



Improvement to Transit Access For Cyclists and Pedestrians  
**Existing Conditions Report**

**Submitted to the San Bernardino Associated Governments**

by Alta Planning + Design  
with Gruen Associates

September 2011



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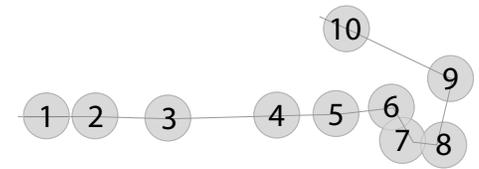
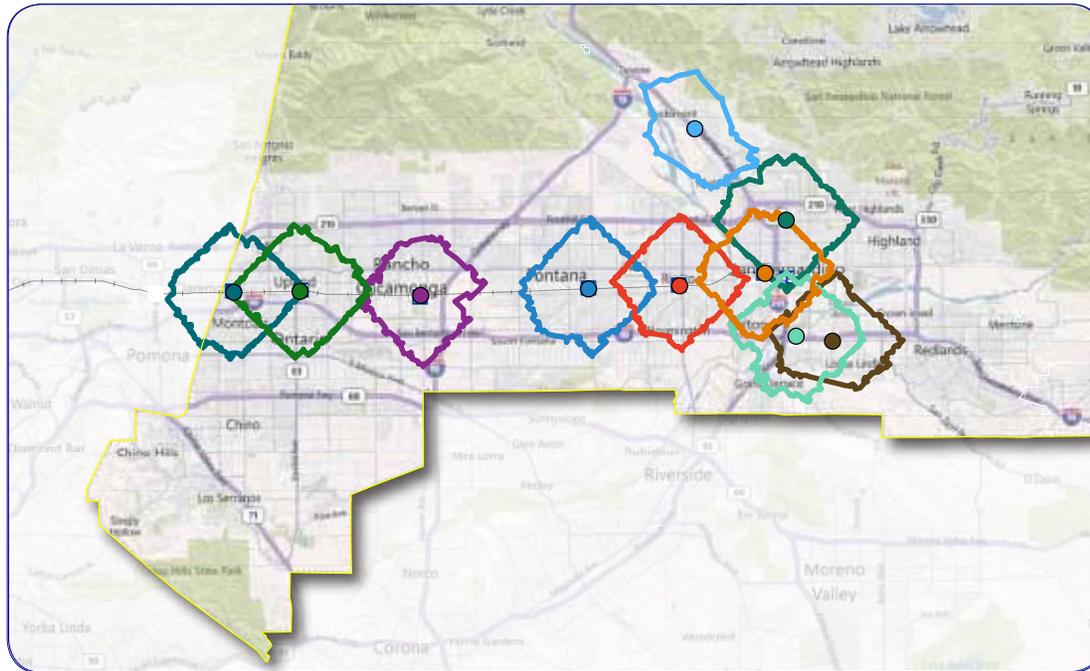


FIG. I.1 STUDY AREA LOCATIONS AND PROXIMITY BUFFERS



## Introduction

San Bernardino Associated Governments (SANBAG) has undertaken an effort to examine the ability of non-motorized users to access its regional transit network, including existing Metrolink Commuter Rail services, planned sbX Bus Rapid Transit (BRT) Stations, and other existing fixed-route transit services throughout the Inland Empire.

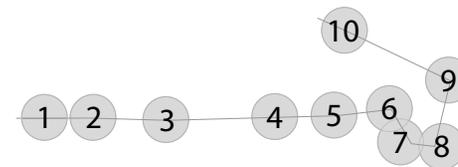
This Existing Conditions Report documents the current pedestrian and bicycling environments at a number of typical transit facilities throughout the Inland Empire. It identifies barriers and challenges to non-motorized access in and around the selected stations, and will serve as the baseline document around which a series of Best Practices and Non-Motorized Access Design Guidelines will be developed. These documents will guide the improvement of on-site transit facilities, and will ensure facility consistency with those of the participating local jurisdictions.

## Study Area Description

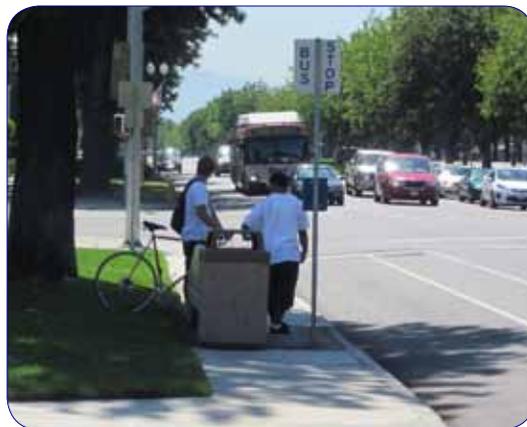
The project study area is located in the southwestern corner of San Bernardino County, primarily along the Metrolink Commuter Rail network and the Interstate 10 corridor, with a small number of stations along the Interstate 215 corridor. Fixed-route bus transit service is provided by Omnitrans, and as mentioned, Metrolink provides commuter rail service within the study area. San Bernardino County cities participating in the study include Montclair, Upland, Rancho Cucamonga, Fontana, Rialto, San Bernardino, and Loma Linda.

## Stations Selected for Analysis

The Project Development Team (PDT) developed ten stations for analysis. The locations were selected for a number of reasons, including high levels of existing or planned transit service, proximity to transit-oriented subpopulations such as students or employees, and for some smaller stations, the opportunity to serve as a model for how to implement infrastructure improvements designed to best serve the needs of bicyclists and pedestrians at transit stations throughout the Inland Empire.



Accessing transit on foot or by bicycle often involves negotiating difficult street environments



Transit waiting environments can affect ridership



Example of GIS-based distance buffer compared to radial distanced-based buffer

The following ten stations were selected for analysis:

1. Montclair Metrolink Station
2. Upland Metrolink Station
3. Rancho Cucamonga Metrolink Station
4. Fontana Metrolink Station
5. Rialto Metrolink Station
6. San Bernardino Metrolink Station
7. Hunts Lane (San Bernardino) sbX Station
8. Anderson Street (Loma Linda) sbX Station
9. Highland Avenue (San Bernardino) sbX Station
10. Palm Avenue (San Bernardino) sbX Station



Omnitrans System Map and Station Locations

## Project Catchment Areas and Distances

Frequently in transit access analyses, simple distance-based buffers are applied around the station location to comply with the Federal Transit Administration (FTA) guidelines of one-half mile for pedestrian access, and three miles for bicycle access. These distances are used to identify which projects within a city may be eligible for FTA transit access funding and fit the description found in the FTA *Final Policy Statement on the Eligibility of Pedestrian and Bicycle Improvements Under Federal Transit Law*.

Increasingly, however, distance-based buffers are making use of sophisticated routefinding software algorithms to better reflect the true travel distance from a station as reflected by the local street network. This method allows for planners to account for barriers and delays built into travel routing to develop a catchment area that is more reflective of the conditions on the ground than an area that is simply radial in nature.

These barriers to travel may include having to alter one's route to access freeway, rail corridor, or river channel crossing points, cul-de-sacs, private drives, or other non-connected features of the built environment. Based on feedback from the Project Development Team, each station catchment area under study was refined to reflect this "true" travel distance, and complies with FTA guidelines.

**2009 SCAG General Plan Land Use Category**

-  Agriculture
-  College or Universities
-  General Commercial
-  General Industrial
-  Golf Course
-  Heavy Industrial
-  Hotel
-  Institutions / Government
-  K-12 Schools
-  Light Industrial
-  Military
-  Misc. Commercial
-  Misc. Industrial
-  Office
-  Open Space / Parks
-  Other Retail
-  Regional Commercial
-  Residential
-  Transportation
-  Urban / Mixed Use
-  Utilities

The land uses in each study vary greatly, and affect the nature of pedestrian and bicycle travel around each station

**Population per Acre (2010)**

-  None
-  0.1 - 5
-  5.1 - 10
-  10.1 - 25
-  Over 25

The more dense the population, the more potential for pedestrian and bicyclist access

**Layout of this Report**

This Existing Conditions Report is broken into ten sections, one for each transit station under study. Each station is assessed generally and specifically with regards to the pedestrian and bicycle environment present in each respective catchment area.

General assessment criteria include:

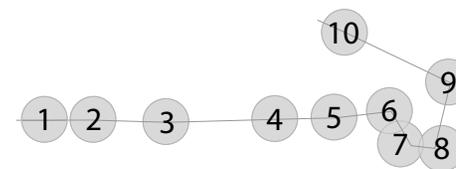
- Opportunities and Constraints bullet points as observed by the Project Team through fieldwork and other professional judgement criteria
- Nearby and adjacent land uses and their observed effects on transit access (see general legend at left)
- Population density figures as reported by the 2010 Census (see general legend at left)
- Overall level of existing and planned transit connectivity based on Omnitrans’ route network (local Omnitrans Routes are shown in **ORANGE**, the E Street sbX BRT route is shown in **BLUE**)

In addition to these general observations, each station catchment area was specifically assessed for the level of its pedestrian and bicycle infrastructure networks. SANBAG and SCAG provided Geographic Information System (GIS) infrastructure data to the consultant team from their databases, and coordinated the data collection efforts between the participating cities. Alta Planning + Design and Gruen Associates used this data to confirm existing conditions as part of their fieldwork efforts of August 2011.

These specific findings are reported in a series of matrices following the general assessments of each respective station. Specific assessment criteria include:

**Bicycle Network**

- **Speed and Condition of Vehicular Traffic** - Class II and III bikeway facilities share the road right-of-way with automobiles, and their usage is often correlated with the speed and congestion of automobile traffic. Bicyclists who feel adjacent traffic is too congested or moving too fast may be unwilling to use these facilities.
- **Pavement Condition** - Roadway shoulders or bike lanes that are neglected, unmaintained, or in poor condition can be hazardous, and can discourage bicyclists from using the facility.
- **“Door Zone” and Driveway Conflicts** - Vehicles entering or exiting driveways frequently pose challenges to on-road cyclists, as do drivers exiting their vehicles from the driver’s side of a parallel



parking space. The more parallel parking and driveways in a corridor, the greater possibility of these types of conflicts.

- **Transit Service and Waiting Environment Within Corridor** - Transit must be accessible and inviting to encourage use. Ample transit service with adequate waiting environments are key components of a well-used transit network for all users.
- **Amount of Trip Generators and Attractors** - The more attractions in an area, the greater the potential for bicycle traffic in and around the study area.
- **Amount of Bike Facility Striping or Signage** - Successful bicycle facilities should be well-signed for routefinding along the facility itself, and regional wayfinding to nearby destinations.

### Pedestrian Network

Providing safe, convenient and attractive sidewalks, pedestrian crossings and transit stops are imperative to ensuring transit riders have a positive experience. A safe, comfortable, and pleasant pedestrian environment encompasses the following:

- **Sidewalk/Parkway Width** - Sidewalk and Parkway width includes the landscape/furniture zone and the pedestrian zone. The Landscape/Furniture Zone is defined as the area between the roadway curb face and the front edge of the walkway. The recommended minimum width of this zone is 5 feet wide; six feet is better. This zone buffers pedestrians from the adjacent roadway. It is the appropriate location for street trees and landscaping and also the preferred location for street furniture, art, pedestrian lighting and other elements. The pedestrian zone is the area of the sidewalk that is specifically reserved for pedestrian travel.
- **Sidewalk Width** - Residential sidewalks are often four feet wide, but that should be considered an absolute minimum. In commercial areas, sidewalks should be a minimum five feet wide. Six feet or more is better, as it allows people travelling opposite direction to pass comfortably, and allows two people to walk abreast. Sidewalks that are too narrow encourage people to walk in the street, which is unsafe. Sidewalks widths should accommodate people in wheelchairs, parents with toddlers or pushing baby strollers, and a variety of other pedestrians.
- **Sidewalk Condition** - Sidewalks that are neglected, unmaintained, or in poor condition can be hazardous, and can discourage pedestrians from using the facility. Sidewalks with holes deeper than 1", loose gravel and high cracks with missing pieces are considered extremely unsafe.
- **Sidewalk and/or Parkway Location** - Trees in tree well/planting strips provide a buffer between



Unmaintained facilities discourage use and create hazards



Interactions with interstate-bound traffic are frequent and challenging in the study area



Unmaintained bike lane and non-ADA compliant sidewalk



Residential uses often do not connect to adjacent bikeway facilities

pedestrians on the sidewalk and motor vehicle traffic. Planting strips require a minimum of five feet, although six feet or wider is more desirable, especially for larger trees.

- **Crosswalks** - Pedestrian crossings generally fall into two categories: controlled and uncontrolled. Controlled crossings include signalized locations and stop-controlled crossings. Uncontrolled crossings include both intersection and mid-block locations. Well-marked pedestrian crossings serve two purposes - 1.) they prepare drivers for the likelihood of encountering a pedestrian, and 2.) they create an atmosphere of walkability and accessibility for pedestrians. Marked crossings reinforce the location and legitimacy of a crossing.
- **Curb Ramp** - Curb ramps provide critical access between the sidewalk and the street for people with mobility impairments. Without curb ramps, people who use wheelchairs cannot access the sidewalk. Curb ramps are most commonly found at intersections but also are required at midblock crossings and crossings of medians.
- **Street Tree Locations** - A row of trees on either side of the street, spaced 30 to 35 ft. apart, is considered ideal. In most situations shade trees located in parkway or tree wells next to the curb are recommended.
- **Raised Median** - A landscaped median reduces the perceived width of a wide street and makes it seem pedestrian-friendly and reduces motor vehicle crashes between opposing lanes of traffic.
- **Utility Poles** - Utility poles located within a sidewalk can obstruct pedestrian mobility and block views.
- **Lighting** - Pedestrian-scale lighting improves accessibility by illuminating sidewalks, crosswalks, curbs, curb ramps, and signs as well as barriers and potential hazards. On wide streets, pedestrian-scale lighting and motor vehicle-scale lighting should be provided to complement each other ensuring that both sidewalks and travel lanes are effectively illuminated.
- **Street Furniture** - Street furnishings, public art and other pedestrian and bicycle amenities are important elements that can create a comfortable, safe and attractive public realm. Examples of street furnishings include benches, litter and recycling receptacles, bike racks, multiple publication newsstands, water fountains, pedestrian scaled lighting and planters.
- **Wayfinding Signage** - An enhancement to the sidewalk network for pedestrians is wayfinding signage. The signs should consist of a distinctive logo and directional guidance to neighborhood destinations. The signs can be attached to separate poles or lampposts and located at decision points along the route network.

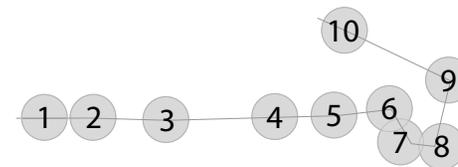
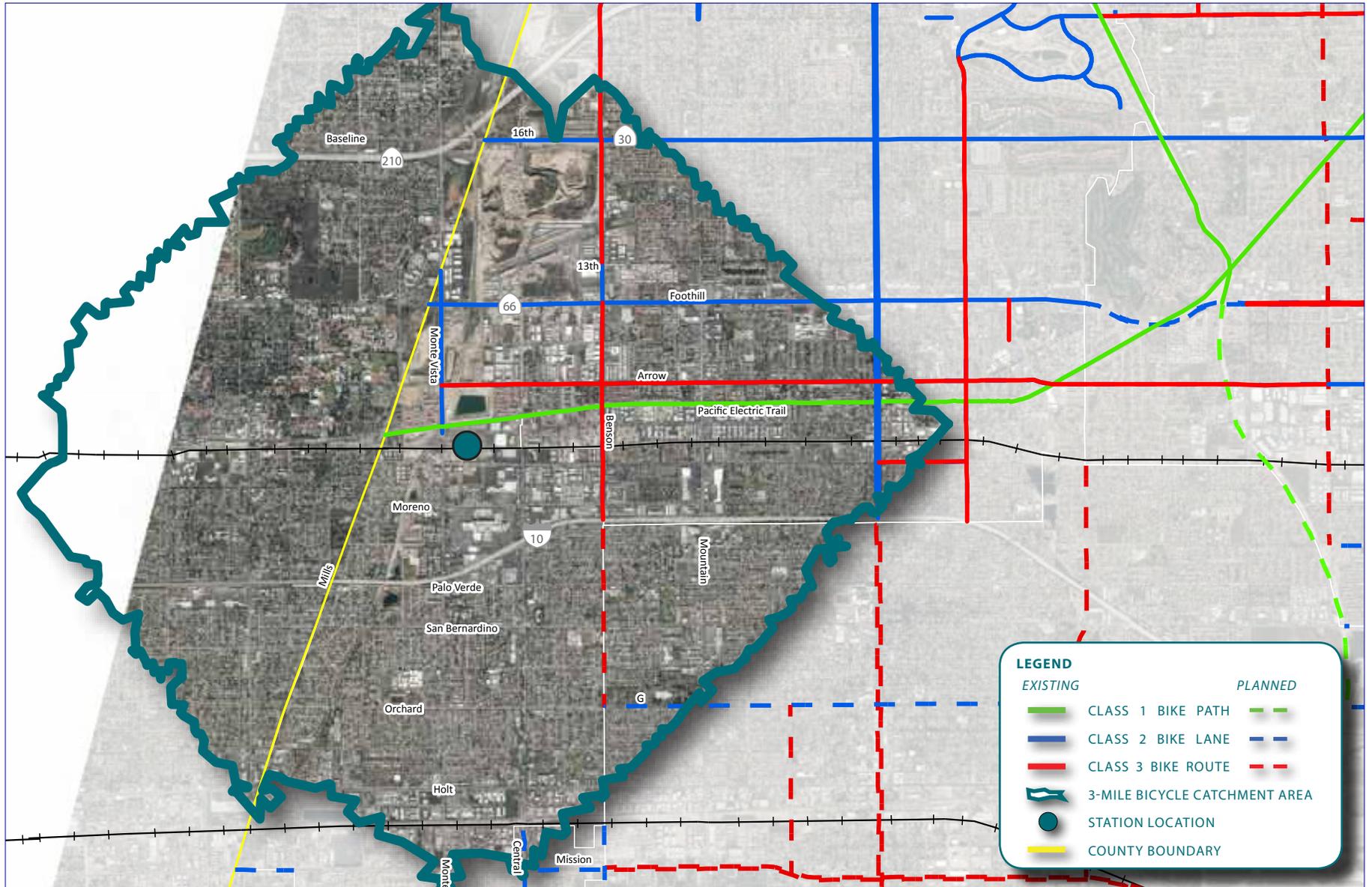


TABLE I.1 **BICYCLE AND PEDESTRIAN SCORING CRITERIA**

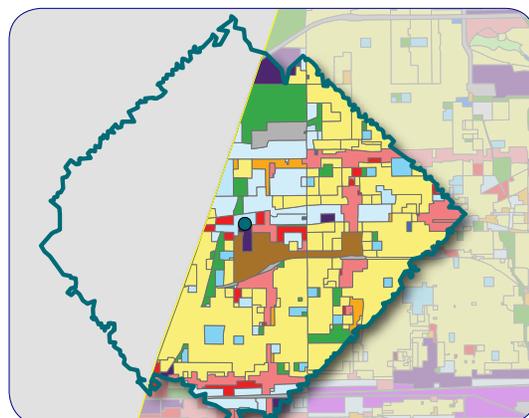
Matrix Item	Rating					
<b>Bicycle Environment</b>						
<b>Speed and Conditions of Vehicular Traffic</b>	Low speeds, free flow	Moderate speeds, free flow	Moderate speeds, some constrained flow	Moderately high or low speeds, constrained flow	Low speeds, failing flow, or excessively high speeds	
<b>Pavement Condition</b>	Excellent pavement conditions	Good pavement conditions	Average pavement conditions	Below average pavement conditions	Poor pavement conditions	
<b>"Door Zone" and Driveway Conflicts</b>	No conflicts	Few conflicts	Some conflicts	Many conflicts	Dangerous amount of conflicts	
<b>Transit service and waiting environment within Corridor</b>	Several bus routes, mostly enhanced or standard stop types	Several bus routes, mix of standard and sub-standard stop types	Some routes, mix of standard and sub-standard stop types	Few routes, mostly basic stop types	No routes, no stops	
<b>Amount of Key Attractions Served</b>	Several key attractions	Some key attractions	Few key attractions	Very few key attractions	No key attractions	
<b>Amount of Bike Facility Striping or Signage</b>	Ample signage and striping, good condition	Some signage and striping, good condition	Some signage and striping, fair condition	Little signage and striping, fair condition	No signage or striping	
<b>Pedestrian Environment</b>						
<b>Sidewalk/Parkway Width</b>	> 12 ft	10 ft	8 to 10 ft	5 to 10 ft	0 to 4 ft	
<b>Sidewalk Width</b>	> 6 ft	5 ft	4 to 5 ft	4 ft	0 to 3 ft	
<b>Sidewalk Condition</b>	Excellent sidewalk conditions	Good sidewalk conditions	Average sidewalk conditions	Below average sidewalk conditions	Poor sidewalk conditions	
<b>Sidewalk and/or Parkway Location</b>	Parkway planted with shade trees located next to the curb with sidewalk behind	Landscaped parkway planted with some trees located next to the curb with sidewalk behind	Landscaped parkway planted with no trees located next to the curb with sidewalk behind	Sidewalk next to the curb	No sidewalks	
<b>Crosswalks</b>	Continental markings /Decorative/Colored Concrete/Stamped crosswalks and curb extensions	Continental markings crosswalks	Crosswalks with parallel markings	Crosswalks with parallel markings in fair condition	No crosswalks	
<b>Curb Ramp</b>	ADA complaint with truncated dome; good condition	Curb ramp without truncated dome; good condition	ADA complaint without truncated dome; fair condition	ADA non-compliance	No curb ramp	
<b>Street Trees Location</b>	Double row of trees spaced 30 to 35 ft apart	Single row of trees spaced 30 to 35ft apart in parkway/tree wells located next to the curb	Shade trees spaced more than 40ft apart in parkway/tree wells located next to the curb	No trees in public right-of-way; adjoining trees on private property shading sidewalks	No trees	
<b>Raised Median</b>	14 ft or greater median with landscaping and large mature trees	10 ft to 13ft median with landscaping and large mature trees	10 to 14ft landscaped median with a few trees	Concrete median with no trees and/or landscaping	No raised median	
<b>Utility Poles and wires</b>	Underground	Located within Parkway allowing for street trees	Located within sidewalk with enough room for pedestrians and trees in parkway	Located within parkway with no room for trees	Located within sidewalk restricting pedestrian mobility	
<b>Lighting</b>	Street lights and pedestrian-scaled lights	Street lights and/or pedestrian-scaled lights	Street lights with double arms	Street lights with single arm	No lights	
<b>Street Furniture</b>	Benches/Bicycle Racks/Trash Receptacle/Public Art	Benches/Bicycle Racks/Trash Receptacle	Benches and Trash Receptacle	Benches or Trash Receptacle	None	
<b>Wayfinding Signage in public realm</b>	Ample pedestrian-scaled wayfinding signage; good condition	Some pedestrian-scaled wayfinding signage; good condition	Some pedestrian-scaled wayfinding signage, fair condition	Little pedestrian-scaled wayfinding signage, fair condition	No wayfinding signage	

FIG. 1.1 MONTCLAIR METROLINK STATION AND CATCHMENT AREA

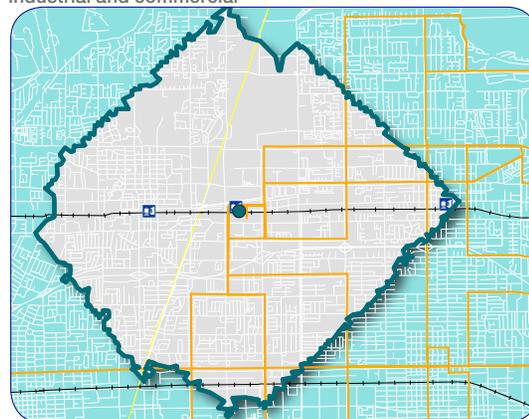




View of Montclair Metrolink Station



Area immediately surrounding station area is primarily industrial and commercial



Transit service focuses on connections to commercial and residential areas

## 1.0 Montclair Metrolink Station

The Montclair Metrolink Station serves as the western terminus of the Omnitrans fixed-route transit network, and provides connections to Los Angeles and Riverside County transit services. It is also a large commuter station for Metrolink services to Los Angeles County, and features a large parking area to accommodate “park-and-ride” transit users.

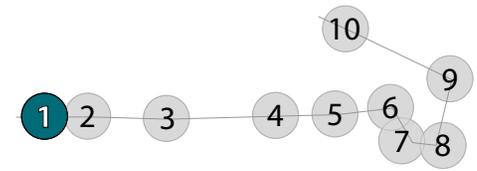


The station is surrounded by commercial, residential, and industrial uses, and is located just south of the Pacific Electric Rail Trail, a Class I facility running between Montclair and Fontana.

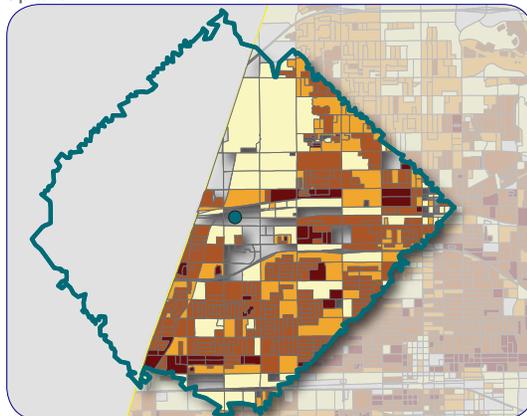
Most of the Montclair Metrolink Station catchment area is physically within Upland City limits, however the station itself is located in Montclair.

### Opportunities

- Pacific Electric Rail Line Trail provides for non-motorized access paralleling existing Metrolink alignment
- Significant connections to wide range of transit services throughout the region
- Moderate density of existing and planned residential land uses nearby
- Ample space for bicycle parking facilities or other commuter facilities
- Montclair Transcenter is a major stop on the San Bernardino Metrolink line and is served by Foothill Transit, Omnitrans and RTA bus lines. In addition, the Transcenter acts as a Caltrans Park-and-Ride facility providing regional connectivity.
- Montclair Transcenter provides opportunities for the development of commuter-related facilities within its own site and is a key element in the transportation link between North Montclair, the Montclair Plaza and outlying cities.
- Montclair Plaza is a major destination in the area.
- The *North Montclair Downtown Specific Plan* recognizes this and includes an overall vision to provide a viable and convenient connection between the Transcenter and Plaza and proposes creating a mixed-use, transit-oriented district between the Transcenter and Plaza.”
- Planned mixed-use and transit-oriented residential developments in the North Montclair



Unimproved mid-block crossing at border of Montclair and Upland



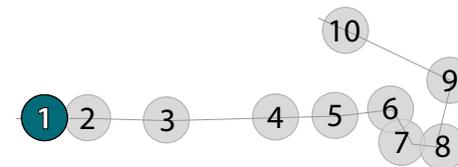
Residential density is concentrated to the south and east of the Metrolink Station

Downtown Specific Plan will offer its residents convenient access to rail transit via Metrolink commuter rail service.

- The City will also be the eastern terminus of the Gold Line light rail, which will link the foothill communities of the San Gabriel Valley with Pasadena and Downtown Los Angeles.
- The Pacific Electric Bicycle Trail, connecting Montclair to Rialto, ends approximately 1300 feet south of Monte Vista Avenue; however, the Huntington right-of-way provides the opportunity to extend this bike path and pedestrian trail to Claremont Village.
- The Transit plaza could include a day-care center, restaurants, coffee shop, police substation, and other commuter-related facilities to re-energize the plaza.

## Constraints

- City of Montclair has no existing or planned bicycle facilities
- Off-street connections to regional bicycle facilities are limited
- High-speed, high-volume arterials
- Commercial developments discourage pedestrian activity
- Currently, North Montclair is characterized by “super-block” development - blocks that are well over 800 to 1000 feet in length, and are oriented towards automobile movement. In large measure, this is the result of parcels that have not yet been improved, or are subdivided only as necessary to accommodate big box retail with surface parking.
- Richton Street is a wide four lane street with sidewalks next to the curb (no hardscape zone) making it unfriendly for pedestrians and bicycles alike.
- Sidewalk is missing on the north side of Richton Street between Monte Vista Avenue and the first entry/exit to the station park & ride lot
- Monte Vista Avenue is a wide street with a landscaped median and bike lanes; however, the street appears extremely pedestrian unfriendly north of Richton Street. Shade trees are missing along much of the sidewalk; utility poles are located within the narrow sidewalk on the east side limiting pedestrian mobility; the median lacks enough trees to breakup this wide street. South of Richton Street: Sidewalk is missing on the east side between 8th Street and Richton Street limiting pedestrian access.



- Access from the south side of the platforms is limited to Monte Vista Avenue and Central Avenue which are approximately 2500 feet apart.
- The Transit Plaza seems highly underutilized especially during off-peak hours.



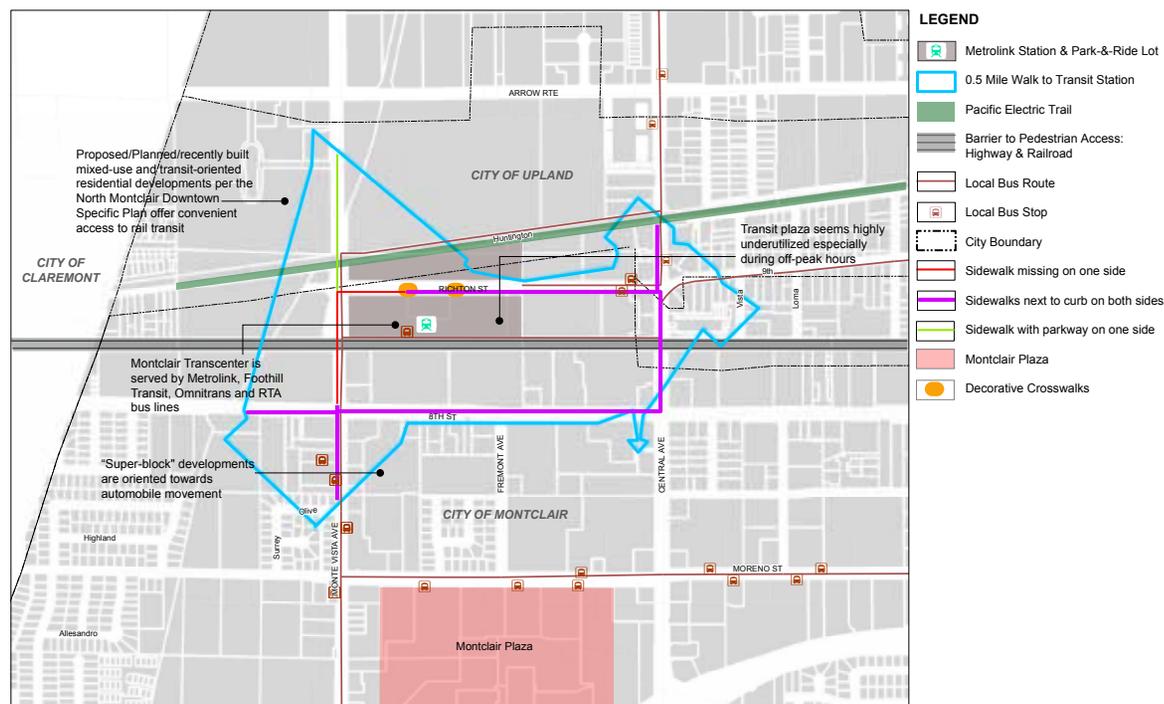
Illegal bicycle parking near tunnel to access Track 2.



Adequate signage and utilities placed clear of sidewalks encourage facility use for users of all mobility levels

FIG. 1.2 **MONTCLAIR METROLINK STATION PEDESTRIAN ANALYSIS**

*Montclair Metrolink Station - Opportunity & Constraints Analysis*



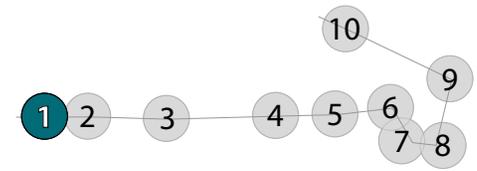
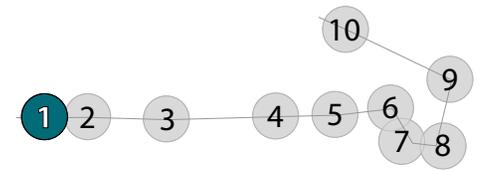


TABLE 1.1 EXISTING BICYCLE FACILITIES

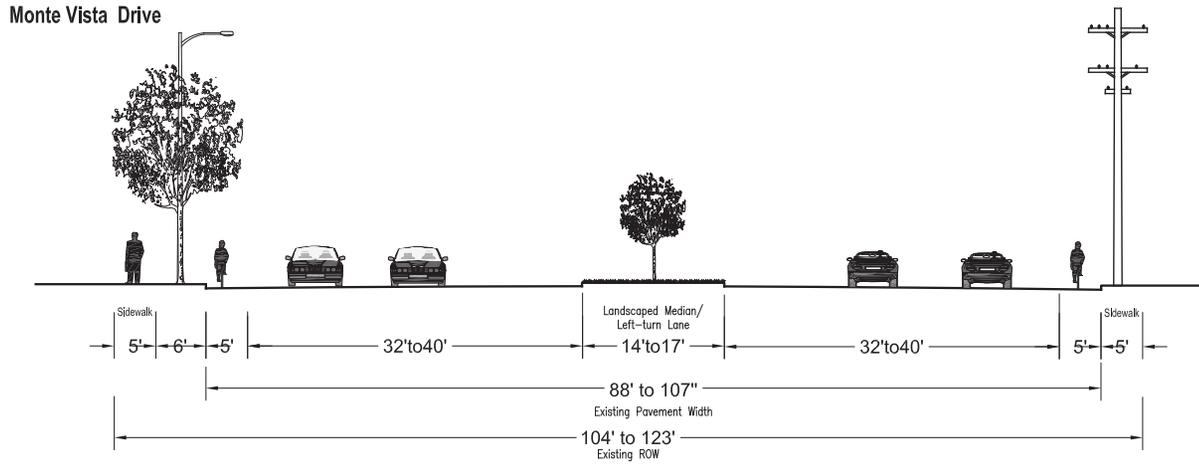
Street	Monte Vista Ave	Pacific Electric Bike Trail	Baseline Rd	16th Street	Foothill Blvd	Benson Ave				Arrow Route	Arrow Hwy	Euclid Ave
Segment	South of Claremont Blvd to Richton St	Claremont Blvd to 5th Ave	Summer Ave to Hwy 210 Onramp	Hwy 210 Onramp to Columbia Wy	Monte Vista Ave to 3rd Pl	Murfield Ave to Birkdale Ave	Birkdale Ave to 13th St	13th St to Foothill Blvd	Foothill Blvd to 10 Fwy	Monte Vista Ave to Benson Ave	Benson Ave to 5th Ave	15th St to 10 Fwy
Existing Facility Type	Class II	Class I	Class II	Class II	Class II	Class I	Class III	Class II	Class III	Class III	Class III	Class II
Speed and Condition of Vehicular Traffic		N/A				N/A						
Pavement Condition												
"Door Zone" and Driveway Conflicts												
Transit Service and Waiting Environment in Corridor	N/A		N/A	N/A		N/A						
Amount of Key Attractions												
Amount of Bike Facility Striping or Signage												

TABLE 1.2 EXISTING PEDESTRIAN FACILITIES

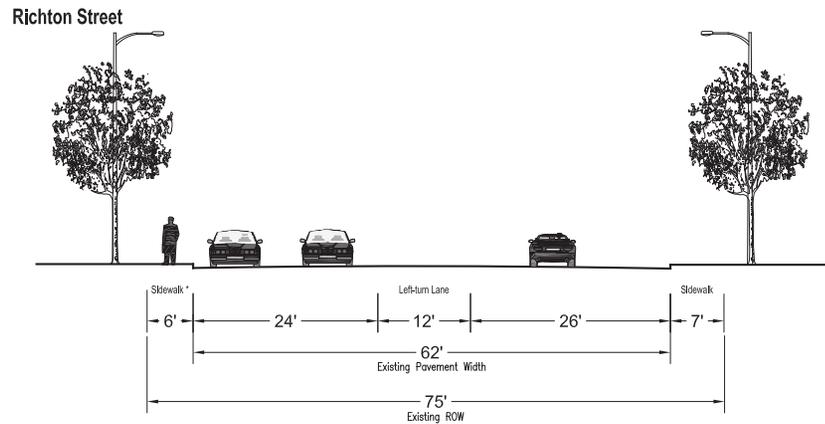
Street	Richton St	Monte Vista Ave		Central Ave	8th St
Segment		North of Richton St	South of Richton St		
Sidewalk/Parkway Width					
Sidewalk Width					
Sidewalk Condition					
Sidewalk and/or Parkway Location					
Crosswalks					
Curb Ramp					
Street Trees Location					
Raised Median					
Utility Poles and wires					
Lighting					
Street Furniture					
Wayfinding Signage in public realm					



**FIGURE 1.3 TYPICAL SECTION - MONTE VISTA DRIVE**

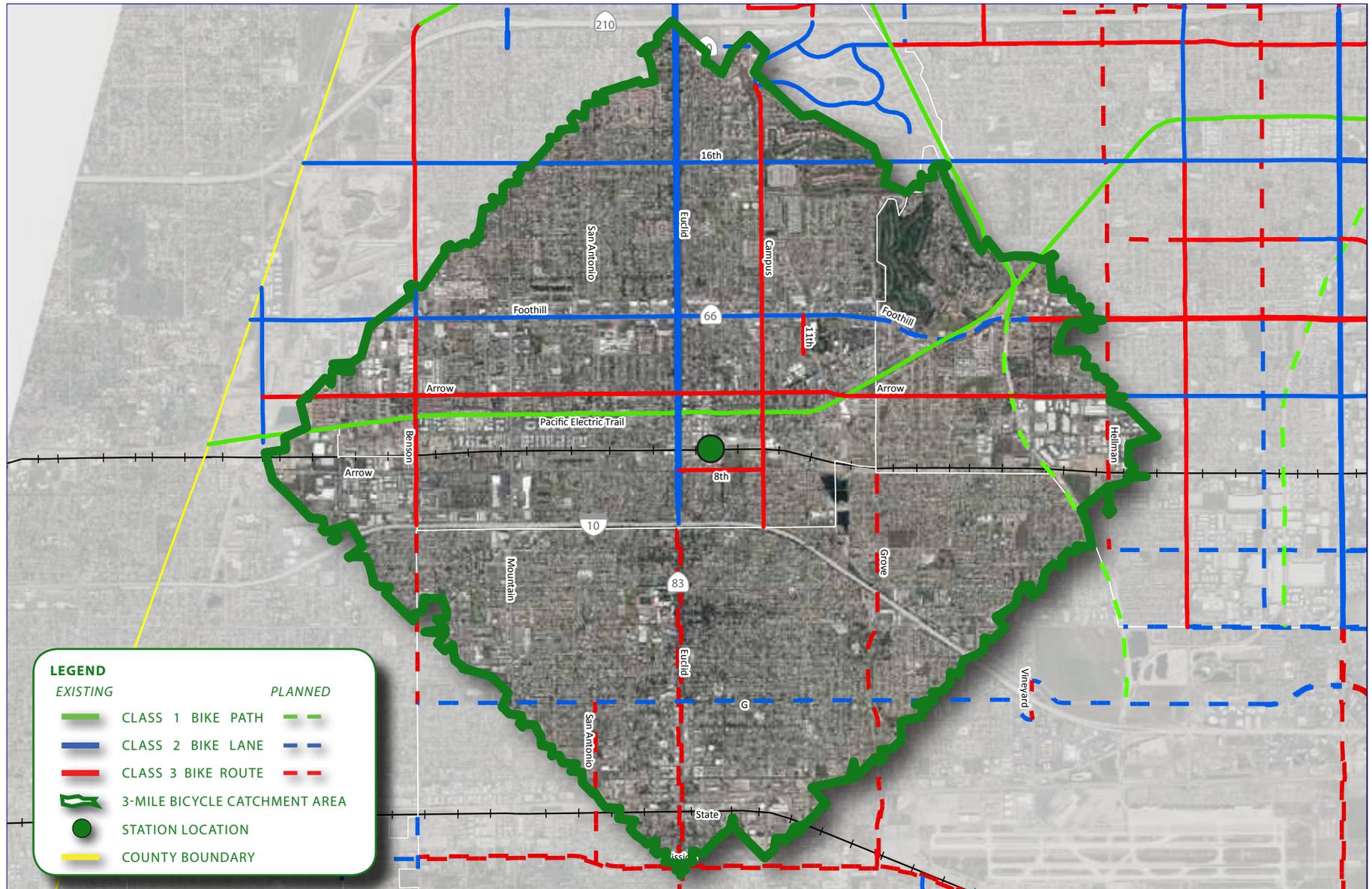


**FIGURE 1.4 TYPICAL SECTION - RICHTON STREET**



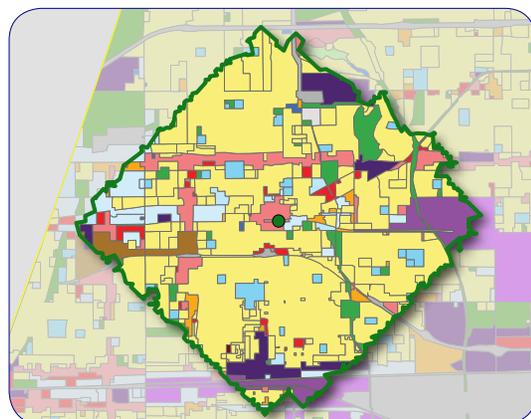
\* Sidewalk is missing between Monte Vista Avenue and the first entry/exit to the station park & ride lot

FIG. 2.1 UPLAND METROLINK STATION AND CATCHMENT AREA

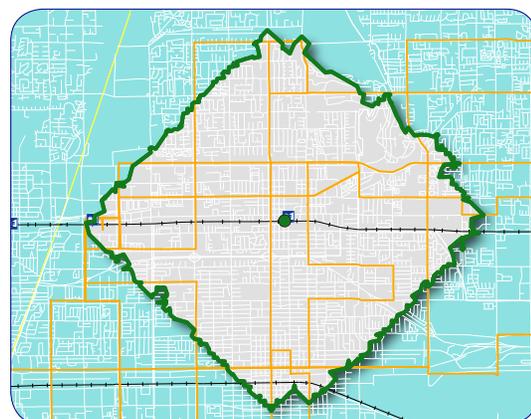




View of Upland Metrolink Station



Residential is the dominant land use in the study area



Station area is well-served by transit, although the station itself has limited direct connections to transit

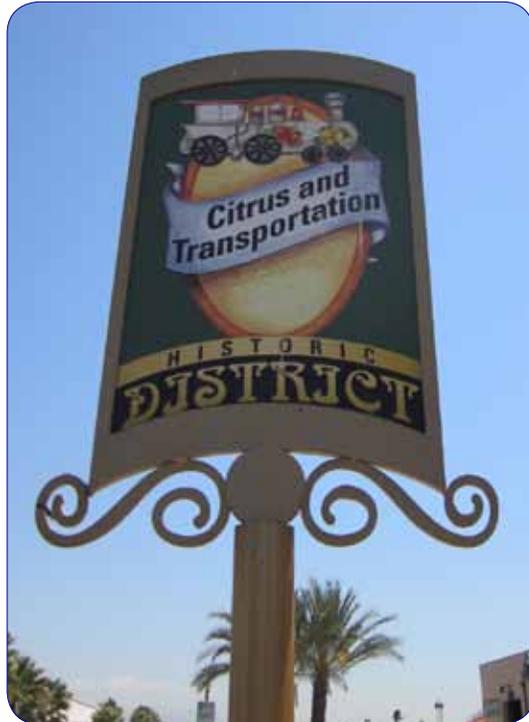
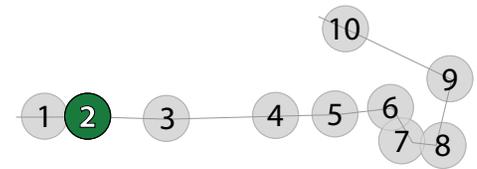
## 2.0 Upland Metrolink Station

The Upland Metrolink Station is located in the center of Downtown Upland, and is well-connected to the adjacent pedestrian and bicycle network. The station is surrounded by older storefront commercial development, which is itself surrounded primarily by low-density residential land uses.

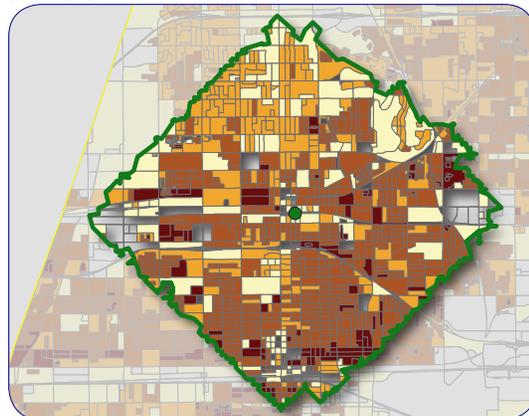


### Opportunities

- Excellent connection to downtown Upland commercial and residential areas
- Mature trees and pedestrian-scale storefronts invite pedestrian activity
- Pacific Electric Trail is well-located and well-signed
- Upland Metrolink Station is located within close proximity of the Downtown.
- Downtown Upland has wide sidewalks lined with widened landscaped sidewalks, street furniture, on-street parking in the center of the street, decorative crosswalks, pedestrian lighting and shops and small businesses oriented to the sidewalks.
- The *Historic Downtown Upland Specific Plan* (bounded by Arrow Highway to the north, 8th Street to the south, Campus Avenue to the east and Euclid Avenue in the west) has design standards and guidelines to improve pedestrian circulation, safety and activity and create a cohesive identity and environment for the Downtown.
- The *Historic Downtown Upland Specific Plan* includes working with the Southern California Regional Rail Authority and SANBAG to fund and construct a pedestrian bridge over the Metrolink tracks, working with Omnitrans to provide direct bus and shuttle service to the Upland Metrolink station and encouraging and supporting transit-oriented development near the Metrolink station, consisting of higher-density residential development that provides pedestrian access to public transit and nearby services.
- The *Historic Downtown Upland Specific Plan* identifies sidewalks locations where sidewalks are needed or should be improved in Downtown.
- The Metrolink Station can be accessed by the City of Upland's adjacent Pacific Electric Trail project, which includes a series of paved walking and jogging paths that help to preserve the right-of-ways and provides convenient pedestrian access to the Metrolink station.



Downtown Upland promotes itself as a regional tourist destination

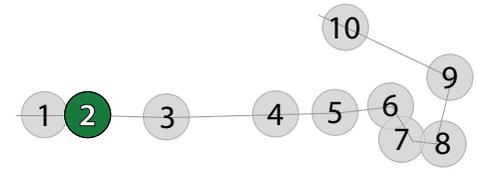


Station area has balanced, well-distributed residential density

- The Long Range Transportation Plan recommends Bus Rapid Transit along Euclid Avenue.
- A vacant lot located at the northeast corner of Sultan Avenue and 8th Street represents an opportunity for transit-oriented uses and connecting the station to Olivedale Park.
- The walkable grid pattern with tree-lined streets in the station vicinity is ideal for walking.
- A Street, the main access street to the Station, is a pedestrian-scaled street with one lane of traffic in each direction, parking on both sides, parkway/sidewalk and historic lights.
- Alleys in Downtown provide a great opportunity for pedestrian and public spaces by using such elements as pervious paving materials, potted plants and trees, park benches, lighting, allowances for outdoor café seating, and other amenities.

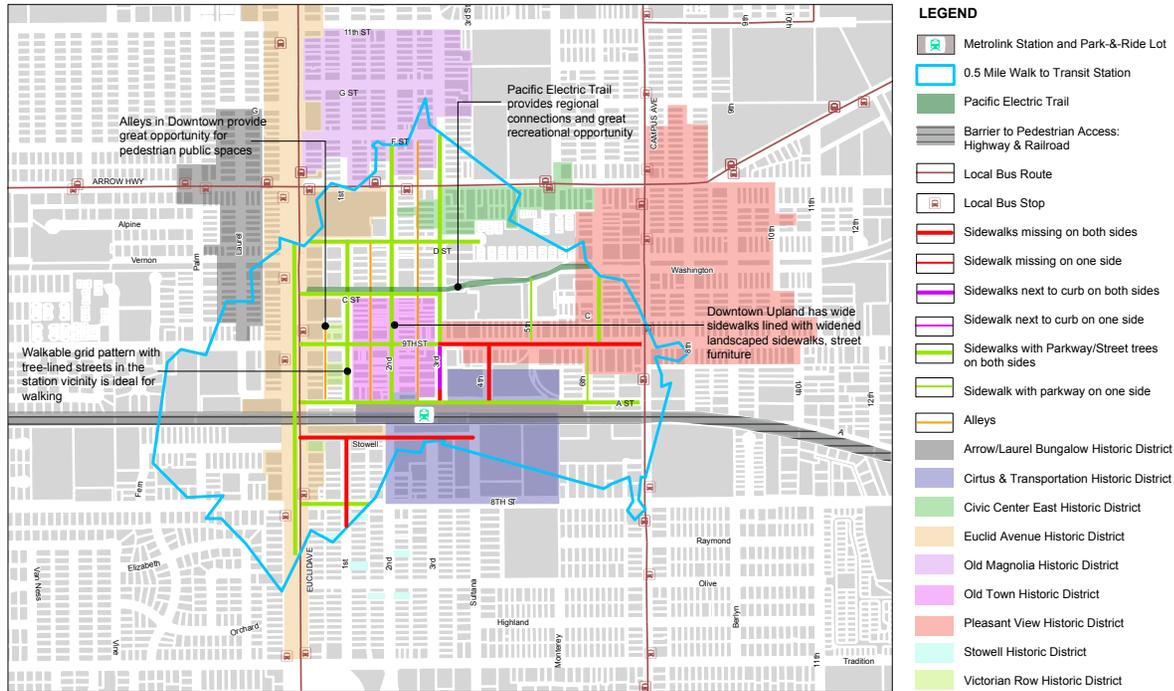
### Constraints

- Limited opportunities between station and Interstate 10
- Arterials with landscaped medians often lack mid-block crossings for cyclists and pedestrians
- Omnitrans does not directly serve the station, but runs route 83 along Euclid Avenue
- 3rd Avenue lacks landscape improvements between A Street and 9th Street. Sidewalks are missing on the west side of 3rd Avenue at the intersection of 3rd Avenue and A Street. Also, shade trees are missing in this segment and there are no street lights.
- Pedestrian crossings connecting north and south sides of the station area are limited to 2nd Avenue and Campus Avenue.
- The existing Pacific Electric Trail, serving pedestrians and bicyclists, does not have a designated crossing at Euclid Avenue or any other streets in Downtown.



**FIG. 2.2 UPLAND METROLINK STATION PEDESTRIAN ANALYSIS**

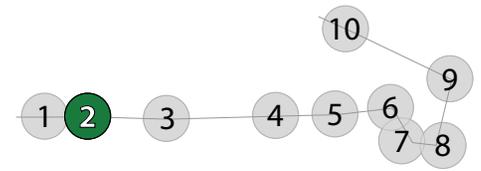
*Upland Metrolink Station - Opportunity & Constraint Analysis*



Shade of mature trees provides a natural alternative to bus shelter

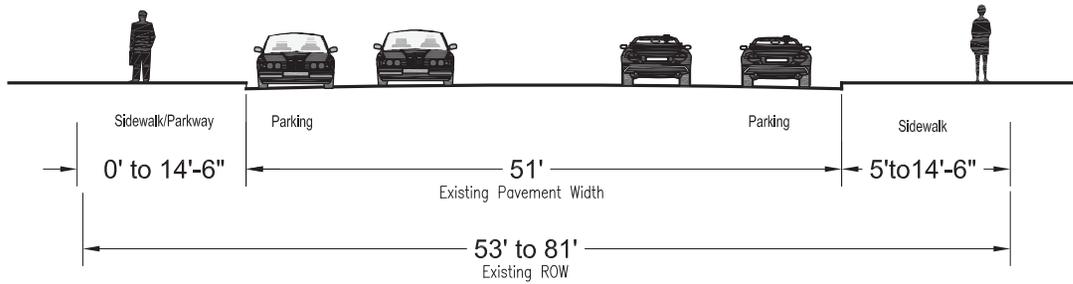


Identifying Metrolink connections along the Pacific Electric Bike Trail



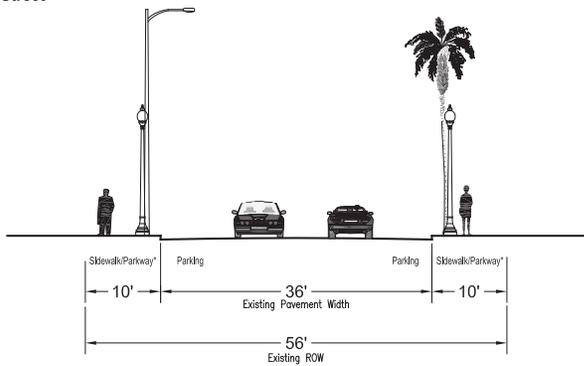
**FIGURE 2.3 TYPICAL SECTION - 3RD AVENUE**

**3rd Avenue (between A Street and 9th Street)**

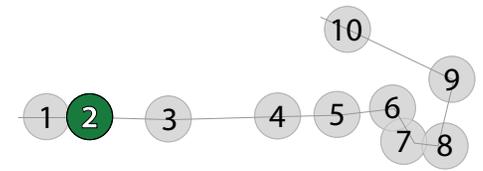


**FIGURE 2.4 TYPICAL SECTION - A STREET**

**A Street**



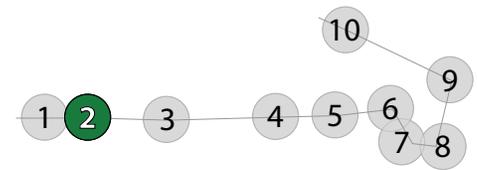
\* In some sections there is a 5ft parkway next to the curb whereas in some sections there are tree wells



**TABLE 2.1 EXISTING BICYCLE FACILITIES**

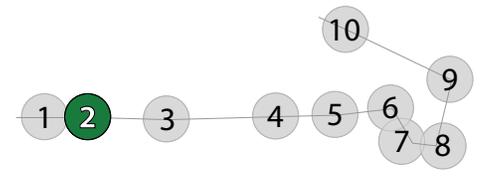
Street	Foothill Blvd	16th Street	Baseline Rd	Mountain Ave	19th St	Campus Ave			Hwy 30	Colonies Pkwy
Segment	Monte Vista Ave to Grove Ave	Hwy 210 Onramp to Campus Ave	Campus Ave to Lion St	Hwy 210 to 19th St	Miramar St to East End	21st St to 20th St	Hwy 210 to Colonies Pkwy	Colobies Pkwy to 10 Fwy	Campus Ave to Channel	Campus Ave to Hwy 30
Existing Facility Type	Class II	Class II	Class II	Class II	Class II	Class III	Class II	Class III	Class II	Class II
Speed and Condition of Vehicular Traffic										
Pavement Condition										
"Door Zone" and Driveway Conflicts										
Transit Service and Waiting Environment in Corridor				N/A	N/A					N/A
Amount of Key Attractions										
Amount of Bike Facility Striping or Signage										

Street	Tanglewood Ave	8th Street	Cucamonga Creek	Pacific Electric Bike Trail	Benson Ave			Arrow Route		Arrow Hwy	20th St
Segment	Colonies Pkwy to Hummingbird Ln	Euclid to Campus	Hwy 210 to Foothill Blvd	Monte Vista Ave to Hellman Ave	18th St to 13th St	13th St to Foothill Blvd	Foothill Blvd to 10 Fwy	Monte Vista Ave to Benson Ave	Helman Ave to Archibald Ave	Benson Ave to Hellman Ave	Campus Ave to Campus Ave
Existing Facility Type	Class II	Class III	Class I	Class I	Class III	Class II	Class III	Class III	Class II	Class III	Class III
Speed and Condition of Vehicular Traffic			N/A	N/A							
Pavement Condition											
"Door Zone" and Driveway Conflicts											
Transit Service and Waiting Environment in Corridor	N/A		N/A	N/A							N/A
Amount of Key Attractions											
Amount of Bike Facility Striping or Signage											



**TABLE 2.2 EXISTING PEDESTRIAN FACILITIES**

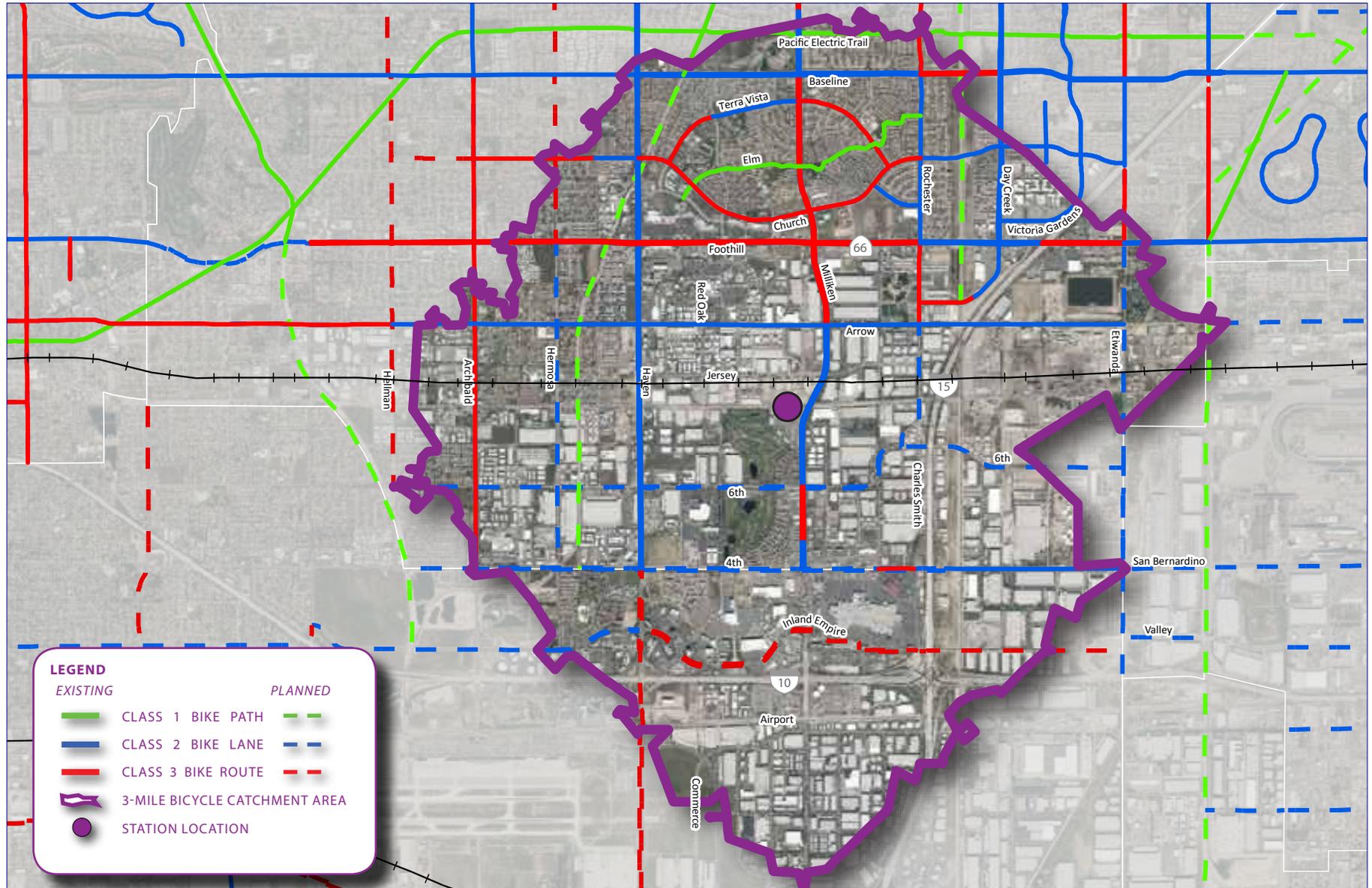
Street	A St	9 th St	C St	D St	Euclid Ave	1st St	2nd St	3rd St	4th St
Segment									
Sidewalk/Parkway Width									
Sidewalk Width									
Sidewalk Condition									
Sidewalk and/or Parkway Location									
Crosswalks									
Curb Ramp									
Street Trees Location									
Raised Median		N/A	N/A	N/A		N/A	N/A	N/A	N/A
Utility Poles and wires									
Lighting									
Street Furniture									
Wayfinding Signage in public realm									



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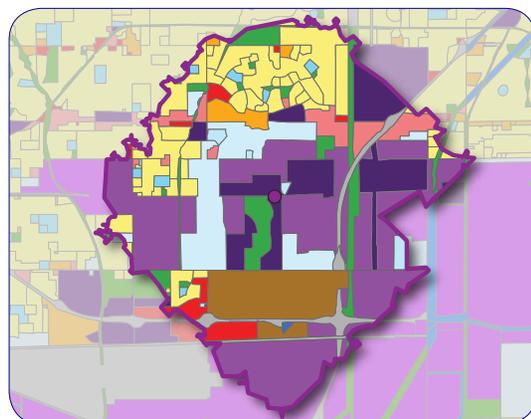
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FIG. 3.1 RANCHO CUCAMONGA METROLINK STATION AND CATCHMENT AREA

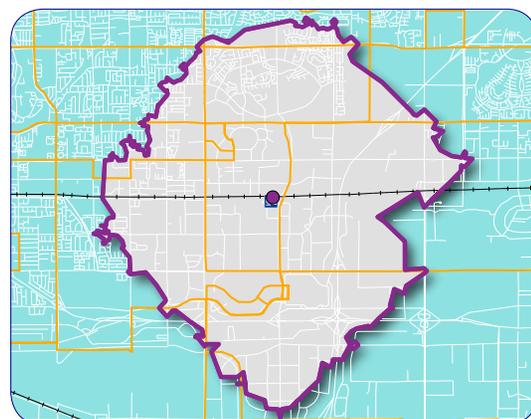




View of Rancho Cucamonga Metrolink Station



Limited residential density in study area, primarily industrial



Transit service to station follows Milliken

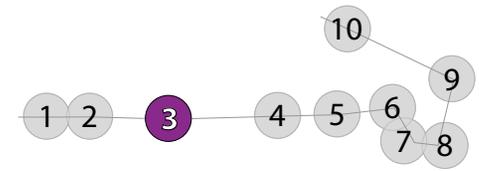
## 3.0 Rancho Cucamonga Metrolink Station



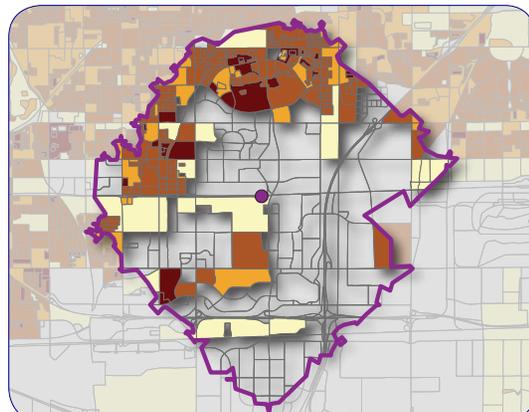
The Rancho Cucamonga Metrolink Station and catchment area are dominated by industrial land uses, although there are areas of low-density residential development in the northern part of the study area. The station is surrounded by large areas of free motor vehicle commuter parking, which are generally well-utilized during the workday. Roadways around the station are high-speed and high-volume, with significant truck traffic.

### Opportunities

- Excellent bicycle parking facilities (bike lids and bike racks) for commuters and day users
- Extensive existing bikeway facilities throughout study area
- Existing Class II/III facility along Milliken Avenue provides direct connection between Terra Vista and the Metrolink Station
- General sloping topography allows residents commuting from areas north of the station to peddle downhill on morning commute
- Milliken Avenue is a major arterial with six lanes; however the landscaped median, bike lanes, sidewalks next to landscaped parkways, landscaped setbacks and street lights makes it a pedestrian-friendly street.
- Rancho Cucamonga Metrolink Station plaza area has colored concrete, benches, pedestrian-scale lights, trees in tree wells and other pedestrian amenities.
- Rancho Cucamonga Metrolink Station has bicycle lockers.
- Omnitrans Route #81 serves the bus loop near the platform.
- Newer higher density transit supportive land uses are located at the northwest and northeast corner of 6th Street and Milliken Avenue with landscaped sidewalks and direct pedestrian connections to the station.
- The golf-course could be redeveloped as potential transit-supportive uses.
- Some industrial/business park uses could be intensified or converted into Transit-Oriented



Wayfinding at station identifies City-sponsored bike lockers



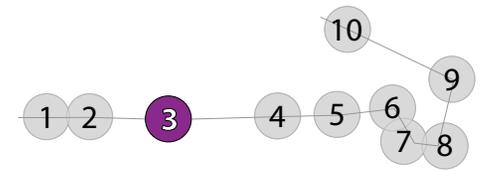
Extremely little residential development adjacent to station area discourages pedestrian access

Developments.

- The Rancho Cucamonga General Plan Community Mobility Element recommends relocating the Metrolink Station to Haven Avenue to provide more convenient access to employment centers and to allow for coordination with bus transit, including a possible BRT route along Haven Avenue. The Plan also recognizes the need to increase bicycle, trail and pedestrian use and recommends policies to expand pedestrian, bicycle and trail networks.

### Constraints

- Industrial land uses limit pedestrian connectivity in and around station area
- Conflicts with freeway traffic at Interstates 15 and 10
- Limited Omnitrans fixed-route transit connections to station
- Rancho Cucamonga Metrolink Station is surrounded by a large parking lot.
- Bike lockers are located on the far east side of the station boarding and ticketing area adding more travel time for bicyclist to park and board the train. There is enough room near the transit station ticketing area to accommodate these bike lockers closer to the boarding area.
- The transit plaza seems underutilized, especially during the off-peak period. It could be activated with food vendors, coffee shops and/or restaurants that not only cater to transit patrons, but also to commercial/industrial uses nearby.
- No direct pedestrian/bicycle access exists from the commercial/industrial developments on the north side to the station platform.
- No crosswalk exists at the intersection of Milliken Avenue and Azusa Ct., limiting direct pedestrian and bicycle access to the station. Pedestrians and bicyclists have to either use crosswalks at Jersey Boulevard or 7th Street; these crosswalks are approximately 2500 feet apart.
- There is no direct access for pedestrians and bicyclists on the west sidewalk along Milliken Avenue until Azusa Ct. This forces pedestrians and bicyclists to walk an extra 500 ft. along the edge of the station park & ride lot to access the station.
- Street lights along Milliken Avenue are located within the parkway, approximately 18" from the curb and face away from the sidewalks.



- Wayfinding signage leading up to the station are missing along Milliken Avenue.
- Shade trees are missing along the north side parkway on Azusa Ct.
- Auto-oriented, super-block development pattern is well established.
- Generally, Washingtonia Robusta (Mexican Fan Palms) is the major Street tree on Sierra Avenue between Orange Way and Valencia Avenue. These trees offer a strong defining edge and add character to the street; however, they provide no shade. Another accent shade tree could be added for pedestrian comfort.
- Within the study area, Juniper Street has narrow sidewalks located next to the curb. In some locations, utility poles are located within the sidewalk reducing pedestrian mobility.

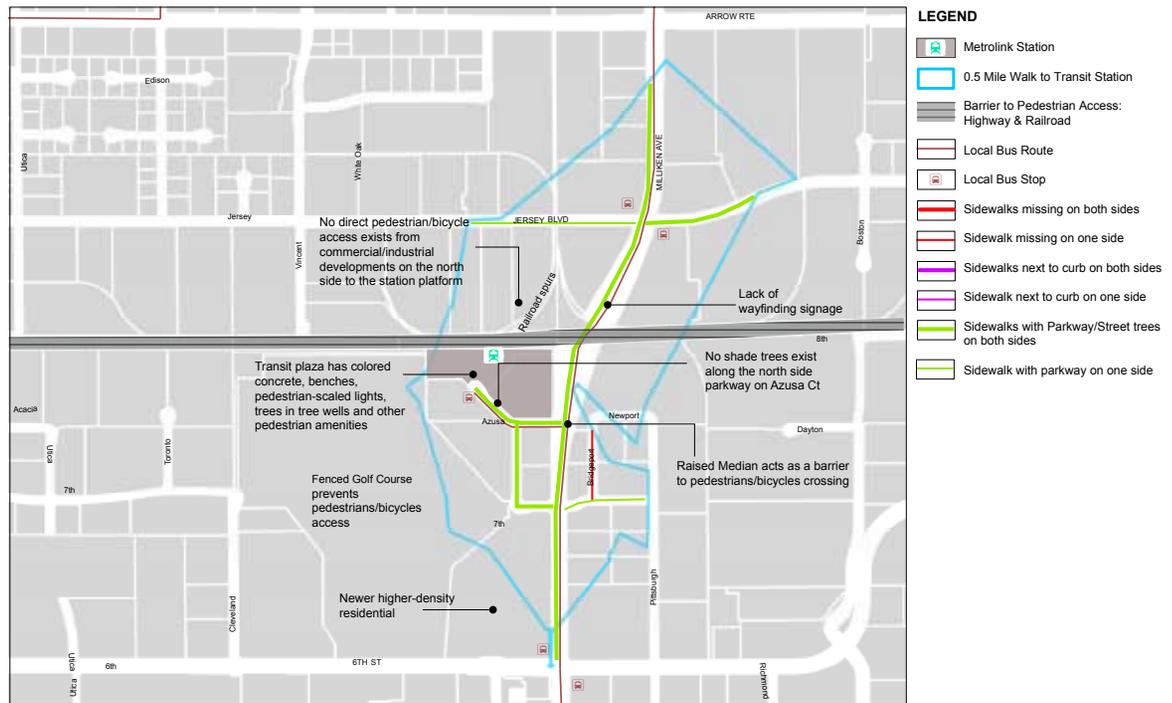


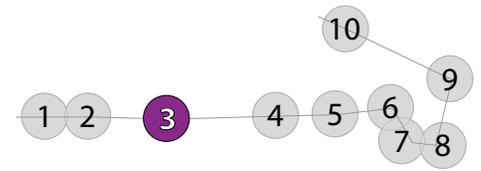
Short-term and long-term bicycle parking facilities accommodate all users



Area north of station is undeveloped and lacks direct connection to station

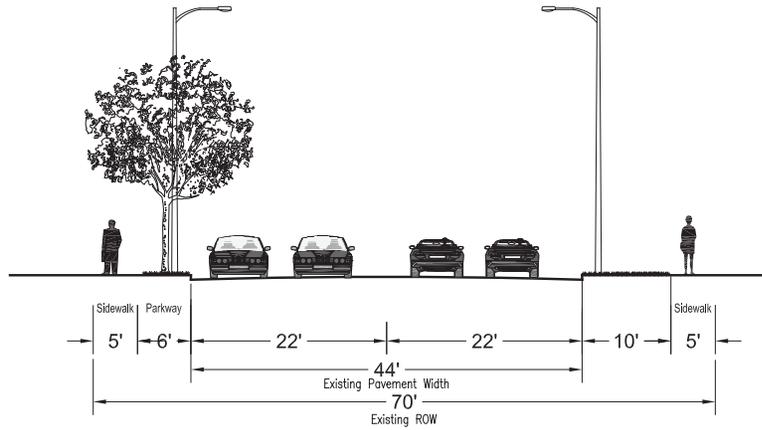
**FIG. 3.2 RANCHO CUCAMONGA METROLINK STATION PEDESTRIAN ANALYSIS**  
*Rancho Cucamonga Metrolink Station - Opportunity & Constraint Analysis*





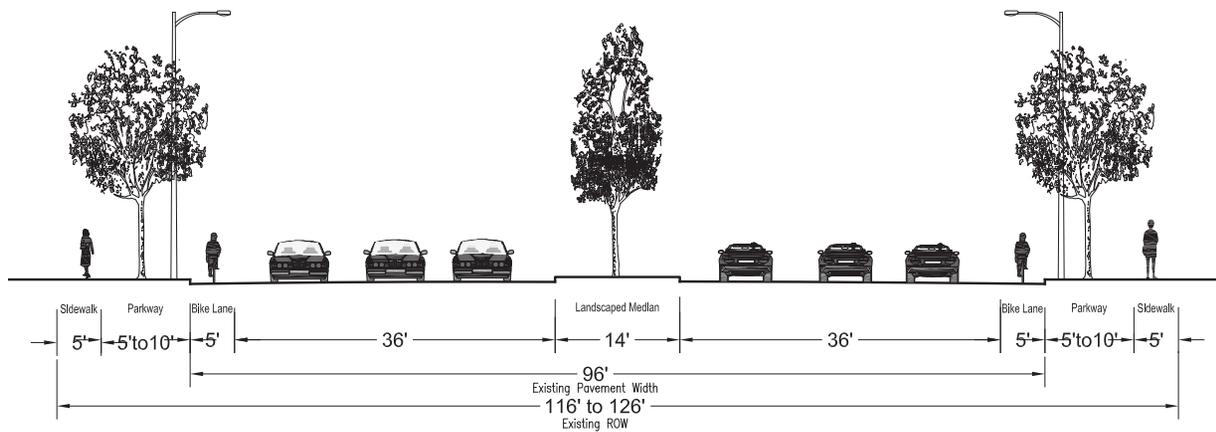
**FIGURE 3.3 TYPICAL SECTION - AZUSA COURT**

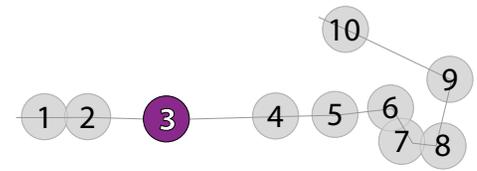
**Azusa Ct**



**FIGURE 3.4 TYPICAL SECTION - MILLIKEN AVENUE**

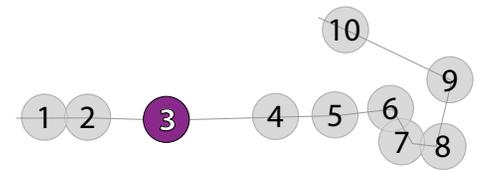
**Milliken Avenue**





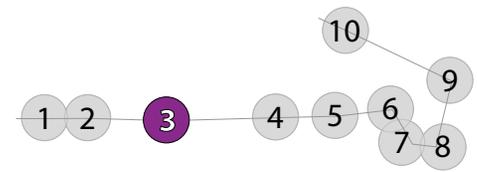
**TABLE 3.1 EXISTING BICYCLE FACILITIES**

Street	Victoria Park Ln - Fairmont Wy	Victoria Park Ln - Victoria Gardens Ln	Charleston St - Alberta Pl - Loyola Ct	Deer Creek Channel	Pacific Electric Bike Trail	Baseline Rd	Church St	Terra Vista Pkwy	Elm Ave Bike Path	Malaqa Dr
Segment	Charleston St to Victoria Windrows Loop	Barberry St to Day Creek Blvd	Deer Dreek Channel to Fairmont Wy	Hwy 210 to Baseline Rd	Archibald Ave to Etiwanda Ave	Amethyst Ave to Etiwanda Ave	Archibald Ave to Etiwanda Ave	Church St to Milliken Ave	Town Center Dr to Rochester Ave	Church St to Rochester Ave
Existing Facility Type	Class II	Class II	Class II	Class I	Class I	Class II	Class II & III	Class II & III	Class I	Class II
Speed and Condition of Vehicular Traffic				N/A	N/A				N/A	
Pavement Condition										
"Door Zone" and Driveway Conflicts										
Transit Service and Waiting Environment in Corridor				N/A	N/A		N/A	N/A	N/A	N/A
Amount of Key Attractions										
Amount of Bike Facility Striping or Signage										



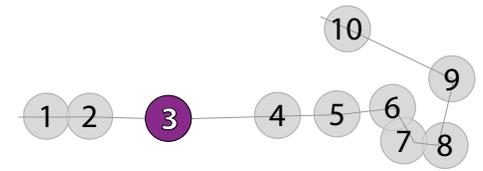
**TABLE 3.1 EXISTING BICYCLE FACILITIES (CONTINUED)**

Street	Arbor Ln	Day Creek Blvd - Jack Benny Dr	Jack Benny Dr	Haven Ave	Foothill Blvd				Archibald Ave
Segment	Vintner Dr to Cultural Center Dr	Victoria Park Ln to South End of Bike Lanes	Rochester Ave to Bike Lanes (East)	Hwy 30 to 4th St	East of Vineyard Ave to Rochester Ave	Rochester Ave to 15 Fwy Onramp	15 Fwy Onramp to Etiwanda Ave	Etiwanda Ave to Cottonwood Ave	Pacific Electric Bike Trail to 4th St
Existing Facility Type	Class II	Class II	Class III	Class II	Class III	Class II	Class III	Class II	Class II
Speed and Condition of Vehicular Traffic									
Pavement Condition									
"Door Zone" and Driveway Conflicts									
Transit Service and Waiting Environment in Corridor	N/A								N/A
Amount of Key Attractions									
Amount of Bike Facility Striping or Signage									



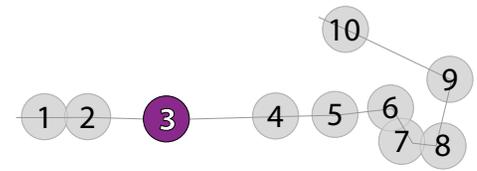
**TABLE 3.1 EXISTING BICYCLE FACILITIES (CONTINUED)**

Street	Milliken Ave								
Segment	Kenyon Wy to Fairmont Wy	Fairmont Way to Baseline Rd	Baseline Rd to Arrow Route	Arrow Route to 6th St	6th St to Beginning of Bike Lanes (South of 5th)	Beginning of Bike Lanes (South of 5th St) to 4th St	Victoria Park Ln to Baseline Rd	Baseline Rd to Foothill Blvd	Foothill Blvd to Arrow Route
Existing Facility Type	Class III	Class II	Class III	Class II	Class III	Class II	Class III	Class II	Class III
Speed and Condition of Vehicular Traffic									
Pavement Condition									
"Door Zone" and Driveway Conflicts									
Transit Service and Waiting Environment in Corridor									
Amount of Key Attractions									
Amount of Bike Facility Striping or Signage									



**TABLE 3.1 EXISTING BICYCLE FACILITIES (CONTINUED)**

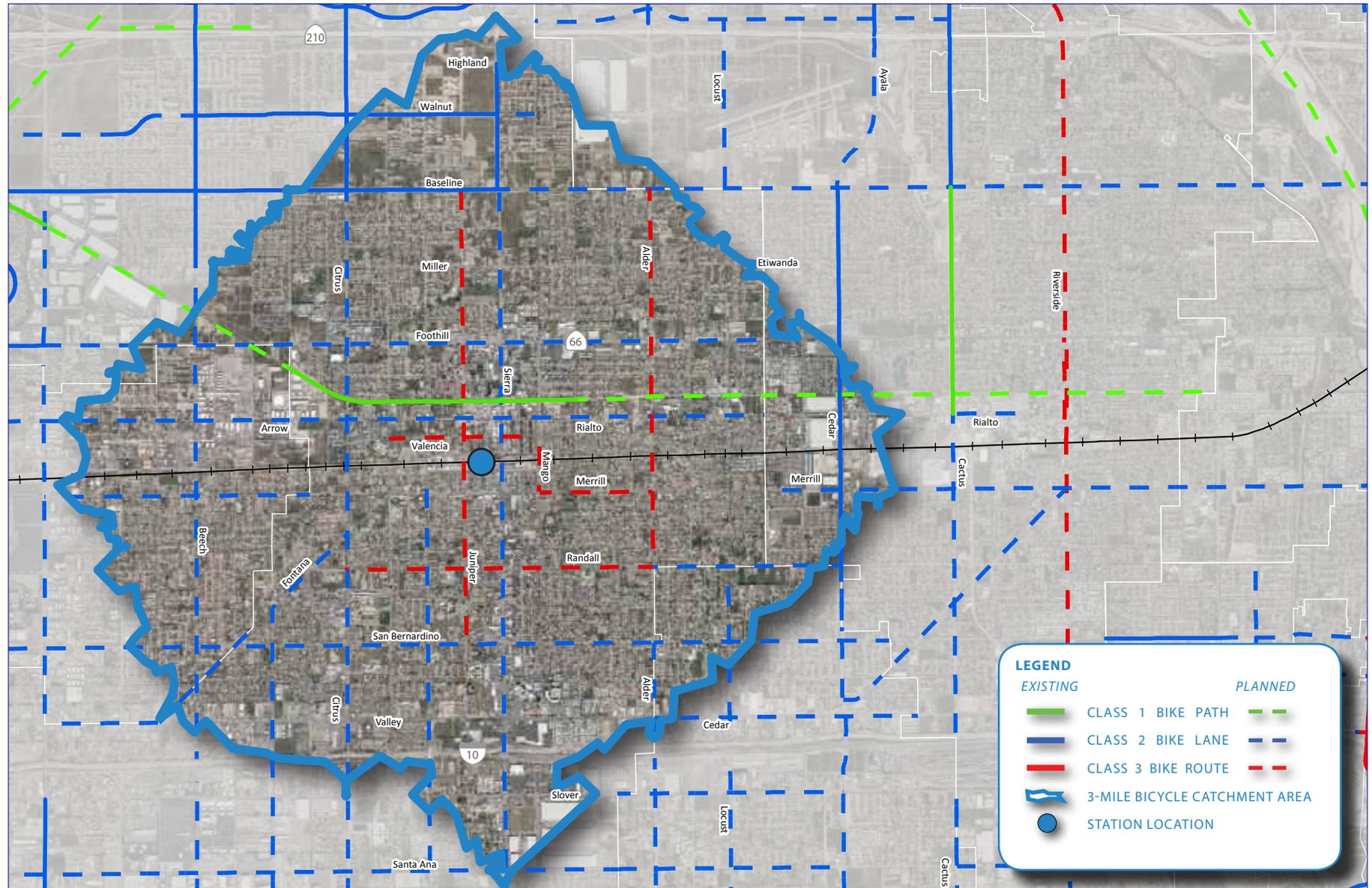
Street	Etiwanda Ave	Arrow Route	4th St	East Ave	San Sevaine Trail
Segment	Baseline Rd to Foothill Blvd	Vineyard Ave to Etiwanda Ave	Buffalo Ave to Etiwanda Ave	Miller Ave to Foothill Blvd	Northeast of Foothill Blvd to Foothill Blvd
Existing Facility Type	Class II & III	Class III & III	Class II & III	Class III	Class I
Speed and Condition of Vehicular Traffic					N/A
Pavement Condition					
"Door Zone" and Driveway Conflicts					
Transit Service and Waiting Environment in Corridor	N/A			N/A	N/A
Amount of Key Attractions					
Amount of Bike Facility Striping or Signage					

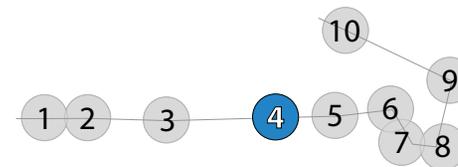


**TABLE 3.1 EXISTING PEDESTRIAN FACILITIES**

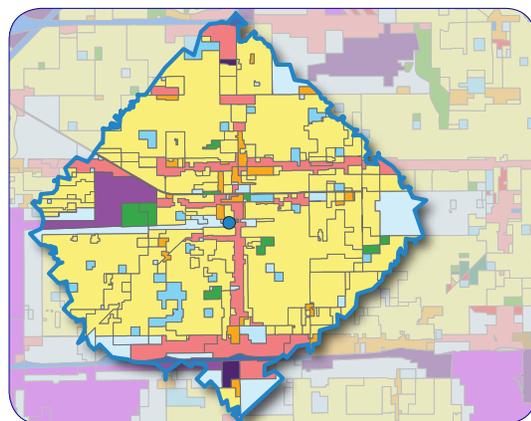
Street	Milliken Avenue			Azusa Ct	Jersey Blvd	Bridgeport
Segment	North of Jersey Blvd	Jersey Blvd to Azusa Ct	Azusa Ct to 6th St			
Sidewalk/Parkway Width						
Sidewalk Width						
Sidewalk Condition						
Sidewalk and/or Parkway Location						
Crosswalks						
Curb Ramp						
Street Trees Location						
Raised Median				N/A		N/A
Utility Poles and wires						
Lighting						
Street Furniture						
Wayfinding Signage in public realm						

FIG. 4.1 FONTANA METROLINK STATION AND CATCHMENT AREA

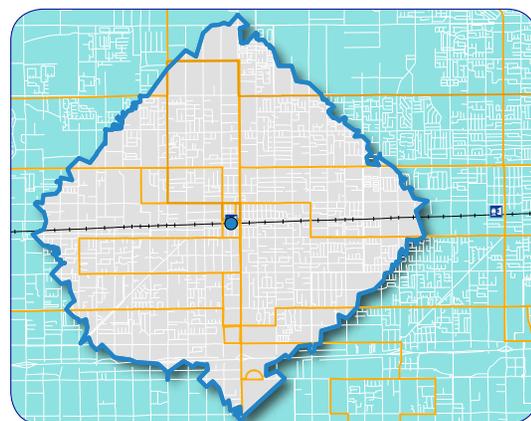




View of Fontana Metrolink Station



Mix of residential and arterial commercial land uses



Extensive transit connections throughout study area

## 4.0 Fontana Metrolink Station

The Fontana Metrolink Station is located in Downtown Fontana, and serves as a Transit Plaza for area residents and visitors. It is surrounded by a mix of commercial, civic, and residential land uses. The Pacific Electric Bicycle Trail reaches its eastern terminus northeast of the station.

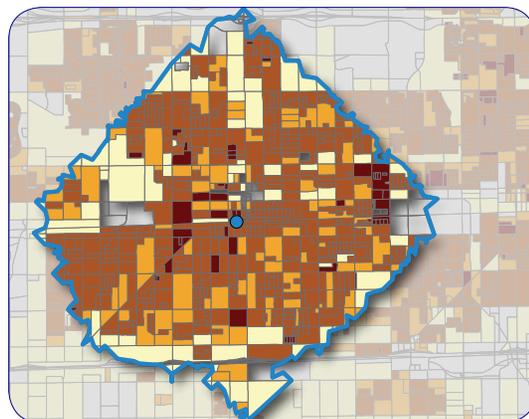


### Opportunities

- Improved downtown area along Sierra provides excellent pedestrian connectivity and a great walking environment
- Eastern terminus of existing Pacific Electric Bike Trail
- The station is in close proximity to Downtown Fontana and various civic and public uses.
- Omnitrans maintains a transit center next to the station, which serves as a transfer point to various bus routes.
- Sierra Avenue is a pedestrian-friendly street with widened landscaped sidewalks, street furniture, curb extension, on-street parking, decorative crosswalks, pedestrian lighting and shops and small businesses oriented to the sidewalks and a landscaped median in some locations.
- Pacific Electric Bicycle Trail with tree groves, open space, benches and landscaped areas provides an excellent opportunity for regional connectivity.
- Grid street pattern in the station area is ideal for walking.
- Most neighborhood streets such as Rosena, Bennett, Nuevo, Wheeler, Newport and Emerald have approximately 5 to 6' wide sidewalks located next to a 10' parkway with shade trees.
- A few newer and existing dense residential developments creates demand for pedestrian/bicycle-friendly neighborhoods.
- Decorative crosswalks and colored intersection occur at Orange Way and Arrow Boulevard intersections with Sierra Way.



Downtown features excellent wayfinding measures



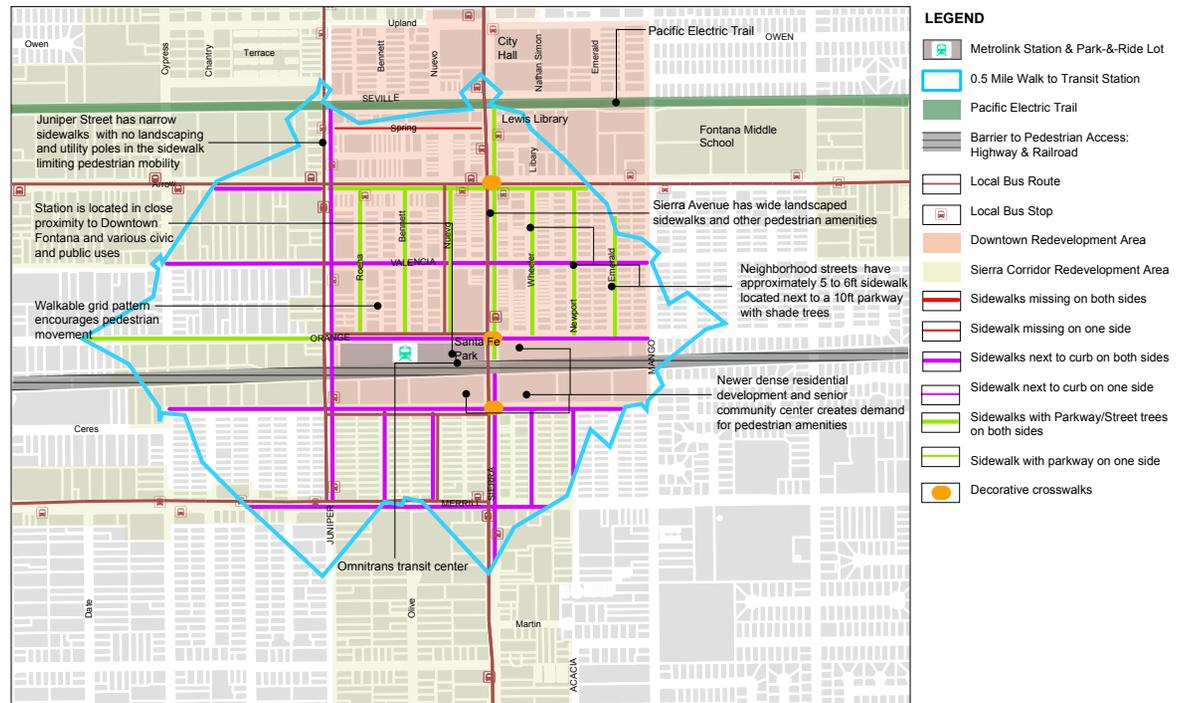
Substantial residential density throughout study area

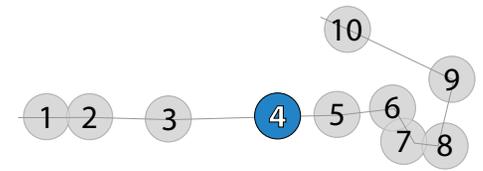
## Constraints

- Barriers created by Interstate 10
- Generally, Washingtonia Robusta (Mexican Fan Palms) is the major Street tree on Sierra Avenue between Orange Way and Valencia Avenue. These trees offer a strong defining edge and add character to the street; however, they provide no shade. Another accent shade tree could be added for pedestrian comfort.
- Within the study area, Juniper Street has narrow sidewalks located next to the curb. In some locations, utility poles are located within the sidewalk reducing pedestrian mobility.

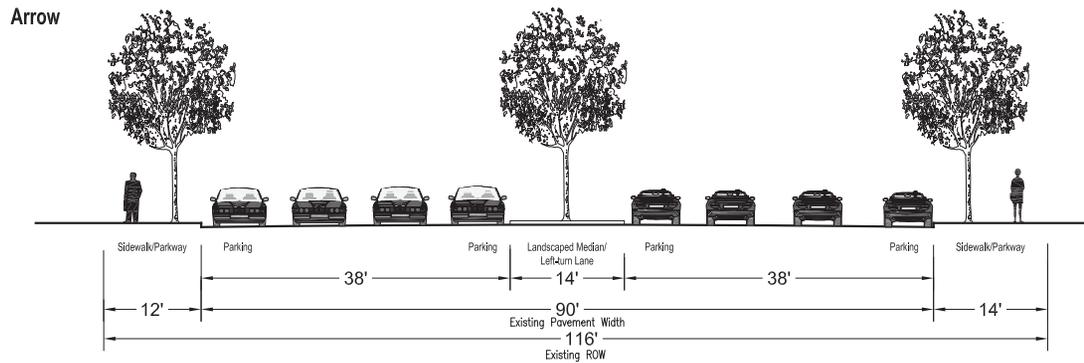
FIGURE 4.2 FONTANA METROLINK STATION PEDESTRIAN ANALYSIS

### Fontana Metrolink Station - Opportunity & Constraint Analysis





**FIGURE 4.3 TYPICAL SECTION - ARROW HIGHWAY**

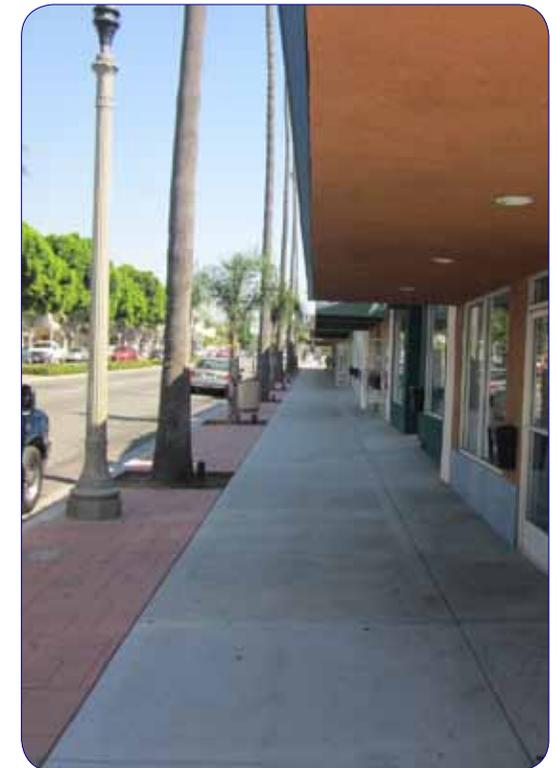
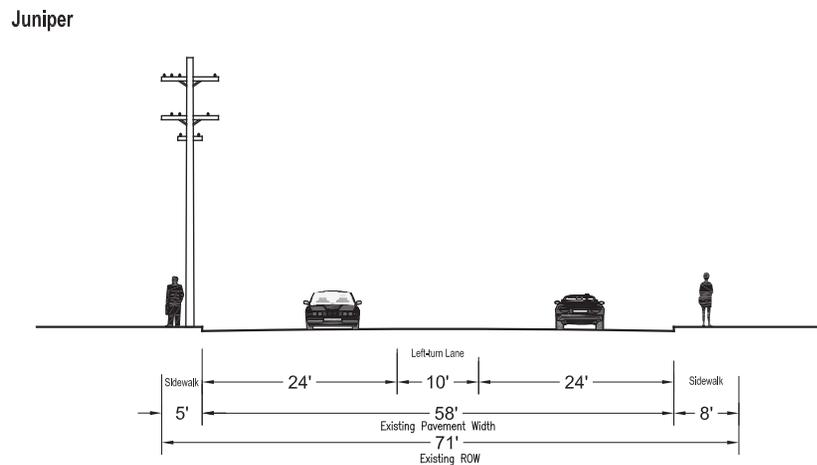


Street trees are sparsely placed along Arrow Blvd  
 Landscaped median is only between Palmetto and Juniper Avenues



Excellent signage along Pacific Electric Bicycle Trail

**FIGURE 4.4 TYPICAL SECTION - JUNIPER**



Wide, clear sidewalks and awnings provide an inviting pedestrian environment

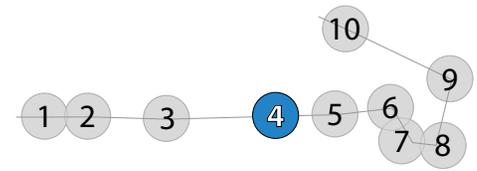


FIGURE 4.5 TYPICAL SECTION - ORANGE WAY

Orange Way

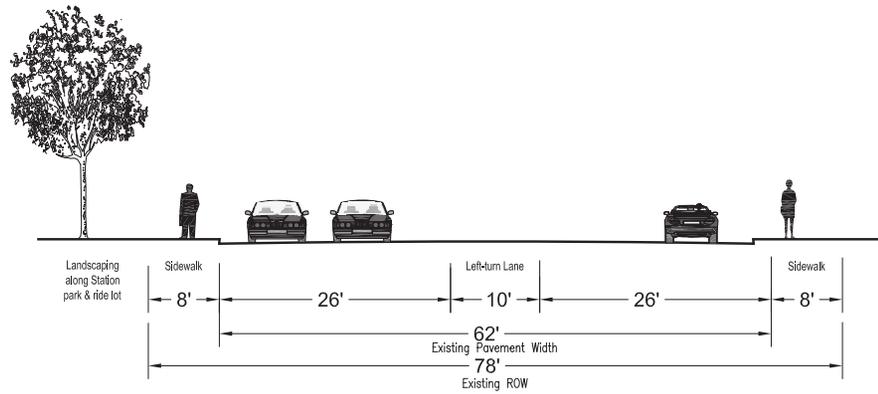


FIGURE 4.6 TYPICAL SECTION - RESIDENTIAL

Typical residential street

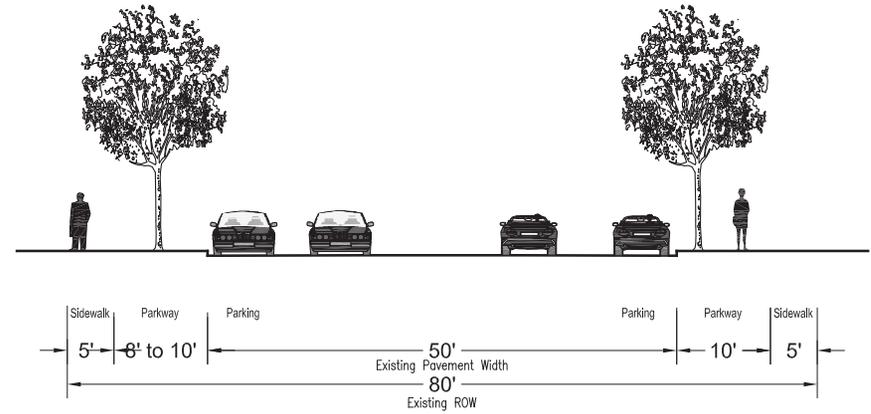
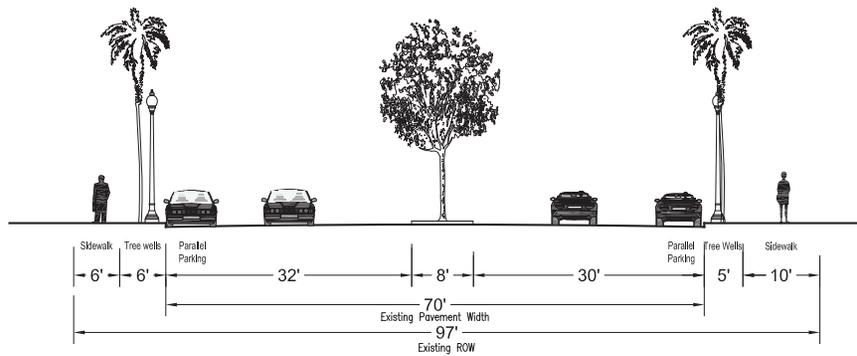
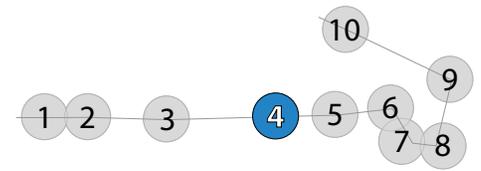


FIGURE 4.7 TYPICAL SECTION - SIERRA AVENUE

Sierra

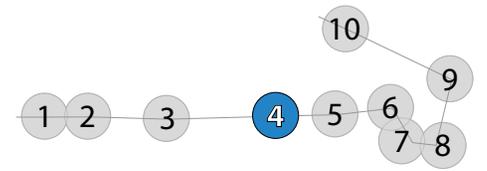


Between Valencia Avenue and Arrow Boulevard the major street is Ficus



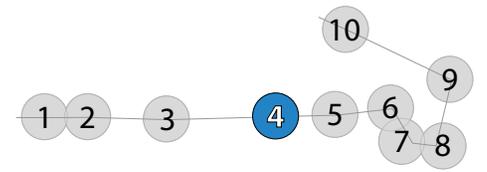
**TABLE 4.1 EXISTING BICYCLE FACILITIES**

Street	Pacific Electric Bike Trail	Cedar Ave	Beech Ave	Citrus Ave	Sierra Ave	Walnut St	Baseline Rd
Segment	Almeria Ave to Palmetto Ave	Baseline Rd to Randall Ave	Walnut St to Miller Ave	210 Fwy to Baseline Rd	Highland Ave to Baseline Rd	Beech Ave to Sierra Ave	Live Oak Ave to Sierra Ave
Existing Facility Type	Class I	Class II	Class II	Class II	Class II	Class II	Class II
Speed and Condition of Vehicular Traffic	N/A						
Pavement Condition							
"Door Zone" and Driveway Conflicts							
Transit Service and Waiting Environment in Corridor							
Amount of Key Attractions							
Amount of Bike Facility Striping or Signage							



**TABLE 4.2 EXISTING PEDESTRIAN FACILITIES**

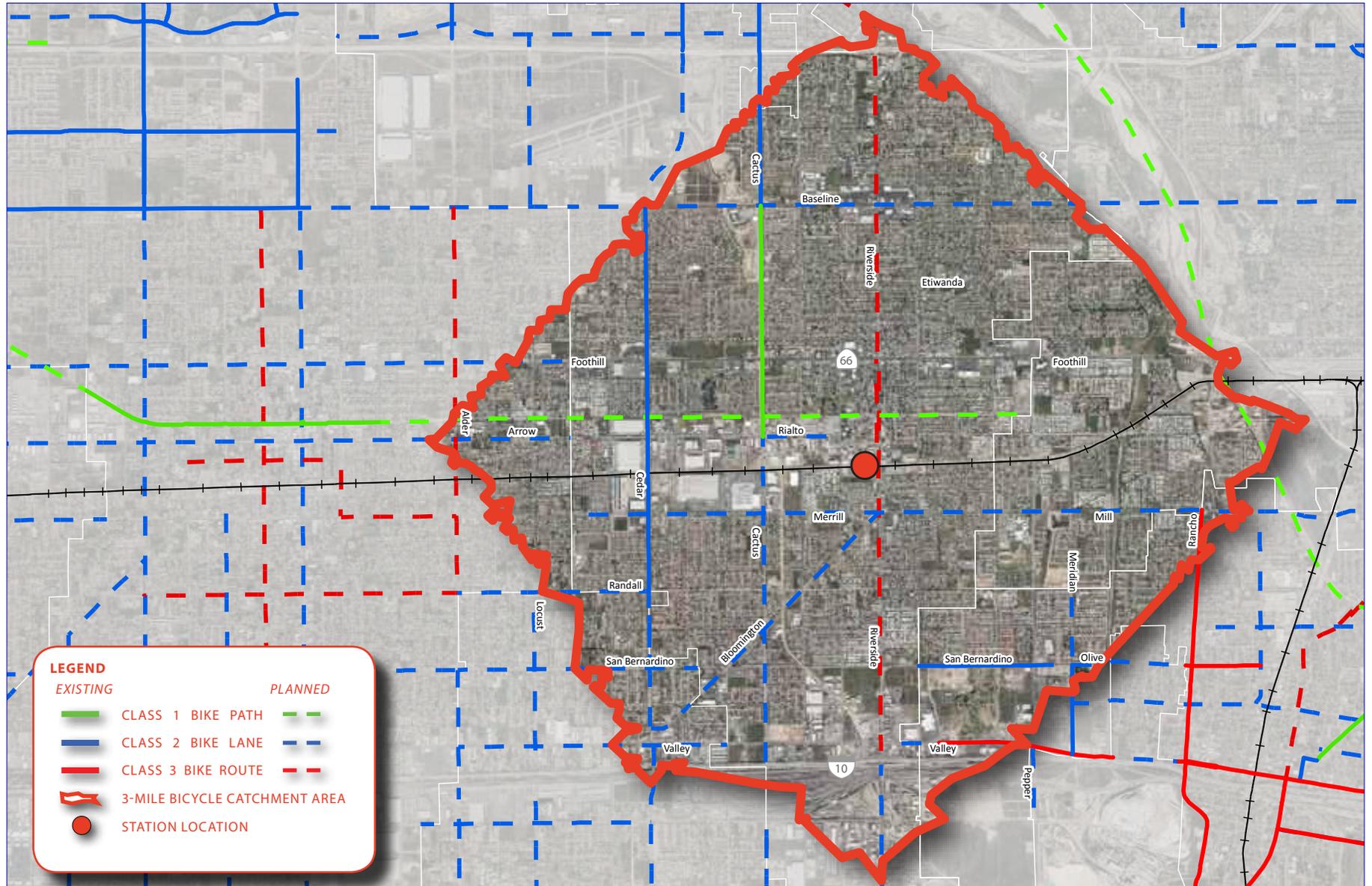
Street	Orange Way	Sierra Way	Valencia Ave	Arrow Blvd	Ceres Ave	Merrill Ave	Juniper	Residential/Local Streets	
								North of Orange Way	South of Orange Way
Segment									
Sidewalk/Parkway Width									
Sidewalk Width									
Sidewalk Condition									
Sidewalk and/or Parkway Location									
Crosswalks									
Curb Ramp									
Street Trees Location									
Raised Median								N/A	N/A
Utility Poles and wires									
Lighting									
Street Furniture									
Wayfinding Signage in public realm									



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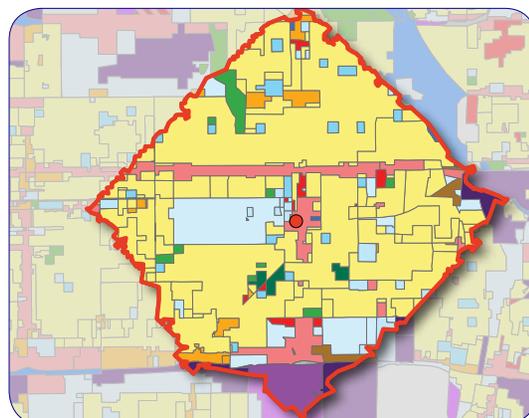
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**FIG. 5.1 RIALTO METROLINK STATION AND CATCHMENT AREA**

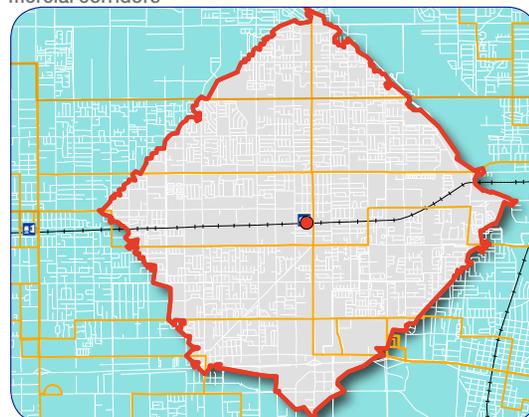




View of Rialto Metrolink Station



Residential land uses throughout study area, with commercial corridors



Study area has well-distributed transit service

## 5.0 Rialto Metrolink Station

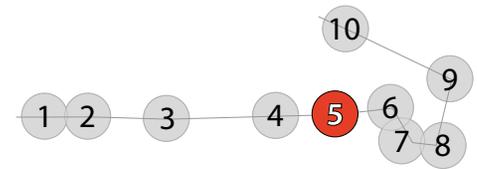
The Rialto Metrolink Station is located immediately west of Riverside Avenue in Downtown Rialto. As with the nearby Fontana station, the immediate station area is characterized by revitalized commercial and older residential neighborhoods.

Riverside Avenue features extensive pedestrian enhancements in the study area, including landscaped medians and pedestrian refuge islands, curb extensions and bulbouts, and crosswalk enhancements.

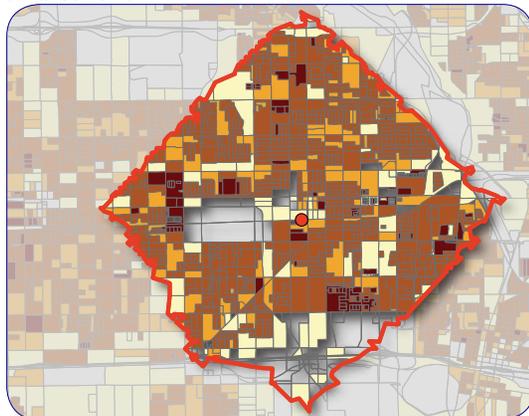


### Opportunities

- Central downtown allows for pleasant non-motorized experience.
- The station is proximate to Downtown Rialto and major civic uses including the City Hall.
- Riverside Avenue (Downtown area) has an attractive and pedestrian-friendly streetscape with a wide landscaped median, widened landscaped sidewalks, street furniture, curb extensions, on-street parking, decorative crosswalks, pedestrian lighting and shops and small businesses oriented to the sidewalks.
- Generally large shade trees are prevalent in the study area.
- A walkable grid pattern street network exists in the vicinity of the station.
- Station area is well-integrated with Downtown.
- Most of the area around the Station is within the Rialto Downtown Redevelopment Area and is in the Downtown Specific Plan (also called the Central Area Specific Plan).
- Rialto Park and Margaret Todd Park are located within close proximity of the station.
- Vacant and underutilized properties in the station vicinity provide opportunities for potential Transit-Oriented Development (TOD) and/or intense transit supportive mixed-use development.
- Local Omnitrans bus service runs along Riverside Avenue and Merrill Avenue .
- The recently updated Rialto General Plan includes a Downtown Mixed Use designation to facilitate development of a complementary mix of retail and commercial, dining, entertainment, and residential uses within walking distance of each other and the nearby Metrolink station and



Downtown Rialto features extensive pedestrian enhancements



Study area is residential in nature throughout

Civic Center.

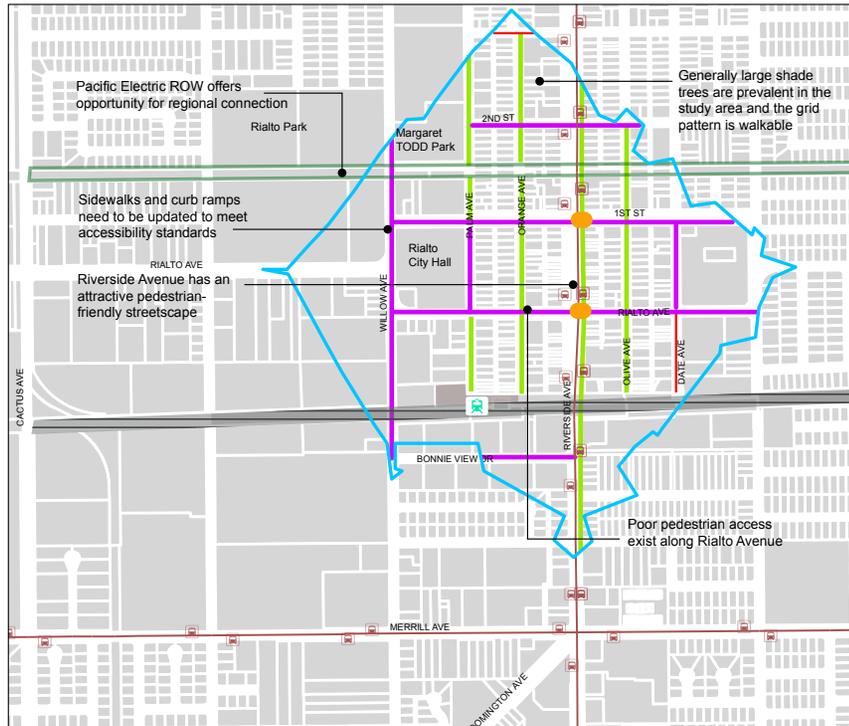
- The former Pacific Electric right-of-way offers opportunity for regional bikeway connection. The General Plan has a measure to pursue funding to construct the Pacific Electric Bicycle Trail and include amenities for bicyclists and pedestrian including lighting, seating areas, bicycle racks, landscaping, and related amenities.

### Constraints

- Barriers created by Interstate 10
- Foothill Blvd is high-speed and high-volume
- Limited existing bicycle facilities
- Existing Class I facility along Cactus Avenue is isolated and under-utilized
- Poor pedestrian access from Downtown along Rialto Avenue; Sidewalks are generally narrow with no landscaping and/or street trees; there are no pedestrian or street lights
- Orange Avenue and Palm Avenue are main streets connecting the adjacent neighborhoods to the Metrolink Station and they lack the character of an inviting pedestrian-friendly street i.e. shade trees, street & pedestrian lights, street furniture etc.
- Along Willow Avenue, sidewalks and curb ramps are generally not ADA compliant.
- Unimproved sidewalks and parkways exist along the vacant and underutilized properties located within the vicinity of the station.
- Currently, the Pacific Electric right-of-way within City of Rialto is vacant and underutilized and not connected to the regional trail network.
- Most of the streets have sidewalks and parkways; however, there is a lack of maintenance and shade trees.

**FIG. 5.2 RIALTO METROLINK STATION PEDESTRIAN ANALYSIS**

*Rialto Metrolink Station - Opportunity & Constraint Analysis*



**LEGEND**

- Metrolink Station & Park-&-Ride Lot
- 0.5 Mile Walk to Transit Station
- Pacific Electric Trail
- Barrier to Pedestrian Access: Highway & Railroad
- Local Bus Route
- Local Bus Stop
- Sidewalks missing on both sides
- Sidewalk missing on one side
- Sidewalks next to curb on both sides
- Sidewalk next to curb on one side
- Sidewalks with Parkway/Street trees on both sides
- Sidewalk with parkway on one side
- Decorative crosswalks



Decorative bicycle parking feature in downtown Rialto



Unmaintained Class I facility limits its attractiveness and utility to users

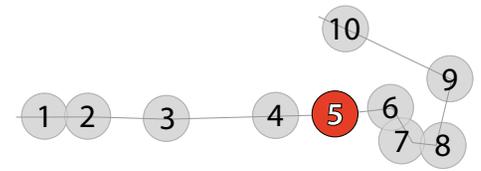
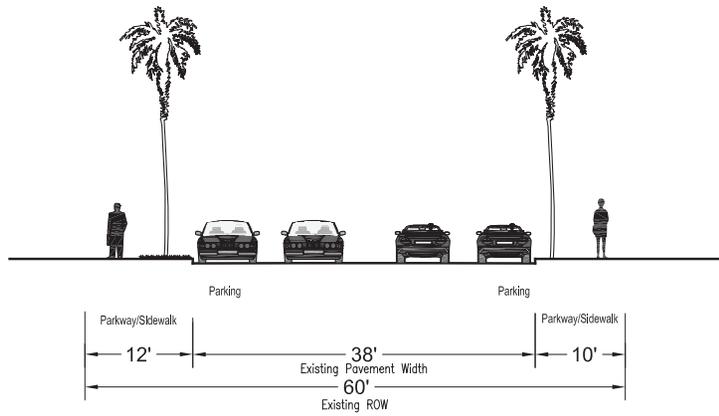


FIGURE 5.3 **TITLE OF MATRIX HERE**

FIGURE 5.5 **TYPICAL SECTION - RIALTO AVENUE**

**Palm Avenue**



**Rialto Avenue**

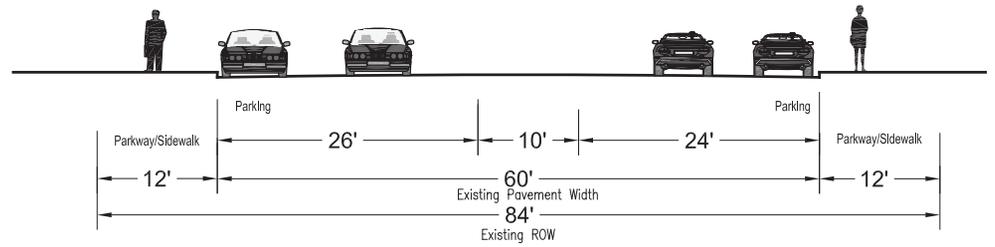
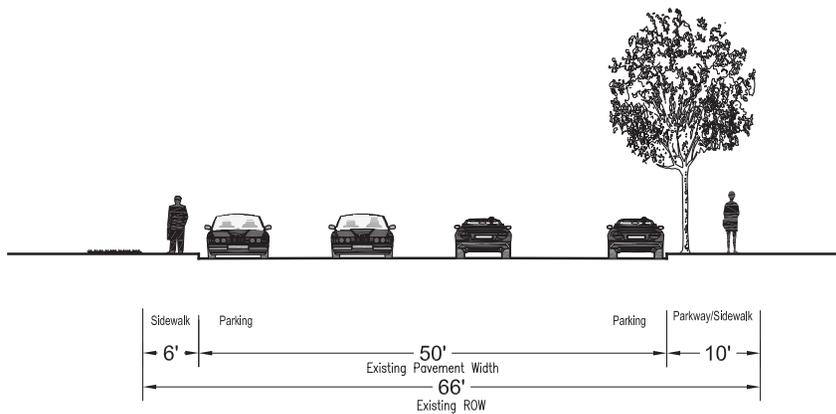


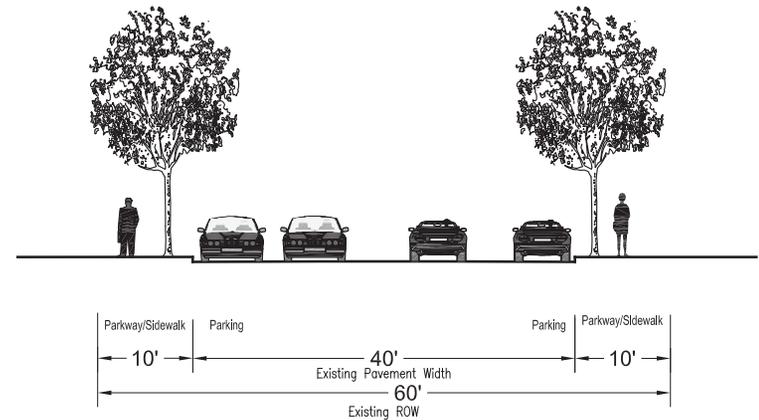
FIGURE 5.4 **TYPICAL SECTION - PALM AVENUE**

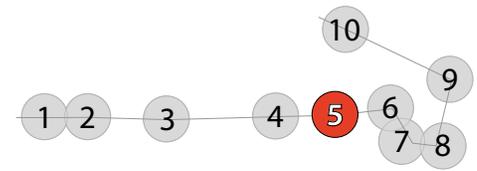
FIGURE 5.6 **TYPICAL SECTION - RESIDENTIAL**

**Palm Avenue btw Rialto and 1st Street**



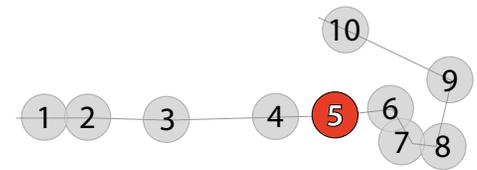
**Typical residential street**





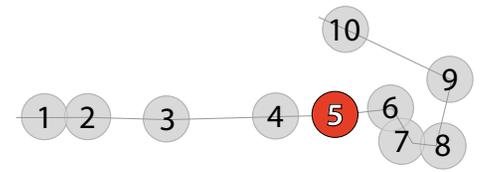
**TABLE 5.1 EXISTING BICYCLE FACILITIES**

Street	Cactus Ave	Ayala Dr	Cedar Ave	Cactus Ave	San Bernardino Ave	Meridian Ave	Rancho Ave	Valley Blvd		
Segment	Mesa St to Baseline Rd	Casmalia St to Hwy 210	Baseline Rd to Randall Ave	Baseline Rd to Rialto Ave	Sycamore Ave to Pepper Ave	San Bernardino Ave to Valley Blvd	Mill St to 10 Fwy	Wildrose Ave to Pepper Ave	Pepper Ave to Hermosa Ave	0.05 mi West of Rancho Ave to 2nd St
Existing Facility Type	Class II	Class II	Class II	Class I	Class II	Class II	Class III	Class III	Class III	Class III
Speed and Condition of Vehicular Traffic				N/A						
Pavement Condition										
"Door Zone" and Driveway Conflicts										
Transit Service and Waiting Environment in Corridor	N/A	N/A		N/A		N/A	N/A			
Amount of Key Attractions										
Amount of Bike Facility Striping or Signage										



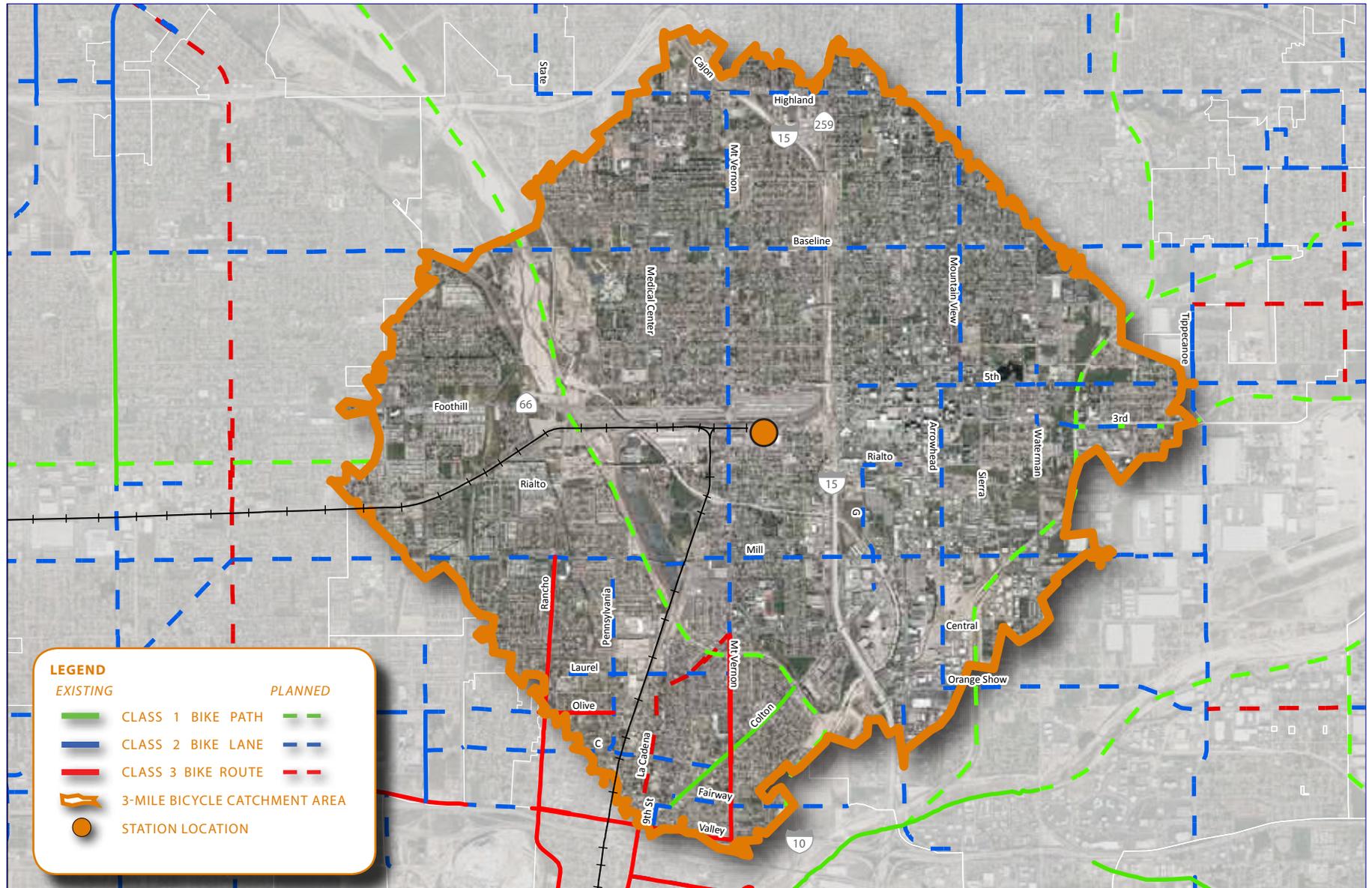
**TABLE 5.2 EXISTING PEDESTRIAN FACILITIES**

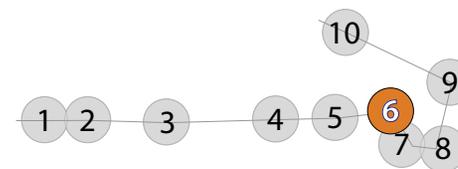
Street	Riverside Ave	Rialto Ave	1st St	2nd St	Willow Ave	Palm Ave	Orange Ave	Olive Ave	Date Ave	Bonnie View Dr
Sidewalk/Parkway Width										&
Sidewalk Width										&
Sidewalk Condition										
Sidewalk and/or Parkway Location				&	&	&	&	&	&	
Crosswalks										
Curb Ramp										
Street Trees Location					&	&	&	&	&	
Raised Median										
Utility Poles and wires										
Lighting										
Street Furniture										
Wayfinding Signage in public realm										



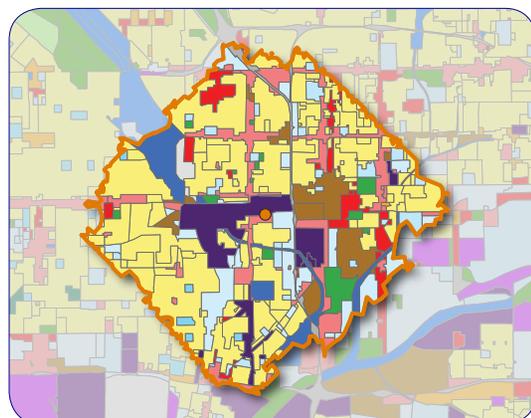
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FIG. 6.1 SAN BERNARDINO METROLINK STATION AND CATCHMENT AREA

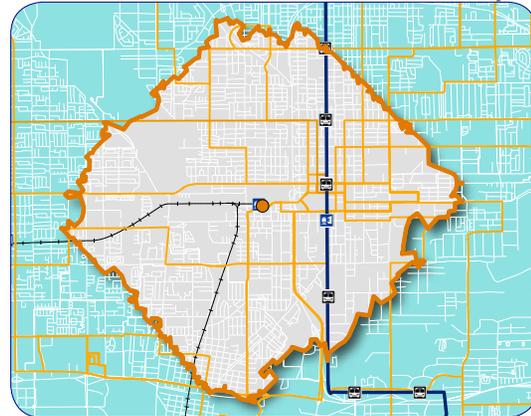




View of San Bernardino Metrolink Station



Mix of residential and commercial uses near station, yet immediate area is industrial and has limited connectivity



Station area is well-served by all forms of transit, including Fourth Street Transit Mall at Carousel Mall

## 6.0 San Bernardino Metrolink Station



The San Bernardino Metrolink Station is a regional transit station serving the greater San Bernardino area. Transit services at the site include Metrolink commuter rail, Omnitrans local buses, and Mountain Area Regional Transit Authority (MARTA) bus service.

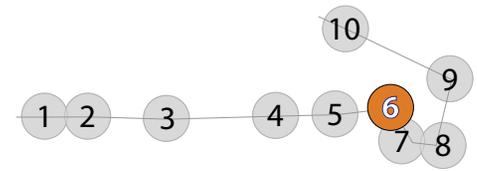
Amtrak service is available at the adjacent Santa Fe Depot, and the nearby Fourth Street Transit Mall at the Carousel Mall provides extensive connections to the regional Omnitrans fixed route network.

### Opportunities

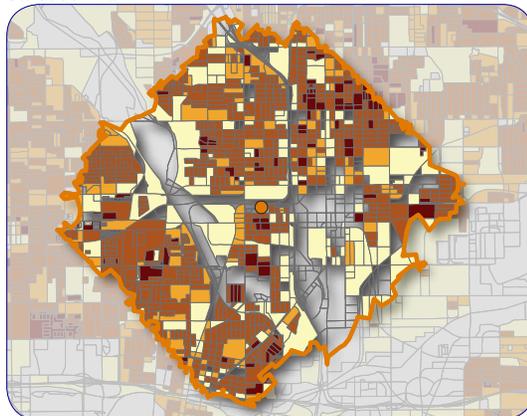
- Strengthen the connection between the Metrolink Station and Omnitrans service at Carousel Mall
- Grid street network provides routefinding flexibility
- Wide local streets
- Large amount of nearby residential development
- San Bernardino station serves as the eastern terminus for most Metrolink San Bernardino Line trains which originate from Los Angeles' Union Station and the northern terminus for some Inland Empire-Orange County Line trains providing regional connectivity.
- Planned Metrolink extension to Rialto/E Street will provide additional connectivity to Downtown San Bernardino, sbX E Street BRT Corridor and Redlands passenger Rail Corridor.
- A walkable grid street pattern exists within station vicinity.
- Generally, adjacent residential neighborhoods' streets have sidewalks/parkways with shade trees.
- San Bernardino General Plan Land Use Element establishes a Santa Fe Depot Strategic Area with the main goal of integrating the Depot with surrounding neighborhoods through design, landscaping, entry features and pedestrian pathways.

### Constraints

- Interstate 215 and BNSF rail yard create physical and psychological barriers to connections with



Construction hinders walking and biking connections to Carousel Mall



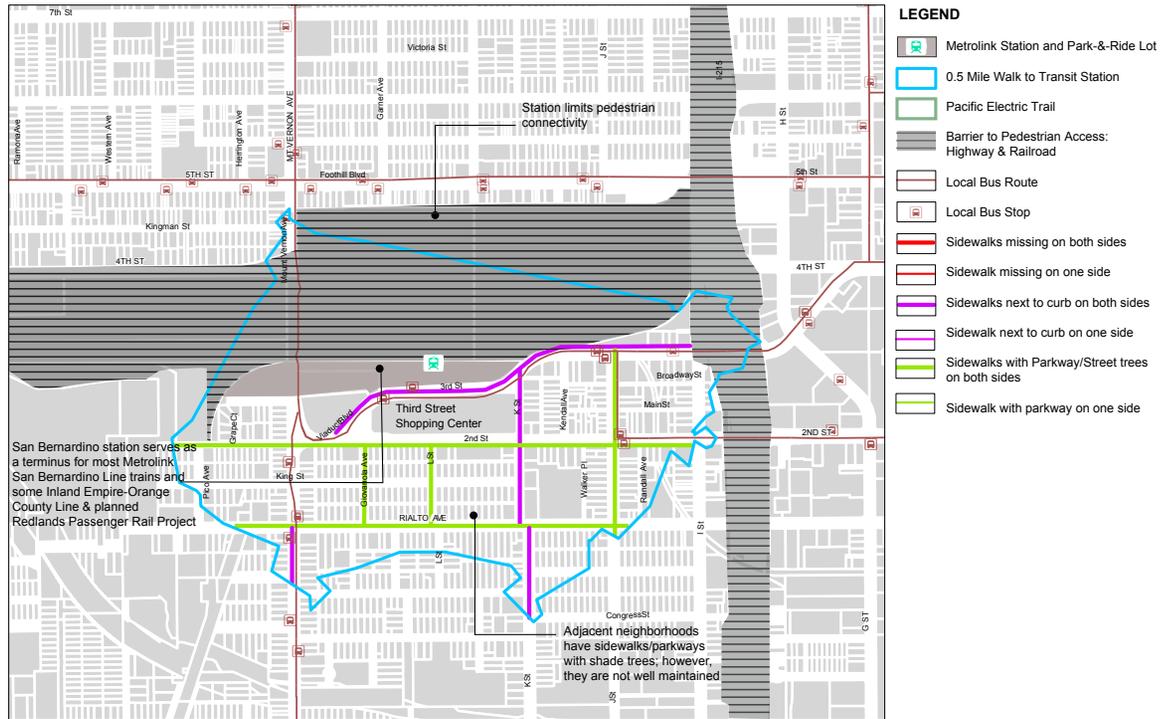
Station area has dense, well-distributed population, but with barriers created by rail and freeway infrastructure

areas north and west of station

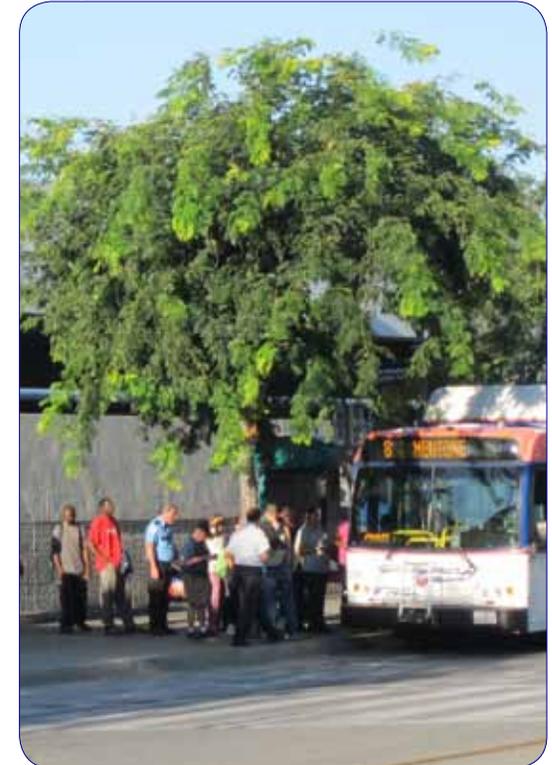
- Current construction along I-215 further discourages pedestrian and bicycle connections
- Ample free parking may discourage accessing station by bike or on foot if other modes are available to the user
- Lack of short-term bicycle parking
- Major arterials are high-speed and high-volume San Bernardino Metrolink station acts as a barrier to pedestrian mobility from developments north of the station.
- No direct pedestrian access exists between the new Third Street Shopping Center and the Metrolink Station.
- 2nd Street has narrow sidewalks with little to now landscaping.
- Poor pedestrian access or wayfinding signage exists between the ticketing area on the west side of the station and the local bus stop located along 3rd Street stop.
- Sidewalks/parkways in adjacent neighborhoods are not well maintained.

**FIG. 6.2 SAN BERNARDINO METROLINK STATION PEDESTRIAN ANALYSIS**

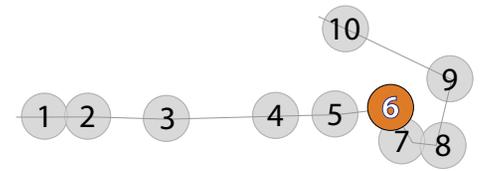
*San Bernardino Metrolink Station - Opportunity & Constraint Analysis*



Limited short-term bicycle parking facilities creates illegal parking situations

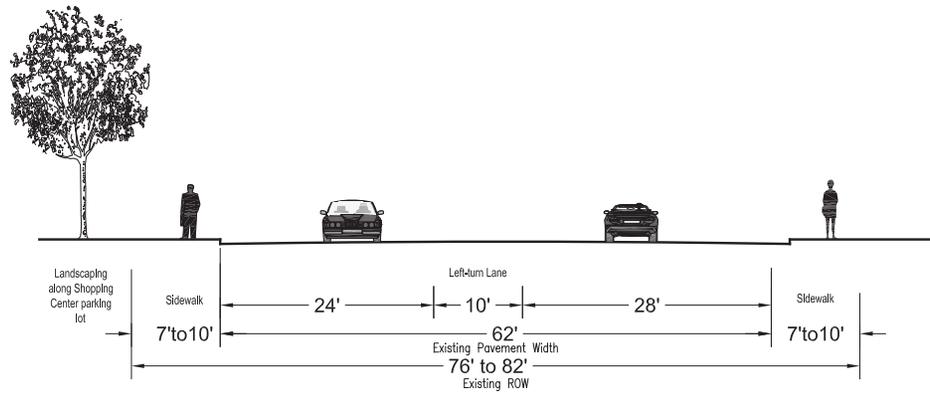


Carousel Mall has high levels of transit ridership



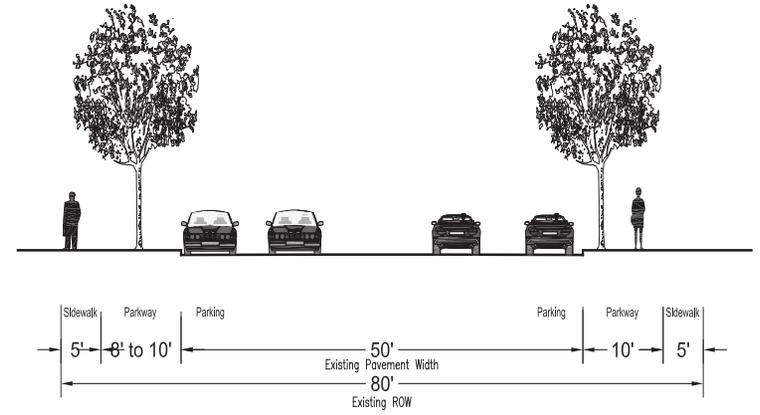
**FIGURE 6.3 TYPICAL SECTION - 2ND STREET**

**2nd Street**



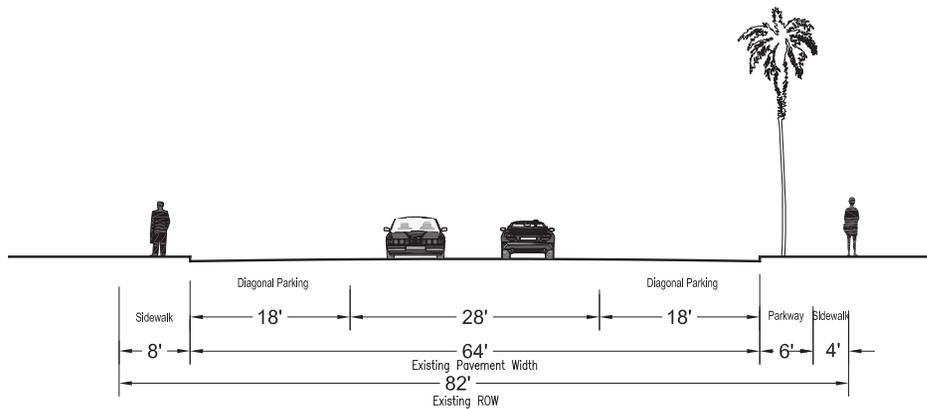
**FIGURE 6.5 TYPICAL SECTION - RESIDENTIAL**

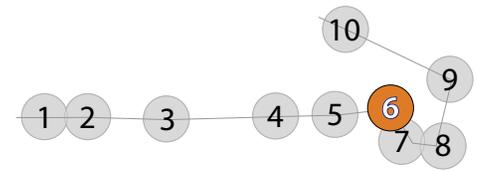
**Typical residential street**



**FIGURE 6.4 TYPICAL SECTION - 3RD STREET**

**3rd Street**





**TABLE 6.1 EXISTING BICYCLE FACILITIES**

Street	Mountain View Ave	Meridian St	Rancho Ave	San Bernardino/ Olive St	Valley Blvd	9th St	G St	Mt Vernon Ave	La Cadena Dr	Colton Ave Bike Path	Santa Ana River Trail
Segment	28th St to 23rd St	San Bernardino Ave to C St	Mill St to 10 Fwy	West of Rancho Ave to Pennsylvania	West of Rancho Ave to Mt Vernon Ave	G St to Valley Blvd	9th St to 10th St	Grant Ave to Valley Blvd	Valley Blvd to M St	G St to Wheeler Ln	Waterman Ave to Mt Vernon Ave
Existing Facility Type	Class II	Class II	Class III	Class III	Class III	Class II	Class II	Class III	Class III	Class I	Class I
Speed and Condition of Vehicular Traffic										N/A	N/A
Pavement Condition											
"Door Zone" and Driveway Conflicts											
Transit Service and Waiting Environment in Corridor	N/A				N/A					N/A	
Amount of Key Attractions											
Amount of Bike Facility Striping or Signage											

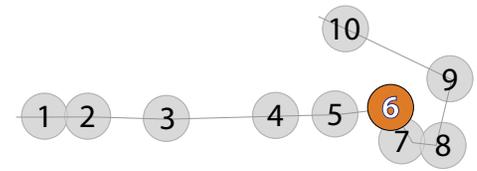
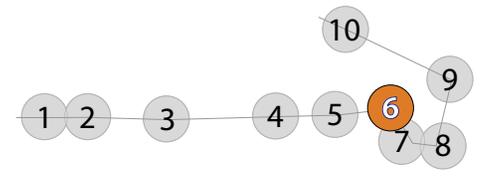


TABLE 6.2 EXISTING PEDESTRIAN FACILITIES

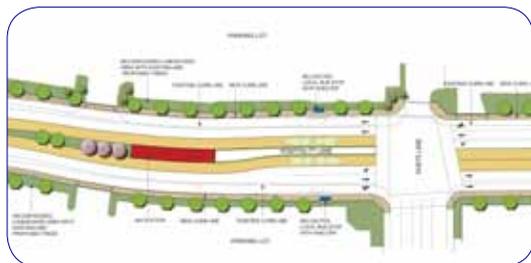
Street	3rd St	2nd St	Rialto Ave	Mt Vernon Ave	K St	Other Local/Residential Streets
Sidewalk/Parkway Width						
Sidewalk Width						
Sidewalk Condition						
Sidewalk and/or Parkway Location						
Crosswalks						
Curb Ramp						
Street Trees Location						
Raised Median	N/A					
Utility Poles and wires						
Lighting						
Street Furniture						
Wayfinding Signage in public realm						



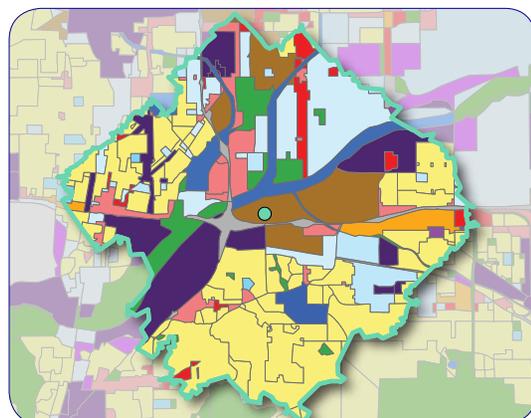
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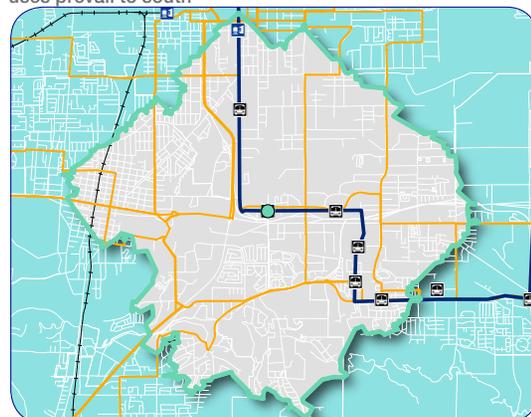




Plan for Hunts Lane sbX Station



Commercial uses prevail adjacent to station, residential uses prevail to south



Area will be well-served by BRT service, potential for high commuter trip volumes

## 7.0 Hunts Lane sbX Station

The Hunts Lane sbX Station is located immediately north of Interstate 10 and just east of Interstate 215. The land uses around the station area are generally non-residential, aside from an area south of Interstate 10. The station has a direct connection to the Santa Ana River Trail, located directly behind the Hall of Records. Automobile traffic is significant.



### Opportunities

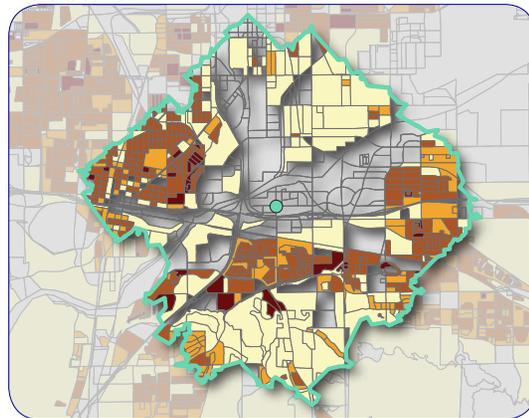
- Access to Class I facility provides excellent connection to regional bicycle network
- Station area provides mix of commercial uses and relatively dense office parks
- The existing Santa Ana River trail provides regional connectivity and is a great recreational resource.
- sbX will improve the pedestrian environment along Hospitality Lane by reconfiguring the street to include a 6' wide parkway with street trees next to the curb and sidewalk behind.
- Underutilized industrial/business park area south of the I-10 Freeway can be redeveloped with high-intensity transit-supportive uses.

### Constraints

- Limited residential land use north of station
- Several signalized, short-block intersections around station area
- Station area ridership potential and access is constrained by major barriers – Santa Ana River, the I-10 Freeway and I-215 Freeway.
- Auto-oriented, super-block development pattern is well established.
- Poor pedestrian access exists into and through super-blocks.
- Hunts Lane is the only direct access to Santa Ana River Trail from Hospitality Lane and future sbX Station
- Sidewalks and pedestrian lights are missing along Hunts Lane on both sides, north of Hospitality



Class I facility along Cooley Drive drops just west of Interstate 215



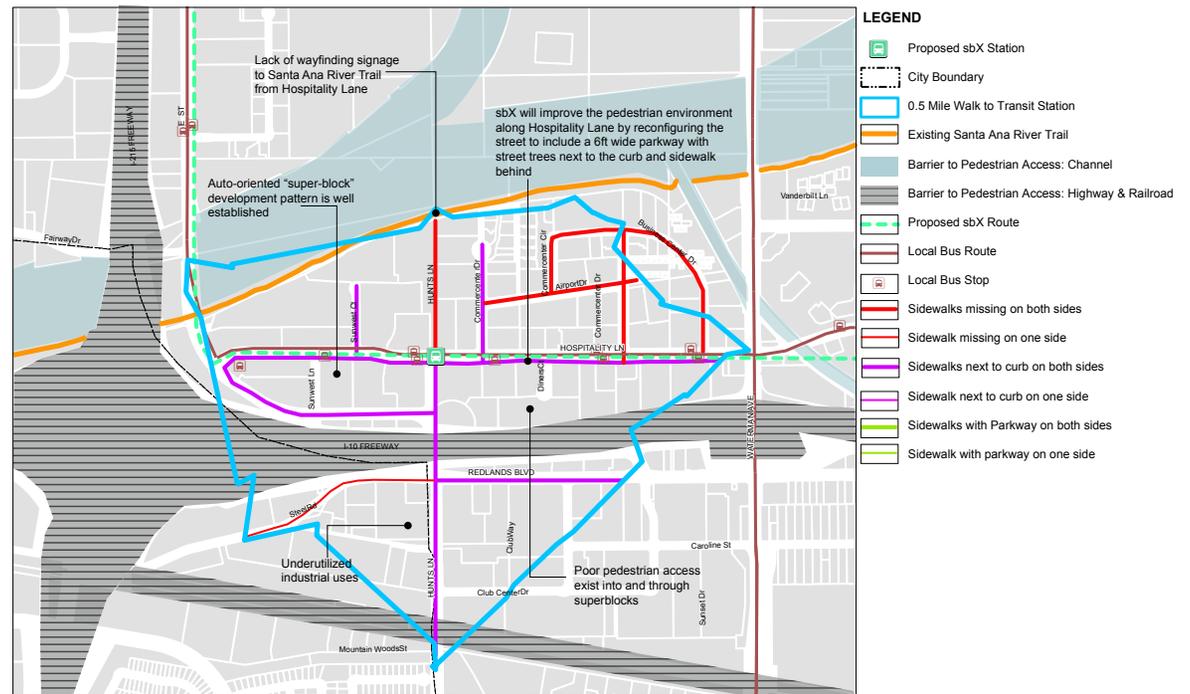
Residential densities concentrated to south and west of study area

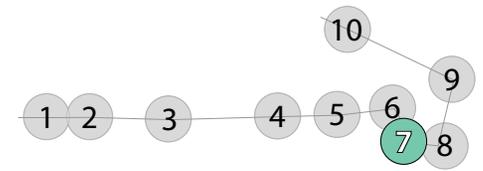
Lane.

- Lack of direct pathway and wayfinding signage to Santa Ana River Trail from Hospitality Lane.

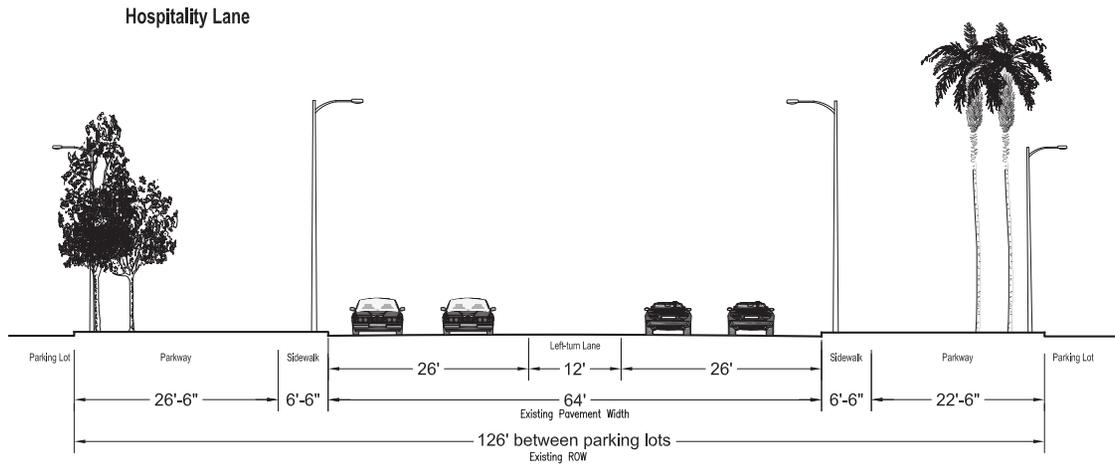
FIG. 7.2 HUNTS LANE SBX STATION PEDESTRIAN ANALYSIS

*Hunts Lane sbX Station - Opportunity & Constraint Analysis*





**FIGURE 7.3 TYPICAL SECTION - HOSPITALITY LANE**



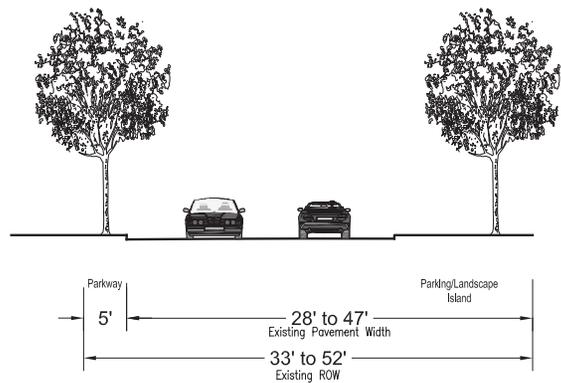
Unmaintained bike lane and non-ADA compliant sidewalks in the Cooley Ranch area



Santa Ana River Trail Class I facility north of the Hall of Records

**FIGURE 7.4 TYPICAL SECTION - HUNTS LANE**

**Hunts Lane**



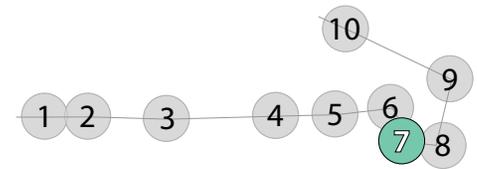


TABLE 7.1 EXISTING BICYCLE FACILITIES

Street	Rancho Ave	San Bernardino/ Olive St	Valley Blvd	9th St	G St	Colton Ave Bike Path	Mt Vernon Ave			La Cadena Dr	
Segment	Citrus St to La Cadena Dr	West of Rancho Ave to Pennsylvania	West of Rancho Ave to Mt Vernon Ave	G St to Valley Blvd	9th St to 10th St	G St to Wheeler Lm	Grant Ave to Valley Blvd	Santa Ana River Trail to Cooley Dr	Barton Rd to Cardinal St	Valley Blvd to M Bike Lanes	Start of Bike Lanes to Santa Ana River Trail
Existing Facility Type	Class III	Class III	Class III	Class II	Class II	Class I	Class III	Class II	Class II	Class III	Class II
Speed and Condition of Vehicular Traffic						N/A					
Pavement Condition											
"Door Zone" and Driveway Conflicts											
Transit Service and Waiting Environment in Corridor	N/A	N/A		N/A	N/A						
Amount of Key Attractions											
Amount of Bike Facility Striping or Signage											

Street	Santa Ana River Trail	M St	Washington St		Barton Rd				Cooley Dr		Cooley Dr W
Segment	La Canada Dr to Waterman Ave	La Cadena Dr to Mt Vernon Ave	Mt Vernon Ave to Barton Rd	Milano Way to Mt Vernon Ave	Cooley Dr E to Waterman Ave	Michican St to Mt Vernon Ave	Mt Vernon Ave to Washington St	Waterman Ave to Power Line Easement	Mt Vernon Ave to Cooley Ln	Cooley Dr W to Valley Woods St	Cooley Dr to Cooley Dr
Existing Facility Type	Class I	Class III	Class III	Class II	Class III	Class III	Class II	Class II	Class II	Class II	Class II
Speed and Condition of Vehicular Traffic	N/A										
Pavement Condition											
"Door Zone" and Driveway Conflicts											
Transit Service and Waiting Environment in Corridor									N/A	N/A	N/A
Amount of Key Attractions											
Amount of Bike Facility Striping or Signage											

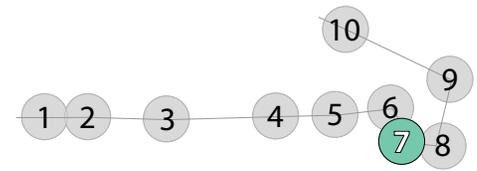


TABLE 7.1 EXISTING BICYCLE FACILITIES (CONTINUED)

Street	Cooley Dr E	Cooley Ln	University Ave	Anderson St	Shepardson Dr	Benton St	San Timoteo Creek Trail	Power Line Easement
Segment	Valley Woods St to Old Ranch Rd	Cooley Dr E to Hunts Ln	Barton Rd to Campus St	Court St to University Ave	Stewart St to Benton St	Shepardson Dr to Barton Rd	Redlands Blvd to Power Line Easement	North End to San Timoteo Creek Trail
Existing Facility Type	Class II	Class II	Class II	Class II	Class II	Class III	Class I	Class I
Speed and Condition of Vehicular Traffic							N/A	N/A
Pavement Condition								
"Door Zone" and Driveway Conflicts								
Transit Service and Waiting Environment in Corridor	N/A	N/A			N/A			N/A
Amount of Key Attractions								

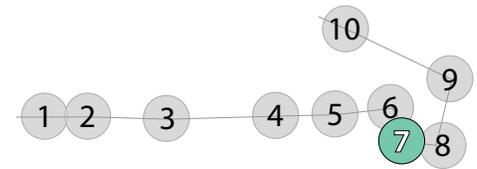
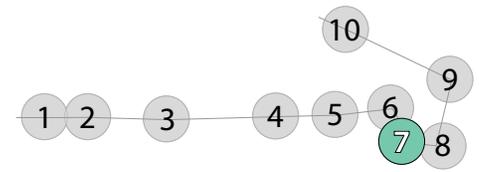


TABLE 7.1 EXISTING PEDESTRIAN FACILITIES

Street	Hospitality Ln	Hunts Ln		Redlands Blvd		E St/Sunwest Ct	Airport Dr / Commercenter Cir/Commercenter Dr/Business Center Dr
Segment		North of Hospitality Ln	South of Hospitality Ln	East of Hunts Ln	West of Hunts Ln		
Sidewalk/Parkway Width							
Sidewalk Width							
Sidewalk Condition		N/A			N/A		N/A
Sidewalk and/or Parkway Location		N/A			N/A		N/A
Crosswalks		N/A			N/A		N/A
Curb Ramp		N/A			N/A		N/A
Street Trees Location							
Raised Median		N/A					N/A
Utility Poles and wires							
Lighting							
Street Furniture							
Wayfinding Signage in public realm							



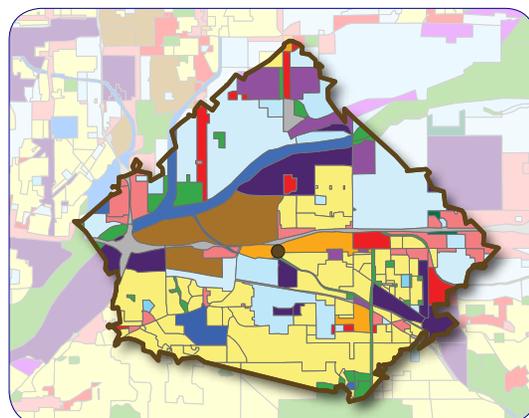
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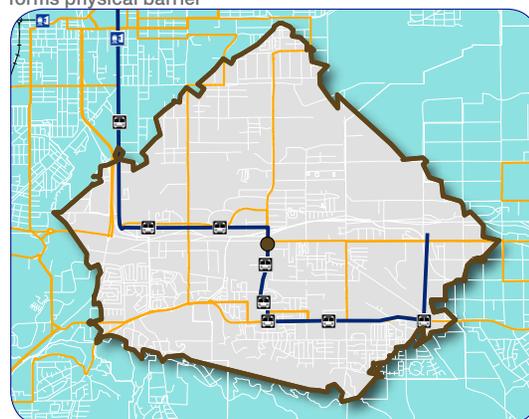




Plan for Anderson Street sbX Station



Residential uses are concentrated south of station, I-10 forms physical barrier



Transit concentrated around Loma Linda University and Medical Center

## 8.0 Anderson Street sbX Station



The Anderson Street sbX Station south of Redlands Boulevard was selected for study due to its close proximity to Loma Linda University and Medical Center and the nearby San Timoteo Creek Class I facility.

A well-developed access plan can attract a number of local students and non-student residents, as well as regional bicycle trips from the Class I facility.

The area also possesses a fairly good mix of retail and residential uses nearby, and high-density commercial uses north of Interstate 10.

### Opportunities

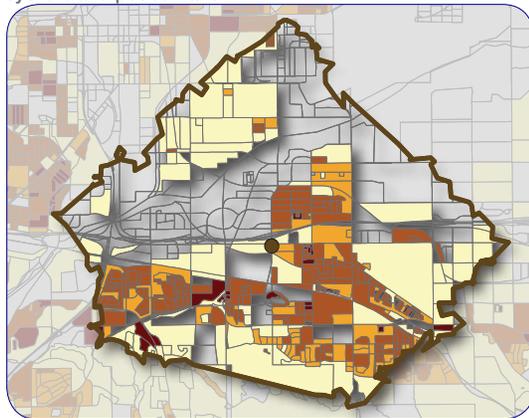
- Uninterrupted connection to San Timoteo Class I facility
- Campus setting and student population comfortable with cycling for transportation
- The major activity center is the Loma Linda Academy immediately south of the station
- Bike lanes exist along Anderson Street.
- Planned San Timoteo Creek Trail will provide regional connectivity.
- sbX park & ride lot provides opportunities for the development of commuter-related facilities within its own site.
- Congestion from I-10 freeway to and from Anderson Boulevard is moderate to severe today due to limited through street options making it unsafe for pedestrians; however, the proposed I-10 freeway and Anderson Boulevard interchange would improve traffic conditions to and from I-10 freeway.

### Constraints

- High-speed arterials throughout study area
- Interstate 10 creates physical barrier and challenging crossings
- Limited north-south connections



Site of sbX station is frequently congested and difficult for cyclists and pedestrians



Residential density is concentrated to the south and immediate northeast of station

- Nearby barriers to pedestrian access to transit include I-10 and San Timoteo Creek.
- North of Redlands Boulevard: East of Tippecanoe Avenue, there are generally no sidewalks and curbs existing within the residential neighborhoods, limiting pedestrian safety and activity from these neighborhoods. West of Tippecanoe Avenue, the office park and commercial development along Harriman Place have sidewalks buffered by landscaping providing some pedestrian amenity but the area has large blocks with few interconnected streets and poor pedestrian connectivity.
- South of Redlands Boulevard: East of Anderson Boulevard there are many vacant and undeveloped parcels with few interconnected streets and poor pedestrian connectivity. West of Anderson Boulevard, Loma Linda Academy dominates this area; however narrow sidewalks located next to the curb connect this Academy to the station limiting pedestrian activity.

FIG. 8.2 **ANDERSON STREET SBX STATION PEDESTRIAN ANALYSIS**

*Anderson Street at Redlands Boulevard sbX Station - Opportunity & Constraint Analysis*

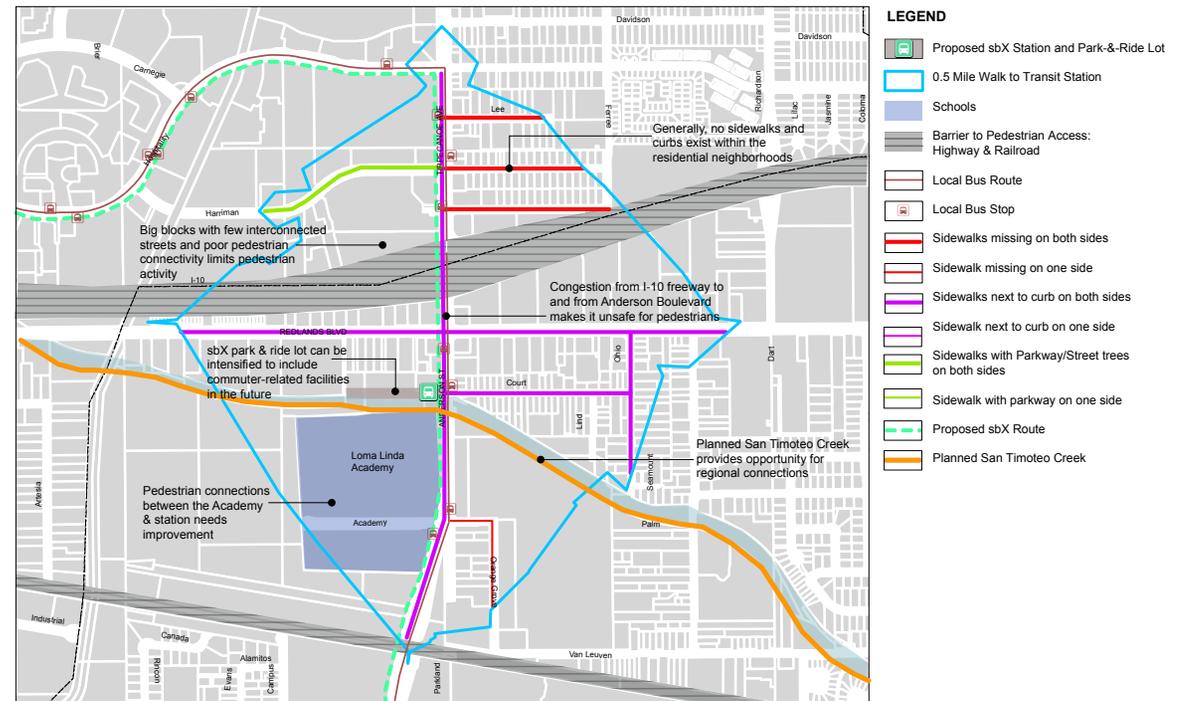
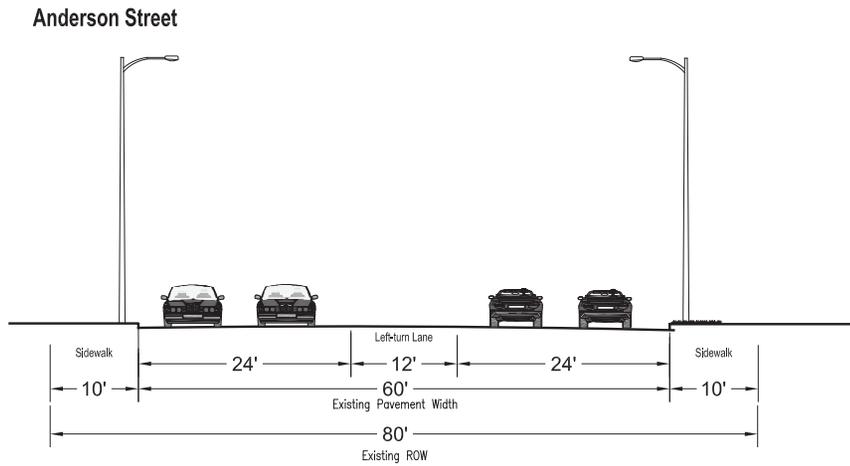
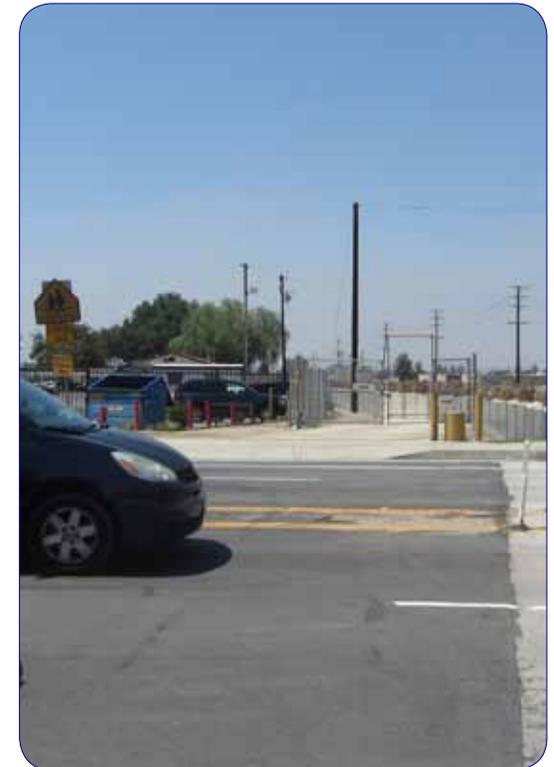


FIGURE 8.3 **TYPICAL SECTION - ANDERSON STREET**

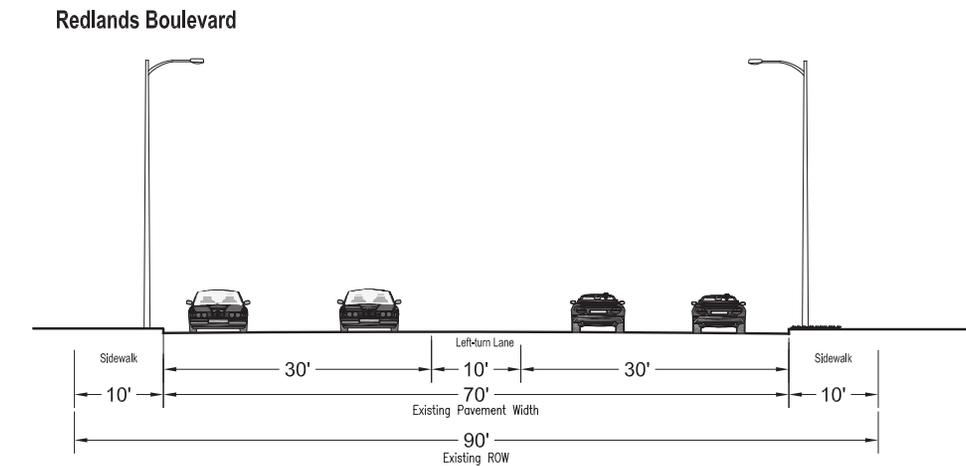


Existing Class I facility currently terminates east of Anderson



Class I facility will resume west of Anderson, crosswalk improvements may be needed

FIGURE 8.4 **TYPICAL SECTION - REDLANDS BOULEVARD**



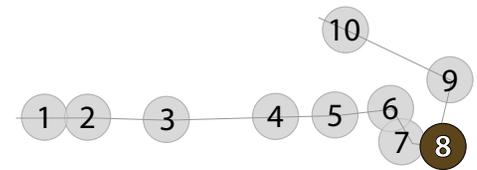


TABLE 8.1 **EXISTING BICYCLE FACILITIES**

Street	Washington St		Barton Rd			University Ave	Cooley Dr		Cooley Dr W
Segment	Theatre Rd to Mt Vernon Ave	Mt Vernon Ave to Barton Rd	Cooley Dr E to Waterman Ave	Waterman Ave to San Timoteo Canyon Rd	Preston St to Cooley Dr E	Barton Rd to Campus St	Mt Vernon Ave to Cooley Ln	Cooley Dr W to Valley Woods St	Cooley Dr to Cooley Dr
Existing Facility Type	Class II	Class III	Class III	Class II	Class II	Class II	Class II	Class II	Class II
Speed and Condition of Vehicular Traffic									
Pavement Condition									
"Door Zone" and Driveway Conflicts									
Transit Service and Waiting Environment in Corridor							N/A	N/A	N/A
Amount of Key Attractions									
Amount of Bike Facility Striping or Signage									

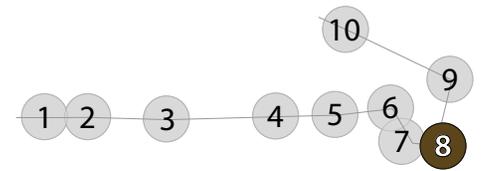


TABLE 8.1 **EXISTING BICYCLE FACILITIES (CONTINUED)**

Street	Cooley Dr E	Cooley Ln	Mt Vernon Ave	Mountain View Ave	Beaumont Ave		Anderson St
Segment	Valley Woods St to Old Ranch Rd	Cooley Dr E to Hunts Ln	Santa Ana River Trail to Cooley Dr	Barton Rd to Beaumont Ave	Mountain View Ave to Whittier Ave	Whittier Ave to San Timeoteo Creek Trail	Court St to University Ave
Existing Facility Type	Class II	Class II	Class II	Class II	Class II	Class I	Class II
Speed and Condition of Vehicular Traffic						N/A	
Pavement Condition							
"Door Zone" and Driveway Conflicts							
Transit Service and Waiting Environment in Corridor	N/A	N/A	N/A	N/A	N/A	N/A	
Amount of Key Attractions							
Amount of Bike Facility Striping or Signage							

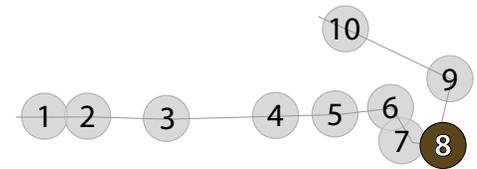


TABLE 8.1 **EXISTING BICYCLE FACILITIES (CONTINUED)**

Street	Shepardson Dr	Benton St	San Timoteo Creek Trail	Power Line Easement		Citrus Ave	Colton Ave Bike Path	Santa Ana River Trail
Segment	Stewart St to Benton St	Shepardson Dr to Barton Rd	Redlands Blvd to Beaumont Ave	North End to San Timoteo Creek Trail	Barton Rd to Beaumont Ave	Nevada St to Iowa St	Vista Way to Wheeler Ln	Mt Vernon Ave to Waterman Ave
Existing Facility Type	Class II	Class III	Class I	Class I	Class I	Class I	Class I	Class I
Speed and Condition of Vehicular Traffic			N/A	N/A	N/A	N/A	N/A	N/A
Pavement Condition								
"Door Zone" and Driveway Conflicts								
Transit Service and Waiting Environment in Corridor	N/A			N/A	N/A	N/A	N/A	
Amount of Key Attractions								
Amount of Bike Facility Striping or Signage								

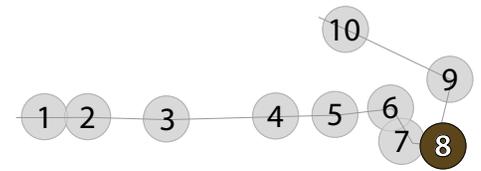
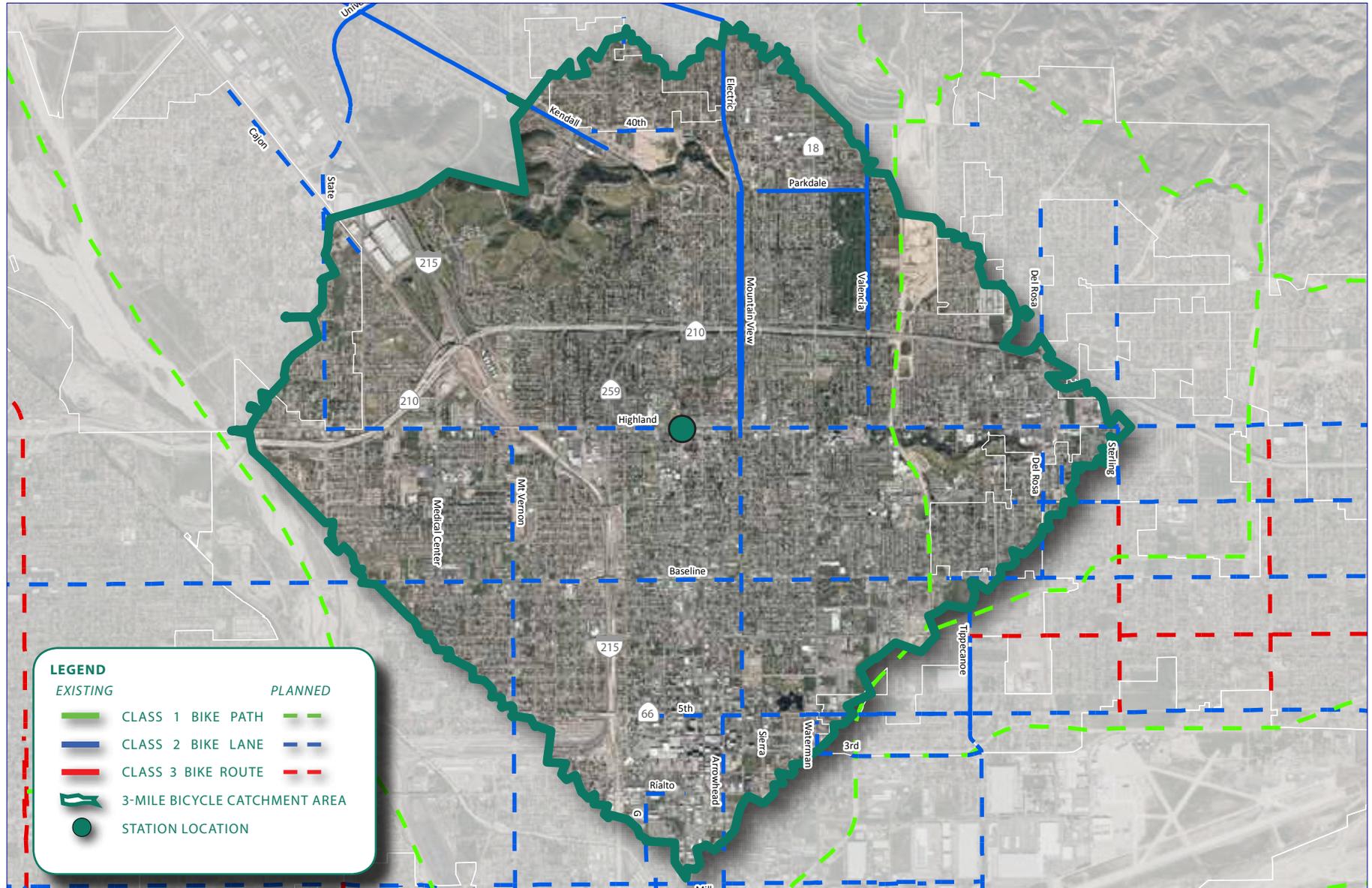


TABLE 8.2 **EXISTING PEDESTRIAN FACILITIES**

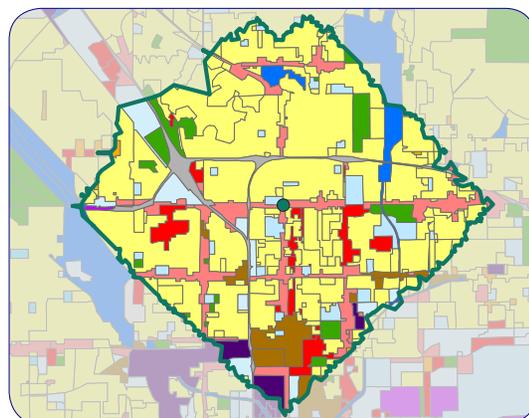
Street	Redlands Blvd	Anderson St	Tippecanoe Ave	Court/Ohio Sts	Lee/Laurelwood Dr/Rosewood Dr	Harriman Pl	Orange Grove St
Segment							
Sidewalk/Parkway Width							
Sidewalk Width							
Sidewalk Condition							
Sidewalk and/or Parkway Location							
Crosswalks							N/A
Curb Ramp							N/A
Street Trees Location							
Raised Median				N/A	N/A		N/A
Utility Poles and wires							
Lighting							
Street Furniture							
Wayfinding Signage in public realm							

FIG. 9.1 **HIGHLAND AVENUE SBX STATION CATCHMENT AREA**

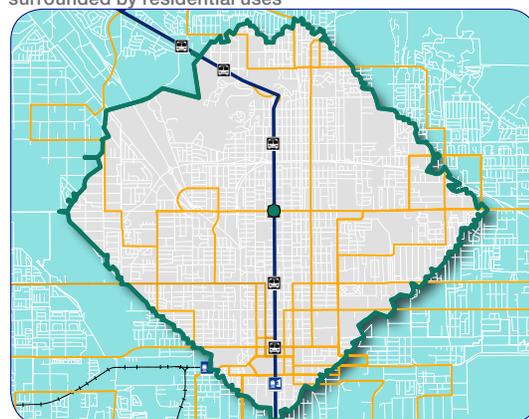




Plans for Highland Ave sbX Station



Key north-south and east-west commercial corridors are surrounded by residential uses



Commercial area is well-served by transit

## 9.0 Highland Avenue sbX Station

The Highland Avenue sbX Station is located in the heart of San Bernardino. The site will feature stations at opposite corners of Highland Avenue and E Street. Residential and commercial uses dominate the area, and the immediate vicinity is home to two schools, Arrowview Middle School and San Bernardino High School.



### Opportunities

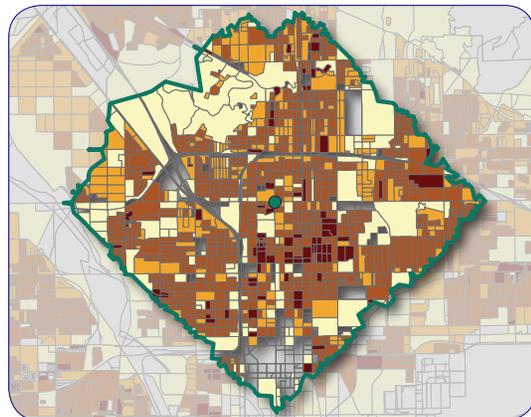
- Destinations within the station vicinity include Arrowview Middle School immediately west of the station and San Bernardino High School to the south.
- A walkable grid street pattern exists in the station catchment area.
- Large shade trees in parkways provide a pleasant pedestrian-friendly environment within the neighborhoods north of Highland Avenue along E Street.
- Sidewalks are in good condition near station
- Good pedestrian activity along both E Street and Highland Avenue and the walkable grid street pattern in the vicinity support walking.
- Existing east-west transit connections along Highland Avenue and planned BRT system along E Street provide additional mobility choices.
- D Street is a four lane street with approximately 20' curb lanes offering opportunity to accommodate bike lanes paralleling E Street.

### Constraints

- Highland Avenue is not a pedestrian-friendly street, especially east of E Street, as it is a four lane street with painted left-turn lane and 9' sidewalks located next to the curb with little to no landscaping.
- Generally sidewalks and curb ramps are not ADA compliant.



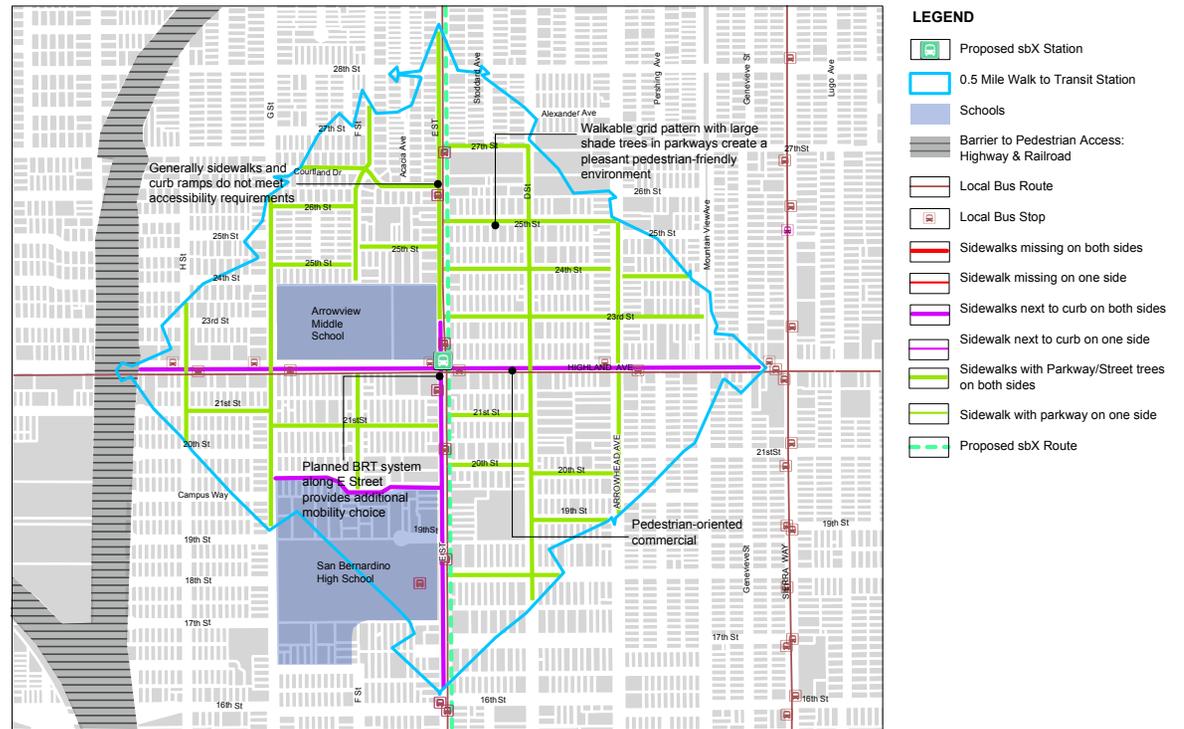
Several schools can be found within study area



Residential density is significant throughout study area

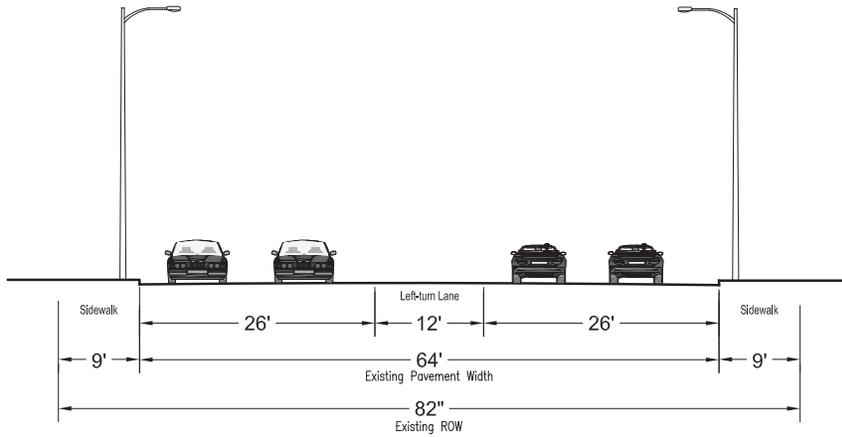
**FIG. 9.2 HIGHLAND AVENUE SBX STATION PEDESTRIAN ANALYSIS**

*Highland Avenue sbX Station - Opportunity & Constraint Analysis*



**FIGURE 9.3 TYPICAL SECTION -HIGHLAND AVE**

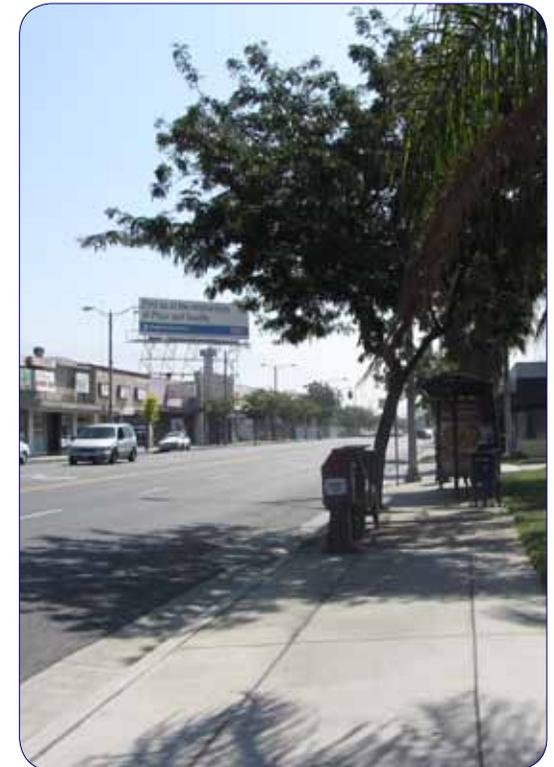
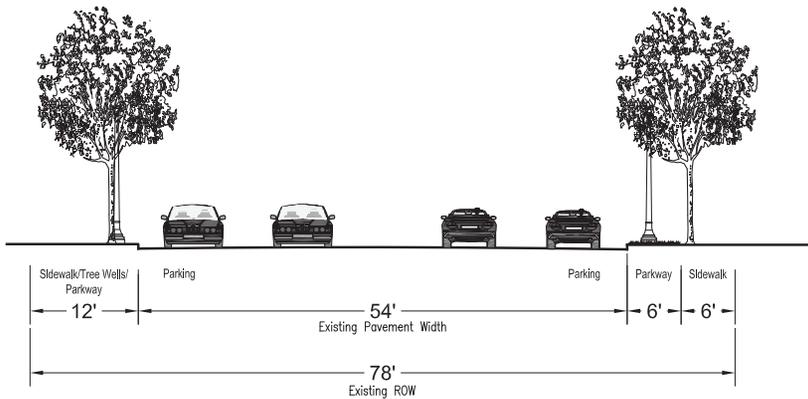
**Highland Avenue**



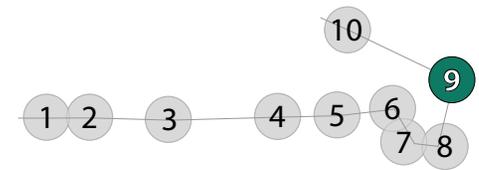
Example of a standard unimproved crosswalk

**FIGURE 9.4 TYPICAL SECTION - D STREET**

**D Street**

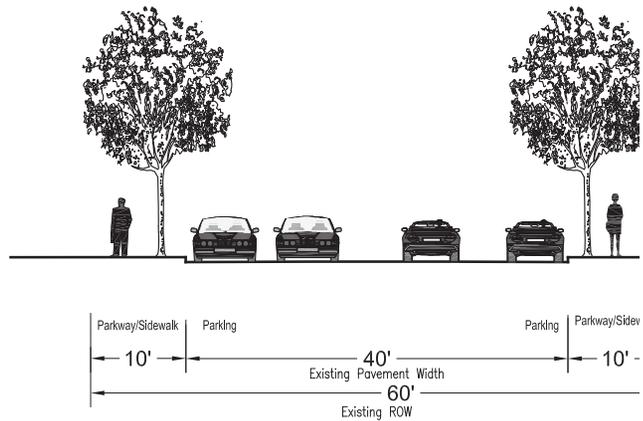


Highland Avenue commercial area pedestrian environment



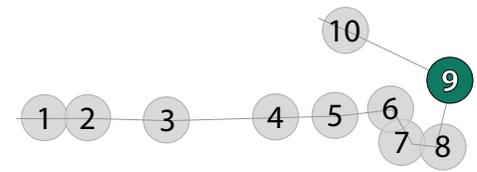
**FIGURE 9.5 TYPICAL SECTION - RESIDENTIAL**

**Typical residential street**



**TABLE 9.1 EXISTING BICYCLE FACILITIES**

Street	Kendall Dr	Northpark Blvd	Electric Ave - Mountain View Ave	Parkdale Dr	Valencia Ave
Segment	Brookfield St to Shandin Hills Cir	Mountain Dr to Electric Ave	Northpark Blvd to 23rd St	Sierra Way to Valencia Ave	40th St to 30th St
Existing Facility Type	Class II	Class II	Class II	Class II	Class II
Speed and Condition of Vehicular Traffic	◐	◑	◐	◐	○
Pavement Condition	◐	○	◐	◐	○
"Door Zone" and Driveway Conflicts	○	○	○	◐	○
Transit Service and Waiting Environment in Corridor	◐	◐	◐	N/A	N/A
Amount of Key Attractions	◐	◐	◐	◐	◐
Amount of Bike Facility Striping or Signage	◐	◑	○	◐	○



**TABLE 9.2 EXISTING PEDESTRIAN FACILITIES**

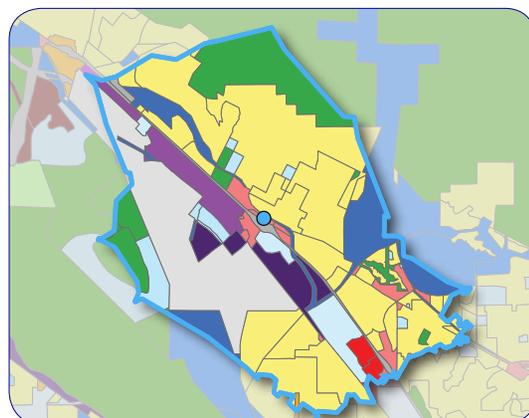
Street	E Street		Highland		D Street	Arrowhead Avenue	G Street	H Street	Residential Streets	
	North of Highland Avenue	South of Highland Avenue	East of E Street	West of E Street					North of Highland Avenue	South of Highland Avenue
Segment										
Sidewalk/Parkway Width										
Sidewalk Width										
Sidewalk Condition										
Sidewalk and/or Parkway Location										
Crosswalks										
Curb Ramp										
Street Trees Location										
Raised Median									N/A	N/A
Utility Poles and wires										
Lighting										
Street Furniture										
Wayfinding Signage in public realm										

FIG. 10.1 PALM AVENUE SBX STATION CATCHMENT AREA

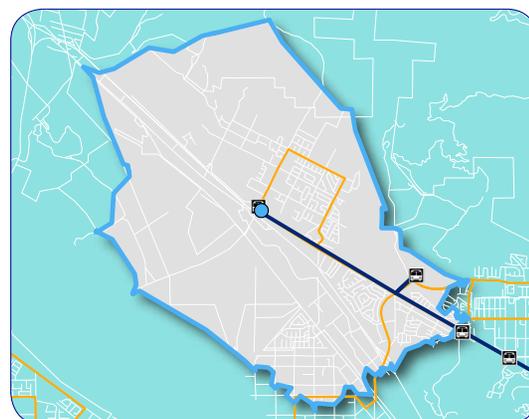




Plan for Palm Avenue sbX Station



Residential land uses are separated by Interstate 215



Limited existing and planned transit service, "end of line" sbX facility

## 10.0 Palm Avenue sbX Station



The Palm Avenue sbX Station is located immediately southwest of a newer residential development. On the opposite side of the station and the adjacent Interstate 15 freeway are a number of low-density heavy industrial uses. Interstate 15 effectively bisects the study area, and creates a barrier for accessing the station from a second area of residential development at the southern end of the study area.

The station is designed to be the northern terminus of the E Street sbX line, and when completed, will feature an off-street facility with bus bays, waiting areas, and a small passenger parking lot.

### Opportunities

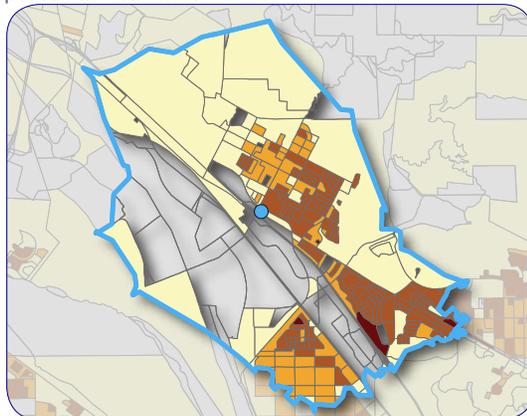
- Existing Class I facility running through center of residential district
- Planned Class I facility along flood channel would connect to greater San Bernardino
- Sloping topography
- Limited existing development around station area provides "blank canvas" for station-area improvements and appropriate design guidelines
- sbX station and improvements offer an opportunity to improve pedestrian connections.
- Existing Chestnut Trail provides recreational opportunities.
- Two vacant parcels near the station are slated for mixed-use developments.

### Constraints

- Interstate 215 presents physical and psychological barrier to access to and from residential area southeast of station
- Industrial land uses south of Interstate 215 employ relatively few people at present, meaning non-motorized access to station may be peak-only and one-directional
- Nearby barriers to pedestrian access to transit include the I-215 Freeway, a drainage channel and steep topography.



Newer residential development features ADA-compliant pedestrian treatments

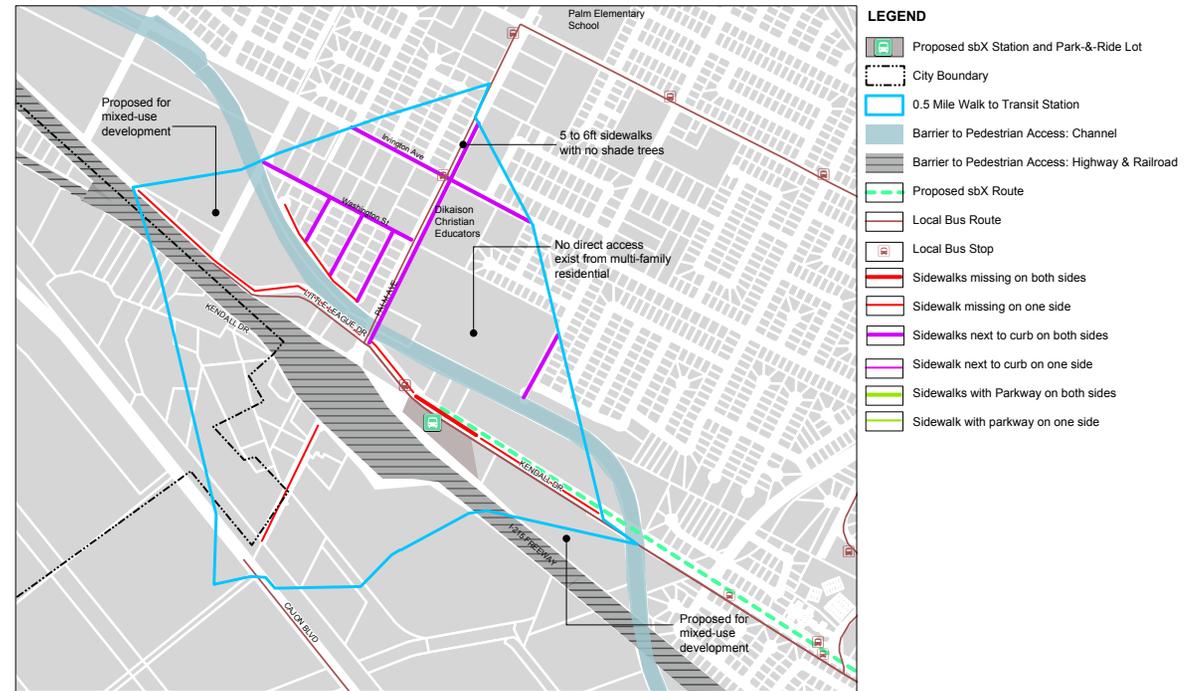


Interstate creates physical barrier to access for residents south of station

- North of Kendall Drive newer residential areas have 5 to 6' sidewalks leading to the stations; however, no landscaping and/or shade trees are located next to the curb to protect and/or shade pedestrians.
- Incomplete sidewalks exist along Kendall Drive, near the sbX station and park & ride lot and near the intersection of Kendall Drive and Palm Avenue

**FIG. 10.2 PALM AVENUE SBX STATION PEDESTRIAN ANALYSIS**

*Palm Avenue/Kendall Drive sbX Station - Opportunity & Constraint Analysis*



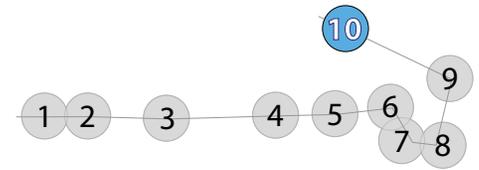
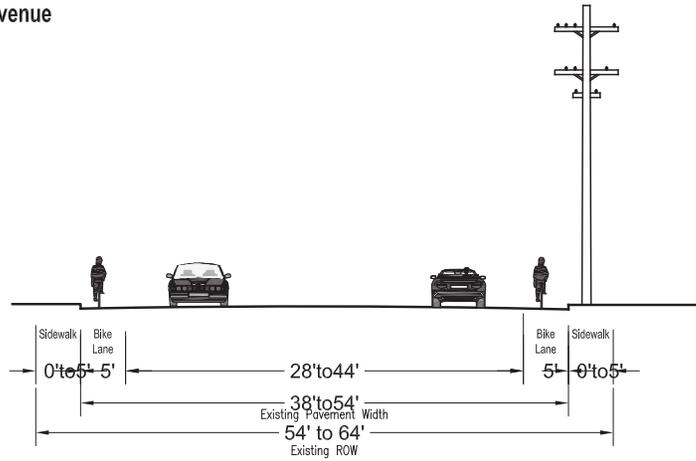
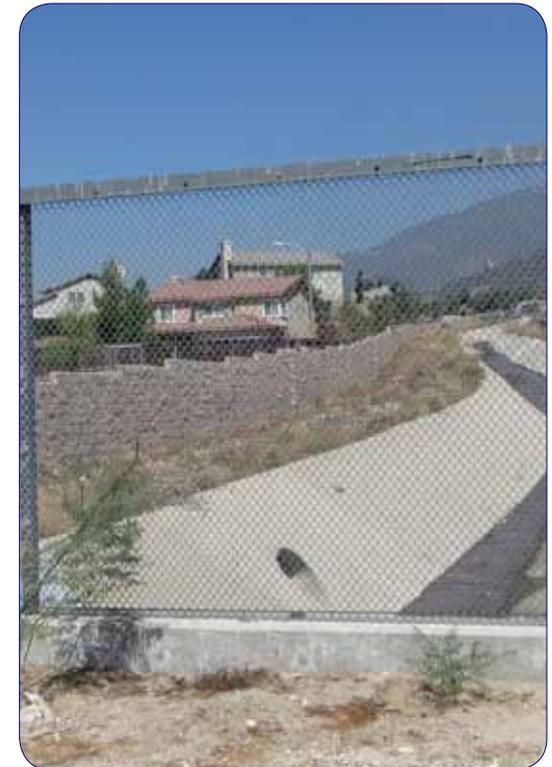


FIGURE 10.3 TYPICAL SECTION - KENDALL AVENUE

Kendall Avenue



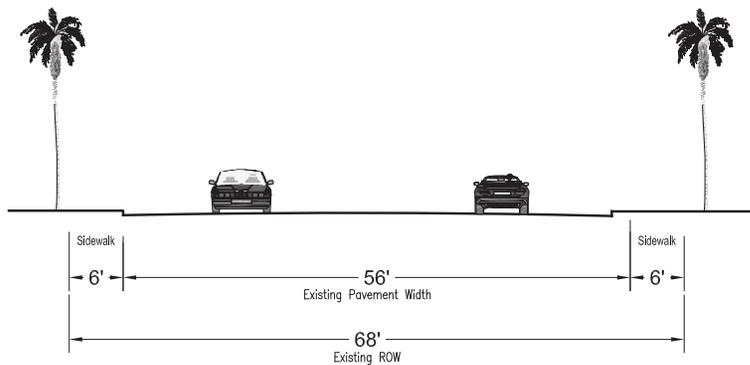
Existing trail north of station area could serve area commuters and connect to sbX station



Site of planned Class I facility north of station area

FIGURE 10.4 TYPICAL SECTION - PALM AVENUE

Palm Avenue



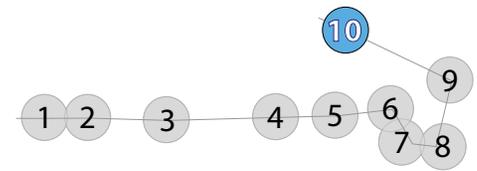


TABLE 10.1 EXISTING BICYCLE FACILITIES

Street	Chesnut Ave Path	Kendall Dr	Campus Pkwy	Devils Canyon Rd - Northpark Blvd	University Pkwy
Segment	Ohio Ave to Irvington Ave	Palm Ave to Little Mountain Dr	Kendall Dr to Devils Canyon Rd	Ben Canyon Rd to Westwind Dr	Northpark Blvd to State St
Existing Facility Type	Class I	Class II	Class II	Class II	Class II
Speed and Condition of Vehicular Traffic	N/A				
Pavement Condition					
"Door Zone" and Driveway Conflicts					
Transit Service and Waiting Environment in Corridor	N/A				
Amount of Key Attractions					
Amount of Bike Facility Striping or Signage					

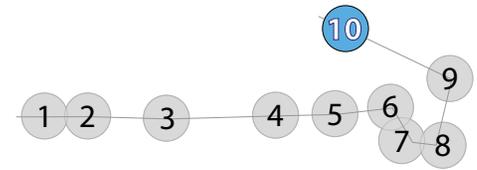
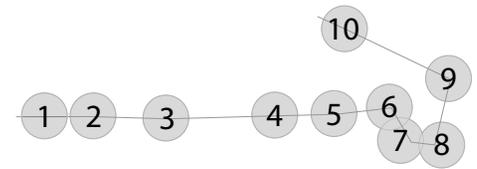


TABLE 10.2 EXISTING PEDESTRIAN FACILITIES

Street	Kendall Dr	Palm Ave		Irvington Ave	Washington St	Other Residential Streets
Segment		North of Kendall Dr	South of Kendall Dr			
Sidewalk/Parkway Width						
Sidewalk Width						
Sidewalk Condition						
Sidewalk and/or Parkway Location						
Crosswalks						N/A
Curb Ramp						
Street Trees Location						
Raised Median				N/A	N/A	N/A
Utility Poles and wires						
Lighting						
Street Furniture						
Wayfinding Signage in public realm						



Bicyclist north of the Rialto Metrolink Station



Walking environment south of San Bernardino Metrolink Station

## 11.0 Conclusions & Next Steps

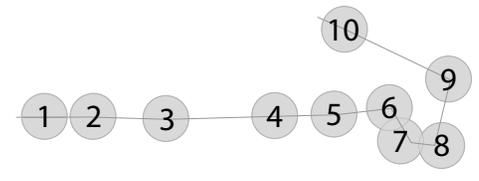
The overall study area is a study in contrasts.

Some stations and study areas (Upland, Fontana, Rialto, San Bernardino Metrolink, and Highland sbX stations) are primarily community stations in nature, and serve a mix of residential and small-scale commercial land uses. These stations often feature a well-distributed, well-balanced mix of residential densities, and the pedestrian environment is well-equipped to handle pedestrian traffic. Non-motorized activity at these stations is dispersed and steady throughout the day, and trip types are varied.

Other stations (Montclair, Rancho Cucamonga Metrolink, Hunts Lane and Anderson sbX stations) are located in commercial and industrial areas, and feature more peak non-motorized access activity periods that correspond with the morning and afternoon peak commute periods. Trip types are also varied, but without the adjacent residential land uses, they tend to also follow peak commute times.

Palm Avenue is somewhat of a mix of types, and possesses great potential to allow nearby residents to access the regional transit network once the high-quality sbX service is operational.

Alta Planning +Design and Gruen Associates, together with SANBAG and the respective City staffs, will take the insights and results gained by the existing conditions fieldwork, the ongoing public outreach and survey effort, and national “Best Practices” insights to develop a series of design guidelines, site-specific treatments, and financing implementation strategies to improve access to transit for the bicyclists and pedestrians of the Inland Empire.



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