Project Description

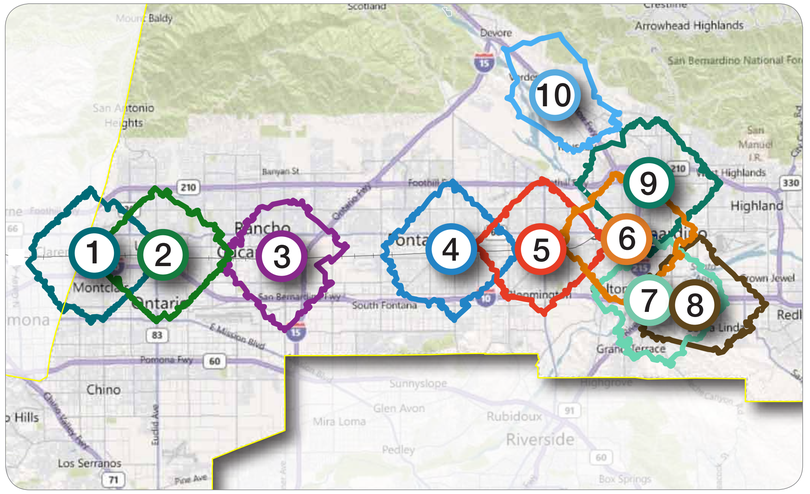
San Bernardino Associated Governments (SANBAG) is evaluating the ability of non-motorized users to access its regional transit network, including existing Metrolink Commuter Rail services, planned sbX Bus Rapid Transit (BRT) Stations, and other existing fixed-route transit services throughout the Inland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

This project is identifying barriers and challenges to non-motorized access in and around the selected stations, and is recommending improvements to facilitate pedestrian and bicycle access to transit stations.

Study Area

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 Metrolink provides commuter rail service within the study area.

Cities participating in the study include Montclair, Upland, Rancho Cucamonga, Fontana, Rialto, San Bernardino, and Loma Linda.



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

Stations Selected for Analysis

Ten stations have been selected for analysis. The locations were selected for a number of reasons, including high levels of existing or planned transit service, proximity to transit-oriented residents 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.

Project Schedule

The project has been underway for approximately eight months, and is scheduled to conclude in Summer 2012. Feedback from this workshop will help shape the development of Station Access Improvement Plans for each of the ten stations.

Phase 1
- ✓ Identify Stations
- ✓ Preliminary Fieldwork
- ✓ Document Existing Conditions
- ✓ Review Industry Best Practices

Phase 2
- ✓ Interview Transit Riders at Stations
- ✓ Conduct Walk and Bike Audits with City Staff
- ✓ Public Workshops

Phase 3
- ✓ Develop Preliminary Station Access Improvement Plans
- ✓ Hold Additional Public Workshops
- • Identify Funding and Implementation Strategies

Draft and Final Reports

Project Description and Timeline

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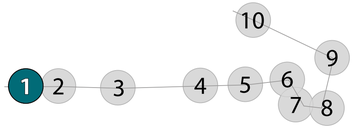
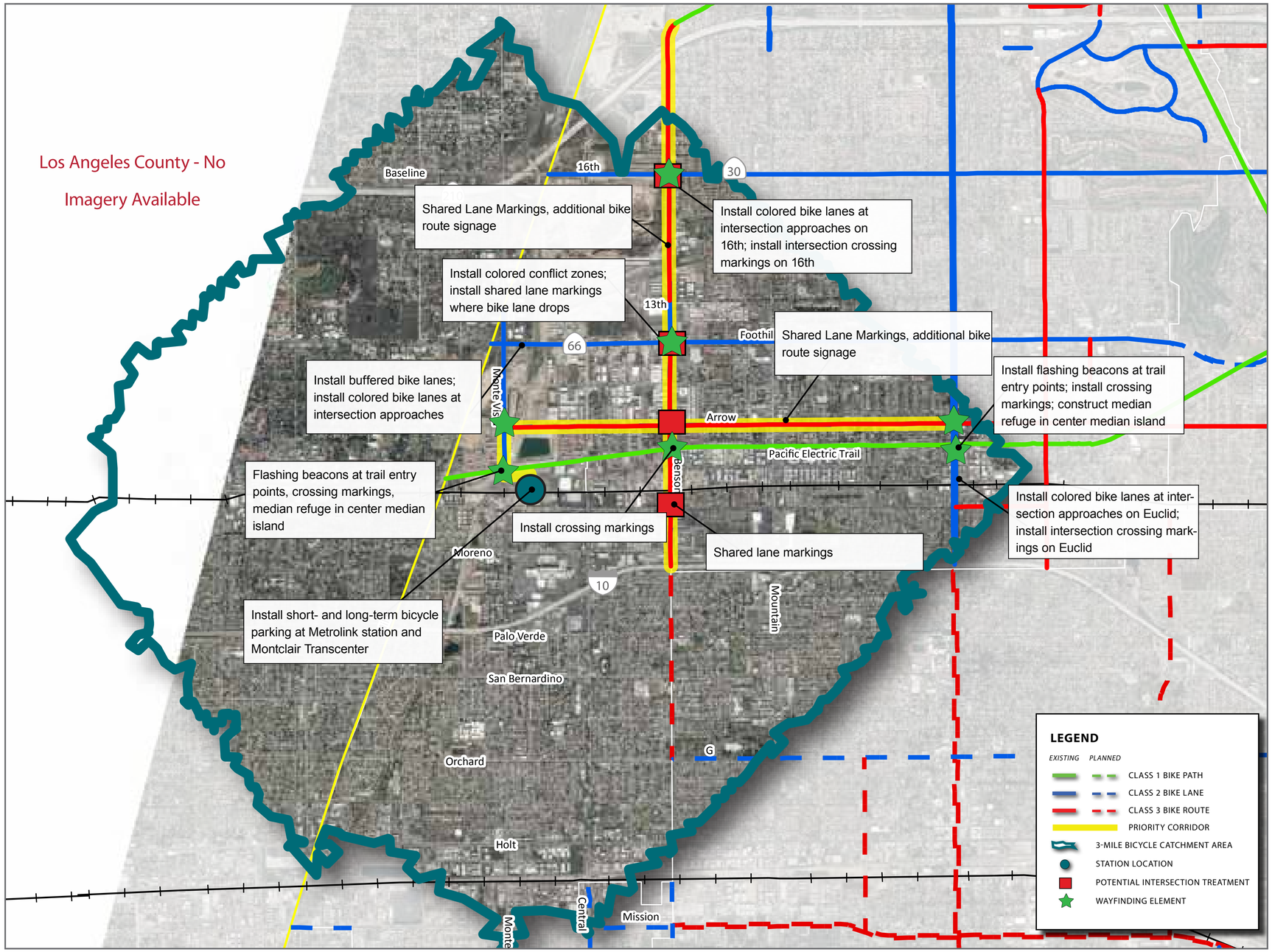


MONTCLAIR

Montclair Metrolink Station Area Proposed Bicycle Network Improvements

Comments



Improve Existing Wayfinding

Existing Class II bike lanes in Upland provide adequate utility for cyclists, but are not always noticed by motorists

Example of colored bike lane concept on Euclid Avenue in Upland to increase visibility

Improve Pacific Electric Trail Crossings

Wide arterials along the Pacific Electric Trail do not encourage cyclists or pedestrians

Improvements can include high-visibility crosswalks, rectangular rapid flashing beacons (RRFB), or other traffic control devices

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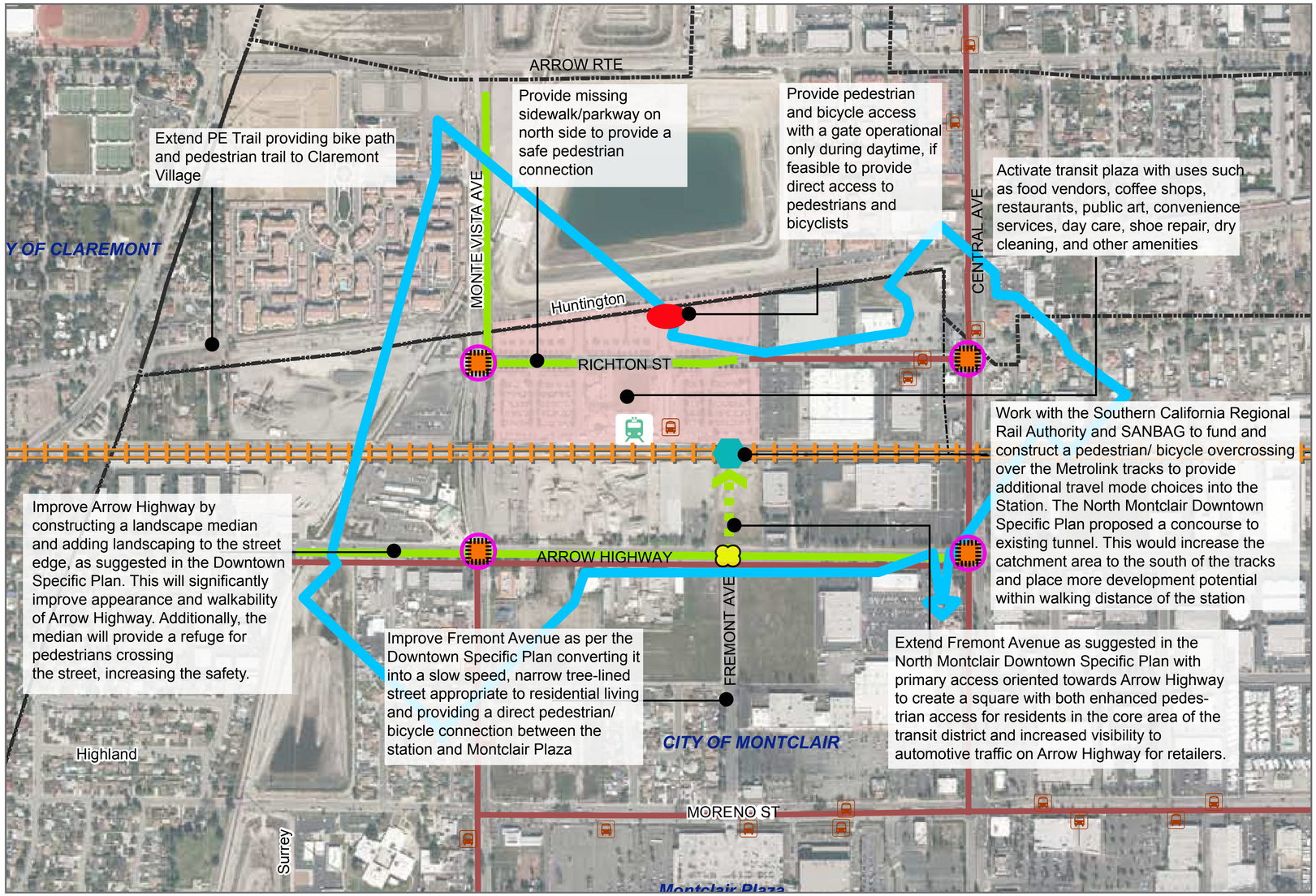
MONTCLAIR

Montclair Metrolink Station Proposed Pedestrian Improvements

Comments



LEGEND

- Existing Metrolink Station
- 0.5 Mile Walk to Transit Station
- Existing Railroad
- Existing Local Bus Route

LEGEND

- Existing Local Bus Stop
- Provide sidewalks with Parkway/ Street trees on both sides
- Proposed Pedestrian/Bicycle Access Gate
- Pedestrain/Bicycle Overcrossing
- Provide Wayfinding Signage/Public Art
- Provide Decorative Crosswalks
- Proposed Landscaped Bulbouts
- City Boundary

Activate Transit Plaza

Chatsworth Metrolink Station in the San Fernando Valley includes a small railroad museum and a childcare facility.

Gold Line Station - South Pasadena

Coffee shops help activate the plaza

Recommended Landscaped Bulbouts

Recommended Pedestrian/Bicycle Bridge

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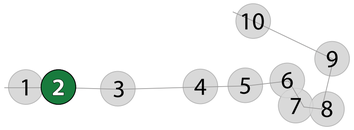
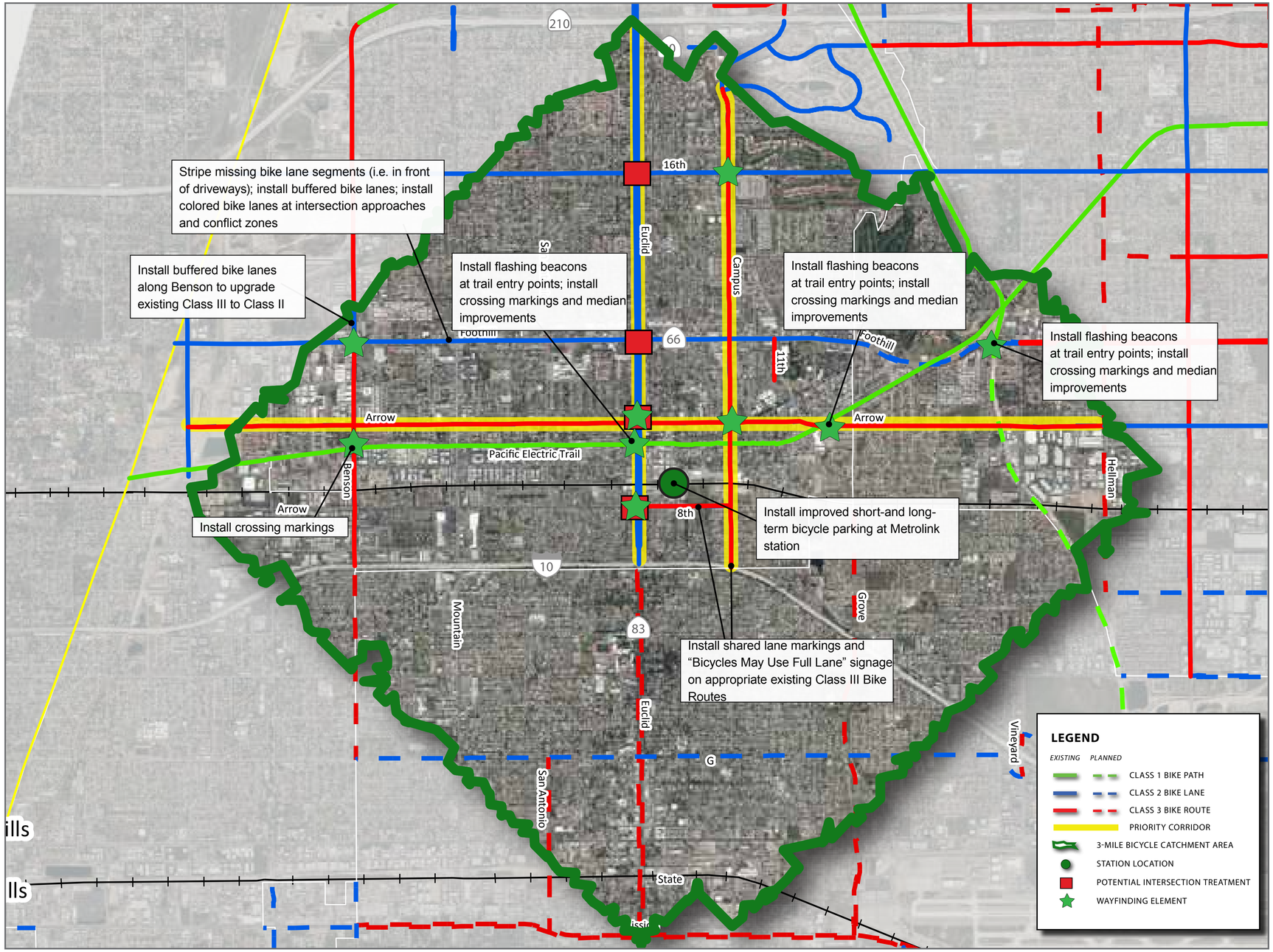


Upland Metrolink Station Area Proposed Bicycle Network Improvements

Comments

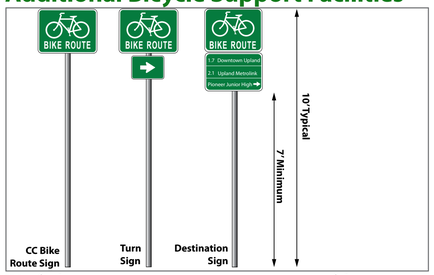


Improve Existing Bicycle Routes and Lanes

Example "Sharrow" shared-lane marking. These work best on lightly-travelled local streets where vehicle speeds are closely related to cyclist speeds.

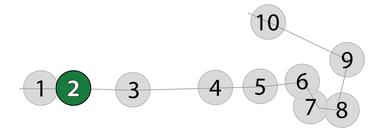
Example of buffered bike lane with on-street parking. This provides safer bicycle operation within the "door zone."

Additional Bicycle Support Facilities



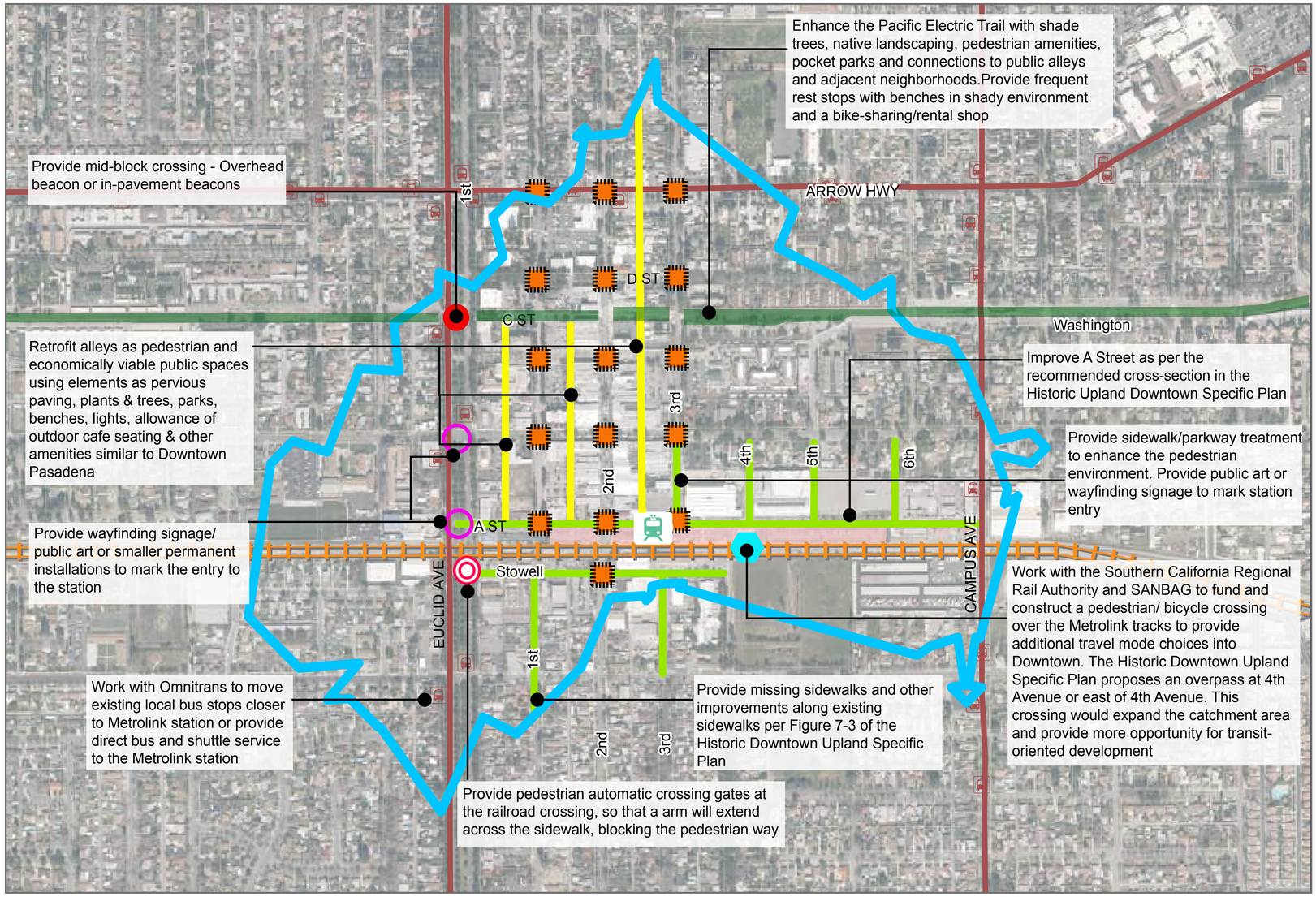
Wayfinding components can encourage more confidence among cyclists and improve access to local destinations.

Example high-quality, secure long-term bicycle parking at Rancho Cucamonga Metrolink Station.



Upland Metrolink Station Proposed Pedestrian Improvements

Comments



LEGEND

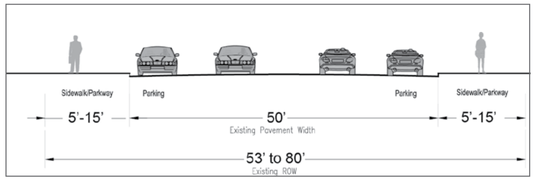
- Existing Metrolink Station
- 0.5 Mile Walk to Transit Station
- Existing Railroad
- Existing Local Bus Route
- Existing Local Bus Stop
- Provide sidewalks with Parkway/ Street trees on both sides
- Proposed Pedestrian Automatic Crossing Gate
- Provide Wayfinding Signage/Public Art
- Provide Decorative Crosswalks
- Proposed Mid Block Pedestrian Crossing
- Proposed Pedestrian/Bicycle Overcrossing

Install Mid-Block Crossing at Euclid Avenue

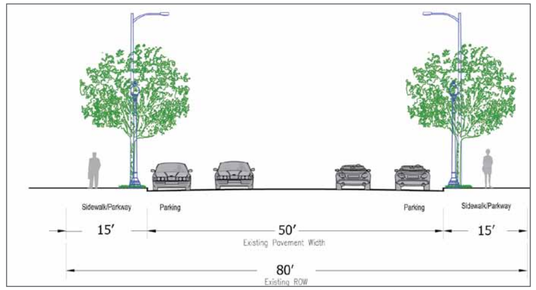
Existing view of Euclid Avenue looking east from the Pacific Electric Trail.

Proposed Euclid Ave mid-block pedestrian crossing for pedestrians and bicyclists – Overhead beacon or in-pavement beacon.

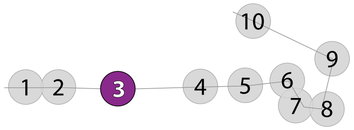
Improve the Pedestrian Experience



Existing Cross-Section : 3rd Avenue between A Street and 9th Street.



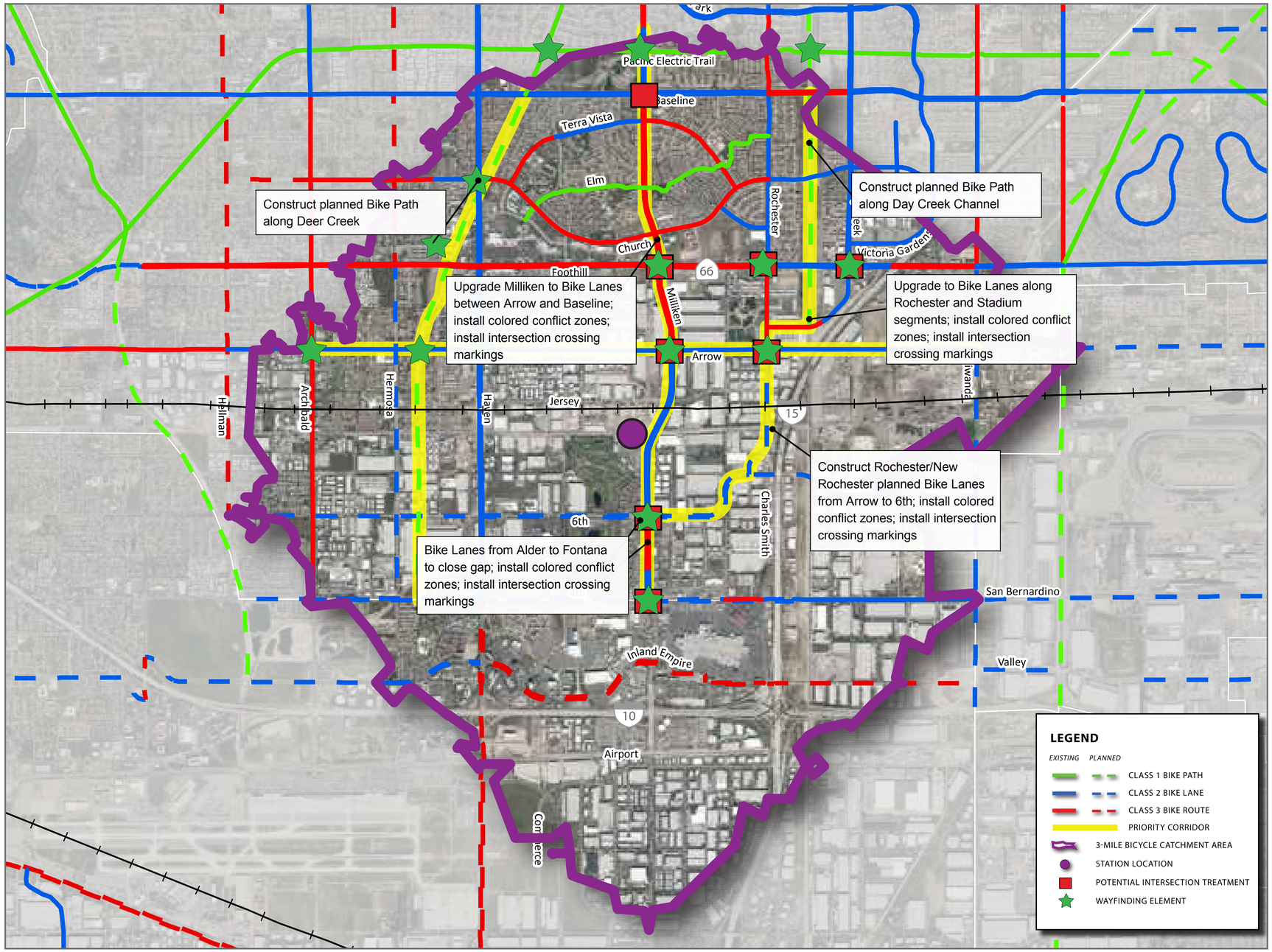
Proposed Cross-Section : 3rd Avenue between A Street and 9th Street.



Rancho Cucamonga Metrolink Station Area Proposed Bicycle Network Improvements

RANCHO CUCAMONGA

Comments



Improve Existing Wayfinding

Existing wayfinding monument along Pacific Electric Trail.

Improved wayfinding monument with City logo and Metrolink destination.

Explore Flood Channel Routes

Existing flood channels are often closed for users, despite being planned as Class I Bike Paths.

Agreements with County Flood Control can allow for opening of pathways for non-motorized use.

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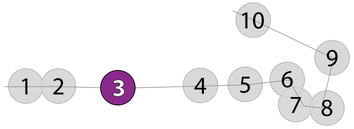
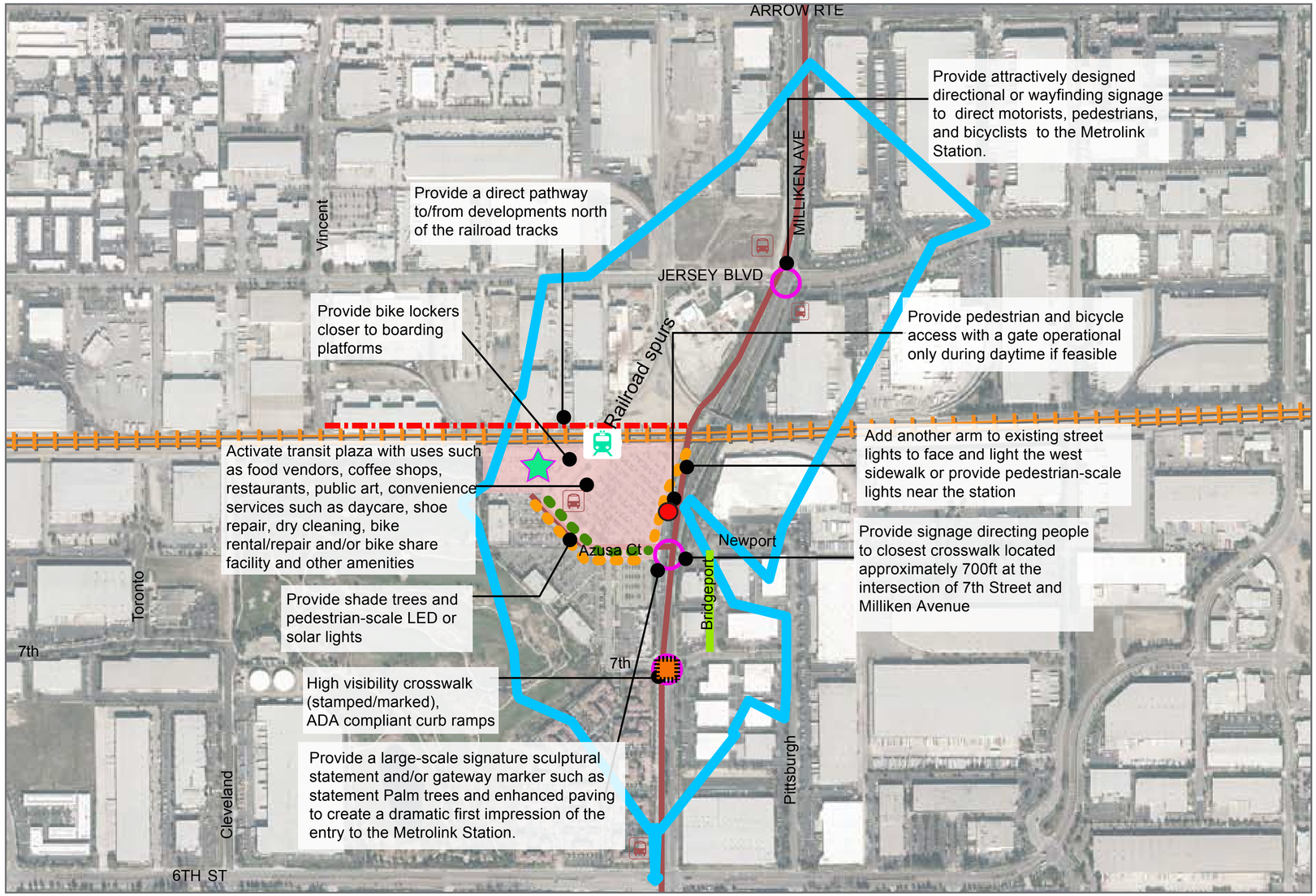


Rancho Cucamonga Metrolink Station Proposed Pedestrian Improvements

Rancho Cucamonga

Comments



LEGEND

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- 0.5 Mile Walk to Transit Station
- Existing Railroad
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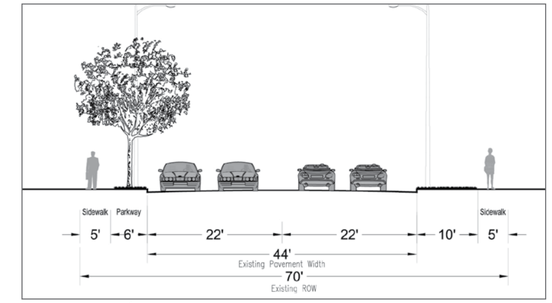
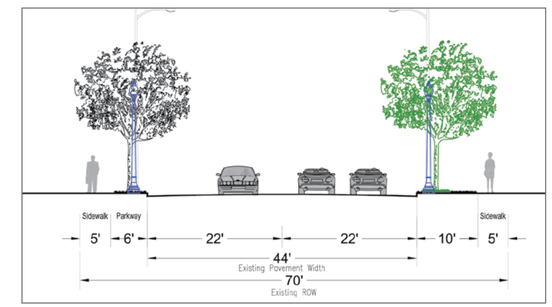
- Provide sidewalks with Parkway/ Street trees on both sides
- Proposed Shade Trees
- Proposed Pedestrian-Scale LED or Solar Lights
- Provide Wayfinding Signage/Public Art
- Provide Decorative Crosswalks
- Proposed Landscaped Bulbouts
- Proposed Pathway
- Proposed Bike Rental

Enhance Azusa Street



Existing view of Azusa Street



Provide shade trees and pedestrian-scale lighting

Provide Access at Northern End of Station

Area north of station is undeveloped and lacks connectivity.

Example multi-use path along rail line in San Diego.

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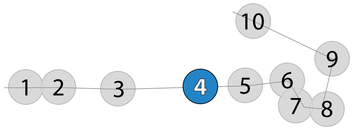

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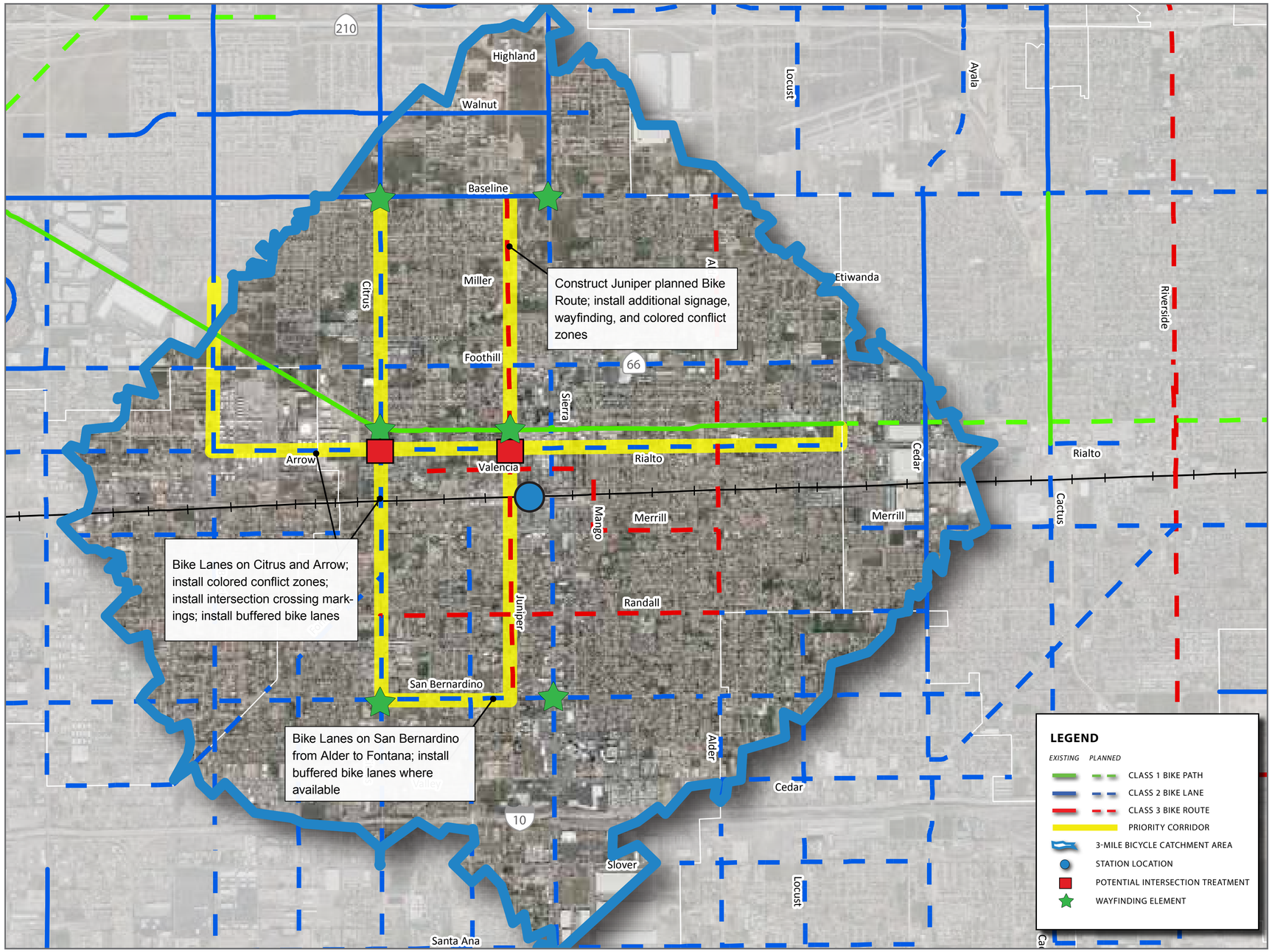
CALIFORNIA

Comments

Fontana Metrolink Station Area Proposed Bicycle Network Improvements



Improve Mid-Block Crossings

Along the Pacific Electric Trail, cities have often not improved mid-block crossings. This example is in Upland.

Signage and pavement markings can make crossings easier to navigate

Improve Bicycle Parking

Underutilized areas of the Metrolink Station could be improved with bicycle parking stations

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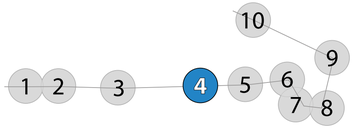
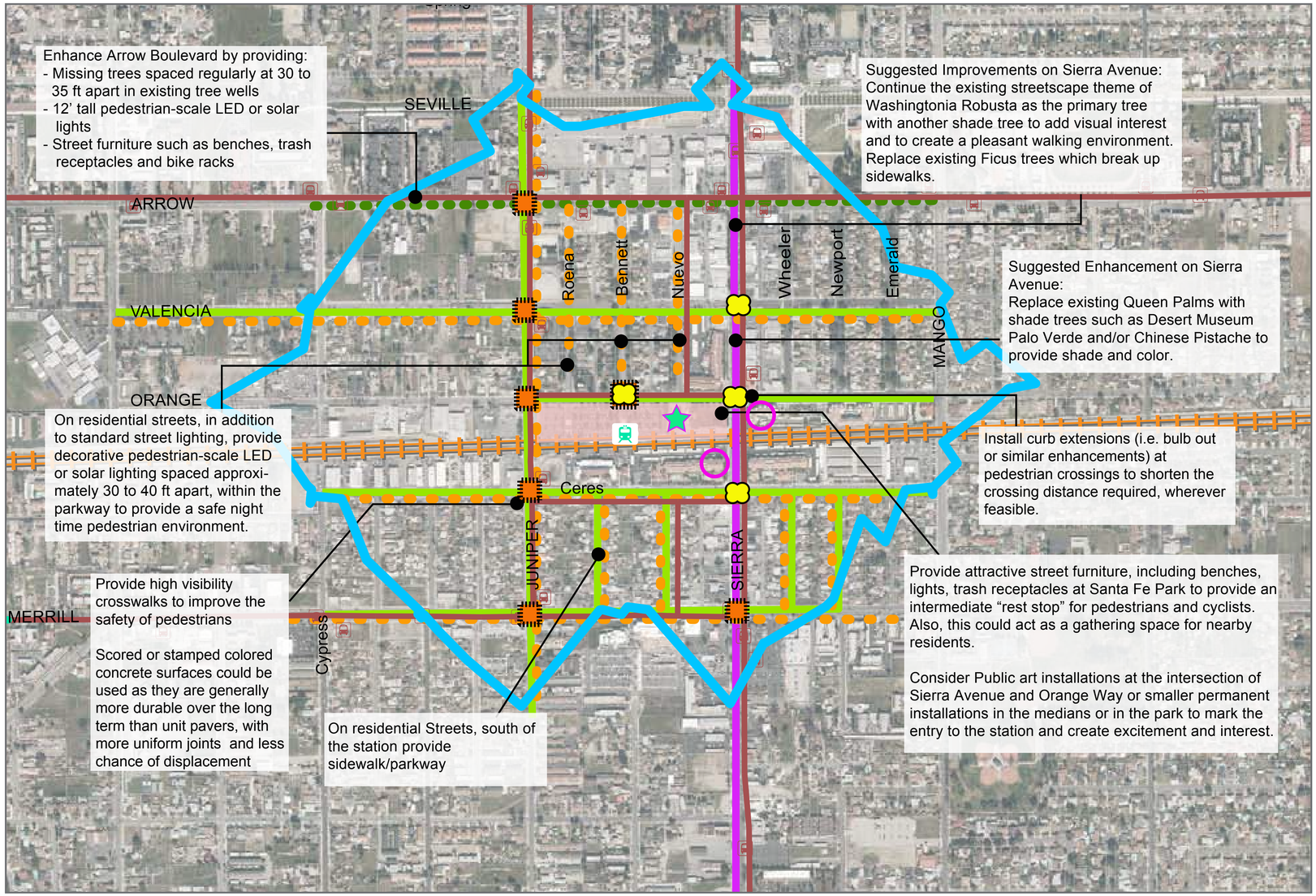


FONTANA
CALIFORNIA

Comments

Fontana Metrolink Station Proposed Pedestrian Improvements



LEGEND

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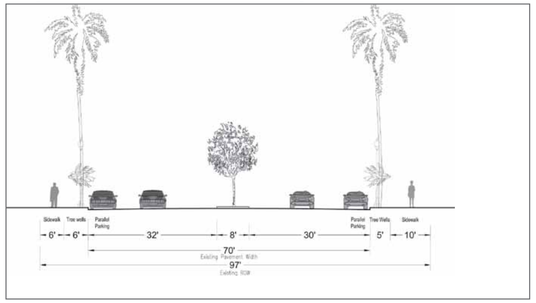
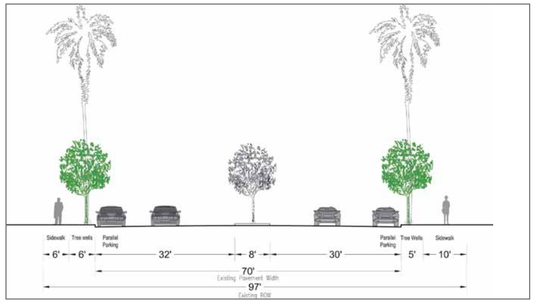
- Proposed shade trees
- Proposed Pedestrian-Scale LED or Solar Lights
- Provide Wayfinding Signage/Public Art
- Provide Decorative Crosswalks
- Proposed Landscaped Bulbouts
- Suggested Sierra Avenue Enhancements
- Proposed Bike Rental

Improve the Pedestrian Experience



Existing Cross-Section - Sierra Avenue



Proposed Cross-Section - Sierra Avenue

Activate Santa Fe Park

Gold Line Mission Station Park features public art and furniture

Public art creates excitement and a sense of place.

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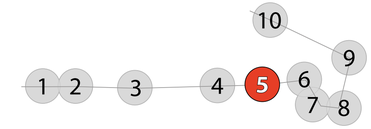
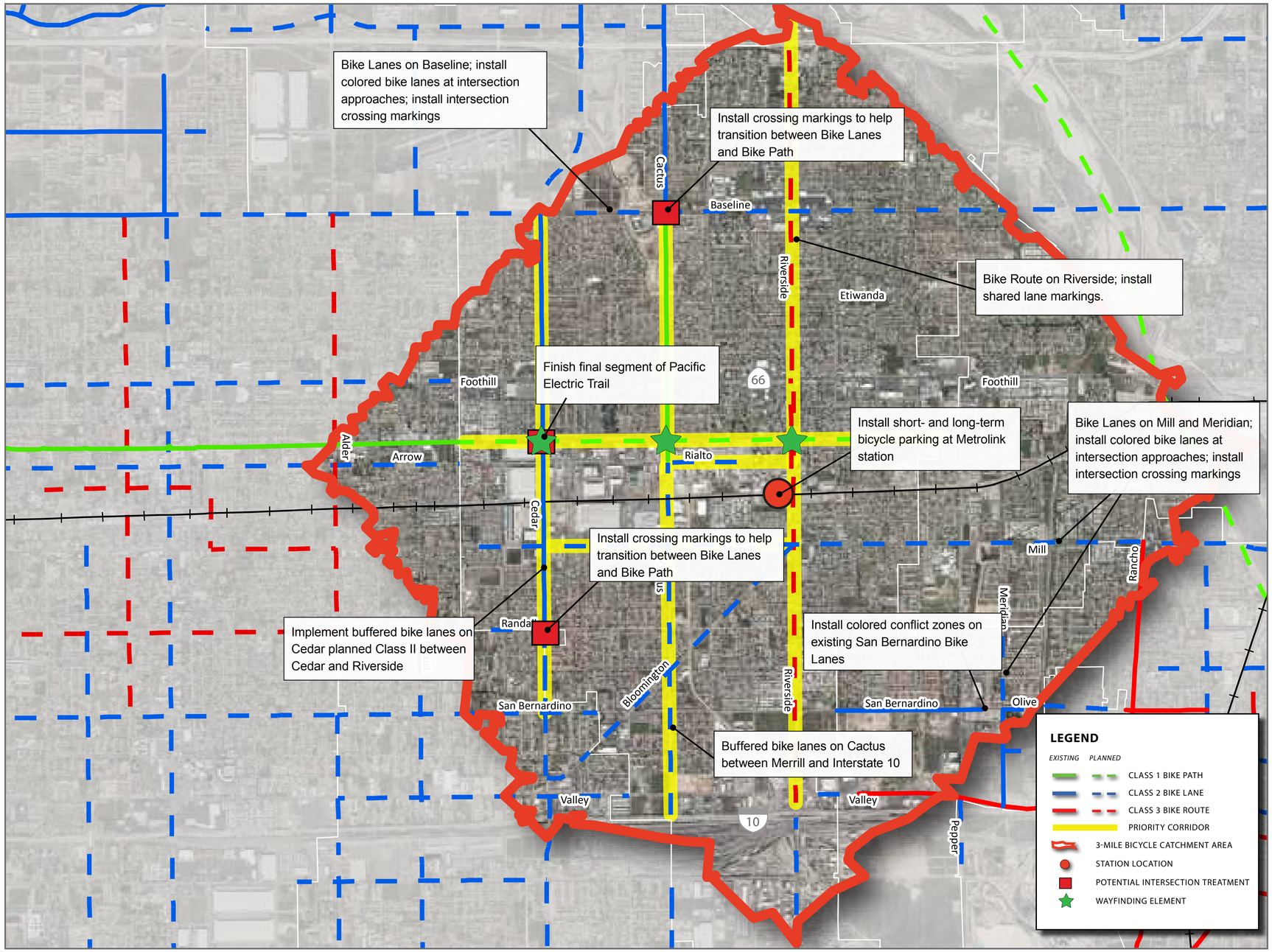


Rialto Metrolink Station Area Proposed Bicycle Network Improvements

Comments



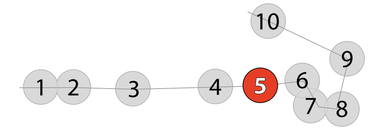
Improve Existing Facilities

Existing Class I Bike Path is overgrown and unattractive to users.

Cost-effective striping improvements and additional maintenance can increase attractiveness and functionality.

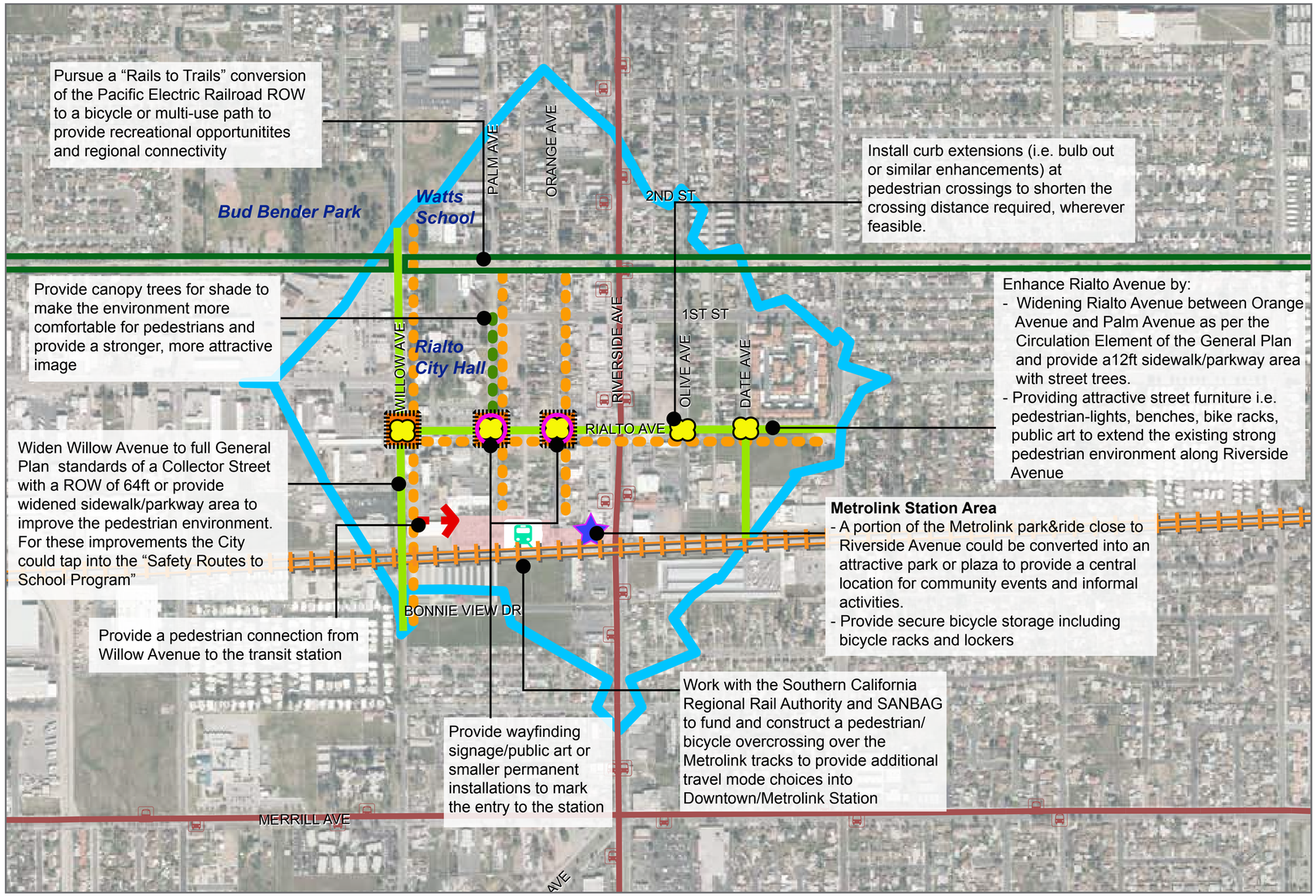
Encourage and Develop Programs that Support Cycling

City or regional programs aimed at commuters and students can increase levels of cycling, improve air quality, and build lifelong bicyling habits.



Rialto Metrolink Station Proposed Pedestrian Improvements

Comments



LEGEND

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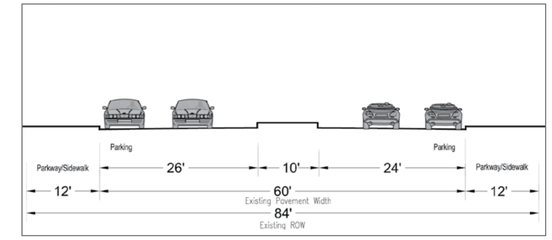
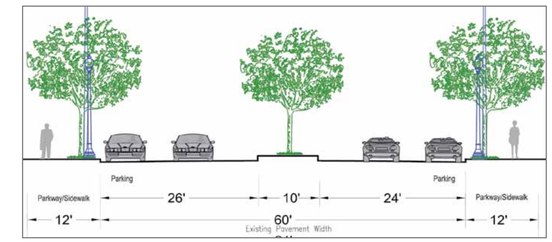
- Proposed Pedestrian-Scale LED or Solar Lights
- Provide Wayfinding Signage/Public Art
- Provide Decorative Crosswalks
- Proposed Landscaped Bulbouts
- Proposed Pacific Electric Trail
- Proposed Transit Plaza

Improve the Pedestrian Experience



Existing Cross-Section - Rialto Avenue



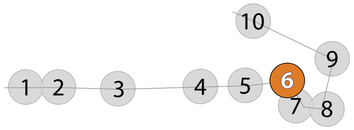
Proposed Cross-Section - Rialto Avenue

Install Landscaped Bulbouts

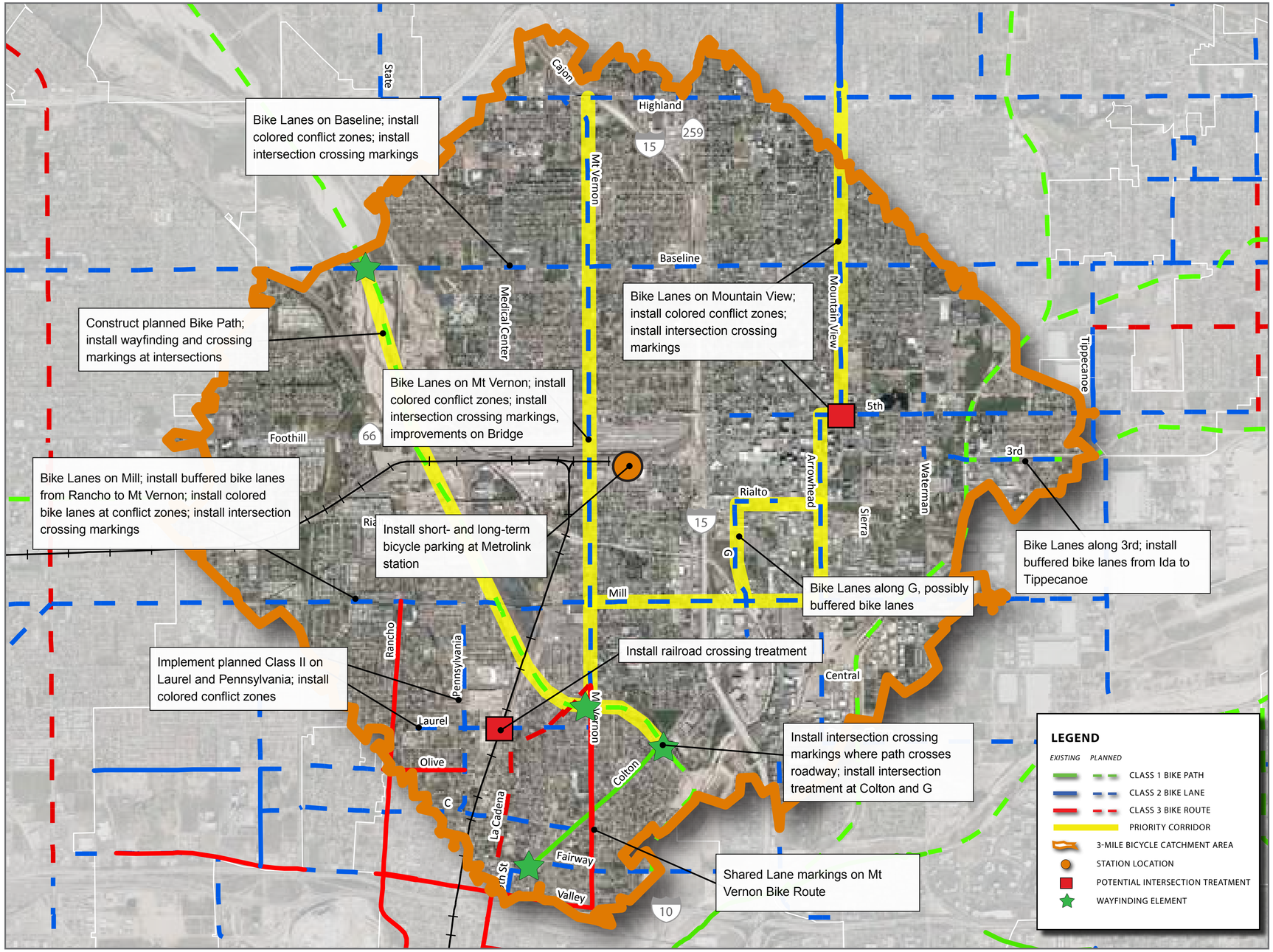
Existing Cross-Section : 3rd Avenue between A Street and 9th Street.

Pursue "Rails to Trails" Conversion

Begin exploring ways to complete sections of the Pacific Electric Trail.



San Bernardino Metrolink Station Area Proposed Bicycle Network Improvements



Improve Freeway Ramp Experiences

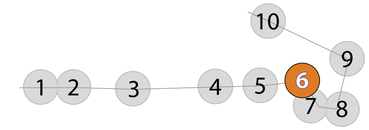
Cyclists often find freeway ramp environments challenging and difficult to navigate, such as this interchange at Baseline and I-15 in Rancho Cucamonga.

Colored bike lanes provide motorists and cyclists with a less challenging, less stressful experience.

Encourage High-Quality Commuter Bicycle Parking

Bicycle lockers are acceptable only for lower levels of use.

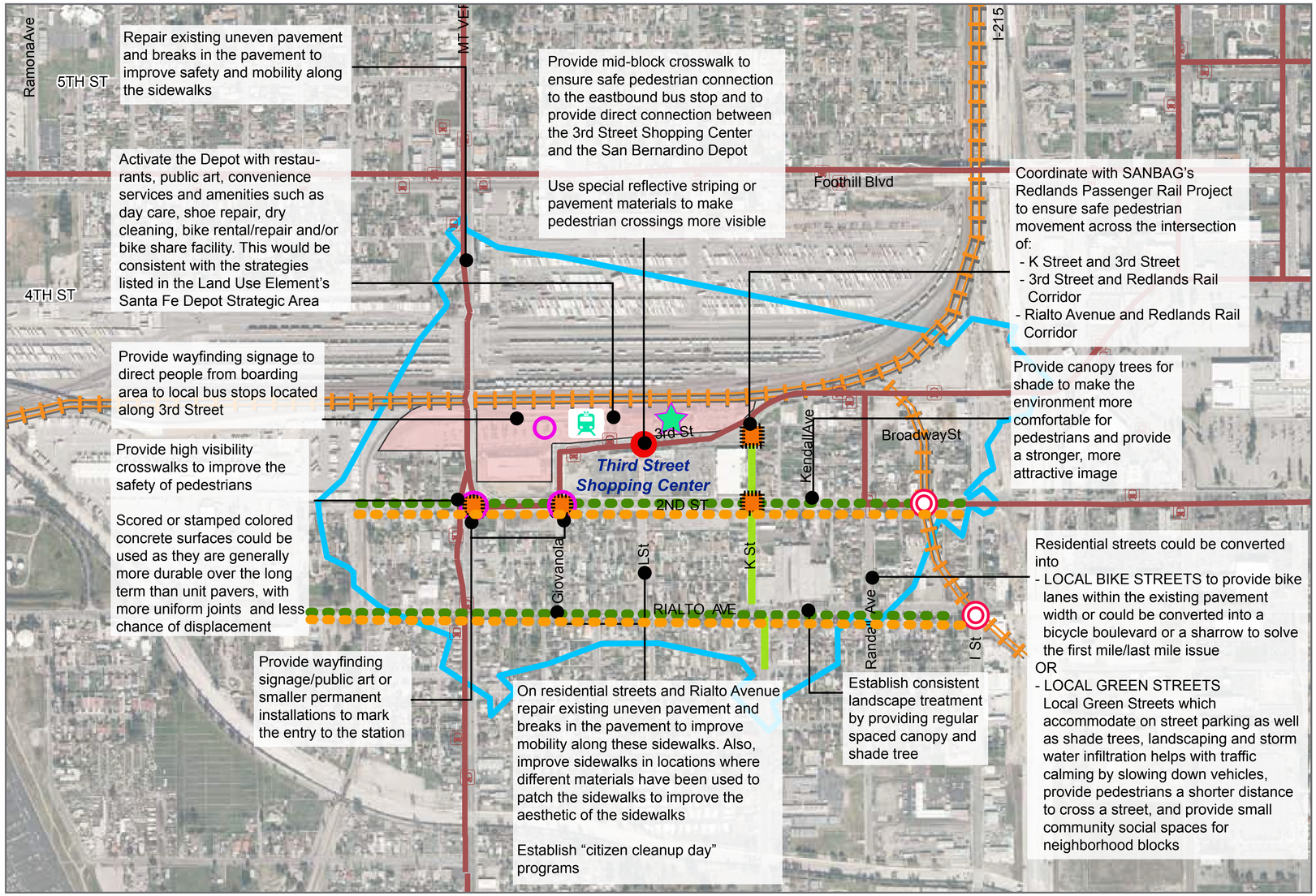
As cycling becomes more popular at stations, other options make more sense for users, such as the secure Bike Station shown above.



CITY OF San Bernardino

Comments

San Bernardino Metrolink Station Proposed Pedestrian Improvements



LEGEND

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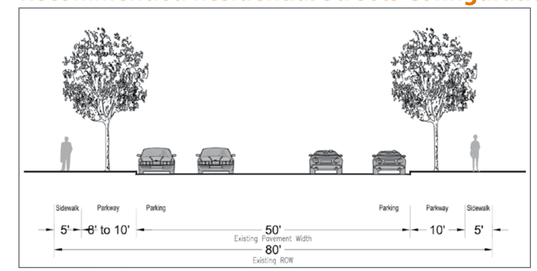
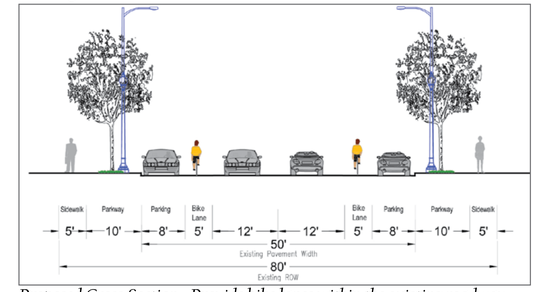
- Provide Decorative Crosswalks
- Proposed Mid Block Pedestrian Crossing
- Proposed Pedestrian Automatic Crossing Gate
- Proposed Bike Rental

Recommended Residential Streets Configuration



Existing Cross Section



Proposed Cross-Section - Provide bike lanes within the existing roadway cross-section.

Install Mid-Block Crossing of 3rd Street

Missing crosswalk between San Bernardino Metrolink Station, local bus stop and the 3rd Street Shopping Center encourages illegal crossings.

Proposed mid-block crossing with in-pavement beacons would provide safe and direct pedestrian/bicycle crossing between the Metrolink Station and local bus stop.

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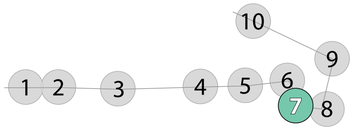
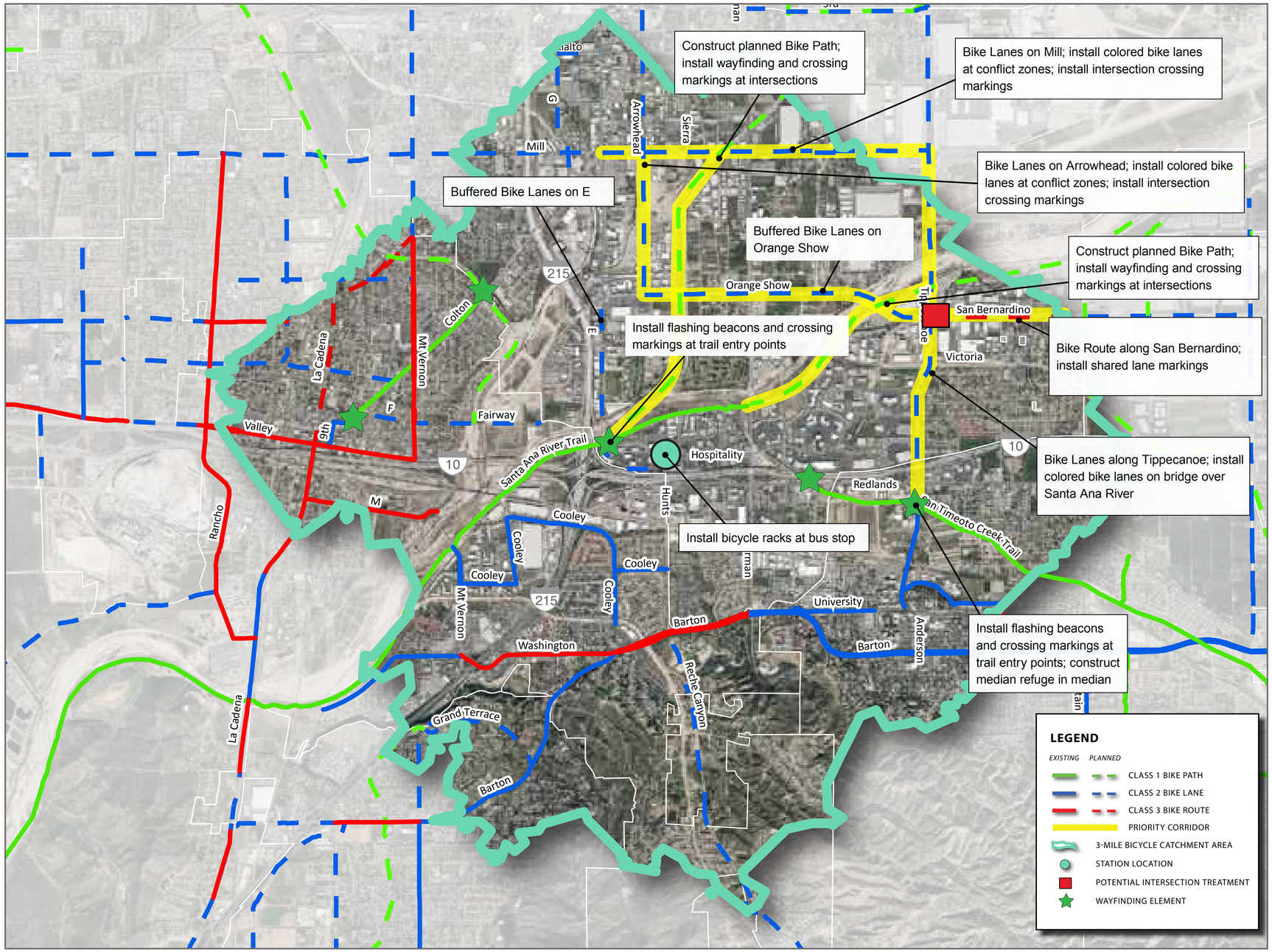


Hunts Lane sbX Station Area Proposed Bicycle Network Improvements

Comments



Improve Access to Santa Ana River Trail

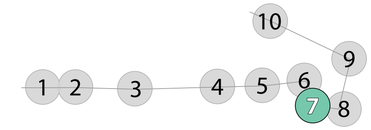
Existing Santa Ana River Trail signage near the Hall of Records is vague and uninviting

Branding the Santa Ana River Trail as a destination for regional cyclists will increase usage by commuters

Encourage High-Quality Commuter Bicycle Parking

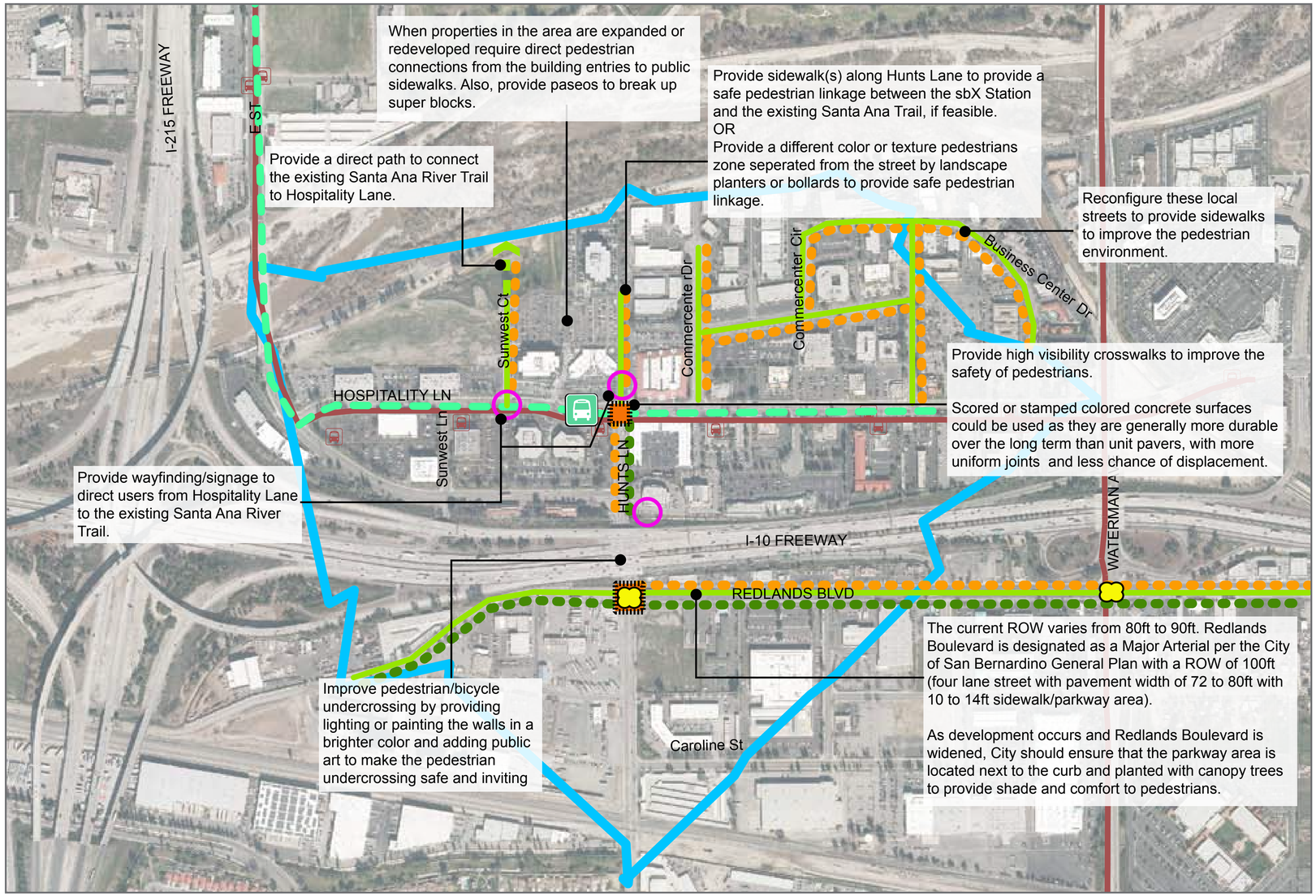
Improving existing long-term bicycle parking should be a priority

Long-term bicycle parking near sbX stations can encourage more commuters to make use of transit



Hunts Lane sbX Station Proposed Pedestrian Improvements

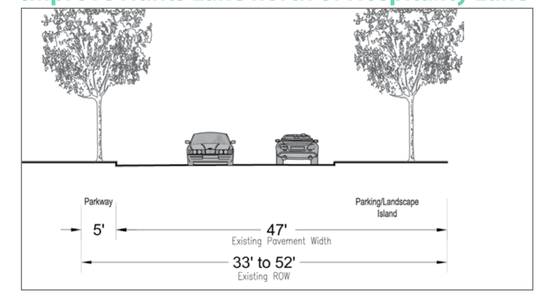
Comments



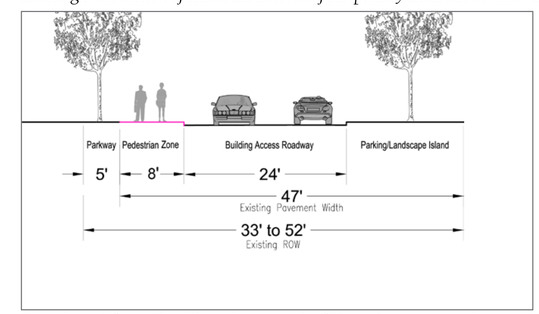
LEGEND

- Proposed Center Running sbX Station
- 0.5 Mile Walk to Transit Station
- Existing Local Bus Route
- Existing Local Bus Stop
- Provide sidewalks with Parkway/ Street trees on both sides
- Proposed Landscaped Bulbouts
- Proposed Shade Trees
- Proposed Pedestrian-Scale LED or Solar Lights
- Provide Wayfinding Signage/Public Art
- Provide Decorative Crosswalks
- Proposed Mid Block Pedestrian Crossing
- Proposed Pedestrian/Bicycle Overcrossing
- Proposed sbX Route (Exclusive Lanes)

Improve Hunts Lane north of Hospitality Lane



Existing cross section of Hunts Lane north of Hospitality Lane has no sidewalks



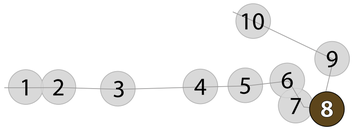
Provide an 8-foot sidewalk on the west side of Hunts Lane or provide a different color or texture pedestrians zone within the pavement

Provide Public Art

Public art/wayfinding define the entry for the sbX station, Santa Ana River Trail and Hospitality Lane

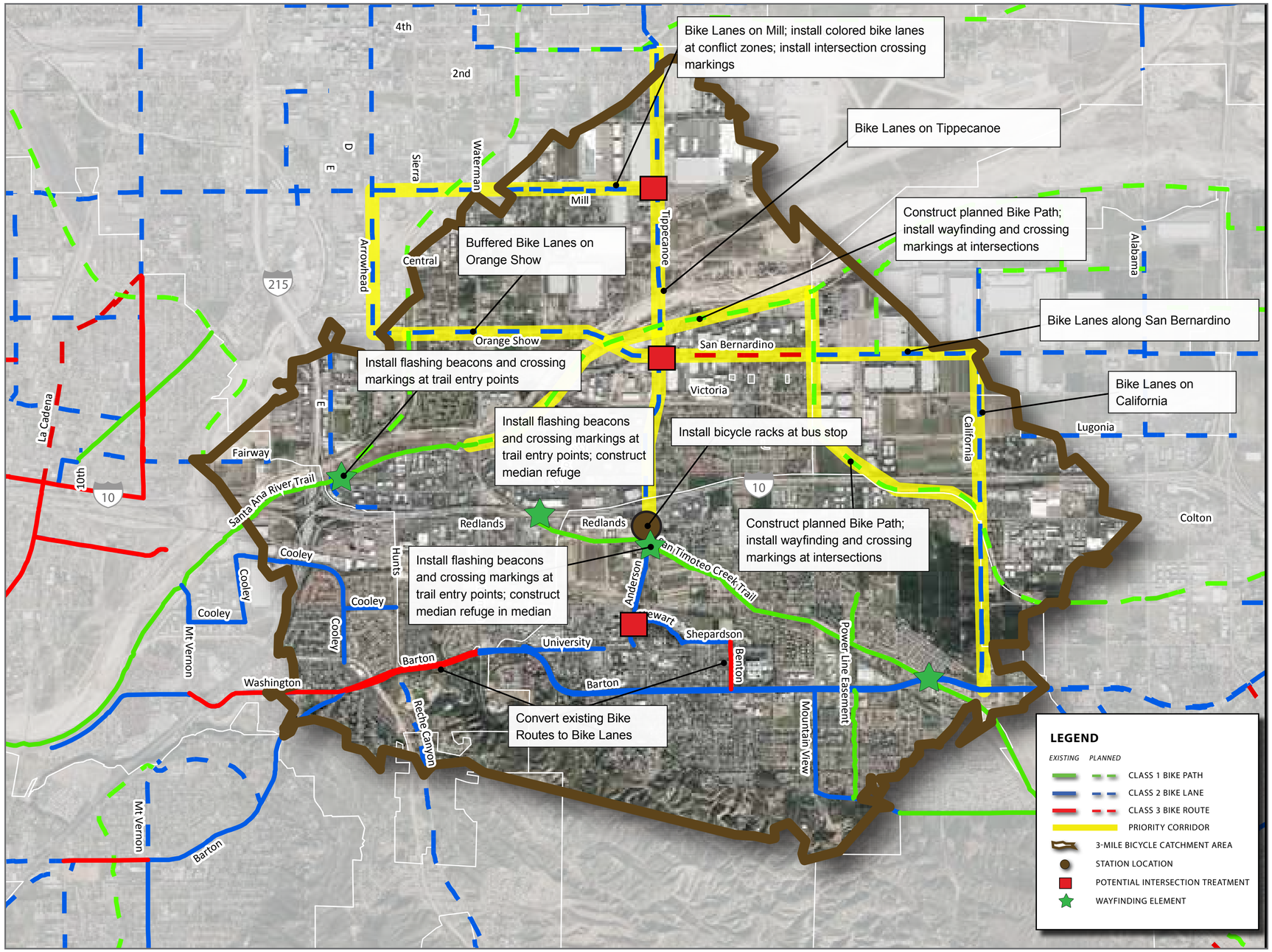
Provide High Visibility Crosswalk

Provide wayfinding signage to direct users from Hospitality Lane to Santa Ana River Trail



Anderson Street sbX Station Area Proposed Bicycle Network Improvements

Comments



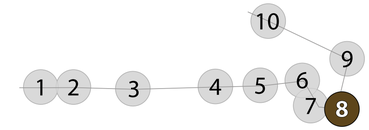
Improve Access to Bike Path East of Anderson

Regional Class I Bike Path facility abruptly ends east of Anderson.

Opening the pathway provides a direct link to the Anderson sbX station and the rest of the City bike network.

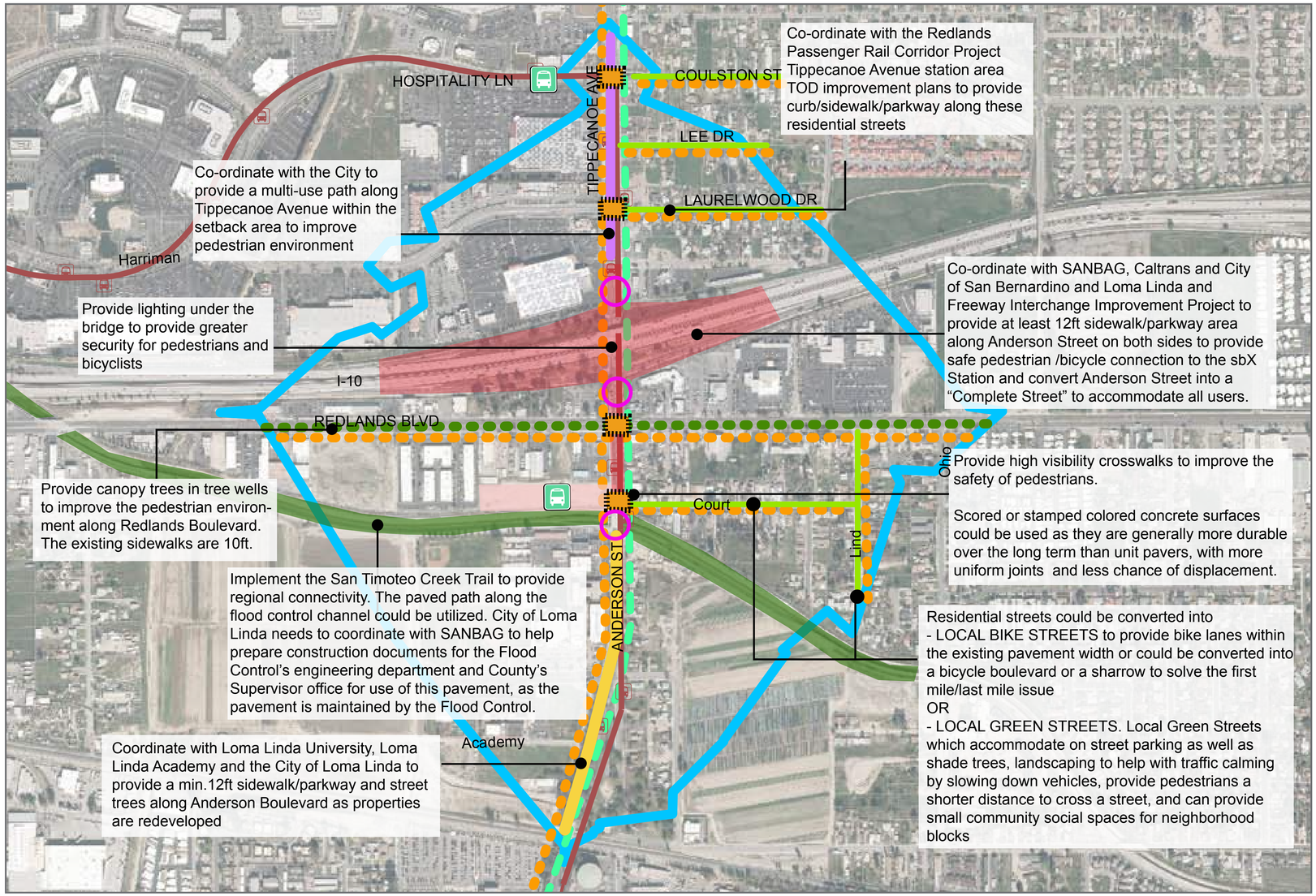
Increase Maintenance of Existing Facilities

Unmaintained bicycle facilities can discourage use and cause flats or conflicts with motor vehicles.



Anderson Street sbX Station Proposed Pedestrian Improvements

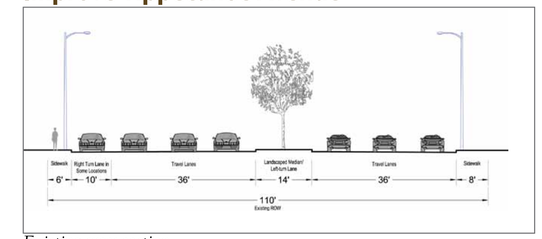
Comments



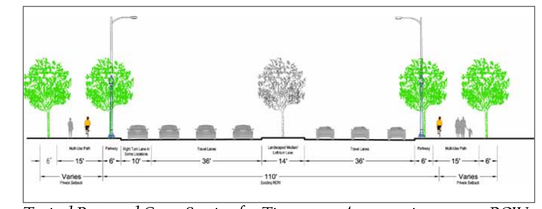
LEGEND

- Proposed Center Running sbX Station
- 0.5 Mile Walk to Transit Station
- Existing Local Bus Route
- Existing Local Bus Stop
- Provide sidewalks with Parkway/ Street trees on both sides
- Proposed Multi-Use Path
- Proposed Pedestrian Enhancements
- Proposed Shade Trees
- Proposed Pedestrian-Scale LED or Solar Lights
- Provide Wayfinding Signage/Public Art
- Provide Decorative Crosswalks
- Proposed San Timoteo Creek Trail
- Proposed sbX Route

Improve Tippecanoe Avenue



Existing cross section



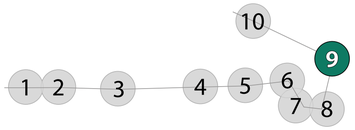
Typical Proposed Cross-Section for Tippecanoe Avenue using current ROW and development setbacks.

Provide Lights Under the Freeway Bridge

Aspire, by Sydney artist Warren Langley celebrates the reawakening of inner-city spaces and neighborhoods and lights up the space under the freeway.

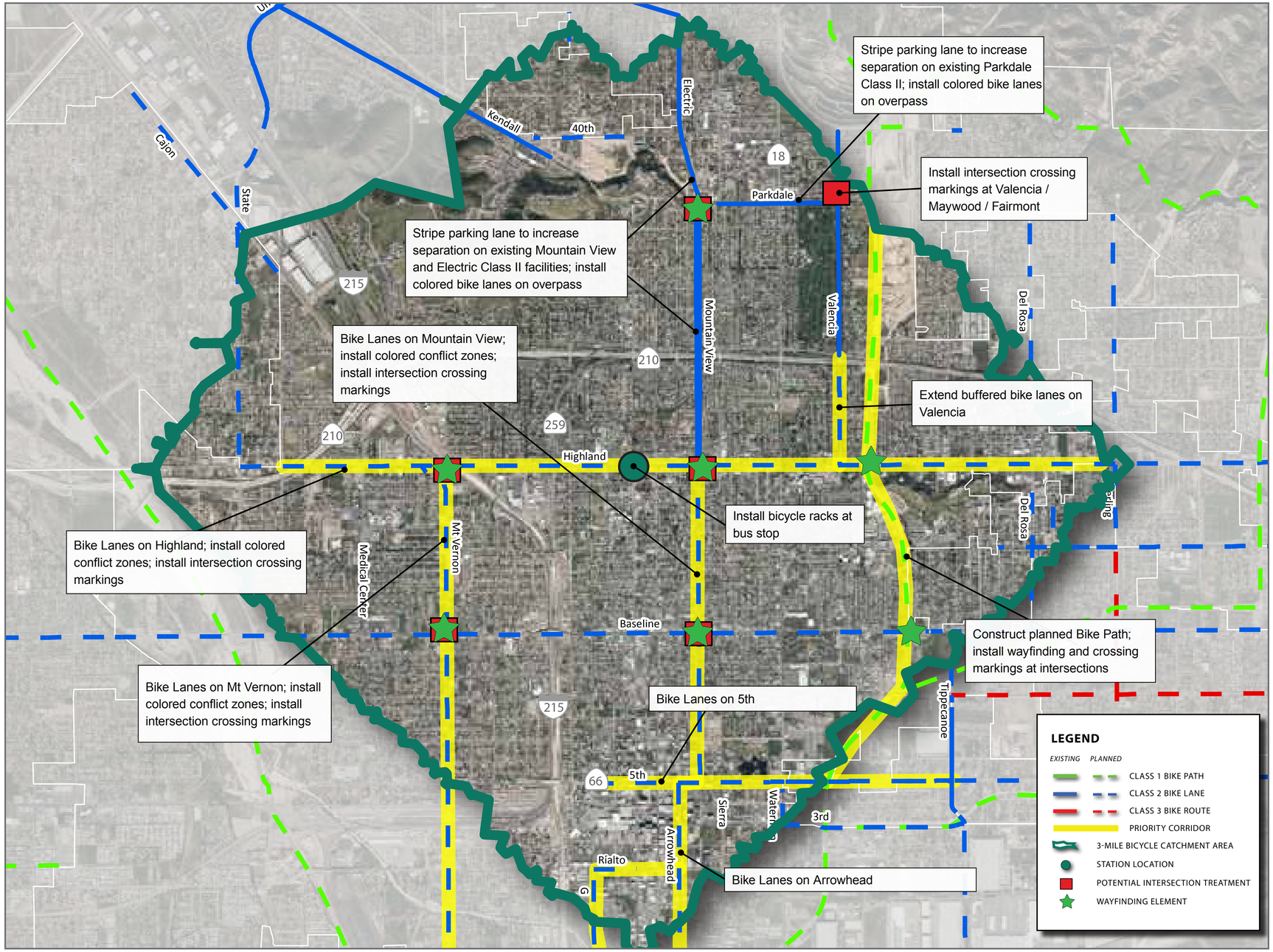
Provide Public Art/Wayfinding

The Gateway "Feathers" at the Gateway Transit Center in Portland, Oregon are visible from the I-205 freeway and create a landmark for the transit station.



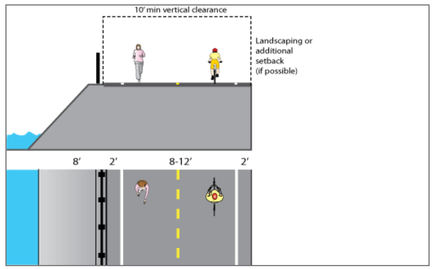
Highland Avenue sbX Station Area Proposed Bicycle Network Improvements

Comments



Construct Mid-City Connector

SANBAG has identified the Mid-City Connector as a future Class I Bike Path in the study area. When complete, it will connect northern San Bernardino to the Santa Ana River Trail.

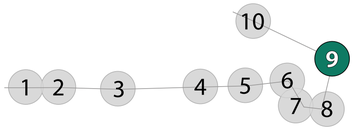


Typical dimensions of a multi-use path adjacent to a floodway channel.

Take Advantage of the Width of Highland Avenue

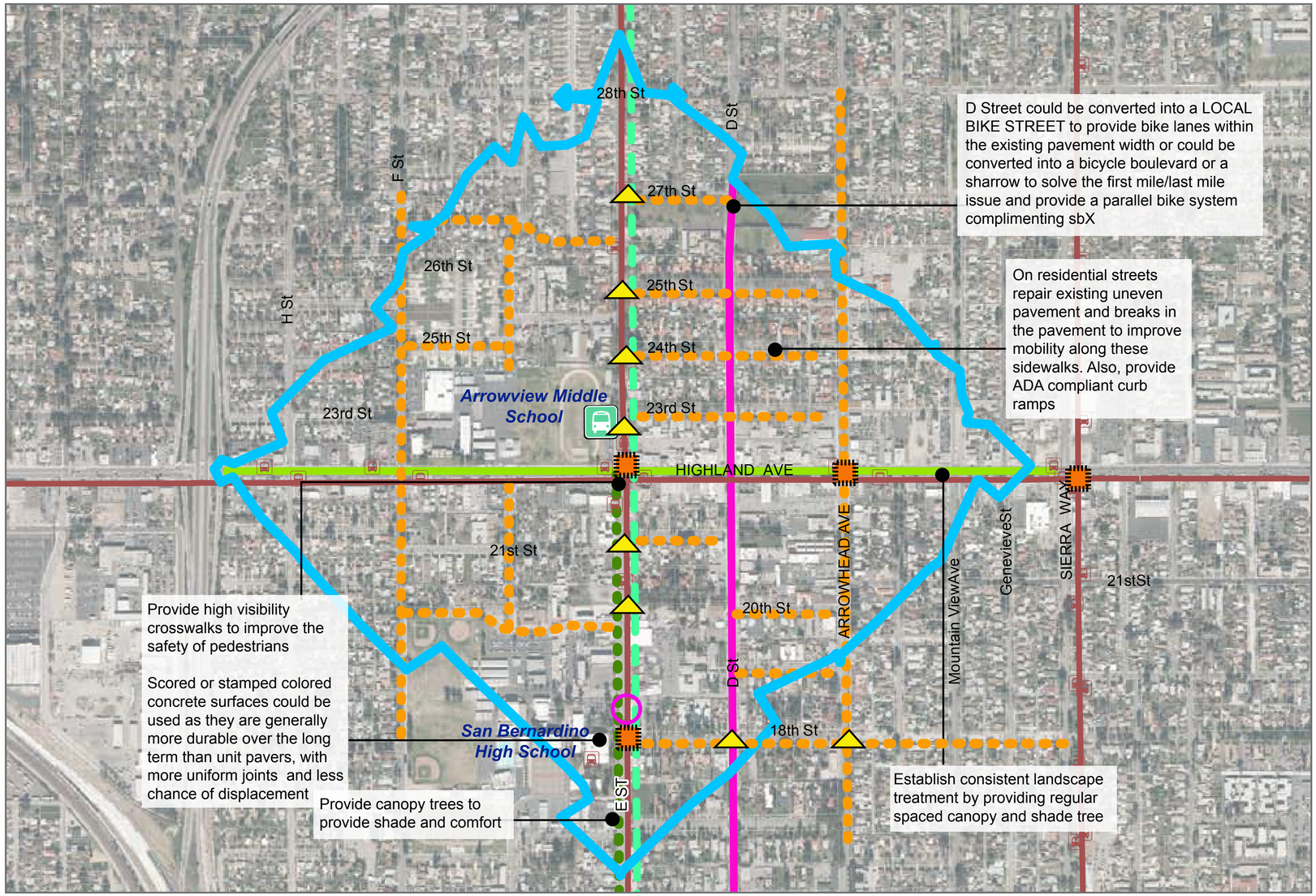
Highland Avenue has ample space to accommodate the Class II Bike Lanes planned for the corridor.

Busy roadways can benefit from colored pavement markings identifying the designated bike lanes.



Highland Avenue sbX Station Proposed Pedestrian Improvements

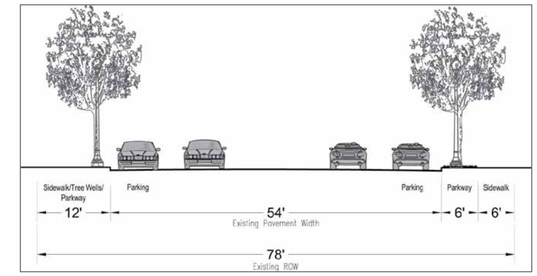
Comments



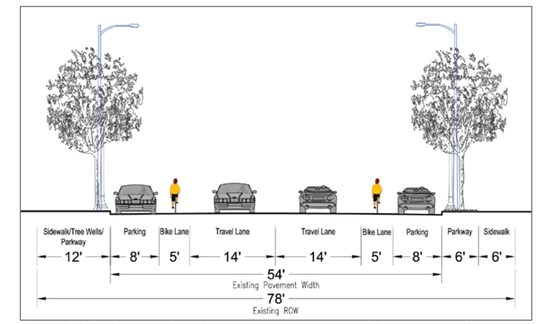
LEGEND

- Proposed sbX Station
- 0.5 Mile Walk to Transit Station
- Existing Local Bus Route
- Existing Local Bus Stop
- Provide sidewalks with Parkway/ Street trees on both sides
- Proposed Accessibility Compliant Curb Ramps
- Proposed Shade Trees
- Proposed Pedestrian-Scale LED or Solar Lights
- Provide Wayfinding Signage/Public Art
- Provide Decorative Crosswalks
- Proposed sbX Route

Convert D Street Into a Bike Street/Boulevard



Existing Cross Section

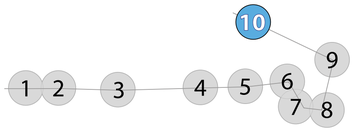


Provide bike lanes within the existing pavement width or convert the street into a bicycle boulevard or a sharrow.

Provide Accessible Environments

Generally sidewalks and curb ramps within Highland station area do not meet accessibility requirements.

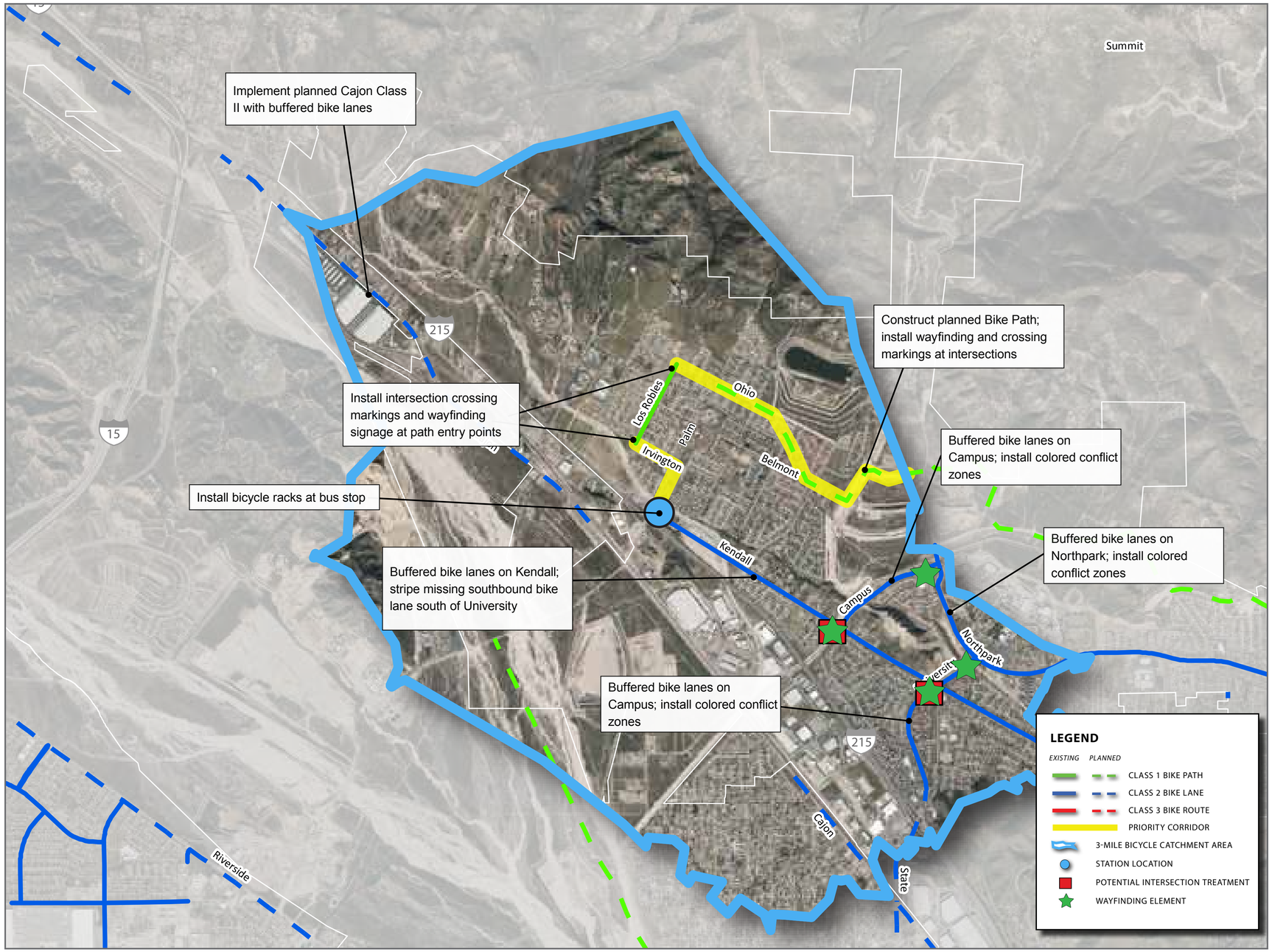
Accessible curb ramps allow all users to move confidently through their environment.



CITY OF San Bernardino

Comments

Palm Avenue sbX Station Area Proposed Bicycle Network Improvements

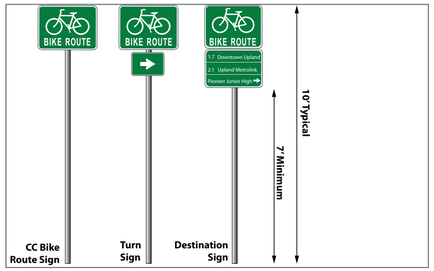


Take Advantage of Flood Channel Maintenance Roads

Many flood channel roads are closed and unavailable for non-motorized use.

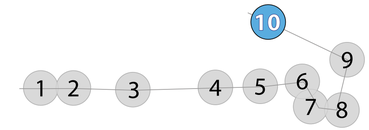
Explore and Enhance Neighborhood Facilities

Slower, low-traffic neighborhood streets provide an excellent opportunity for bicycle boulevards.



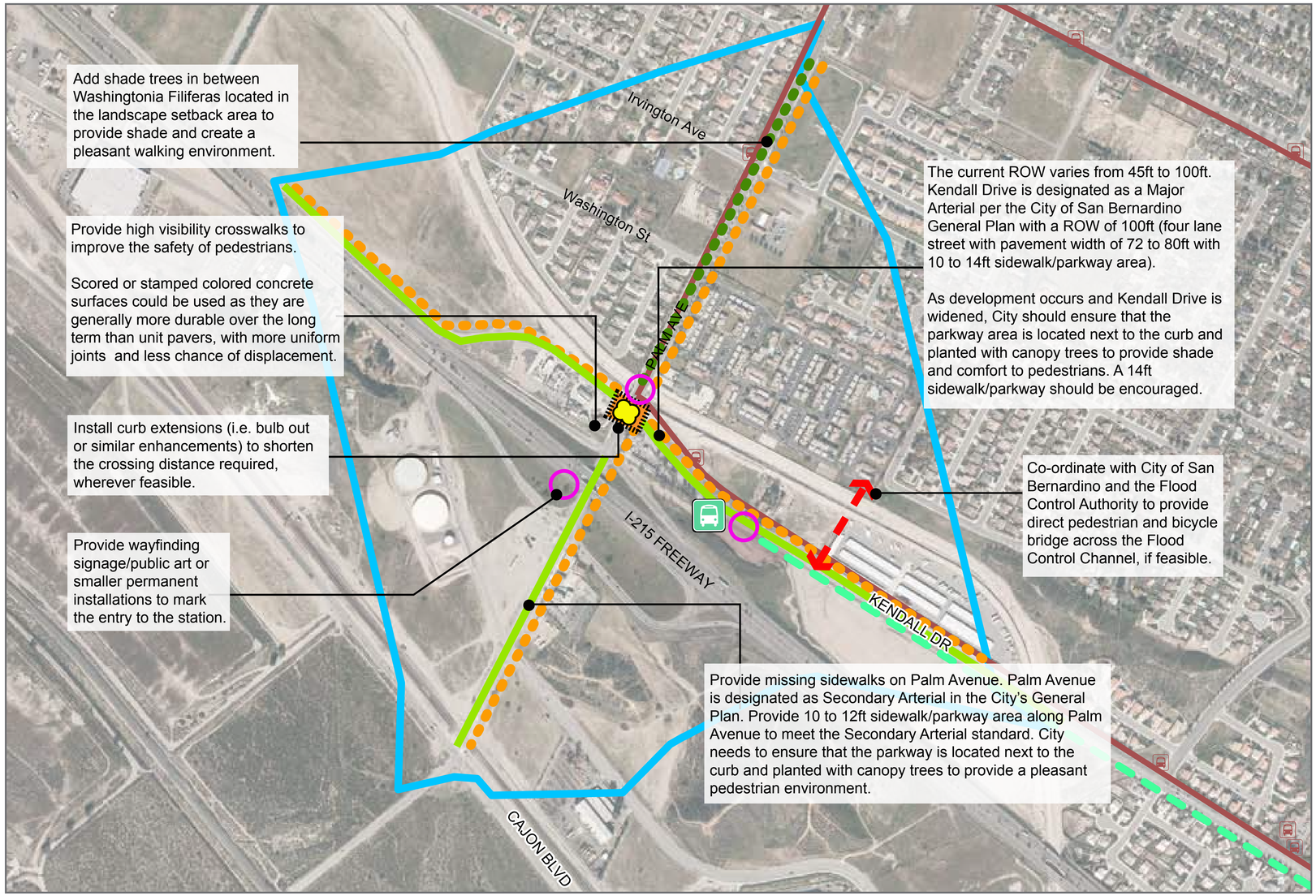
Wayfinding components can encourage more confidence among cyclists and improve access to local destinations.

Governments SANBAG Working Together
SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS
alta PLANNING + DESIGN
GRUENASSOCIATES



Palm Avenue sbX Station Proposed Pedestrian Improvements

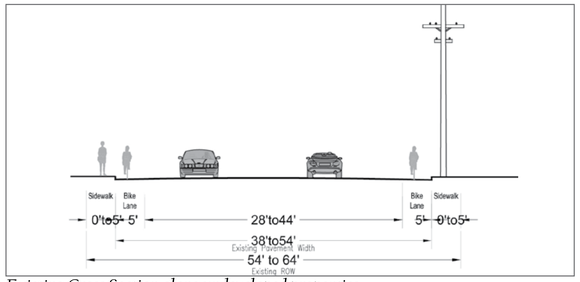
Comments



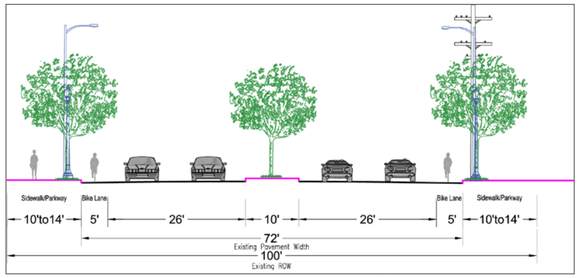
LEGEND

- Proposed sbX Station and Park & Ride
- 0.5 Mile Walk to Transit Station
- Existing Local Bus Route
- Existing Local Bus Stop
- Provide sidewalks with Parkway/ Street trees on both sides
- Proposed Landscaped Bulbouts
- Proposed Shade Trees
- Proposed Pedestrian-Scale LED or Solar Lights
- Proposed Pedestrian/Bicycle Bridge
- Provide Wayfinding Signage/Public Art
- Provide Decorative Crosswalks
- Proposed sbX Route

Improve Kendall Drive Per General Plan Standards

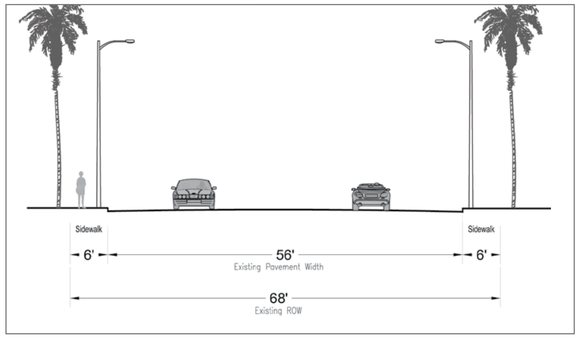


Existing Cross Section along undeveloped properties

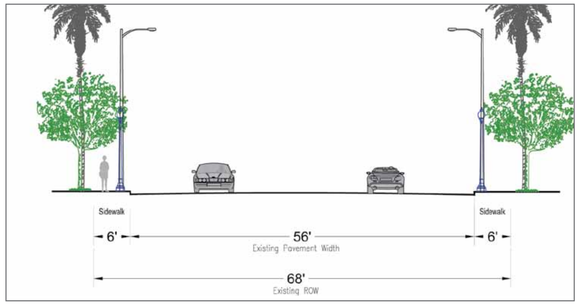


General Plan Cross Section; add Landscaped Median, if feasible

Add Shade Trees along Palm Avenue



Existing cross section



Add shade trees and pedestrian-scaled lights to improve the pedestrian environment