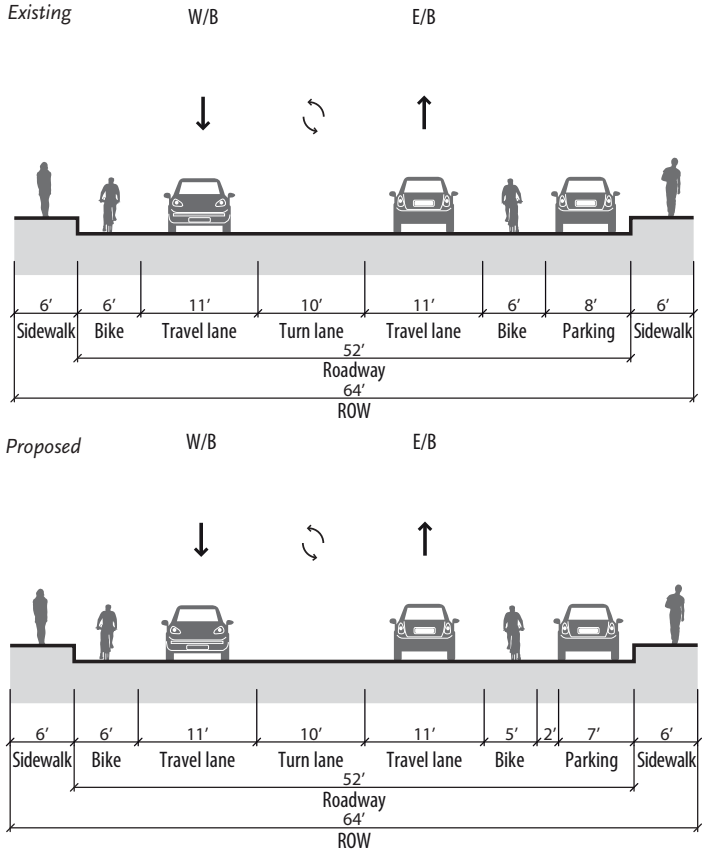
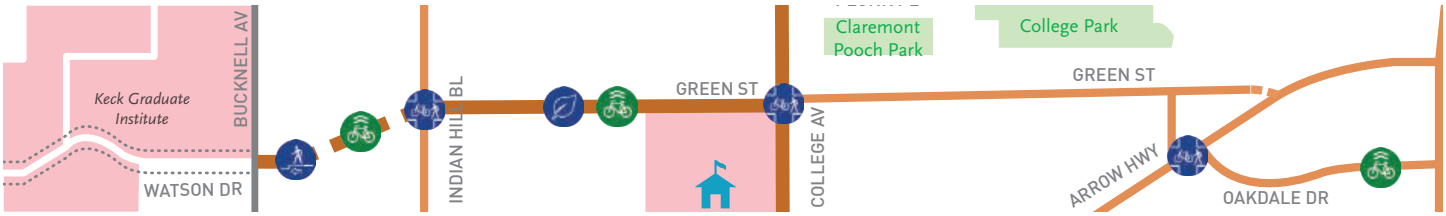


Figure 9-11. Typical Cross-Section for Bonita Avenue, Berkeley Av. to Indian Hill Bl.



Green St/Elder Dr/Oakdale Dr: Pathway Arterial/Collector

This route provides a priority east-west alternative to Arrow Highway south of the station. Community engagement revealed a strong preference for encouraging FLM journeys, particularly bicycle trips, on streets other than Arrow Highway.

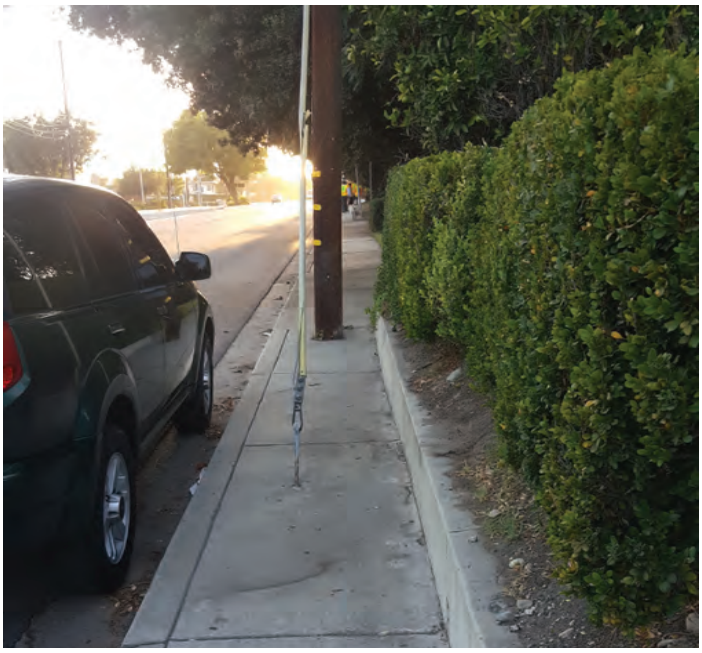
This route links streets with calm traffic patterns into a bicycle boulevard connecting to north-south bikeways on Cambridge Avenue, College Avenue and Mills Avenue. Clear signage, directional sharrows and a potential number or name for the route are recommended to help people navigate it. West of Indian Hill Boulevard, the route continues along a new pedestrian- and bicycle-friendly street connecting Watson Drive to Green Street. It is recommended that the forthcoming Village South Specific Plan (VSSP) establish a mechanism to create this street. West of the VSSP area, a potential exists to continue connections westward to Cambridge Avenue via Watson Avenue, a private street on the Keck Graduate Institute (KGI) campus, and Wharton Drive. Special coordination, perhaps undertaken as a part of the VSSP process, would be necessary to ensure access, signage and branding for the route to continue through KGI.

As in any bicycle boulevard, major street crossings are key, and intersections should be designed carefully to allow for comfortable and rapid pedestrian and bicycle movement while ensuring that vehicular speeds and volumes remain low. Specific bicycle boulevard treatments to be recommended along the route should be determined through a more focused study. Figure 9-12 presents an illustrative concept for the Green St portion.

Arrow Hwy: Pathway Collector

Arrow Highway has posted speed limits of 40-45 miles per hour within the station area. There is an intermittent bike lane west of Indian Hill Boulevard.

As experienced on the walk audit, pedestrians have to deal with blocked paths, narrow sidewalks, non-ADA-compliant ramps and a lack of lighting. At a minimum, a clear path of travel needs to be maintained. The City should consider right-of-way acquisition if necessary to ensure a minimally compliant sidewalk. As circumstances allow, sidewalks can be widened to a minimum of 10'-12' with good lighting and street trees.



The greatest need for improved sidewalks on Arrow Highway is between Indian Hill Boulevard and College Avenue.

Existing

Future Concept

Figure 9-12. Proposed Character - Green Street Bike Boulevard. Westbound view near Spring Street.

Indian Hill Bl: Pathway Collector

Community outreach showed a clear preference for College Avenue over Indian Hill Boulevard as a general route for FLM journeys, but Indian Hill Boulevard still registered as an important street that residents wanted to ensure that the plan addressed. Pedestrian safety and comfort were major issues. A bicycle facility was deemed not appropriate along the length of the street due to the constrained right-of-way within the Village and high traffic volumes, over 20,000 ADT south of Arrow Highway.

The Gold Line will cross Indian Hill Boulevard on a bridge; however, the Metrolink tracks will remain at-grade. Community members expressed interest in plazas and a crossing of Indian Hill Boulevard at the tracks. However, the planning process in general determined that the best locations for crossing the street for station access were at 1st Street and Green Street.

Intersection improvements would be made at Bonita Avenue, 1st Street and Green Street. Individual crash records can be studied to determine the most necessary improvements at these intersections, which may involve infrastructure improvements (for example, a northwest corner bulb-out at Bonita Avenue and Indian Hill Boulevard), signal timing (leading pedestrian interval) or turning prohibitions.

Widened sidewalks, street furniture and pedestrian lighting could be installed as part of the VSSP. Pedestrian lighting would make connections under the future Gold Line bridge.

Cambridge Av: Pathway Collector

Cambridge Avenue/Mountain Avenue is a north-south street that provides FLM connectivity to the more disadvantaged southwest portion of Claremont. The street is very wide between Arrow Highway and Bonita Avenue and affords the opportunity of creating a separated bikeway, as shown in Figure 9-12.

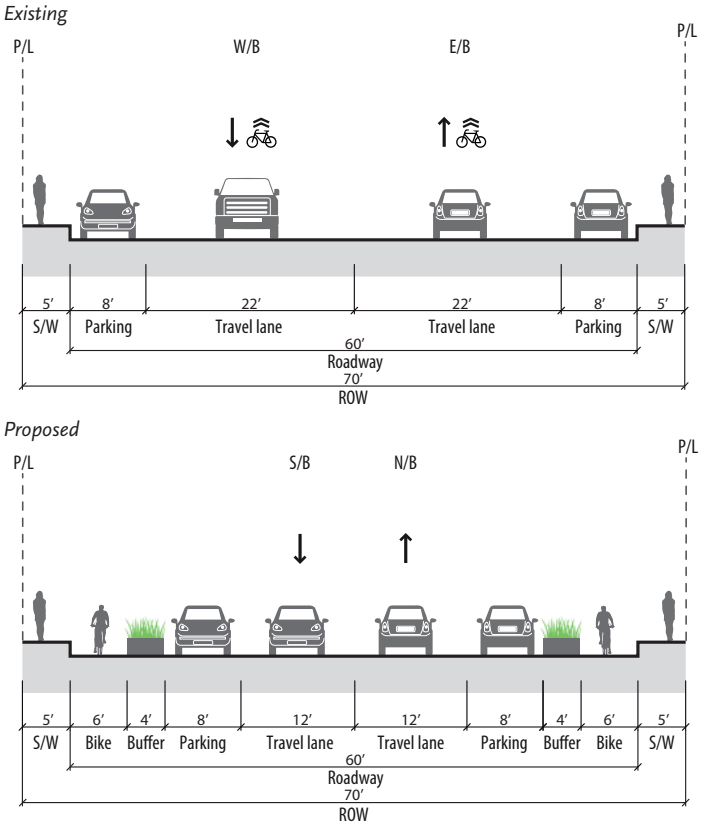


Figure 9-12. Typical Cross-Section for Cambridge Avenue, Arrow Hwy to Bonita Av.

Conceptual future character of Indian Hill Boulevard as presented by the Village South Specific Plan Team. Roadway cross-section may vary from what is seen.

6th St, Harrison Av, Oak Park Dr, Mills Av and other Residential Pathway Collectors

Along residential pathway collectors, the following interventions are recommended:

> The creation of bicycle boulevards. Bicycle boulevards on these roads likely need to involve more than placing bike route signage and painting sharrows. Additional traffic calming measures will likely need to be implemented in order to reduce operating speeds to a maximum of 25 miles per hour and keeping Average Daily Trips below 3,000 vehicles. A specific study would be required to identify the appropriate types of traffic calming for each street.

> Friendly crossings of major roadways for cyclists and pedestrians.

Many of Claremont's residential streets already have good pedestrian amenities.

Bike boulevards allow motorists traveling at slow speeds and cyclists to share the roadway.

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