REDLANDS

Sustainable Mobility Plan

SCAG
INNOVATING FOR A BETTER TOMORROW

alta

January 2021

Acknowledgments

The City of Redlands would like to thank and recognize the efforts of those citizens who participated in the development of the Sustainable Mobility Plan

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SPECIAL THANKS

A special thanks to the community organizations, businesses, and community members who contributed to this plan.

CONSULTANTS TO THE CITY

Alta Planning + Design

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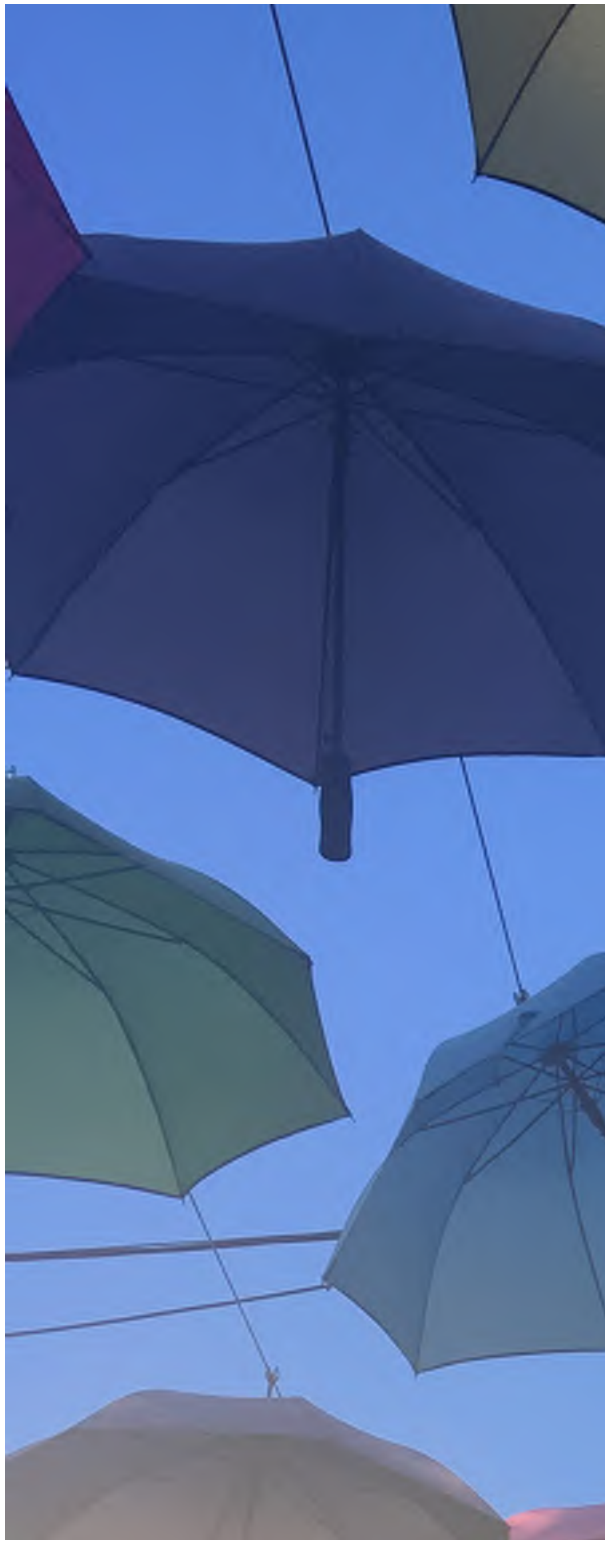
Introduction



What is a Sustainable Mobility Plan?

THIS PLAN'S VISION

Improve Public Health

Connect people to key destinations with or without the use of a vehicle

Plan for a safe and well connected network of mobility choices

Reduce environmental impacts from vehicle emissions

The Sustainable Mobility Plan promotes citywide walking, biking, and transit connections for all residents, including communities that currently have limited access and choices. The SMP outlines a strategy that includes balancing street design for use by people, cars, bicyclists, children, seniors, and bus/rail users.

The SMP coordinates with other City plans such as the Bicycle Master Plan, the Orange Blossom Trail Plan, related work completed on the draft Transit Villages Specific Plan, and will help implement the environmental goals in the Climate Action Plan.

The SMP is funded by the Sustainable Planning Grant provided by the Southern California Association of Governments (SCAG).

This Plan will expand the range of transportation options for residents, improve equity for disadvantaged communities, and ensure interconnectivity between key destinations and public transit routes.

The Goals of the Sustainable Mobility Plan

- Expand options for active transportation in Redlands.
- Build a safer multi-modal network.
- Provide greater access to currently undeserved communities.
- Encourage more sustainable transportation patterns.
- Improve public health.

Why develop a Sustainable Mobility Plan?

The Sustainable Mobility Plan integrates walking, bicycling, and other transportation modes into a single plan that includes infrastructure recommendations as well as identifying specific funding sources, prioritized projects, and implementation strategies.

The SMP builds off of previous planning efforts in the City. Recognizing that the City may not have the capacity to construct each recommendation contained in these recent planning initiatives, the SMP identifies priority projects and investments. This prioritization is informed by need, community support, and potential for implementation, among other factors.

This plan develops and prioritizes projects that promote walking, biking, and transit options for all residents and business in Redlands. It considers access to locations important to residents and visitors alike such as schools, workplaces, downtown, entertainment, and transit stops.

The Plan is organized as follows:

Vision & Goals

This chapter captures the vision and goals for the Redlands Sustainable Mobility Plan. The chapter also includes performance measures to assist the City in making the SMP vision a reality.

Existing Conditions

An inventory of present-day transportation conditions in Redlands.

Community Engagement

This chapter provides a summary of the community outreach activities organized by the City and the SMP team. Outreach activities focused on identifying barriers to walking and biking in the City and the types of active transportation infrastructure that residents and stakeholders would like to see built.

Network Recommendations

Identifies the recommended bicycle and pedestrian projects from previous planning efforts, community input, and the existing conditions assessment.

Project Prioritization

This chapter provides a summary of the prioritization framework which allows the City to identify priority projects that can be submitted for competitive funding.

Implementation Plan

Details a practical road-map for implementing the proposals within this plan including projects and cost estimates.

"Biking across the freeway, either over or under, never feels safe, either because of people hanging around, road speeds, lack of sidewalks, and traffic noises. It's particularly difficult to get to Citrus Plaza because of this."

"The city feels like it is designed more for cars. There are many places where cars go too fast, inadequate/missing sidewalks, lack of shade, etc. which are an impediment to walking/biking."

"Orange Blossom Trail has potential to be a good off-road route for safe biking and walking."

-Redland's stakeholder responses to the SMP Community Survey

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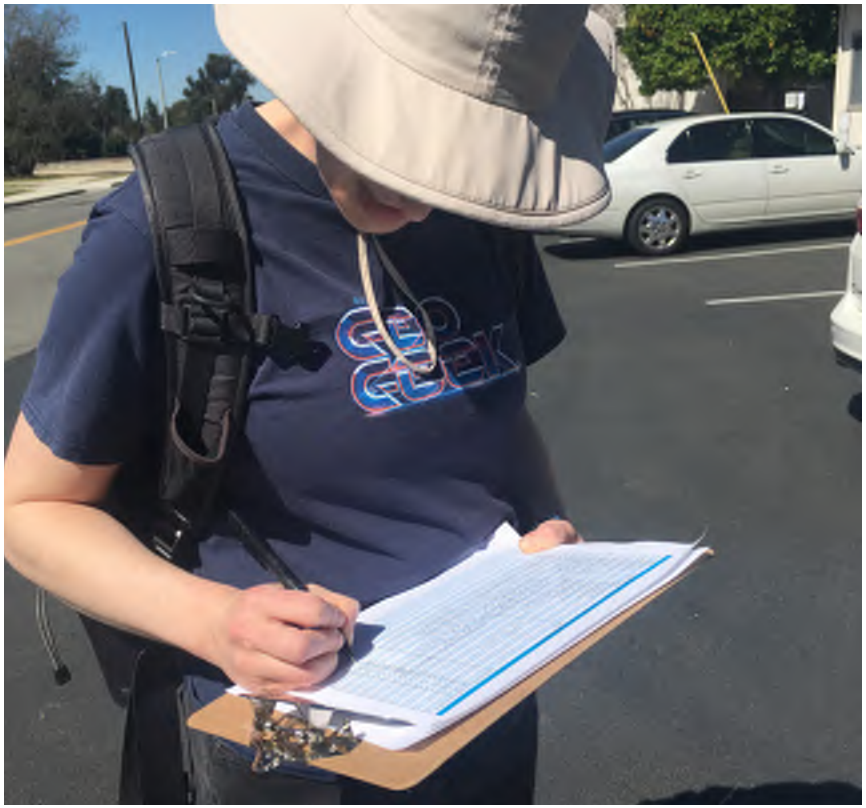
Vision & Goals

SMP Vision and Goals

Vision of this Plan

Residents of Redlands have the opportunity to get around safely and conveniently, whether for recreation or transportation, with or without the use of a car. Access to Redlands' important destinations, commercial areas, and amenities are expanded to residents of more neighborhoods and adjacent cities. By building a safe and convenient multi-modal transportation system, Redlands can improve the health of all residents and reduce environmental impacts caused by vehicle emissions.

This vision was developed through a collaborative process between the City, the Community Advisory Committee, and the project team. The project team assembled the initial draft from existing planning documents that dealt with various aspects of active and shared transportation in Redlands and the larger region. This sketch was then revised, edited, and elaborated upon by the CAC, composed of stakeholders who regularly walk, roll, bike, and take transit in Redlands.



Goal 1: Improve Public Health

This Plan will empower residents to live a more active lifestyle by providing a network of safe, efficient, and enjoyable facilities to support active transportation to important destinations and amenities throughout Redlands. The Plan will support the City's climate action goals by reducing public health impacts caused by greenhouse gas emissions.

OBJECTIVE		ACTIONS	
A	Promote an active lifestyle that includes biking and walking.	1	Increase access to recreational facilities, parks, and trails.
		2	Promote programs that encourage residents to walk and bike together on city streets.
		3	Make active transportation a viable and attractive option for residents traveling to work, school, or daily key destinations.
		4	Generate active, walkable streets with wide sidewalks, shade trees, and safe pedestrian crossings.
B	Enhance public health for all residents by reducing air pollution and asthma rates through increased active transportation use and fewer vehicle miles traveled.	1	Develop a bicycle and pedestrian network that provides the freedom for residents and visitors of Redlands to choose active modes of transportation other than driving by providing low-stress, well-connected facilities and integrating bicycling and walking with transit.
		2	Consistent with the City's Climate Action Plan, implement programs, policies and physical improvements to support targeted reductions in automobile vehicle miles traveled annually as residents, workers, and visitors meet daily needs by walking, biking, and using transit.
		3	Advocate for active transportation as a key strategy for addressing climate change, preserving clean air, reducing traffic congestion and noise, promoting good health, and conserving land and energy resources.

Goal 2: Accessibility

The SMP will serve as a catalyst for significantly increasing citywide bicycle and pedestrian transportation through improved access to community destinations. Pedestrian and bicycle facilities will be designed to provide an accessible, low-stress experience for users of all ages and ability levels.

OBJECTIVE	ACTIONS
A Increase access to jobs, grocery and shopping centers, parks, schools, recreation centers, transit, and other neighborhood destinations.	**1** Provide pedestrian and bicycle connections between transit and key destinations throughout Redlands. **2** Build low-stress bicycle facilities that provide access to local key destinations in every neighborhood in Redlands. **3** Develop a focused Safe Routes to School Improvement Plan for all K-12 schools in Redlands to reduce safety and mobility barriers to walking and biking to school. **4** Develop tools such as a web-based map or app to promote the use of the bicycle and pedestrian network and distribute them as part of a wayfinding strategy.
B Address barriers so that vulnerable populations can take part in the improvements.	**1** Prioritize the implementation of active transportation facilities in disadvantaged communities and low-income neighborhoods. **2** Continue to expand pedestrian access by filling in sidewalk gaps within the existing network. **3** Provide low-stress, affordable connections to the downtown area.

Goal 3: Expand the Active Transportation Network

This Plan will support expanding the overall active transportation network to all neighborhoods in Redlands. The SMP will promote citywide walking, biking, and transit connections for all residents by balancing street design for people of all ages and abilities.

OBJECTIVE		ACTIONS	
A	Provide safe, convenient, accessible, and low-stress bicycle and pedestrian facilities.	1	Increase the overall mileage of the low-stress bicycle network, especially in low-income and disadvantaged communities.
		2	Provide safe pedestrian facilities with wider sidewalks and safe pedestrian crossings.
B	Establish and comprehensive network of low-stress bicycle facilities that increases access to regional destinations and regional public transportation routes.	1	Build citywide and regional connections for the bicycle and pedestrian network.
		2	Develop and implement projects that connect neighborhoods to schools, work places, transit facilities, and other key destinations.
C	Expand the bicycle and pedestrian network by identifying specific network gaps.	1	Increase first-last mile connections to encourage more bicycle and pedestrian travel.
		2	Connect existing sidewalks with missing sidewalks when right-of-way is available.
		3	Identify intersections for improvement to reduce bicycle and pedestrian conflicts with automobiles.
D	Plan for safe routes to schools that allow for increased mode choice and safety for students traveling to and from school.	1	Prioritize infrastructure improvements near schools in Redlands.
		2	Promote bicycling as a mode of transportation to and from school.
		3	Address comfort level of bicycling for children and less confident riders in neighborhoods so that sidewalk riding is less prevalent.
		4	Develop a focused Safe Routes to School Improvement Plan for all K-12 schools to reduce safety and mobility barriers to walking and biking to school.

Goal 4: Build a Safer Multi-Modal Network

This Plan will improve safety for active transportation users through the design and maintenance of sidewalks, streets, intersections, and other roadway improvements to enhance and improve the overall safety of people walking and bicycling.

OBJECTIVE		ACTIONS	
A	Reduce conflicts between transportation modes by utilizing a layered approach to complete streets.	1	Install more street lights and prioritize new lighting installations at locations with higher pedestrian and bicycle activity or where known safety concerns exist.
		2	Use innovative designs to create safety enhancements using guidance from organizations such as National Association of Transportation Officials (NACTO) and the Institute of Transportation Engineers (ITE), as well as applicable state and federal design guidelines.
		3	Increase safety education programs that encourage safe behaviors for all roadway users.
B	Facilitate convenient multi-modal transportation through first- and last-mile mobility options, smooth transitions between modes, and provision of necessary amenities.	1	Install additional bicycle and pedestrian crossings across major arterial and collector streets that will connect residents to key destinations.
		2	Design bikeways and pedestrian facilities that safely facilitate first and last mile connections to transit as well as amenities at transit locations such as bike parking.
		3	Explore opportunities to provide secure long-term bike parking at transit stops including electric bike charging stations.

CONTINUED

Goal 4: Build a Safer Multi-Modal Network (continued)

OBJECTIVE		ACTIONS	
C	Identify and address hazardous areas where conflicts have occurred or are likely to occur.	1	Support design strategies that encourage traffic speeds of 20 mph on residential and local streets and 15-20 mph along neighborhood corridor within school zones.
		2	Develop a focused Safe Routes to School Plan to reduce collisions occurring near schools.
		3	Install priority crossings where collisions have occurred and where other safety concerns exist.
		4	Continue the implementation of a transportation system that prioritizes the safety of active modes to reduce and ultimately eliminate fatal and severe injury collisions.
D	Improve streetscape and public areas to increase safety for pedestrians, bicyclists, and transit users.	1	Work with SCAG and Omnitrans to provide more pedestrian amenities such as benches and covered waiting areas at transit stops.
		2	Support streetscape enhancements, public art, and other placemaking strategies that encourage active transportation.
		3	Plant new street trees to provide shade, physical separation from auto traffic, and a more inviting pedestrian realm.
		4	Install or upgrade streetscape and public amenities to improve access for pedestrian with mobility challenges.
		5	Incorporate landscaping as part of the infrastructure projects where feasible.

Goal 5: Encourage more Sustainable Transportation Patterns

Reduce vehicle miles traveled by developing an active transportation network that is a viable alternative to vehicle travel.

OBJECTIVE	ACTIONS
A Improve air quality by encouraging and enabling residents to travel without the use of a private vehicle.	**1** Encourage residents to choose modes of transportation other than driving by providing a low-stress network, robust pedestrian network, and first/last mile access to transit. **2** Replace vehicle trips with more sustainable modes such as walking, bicycling and taking transit. **3** Consistent with the City's Climate Action Plan, implement programs, policies and physical improvements to support targeted reductions in automobile vehicle miles traveled annually as residents, workers, and visitors meet daily needs by walking, biking, and using transit. **4** Require future development or redevelopment plans be informed by the SMP and the Climate Action Plan.

Goal 6: Collaboration

The SMP is for everyone and includes actions to make these modes of transportation more inclusive and accessible. This Plan will foster an increased role for the community in the planning process and improve community trust that the City will fulfill its promises.

OBJECTIVE		ACTIONS	
A	Create a greater opportunity for social engagement and cohesion through outdoor spaces and public activity.	**1**	Work with community-based organizations to host more outreach events and interact with more people as part of the future planning processes.
		2	Continue to support and participate in Bike to Work and other bike promotion events.
		3	Integrate bicycling encouragement programs into existing municipal programs and events where possible.
		4	Support open streets and pilot active transportation projects.

How Do We Measure Progress?

The following matrix summarizes the ways that the City will measure progress towards implementing the Sustainable Mobility Plan.

	PERFORMANCE MEASURE	BASELINE	TARGET	TRACKING MECHANISM
1	Maintenance of current Average Annual Daily Traffic (AADT) along major corridors in Redlands by 2030 despite projected regional influx of 1.2 million people by 2030.	Year One, establish baseline AADT along major corridors selected by the City.	Maintenance of AADT from Year One baseline along major corridors (by 2030).	Collect annual data on AADT along major corridors in Redlands, and track this data year over year.
2	Increase the percentage of Redlands residents who bike, walk, and/or take transit to work by 7 percentage points by 2030.	Current Mode Shares: ◆ Bike: 0.7% ◆ Walk: 3.2% ◆ Transit: 0.9% ◆ TOTAL: 4.8% *(Source: ACS 5-Year Estimate 2014-2018, Table B08006)*	Total Bike/Walk/Transit: 11.8% (by 2030)	Summarize biennially (every other year) based on data from the U.S. Census Bureau, American Community Survey (latest 5-year average)
3	Decrease the percentage of Redlands residents who drive alone to work by 5 percentage points by 2030. Reducing carbon dioxide and associated co-pollutants such as nitrous oxide contributing towards statewide GHG reduction goals identified in SB32 and local public health goals.	Drive Alone: 82.5% *(Source: ACS 5-Year Estimate 2014-2018, Table B08006)*	Drive Alone: 77.5% (by 2030)	Summarize biennially (every other year) based on data from the U.S. Census Bureau, American Community Survey (latest 5-year average).

How Do We Measure Progress? (continued)

	PERFORMANCE MEASURE	BASELINE	TARGET	TRACKING MECHANISM
4	Complete 50% of the high-priority pedestrian projects and 50% of the high-priority bicycle projects by 2030.	◆ 0 projects completed (of 26 high-priority pedestrian projects) ◆ 0 miles completed (of 7.21 miles of pedestrian routes) ◆ 0 projects completed (of 12 high-priority bicycle projects) ◆ 0 miles completed (of 40.71 miles of high-priority bicycle routes)	◆ 13 high-priority pedestrian projects completed ◆ 3.6 miles of high-priority pedestrian routes completed ◆ 6 projects high-priority bicycle projects completed ◆ 20.36 miles of high-priority bicycle routes completed	This measure is based on the completion rate of projects from the scored project list rated as "High" priority. For routes (such as bike lanes or sidewalk completion), this should be calculated by miles completed. For point projects, this should be calculated by number of projects .
5	Projects with high equity scores (of 15 and above) are completed at the same time or higher rate as projects with lower equity scores.	◆ 0 projects completed (of 18 high-scoring pedestrian point projects) ◆ 0 projects completed (of 12 high-scoring pedestrian route projects) ◆ 0 projects completed (of 4 high-scoring bicycle point projects) ◆ 0 projects completed (15 high-scoring bicycle route projects)	Rates of overall projects completion for each category of projects will be compared to rates for high-scoring projects.	Rates of completion among projects with an equity score of 15-20 (out of 20) should be compared with rates of completion for projects with equity scores under 15.

How Do We Measure Progress? (continued)

	PERFORMANCE MEASURE	BASELINE	TARGET	TRACKING MECHANISM
6	Reduce overall pedestrian and bicycle collision rates by 50% and collisions in which a pedestrian or bicyclists is killed or seriously injured (KSI) by 75% by 2035.	Four-Year Total (2015-2018) ◆ 70 bicycle-involved collisions (2 KSI) ◆ 88 pedestrian-involved collisions (10 KSI)	Four-Year Targets (2030-2033) ◆ 35 or fewer bicycle-involved collisions (1 or fewer KSI) ◆ 44 or fewer pedestrian-involved collisions (5 or fewer KSI)	Analyze four-year data from the Statewide Integrated Traffic Records System (SWITRS) annually. Begin reporting collisions yearly in a Traffic Safety Report.
7	Reduce City obesity levels, heart disease, and diabetes rates by 10% below regional rates by 2040.	SCAG Regional Rates: ◆ Obesity Levels: 27.5% ◆ Heart Disease: 7% ◆ Diabetes Rates: 11.8%	Redlands Targets: ◆ Obesity Levels: 24.8 % ◆ Heart Disease: 6.3% ◆ Diabetes Rates: 10.6%	Summarize biennially (every other year) based on data from the California Health Interview Survey, AskCHIS: Neighborhood Edition.
8	Increase the number of active transportation-related events, groups, or activities held in Redlands by 25% by 2030.	Year One, establish baseline active transportation groups, events, and activities.	25% increase in groups, events, activities from Year One baseline. (by 2030)	Calculate based on active transportation-related events (ex. competitions, community bike rides, walk to school week, SRTS trainings, etc.)
9	Complete a Safe Routes to School plan for all public schools serving the City Redlands by 2030 .	3 Schools	Safe Routes to School Plans for all public schools by 2030.	Completed Safe Routes to School Plans.
10	Complete 25% of the ADA improvements in the City's ADA Transition Plan by 2030.	No improvements list as of 2020.	25% of listed improvements completed.	The City of Redlands would first need to develop an ADA Transition Plan, including a list of improvements necessary for ADA compliance across the city.

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Existing Conditions

Existing Conditions in Redlands

In order to understand and plan for improvements to citywide walking, biking, and transit, this plan must take into account the existing conditions in Redlands. This includes what facilities already exist for pedestrians, bicyclists, and transit users but also many other factors, such as:

- Important destinations in and around Redlands
- Land Use
- Roadway Conditions
- Environmental conditions
- Demographics
- Travel Patterns
- Collision locations and High Injury streets
- Community perspectives on active transportation
- Existing planned improvements

The purpose of the Exisitng Conditions analysis was to evaluate these factors as they relate to sustainable mobility. A comprehensive understanding of conditions as they exist today is necessary to develop a plan for the future that is consistent with community goals and that will ultimately improve the lives of residents. The findings of this analytical effort directly inform project planning recommendations in this plan.

Summary of Findings

Below is a list of key takeaways from the different analyses conducted throughout this chapter:

- According to 2018 data from the American Community Survey (ACS), commuters in Redlands were around 1.6 times more likely to walk or ride a bike than those in San Bernardino County as a whole. This suggests that the planned facility and network improvements mentioned in previous planning documents are likely to find many potential users. Where specific barriers or challenges were identified through previous planning processes or public outreach, the project team was able to gain significant insight into how Redlands can encourage more residents to make use of an expanded network.
- According to analysis of ACS data, the northwest area of Redlands experiences greater burdens due to pollution and other disadvantages than other neighborhoods in the city. These areas also have lower Healthy Places Index (HPI) scores, indicating less-healthy community conditions, especially in central areas adjacent to Interstate10. While this area is very close to Downtown and the planned Transit Villages (and, crucially, the future passenger rail stops), it will be necessary to provide residents with safe and convenient access to these locations. This would include, for example, previously-planned projects for north-south connections and bike-friendly and pedestrian-friendly freeway underpasses.
- Bike and pedestrian involved vehicular collisions occur primarily in the central region of the City. The collision analysis indicated that there have been more severe and fatal collisions involving a pedestrian than collisions involving a bicyclist. Through analysis of collisions

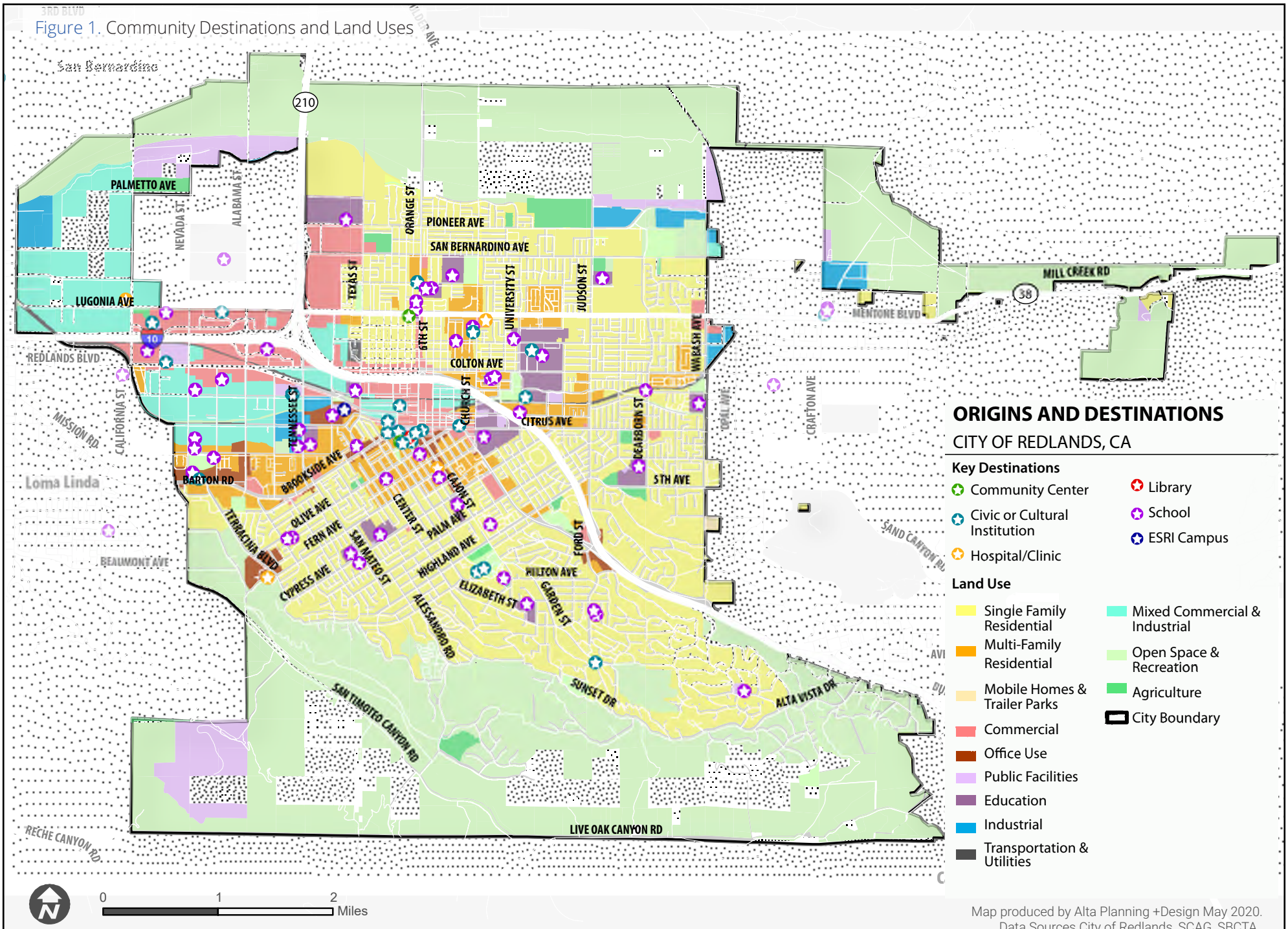
within Redlands, as well as the city's High Injury Network, this plan identifies crossing improvements and other projects that can reduce the inherent risk of collisions on some of the City's more dangerous roadways for bicyclists and pedestrians.

- According to analysis of ACS data, the northwest area of Redlands has a higher percentage of residents who do not have regular access to a vehicle. This region of Redlands also has a high CalEnviroScreen score and low HPI score, making it critical to examine the walking and biking facilities around schools. Campuses located in these areas include Victoria Elementary, Orangewood High School, and Citrus Valley High School.
- Many of the City's previous plans recommend improvements primarily within the Downtown region. This plan compiles all existing recommendations along with additional community-identified improvements in order to evaluate areas beyond the Downtown area and look for opportunities throughout all of Redlands.

Origins and Destinations

Figure 1 displays the current land use designations and key destinations within Redlands. The City is primarily comprised of single-family residential, open space and recreation, and multi-family residential uses. Downtown Redlands primarily consists of commercial use as well as many points of interest including City Hall, libraries, and other key civic and cultural institutions.

Figure 1. Community Destinations and Land Uses



Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

Demographics and Equity

CalEnviroScreen 3.0

The California Office of Environmental Health Hazard Assessment developed the CalEnviroScreen tool to help identify communities that are disproportionately burdened by multiple sources of pollution. Areas with a higher score experiences higher pollution burdens than areas with low scores. This is also a tool used in California's Active Transportation Program grant application scoring. Communities that score in the top quarter of the state are considered to be disadvantaged and receive a small advantage in the competitive funding process.

Figure 2 shows CalEnviroScreen scores for all census tracts within Redlands. The areas with the highest scores are those considered to be most affected by pollution sources. According to the scores, the northwest region of the city appears to be most disadvantaged.

Healthy Places Index

The Healthy Places Index (HPI) aggregates a collection of community characteristics that predict life expectancy and allow users to see how public health intersects with transportation, climate, and other key factors. Characteristics included in the HPI score consists of social equity, healthcare access, economic, educational, housing, transportation, and environmental factors such as air and water pollutants. Higher scores indicate healthier community conditions, while lower scores indicate less healthy conditions.

Figure 3 represents HPI scores for census tracts in Redlands. The areas with the lowest scores are located in the northwest region of the city, which is also considered to be disadvantaged based on its CalEnviroScreen score.

No Access to Vehicles

An analysis was conducted using existing demographic information from the US Census Bureau. All data was obtained from the 2018 American Community Survey (ACS) Five Year Estimates. **Figure 4** displays the percentage of households who do have regular access to a vehicle by census tract. Overall, out of the 41,711 households who took part in the census, there were 1,970 residents that stated that they do not have regular access to a vehicle. Residents without access to a vehicle rely on transit, walking, bicycling, or carpooling to get to their everyday destinations.

Figure 4 indicates that the central part of the City has a higher rate of households that do not have access to a vehicle. Many key destinations are located in this central area of the city, which may contribute to the lower rates of vehicle access.

Figure 2. CalEnviroScreen 3,0

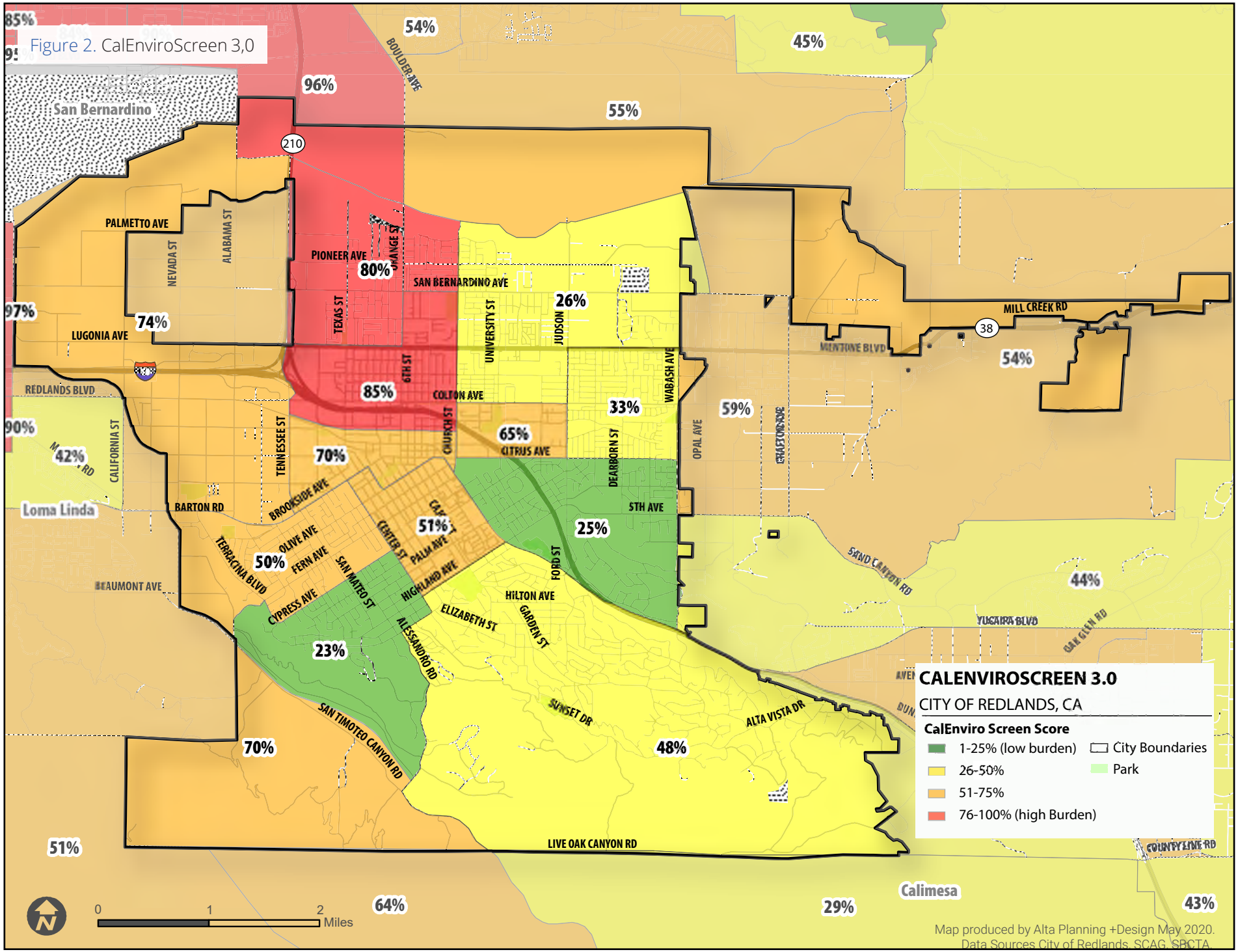


Figure 3. Healthy Places Index

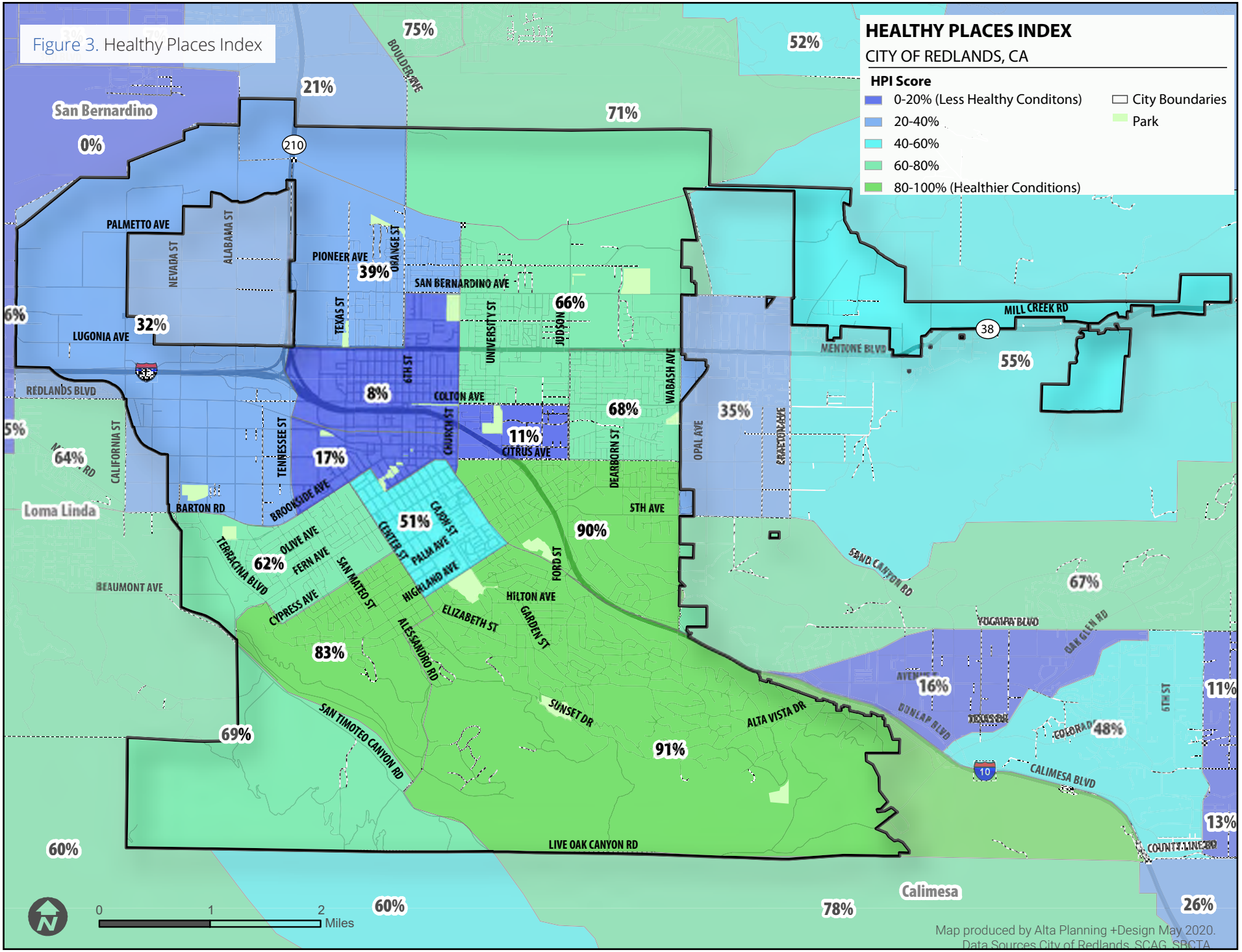
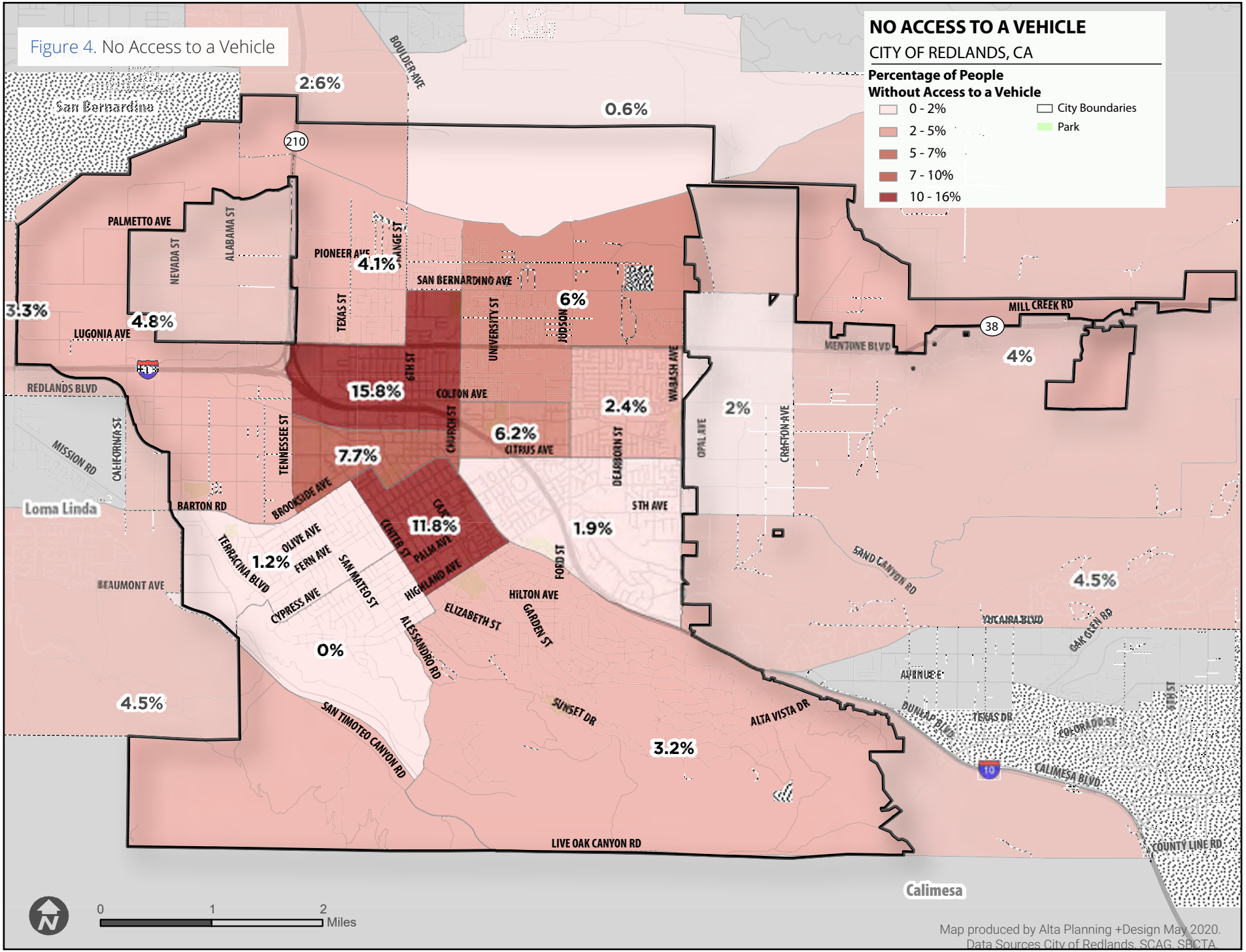


Figure 4. No Access to a Vehicle



Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA

Current Travel Patterns

Current biking and walking patterns were analyzed using data from the US Census Bureau and the 2018 American Community Survey (ACS) Five Year Estimates. Patterns were also analyzed using comments received from the community survey and public input map.

Walking and Biking to Work

Figure 5 shows (by census tract) the percentage of Redlands residents 16 or older who walk to work. Overall, out of the 55,215 workers in Redlands, an estimated 1,438 residents (2.6%) stated that they commute by walking. **Figure 6** shows (by census tract) the percentage of Redlands residents 16 or older who bike to work. Overall, out of 55,215 workers in Redlands, an estimated 231 residents (0.42%) stated that they commute by bike.

According to the Census, of the 881,534 workers in all of San Bernardino County, an estimated 2,335 residents (0.26%) stated that they bike to work and an estimated 14,425 residents (1.6%) stated that they walk to work.

It is important to note that bicycle ridership and walking rates may be higher than this data indicates, as ACS estimates do not account for recreational trips or trips where commuters use more than one mode of transportation when traveling to work. For example, this data would not account for people who walk or bike to transit in order to get to their job.

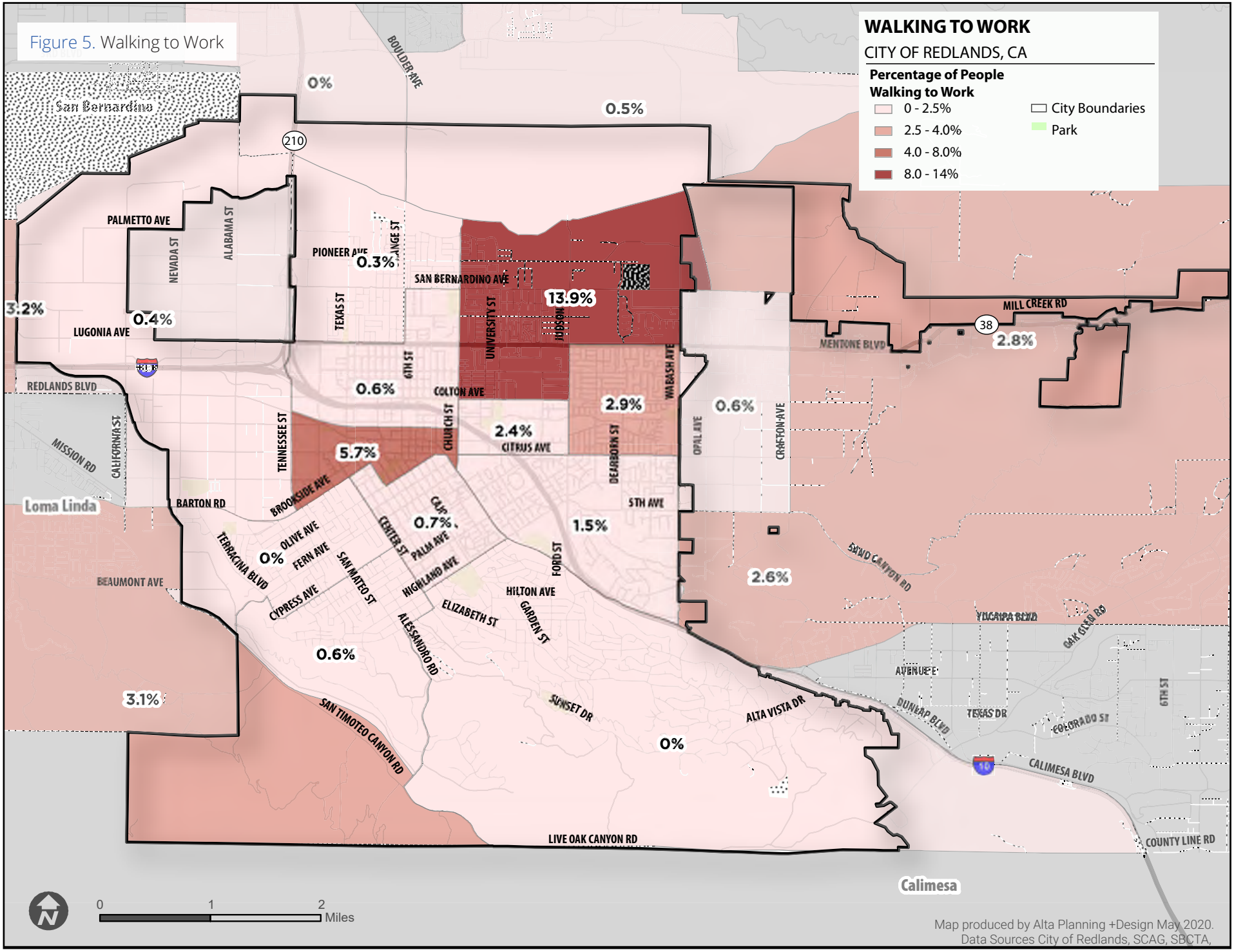
Walking and Biking to Work Findings

As shown in **Figure 5**, the census tract located in the northeastern part of the City has a higher rate of workers who walk as a means of transportation. The University of Redlands is located within this region of the City and could be an underlying contributor to these higher numbers. For example, students and University staff may work on campus and find it easier to commute by active modes.

Figure 6 indicates that the census tract located in the central part of the city has a higher rate of workers who bike as a means of transportation. The Downtown area could be a popular neighborhood for residents to bike to work, since bike parking is more available, and there is an accessible active transportation network. This region is also indicated as an area with a high rate of residents that do not have access to a vehicle.

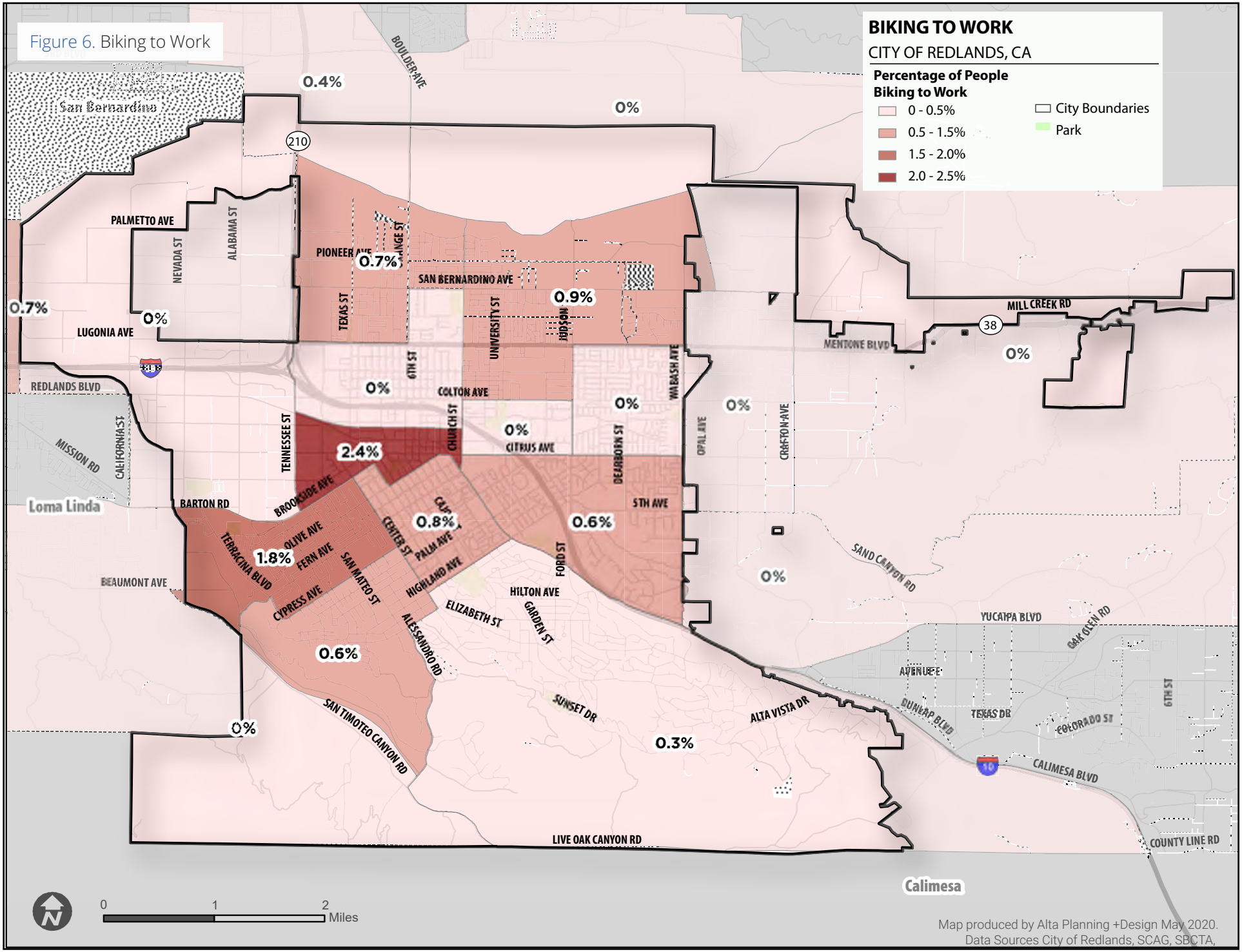
Overall, the census data demonstrates that the City's walking and biking to work rate is higher than the San Bernardino region as a whole. Redlands residents are 1.6 times more likely to walk or bike than the average County resident.

Figure 5. Walking to Work



Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

Figure 6. Biking to Work



Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

Who Bikes and Walks in Redlands Today?

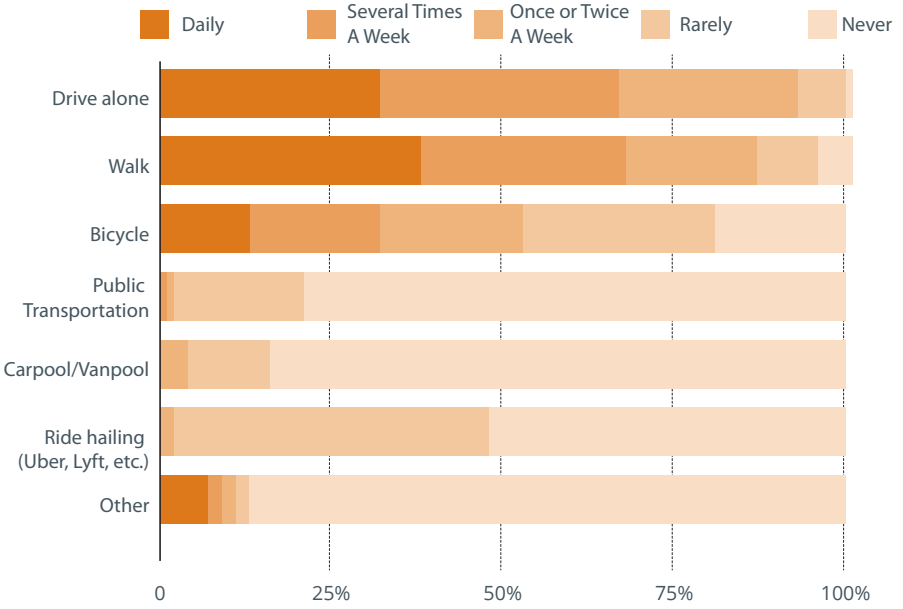
At the beginning of the SMP's development, the City released a project website that included an online survey and public input map. Here residents were able to share their experiences of walking and biking in Redlands. This project website, survey, and map were regularly included in public-facing communication about the project, inviting people to explore, comment, and share the tools with others.

The Citywide survey shows that out of 92 respondents,
13% of residents reported using a bicycle daily and
38% of residents reported walking daily.

What do residents say about walking?

- 88% of residents said they walked for health/exercise/relaxation.
- 39% of residents noted that they would walk more if there were more sidewalks or they were better connected.
- 39% of residents noted that they would walk more if street crossings were safer.
- 53% of residents noted that they walk because it is good for the environment.

Figure 7. In a typical week, how often do you use the following modes to move throughout Redlands?

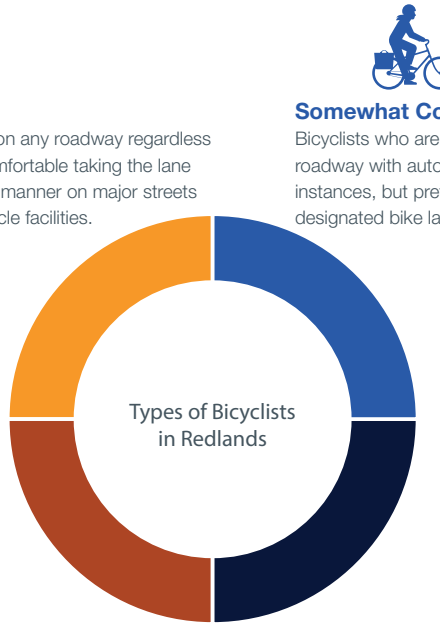


What do residents say about biking?

- 61% of residents noted that they bike for health/exercise/relaxation.
- 62% of residents reported that they would bike more if there were more bicycle lanes and trails.
- 37% of residents noted that they would bike more if there were more bike parking at work, school, or other destinations.
- 42% of residents noted that they bike because it is good for the environment

Types of Bicyclists in Redlands

The perception of risk with using stressful or unsafe facilities is often the most significant barrier to bicycling for most people. Even those interested in cycling will often choose to drive if the available facilities don't meet their comfort level. In order to develop a bicycling environment that will encourage more people to ride, it is important to first understand the different levels of cyclists. The general population can be classified into four types of bicyclists.



Confident

Willing to ride a bicycle on any roadway regardless of traffic conditions. Comfortable taking the lane and riding in a vehicular manner on major streets without designated bicycle facilities.

Somewhat Confident

Bicyclists who are comfortable sharing the roadway with automotive traffic in some instances, but prefer to ride in their own designated bike lane or off-street facility.

Interested, but Concerned

Infrequent bicyclists with some inclination towards bicycling more regularly if they felt safer on the roadways. Not very comfortable sharing the road with cars, or riding on major streets, even with a bike lane. Prefer separated pathways or low-traffic neighborhood streets.

No Way No How

Residents who simply are not interested in bicycling for reasons of topography, inability, or simply complete and utter lack of interest. Unlikely to adopt bicycling in any way.

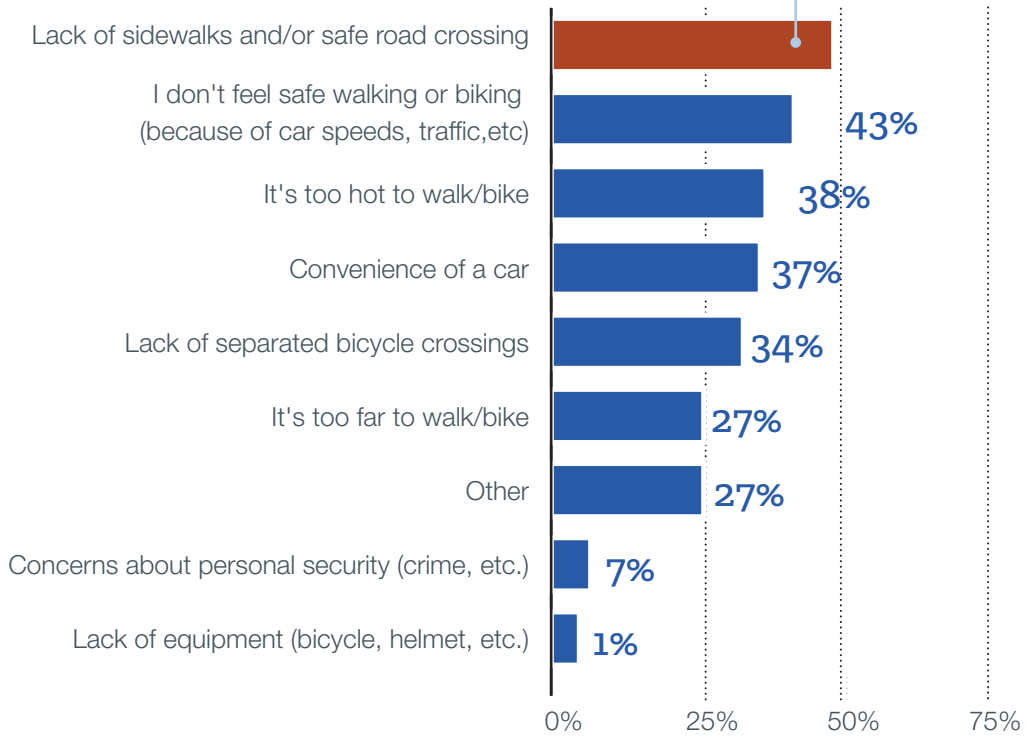
Why are People Not Biking, Walking, or Taking Public Transit More Today?

Residents who participated in the Citywide Survey were asked, ***"If you drive a car regularly for most of your trips, what barriers prevent you from walking, biking, or taking public transit more frequently?"*** Residents were asked to choose their top 3 barriers. The top barriers identified in the survey were lack of safe sidewalks and crossings and not feeling safe due to the presence of vehicular traffic. These concerns emphasize the need to prioritize safety related projects to encourage more walking and biking in Redlands. Over a third of respondents also felt that the heat, the relative convenience of driving, and a lack of separated bicycle crossings were deterrents to active transportation. Seven percent of respondents mentioned crime as a barrier, and a small number lacked the necessary equipment for active transportation.

50%

of respondents are concerned about

lack of sidewalks and/or safe road crossings.



What Other Barriers do Residents in Redlands Face When Bicycling, Walking, or Taking Transit?

An Interactive Online Mapping tool was provided to community members to give them the opportunity to highlight locations that they felt created significant barriers to walking or bicycling, such as intersections and roadway segments they felt unsafe riding along or crossings they preferred to avoid. There were a total of 324 comments that referenced community concerns and barriers to biking, with the following key themes:

- 55% of comments identified bicycle facilities that community members would like to see implemented or improved.
- 34% of the comments identified pedestrian infrastructure they would like to see implemented or improved.
- 9% of comments expressed concerns with high motor vehicle speeds.

These comments were located not only in central areas and Downtown Redlands but across the city and its neighborhoods. Many concerns or recommendations were echoed by more than one commenter, indicating areas where public interest was high.

Along with previously-proposed improvements from existing plans, the project team added relevant community recommendations from this map to the potential projects list, where they were evaluated and prioritized for implementation.

55%

of comments mentioned

bicycle infrastructure

concerns or needs

9%

of comments cited

safety

as a major concern.

34%

of comments mentioned

pedestrian infrastructure

concerns or needs

Bicycle and Pedestrian Counts

As part of the existing conditions assessment, the City recruited Community Based Organizations and Volunteers to conduct bicycle and pedestrian counts at strategic locations throughout Redlands in order to develop a more nuanced understanding of existing active transportation patterns. This counting effort was advertised through the CAC, as well as the City's email and social media networks.

The data that was captured during these counts helped identify common pedestrian and bicycle travel behavior, and will support future competitive funding applications.

Count Locations

The initial proposed count locations were selected based on a methodology adapted from SCAG's Pedestrian Counter siting guidance memo. According to SCAG's process, land use, demographics, and accessibility were taken into consideration when selecting locations.

In order to identify locations that would be likely to serve a large number of people, and especially those with limited transportation options, the project team utilized geospatial analysis to highlight areas of the City that were densely-populated, had lower-than-average Median Household Incomes, and were in close proximity to key destinations such as schools, transit, and employment centers.

This analysis was combined with input from the CAC and City staff, who shared their perspectives on where counts would be most useful. In addition to these comments, other qualitative factors were also important when selecting counts that would be instructive and useful to the planning and funding process.

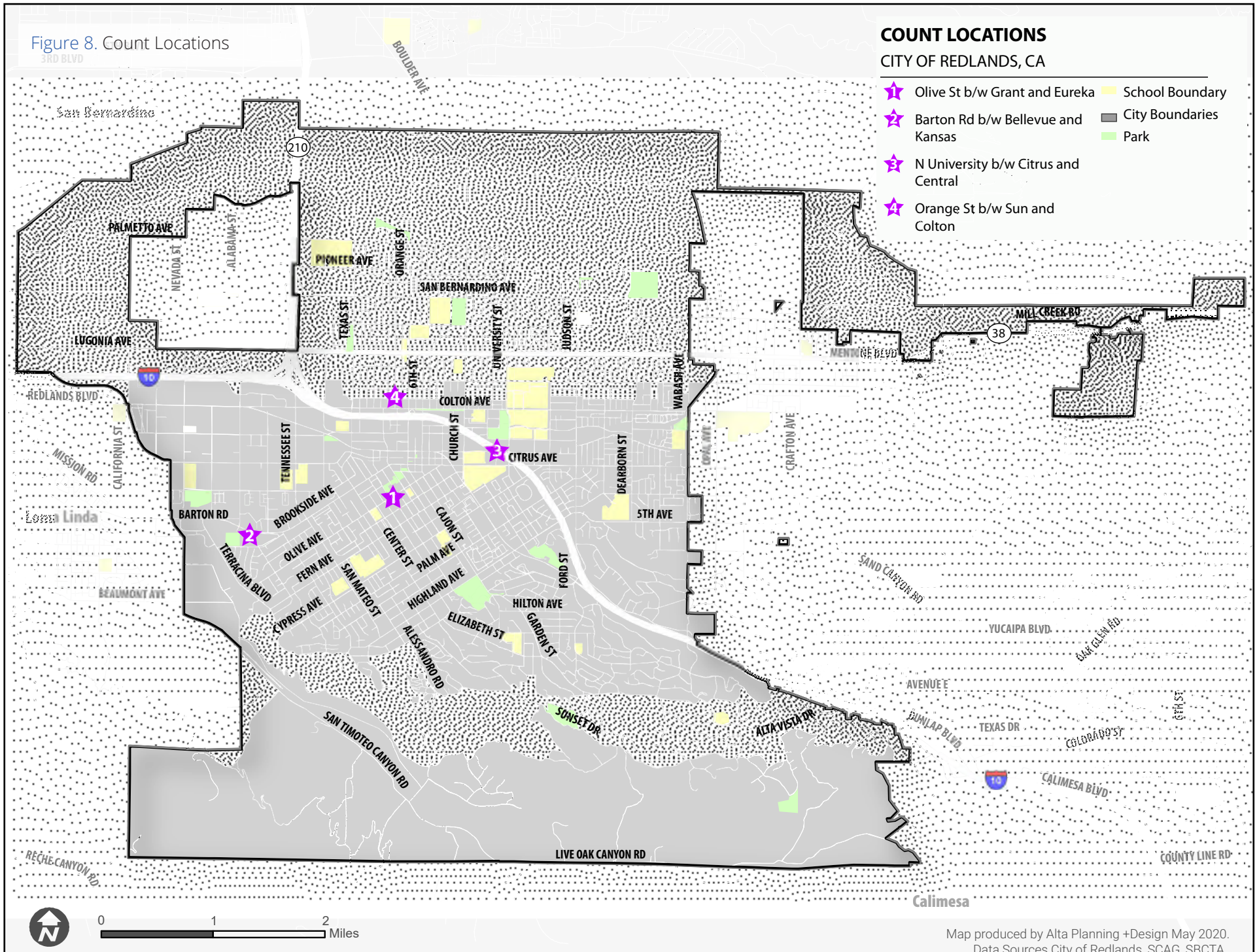
The project team also considered the following:

- Recommended count locations provided by the CAC;
- Representative locations in a variety of areas across the city;
- Key corridors that could potentially be used to gauge the impacts of future improvements (such as underpass improvements or installation of bike facilities);
- Gaps, pinch points, and locations that are operationally difficult for bicyclists and pedestrians (potential improvement areas as identified by the City, CAC, or public input);
- Locations where bicycle and/or pedestrian collisions have occured;
- Varying land uses, on varying roadway types, and in locations where future improvements are expected;
- COVID-related closures and their effects on typical traffic patterns. (For example, during the pandemic, there are few ESRI commuters, children accessing schools, or University students on campus.)

The project team developed a list of ten recommended count locations. With the available volunteers, counts were conducted at four locations (See Figure 8):

1. Olive St b/w Grant and Eureka
2. Barton Rd b/w Bellevue and Kansas
3. N University b/w Citrus and Central
4. Orange St b/w Sun and Colton

Figure 8. Count Locations



Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

Count Scheduling

Times of day and days of the week for these counts were determined according to CalTrans Active Transportation Program (ATP) grant guidance. While these counts will not necessarily be used as part of an ATP grant application, the intention was to set up count data collection according to these requirements, as this is one of the most important funding sources for active transportation improvements in the state of California.

CalTrans recommends that counts are collected on Tuesdays, Wednesdays, or Thursdays at both morning and evening commute hours. The day of the week for each location was chosen (among those options) based on volunteer availability. However, all counts were conducted between 7 and 9am and between 4 and 6pm to ensure compatibility with CalTrans methodology.

Per CalTrans requirements, counts are also conducted on one weekend day from 11am to 1pm. (or whatever the jurisdiction determines to be the peak time). After conversation with CAC members signed up to conduct weekend counts, it was determined that, given the hot weather in Redlands, peak time was closer to 8-10am. Therefore, counts were scheduled for the morning instead of midday.

Date selection for the counts took into account guidance from the National Bike/Ped Documentation Project, which recommends scheduling annual counts for the same week each fall and spring. Their counts are generally performed in mid-September, meaning that students are back in school.

Other Challenges and Considerations

Due to the impacts of the COVID-19 pandemic, pedestrian and bicycle activity in Redlands was not typical during the time of these counts. For example, elementary, middle, and high schools, as well as University of Redlands, were not holding in-person classes in September. Additionally, many workplaces were operating remotely and hours for other businesses were altered. This meant fewer people were on the road during commute hours and that many more people simply stayed at home during this time.

Adding to scheduling challenges were air quality issues caused by smoke from nearby wildfires. Counts were delayed two weeks to protect the health and safety of volunteers. By the end of the two weeks, smoke levels were considerably improved and within safe margins.

Due to these particular circumstances, this year's data may not track perfectly with subsequent years.

Pedestrian Count Results

For all four count locations, the weekend was when counters recorded the largest number of pedestrians (see **Figure 9**). Afternoons tended to have smaller numbers of people walking, potentially due to the higher temperatures at this time. The count location with by far the most pedestrian activity was Olive Avenue, where the weekday morning and weekend counts both recorded over 30 pedestrians an hour. Interestingly, weekday afternoon counts on Olive showed only six pedestrians per hour. Barton Road was also a popular pedestrian route, especially on the weekend, when about 27 pedestrians traveled this way per hour despite 93-degree weather.

In terms of direction of travel, on Olive Avenue, pedestrians were more likely at all times of day to be heading Southwest, away from Cajon Street (See **Figure 10**). On Barton Road, more pedestrians were traveling from West to East, toward Downtown. On Orange Street, numbers were roughly even during weekday afternoons, but weekend counts showed a majority walking north. On North University, recorded numbers of pedestrians were very low, making it hard to draw clear conclusions about direction.

Figure 9. Average Pedestrians per Hour

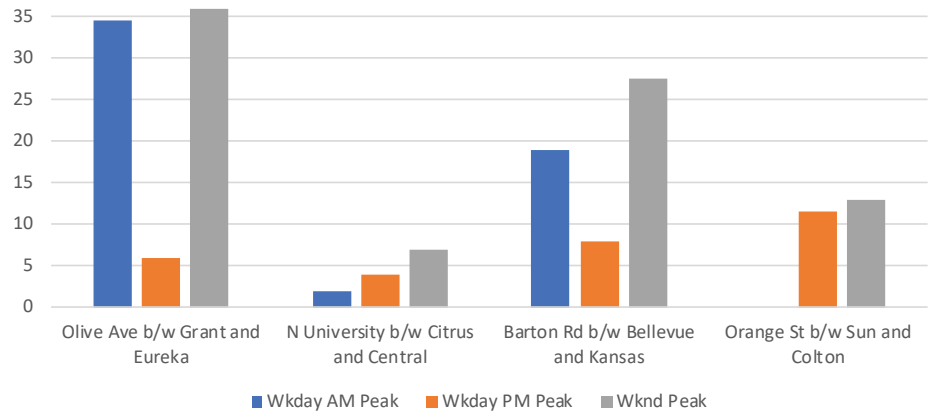
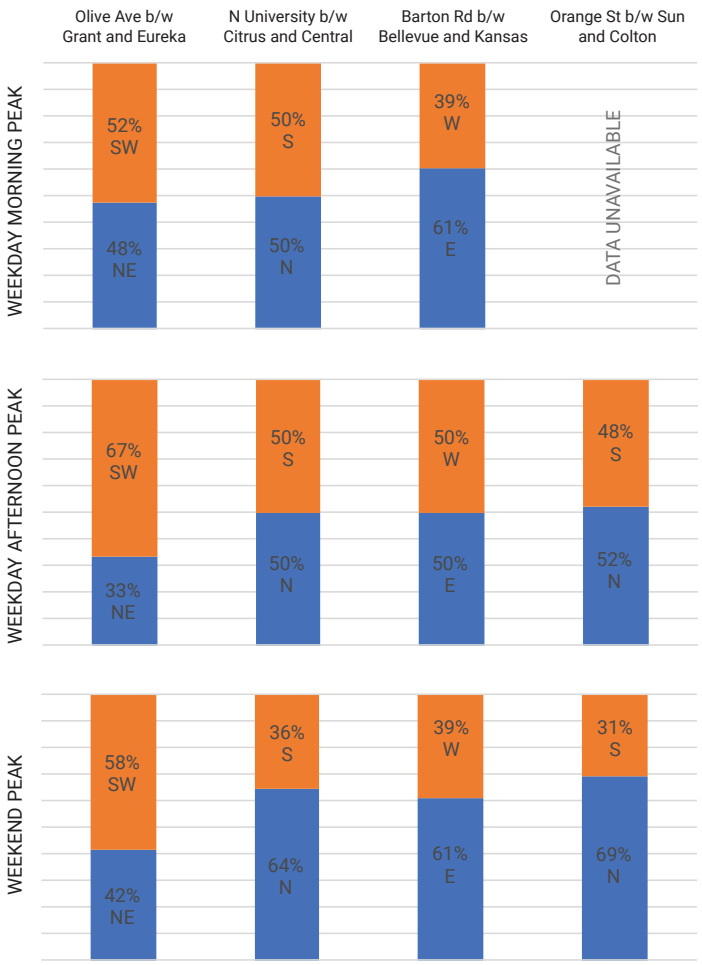


Figure 10. Pedestrian Travel by Direction and Time



Note: Where data is listed as unavailable, volunteer was unable to conduct count as planned.

Bicycle Count Results

As was true for pedestrians, the weekend was the most popular time for bicyclists at each of these locations (See **Figure 11**). Barton Road was especially popular as a bicycle route on the weekend, with 28 bicyclists per hour traveling along this street. Olive Avenue was also used by about 20 bicyclists an hour during the weekend peak. North University and Orange Street were not popular with bicyclists at any time, likely owing to their lack of designated facilities. That said, some bicyclists did use these streets, especially on the weekends.

In terms of direction of travel, on Olive Avenue, bicyclists showed a pattern of traveling southwest during the weekday morning peak and northeast on the weekend (See **Figure 12**). On Barton Road, the predominant travel direction for weekday mornings and weekends was westbound. On North University, the small number of weekend bicyclists were almost all traveling north, and the weekend bicyclists counted on Orange Street were mostly traveling south.

Figure 11. Average Bicyclists per Hour

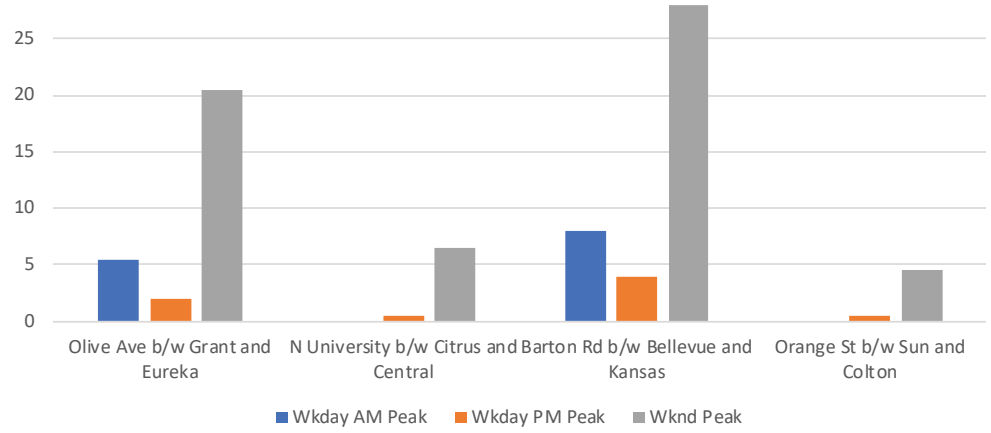
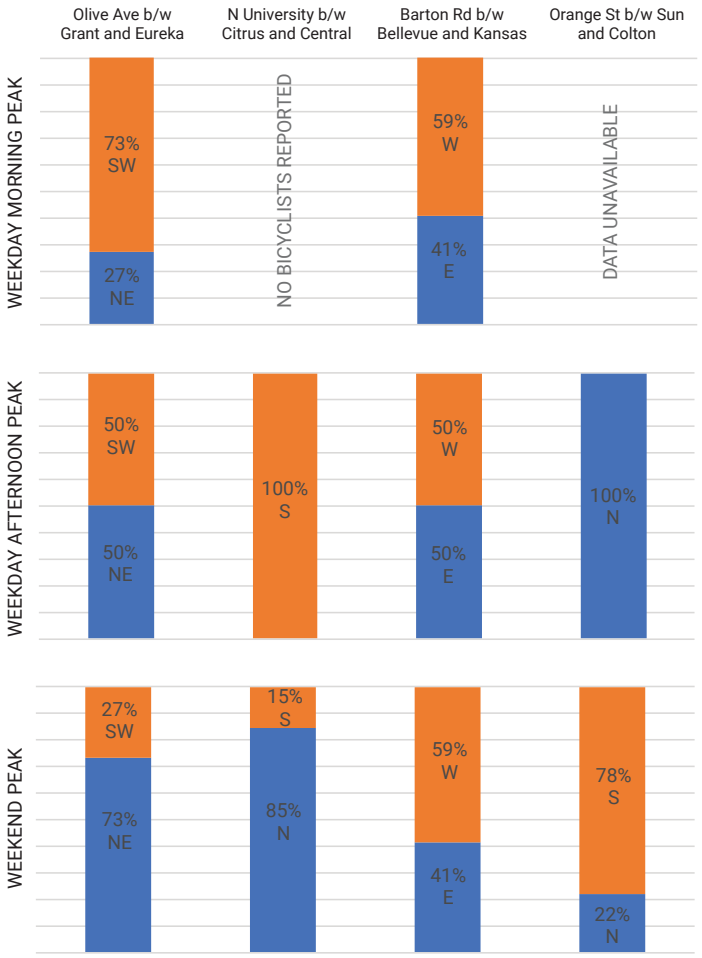


Figure 12. Bicycle Travel by Direction and Time



Note: Where data is listed as unavailable, volunteer was unable to conduct count as planned.

Bicycle and Pedestrian Audits

Traditionally, a walk audit of bicycle and pedestrian facilities involves gathering a group of community members to tour selected areas of the city in person. Participants are able to comment on these facilities as they used them, stopping at key locations to discuss and note issues and make observations. In response to public health provisions related to Covid-19, however, the Sustainable Mobility Plan (SMP) Bicycle and Pedestrian Audits were held in a Zoom presentation format. The audits were held between 6PM-7PM over two weeks in September and October 2020. Audit locations were chosen based on factors including consultation with City staff, existing conditions, and community feedback from the public input map. Participants were recruited through the CAC, email, and the City's social media networks.

Each audit was conducted using Google Earth Projects, an interactive tool that facilitates customized maps and stories (See **Figure 13**). The map consisted of different "stops" in street view, where participants were able to discuss potential bicycle and pedestrian obstacles. Those who attended were given a link to this tool prior to the audit. In order to ensure that participants were given the opportunity to share their experiences or concerns, the project team provided links to a Google Form Survey and a link to the interactive mapping tool on the project website. Participants were also provided with a Toolkit which described different facility types that could help address common challenges when walking or biking in Redlands.

Each audit observation is located in Appendix C.

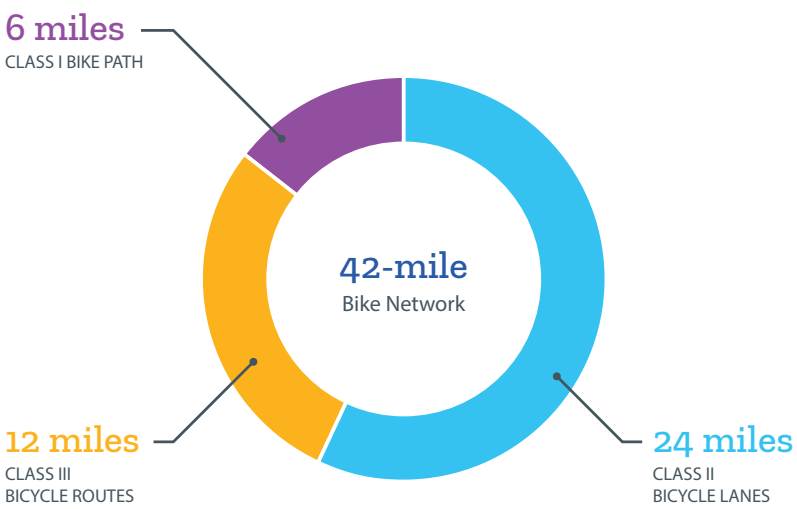
Figure 13. Example of Walk Audit Interface in Google Projects. Paths are shown in orange, while stops are represented by blue waypoints

Existing Bicycle Network

Existing and previously planned bikeways in Redlands can provide a base from which the City can propose a low stress bikeway network. It is important to note that some facilities promote both bicycle and pedestrian safety.

Existing Bicycle Facility Mileage by Type

The City of Redlands current bicycle network includes approximately 42 miles of designated paths, lanes, and routes. There are approximately six miles of Class I Bike Paths, 24 miles of Class II Bike Lanes, and approximately 12 miles of Class III Bike Routes. **Figure 14** shows the existing and previously planned bicycle facilities throughout Redlands, as well as immediately outside of the City Boundary.



Class I Bike Path

Class I Bike Paths are off-street facilities located in a separate right-of-way from the roadway and for the exclusive use of bicycles and pedestrians. The Orange Blossom Trail is a Class I Facility.

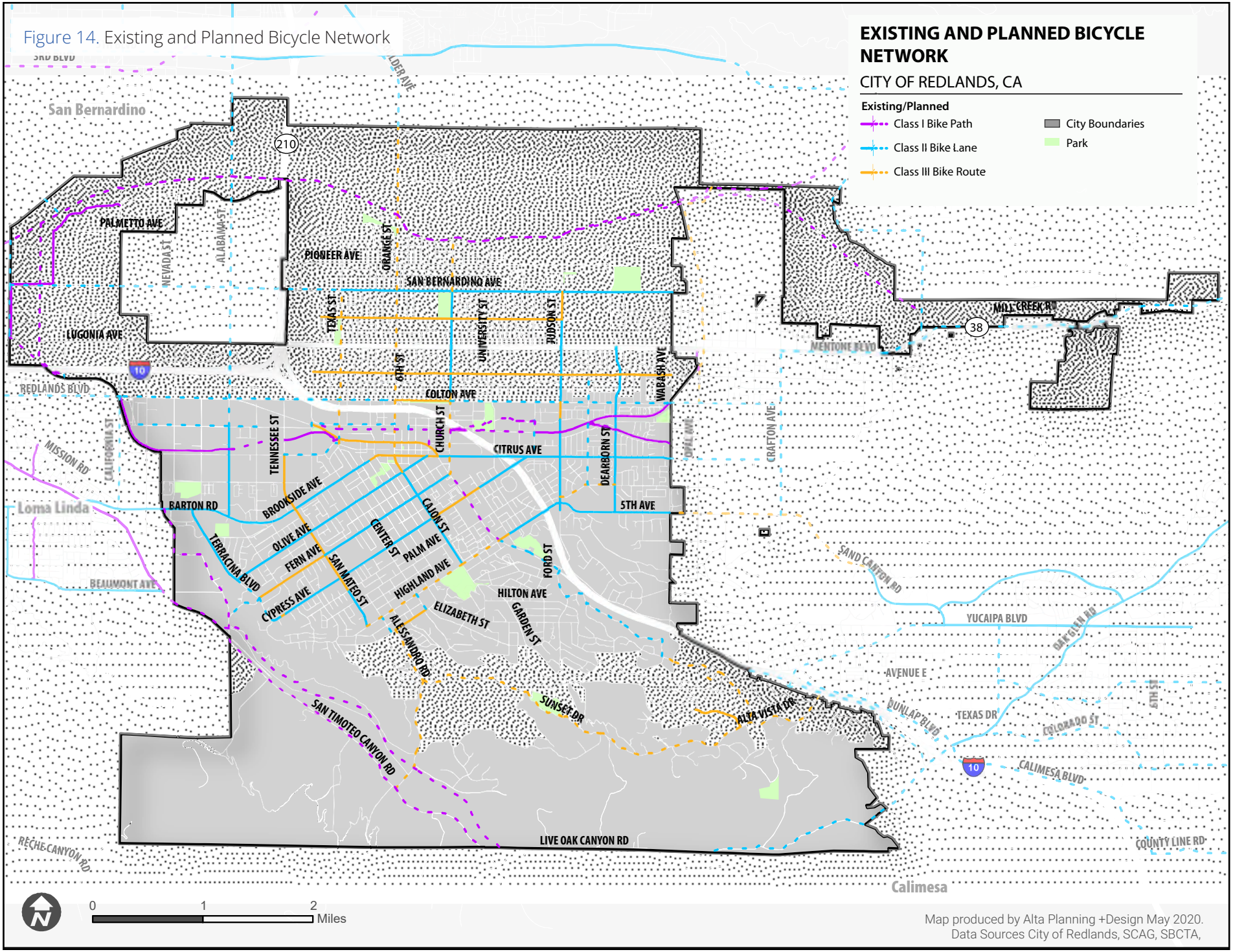
Class II Bike Lane

Class II Bike Lanes are on-street facilities dedicated to bicycles and identified with lane striping and pole signs. Class II facilities may be further separated from vehicular lanes and or parking lanes by buffers indicated with two to three foot diagonal painted striping.

Class III Bike Route

Class III facilities are on-street bike routes shared with motorists. They lack a dedicated striped lane, are identified with bike route signs, and often include the shared use marking, also known as a sharrow.

Figure 14. Existing and Planned Bicycle Network



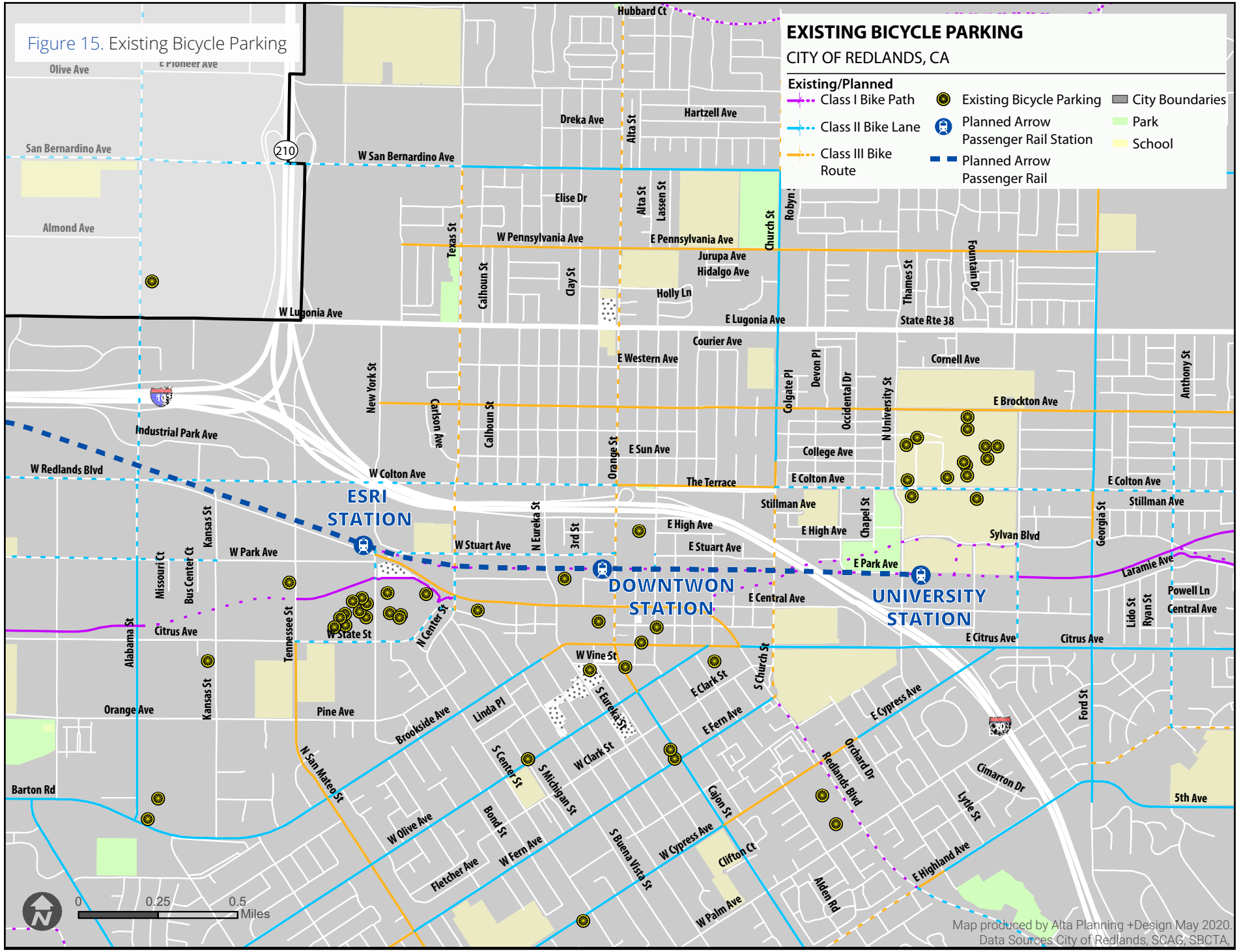
Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

Bicycle Parking

The City of Redlands has many bicycle parking locations, mostly centralized to the downtown area. The city understands the importance of providing secure bicycle parking at key destinations to support bicycling as a viable transportation option.

Figure 15 shows The City of Redlands existing bicycle parking locations. There are a number of excellent bike parking facilities located around the City. The City has about 50 existing bicycle parking locations which mainly consists of bike racks. Many of the bike parking facilities are located at the heart of the City within the downtown area and the University but are less abundant throughout the rest of the City.

Figure 15. Existing Bicycle Parking



Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

Existing Pedestrian Facilities

The City of Redlands pedestrian infrastructure includes sidewalks and paseos, shared-use paths, curb ramps, crosswalks, median refuges, and hiking trails.

HAWK Signal

Bulb-Out

High-Visibility Crosswalk

Rectangular Rapid Flashing Beacon

Refuge Island

Curb Ramp

Sidewalks

Other Existing Bicycle & Pedestrian Design Elements

Other infrastructure and design elements that make up the existing pedestrian and bicycle environment within Redlands include pedestrian and bicycle signals, grade-separated crossings (bridges and tunnels), pedestrian crossing signals and beacons, street lighting and wayfinding signage. Providing intersection improvements that promote bicycle and pedestrian safety can encourage residents to bike and walk more frequently.

Pedestrian-Scale Street Lights

Wayfinding/Guide Signage

Bike + Pedestrian Bridge

Bike Signal

Green Bike Lane Markings

Bike Box

Prioritizing Safety Using Data

There are significant safety risks for those walking and biking in Redlands. Based on public input, many community members do not feel safe walking or biking on the City streets. This sentiment was also echoed during walk audits, where participants pointed out particular areas where they felt the potential for future collisions was high.

Collision data involving people walking and bicycling was acquired from the Statewide Integrated Traffic Records System (SWITRS). This database includes information on locations, dates, and collision types, allowing the project team to analyze collisions by various factors.

According to SWITRS data, from January 1, 2015 to December 31, 2018 there have been 70 bicycle involved collisions and 88 pedestrian involved collisions within the city of Redlands. There have been seven pedestrian-involved collisions that resulted in severe injury and three fatal collisions involving a pedestrian. One severe injury collision involving a bicyclist and one fatal bicycle-involved collision have occurred.

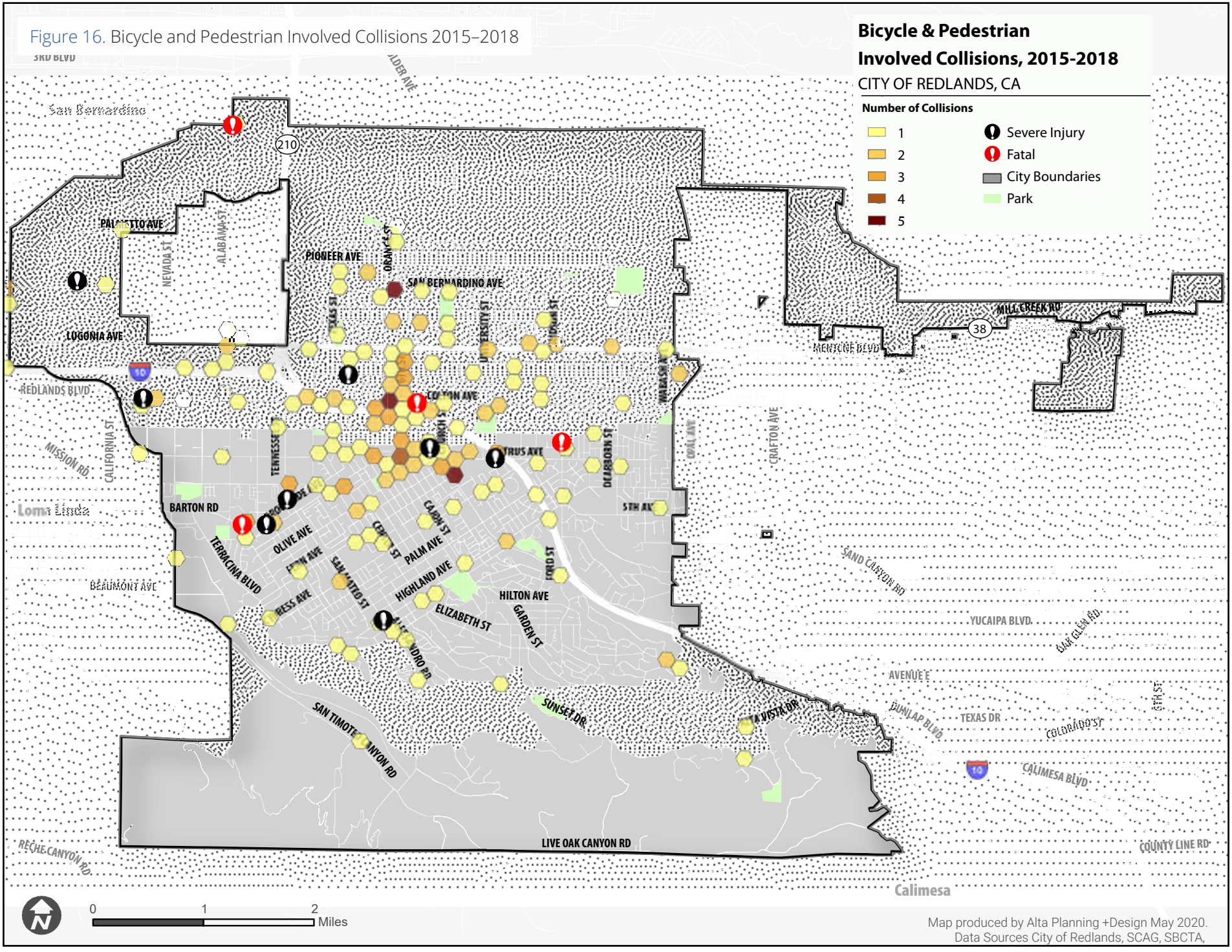
Where are the Majority of Collisions Happening Today?

Collisions have primarily occurred in the central portion of the city along major arterials like Redlands Boulevard, Brookside Avenue, and Orange Street.

Figure 16 shows the locations of all the bicycle and pedestrian involved collisions between 2015 and 2018. The color of each hexagon in the map represents the number of collisions that occurred in that area.

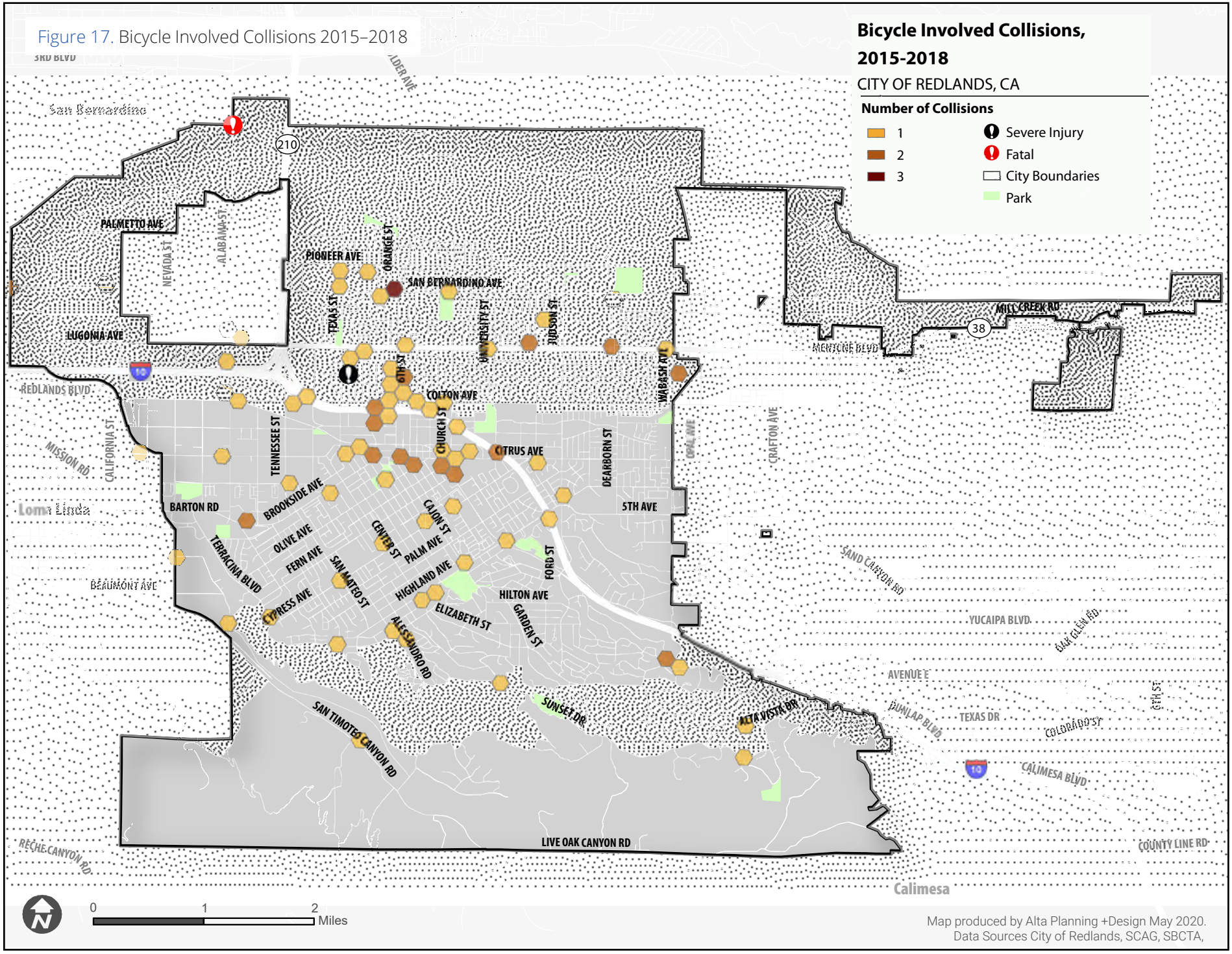
Figure 17 shows all bicycle-involved collisions and **Figure 18** shows all pedestrian-involved collisions. An elevated concentration of pedestrian-involved collisions have occurred in the central part of the City near Citrus Avenue, 6th Street , Colton Avenue, and Redlands Boulevard, indicating a need for more pedestrian improvements.

Figure 16. Bicycle and Pedestrian Involved Collisions 2015–2018



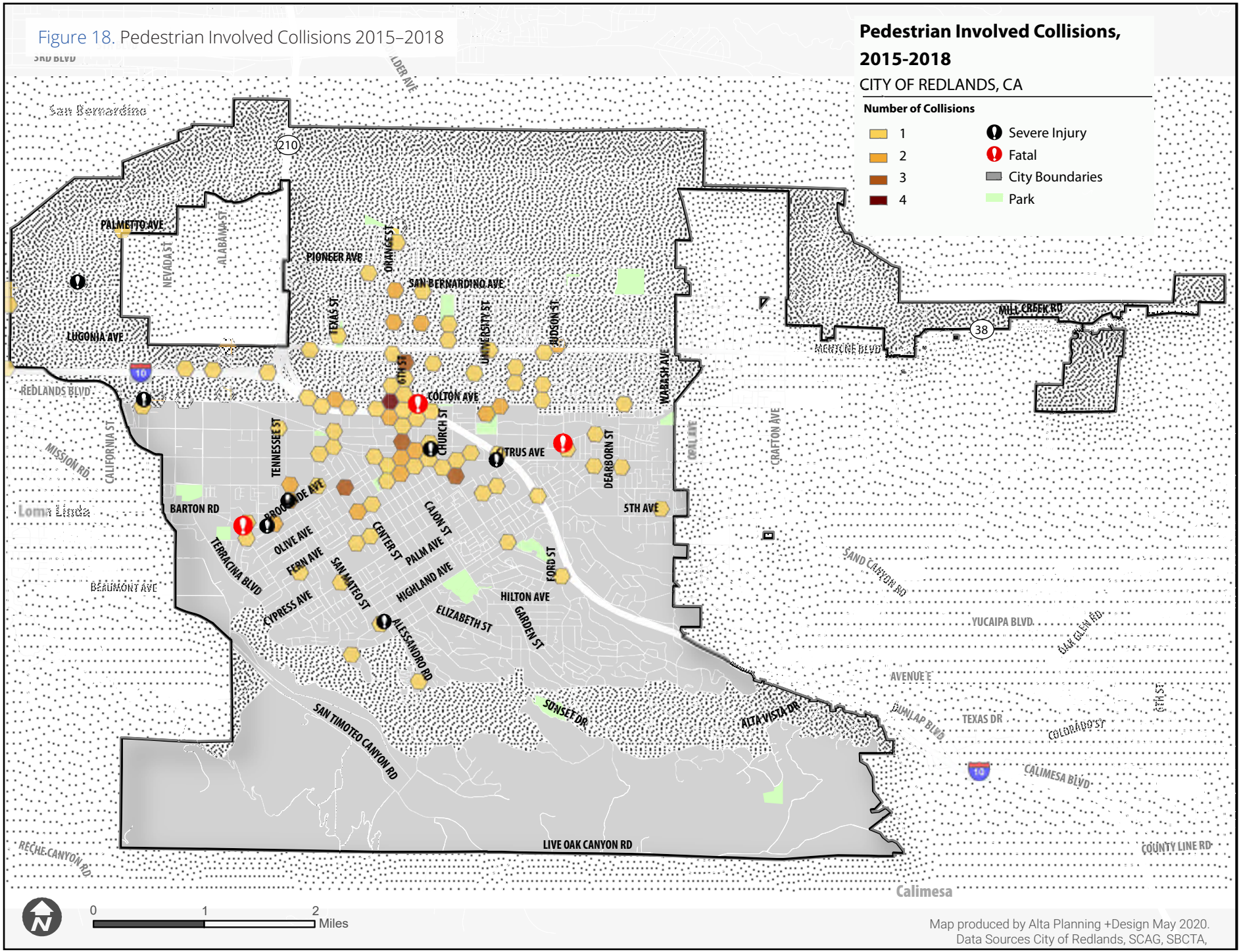
Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

Figure 17. Bicycle Involved Collisions 2015–2018



Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

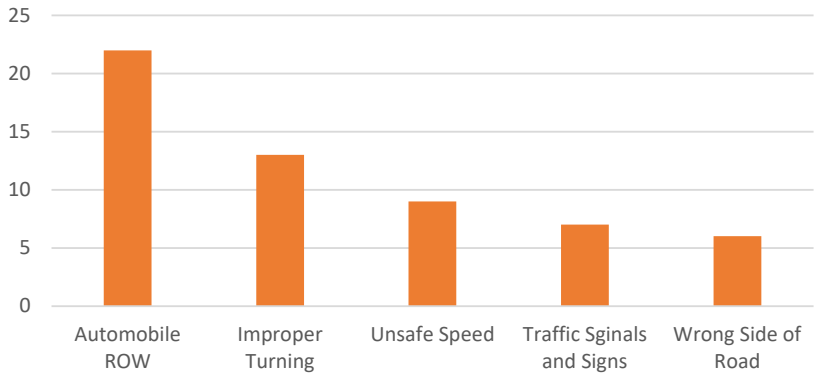
Figure 18. Pedestrian Involved Collisions 2015–2018



Most Common Bicycle Crash Types in Redlands

Figure 19 presents bicycle-involved collisions by primary collision factor. The majority of the collisions were caused by a party violating the automobile right of way or conducting an improper turn. The absence or quality of bicycle facilities throughout Redlands may lead to some bicyclists violating the law as they attempt to navigate vehicle traffic. It is important to note that the tool used for this analysis, SWITRS, does not identify which party was at fault for the collision.

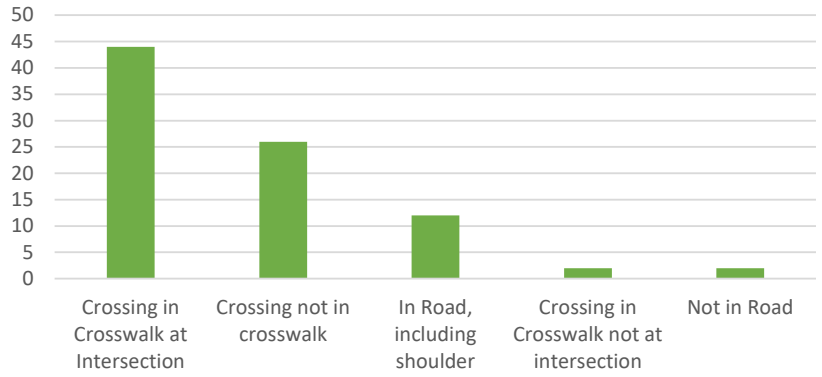
Figure 19. Bicycle-Involved Collisions by Primary Collision Factor



Most Common Pedestrian Crash Types in Redlands

Figure 20 breaks down pedestrian involved collisions by the pedestrian's action at the time of the collision. The majority of pedestrians were struck by a vehicle while in a crosswalk, indicating the need for improvements at existing crosswalks.

Figure 20. Pedestrian-Involved Collision by Pedestrian Action

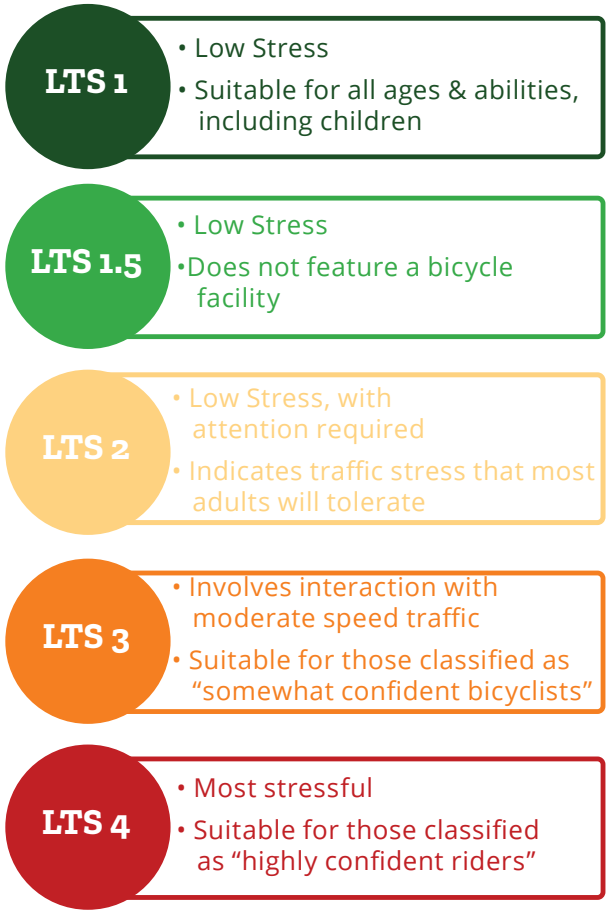


Level of Traffic Stress

The perception of a stressful or unsafe journey is often the greatest barrier to bicycling for most residents. For this reason, it is important to understand how stressful different routes and roadway conditions are likely to be perceived by the average rider. In order to increase bicycle ridership, the routes that provide access to the most prominent destinations need to feel safe for all cyclists, not just the strong and fearless.

The Level of Traffic Stress (LTS) indicates the amount of traffic stress a particular facility imposes on bicyclists. The analysis, based on methods developed by the Mineta Transportation Institute, considers posted speed, number of travel lanes, presence of bicycle facility and land use context to calculate a bicyclist's comfort level.[1]

The combination of these criteria creates four levels of traffic stress for the existing roadway network. However, this Plan introduced a fifth level (LTS 1.5) to differentiate between streets without specific bike improvements which nevertheless remain low-speed and low-stress for most people on bikes, versus streets with specific improvements and facilities to create a low-stress experience for riders (LTS 1). The principle of the scale remains the same: the lower the number, the lower the stress and the higher the level of comfort for people on bicycles. LTS 1 and 2 roads are typically the roadways that are appropriate for "All Ages and Abilities" and the "Interested but Concerned" cyclists, respectively. For this analysis, levels of traffic stress range from 1 to 4

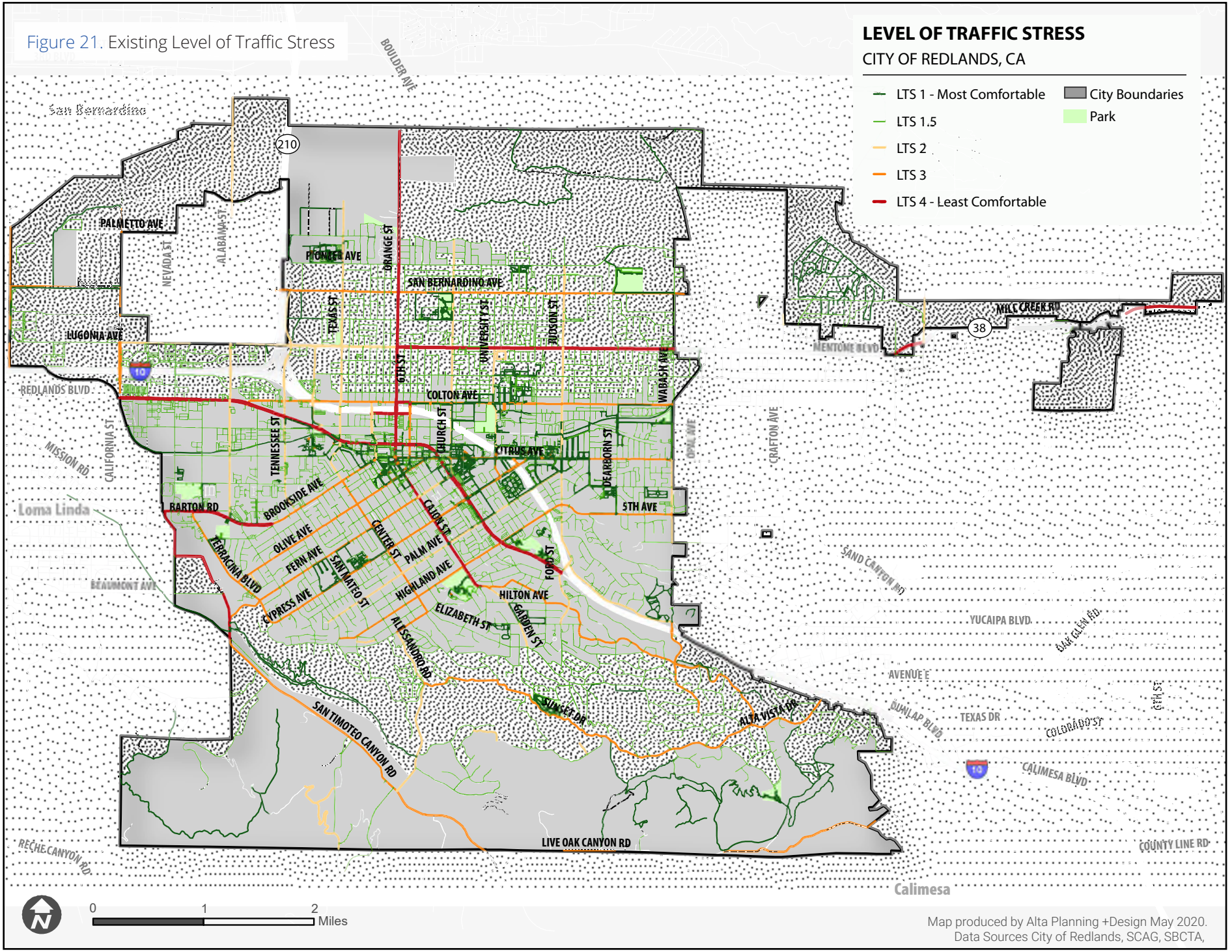


Existing Bicycle Level of Traffic Stress in Redlands

The level of traffic stress scores shown in **Figure 23** illustrate the low stress connections and gaps throughout Redlands. The Bicycle LTS results approximates the user experience for the majority of Redlands residents. However, people may have differing opinions of traffic stress depending on their own experiences. Many of Redlands' local roads are considered to be LTS 1 or LTS 1.5. The City's major roads and corridors connecting to key destinations are primarily considered to be LTS 3 or LTS 4, including Redlands Boulevard, Orange Street, Cajon Street, and others.

1 Maasa, Furth, and Nixon. Low-Stress Bicycling and Network Connectivity, Mineta Transportation Institute, May 2012.

Figure 21. Existing Level of Traffic Stress



Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

Low-Stress Connectivity Islands Analysis

Figure 22 analyzes the connectivity of existing low-stress areas of the city based on the Level of Traffic Stress (LTS) Analysis mentioned in the previous section. This exercise helps highlight the barriers that high-speed roadways, freeways, and railroad tracks create between neighborhoods.

A low-stress connection requires both segments and intersections to accommodate low-stress travel. For example, if a corridor is considered a stressful roadway, enhanced crossings may be needed to provide a comfortable crossing experience for cyclists traveling between neighborhoods. Elements that promote low-stress connectivity between areas of the city could include:

- Signalized Intersection
- High-Visibility Crosswalks with flashing beacons
- Low-speed roadways, bridges or tunnels bypassing high-speed streets

In **Figure 22**, complete connections are displayed in the same color and create "low stress islands". When the color of the roadways changes, or the color is broken, this indicates that a high-stress roadway is creating a barrier, such as a lack of signalized crossings at the intersection. In this map, colors do not correspond to levels of traffic stress; rather, each color represents a part of Redlands where internal travel is low-stress, but crossing to another island is likely more stressful.

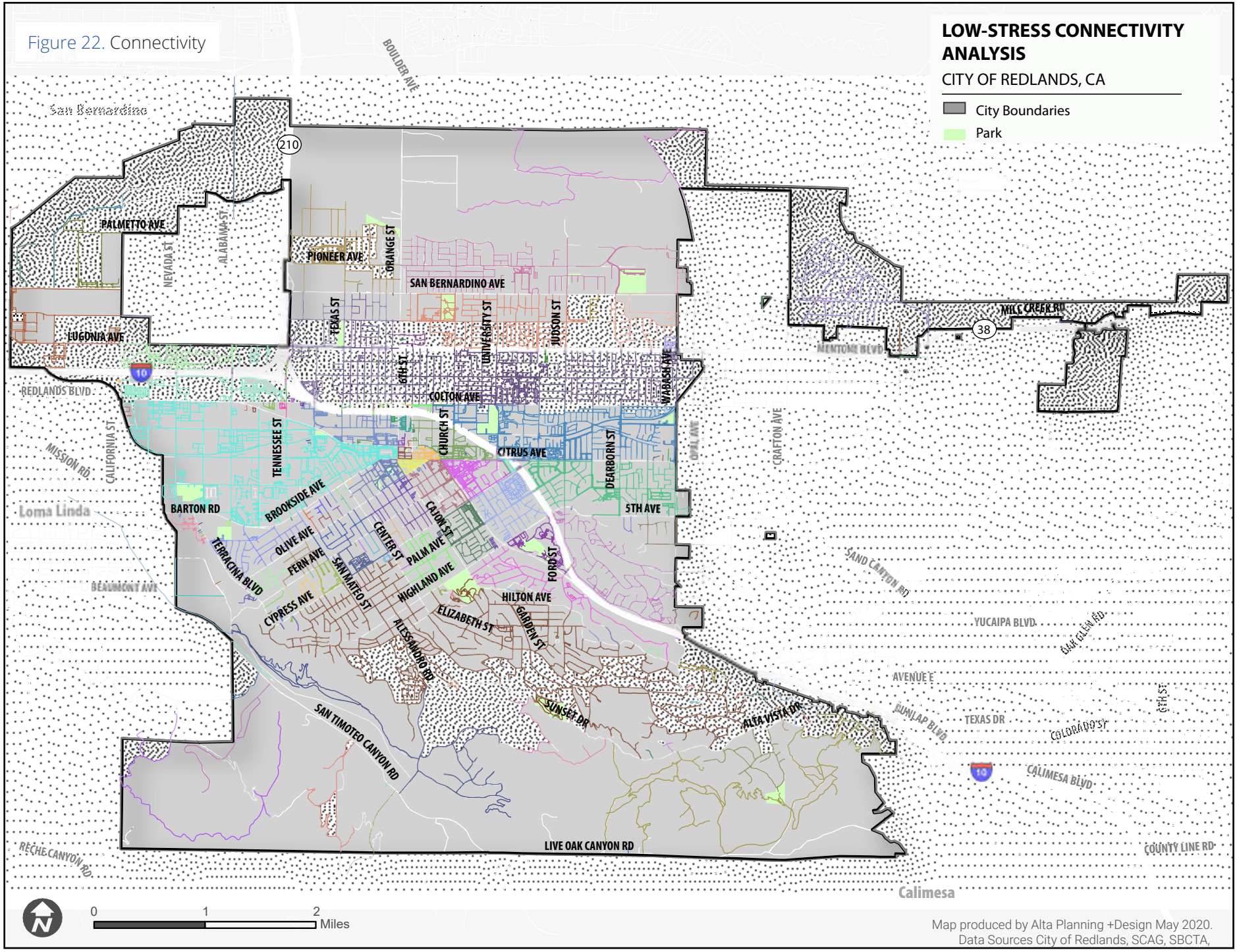
This analysis approximates the user experience by visualizing potential barriers when moving from a low-stress LTS 1 or 2 corridor to a LTS 3 or 4 corridor. The connectivity analysis shows that there are several large pockets within Redlands that provides complete low-stress connections. Many of these low-stress connections are within residential neighborhoods that are not intersected by higher-stress roadways. For example, the large area north of Barton Road / Brookside Avenue and south of Redlands Boulevard (shown in light blue on the map) represents a large region of Redlands where internal travel is relatively low-stress.

Alternately, in the central area of the city, where many larger streets converge, islands are small and more numerous, as represented by the multiple colors in this area. Bicyclists who wish to travel to the Downtown area, for example, may face barriers crossing high-stressful roadways such as Redlands Boulevard or Cajon Street. This suggests that this part of the city will require intersection and crossing improvements to better facilitate pedestrian and bicycle travel between areas.

The map also shows areas of the city that are relatively cut-off from other locations, such as the neighborhood around Citrus Valley High School or Ford Park. Without safe crossings in place, these destinations could be difficult or unsafe to access.

Other high-stress roadways that may create a barrier for bicyclists traveling to their everyday destinations include San Bernardino Avenue, Lugonia Avenue, Citrus Avenue, and Orange Street.

Figure 22. Connectivity

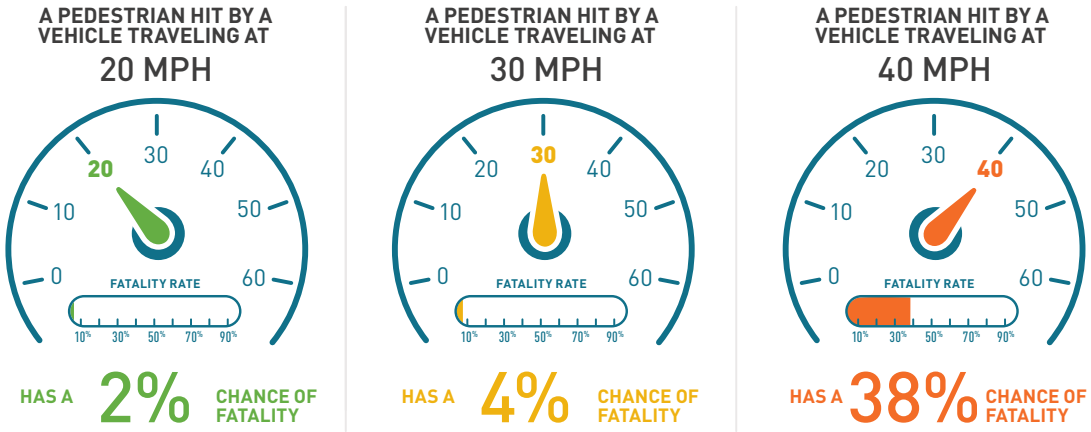


Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

Existing Roadway Conditions

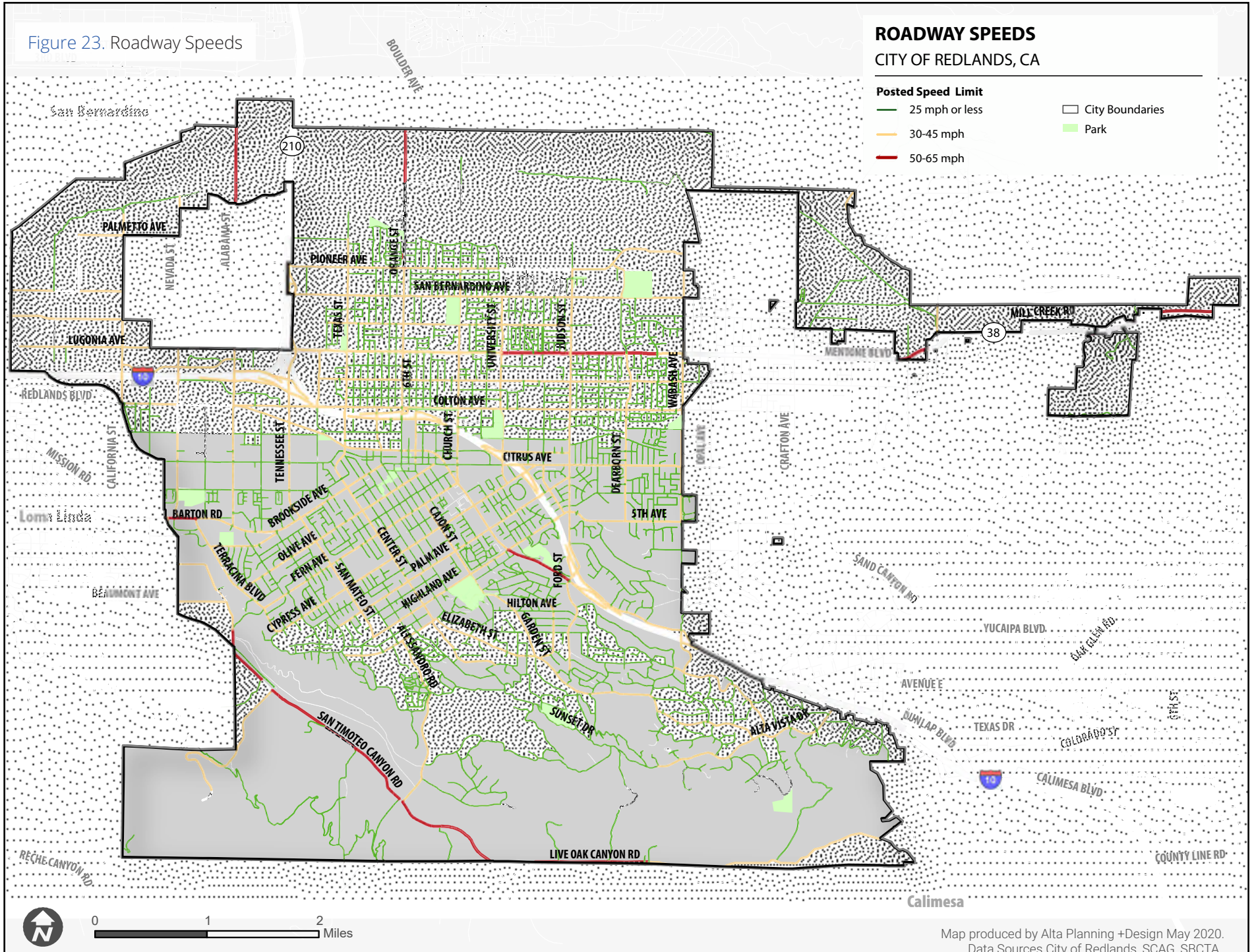
The speed at which vehicles are traveling has a significant impact on the comfort and safety of bicyclists and pedestrians who are also using the same right of way. As the figure below illustrates, a pedestrian's chance of survival after being hit by a vehicle at 20 mph is 98 percent but drops to only 62 percent if the vehicle is traveling at 40 mph. **Figure 23** shows the posted speed limits for Redlands streets.

Figure 24 illustrates the City's street widths. The widest road in Redlands is 105 feet and can cause drivers to drive at a higher speed. Additionally, the maps show that the wider the street, the higher the vehicle volume is as seen in **Figure 25**. This map shows the Average Annual Daily Traffic (AADT) along the roadways within the City. The red line indicates that those roadways have a vehicular volume of 14,000 to 22,000 AADT. The major corridors that have the highest volume of traffic include San Bernardino Avenue, Lugonia Avenue, Redlands Boulevard, and Barton Road.



Source: Rosen and Sander. Pedestrian fatality risk as a function of car impact speed. Accident Analysis and Prevention 41 (2009) 536–542.

Figure 23. Roadway Speeds



Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

Figure 24. Street Width

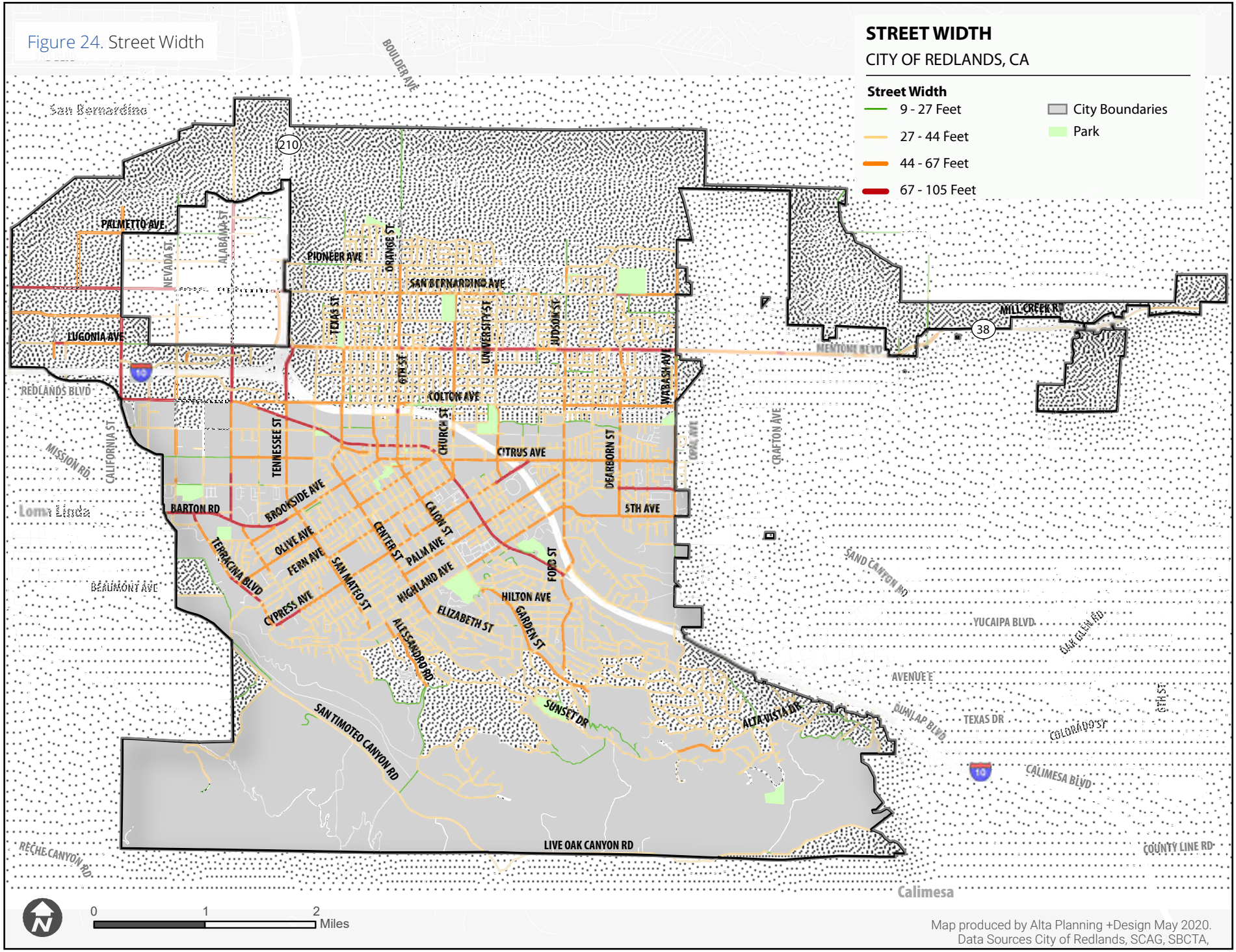
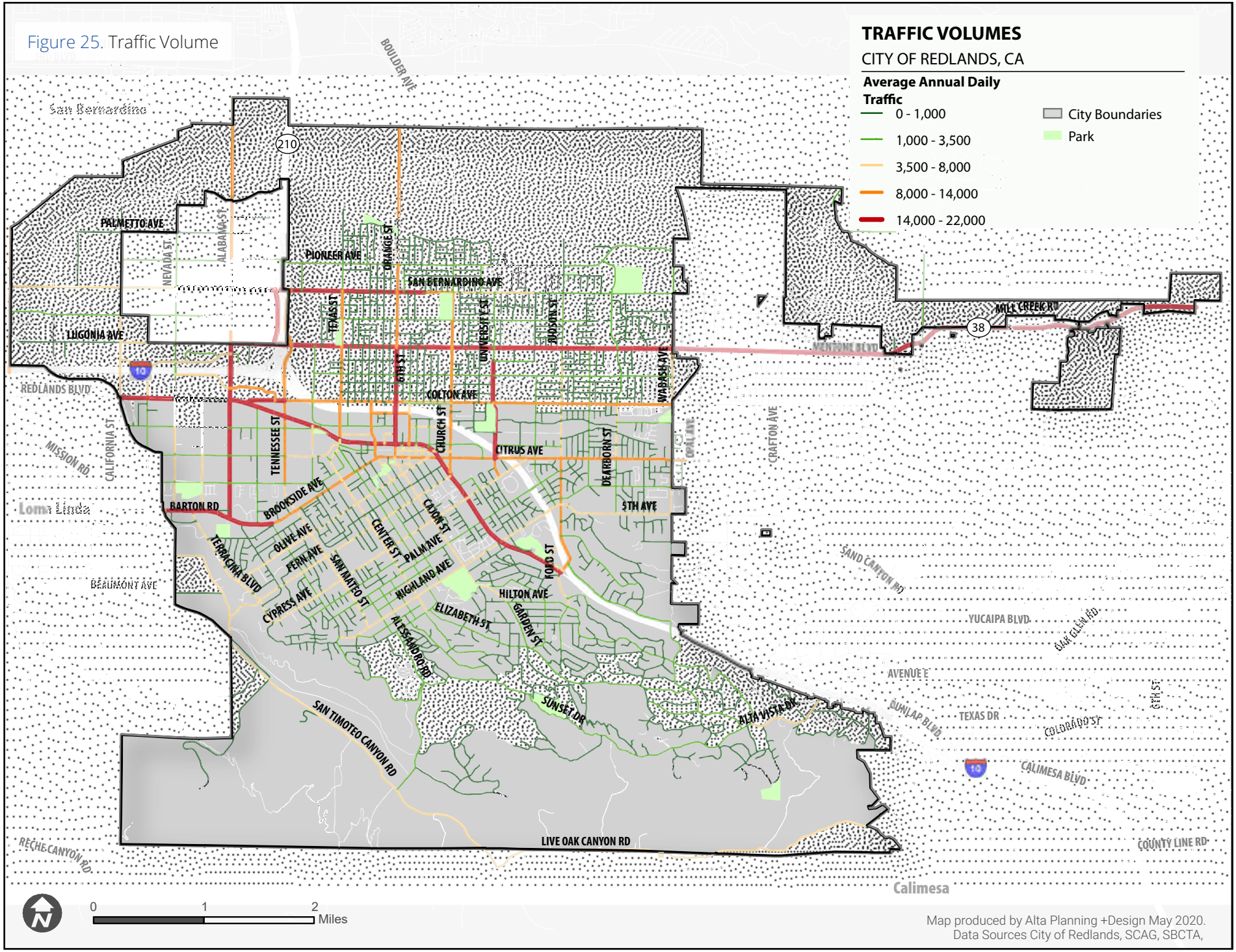


Figure 25. Traffic Volume



Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

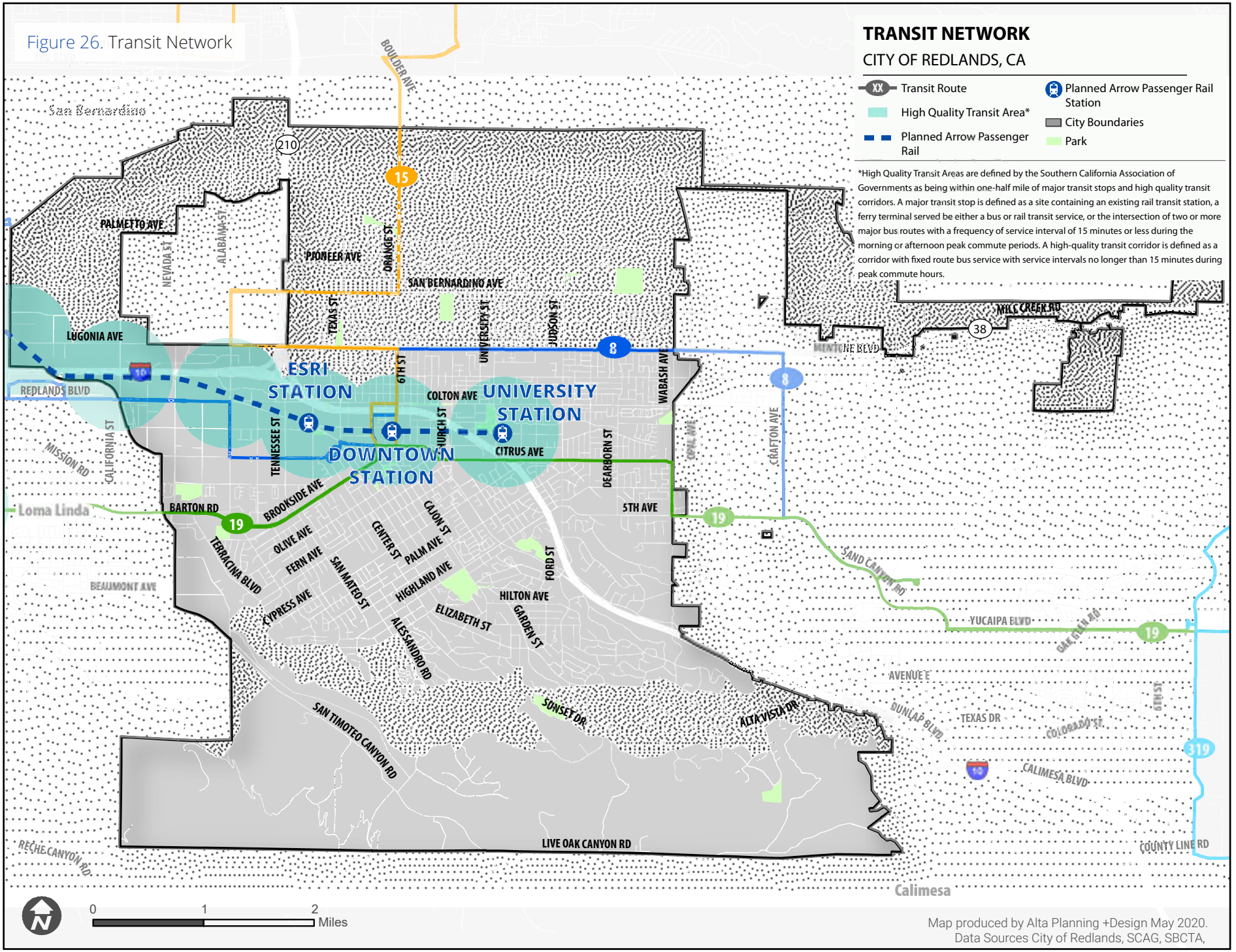
Existing Transit Network

The City of Redlands is currently served by Omnitrans, the primary transit operator in the San Bernardino Valley. Currently, there are three bus routes that provide service in Redlands. The 8 and 19 routes travel east-west through central Redlands, including Downtown. Both these routes serve as regional connections to Loma Linda. The 15 route travels through the San Bernardino Avenue, the Donut Hole, Lugonia Avenue, and Downtown Redlands. This route also links Redlands to the City of Highland in the north via Orange Avenue.

Additionally, the City of Redlands has plans for three stations along the Arrow Passenger Rail Line, which will run through the central part of the City. **Figure 26** shows the City of Redland's existing transit network, and planned Arrow Passenger Rail Line.

It is important to note that the future Arrow Passenger Rail Line correlates relatively close with SCAG's High Quality Transit Areas, or areas within one-half mile of existing major transit stops and frequent transit service.

Figure 26. Transit Network



Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

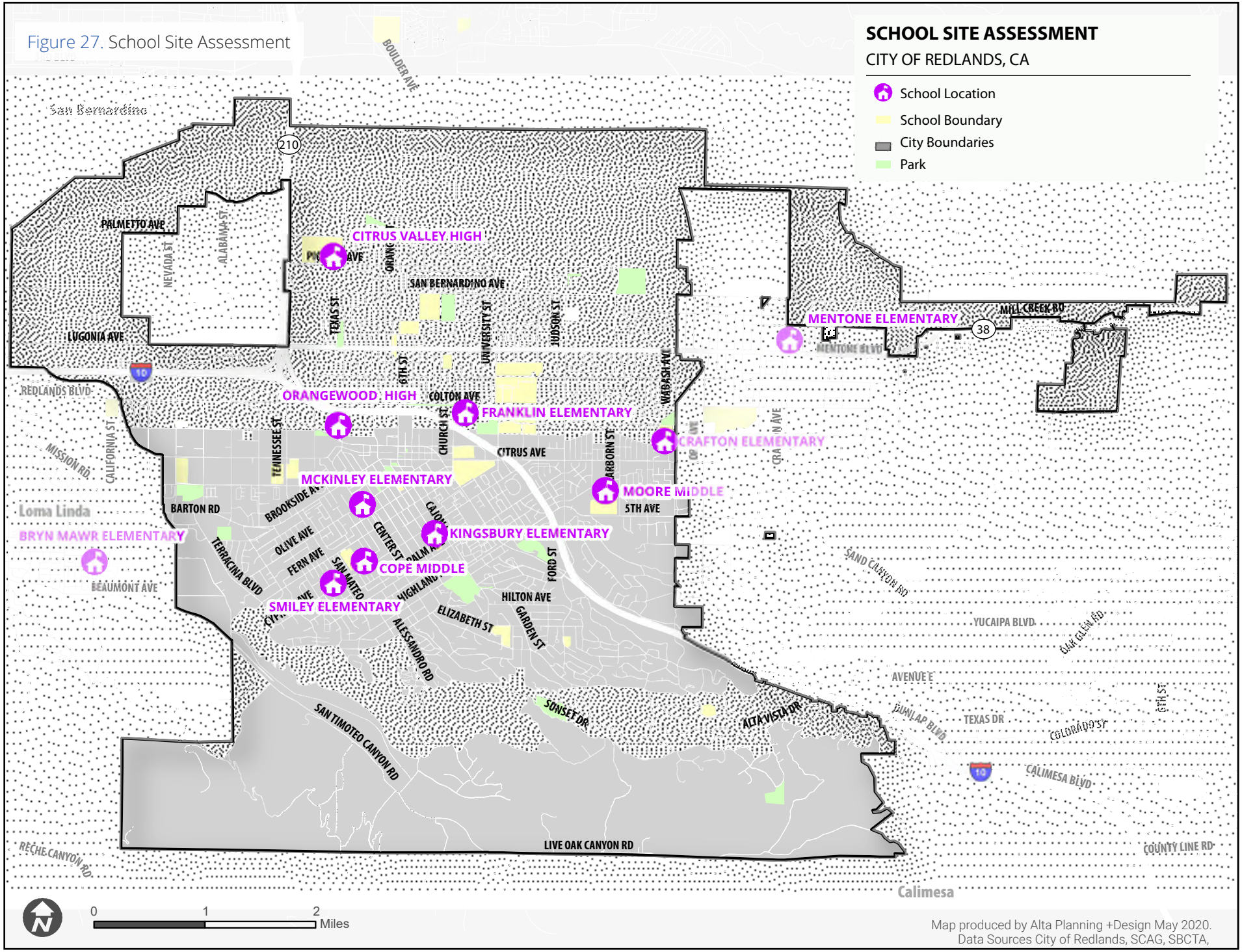
School Site Assessments

Addressing conditions for students traveling to and from school is an important component of sustainable mobility and active transportation. To facilitate increased safety near schools, Safe Routes to School programs evaluate and upgrade street infrastructure. These programs also promote walking and bicycling to school in a safe and supportive environment through education and encouragement activities.

The project team identified the existing conditions within a quarter-mile buffer around 12 schools in and adjacent to the city of Redlands. Assessing the existing conditions surrounding these schools is an important component when creating recommendations. The assessment reviewed existing conditions, including existing bikeways, existing sidewalks, missing sidewalks, stop signs, curb ramps, and signage.

Figure 27 looks at the City's public schools that are not currently addressed in the San Bernardino County Transit Authority's Safe Routes to School report. The individual school site assessment maps are located in Appendix D.

Figure 27. School Site Assessment



Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

Previously Planned Projects

The Redlands Sustainable Mobility Plan builds upon recent planning efforts and provides a comprehensive vision for sustainable transportation throughout the city. **Figure 28** shows the projects that were recommended in previous plans, including the following:

- Redlands Bicycle Master Plan (2015)
- Redlands General Plan 2035 (2017)
- San Bernardino County Active Transportation Plan, formerly the San Bernardino County Non-Motorized Transportation Plan (Revised 2018)
- Draft Transit Villages Specific Plan (2020)
- SCAG Passenger Rail Access Plan (2020)

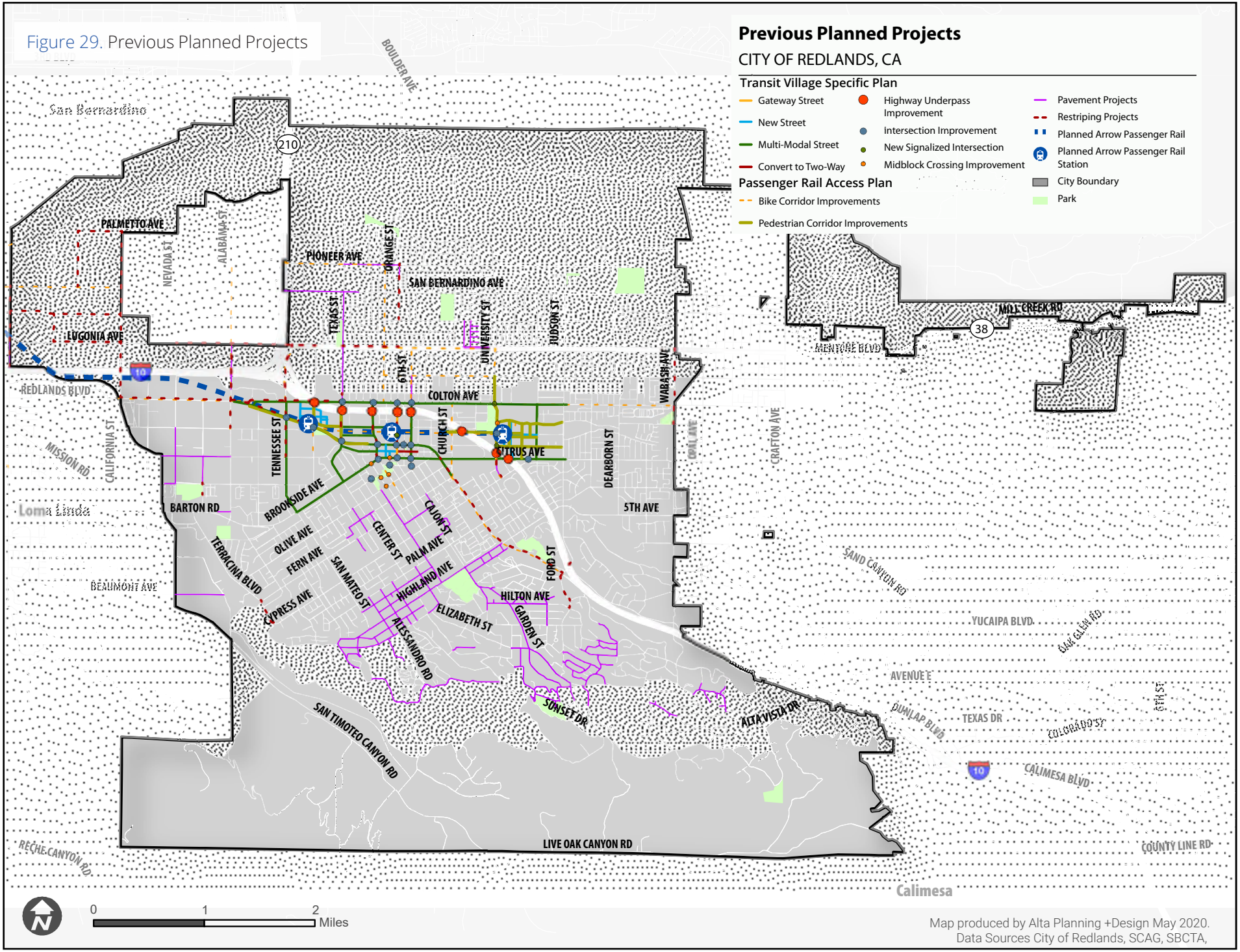
Figure 29 indicates that many of the previous plans recommend projects within the city's Downtown region. Some projects from different plans overlap with one another or recommend different facilities. The City of Redlands also has pavement and re-striping projects planned, which (if coordinated with) could provide an opportunity to integrate sustainable mobility projects into previously-budgeted work in a cost-effective manner. However, it will be crucial to examine where plans may conflict, where alternative recommendations have been made, and where opportunities for coordination can occur..

The table in **Figure 28** below lists some of the major corridors in Redlands where past plans have recommended projects that overlap with each other, indicating a need for review and consideration.

Figure 28. Corridors with Multiple Planned Projects

STREET	PREVIOUS PLAN
Colton Avenue	• Transit Villages Specific Plan: Multi-Modal Street • Redlands Passenger Rail Access Plan: Bike Corridor Improvements • City of Redlands Bicycle Improvements: Class II Bike Lane • City's candidate for re-striping
Texas Street	• Transit Villages Specific Plan: Multi-Modal Street • Redlands Passenger Rail Access Plan: Pedestrian Corridor Improvements • City of Redlands Bicycle Improvements: Class III Bike Route • City's candidate for re-striping
Redlands Boulevard	• Transit Villages Specific Plan: Multi-Modal Street • Redlands Passenger Rail Access Plan: Bike and Pedestrian Corridor Improvements • City of Redlands Bicycle Improvements: Class I Shed Use Path • City's candidate for re-striping
University Street	• Transit Villages Specific Plan: Multi Modal Street and Gateway Street • Redlands Passenger Rail Access Plan: Bike and Pedestrian Corridor Improvements • City's candidate for re-striping

Figure 29. Previous Planned Projects



Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA,

04

Stakeholder Engagement

Overview

In order to inform and engage the Redlands community about the Sustainable Mobility Plan (SMP), a variety of communication, meeting, and web tools were employed. Community members were invited to discuss the SMP's objectives, outreach strategies, and plan methodologies at a series of Community Advisory Committee Meetings. Public Engagement Workshops held by the Project Team informed community members of the background and trajectory of the SMP and educated them on how to record comments and suggestions on the project's public input map. Community members who were unable to attend engagement events were invited to leave their comments via the Public Input Map or Community Survey on the project website, or to email the Project Team with questions and comments about the SMP. The City's social media accounts were leveraged to advertise these events and to encourage community participation.

The purpose of the engagement effort was to obtain community input on:

- Vision for the SMP
- Types of active transportation infrastructure and policies to support the City's goals
- Barriers to walking and bicycling in the City
- Who currently walks and bikes

Recommendations focused on:

- Types of bicycle facilities needed
- Types of pedestrian facilities needed
- Desired routes to prioritize first for investment

Role of the Community Advisory Committee

Community Advisory Committee (CAC) Meetings invited Redlands residents who wanted to be more involved in the SMP's development to join the Project Team in discussing the goals and the paths forward for the plan. Some CAC members represented institutions and organizations in Redlands, including bike shop owners, University of Redlands professors, and ESRI employees. Other Redlands CAC members joined as interested residents. These meetings invited attendees to share their thoughts on the SMP throughout its formation. Attendees were expected to review documents completed by the Project Team and offer their comments during the meetings. Among other things, attendee's suggestions helped determine how the Project Team approached outreach, how recommended improvements were prioritized, and how the bicycle and pedestrian networks in Redlands were shaped.

Outreach and Communications Plan

The Outreach and Communications Plan was divided into three phases: **Listen, Collaborate, and Refine.** These phases allowed the Project Team to explain the contours of the SMP to community members in a variety of manners and for community members to give meaningful feedback and suggestions both regarding the SMP as a whole, and about specific corridors in the project area. The communications plan featured digital tools, social media updates, and live events with community members. Because of the impacts of COVID-19, all of these events occured online.

The assortment of outreach strategies was planned in order to give community members options to engage in their preferred format and at the dates and times that worked best for them. As a result, the project team was able to reach a wide range of community stakeholders.

Listen

- Community Survey
- Public Input Map

Collaborate

- Community Meetings
- CAC Meetings
- Walk and Bike Audits

Refine

- Incorporate what we heard into the prioritized project recommendations

Online Activities

Social Media Strategy

Advertisements and reminders about engagement events were posted to the City of Redlands Facebook, Twitter, and Instagram pages. These posts helped spread the word about the Walk and Bike Audits and Public Engagement Workshops, and directed community members to the project website to participate in the Community Survey and Public Input Map.

On Facebook, the Walk and Bike audits were advertised both as Facebook event pages, and as posts, inviting community members to reach out via the project email to learn more information on how to participate. On Twitter, tweets with an image attached reminded followers about the Walk and Bike audits and directed them to the project email for more information. On Instagram, images were posted with captions that included Walk and Bike Audit locations and dates, along with email contact information. On all of these social media platforms, community members could "like" or comment on the posts.

Webpage

The Project Team built a project website to keep community members informed and engaged about the SMP. The project website had an "About" section where viewers could learn a bit more about the project and its timeline, and a "Contact" section so community members could contact the Project Team. The website remained updated with materials and documents that the public could use to track the project's progress such as an FAQ sheet and self-guided Walk Audit materials. Additionally, the website showed upcoming events which community members could put on their calendars. The website remained open from August 2020 through February 2021.

Community Survey

Within the project website, the project team developed a community survey to capture community members' experience and perspectives on walking, biking, and riding transit in Redlands. Survey participants were asked about their typical mobility patterns and what types of improvements might be made that could encourage more walking, biking, and rolling in the city. These survey results helped inform the recommendation and prioritization process and also guided the Project Team in understanding what improvements are most important to Redlands residents. The Community Survey was open from August 2020 through October 2020, and 92 people responded.

Public Input Map

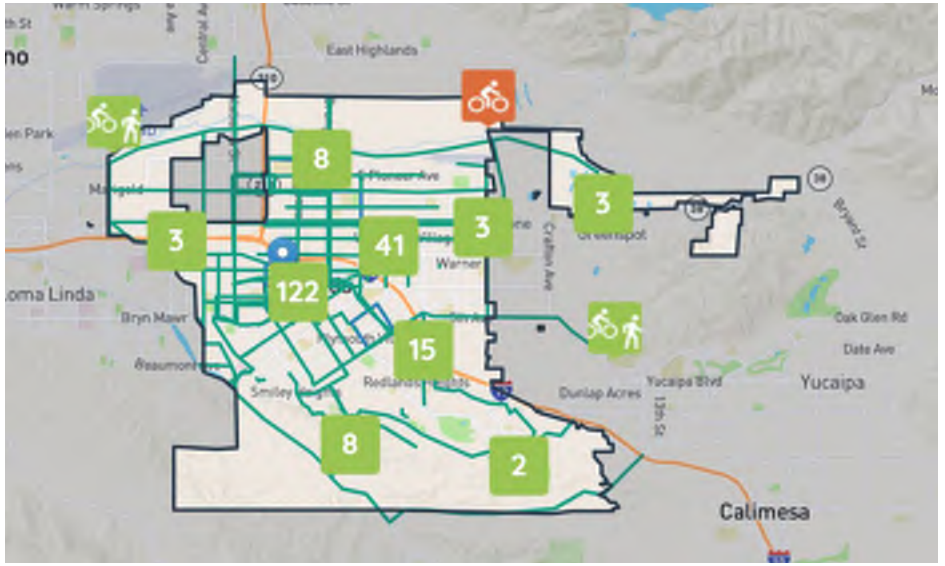
The interactive Public Input Map was another way for community members to inform the Plan. Community members were able to comment on any street, intersection, or corridor in the City of Redlands. There were three types of comments a community member could leave.

- Destinations I currently access or would like to access by foot or bike
- Barriers to walking or biking
- Bicycle or walking routes that need improvement

Community members could also review previous comments left by other participants and vote to either like or dislike the comments. The Public Input Map remained open for comments from August 2020 through October 2020.

The public input map was used to both create recommended bicycle and pedestrian projects and prioritize these projects. Where comments recommended improvements to facilities such as crossings, sidewalks, or on-street bicycle routes, these items were added to the potential projects list to be evaluated alongside other previously-planned improvements. Community input was also one of the factors in evaluating and scoring potential projects. Where public comments intersected with a project area, projects were given points to indicate that they were priorities for members of the Redlands community..

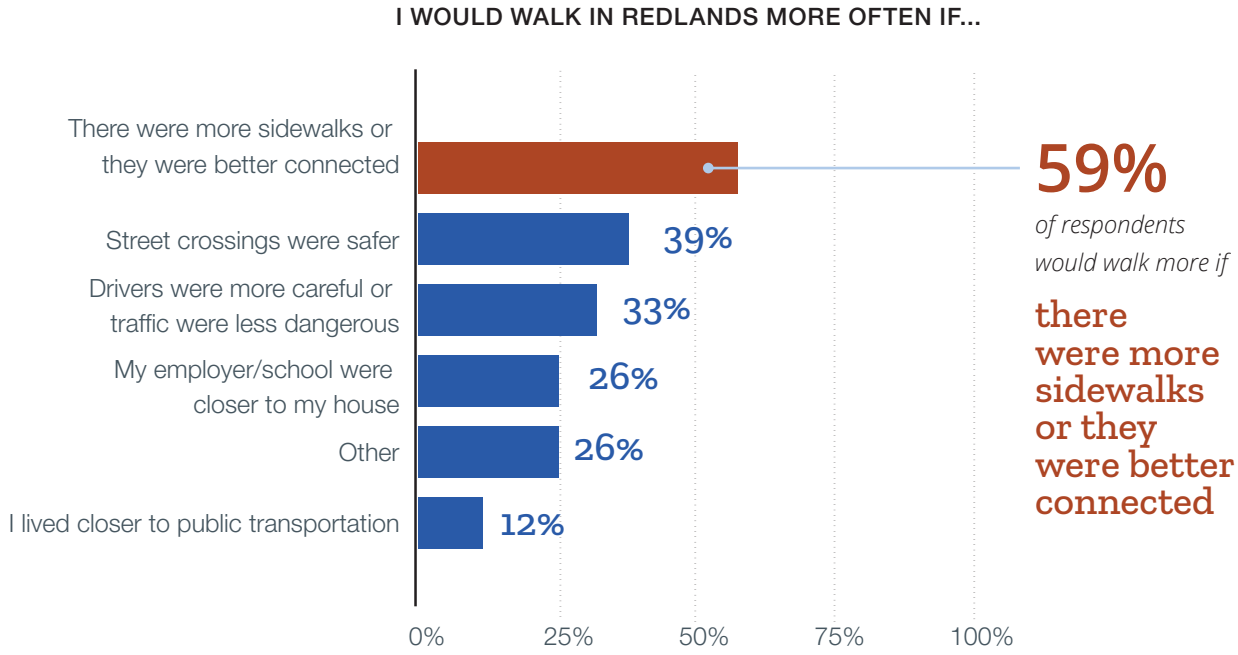
Figure 30. The Redlands SMP Public Input Map



Community Survey Input

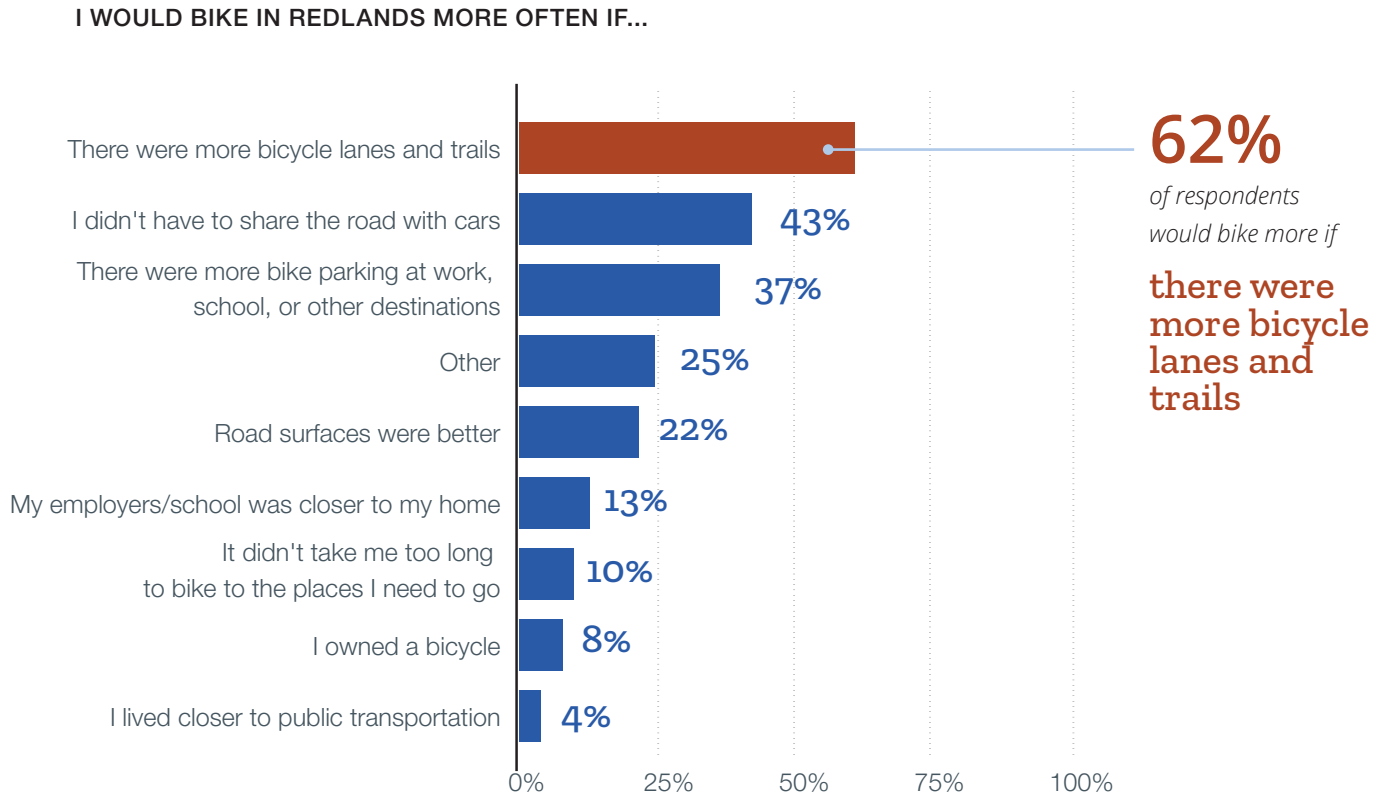
Barriers to Walking

- Lack of Sidewalks and/or safe crossings.
- Lack of shade/too hot.
- Transit stops are too far from resident's homes.
- Safety concerns at major corridors like Lugonia Avenue and Redlands Boulevard.

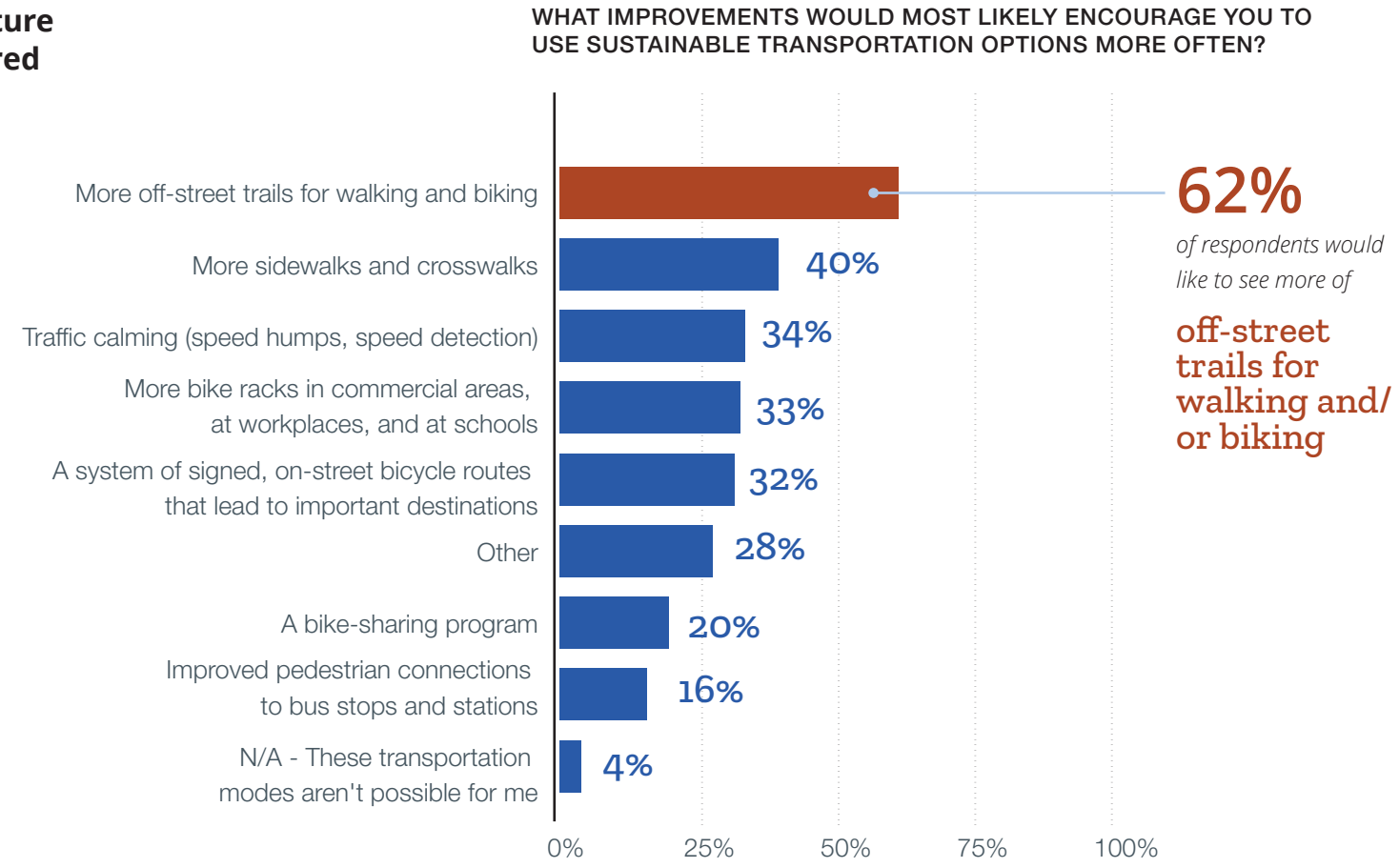


Barriers to Biking

- Lack of secure bike parking at transit locations, work, school, and other destinations.
- Concerned with distracted driving and vehicular speeding.
- Lack of separated bicycle facilities.



Types of Infrastructure and Programs Desired by the Community



Public Input Map Results

The Public Input Map received over 450 comments, and over 1,000 votes on these comments. The public input map was used both to create recommended bicycle and pedestrian projects and to prioritize these projects.

Types of Infrastructure Desired by the Community

- Better or increased bicycle and pedestrian facilities including high visibility crosswalks, bike lanes, bike racks, and sidewalks
- Alternative bicycle routes in the bike network on lower speed streets
- More educational opportunities for bicyclists and drivers about how to use bicycle infrastructure, like bike boxes
- Increased bicycle parking conforming to current design standards
- Mid-block crossings near popular destinations
- Longer crossing intervals, particularly in areas with children and older residents
- Traffic calming in high volume and high-speed intersections
- More shade structures
- Increased lighting
- Better wayfinding, particularly around trails

Difficult Streets and Intersections

- Dangerous crossing conditions at Center Street and State Street
- Redlands Boulevard and Ford Street is a busy intersection with no crosswalks
- The need for a bike lane on Lugonia Avenue
- The need for improved sidewalks on San Bernardino Avenue
- Heavy traffic volumes on Redlands Boulevard make biking and walking uncomfortable
- Requests for a separated bike lane on Tennessee Street, a wide street with fast traffic speeds
- The pedestrian infrastructure near Citrus Valley High School should better accommodate students who walk

> *Separating bike lanes from traffic improves safety and accessibility. Consideration should be given to a protected bike lane.*
>
> **– INTERACTIVE MAPPING TOOL COMMENT**

> *The City should consider a Promenade or walking district connecting the transit station to State Street through a potential re-development of the Redlands Mall.*
>
> **– INTERACTIVE MAPPING TOOL COMMENT**

1 Listen 2 Collaborate 3 Refine

Online Engagement

The Public Engagement Workshops and Walking and Biking Audits were hosted via Zoom meetings. The Workshops and Audits placed community members in settings where they were encouraged to participate and voice their opinions and concerns. The Project Team answered questions from community members, and took detailed notes in order to incorporate community member's comments in the Plan's prioritization list. The four Workshops and four Audits gave community members options to choose the events that best fit their schedule and interests

Community Workshops

The Workshops began by covering the background and goals of the SMP, and showed existing conditions maps of the City with sustainable mobility infrastructure improvements proposed in previous planning efforts such as the Redland's Bicycle Master Plan and Rail Access Plan. Next, the Project Team explained how community input would help inform the prioritized project and mobility network implementation strategy. In Workshops 3 and 4, information was added to the presentation which summarized the findings from the completion of the Walking and Biking Audits and the Active Transportation Counts. The Workshops closed with a demonstration of the engagement tools on the project website.

The Workshops were held on September 23 and October 6 from 6pm-7pm, and September 30 and October 15 from 4pm-5pm. A total of 17 community members attended the Public Engagement Workshops.

During the Workshops, attendees suggested bicycle and pedestrian improvements that were not seen on the exiting conditions maps, such as bike parking, wayfinding signage, and Class IV bike lanes. Attendees also discussed areas of the City that were not included in the Walk Audits that were in need of infrastructure improvements. The Project Team noted these suggestions, and also encouraged attendees to leave these comments in the Public Input Map online. While most of the attendees had visited the project website already, some were unaware of the information available, and some had not been taking advantage of all of the features of the Public Input Map.

Walking and Biking Audits

Four virtual Walking and Biking Audits were conducted utilizing Google Earth Projects and Zoom. This tool allowed the Project Team to make "stops" in Google street view in order to discuss the opportunities and constraints of walking and biking in the surrounding area. Each of the four Audits reviewed a different section of the City, focusing on major intersections, busy streets, and popular destinations. These locations were chosen based on factors including consultation with City staff, existing conditions, and community feedback from the public input map. These virtual audits functioned similarly a traditional in-person audit, allowing the project team and participants to observe existing conditions and discuss potential improvements. The virtual interface also had the additional benefit of allowing the group to quickly zoom to other locations and discuss their characteristics in real time.

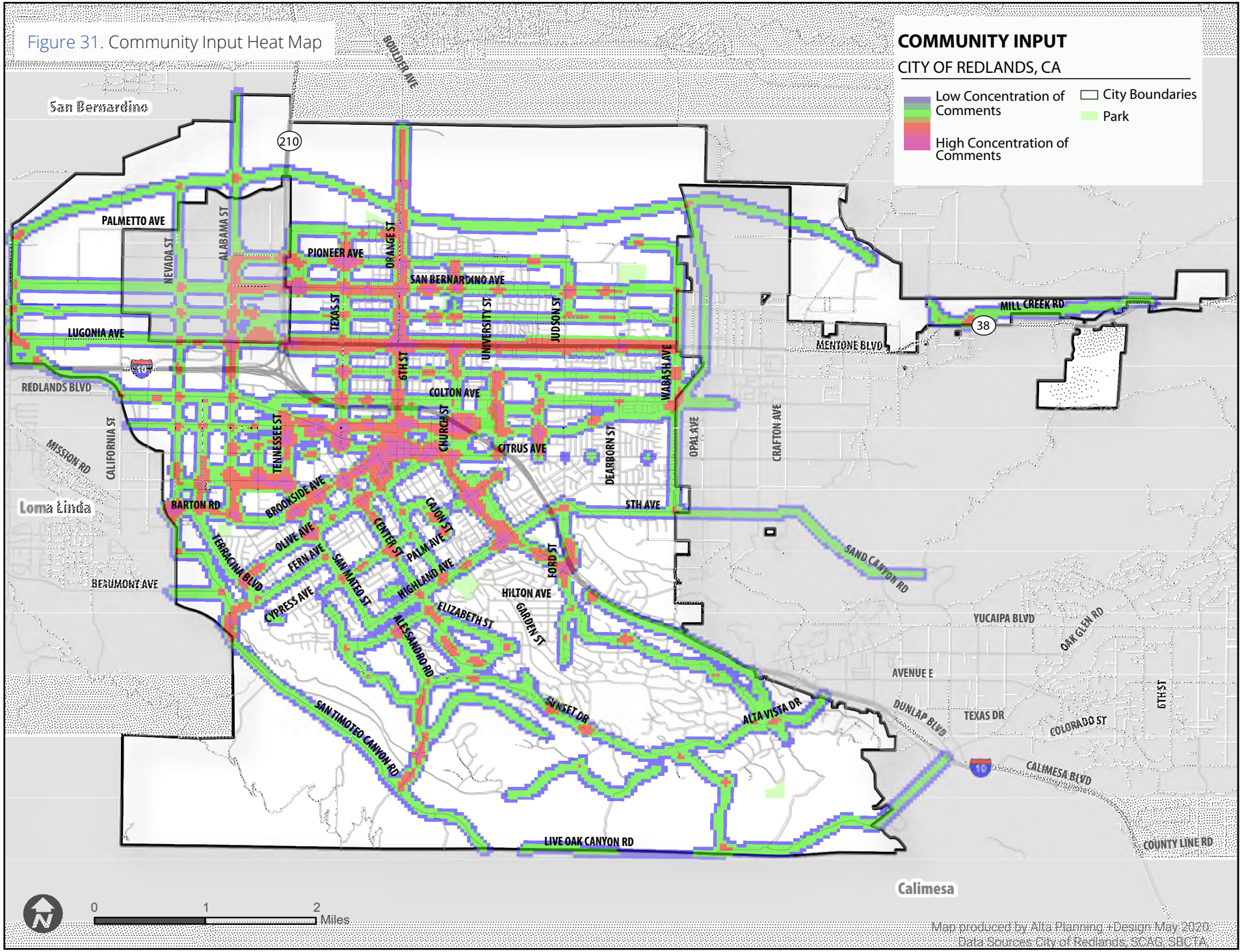
Walk Audit Participant Comments

- Enhanced pedestrian facilities should be installed around schools with busy pick up/drop off times.
- Despite existing bike lanes, some streets are too uncomfortable to access by bicycle. Participants asked for separated bike lanes, or for alternative bike lanes on less busy nearby streets.
- Freeway underpasses should have better pedestrian and bicycle facilities. Participants feel uncomfortable walking and biking in these areas, even though the underpasses connect pedestrians and bicyclists to popular and important destinations.
- There are sidewalks in the City which end abruptly, forcing pedestrians into the street. These sidewalks should be completed and/or extended where possible.
- Hot temperatures can be a deterrent to walking and biking in Redlands. Trees and other shade structures should be installed to reduce temperatures and make travel more comfortable

Community Input Locations

Figure 31 represents the density of comments received from the public input map, as well as community walk audits, Where more comments were received, areas of the city appear darker, indicating a concentration of interest among participants in improvements in these areas. Crucially, this map should not be interpreted as reflecting intensity of need or level of priority, since it only reflects the concerns and recommendations of residents who were engaged through public outreach. However, it indicates that areas with lower incomes, as well as greater environmental and public health concerns, are also areas with high numbers of community comments.

Figure 31. Community Input Heat Map



Bringing it All Together

Within the final phase of outreach, the project team hoped to edit, vet, and refine the prioritization methodology, the City's goals, and the overall bicycle and pedestrian network. The stakeholder engagement process was an opportunity for the project team to say "did we get it right? and "is there anything that we missed?

WHAT WE HEARD

- More sidewalks, improve broken sidewalks, and create sidewalk connections
- More Protected Bike Lanes
- More street lights
- More street trees/shading opportunities
- More off-street trails for bicycle and pedestrian use
- Need a better sense of security walking and biking along major corridors
- Create education programs for bicyclists and drivers about bicycle safety
- Create traffic calming measures in high volume and high-speed intersections

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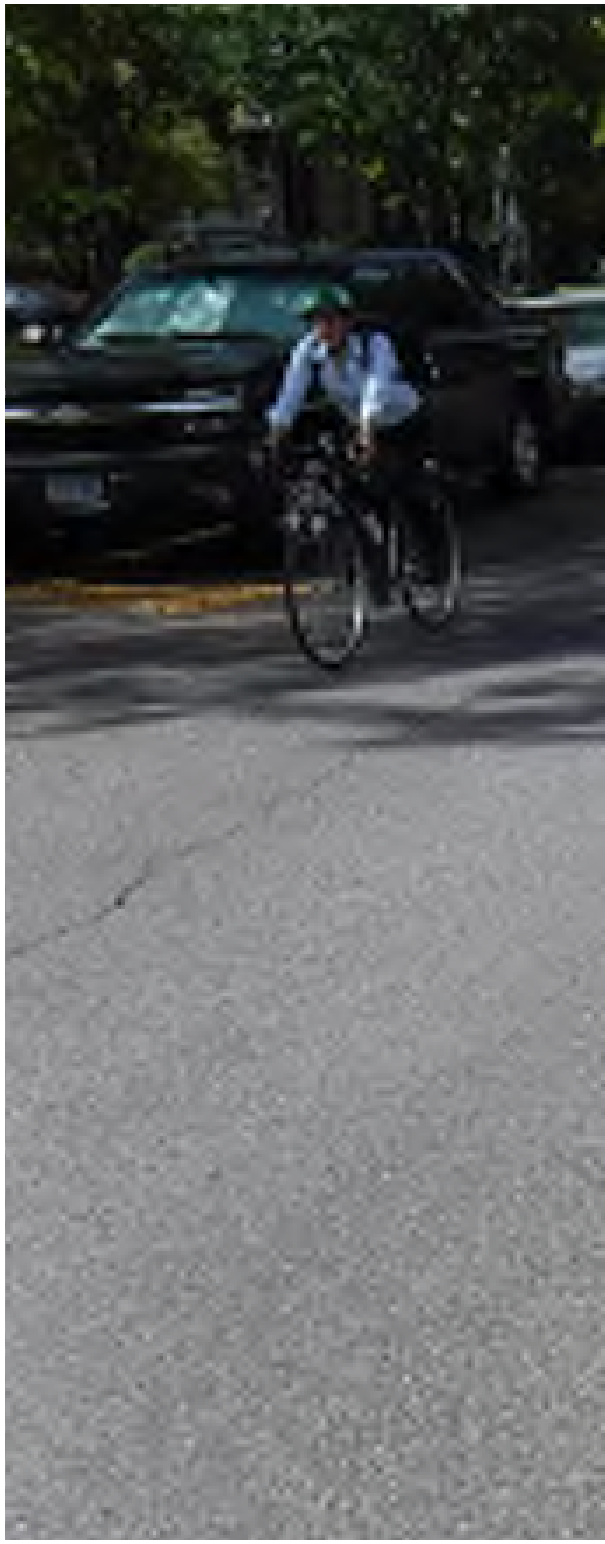
Network Recommendations



The Bicycle and Pedestrian Network

Many previous improvements to the pedestrian and bicycle network are well-utilized and celebrated by Redlands residents. At the same time, there are also recognized limitations and areas where the network doesn't meet community needs. This chapter introduces the prioritization concept for determining which bicycle and pedestrian projects, as well as supporting amenities, the City of Redlands will prioritize for future implementation. This chapter also includes the overall strategy for determining the locations and type of facilities that should be recommended based on input from.

Figure 32 lists some of the messages the project team received and corresponding proposals for addressing each issue or observation.

Figure 32. Community Feedback and Project Team Proposals

WHAT WE HEARD	WHAT WE'VE PROPOSED
Bicycling and walking are uncomfortable and stressful due to heavy traffic and because cars drive too fast.	**Make it Comfortable** ◆ Prioritize bicyclists and pedestrians with wider sidewalks, bicycle lanes as well as improving streetscape and public areas. ◆ Continue implementation of the City's Bicycle Master Plan and General Plan to build a transportation system that will reduce fatal and severe crashes around Redlands.
Bikeways are only useful if they are connected. Bicycle and pedestrian gaps as short as crossing an intersection or as long as several miles can keep people from biking and walking more often.	**Make it Connected** ◆ Increase the overall mileage of the low-stress bicycle and pedestrian network, especially in low-income and disadvantaged communities. ◆ Increase first-last mile connections to encourage more bicycle and pedestrian travel. ◆ Address bicycle and pedestrian gaps and increase connectivity.
Biking and walking in certain parts of Redlands create safety issues for residents who wish to walk and bike.	**Make it Safe** ◆ Install more streetlights and prioritize new lighting installations at locations with higher bicycle and pedestrian activity or where known safety concerns exist. ◆ Install additional bicycle and pedestrian crossings across major arterial and collector streets that will connect residents to their everyday destinations.

How will Bicycle and Pedestrian Recommendations Achieve our Goals?

Goal 1: Improve Public Health

Network recommendations address the focus of promoting a walking and biking culture in Redlands.

Goal 2: Accessibility

Network recommendations guides development of an active transportation environment that provides access and mobility options for users of all ages and physical ability levels.

Goal 3: Expand Options for Active Transportation

Bicycle and pedestrian project recommendations should improve connectivity, efficiency, and comfort of the bicycle and pedestrian transportation system. The city's active transportation network should be extended to currently-undeserved communities and areas of Redlands.

Goal 4: Build a Safer Multi-Modal Network

Bicycle and pedestrian recommendations should address the most critical safety issues and prioritize improvements along high-injury corridors and at intersections.

Goal 5: Encourage More Sustainable Transportation Patterns

Network recommendations address the reduction in Vehicle Miles Traveled (VMT) by developing viable alternatives to vehicle travel.

Goal 6: Collaboration

Bicycle and pedestrian project recommendations are meant to be used by everyone in the community. This Plan will foster an increased role for the community in the planning process and improve community trust that the City will fulfill its promises.

Developing the Proposed Network

The SMP takes into account a combination of existing proposed projects and additional public input received as part of this recent planning process. Ultimately, the following sources informed the proposed network of bike and pedestrian improvements.

Public Input

Redlands residents and visitors helped identify barriers to walking and biking in their neighborhoods through survey results, online mapping, virtual walk audit comments, and virtual outreach events.

Residents identified walking and biking issues which included missing sidewalks, missing/ challenging intersection crossings, lack of safe bicycle facilities, and lack of lighting and shade.

Bicycle Master Plan

In 2015 the City of Redlands adopted the Bicycle Master Plan. The Sustainable Mobility Plan recommends implementation of focused projects from the Bicycle Master Plan, which includes increasing and improving the bicycle network.

DRAFT Transit Villages Specific Plan

In April 2020, the City of Redlands released the draft document of the Transit Villages Specific Plan. This plan details the developments planned for each of the three Redlands Transit Villages, including alterations of pedestrian and bicycle access, traffic patterns, and street design. The SMP recommends the development of projects within each Transit Village.

General Plan 2035

In 2017, the City adopted the General Plan, which includes recommendations for each aspect of the City's planning and development efforts. The SMP recommends implementing focused projects from the General Plan which includes bicycle and pedestrian network improvements.

SCAG's Rail Access Plan

In 2020, the Southern California Association of Governments (SCAG) released their Rail Access Plan to address accessibility to the future Arrow stations. The SMP recommends implementing focused projects from the Rail Access Plan which includes bicycle and pedestrian improvements.

San Bernardino County Non-Motorized Transportation Plan

In 2018, The San Bernardino County Transit Authority (SBCTA) revised their Non-Motorized Transportation Plan. The SMP recommends implementing bicycle and pedestrian projects from this plan.

Bicycle and Pedestrian Counts

Redlands residents volunteered to perform bicycle and pedestrian counts at specific locations in Redlands. This web-based system was used to determine bicycle and pedestrian activity.

Orange Blossom Trail + Highland-Redlands Regional Connector Project

The Orange Blossom Trail stretches from Redlands' western City boundaries (Mountain View Avenue) to the eastern City boundaries (Wabash Street). The Orange Blossom Trail is a valued community supported asset and is considered to be the "backbone" of the Redlands bikeway system. Routing for the trail was approved in 2015. The Orange Blossom Trail is a paved trail for 3.5 miles. The trail is inturrupted by a 2.5 mile section on city streets, and when fully realized, will expand local and regional active tranportation options. This study evaluated the unbuilt segments of the overall trail. For more information, please see the .Conceptual Alignment Study Opportunity and Constraints & Final Alignment Addendum. (PDF)

The Highland-Redlands Regional Connector Project plans to construct 4.7 miles of bikeways and walkways to connect the bikeway and trails system in the City of Highland and Redlands. The Class I bikeway will connect the City of Highland to Redlands from Redlands' northern boundary south along Orange Street to Pioneer, and west from Pioneer to Citrus Valley High School. A complementary Class II Bike Lane is proposed to run along Orange Street from the Redlands' northern boundary to Colton Avenue parallel to the trail, which would create an easier transition for bicyclists accessing Downtown Redlands.

Bicycle Facility Types

Different types of bicycle facilities are better suited for different roadways, based on considerations such as vehicle speeds and volumes, the roadway width, and other types of transportation using the space. The following bicycle facilities are part of the City of Redland's toolbox. It is important to note that some facilities promote both bicycle and pedestrian use.

Class I Bike Path

Class I Bike Paths are off-street facilities located in a separate right-of-way from the roadway and for the exclusive use of bicycles and pedestrians. The Orange Blossom Trail is a Class I Facility.

Class II Bike Lane

Class II Bike Lanes are on-street facilities dedicated to bicycles and identified with lane striping and pole signs. Class II facilities may be further separated from vehicular lanes and or parking lanes by buffers indicated with two to three foot diagonal painted striping.

Class III Bike Route

Class III facilities are on-street bike routes shared with motorists. They lack a dedicated striped lane, are identified with bike route signs, and often include the shared use marking, also known as a sharrow.

Class IV Protected Bike Lane

Class IV facilities are separated from traffic by a vertical barrier, such as a curb, median, or bollards. Also called a "cycle track" or" separated bikeway"

Class IV facilities are most helpful on streets with high traffic volume..

Bikeway Amenities

BIKE PARKING

- Includes curbside and sidewalk racks, corrals, bike lockers, or bike stations
- Racks provide short-term dedicated parking outdoors.
- Lockers provide long-term secure parking at high demand locations.
- Stations provide long-term parking typically near transit.

BICYCLE-PROTECTED INTERSECTION

- Intersections designed to provide additional separation, comfort, and safety for people biking and walking.
- May include bike boxes, signal priority, curb extensions, or islands.
- Ideal for locations with conflicts between people driving, walking, and biking.

Bikeway Amenities (cont.)

BIKE SIGNALS

- Bike signals can create even more separation between bicyclists and vehicles.
- Allows for better intersection movements for all users.

WAYFINDING

- Orients people to their surroundings and informs them on how to best navigate to their destination along preferred bicycle facilities.
- Offer a sense of safety and familiarize users with the network.

GREEN BIKE LANE THROUGH INTERSECTIONS

- Provides additional comfort for bicyclists.
- Creates bicycle visibility for drivers.
- Ideal for locations with conflicts between people driving, walking, and biking.

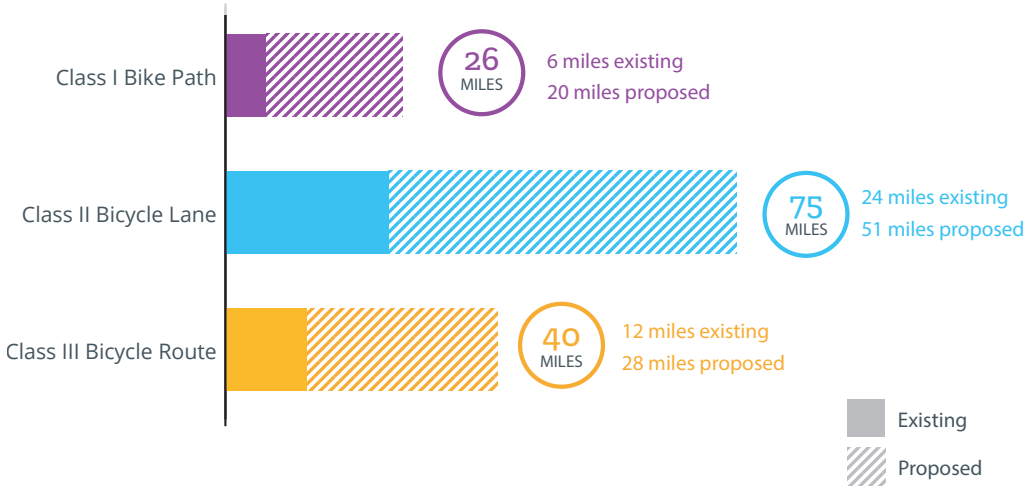
Citywide Bicycle Recommendations

The City of Redlands is proposing almost 42 miles worth of upgraded and new bikeways. There are approximately 6 miles of proposed Class I Bike Paths, 24 miles of Class II Bike Lanes, 12 miles of Class III Bike Routes. **Figure 33** presents the mileage of the bike network today and the proposed new bikeways. **Figure 34 - Figure 37** shows the existing and proposed planned bicycle facilities throughout Redlands.

It is important to note that the recommendations from the previously planned bicycle facilities are from the 2015 Bicycle Master Plan, the 2017 General Plan, SCAG's 2020 Rail Access Plan, the Draft Transit Villages Specific Plan, and the County of San Bernardino's Non-Motorized Transportation Plan.

A full list of the previously planned projects and which plan it came from can be found in Appendix E.

Figure 33. Complete Bicycle Network



Feasibility of Improvement Recommendations

This is a planning document, providing a high-level blueprint to guide future bicycle and pedestrian improvements throughout Redlands. This plan will show the recommended bicycle network, the prioritized projects based on the projects prioritization methodology, and an implementation plan with funding opportunities.

Each project in this plan will require more detailed project-level analysis, community engagement, and engineering study. As the City proceeds with more detailed project-level planning, some projects identified in this plan may require refinement.

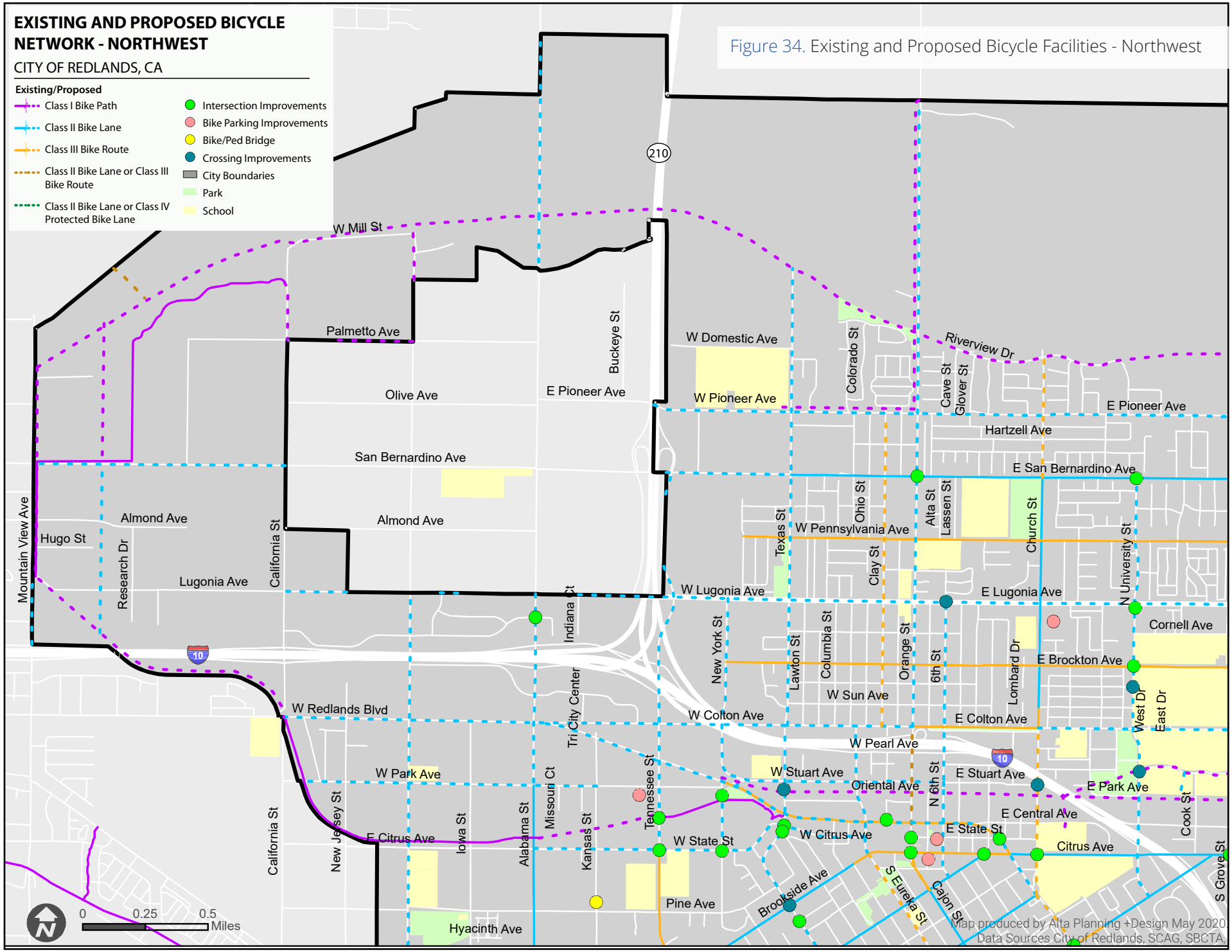
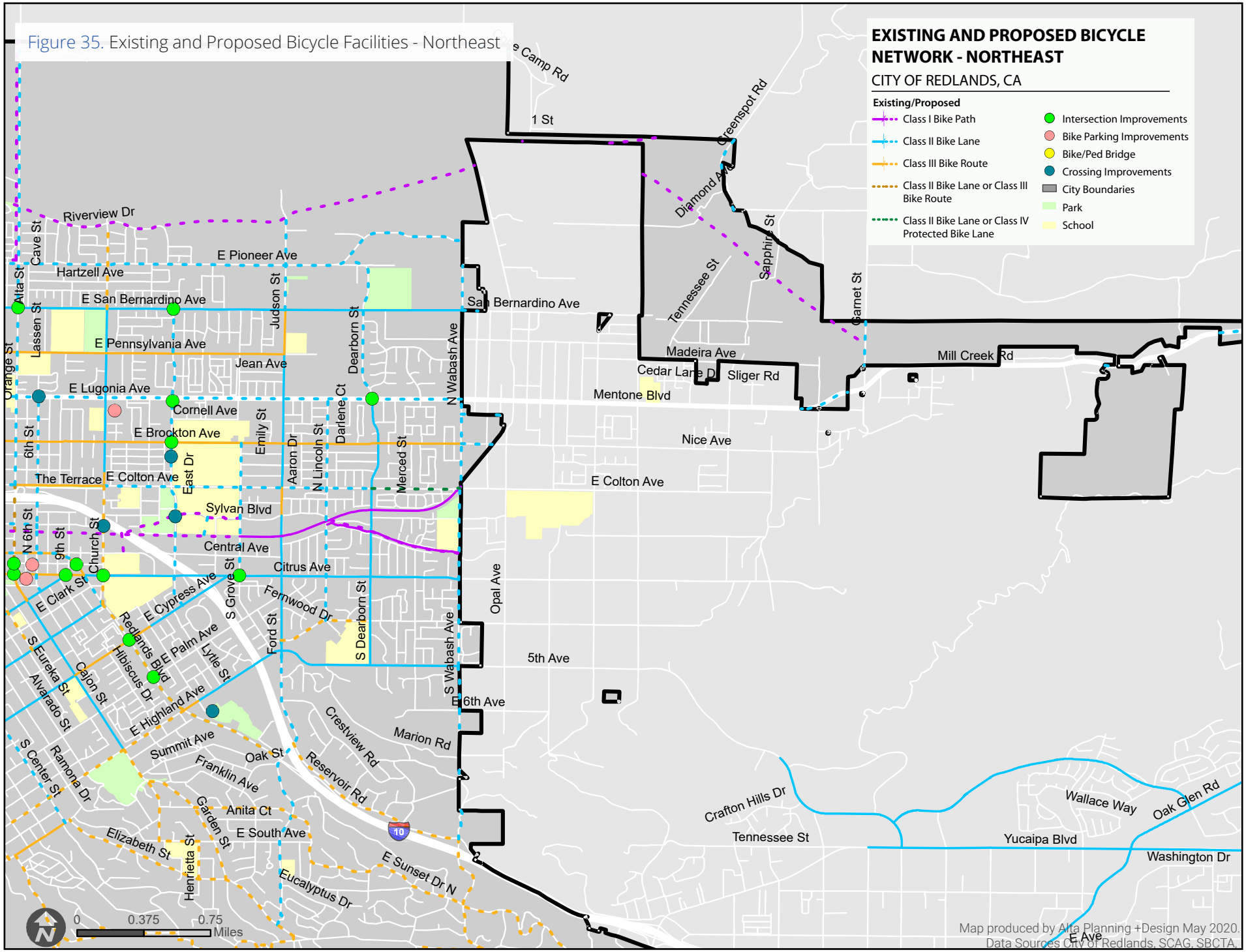


Figure 34. Existing and Proposed Bicycle Facilities - Northwest

Figure 35. Existing and Proposed Bicycle Facilities - Northeast



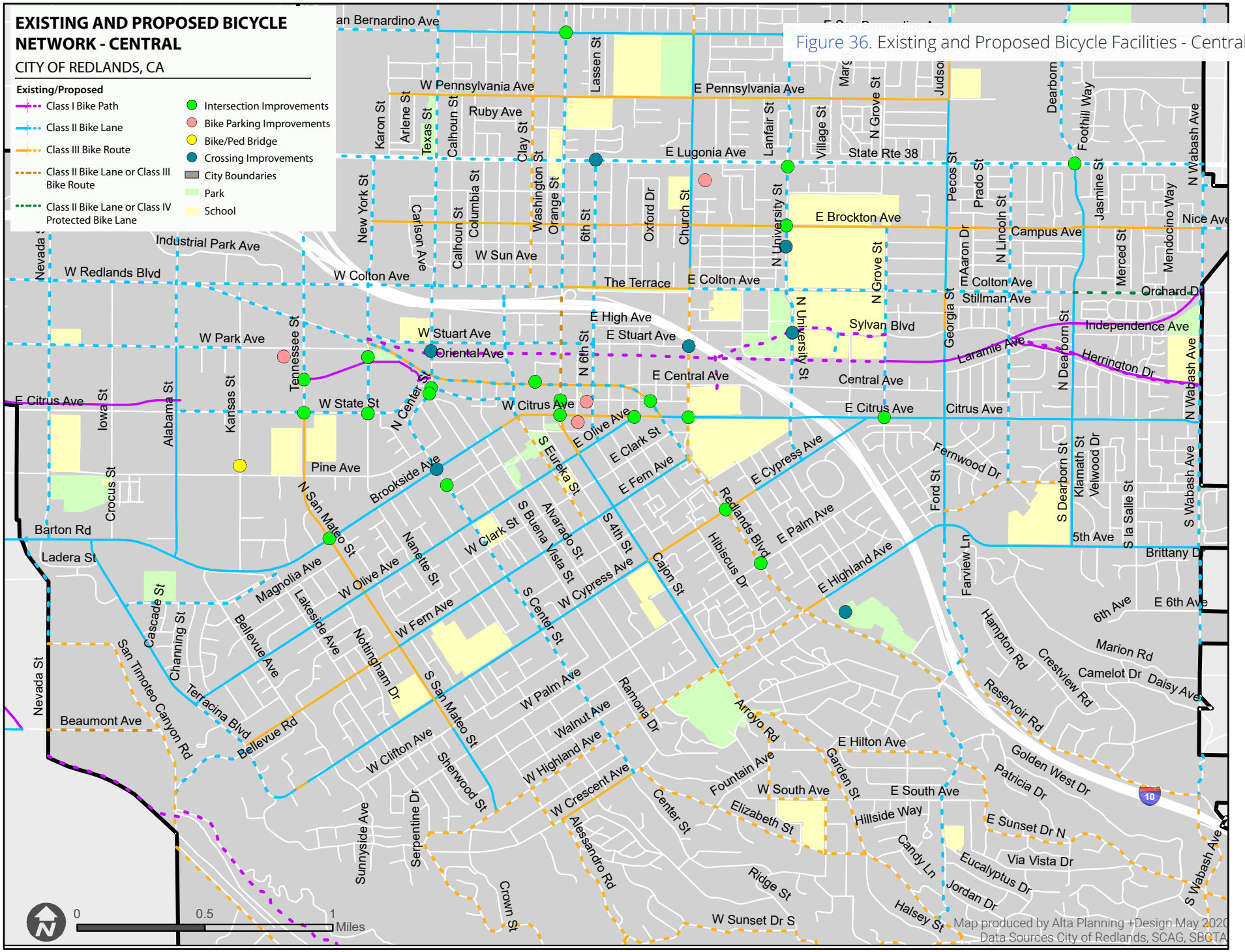
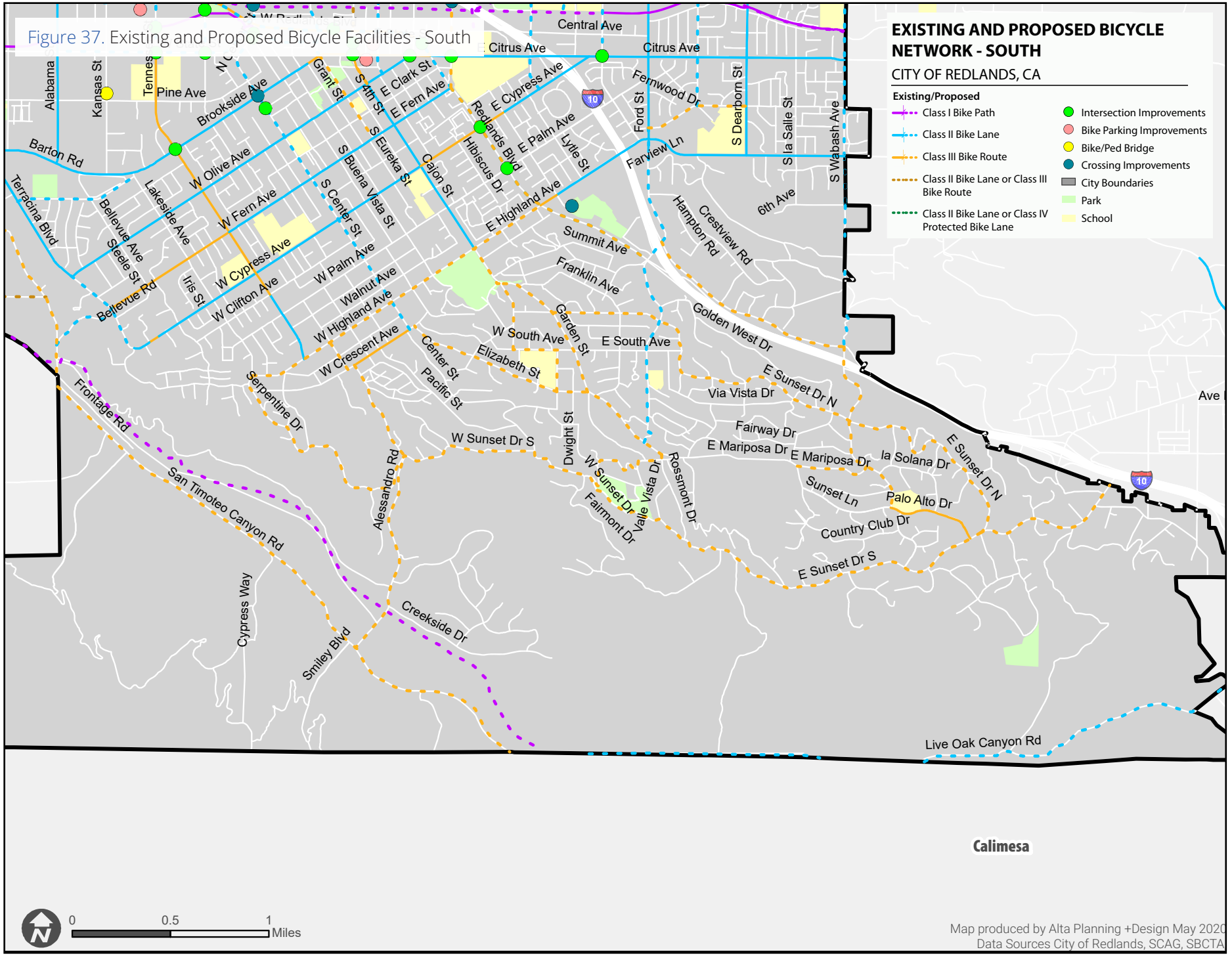


Figure 36. Existing and Proposed Bicycle Facilities - Central

Figure 37. Existing and Proposed Bicycle Facilities - South



Citywide Pedestrian Improvements

The City of Redlands has proposed a multitude of walking and bicycling infrastructure improvements through the General Plan, the draft Transit Villages Specific Plan, and the Rail Access Plan.

Improving crossings at high-traffic intersections and where significant barriers exist, installing new sidewalks where gaps currently exist, and repairing and maintaining existing sidewalks can provide a safe and enjoyable experience for both pedestrians and bicyclists.

Figure 38-Figure 41 shows the locations of proposed intersection improvements

Intersection improvements can include projects like installing a high-visibility crosswalk, Americans with Disabilities Act (ADA) accessible curb ramp, protected intersection, a rectangular rapid flashing beacon, etc.

Pedestrian Facility Types

Different types of crossing improvements can greatly enhance the experience of walking throughout the City. It is important to note that some of the facilities listed below in the toolbox promote both pedestrian and bicycle safety.

BULB-OUT

RECTANGULAR RAPID FLASHING BEACON

SIDEWALKS

REFUGE ISLAND

HAWK SIGNAL

HIGH-VISIBILITY CROSSWALK

CURB RAMP

PEDESTRIAN SCALE LIGHTING

Supporting Infrastructure

In order to ensure an enjoyable trip from beginning to end, supporting infrastructure is needed at intersections to make crossing easier, wayfinding signs along the way to help reach your destination, and secure parking once you reach your destination to store your bicycle.

Intersection Enhancements

A bicycle and pedestrian network is not complete without looking at how people cross challenging intersections and reduce conflicts between people driving, walking, and biking. New treatments can be added to retrofit intersections to better serve bicycling and walking moving across or through busy intersections.

Pedestrian-Scale Lighting

Pedestrian-scale lighting provides illumination of walking areas by installing frequent lamp posts at a low height. Pedestrian-scale lighting increases visibility to drivers and bicyclists, increases pedestrian comfort, perceived sense of safety, and helps to create an inviting and vibrant streetscape for those walking and biking throughout the city.

Bike Parking

Knowing you have a secure place to store your bike at your destination is an important part of making a bike trip feasible. The City has many bike parking facilities but more is needed, especially to accommodate cargo and other large bicycles.

Streetscape Amenities

Sidewalk amenities like benches, shade structures, parklets, water fountains, public art, and pedestrian signals can contribute to a safer, inviting, and more pedestrian-oriented community. These elements can greatly activate the City's sidewalks at popular destinations.

Wayfinding

Providing wayfinding signs for bicyclists and pedestrians that directs them to nearby destinations on the safest route is an important element to any bicycle and pedestrian network.

Figure 38. Existing and Proposed Pedestrian Facilities - Northwest

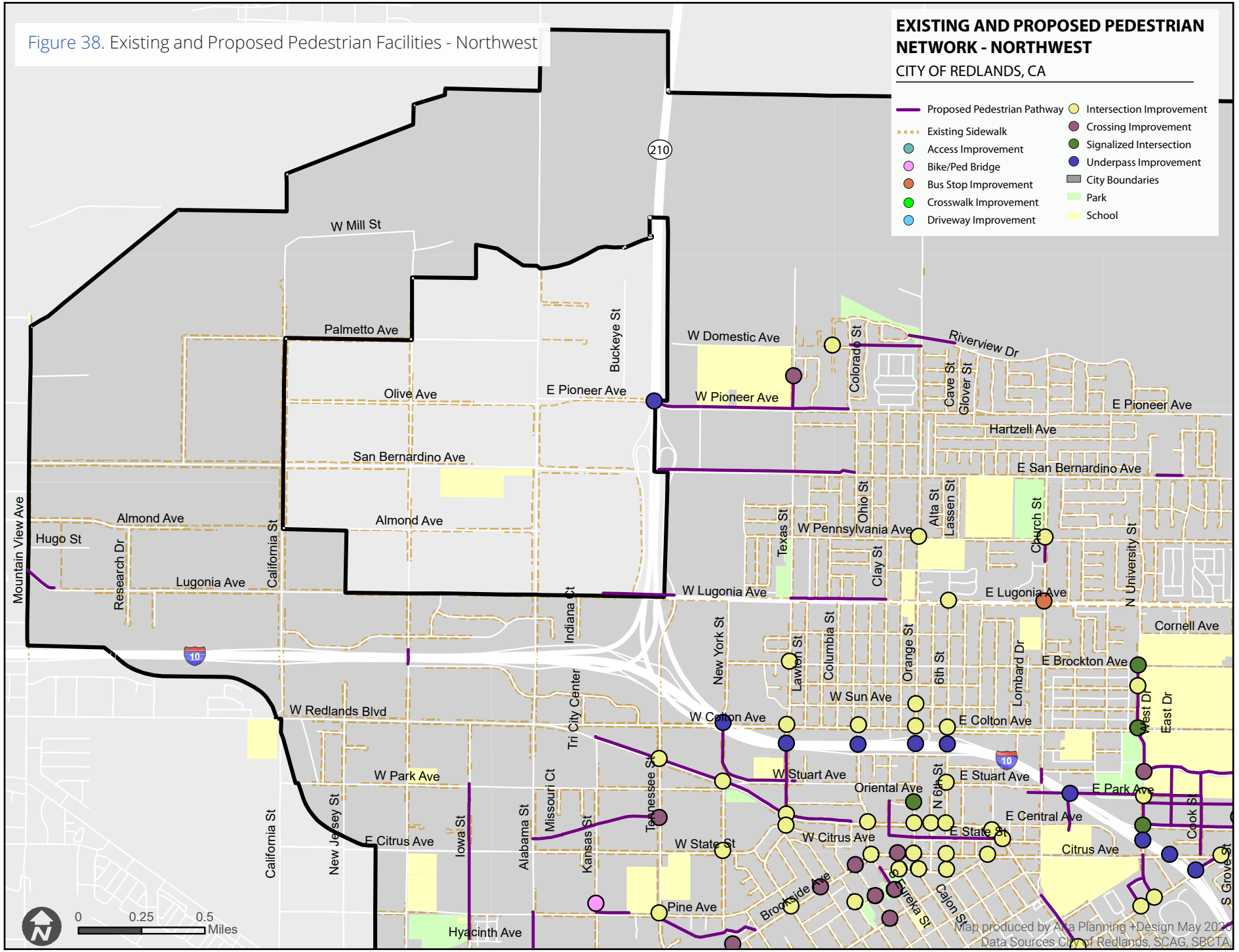


Figure 39. Existing and Proposed Pedestrian Facilities - Northeast

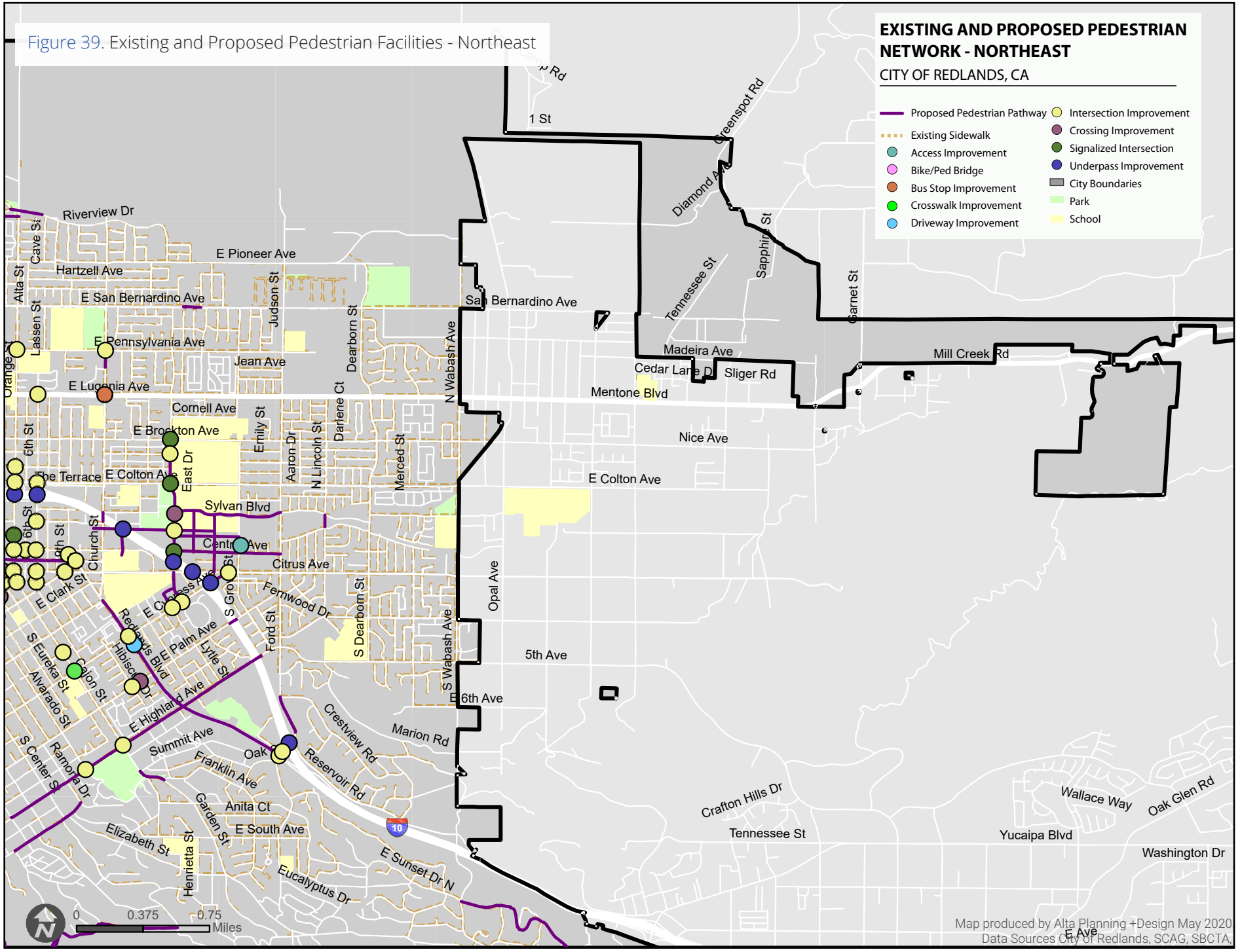
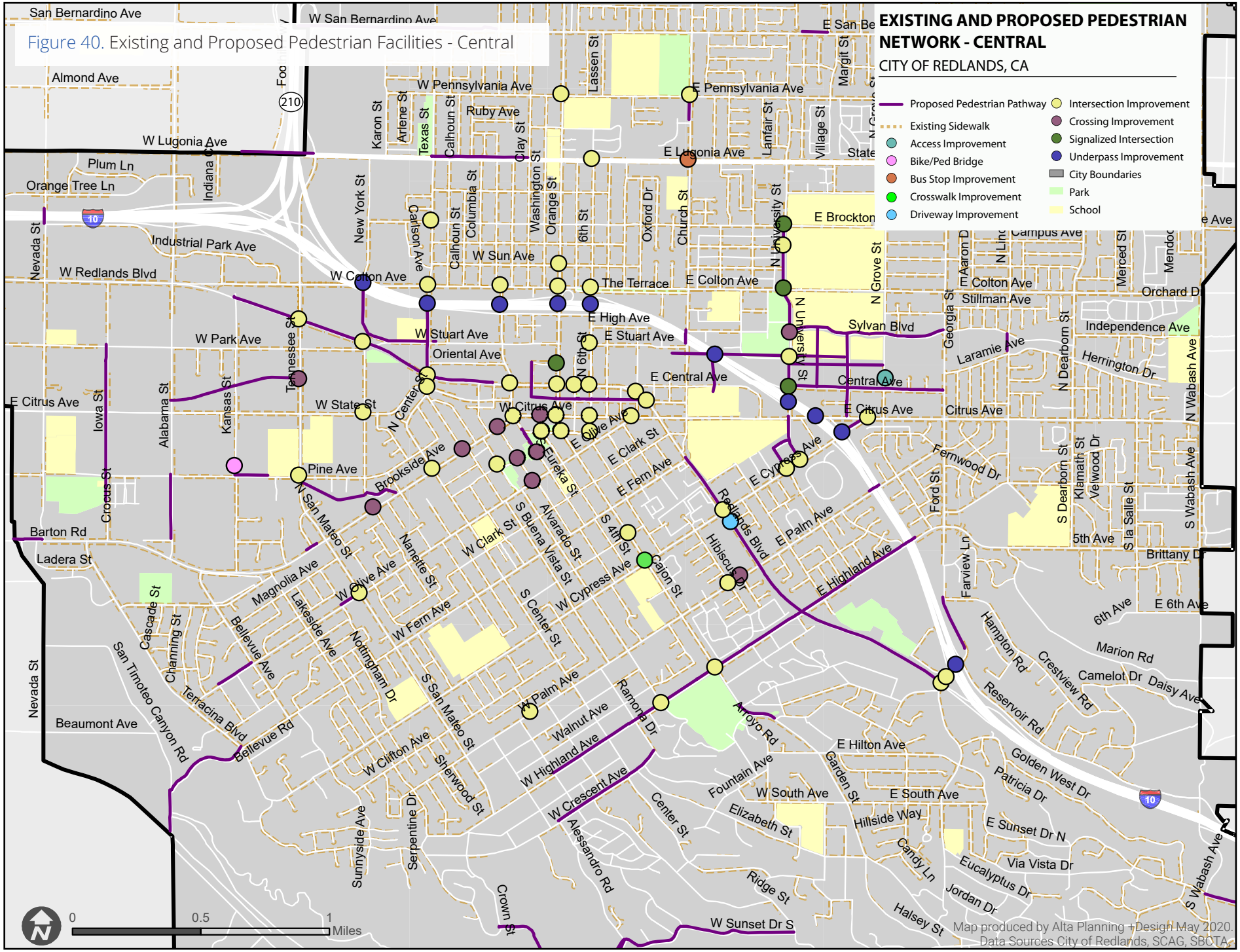


Figure 40. Existing and Proposed Pedestrian Facilities - Central



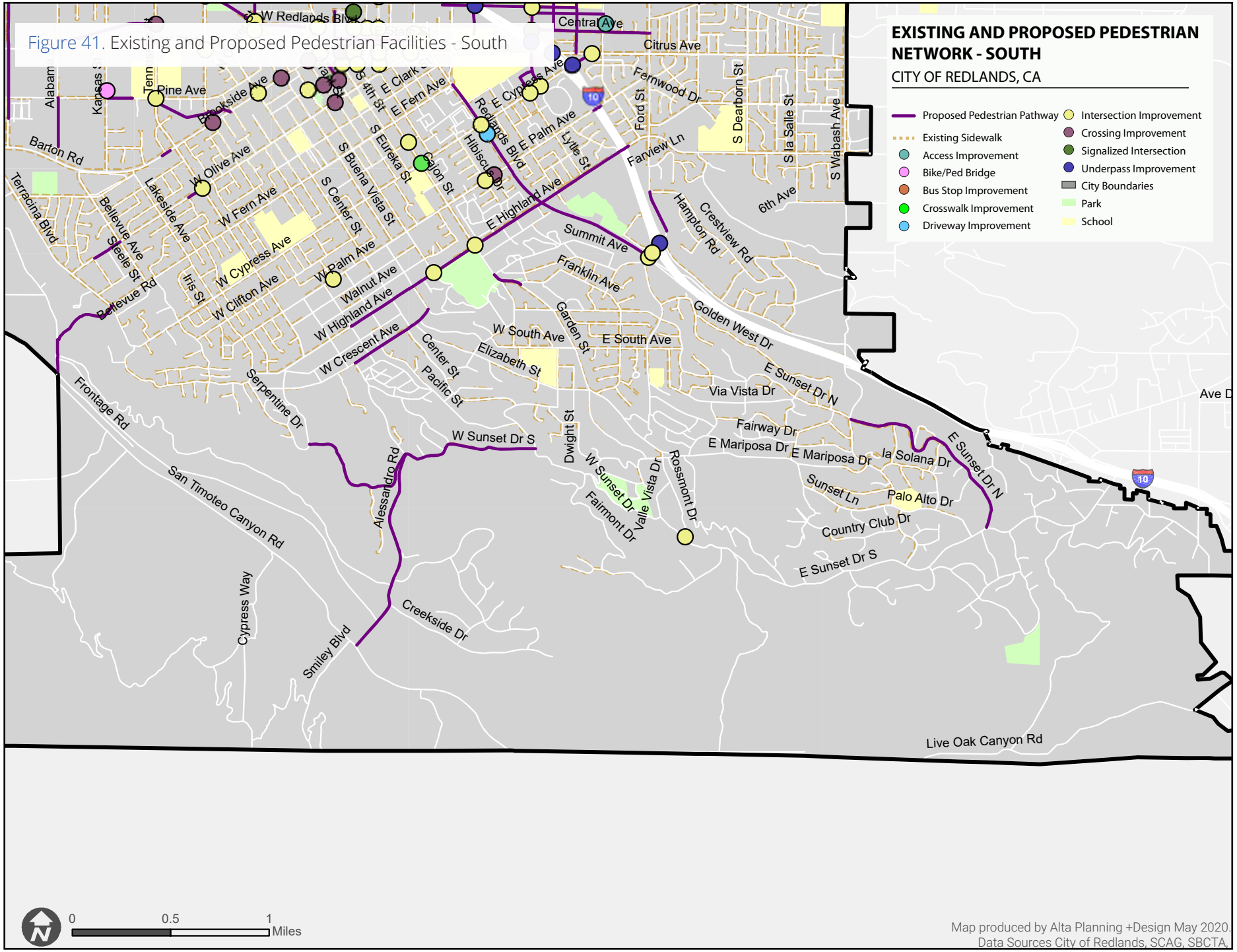


Figure 41. Existing and Proposed Pedestrian Facilities - South

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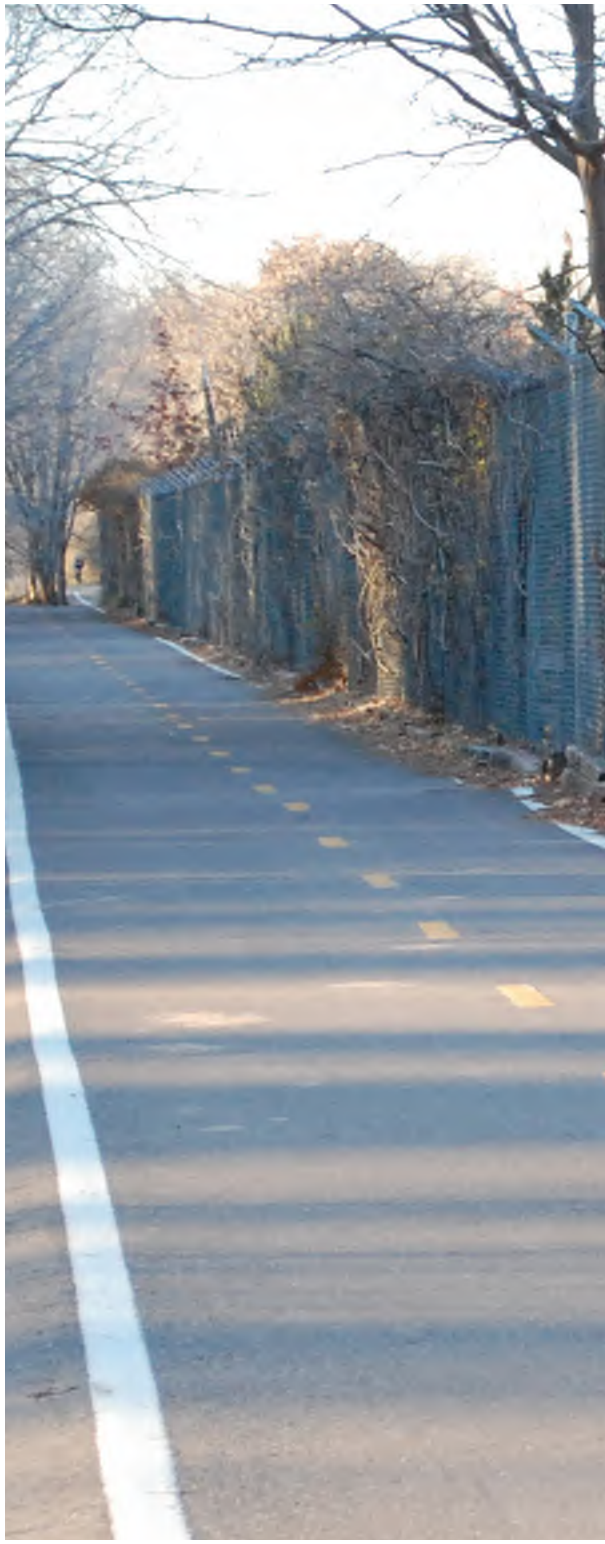
Project Prioritization



Prioritizing the Mobility Network

The intent of evaluating projects is to create a prioritized list of projects for implementation. As projects are implemented, lower ranked projects move up the list. The project prioritization list included in this plan is flexible and should be used as a guideline to implementation. While one project may be ranked higher than another in this guide, funding may better align with a lower ranked project to help leverage local money with competitive, regional, state, and federal resources. The high-priority project list, and perhaps the overall project list may change over time as a result of changing bicycle and walking patterns, land use patterns, implementation constraints, and opportunities and the development of other transportation improvements.

Project prioritization was developed through feedback the project team received from City staff as well as input from the CAC members.

The project prioritization strategy looked at different indicators to determine the need, feasibility, and benefit of implementing each recommended bicycle and pedestrian project. The project team developed a prioritization criteria and collectively determined the importance of each consideration by assigning each category an appropriate weight. The prioritization criteria is shown in the table on the following pages.

Bicycle Prioritization Criteria

CRITERIA	DESCRIPTION	MAX. SCORE
Proximity to School	◆ The project is within a quarter mile of the school (5 pts) ◆ The project is within a half mile of the school (3 pts) ◆ The project is within one mile of the school (1 pt)	5
Proximity to a Bus Stop	◆ The project is within a quarter mile of a bus stop (5 pts) ◆ The project is within a half mile of a bus stop (3 pts) ◆ The project is within a mile of a bus stop (1 pt)	5
Proximity to a Key Destination	◆ The project is within a quarter mile of a key destination (5 pts) ◆ The project is within a half mile of a key destination (3pts) ◆ The project is within a mile of a key destination (1 pt)	5
Proximity to Bicycle Involved Collisions	◆ The project is within 1,000 feet of multiple bicycle/pedestrian involved collisions (4 pts), plus one point for reported injury/fatality ◆ The project is within 1,000 feet of one bicycle/pedestrian collisions (2 pts), plus one point for reported injury/fatality ◆ The project is not within 1,000 feet of any bicycle/pedestrian involved collisions	5
Located on a High Injury Network	◆ The project is on a high injury network corridor (5 pts) ◆ The project is not on a high injury network corridor (0 pts)	5
Intra-City Connectivity	◆ The project is on a local corridor or trail (5 pts) ◆ The project is not located on a local corridor or trail (0 pts)	5

Bicycle Prioritization Criteria (cont.)

CRITERIA	DESCRIPTION	MAX. SCORE
Regional Connectivity	• The project is on a regional corridor or trail (5 pts) • The project is not located on a regional corridor or trail (0 pts)	5
Community Concern/Need	• The project is located in an area where the community has identified a concern or need (5 pts) • The project is not located in an area where the community has identified a concern or need (0 pts)	5
Median Household Income	• The project is located in census tracts with an average MHI under 30% of the Redlands MHI (5 pts) • The project is located in census tracts with an average MHI between 31% and 50% (4 pts) • The project is located in census tracts with an average MHI between 51% and 80% (3 pts) • The project is located in census tracts with an average MHI above 80% (0 pts)	5
Free and Reduced Lunch Program Eligibility	• The project is located in the service boundary of an Elementary School where 80-100% of students qualify for FRPM (5 pts) • The project is located in the service boundary of an Elementary School where 60-80% of students qualify for FRPM (3 pts) • The project is located in the service boundary of an Elementary School where less than 60% of students qualify for FRPM (0 pts)	5
Hazardous Environmental Areas	• The project is located in an area with over 80th percentile burden (5 pts) • The project is located in the 50th to 80th percentile range (3 pts) • The project is located in the bottom 50th percentile burden (0 pts)	5

Bicycle Prioritization Criteria (cont.)

CRITERIA	DESCRIPTION	MAX. SCORE
Public Health	• The project is located in census tracts with a score of 40 or less (5 pts) • The project is located in census tracts with a score between 40 and 60 points (3 pts) • The project is located in census tracts with a score of more than 60 (0 pts)	5
Inclusion in Bicycle Master Plan	• The project is identified in the Bicycle Master Plan (5 pts) • The project is not identified in the Bicycle Mater Plan (0 pts)	5
Inclusion in the Draft Transit Villages Specific Plan	• The project is identified in the Draft Transit Villages Specific Plan (5 pts) • The project is not identified in the Draft Transit Villages Specific Plan (0 pts)	5
Inclusion in SBCTA's Non-Motorized Transportation Plan	• The project is identified in the Non- Motorized Transportation Plan (5 pts) • The project is not identified in the Non-Motorized Transportation Plan (0 pts)	5
Inclusion in the Passenger Rail Access Plan	• The project is identified in the Passenger Rail Access Plan (5 pts) • The project is not identified in the Passenger Rail Access Plan (0 pts)	5
	TOTAL POSSIBLE SCORE	**80**

Pedestrian Prioritization Criteria

CRITERIA	DESCRIPTION	MAX. SCORE
Proximity to School	• The project is within a quarter mile of the school (5 pts) • The project is within a half mile of the school (3 pts) • The project is within one mile of the school (1 pt)	5
Proximity to a Bus Stop	• The project is within a quarter mile of a bus stop (5 pts) • The project is within a half mile of a bus stop (3 pts) • The project is within a mile of a bus stop (1 pt)	5
Proximity to a Key Destination	• The project is within a quarter mile of a key destination (5 pts) • The project is within a half mile of a key destination (3pts) • The project is within a mile of a key destination (1 pt)	5
Proximity to Pedestrian Involved Collisions	• The project is within 1,000 feet of multiple bicycle/pedestrian involved collisions (4 pts), plus one point for reported injury/fatality • The project is within 1,000 feet of one bicycle/pedestrian collisions (2 pts), plus one point for reported injury/fatality • The project is not within 1,000 feet of any bicycle/pedestrian involved collisions	5
Located on a High Injury Network	• The project is on a high injury network corridor (5 pts) • The project is not on a high injury network corridor (0 pts)	5
Intra-City Connectivity	• The project is on a local corridor or trail (5 pts) • The project is not located on a local corridor or trail (0 pts)	5

Pedestrian Prioritization Criteria (cont.)

CRITERIA	DESCRIPTION	MAX. SCORE
Regional Connectivity	• The project is on a regional corridor or trail (5 pts) • The project is not located on a regional corridor or trail (0 pts)	5
Community Concern/Need	• The project is located in an area where the community has identified a concern or need (5 pts) • The project is not located in an area where the community has identified a concern or need (0 pts)	5
Median Household Income	• The project is located in census tracts with an average MHI under 30% of the Redlands MHI (5 pts) • The project is located in census tracts with an average MHI between 31% and 50% (4 pts) • The project is located in census tracts with an average MHI between 51% and 80% (3 pts) • The project is located in census tracts with an average MHI above 80% (0 pts)	5
Free and Reduced Lunch Program Eligibility	• The project is located in the service boundary of an Elementary School where 80-100% of students qualify for FRPM (5 pts) • The project is located in the service boundary of an Elementary School where 60-80% of students qualify for FRPM (3 pts) • The project is located in the service boundary of an Elementary School where less than 60% of students qualify for FRPM (0 pts)	5
Hazardous Environmental Areas	• The project is located in an area with over 80th percentile burden (5 pts) • The project is located in the 50th to 80th percentile range (3 pts) • The project is located in the bottom 50th percentile burden (0 pts)	5

Pedestrian Prioritization Criteria (cont.)

CRITERIA	DESCRIPTION	MAX. SCORE
Public Health	• The project is located in census tracts with a score of 40 or less (5 pts) • The project is located in census tracts with a score between 40 and 60 points (3 pts) • The project is located in census tracts with a score of more than 60 (0 pts)	5
Inclusion in the Draft Transit Villages Specific Plan	• The project is identified in the Draft Transit Villages Specific Plan (5 pts) • The project is not identified in the Draft Transit Villages Specific Plan (0 pts)	5
Inclusion in SBCTA's Non-Motorized Transportation Plan	• The project is identified in the Non- Motorized Transportation Plan (5 pts) • The project is not identified in the Non-Motorized Transportation Plan (0 pts)	5
Inclusion in the Passenger Rail Access Plan	• The project is identified in the Passenger Rail Access Plan (5 pts) • The project is not identified in the Passenger Rail Access Plan (0 pts)	5
	TOTAL POSSIBLE SCORE	**75**

Prioritized Bicycle and Pedestrian Projects

Figure 42 shows the top ten tier 1 bicycle projects and **Figure 43** shows the top ten tier 1 pedestrian projects. The following tables summarize the bicycle and pedestrian projects that were scored as Tier 1 projects. This list will act as a guide for implementation for the City when funding becomes available.

Figure 44 - Figure 49 shows the top bicycle and pedestrian projects within each council district.

It is important to note that some projects will require additional study to aquire an exact cost.

Bicycle and Pedestrian Tier 2 and Tier 3 Projects are located in Appendix F.

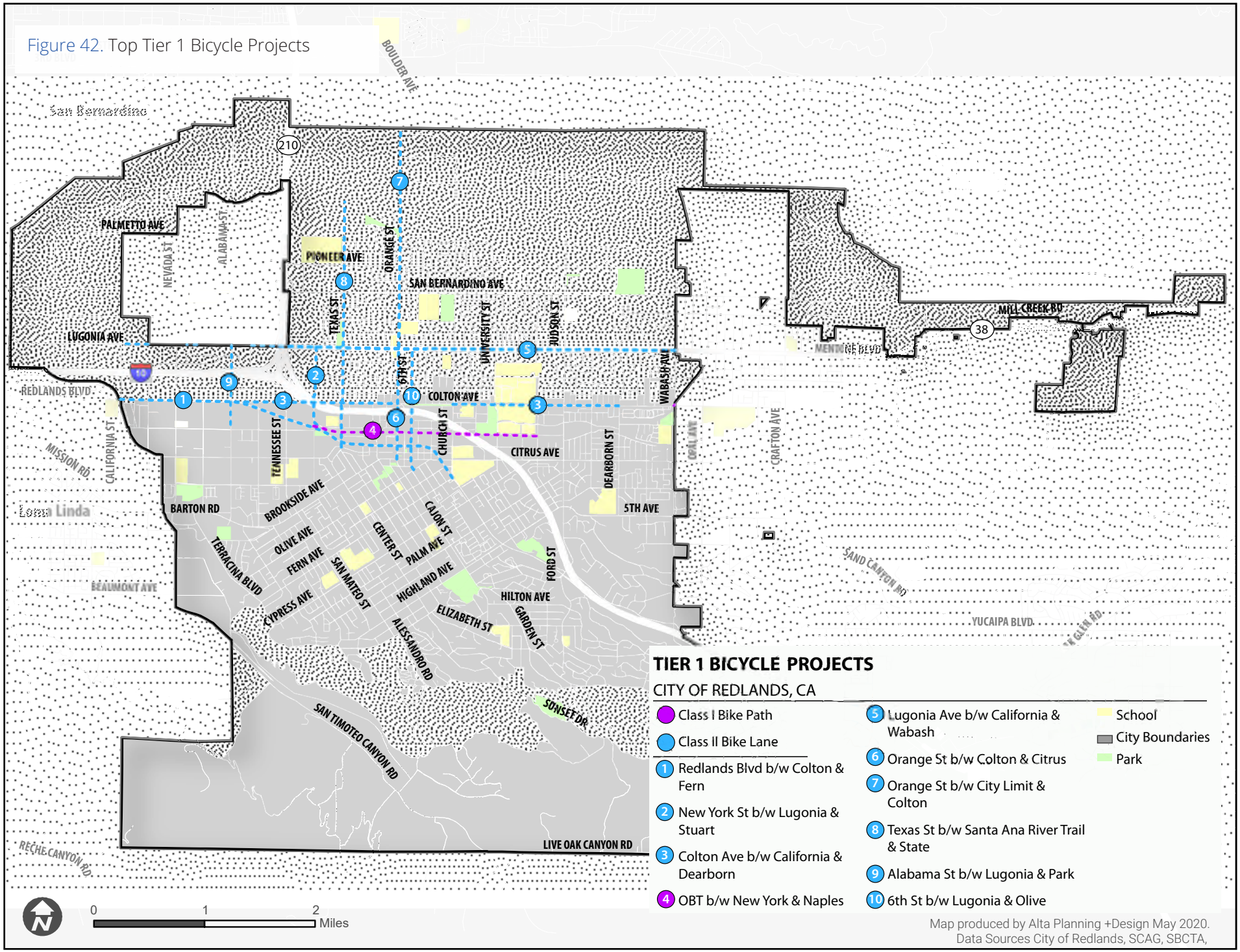
The projects have been categorized into the following categories:

Tier 1: Projects with the highest potential to increasing the number of people bicycling and walking. The City should actively pursue funding for these projects.

Tier 2: Projects with a lower potential than Tier 1 in increasing bicycling and walking yet still play an important role. These projects should be pursued as funding opportunities arise. (Appendix F)

Tier 3: Projects that help complete the bicycling and walking network should be funded mostly by development projects. (Appendix F)

Figure 42. Top Tier 1 Bicycle Projects



Tier 1 Bicycle Projects

STREET	FROM	TO	PROPOSED PROJECT	LOCAL/REGIONAL CORRIDOR	TOTAL SCORE	COST LOW	COST HIGH
Redlands Blvd	Colton Ave	Fern Ave	Class II Bike Lane	Both	73	$221,320	$893,970
New York St	Lugonia Ave	Stuart Ave	Class II Bike Lane	Both	71	$72,432	$292,572
Colton Ave	California St	Dearborn St	Class II Bike Lane	Both	70	$403,406	$1,629,464
Orange Blossom Trail	New York St	Naples St	Class I Bike Path	Both	68	$1,606,500	$7,956,000
Lugonia Ave	California St	Wabash St	Class II Bike Lane	Both	65	$422,520	$1,706,670
Orange St	Colton Ave	Citrus Ave	Class II Bike Lane or Class III Bike Route	Both	65	$50,300	$203,175
Orange St	San Bernardino Ave	Colton Ave	Class II Bike Lane	Both	64	$250,494	$1,011,812
Texas St	Santa Ana River Trail	State St	Class II Bike Lane	Both	63	$223,332	$902,097
Alabama St	Lugonia Ave	Park Ave	Class II Bike Lane	Both	63	$76,456	$308,826
6th St	Lugonia Ave	Olive Ave	Class II Bike Lane	Regional	63	$110,660	$446,985
State St	Alabama St	Eureka St	Class II Bike Lane	Both	63	$137,822	$556,700
San Bernardino Ave	OBT	California St	Class II Bike Lane	Both	61	$100,600	$406,350
Tennessee St	San Bernardino Ave	State St	Class II Bike Lane	Both	61	$124,744	$503,874
Church St	Santa Ana River Trail	San Bernardino Ave	Class III Bike Route	Both	60	$15,939	$24,255

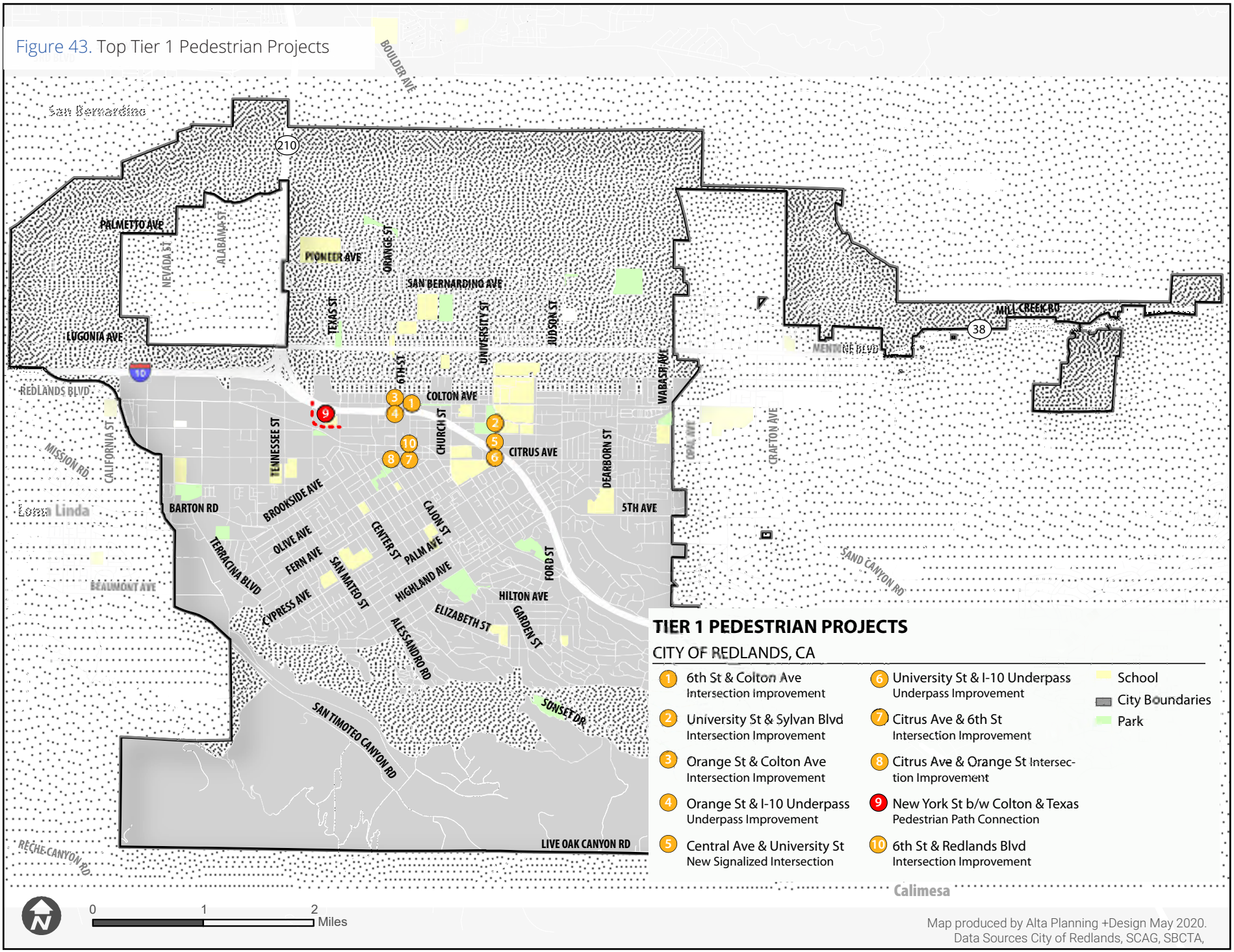
Tier 1 Bicycle Projects (cont.)

STREET	FROM	TO	PROPOSED PROJECT	LOCAL/REGIONAL CORRIDOR	TOTAL SCORE	COST LOW	COST HIGH
University St	San Bernardino Ave	Cypress Ave	Class II Bike Lane	Both	60	$170,014	$686,732
New York St	OBT	End of New York St	Class II Bike Lane	Local	59	$23,138	$93,461
Stuart Ave	New York St	6th St	Class II Bike Lane	Regional	58	$85,510	$345,398
Cajon St	Citrus Ave	Olive Ave	Class III Bike Route	Both	58	$4,106	$6,248
Orange Blossom Trail	Mountain View Ave	Bryn Mawr Ave	Class I Bike Path	Both	56	$1,134,000	$5,616,000
Grove St	Brockton Ave	Citrus Ave	Class II Bike Lane	Regional	56	$4,106	$6,248
W Lugonia Ave & 6th St			Redesign Median	Both	56		
W San Bernardino Ave & Orange St			Bike Detection Improvement	Both	56		
Nevada St	Lugonia Ave	Barton Rd	Class II Bike Lane	Both	54	$152,912	$617,652
6th St	Stuart Ave	OBT	Class II Bike Lane	Regional	54	$4,024	$16,254
San Bernardino Ave	E Donut Hole	Texas St	Class II Bike Lane	Both	54	$50,300	$203,175
Park Ave	OBT	Kansas St	Class II Bike Lane	Regional	54	$117,702	$475,430
W Citrus Ave & Cajon St			Bike Detection Improvement	Both	53		

Tier 1 Bicycle Projects (cont.)

STREET	FROM	TO	PROPOSED PROJECT	LOCAL/REGIONAL CORRIDOR	TOTAL SCORE	COST LOW	COST HIGH
University St & Sylvan Blvd			Mid-block Crossing Improvement	Both	52		
Orange St & E State St				Both	51		
E State St & E Citrus Ave			Intersection Improvement	Both	51		
Colton Ave	Dearborn St	OBT	Class II Bike Lane or Class IV Protected Bike Lane	Both	51	$163,275	$465,625
Pioneer Ave	Buckeye St	Wabash Ave	Class II Bike Lane	Regional	51	$365,178	$1,475,051
Center St	State St	Crescent Ave	Class II Bike Lane	Both	50	$180,074	$727,367
Zanja Creek Trail	OBT	Grove St	Class I Bike Path	Regional	49	$543,375	$2,691,000
Clay St	Colton Ave	Pioneer Ave	Class III Bike Route	Regional	49	$30,188	$45,938
Tennessee St at OBT			Intersection Improvement	Both	49		
W State St & Tennessee St			Intersection Improvement	Both	49		
New York St at OBT			Improve Wayfinding	Both	49		
Alabama St & Orange Tree Ln			Intersection Improvement	Both	49		
E Citrus Ave & olive Ave			Intersection Improvement	Both	48		
N University St & Lugonia Ave			Safety Improvements	Both	45		

Figure 43. Top Tier 1 Pedestrian Projects



Tier 1 Pedestrian Projects

STREET	CROSS STREET	PROPOSED PROJECT	LOCAL/REGIONAL CORRIDOR	TOTAL SCORE	COST LOW	COST HIGH
6th St	Colton Ave	Intersection Improvement	Both	67		
University St	Sylvan Blvd	Mid-Block Crossing Improvement	Both	66		
Orange St	Colton Ave	Intersection Improvement	Both	65		
Orange St	I-10 Underpass	Underpass Improvement	Both	64		
Central Ave	University St	New Signalized Intersection	Both	63		
University St	I-10 Underpass	Underpass Improvement	Both	63		
Citrus Ave	6th St	Intersection Improvement	Both	63		
Citrus Ave	Orange St	Intersection Improvement	Both	63		
New York St	Between Colton and Texas	Pedestrian Path Connection	Both	63	$46,228	$173,357
6th St	Redlands Blvd	Intersection Improvement	Both	62		
Orange St	Redlands Blvd	Intersection Improvement	Both	61		
Texas St	Redlands Blvd	Intersection Improvement	Both	61		
5th St	Redlands Blvd	Intersection Improvement	Both	61		
Citrus Ave	Eureka St	Intersection Improvement	Both	61		

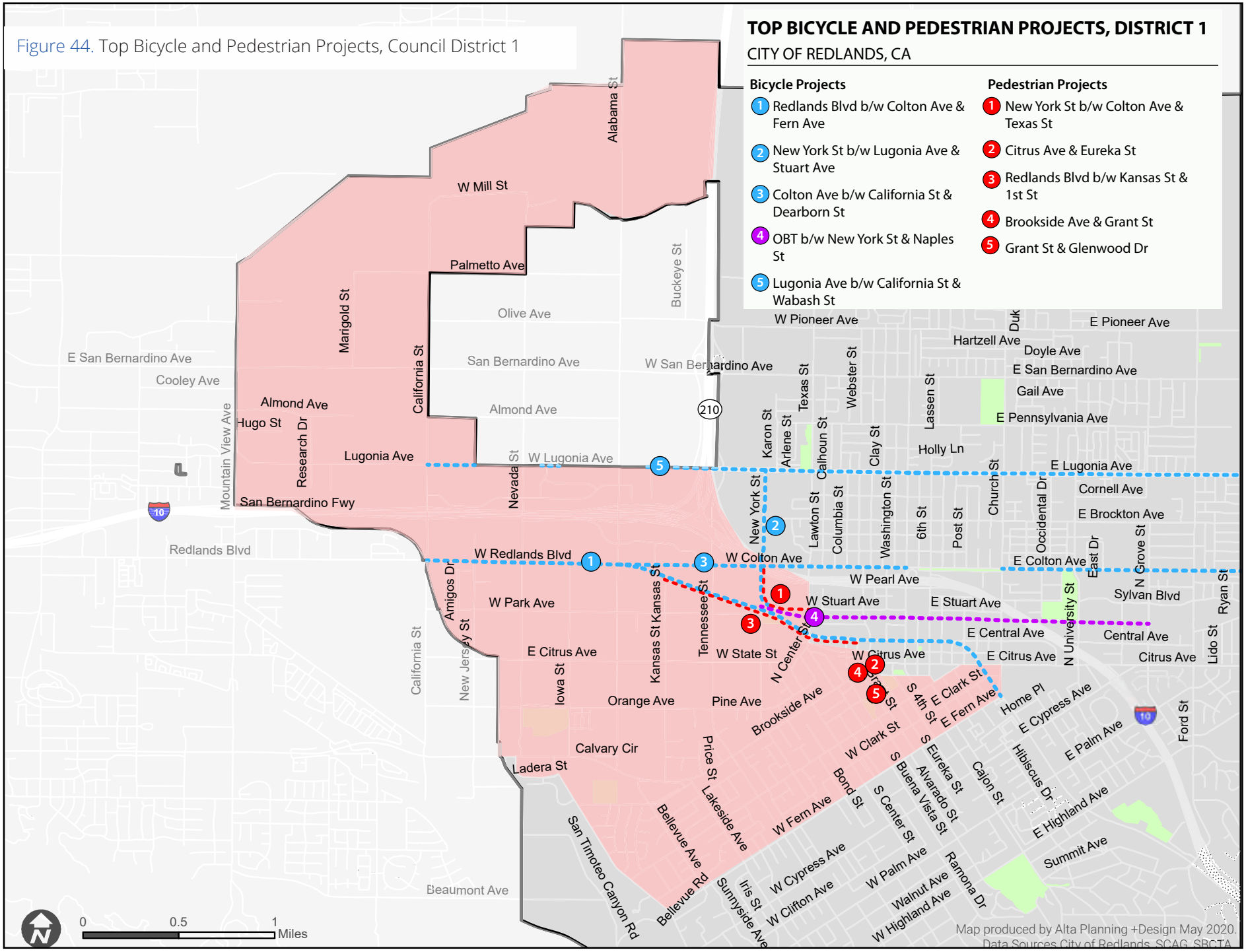
Tier 1 Pedestrian Projects (cont.)

STREET	CROSS STREET	PROPOSED PROJECT	LOCAL/REGIONAL CORRIDOR	TOTAL SCORE	COST LOW	COST HIGH
6th St	I-10 Underpass	Underpass Improvement	Regional	60		
University St	Between Park and Central	Pedestrian Path Connection	Regional	60	$11,877	$44,538
Redlands Blvd	Between Kansas and 1st	Pedestrian Path Connection	Both	60	$113,313	$424,924
Park Ave	Between Church and Cook	Pedestrian Path Connection	Both	59	$70,899	$265,870
Brookside Ave	Grant St	Mid-Block Crossing Improvement	Both	59		
Grant St	Glenwood Dr	Mid-Block Crossing Improvement	Regional	58		
6th St	Lugonia Ave	Intersection Improvement	Both	58		
Citrus Ave	I-10 Underpass	Underpass Improvement	Both	58		
University St	Between Central and I-10 Off Ramp	Pedestrian Path Connection	Regional	58	$9,162	$34,359
Lugonia Ave	Texas St to Clay St	Pedestrian Path Connection	Both	57	$39,634	$148,626
Texas St	Between I-10 to Redlands Blvd	Pedestrian Path Connection	Both	57	$30,528	$114,479
University St	Park Ave	Intersection Improvement	Both	57		
Texas St	Colton Ave	Intersection Improvement	Both	56		
Pennsylvania Ave	Orange St	Intersection Improvement	Both	56		
Lugonia Ave	Church St	Bus Stop Improvement	Both	56		
Colton Ave	University Ave	New Signalized Intersection	Both	55		

Tier 1 Pedestrian Projects (cont.)

STREET	CROSS STREET	PROPOSED PROJECT	LOCAL/REGIONAL CORRIDOR	TOTAL SCORE	COST LOW	COST HIGH
Orange St	Oriental Ave	New Signalized Intersection	Both	55		
Central Ave	Between University and Judson	Pedestrian Path Connection	Regional	55	$63,434	$237,876
Sylvan Ave	Between University and Judson	Pedestrian Path Connection	Regional	55	$65,007	$243,776
Sun Ave	Orange St	Intersection Improvement	Both	54		
Park Ave	I-10 Underpass	Underpass Improvement	Local	54		
University Ave	Between Brockton and Sylvan	Pedestrian Path Connection	Regional	53	$45,141	$169,280
Orange Ave	Orangewood Ct to Kansas St	Pedestrian Path Connection	Both	51	$13,473	$50,525
Alabama St	Calvary Cir to Orange Ave	Pedestrian Path Connection	Both	50	$26,432	$99,121
Redlands Rail Corridor	University Ave to Grove St	Pedestrian Path Connection	Regional	48	$38,414	$144,053
Church St	Pennsylvania Ave to Church Pl	Pedestrian Path Connection	Regional	48	$9,590	$35,961
Cook St	Sylvan Ave to Citrus Ave	Pedestrian Path Connection	Regional	48	$34,073	$127,773
Orange Blossom Trail	Tennessee St to Alabama St	Pedestrian Path Connection	Both	46	$53,931	$202,241
Stuart Ave	Between Texas and Lawton	Pedestrian Path Connection	Both	46	$1,118	$4,194
New St	Between Sylvan and Central	Pedestrian Path Connection	N/A	46	$24,649	$92,434
San Bernardino Ave	Tennessee St to Webster St	Pedestrian Path Connection	Both	44	$64,837	$243,138

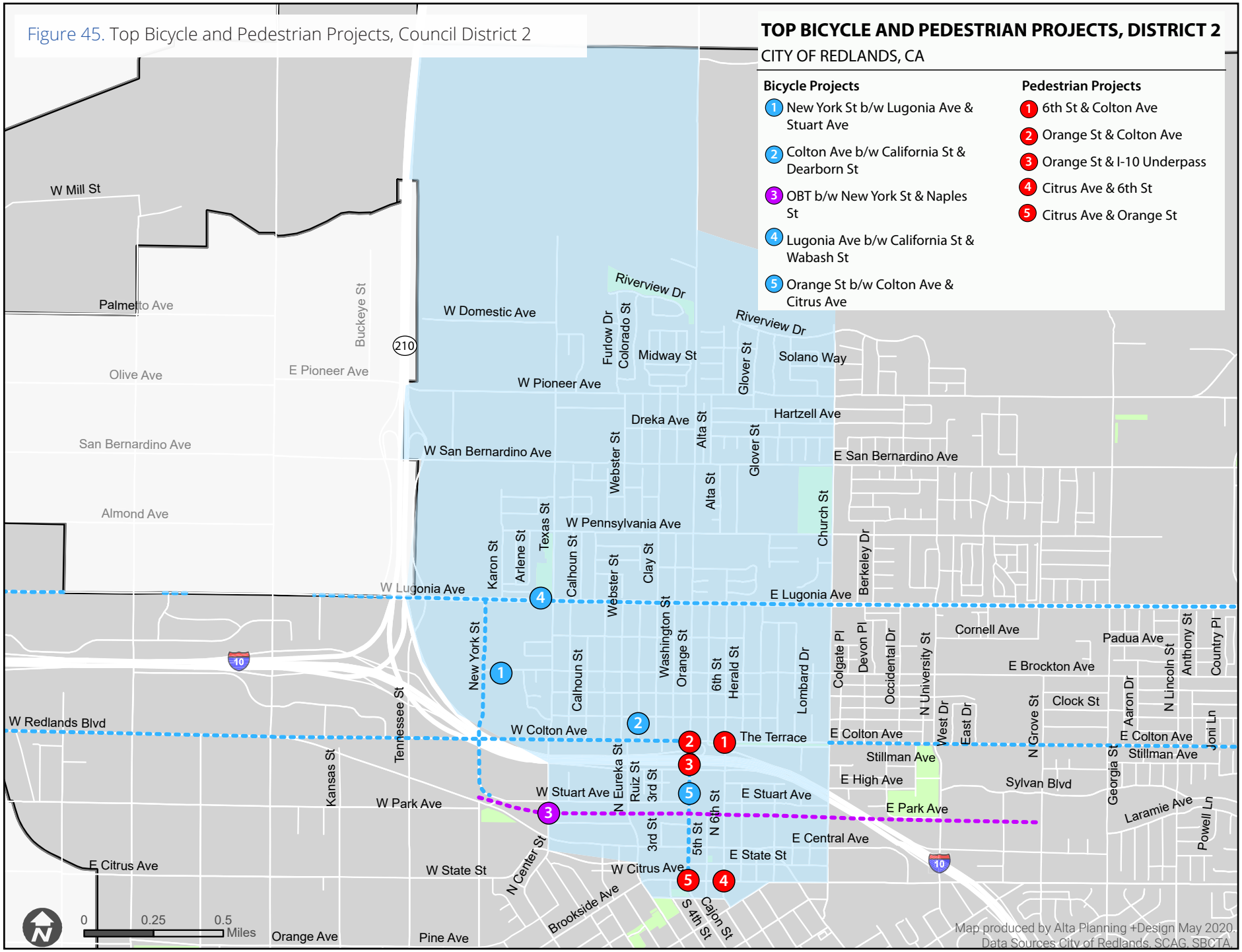
Figure 44. Top Bicycle and Pedestrian Projects, Council District 1



Top Bicycle and Pedestrian Projects - District 1

ID	STREET	FROM	TO	PROPOSED PROJECT	TIER
Bicycle Projects					
1	Redlands Blvd	Colton Ave	Fern Ave	Class II Bike Lane	Tier 1
2	New York St	Lugonia Ave	Stuart Ave	Class II Bike Lane	Tier 1
3	Colton Ave	California St	Dearborn St	Class II Bike Lane	Tier 1
4	Orange Blossom Trail	New York St	Naples St	Class I Bike Path	Tier 1
5	Lugonia Ave	California St	Wabash St	Class II Bike Lane	Tier 1
Pedestrian Projects					
1	New York St	Colton Ave	Texas St	Pedestrian Path Connection	Tier 1
2	Citrus Ave & Eureka St	N/A	N/A	Intersection Improvement	Tier 1
3	Redlands Blvd	Kansas St	1st St	Pedestrian Path Connection	Tier 1
4	Brookside Ave & Grant St	N/A	N/A	Mid-Block Crossing Improvement	Tier 1
5	Grant St & Glendwood Dr	N/A	N/A	Mid-Block Crossing Improvement	Tier 1

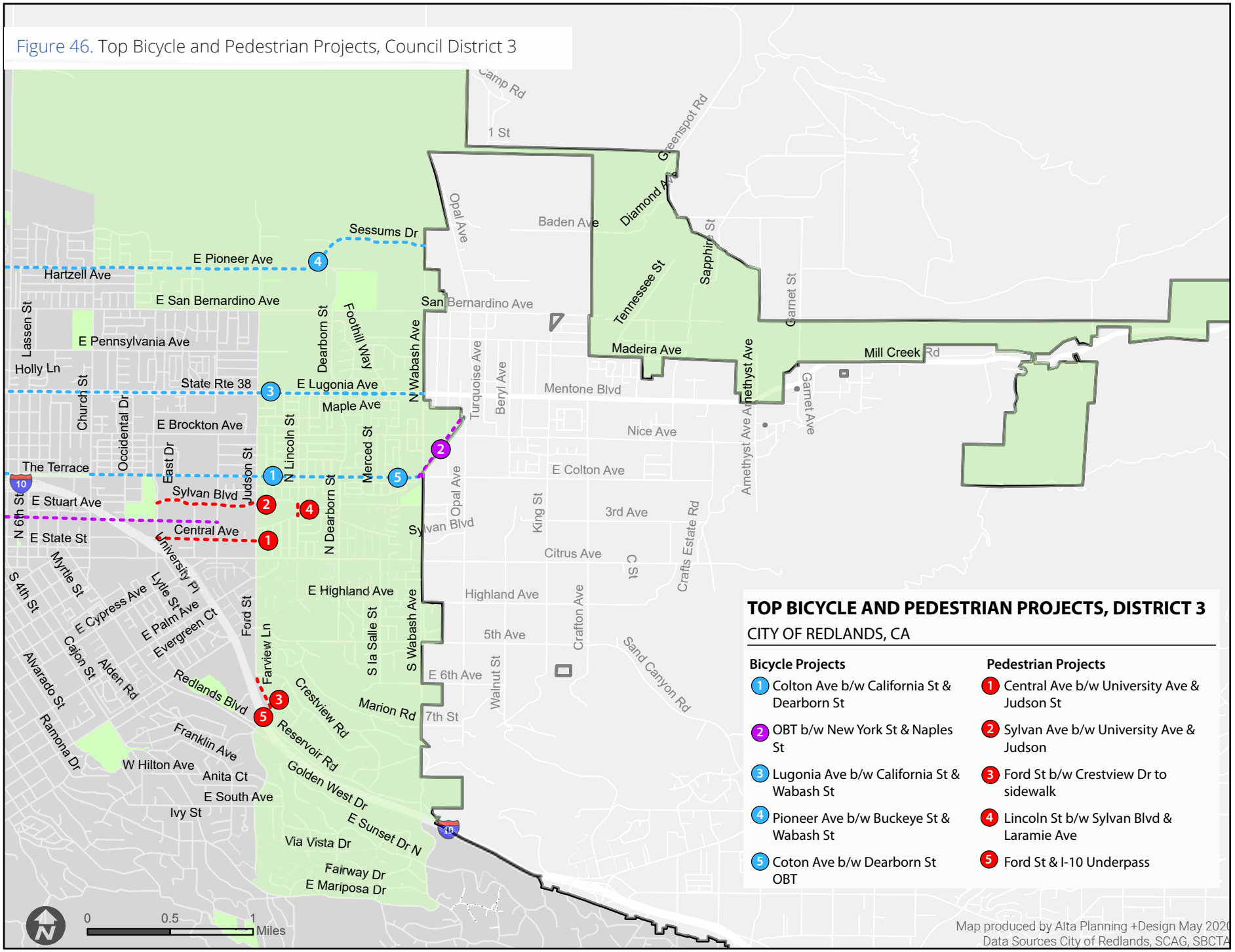
Figure 45. Top Bicycle and Pedestrian Projects, Council District 2



Top Bicycle and Pedestrian Projects - District 2

ID	STREET	FROM	TO	PROPOSED PROJECT	TIER
Bicycle Projects					
1	New York St	Lugonia Ave	Stuart Ave	Class II Bike Lane	Tier 1
2	Colton Ave	California St	Dearborn St	Class II Bike Lane	Tier 1
3	Orange Blossom Trail	New York St	Naples St	Class I Bike Path	Tier 1
4	Lugonia Ave	California St	Wabash St	Class II Bike Lane	Tier 1
5	Orange St	Colton Ave	Citrus Ave	Class II Bike Lane or Class III Bike Route	Tier 1
Pedestrian Projects					
1	6th St & Colton Ave	N/A	N/A	Intersection Improvement	Tier 1
2	Orange St & Colton Ave	N/A	N/A	Intersection Improvement	Tier 1
3	Orange St & I-10 Underpass	N/A	N/A	Underpass Improvement	Tier 1
4	Citrus Ave & 6th St	N/A	N/A	Intersection Improvement	Tier 1
5	Citrus Ave & Orange St	N/A	N/A	Intersection Imporvement	Tier 1

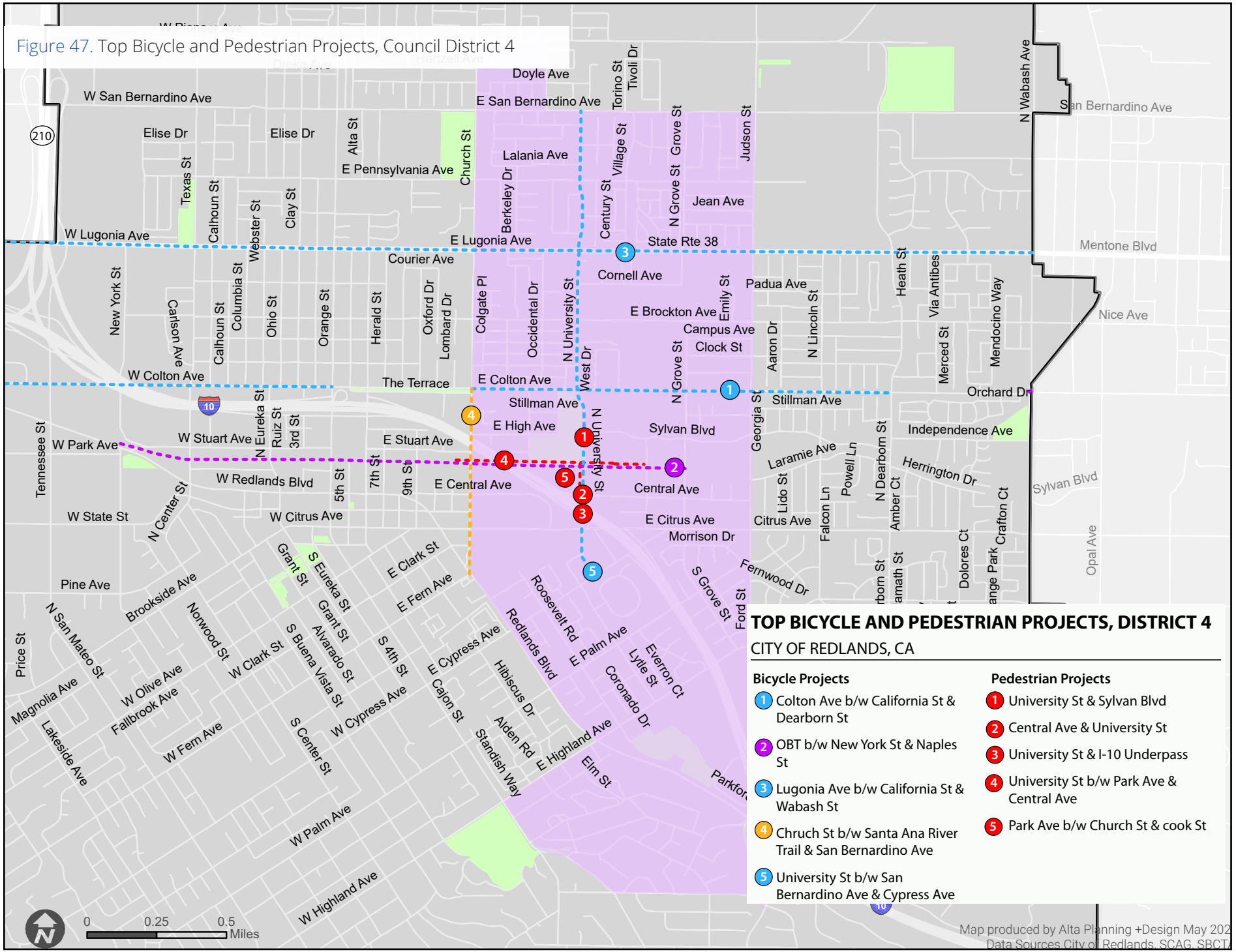
Figure 46. Top Bicycle and Pedestrian Projects, Council District 3



Top Bicycle and Pedestrian Projects - District 3

ID	STREET	FROM	TO	PROPOSED PROJECT	TIER
Bicycle Projects					
1	Colton Ave	California St	Dearborn St	Class II Bike Lane	Tier 1
2	Orange Blossom Trail	New York St	Naples St	Class I Bike Path	Tier 1
3	Lugonia Ave	California St	Wabash St	Class II Bike Lane	Tier 1
4	Pioneer Ave	Buckeye St	Wabesh St	Class II Bike Lane	Tier 1
5	Colton Ave	Dearborn St	Orange Blossom Trail	Class II Bike Lane or Class IV Protected Bike Lane	Tier 1
Pedestrian Projects					
1	Central Ave	University Ave	Judson St	Pedestrian Path Connection	Tier 1
2	Sylvan Ave	University Ave	Judson St	Pedestrian Path Connection	Tier 1
3	Ford St	Crestview Dr	Existing Sidewalk	Pedestrian Path Connection	Tier 3
4	Lincoln St	Sylvan Blvd	Laramie Ave	Pedestrian Path Connection	Tier 3
5	Ford St & I-10 Underpass	N/A	N/A	Underpass Improvement	Tier 3

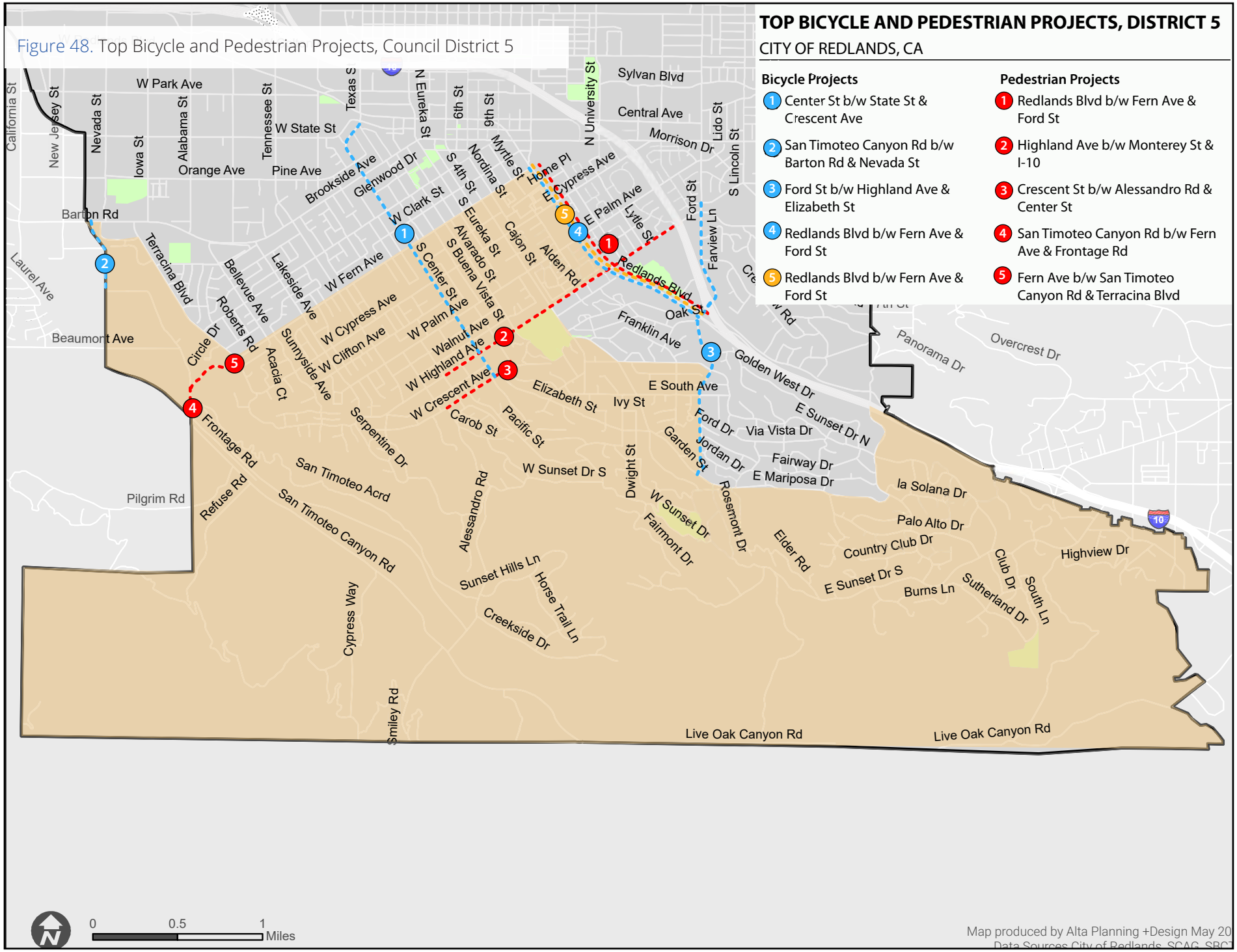
Figure 47. Top Bicycle and Pedestrian Projects, Council District 4



Top Bicycle and Pedestrian Projects - District 4

ID	STREET	FROM	TO	PROPOSED PROJECT	TIER
Bicycle Projects					
1	Colton Ave	California St	Dearborn St	Class II Bike Lane	Tier 1
2	Orange Blossom Trail	New York St	Naples St	Class I Bike Path	Tier 1
3	Lugonia Ave	California St	Wabash St	Class II Bike Lane	Tier 1
4	Church St	Santa Ana River Trail	San Bernardino Ave	Class III Bike Route	Tier 1
5	University St	San Bernardino Ave	Cypress Ave	Class II Bike Lane	Tier 1
Pedestrian Projects					
1	University St & Sylvan Blvd	N/A	N/A	Mid-Block Crossing Improvement	Tier 1
2	Central Ave & University St	N/A	N/A	New Signalized Intersection	Tier 1
3	University St & I-10 Underpass	N/A	N/A	Underpass Improvement	Tier 1
4	University St	Park Ave	Central Ave	Pedestrian Path Connection	Tier 1
5	Park Ave	Churc St	Cook St	Pedestrian Path Connection	Tier 1

Figure 48. Top Bicycle and Pedestrian Projects, Council District 5

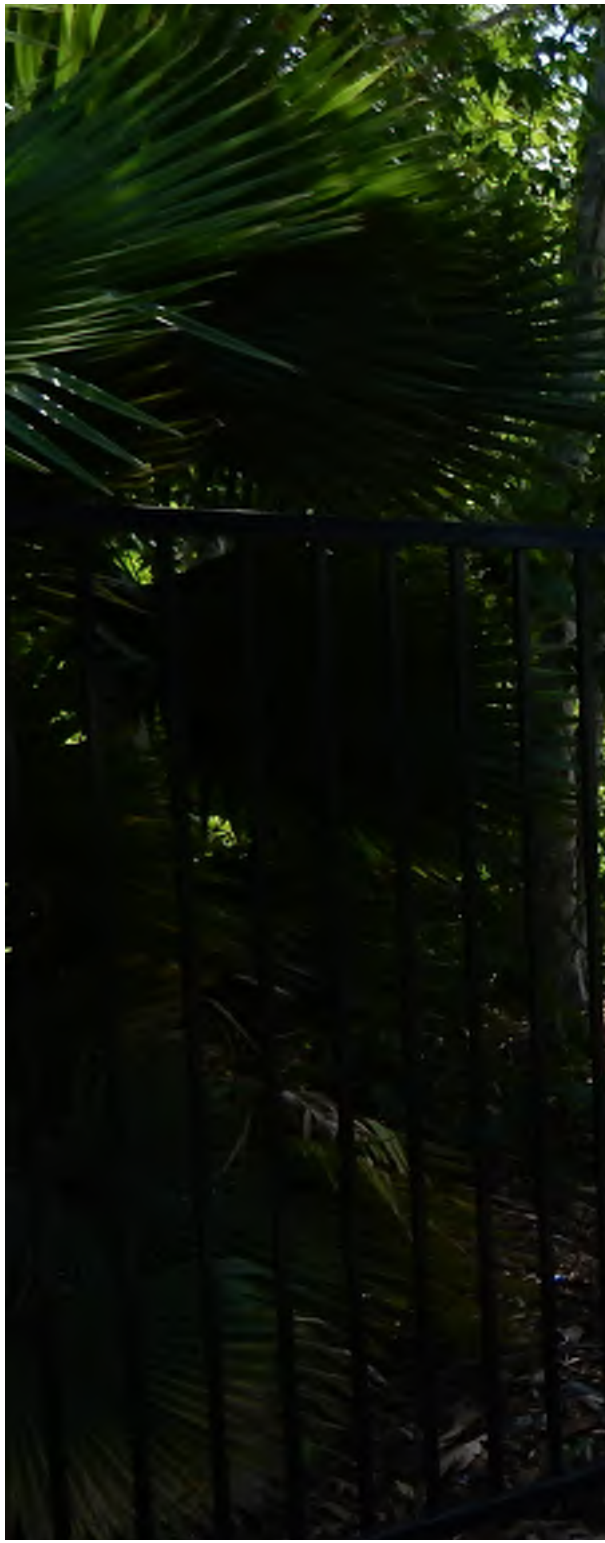


Top Bicycle and Pedestrian Projects - District 5

ID	STREET	FROM	TO	PROPOSED PROJECT	TIER
Bicycle Projects					
1	Center St	State St	Crescent Ave	Class II Bike Lane	Tier 1
2	San Timoteo Canyon Rd	Barton Rd	Nevada St	Class II Bike Lane	Tier 2
3	Ford St	Highland Ave	Elizabeth St	Class II Bike Lane	Tier 2
4	Redlands Blvd	Fern Ave	Ford St	Class II Bike Lane	Tier 2
5	Redlands Blvd	Fern Ave	Ford St	Class III Bike Route	Tier 2
Pedestrian Projects					
1	Redlands Blvd	Fern Ave	Ford St	Pedestrian Path Connection	Tier 2
2	Highland Ave	Monterey St	I-10	Pedestrian Path Connection	Tier 2
3	Crescent St	Alessandro Rd	Center St	Pedestrian Path Connection	Tier 3
4	San Timoteo Canyon Rd	Fern Ave	Frontage Rd	Pedestrian Path Connection	Tier 3
5	Fern Ave	Sam Timoteo Canyon Rd	Terracina Blvd	Pedestrian Path Connection	Tier 3

07

Implementation



Implementing the Sustainable Mobility Plan

This chapter provides cost estimates, funding strategies and maintenance approaches that can be utilized to implement the recommended bicycle and pedestrian facilities. Key funding sources are listed in this chapter, with a more extensive list in Appendix G.

Project Prioritization

A prioritization methodology was created to organize the pedestrian and bicycle projects, in order to ensure the projects that will most increase safe active transportation use are the top priority for funding. In Chapter 6, this plan discusses the project prioritization process and identifies the final project list.

The following criteria were used to prioritize the proposed bicycle and pedestrian projects:

- Safety
- Equity
- Destination Accessibility
- Community Identified Needs,
- Connectivity
- Inclusion in previous plans

Costs

Plan level cost estimates for the facilities recommended in this Plan can be seen in the following table. Low and high cost estimates account for the unknowns when implementing a project, including construction costs, design and administration, and environmental studies. In addition to implementation costs, maintenance costs will need to be considered before constructing a project. Maintenance costs can vary depending on whether it is performed by Redlands City staff or private contractors. Costs can also change if implementation occurs simultaneous to other road improvements. These cost estimates are provided in 2020 dollars, and will increase in future years.

		COST ESTIMATE	
FACILITY TYPE	**PER**	**LOW**	**HIGH**
Shared Use Path	Mile	$787,500	$3,900,000
Bicycle Lane	Mile	$100,600	$406,350
Bicycle Route	Mile	$24,150	$36,750
Protected Bike Lane	Mile	$326,550	$931,350
Rectangular Rapid Flashing Beacon (RRFB)	EA	$31,500	$63,000
Pedestrian Refuge Island	EA	$10,500	$52,500
Protected Intersection	EA	$787,500	$1,575,000
High Visibility Crosswalk	EA	$2,625	$5,250
ADA Curb Ramps	EA	$3,675	$5,250
Curb Extensions	EA	$15,750	$131,250
Crossing Signals	LS	$5,250	$525,000
HAWK Signal	EA	$210,000	$420,000
Sidewalk Construction	LF	$20	$75
Streetlights	EA	$500	$20,000
Signal Detection	EA	$1,800	$36,000

Implementation Strategies

Redlands will continue to build a strong, connected active transportation network using a variety of implementation strategies.

Project Feasibility

Project feasibility categorizes projects based on their complexity and high-level costs. In general, projects that only require signage and striping changes are considered highly feasible and can be done in the short term. Examples of projects that can be completed in the short term include:

- Bike routes that require only striping, signage, and low-cost traffic calming measures.
- Bike lanes that only require striping.
- Short sidewalk gap closures that provide better connectivity.
- Crossing improvements to join pathway/trail segments that require only lower-cost materials, such as high-visibility crosswalk markings and signage.

Projects that require inter-agency coordination, hard-scape changes, or potential road diets are considered low-feasibility projects and should look into additional competitive funding sources.

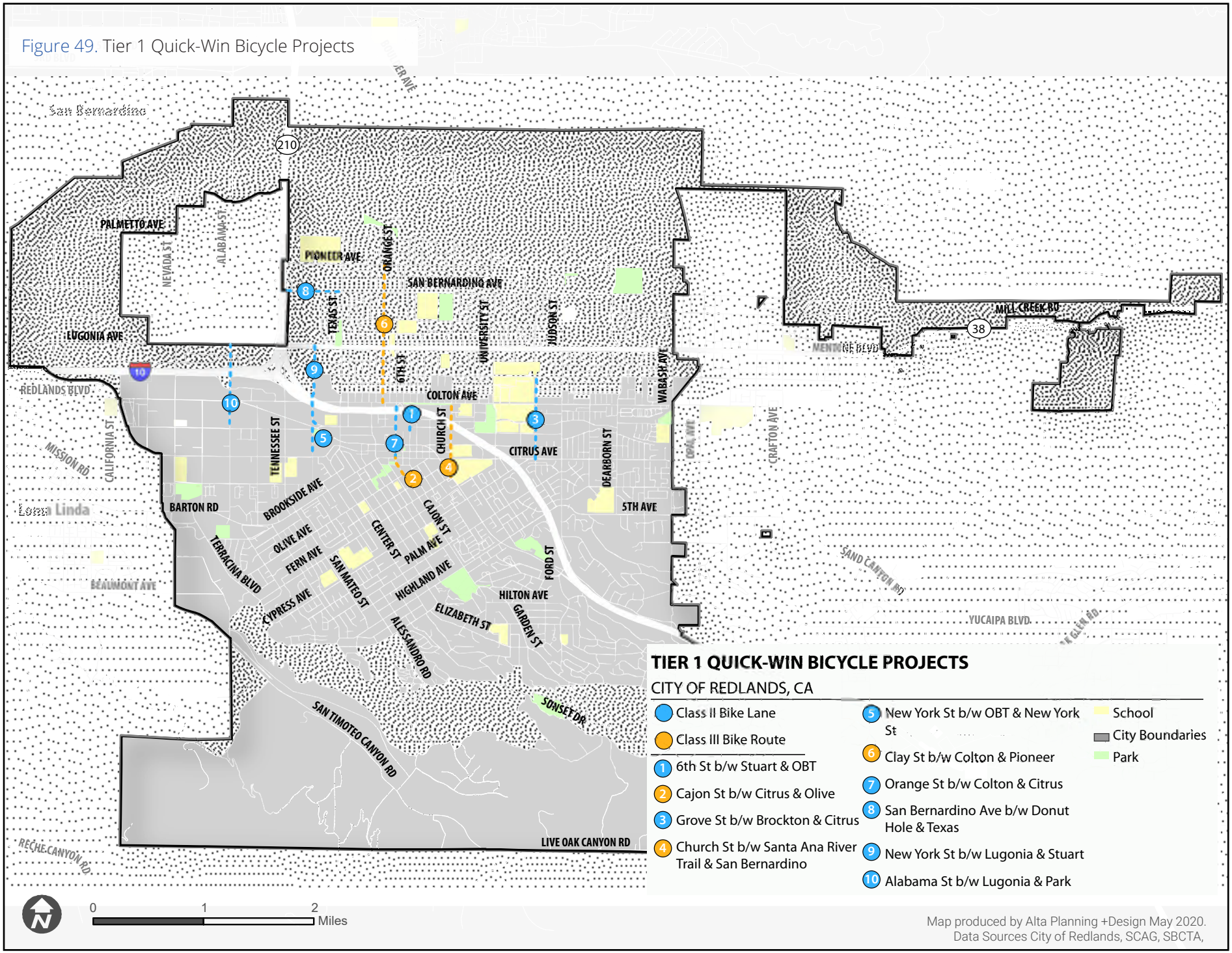
Project Considerations

While some of the projects outlined within this Plan may be implemented more quickly, other projects still need to go through a community design process to evaluate challenges, undertake additional study, or consider multi-agency coordination. Infrastructure projects can be costly, and may require multiple funding opportunities to implement and maintain large scale improvements.

Quick-Win Projects

Balancing the value of implementing Tier 1 projects in a timely manner with the city's overall financial needs, presented on the following page is a financially constrained set of lower-cost Tier 1 bicycle and pedestrian improvements. These projects could be built relatively quickly and cheaply utilizing funds from existing sources such as the city's Capital Improvement Program and maintenance programs. In addition to providing a cost-effective starting point, these "quick wins" can help build momentum and lay the groundwork for future implementation of the city's sustainable mobility network. **Figure 49** and **Figure 50** show the top ten quick win bicycle and pedestrian projects.

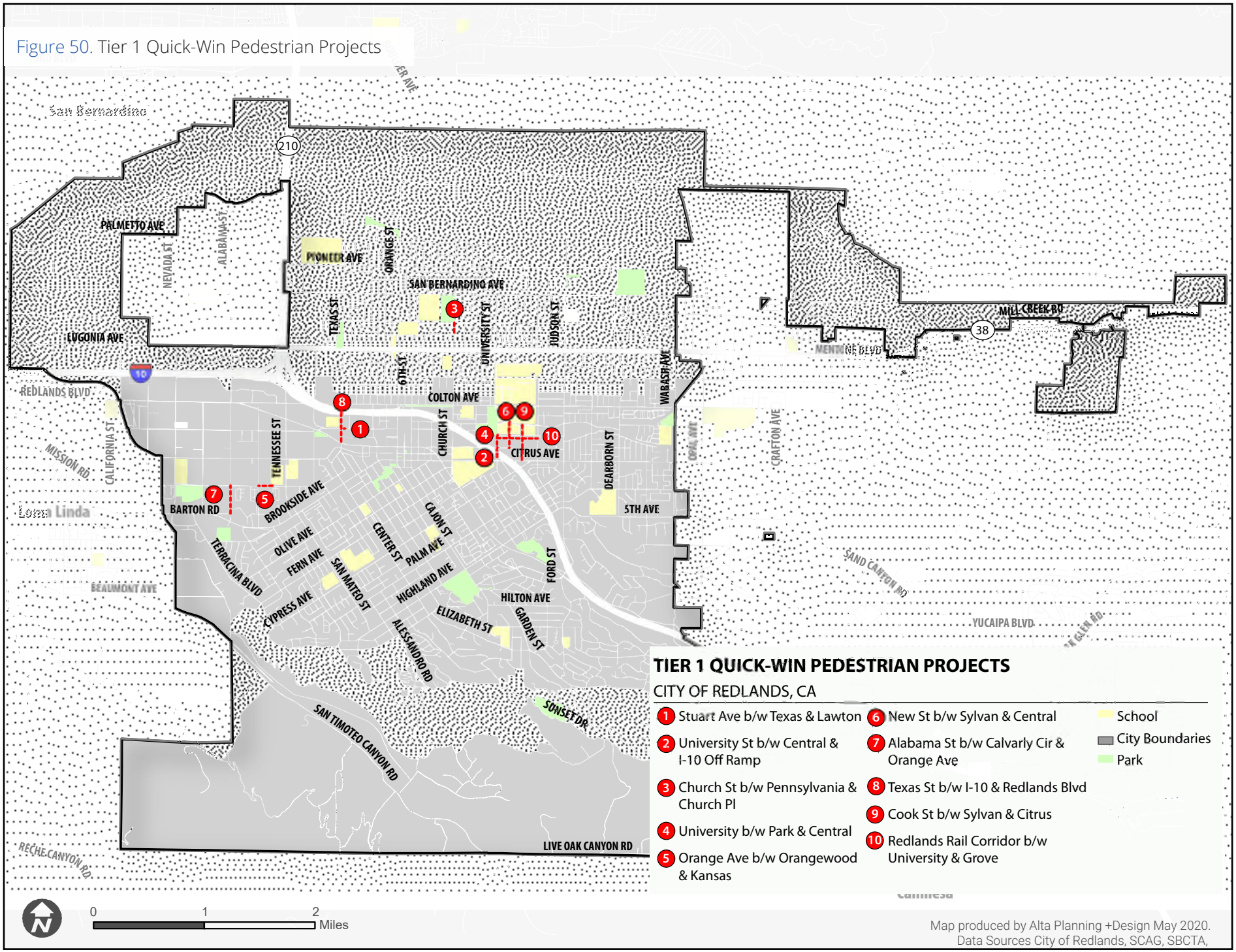
Figure 49. Tier 1 Quick-Win Bicycle Projects



Tier 1 Quick-Win Bicycle Projects

STREET	FROM	TO	PROPOSED PROJECT	LOCAL/REGIONAL CORRIDOR	TOTAL SCORE	COST LOW	COST HIGH
6th St	Stuart Ave	OBT	Class II Bike Lane	Regional	54	$4,024	$16,254
Cajon St	Citrus Ave	Olive Ave	Class III Bike Route	Both	58	$4,106	$6,248
Grove St	Brockton Ave	Citrus Ave	Class II Bike Lane	Regional	56	$4,106	$6,248
Church St	Santa Ana River Trail	San Bernardino Ave	Class III Bike Route	Both	60	$15,939	$24,255
New York St	OBT	End of New York St	Class II Bike Lane	Local	59	$23,138	$93,461
Clay St	Colton Ave	Pioneer Ave	Class III Bike Route	Regional	49	$30,188	$45,938
Orange St	Colton Ave	Citrus Ave	Class II Bike Lane or Class III Bike Route	Both	65	$50,300	$203,175
San Bernardino Ave	E Donut Hole	Texas St	Class II Bike Lane	Both	54	$50,300	$203,175
New York St	Lugonia Ave	Stuart Ave	Class II Bike Lane	Both	71	$72,432	$292,572
Alabama St	Lugonia Ave	Park Ave	Class II Bike Lane	Both	63	$76,456	$308,826

Figure 50. Tier 1 Quick-Win Pedestrian Projects



Tier 1 Quick-Win Pedestrian Projects

STREET	CROSS STREET	PROPOSED PROJECT	LOCAL/REGIONAL CORRIDOR	TOTAL SCORE	COST LOW	COST HIGH
Stuart Ave	Between Texas and Lawton	Pedestrian Path Connection	Both	46	$1,118	$4,194
University St	Between Central and I-10 Off Ramp	Pedestrian Path Connection	Regional	58	$9,162	$34,359
Church St	Pennsylvania Ave to Church Pl	Pedestrian Path Connection	Regional	48	$9,590	$35,961
University St	Between Park and Central	Pedestrian Path Connection	Regional	60	$11,877	$44,538
Orange Ave	Orangewood Ct to Kansas St	Pedestrian Path Connection	Both	51	$13,473	$50,525
New St	Between Sylvan and Central	Pedestrian Path Connection	N/A	46	$24,649	$92,434
Alabama St	Calvary Cir to Orange Ave	Pedestrian Path Connection	Both	50	$26,432	$99,121
Texas St	Between I-10 to Redlands Blvd	Pedestrian Path Connection	Both	57	$30,528	$114,479
Cook St	Sylvan Ave to Citrus Ave	Pedestrian Path Connection	Regional	48	$34,073	$127,773
Redlands Rail Corridor	University Ave to Grove St	Pedestrian Path Connection	Regional	48	$38,414	$144,053

Complete Streets Implementation Strategies

Complete Streets are streets that are safe for transportation users of all ages and abilities. Complete Streets should balance the needs of drivers, bicyclists, pedestrians, transit riders, rideshare users, and micro mobility devices while also supporting Redlands' existing land use, economies, cultures and natural environments. This can be completed through treatments like bike lanes and sidewalks separated from motor vehicle traffic, strategically located mobility hubs, docking stations for bike and scooter share, and bus only lanes during peak hours. A successful complete street provides a safe public space, rather than just a transportation corridor. There is not a one size fits all approach to Complete Streets, and not every street is appropriate for this approach.

Implementing Complete Streets in Redlands requires thinking holistically about how a corridor is used by all methods of transportation, and what streets are best suited for complete streets treatments based on their proximity to the city's existing and proposed active transportation network, destinations, or their accessibility for vulnerable user groups. Streets near the future Arrow rail stations may be a good fit for these treatments. In addition to considering existing methods of transportation, Redlands City staff must also consider the future of transportation, including autonomous vehicles, and the increased used of e-bikes and other e-mobility options and how these may fit into the design of a Complete Street. Complete Street planning should be considered long term, and should involve many Redlands City departments including planning, public works, parks and recreation, transportation and public safety. Temporary pilot projects can be initiated to test Complete Streets improvements, and gather feedback from community members about the pilot project's efficacy. The goal of implementing Complete Streets in Redlands should not only be to make active transportation safer, but also to encourage more active transportation use by residents.

The City can utilize the Complete Streets Policy Workbook (see link below) to create a locally-appropriate Complete Streets Policy, bringing it into compliance with the California Complete Streets Act of 2008. The Policy itself need not be cumbersome in its language; however, the real “teeth” associated with the Policy is the subsequent development of design guidelines and development code that will meet the goals established in the policy. While the process of developing and adopting a complete streets policy in Redlands may yield additional opportunities, the table below identifies recommended Complete Streets Priority projects.
Complete Streets Policy Workbook: https://smartgrowthamerica.org/resources/complete-streets-local-policy-workbook/

Recommended Complete Streets Priority Projects

STREET	CROSS STREET	PROPOSED PROJECT	LENGTH (MILES)	TOTAL SCORE	COST LOW	COST HIGH
University St	Sylvan Blvd	Mid-Block Crossing Improvement	N/A	66	N/A	N/A
University St		Underpass Improvement	N/A	63	N/A	N/A
University St	Between Park and Central	Pedestrian Path Connection	0.11	60	$11,877	$44,538
University St	San Bernardino Ave to Cypress Ave	Class II Bike Lane	1.69	60	$170,014	$686,732
University St	Between Central and I-10 Off Ramp	Pedestrian Path Connection	0.09	58	$9,162	$34,359
University St	Park Ave	Intersection Improvement	N/A	57	N/A	N/A
University St	Between Brockton and Syvlan	Pedestrian Path Connection	0.43	53	$45,141	$169,280
University St	Sylvan Blvd	Mid-Block Crossing Improvement	N/A	52	N/A	N/A
Orange St	Colton Ave to Citrus Ave	Class II Bike Lane or Class III Bike Route	0.50	65	$50,300	$203,175
Orange St	N City Limit to Colton Ave	Class II Bike Lane	2.49	64	$250,494	$1,011,812
Orange St	Colton Ave	Intersection Improvement	N/A	65	N/A	N/A

Recommended Complete Streets Priority Projects (cont.)

STREET	CROSS STREET	PROPOSED PROJECT	LENGTH (MILES)	TOTAL SCORE	COST LOW	COST HIGH
Orange St		Underpass Improvement	N/A	64	N/A	N/A
Orange St	Redlands Blvd	Intersection Improvement	N/A	61	N/A	N/A
Orange St	State St	Bike Detection Improvement	N/A	51	N/A	N/A
6th St	Colton Ave	Intersection Improvement	N/A	67	N/A	N/A
6th St	Lugonia Ave to Olive Ave	Class II Bike Lane	1.10	63	$110,660	$446,985
6th St	Redlands Blvd	Intersection Improvement	N/A	62	N/A	N/A
6th St		Underpass Improvement	N/A	60	N/A	N/A
6th St	Lugonia Ave	Intersection Improvement	N/A	58	N/A	N/A
Citrus Ave		Underpass Improvement	N/A	63	N/A	N/A
Citrus Ave	6th St	Intersection Improvement	N/A	63	N/A	N/A
Citrus Ave	Eureka St	Intersection Improvement	N/A	61	N/A	N/A
Citrus Ave	Orange St	Intersection Improvement	N/A	58	N/A	N/A
New York St	Lugonia Ave to Stuart Ave	Class II Bike Lane	0.72	71	$72,432	$292,572

Recommended Complete Streets Priority Projects (cont.)

STREET	CROSS STREET	PROPOSED PROJECT	LENGTH (MILES)	TOTAL SCORE	COST LOW	COST HIGH
New York St	OBT to End of New York Street	Class II Bike Lane	0.23	59	$23,138	$93,461
New York St/Stuart Ave	Between Colton and Texas	Pedestrian Path Connection	0.44	63	$46,228	$173,357
New York St	Orange Blossom Trail	Wayfinding Improvement	N/A	49	N/A	N/A
Texas St	Santa Ana River Trail to State St	Class II Bike Lane	2.2	63	$223,332	$902,097
Texas St	Redlands Blvd	Intersection Improvement	N/A	61	N/A	N/A
Texas St	Between I-10 and Redlands Blvd	Pedestrian Path Connection	0.29	57	$30,528	$114,479
Texas St	Colton Ave	Intersection Improvement	N/A	56	N/A	N/A
Alabama St	Lugonia Ave to Park Ave	Class II Bike Lane	0.76	63	$76,456	$308,826
Alabama St	Calvary Cir to Orange Ave	Pedestrian Path Connection	0.25	50	$26,432	$99,121
Alabama St	Orange Tree Ln	Improved Intersection	N/A	49	N/A	N/A
Lugonia Ave	California St to Wabash St	Class II Bike Lane	4.20	68	$422,520	$1,706,670
Lugonia Ave	Texas St to Clay St	Pedestrian Path Connection	0.38	57	$39,634	$148.,626
Lugonia Ave	6th St	Median Improvement	N/A	56	N/A	N/A

Recommended Complete Streets Priority Projects (cont.)

STREET	CROSS STREET	PROPOSED PROJECT	LENGTH (MILES)	TOTAL SCORE	COST LOW	COST HIGH
Central Ave	University St	New Signalized Intersection	N/A	63	N/A	N/A
Central Ave	Between University and Judson	Pedestrian Path Connection	0.60	55	$63,434	$237,876
Church St	Santa Ana River Trail to San Bernardino Ave	Class II Bike Route	0.66	60	$15,939	$24,255
Church St	Pennsylvania Ave to Church Pl	Pedestrian Path Connection	0.09	48	$9,580	$35,961
Redlands Blvd	Colton Ave to Fern Ave	Class II Bike Lane	2.20	73	$221,320	$893,970
Redlands Blvd	Between Kansas and 1st	Pedestrian Path Connection	1.07	60	$113,313	$424,924
San Bernardino Ave	OBT to California St	Class II Bike Lane	1.00	61	$100,600	$406,350
San Bernardino Ave	Tennessee St to Webster St	Pedestrian Path Connection	0.61	44	$64,837	$243,138

Funding Strategies

With limited and competitive funding options, implementing a citywide bicycle and pedestrian network must be prioritized in a thoughtful and feasible manner. In Chapter 6, the SMP provides the final list of prioritized projects and will be used to determine which funding sources are the "best fit." Funding sources can be local, regional, or federal, and can be used for building bicycle and pedestrian facilities, maintenance of infrastructure, and programming to encourage safe use of active transportation methods.

A list of potential funding sources are located in this section and a full list of additional funding sources are located in Appendix G.

Local Grants

REDLANDS MEASURE T

In November 2020 Redlands voters passed Measure T, a one-cent sales tax to preserve the quality of life and city services in Redlands. Measure T funds can be used to keep public spaces such as parks and recreation areas clean and maintained. The money can also be used to maintain sidewalks and curbs. All Measure T money is required to be used in the City.

Regional Grants

SBCTA MEASURE I

Measure I is a half-cent sales tax in San Bernardino County which can fund projects until 2040. Redlands City staff can apply for this grant to fund road maintenance, sidewalk installations, ADA upgrades and other transportation improvements. Funding is distributed based on the Measure I 2010-2040 Ordinance and Expenditure Plan and the Strategic Plan. SBCTA administers the revenue and is responsible for ensuring funds are used properly.

SBCTA TRANSPORTATION DEVELOPMENT ACT (TDA)

The Transportation Development Act (TDA) provides funding for building and maintaining bicycle and pedestrian facilities. Funds can also be distributed to improve public transit stops, including construction of new sidewalk near a bus stop. SBCTA oversees the distribution of these funds. Bicycle projects must be included in the SBCTA Non-Motorized Transportation Plan. Funding is available to cover up to 90% of total project costs, and 50% of the total funding available is reserved for smaller projects under $250,000.

SCAG SUSTAINABLE COMMUNITIES PROGRAM (SCP)

Created in 2005, SCAG's Sustainable Communities Program (SCP) can provide resources and assistance to Redlands to complete local planning efforts. The SCP provides resources to support active transportation and multimodal efforts and sustainability, equity in transportation planning, reductions in motorized vehicle miles traveled and reductions in greenhouse gas emissions. The SCP can fund quick build projects, Safe Routes to School Plans, active transportation infrastructure, and pedestrian plazas, and can assist in evaluating the success of new infrastructure and programming.

State and Federal Grants

CALIFORNIA'S ACTIVE TRANSPORTATION PROGRAM (ATP)

The California State Legislature created the Active Transportation Program to encourage walking, biking, and rolling in California cities. Eligible projects include infrastructure projects, education, encouragement and enforcement non- infrastructure projects which further the goals of the ATP, and a combination of infrastructure and non-infrastructure activities. The goals of the ATP include shifting driving trips to walking and biking, reducing greenhouse gas emissions, and improving public health.

CALTRANS SUSTAINABLE TRANSPORTATION PLANNING GRANT

This grant is available to Redlands for planning, study, and design work to identify and evaluate projects, including conducting outreach or implementing pilot projects. When applying for this grant in Redlands, City staff should consider the grant objectives of sustainability, preservation, mobility, safety, innovation, economy, health and social equity.

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

The Highway Safety Improvement program's purpose is to reduce traffic fatalities and serious injuries on public roads. Eligible projects from the list of SMP recommendations include installation of pedestrian hybrid beacons, roadway improvements that provide separation between pedestrians and motor vehicles, and other physical infrastructure projects. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance. Funding is available up to $10 million.

Maintenance

Maintenance of pedestrian and bicycle infrastructure will be crucial in keeping the sustainable mobility network safe for all users. Infrastructure should regularly be cleared of debris and hazards, and traffic control devices, striping, and signage should be maintained to ensure the network continues to function properly. Additionally, pavement should be maintained, and vegetation should be cut back when encroaching into pedestrian and bicycle facilities.

The City of Redlands has several maintenance systems in place to keep the active transportation network clean and safe:

- The City of Redlands Pavement Management Program (PMP) evaluates and rates the condition of road surfaces, and identifies a maintenance schedule. The City uses a variety of engineering software to ensure the greatest return on investment for the City's budget. The latest PMP report was released in 2020, and includes a forecasted maintenance report for streets in Redlands until 2024. This latest PMP report can be useful in planning for active transportation upgrades on Redlands streets.
- The Redlands 311 app allows residents to report problems including potholes, non-working street lights, flooding, overgrown vegetation, sidewalk dangers, and other civic issues. Users can take a picture of the problem, write a short description, and geo-tag its location before sending it to City personnel.
- The Street Maintenance Division is responsible for clearing and maintaining streets, curbs, gutters, sidewalks, and street signage. The Street Maintenance Division asks residents to relay any issues to them via the Redlands 311 app. Most Redlands streets are included in the regular street sweeping schedule.
- Redlands Conservancy maintains 26 miles of natural surface trails in the City. The Conservancy trains volunteers, called the Trail Care Crew, to help keep trails safe and clear of debris and ruts. The Conservancy also organizes Trail Care Days, and at San Timoteo Nature Sanctuary, shovels are left in public places to be used for hikers to voluntarily remove weeds as they walk.
- Redlands offers opportunities for interested groups to adopt a section of the City's streets or trails. In return for the group completing regular clean ups on the street or trail, the City rewards the group with signage located on corridor. Clean ups must occur at least 4 times per year for a 1- or 2-year period.

The Sustainable Master Plan also proposes maintenance strategies as part of planning process, and collaboration with different departments in Redlands:

- Consider maintenance in the design of bicycle and pedestrian facilities to ensure they remain safe and comfortable to use.
- Incorporate operational issues such as parking, traffic enforcement, and traffic operations during the design of bicycle and pedestrian facilities.
- Update and request funding for annual maintenance costs, to ensure bicycle and pedestrian facilities are routinely maintained.

Bicycle and Pedestrian Programs

Programs help support walking and bicycling by sharing information, providing education on rules of the road, promoting safe travel behaviors for all street users, and creating a vibrant active transportation culture.

Communities that have high rates of walking and bicycling consistently use a "6E's" approach, which include Education, Encouragement, Engagement/ Enforcement, Engineering, Equity, and Evaluation.

Education

Provide information to pedestrians, bicyclists, and drivers related to safely sharing the road. Educate residents about the environmental and financial benefits of using active transportation.

Encouragement

Promote active transportation as fun and efficient methods of transportation, and provide special events that encourage walking and biking.

Engagement/Enforcement

A combination of community-based engagement and enforcement around unsafe travel behaviors can help establish norms and expectations of those using active transportation and those driving motor vehicles. Examples include crossing guards, driver safety education programs, increased enforcement near bicycle/pedestrian collision hotspots with vehicles, and speed-feedback signage.

Engineering

Install bicycle and pedestrian physical infrastructure to support safe and comfortable active transportation

Equity

All community members, particularly those from underrepresented communities, should have equal access to active transportation. Programming materials should be strategically targeted to reach these communities.

Evaluation

The City should monitor the success of the programming efforts to ensure the programs are achieving the desired outcomes.

Examples of 6E Programming

The following lists examples of programs that fulfill at least one of the six E's. Some of these programs are already established in Redlands, and others can be considered for future implementation.

Bike Light Checkpoints

Bike light checkpoints are set up in the evening to stop bicyclists who are riding without a light. The checkpoints give lights to bicyclists who need them, and educate bicyclists about the dangers of riding at night. These checkpoints can also prevent future citations for bicyclists riding without a light.

Bicycle Education Workshops and Campaigns

Bicycle education workshops are beneficial for all bicyclists and motor vehicle drivers who can learn how to share the road with each other. Workshops and safety campaigns can teach residents about proper usage of bicycle infrastructure, how to bicycle defensively, and how to navigate the bicycle network. Workshops should be taught by the league of american cyclists certified instructors.

BikeBBQ

The Redlands BikeBBQ is a space where bicyclists can learn how to build and repair their bicycle, and meet other bicyclists in the community. The BikeBBQ is a volunteer run non-profit, and provides repair tools for very low, or no cost.

Safe Routes for Seniors

Safe Routes for Seniors programming caters to older residents of Redlands to ensure they have safe access to pedestrian infrastructure. These programs can encourage active, healthy habits through group walks and education classes, and can bring awareness to necessary street improvements such as longer crossing times for streets with high numbers of senior pedestrians.

Surveys and Active Transportation Counts

Surveys and active transportation counts can track walking and biking patterns before and after the installation of bicycle and pedestrian infrastructure, and after a programmatic event to evaluate if the improvement increased active transportation use.

Mini-Demonstration Projects

Mini-demonstration projects allow Redlands to test out new infrastructure temporarily, and collect feedback from community members before permanent installation. Materials for mini-demonstrations can include traffic tape, temporary paint, or cones, and work best for demonstrating bike lanes, curb extensions, traffic circles, parklets, pedestrian islands, and slow streets. These projects can last as short as a few hours during a community event, or can last as long as several weeks.

Cycling Clubs

There are several bicycling clubs in Redlands which encourage safe and fun group bicycle riding. There are groups for adult riders such as the Redlands Water Bottle Transit Company, groups for teens like the Redlands Interscholastic Cycling Organization, and groups for families like Ride Yourself Fit. These organizations and others in Redlands also offer their own training classes, and often have different rides for varying skills levels.

Safe Routes to School

National Safe Routes to School (SRTS) programs encourage walking and biking to school as a safe, and fun method of transportation. Often these programs involve an audit of streets around the school to determine needed improvements, or to create a preferred walking and biking route for students. Police may be involved to enforce unsafe traffic behavior by motor vehicles when students are present. Students learn how to safely cross the street, use pedestrian and bicycle infrastructure, and obey the rules of the road. Walking or biking to school can prepare students for the day through physical activity, and it also prevents traffic congestion around schools during pick up and drop off times.

The following are the SRTS recommendations for Redlands.

1. The 2017 Redlands Safe Routes to School program was led by San Bernardino County Transit Authority, but these efforts only included Clement Middle School, Lugonia Elementary, and Franklin Elementary, leaving out many other Redlands schools. Site assessments completed by SBCTA and those completed in the SMP should be expanded to include all schools in the Redlands Unified School District (RUSD).
2. Partner with local organizations such as Ride Yourself Fit, the Inland Empire Bicycle Alliance, the Burrage Mansion and the Redlands Police Department to bring bicycle educational programming to schools.
3. Encourage all schools in the RUSD to fund active transportation programming such as bike rodeos, International Bike and Roll to School day, and walking school buses.
4. Reduce school zone speeds from 25 mph to 15mph, particularly in zones with high traffic volumes.
5. Continue to implement pedestrian recommendations from the SBCTA Safe Routes to School Plan Phase II.
6. Create best pedestrian route maps for parents and students walking to school.

Bike Rodeos

Bike Rodeos are interactive events for elementary school students to learn the rules of the road as a bicyclist. Children learn how to signal, where to ride their bikes, and how their helmets should fit. Bike Rodeos can be coordinated with the Redlands Unified School District as an afterschool program, and can encourage parents and their children to take active transportation to school. Past bike rodeos have been sponsored by the Redlands Police Department.

Bike Safety Fair

In sponsorship with the Redlands Police Department and Redlands Community Hospital, Ride Yourself Fit hosts the annual Children's Health & Bike Safety Expo. Children are encouraged to bring their bicycle to ride on a safety course and learn basic bicycle maneuvers. Helmet fitting is also available, as are booths for parents to learn more about bicycling as a family.

Inland Empire Biking Alliance Children's Events

The Inland Empire Biking Alliance hosts Kid's Bicycle Ambassador Programs and Bicycle Playgrounds for children to learn riding skills, basic mechanics, and gain confidence on their bicycles. These programs can be scheduled on an as-needed basis, and are led by certified instructors.

Transportation Demand Management

Transportation Demand Management (TDM) strategies can help Redlands reach its active transportation goals by incentivizing businesses who encourage walking and biking, and by disincentivizing driving by limiting parking, implementing rideshare systems, creating active transportation encouragement campaigns, and providing active transportation options.

Bicycle Friendly Businesses

Awarded by The League of American Bicyclists, bicycle friendly businesses are recognized for their efforts in encouraging employees to bike to work. Employers may offer incentives such as bicycle equipment subsidies, bicycle commuter tax benefits and guaranteed ride home programs. Employers can also encourage bicycling by participating in bike to work days and bicycle events in the community, offering shared bicycles for employees, providing bicycle parking, showers, and repair tools, and inviting instructors to teach employees safe bicycling skills. Redlands should encourage businesses in the City to implement these incentives and apply for the award.

Reducing Parking Demand

In order to deter residents from driving and parking in high traffic areas like downtown Redlands, parking should be limited or metered. Parking spaces can be time restricted to prevent long term parking, and can require payment which can then be used by the City to maintain and build better active transportation infrastructure. Redlands should reward businesses who subsidize bicycle costs, or transit pass costs, which in turn reduce parking demand. Transit passes should be highly encouraged for Redlands residents and employees ahead of the completion of the planned Arrow Rail Stations.

Other Bicycle Infrastructure

In addition to building new bicycle infrastructure on Redland's streets, other pieces of infrastructure should be considered to ensure commuters have a comfortable bike ride to and from work. Adequate long term bicycle parking should be available for commuters to park their bikes during the work day. Bicycle fix-it stations, hydration stations, showers and lockers will also encourage bicycle commuters and ultimately reduce parking demand in the City.

Pump Tracks and Bike Parks

It is important to also encourage a culture of cycling. Bike parks featuring pump tracks can be a great addition for Redlands. Residents can come together to improve riding techniques in a safe and controlled environment.

Carpool, Vanpool and Telecommuting

For commuters who must drive to work, carpool options limit the number of cars on the road and reduce parking spaces needed. SBCTA offers San Bernardino County residents incentives to take and organize carpool and vanpool routes. SBCTA also offers employers resources, marketing materials, and rewards for encouraging rideshare programs. In addition, SBCTA has resources for employers who want to implement permanent telecommuting systems.

Appendix A

Plan Policy Review

Review Of Existing Plans

Several local and regional plans have been completed in the area that directly or indirectly address active transportation and public space planning and design in the City of Redlands. This review summarizes these plans in order to identify relevant goals and recommendations that may influence the development of the City of Redlands Sustainable Mobility Plan (SMP).The purpose of this review is to identify existing policies related to active transportation and public space development/design. Such policies may need to be updated upon completion of the project. This review includes summaries of the following plans and policies:

- City of Redlands General Plan 2035 (2017)
- City of Redlands Bicycle Master Plan (2015)
- City of Redlands Transit Villages Specific Plan (2020) - DRAFT
- SBCTA Passenger Rail Accessibility Plan (2014)
- SBCTA Safe Routes to School Report
- SBCTA Employer Outreach Study
- SBCTA Non-Motorized Transportation Plan (Revised 2018)

Active transportation is an integral component of many of the existing planning documents and features strongly in the City's vision and goals. There is particular attention given to bicycle and pedestrian access in Downtown and the Transit Villages, where considerable improvements are already planned. In order to enable residents in all parts of Redlands to access these destinations, as well as others located outside this core, the SMP must build on these facilities to create a complete network that increases walking, biking, and transit connections for all Redlands communities. This will include understanding which other destinations residents would like to reach without the use of an automobile and what barriers currently prevent them from doing so. Especially important will be the General Plan's principle of designing a multi-modal system that is accessible and comfortable for users of various ages, needs and abilities - including children, senior citizens, and those with disabilities.

City of Redlands General Plan 2035 (2017)

Study Area	Citywide
Plan Type	Comprehensive Plan
Plan Overview	Includes general recommendations for each aspect of the City of Redlands' planning and development.
Influence on SMP	Many of the principles and actions recommended in the plan relate to pedestrian and bicycle network improvement, citing specific priority routes and areas. The plan also includes guidance on related issues such as wayfinding, support facilities, land use, and pedestrian-focused street design.

Key Recommendations (relating to sustainable and active transportation)

Pedestrian and Bicycle Network Improvement:

- 2-A.5 Develop new roadway connections, pedestrian paths, and bicycle routes that facilitate transportation in the north-south direction traversing the I-10 freeway.
- 2-A.6 Improve and make more efficient traffic flow for all modes of transportation along corridors that link north-south thoroughfares through techniques such as signal timing, additional lanes, sidewalks, bike paths, and other improvements.
- 2-A.101 Improve connections from Downtown to adjacent neighborhoods, including areas north of I-10, through streetscape enhancement and multi-modal improvements.
- 4-A.89 Complete and enhance the sidewalk system along both East and West Redlands Boulevard. Make pedestrian enhancements to facilitate the safe crossing of the street.
- 4-A.97 [Colton Avenue and Orange Street Commercial Corridor] Encourage the development of bicycle, pedestrian, and transit access that reduces the need for on-site parking. Improve the pedestrian experience within these corridors through street trees and landscaping.
- 4-A.147 Improve pedestrian and roadway access to facilitate safe access to and from the airport.
- 5-P.1 Maintain a cohesive circulation system through a "layered network" approach promoting complete

Key Recommendations (relating to sustainable and active transportation)

streets and mobility for all modes while emphasizing specific transportation modes for specific corridors and geographic areas.

- 5-P.2 Use the layered network approach to identify, schedule, and implement roadway improvements as development occurs in the future, and as a standard against which to evaluate future development and roadway improvement plans.
- 5-P.3 Review the layered network with neighboring jurisdictions and seek agreement on actions needing coordination.
- 5-P.4 Support transportation infrastructure improvements such as safer street crossings and attractive streetscapes to encourage bicyclists, walkers, and users of mobility devices.
- 5-P.9 Design a layered transportation network for individuals of all ages and abilities.
- 5-P.16 Strengthen active transportation circulation routes within Downtown and the Transit Villages, and to/ from adjacent neighborhoods.
- 5-P.18 Encourage creative walking paths pursuant to City planning codes, local, State, and federal laws.
- 5-P.20 Establish and maintain a comprehensive network of on- and off-roadway bike routes to encourage the use of bikes for both commuter and recreational trips.
- 5-P.21 Develop bike routes that provide access to rail stations, Downtown, schools, parks, the University, employment, and shopping destinations.
- 5-A.12 Engage the community and neighborhoods in street design and redesign. Consult with the Traffic and Parking Commission on major street design projects.
- 5-A.14 Close the gaps in the sidewalk network where streets are built out but sidewalks are not complete.
- 5-A.16 Prepare an Active Transportation Plan that provides a method of prioritizing City streets to best accommodate all road users including cars, bikes, pedestrians, transit, and logistics.
- 5-A.17 Locate public parking facilities to serve the downtown around the periphery so as not to draw additional vehicles into the core areas. Ensure that easily identifiable pedestrian connections exist between public parking areas and the downtown core.
- 5-A.19 Create appropriate enhancements to pedestrian crossings at key locations across minor arterials, boulevards, and collectors with a target of providing pedestrian crossings no further than 600 feet apart in appropriate areas and in accordance with State standards.
- 5-A.20 Provide pedestrian routes between offices, neighborhoods, Downtown, and Transit Villages. Plan for direct connections from the interiors of residential tracts to neighboring parks, schools, retail, and other services using sidewalks, trails, and paseos.
- 5-A.21Strengthen trail connections to Downtown (such as Orange Blossom Trail, Lugonia Trail,

Key Recommendations (relating to sustainable and active transportation)

Citrus Avenue, and Church Street).

- 5-A.23 Coordinate with San Bernardino County and the Santa Ana River Conservancy on implementing the objectives of the Santa Ana River Trail Parkway and Open Space Plan.
- 5-A.24 Use the City's Bicycle Master Plan as the primary resource for planning and implementing bikeway improvements.
- 5-A.25 Implement bicycle and trail improvements that provide strong east-west connections between Transit Villages and in the city's wider bicycle network. Routes would include the Orange Blossom Trail, the Mission Creek Zanja Trail, routes on Colton Avenue and Citrus Avenue, Santa Ana River Trail, and the San Timoteo Canyon Trail.
- 5-A.26 Implement bicycle and trail improvements that provide strong north-south connections, especially with major eastwest trails, including routes on Mountain View Avenue, California Street, Nevada Street, Alabama Street, Texas Street, New York Street, Orange Street, Church Street, Dearborn Street, and Wabash Avenue.
- 5-A.27 Implement safety improvements in mid-block areas that allow for bicycles to safely cross heavily traveled roads. Improvements can include stop signs for cyclists, warning beacons, and illuminated signs initiated by pedestrians and cyclists.
- 5-A.30 Implement bicycle route improvements that provide inter-city and regional connections, connect to trail systems in Loma Linda, Highland, Yucaipa, San Bernardino, and the Santa Ana River Trail
- 5-A.32 Work with neighboring cities and the County to seek grants for bike routes and facilities that span jurisdictions.
- 5-A.36 Allow for flexibility and creativity in the roadway standards, where appropriate, to preserve historic features, specimen trees and significant landscaping, accommodate turn lanes, parking, wider sidewalks, bike paths, turnouts for buses, public art, and landscaped medians.
- 7-A.37 Prioritize completing incomplete sidewalks within a half-mile radius of existing commercial development.
- 5-A.44 Establish new boulevards Downtown and in the Transit Villages that include planted center medians, accommodations for transit, wider sidewalks, and amenities for pedestrians.
- 5-A.50 Plan an integrated network of collector and local streets serving new neighborhoods. Design cul-de-sacs so they have pedestrian/bike connections at the terminus.
- 7-A.35 Implement street design features that facilitate walking and biking in both new and established areas. Require a minimum standard of these features for all new developments.
- 7-A.41 Improve the conditions for youth walking and bicycling in the areas surrounding schools

Key Recommendations (relating to sustainable and active transportation)

by working with the school district on the Safe Routes to School program. Assess and prioritize identified Safe Routes to School infrastructure improvements in annual transportation improvements budgets.

- 7-A.42 Work with interested community members and organizations to plan and develop a course of exercise circuits that take advantage of existing parks, trails, and other pedestrian infrastructure. The course should be clearly marked, and contain simple stations and diagrams for self-guided training.

Landscaping and Trees

- 2-P.18 Reinforce Redlands' identity as a "Tree City" through cohesive streetscapes that enhance its sense of place and its heritage, and that promote pedestrian comfort
- 2.A.77 Prepare and maintain a citywide inventory and streetscape plan that includes the following components: Streetscape strategies for major arterial streets that may include items such as tree species; median or parkway landscape treatment; and curbs and sidewalk location and materials; and An updated official Street Tree List that is tied to streetscape strategies, which promotes use of native and water efficient trees, and trees that provide pedestrian shade and comfort.

Public Spaces and Street Design

- 3-A.40 Enhance and expand the public spaces Downtown (streetscapes, plazas, parks) to improve the pedestrian experience.
- 4-A.113 [New York Street Transit Village] Provide streetscape improvements along the major corridors of Colton Avenue, Texas Street, and Redlands Boulevard to enhance comfort and safety for all modes of travel and increase accessibility to and from surrounding areas.
- 4-A.120 Complete and implement an update of the Downtown Specific Plan to create a cohesive town center with amenities and pedestrian-oriented streets.
- 5-P.11 Implement standards for pavement design and roadway and intersection striping so streets are accessible by all users and all modes, and safety is improved.
- 5-P.13 Ensure streets are designed to accommodate bicyclists per the Bicycle Master Plan.
- 5-P.14 Design streets to accommodate various modes according to roadway classification and reduce conflicts and safety risks between modes.
- 5-P.17 Provide a safe, direct, and healthful pedestrian environment through means such as providing separate pedestrian-ways in parking lots, avoiding excessive driveway widths, and providing planting strips between sidewalks and streets where feasible.

Key Recommendations (relating to sustainable and active transportation)

Wayfinding

- 5-P.12 Develop and implement a comprehensive wayfinding program serving all modes of transportation.
- 7-A.40 Improve signs directing residents and visitors to public parks and recreational facilities from all parts of the community. Integrate parks signage with bikeway and pedestrian-oriented signage systems throughout Redlands.

Amenities and Support Facilities

- 5-P.19 Enhance street lighting for pedestrians where current lighting is inadequate.
- 5-A.22 Include amenities such as shade trees, transit shelters and other transit amenities, benches, trash and recycling receptacles, bollards, public art, and directional signage that can enhance the pedestrian experience.

Site Development, Land Use and Access:

- 2-P.27 Conserve Downtown's character and historic assets while infusing it with new uses, buildings, and activities. New development should proportionately relate to and complement existing structures and the pedestrian environment
- 2-A.92 [Downtown] Provide public improvements for traffic and pedestrian circulation, flood control, utility services, and aesthetic amenities that will attract new private investment and economic development.
- 2-A.99 Ensure that new development along Redlands Boulevard is pedestrian-oriented.
- 2-A.101 Address parking demand by finding additional areas to provide parking for Downtown, and by developing creative parking management strategies, such as shared parking, maximum parking standards, "smart" metering, utilizing on-street parking for reuse of existing buildings, paid parking, etc. Monitor the impacts of new technology such as the autonomous vehicle and car hire /car share services on the total demand for parking.
- 4-P.41 Foster a connected, accessible, and active community by creating attractively designed pedestrian- and transit-oriented villages with a mix of uses in a compact area.
- 4-P.44 Provide choices for travel options, including walking, biking, vehicular, and transit.
- 4-P.46 Improve connectivity between Transit Villages and existing neighborhoods.
- 4-P.50 Allow for density bonuses in the Transit Village Overlay Zone contingent on the provision of public benefits. Density bonuses shall be a minimum of 25 percent within a quarter-mile of each transit station, and 10 percent in areas located between a quarter-mile and a half-mile radius of each transit station. Public benefits may include but are not limited to amenities such as a public park, plaza, or playground; enhanced streetscaping; public art; or participation in a voluntary transfer of development rights program.
- 4-A.16 Improve vehicular accessibility, traffic flow, and parking availability as well as pedestrian access and amenities within office, commercial, and industrial areas

Key Recommendations (relating to sustainable and active transportation)

- 4-A.114 [New York Street Transit Village] Establish boulevards along Redlands Boulevard and Colton Avenue with pedestrian-oriented streetscape improvements and ground-floor active uses.
- 4-A.126 [Downtown Redlands Transit Village] Establish boulevards along Orange Street, Colton Avenue, and Redlands Boulevard with pedestrian-oriented streetscape improvements and ground floor active uses.
- 5-P.10 Require developers to construct or pay their fair share toward improvements for all travel modes consistent with the layered network.
- 5-A.3 Ensure new street design and potential retrofit opportunities for existing streets minimize traffic volumes and/or speed as appropriate within residential neighborhoods without compromising connectivity for emergency vehicles, bicycles, pedestrians, and users of mobility devices. This could be accomplished through: Management and implementation of complete street strategies, including retrofitting existing streets to foster biking and walking as appropriate; Short block lengths, reduced street widths, and/or traffic calming measures; and Providing pedestrians and bicyclists with options where motorized transportation is prohibited.
- 5-A.4 Consider innovative design solutions to improve mobility, efficiency, connectivity, and safety through the use of traffic calming devices, roundabouts, curb extensions at intersections, separated bicycle infrastructure, high visibility pedestrian treatments and infrastructure, and signal coordination.
- 5-A.5 As part of street redesigns, plan for the needs of different modes – such as shade for pedestrians, lighting at pedestrian scale, mode-appropriate signage, transit amenities, etc.
- 5-A.6 Add bike and pedestrian facilities on roads with excess capacity where such facilities do not exist, using supporting transportation plans as guidance. Excess capacity includes street right-of-ways or pavement widths beyond the standards, or excess capacity in roadways based on actual vehicular travel versus design capacity.
- 5-A.7 Add new streets to create a finer-grained, pedestrian-scaled road network where the roadway network is characterized by particularly long blocks, connecting residential areas to parks and Transit Village cores. Ensure the street systems in Transit Villages support development of connected and accessible communities.
- 7-A.38 Revise development standards to require pedestrian connections into and inside commercial projects.

City of Redlands Bicycle Master Plan (2015)

Study Area	Citywide
Plan Type	Master Plan
Plan Overview	The Plan provides a vision, strategies and actions for the improvement of bicycle infrastructure in the City of Redlands.
Plan Vision Statement	This Plan provides a vision for improving the bicycling environment by providing direction for the expansion of the existing bikeway network, connection of gaps, recommendations for bicycle support facilities, and education and awareness programs.
Influence on SMP	This Plan establishes an inventory of all bicycle infrastructure and recommended priority network improvements, as well as providing goals and recommendations for accommodating and encouraging bicycling.
Key Recommendations (relating to sustainable and active transportation)	**Goals (see page 1-3 to 1-4)** ◆ Create an environment where people can circulate without a car. ◆ Expand the role of bicycling as a contributor to economic vitality. ◆ Increase the number of non-motorized trips in Redlands by encouraging people to bicycle instead of drive. ◆ Decrease the number of bicyclist and pedestrian collisions, injuries and fatalities by 50 percent. ◆ Promote the health of Redlands residents by making bicycling a safe and attractive option. ◆ Facilitate the economic viability of Redlands by making Redlands an attractive place to live, shop and operate a business. ◆ Work with transit agencies (OmniTrans, Metrolink) to promote first and last mile connections.

Key Recommendations (relating to sustainable and active transportation)

Objectives (see page 1-4 to 1-6)

- Provide connections to major destination points and trip generators.
- Close gaps between existing facilities.
- Create opportunities for usage of exclusive rights-of-way (i.e. for Class I facilities).
- Analyze physical characteristics of roadways and suitability for accommodation of bicycle facilities (i.e. for Class II and III facilities).
- Improve technology to ensure that cyclists can activate traffic signals at vehicle-activated intersections.
- Provide secure and convenient bicycle parking throughout Redlands.
- Create a network of pathways so that every neighborhood is within 1/4 mile of an effective multi-use facility.
- Reduce parking requirements near transit hubs.
- Update the General Plan to include the facilities and programs proposed in this Bicycle Master Plan.

Other recommendations:

- The recommended facilities in this plan should be largely accomplished alongside the street repaving program. (4-1)
- The critical remaining link of the Orange Blossom trail from Alabama Street to Grove Street was a high priority at the time the BMP was written. (4-1)
- Traffic calming devices, such as speed tables and flashing beacons, should be included with every OBT crossing of a city street. (4-1)
- The City should work in close collaboration with the County of San Bernardino to ensure that the Redlands portion of the Santa Ana Rail Trail is completed. (4-2)
- Provide a connection to the City of Highland via Orange Blvd.
- The Plan lists 12 priority intersection improvements. (Table 4-3 on page 4-5)
- Consider the installation of bike boxes at intersections that are difficult for bicyclists. (4-5)
- The City should consider installing bicycle detection at all actuated intersections. (4-6)
- This Plan recommends the City consider green lanes through conflict areas on roadways with bike lanes. (4-6)
- Short-term and long-term bike parking is needed close to destinations and should be convenient and visible (4-6 to 4-8)
- Citywide bicycle network needs to be accompanied by a comprehensive wayfinding system, including distances to destinations. (4-8)
- Bike stations - bike parking, repair, changing facilities, etc. (4-9 to 4-10)
- Development of a maintenance schedule for bike, pedestrian, and multi-use path maintenance (4-10)

Key Recommendations (relating to sustainable and active transportation)

Programs:

- Education programs including (youth, adult, senior) bicycle safety and skills classes/clinics and a "share the road" campaign. (page 4-10 to 4-14)
- Encouragement programs including bike valet at City events, youth-oriented and family-oriented bike rides, a bike light campaign, bike festivals, launch parties for new bikeways, a Bicycle Friendly Community designation, commuter incentive programs, Safe Routes to School programs, Bike Friendly Business Districts, bicycle hubs, Open Streets/Cyclovia events, bicycle tourism, bicycle maps, and a bikeshare program. (page 4-14 to 4-21)
- Enforcement programs including speed radar trailers/feedback signs and bike patrol units (Police Department). (page 4-21 to 4-22)
- Evaluation and Policy programs including a bicycle counts and survey program, adoption of a locally-appropriate Complete Streets policy, mapping bikeway investments, a bicycle report card, a bicycle parking development policy, and automatic bicycle counters. (page 4-22 to 4-24)

Policy Changes

- Redlands could use the Complete Streets Policy Workbook (see link below) to create a locally-appropriate Complete Streets policy.
- The code should require sufficient high-quality bicycle parking, installed correctly, based on land use classification. This requirement should be enforced.
- A maintenance program specific to bicycle and pedestrian infrastructure should be created that tales into account issues that pose safety hazards to pedestrians and bicyclists. (page 4-24 to 4-25)

City of Redlands Transit Villages Specific Plan (2020) - DRAFT

Study Area

Transit Villages within Redlands

Plan Type

Specific Plan (Draft as of August 2020)

Plan Overview

Describes a vision and detailed guidelines for the development of each Transit Village.

Plan Vision Statement

This document outlines the City's plan for transportation, land use, and street design in the areas surrounding the three rail stations, including a major portion of Downtown.

Key Recommendations (relating to sustainable and active transportation)

Transportation Recommendations:

- a network of complete, multi-modal streets that provide a positive environment for all users, including pedestrians, cyclists, transit patrons, and motorists (5:2)
- calm traffic in pedestrian-oriented areas while maintaining vehicular flow capacity and accommodating emergency vehicles. (5.2)
- Interconnected streets that enable a variety of alternative paths of movement between destinations. (5:2)
- Short block lengths and strategically located street offsets to calm traffic without the need for post-construction interventions (such as speed bumps). Offset blocks also provide an opportunity to introduce buildings on parcels that occupy the terminus of the offset, enhancing the overall sense of place. (5:2)
- Streets that accommodate two-way traffic and on-street parking to facilitate navigation, provide convenient parking in front of stores and residences, reduce the amount of required off-street parking, and calm traffic speeds. (5:2)
- Narrow lane widths, tight curb radii, and short street crossings to calm traffic and provide a more comfortable and safe environment for pedestrians, cyclists, and automobiles. (5:2)

Key Recommendations (relating to sustainable and active transportation)

- Ample sidewalks, street trees, and generous streetscapes that provide shady, comfortable, and inviting places for pedestrians to walk, while defining the Village's unique and memorable sense of place. (5:2)
- Lighting that generates an inviting and safe environment for pedestrians, cyclists, and commerce. (5:2)
- Convenient access to the train stations, whether by foot, bicycle, scooter, bus, car, or transit network companies such as Uber and Lyft. (5:2)
- Pedestrian-scaled blocks (new development built on megablocks includes new streets that form blocks less than 500 by 500 feet) (5:4)
- Intersection improvements along corridors with higher vehicular volumes (at minimum, update to continental stripes but consider bulb-outs and pedestrian priority signal intervals) (5:4)
- Mid-block intersection crossings should be updated with pedestrian-activated caution signals, continental striping, and adequate lighting. (5:4)
- New signalized intersections to provide safer crossing opportunities (ex. Intersection of Shoppers Lane and Orange Street) (5:4)
- Highway underpass improvements (5:5)
- Downtown rail crossing (5:5)
- New sidewalks along University Street and Redlands Blvd. (5:5)
- Provision of key bicycle amenities such as bicycle parking, bike repair facilities, and on-site changing facilities within the plan area (5:8)

New York Street Transit Village:

Goals

- Generate active, walkable streets with wide sidewalks, shade trees, and safe pedestrian crossings.
- Provide pedestrian and bicycle connections between the train station and the neighborhoods located north of the freeway.
- Introduce pocket parks, plazas, and greens that accommodate playgrounds, dog parks, and public art.
- Complete the Orange Blossom Trail as a link between the three stations and between Jennie Davis Park, Sylvan Park, and new parks, greens, and plazas along the way.

Key Components

- The improvements of Redlands Boulevard with the introduction of missing sidewalks, a planted center median, bicycle lanes, and a crosswalk at New York Street.

Recommended Improvements

- Transform New York Street north of the New York Street/Esri Station into a gateway into a new transit-oriented residential neighborhood and/or office district.
- Provide east-west bicycle connectivity by introducing bike lanes along Redlands Boulevard, Colton Avenue, and completing the Orange Blossom Trail through Downtown.

Key Recommendations (relating to sustainable and active transportation)

- Provide north-south bicycle connectivity by accommodating bicycles along New York Street and Texas Street.
- As large blocks redevelop, introduce new streets to generate walkable blocks in keeping with Redlands traditional street and block pattern.
- Improve pedestrian connectivity by introducing pedestrian safety improvements, including introducing a crosswalk at the intersection of Redlands Boulevard and New York Street, upgrading existing crosswalks, and introducing pedestrian bulb-outs at key intersections (See Section 5.3).

Downtown Redlands Transit Village

Goals:

- Create a mixed-use, multi-modal village around the Downtown Station.
- Generate active, walkable streets with wide sidewalks, shade trees, benches, outdoor dining, and safe pedestrian crossings.
- Recalibrate Downtown streets to create a balanced and safe environment for all travel modes: walking, biking, and driving.
- Provide pedestrian and bicycle connections between the train station and Downtown's unique destinations (Redlands Bowl, C.K. Smiley Library, etc.) and surrounding residential neighbor- hoods, especially those located north of the freeway.
- Replace the Redlands Mall with an interconnected street and paseo network lined with street trees and urban buildings.
- Introduce pocket parks, plazas, and greens that accommodate playgrounds, dog parks, and public art.
- Complete the Orange Blossom Trail as a link between the three stations and between Sylvan Park, Jennie Davis Park, and new parks, greens, and plazas along the way.

Key components:

- Rehabilitation of the Santa Fe Depot.
- A garage that provides parking for rail commuters and for patrons of nearby businesses. The garage also provides bicycle storage for commuters who ride their bikes to the train station.
- A pedestrian passage across the railroad tracks along the Third Street alignment that enables pedestrians to cross between the north and south side of the tracks and provides access to the train platforms buses parked on Stuart Avenue and/or Shoppers Lane. The pedestrian passage is lined with stores and restaurants.
- A plaza located south of the tracks that welcomes commuters and visiors arriving into Downtown Redlands.
- Bus parking along Stuart Avenue or Shoppers Lane within sight of, and walking distance of, the depot.

Key Recommendations (relating to sustainable and active transportation)

Recommended Improvements:

- Transform Orange Street into a gateway street into Downtown by introducing a landscaped median down its center. Also consider reducing the number of vehicular travel lanes from two in each direction to one, and introducing buffered bike lanes.
- In conjunction with the introduction of streets within the Redlands Mall site, turn State Street between Orange Street and Seventh Street into a two-way street to provide more efficient circulation and facilitate access to businesses along the entire length of State Street.
- Work with the owner of the Studio Movie Grill Theater to detail the parking aisle along the Shoppers Lane alignment between Third Street and Eureka Street as a street with sidewalks and street trees
- in order to provide a more formal, urban connection between Eureka Street, future development that occurs west of Eureka Street, and the Downtown Station.
- Provide east-west bicycle connectivity by introducing bike lanes along Redlands Boulevard, Colton Avenue, and completing the Orange Blossom Trail through Downtown.
- Provide north-south bicycle connectivity by introducing bike lanes along Orange Street, or if Orange Street retains two vehicular lanes in each direction, along Sixth Street and along Eureka Street.
- As large blocks redevelop, introduce new streets to generate walkable blocks in keeping with Redlands traditional street and block pattern.
- Improve pedestrian connectivity by introducing upgraded crosswalks, introducing pedestrian bulb-outs at key intersections (designed
- in conjunction with bike lanes, where present), and introducing improved lighting in the underpasses (see Section 5.3).

University Transit Village

Key components:

- Strong pedestrian connections from the station to the Village and across University Street to Sylvan Park

Recommended improvements:

- Transform University Street into a geteway to the University of the Redlands
- Introduce new streets that generate an interconnected network of walkable blocks
- Improve east-west bicycle connectivity by completing the Orange Blossom Trail
- Improve north-south bicycle connectivity by introducting bike lanes along University Street and designating Grove Street as a bike route
- Improve pedestrian connectivity by introducing new and/or upgrading existing sidewalks (especially along University Street) and making the freeway underpasses more appealing for pedestrians.

SBCTA Passenger Rail Accessibility Plan (2020)

Study Area

Citywide

Plan Type

Plan Overview

This project identifies existing barriers surrounding the planned station areas and proposes planning-level improvements based on analysis, relevant plans, community input, and industry best practices.

Influence on SMP

This plan specifically focuses on how to improve bicycle and pedestrian access to the new stations.

Key Recommendations (relating to sustainable and active transportation)

Recommendations:

- Comprehensive Wayfinding Plan (Signs, but Wayfinding can also include virtual elements by providing digital applications (apps) and websites that help display walking or biking routes, time and distances.)
- Pavement Markings: Bicycle Markings (or "sharrows") can be used on streets where traffic speeds and volume are low and it is important to communicate to roadway users that they are traveling along a shared roadway .Conflict markings at intersections help with overall safety and awareness for all and should be included in any intersections along bicycle facilities, trail access points and corridors in need of pedestrian enhancement.
- Network Development: The Rail Access Plan Includes recommended updates to the networks identified in the City of Redlands Bicycle Master Plan (2015) and the SBCTA Non-Motorized Transportation Plan (2018). (Figure 40 on page 88 details the changes from these plans. Pages 99 to 107 show detailed improvements for each station.) These recommendations are intended to complement and be consistent with the 2019 Draft Redlands Transit Villages Specific Plan.

Key Recommendations (relating to sustainable and active transportation)

- Roadway Resurfacing and Regular Maintenance and Monitoring: Roadway resurfacing should be prioritized for designated bikeways. In addition, ongoing maintenance of the on-street bikeway network should include street sweeping and periodic checks to identify areas where bike lane striping, stencils, and signs have been worn or damaged. Any signage that is missing should be replaced and any striping or stenciling that has become well-worn should be refreshed. Maintenance activities should be incorporated into current road checks and by maintenance requests from the public.
- Bike Parking
- Placemaking Elements and Amenities: increasing the desirability of the station areas through public art, small-scale retail operations, and safety enhancements such as additional pedestrian-scale lighting and gathering spaces, which encourage "eyes on the street," further mitigating the perception found at several stations of an unsafe environment.

Recommended Criteria for network selection:

- Low-Stress: Most people who bike, or are interested in biking, prefer to bike on calm, low volume streets or streets that are separated from vehicular traffic. The proposed bikeway network strives to provide low stress routes that allow for families, and those that are interested but concerned about safety, to reach their destinations. Similarly, the pedestrian station area plans focus on high-stress intersections and segments that have the greatest potential to make the walking environment more comfortable, if improved.
- Connectivity: The proposed recommendations close gaps in the existing active transportation network so that people can conveniently access Arrow stations, key destinations, activity centers, and existing facilities.
- Safety: The proposed active transportation network and countermeasures improve safety by decreasing conflicts with motor vehicles.
- Community: The community vision established by previous and concurrent planning efforts as well as the community input obtained through this planning process

SBCTA Passenger Rail Accessibility Plan (2020)

Study Area	Citywide
Plan Type	Non-Motorized Transportation Plan
Plan Overview	The goal of this Plan is to develop a cohesive, integrated strategy for the development of a countywide network of active transportation facilities and identify funding sources to implement that plan.
Influence on SMP	Plans for countywide facilities will influence mobility decisions within Redlands, especially when it comes to facilitating greater connectivity between urban areas.
Key Recommendations (relating to sustainable and active transportation)	**Priorities:** ◆ Deliver the Class I backbone bicycle system. Key elements of the backbone system: Santa Ana River Trail, Pacific Electric Trail, Orange Blossom Trail, San Timoteo Canyon Trail, Riverwalk Trail, Cajon Pass Connector – Route 66 Heritage Trail ◆ Although the Class I facilities can be considered a backbone bicycle system, there is much more to the network than just Class I facilities. Other types of facilities can also be delivered more quickly and less expensively, improving regional connectivity. ◆ Increase connectivity on Class II and Class III bicycle facilities by prioritizing the "low- hanging fruit" – parts of the regional system that are low-cost, close gaps in the system, and provide connections to key destinations ◆ Development of regional trails and pathways which provide improved pedestrian access to destinations ◆ Develop a better "sense of a system" through improved signage, markings, and way- finding for both cyclists and pedestrians ◆ Improving pedestrian access to transit; Proactively coordinate integration of cycling and walking access accommodations to and from transit stations

Key Recommendations (relating to sustainable and active transportation)

- Proactively coordinate integration of cycling and walking accommodations with the State of California's Complete Streets requirements
- Aggressively pursue grant funding and devote additional programmatic funding to non-motorized facilities

Policies:

- Develop better bicycle connectivity between cities and suburban areas of the County by coordinating the location and staging of network improvements. This must include improved collaboration with Caltrans, given the number of State highways connecting the subareas. Connectivity on Class II and Class III bicycle facilities can be increased by prioritizing the "low-hanging fruit" – parts of the regional system that are low-cost, close gaps in the system, and provide connections to key destinations.
- Local jurisdictions are the agencies responsible for the identification of non-motorized transportation projects within their jurisdiction for inclusion into the Plan. SANBAG shall only serve in an advisory capacity with respect to the identification of projects on the regional network. SANBAG shall provide advice on the inclusion of projects that may serve to better establish connectivity between jurisdictions, intermodal facilities and regional activity centers. However, local jurisdictions have sole authority over all projects included in the Plan
- Local jurisdictions are also responsible for implementation of the projects included in the NMTP. SANBAG may provide advisory support to jurisdictions in the project development process on request. Should SANBAG be requested to provide assistance delivering a project in the Plan, such instances should be limited to development of regional non-motorized transportation facilities that provide connectivity to more than one jurisdiction or complete gaps within the regional non-motorized transportation network or serve to provide better access to transit facilities.
- SANBAG shall prepare and update the comprehensive map identifying the County's non-motorized transportation system using its in-house GIS capabilities. Maintenance of the maps is also an important element of SANBAG's proposed 511 Traveler Information System.
- SANBAG shall work with and encourage member agencies to incorporate non-motorized transportation facilities into general and specific plans as well as provide assistance in identifying design standards that provide for pedestrian- and bicycle-friendly access to transit facilities.
- Identify individuals within SANBAG, local jurisdictions, Caltrans, and transit agencies to be points of contact on non-motorized facility implementation and ensure communication on non-motorized topics among the agencies.

Key Recommendations (relating to sustainable and active transportation)

- SANBAG shall work with its member agencies to develop a regional way-finding system to assist travelers to identify the non-motorized transportation system. Any such system developed shall be developed in collaboration with local jurisdictions, will afford an opportunity for member agency customization, and promote connectivity to transit facilities, park and ride lots, and other regional activity centers.
- SANBAG shall work with member agencies to coordinate delivery of the NMTP and projects contained in the Nexus Study.
- SANBAG shall work with and encourage transit operators to provide end-of-trip pedestrian and bicycle-serving facilities, such as bike lockers, racks, and capacity on transit vehicles to carry bicycles and better facilitate the integration and use of non- motorized transportation within the regional transportation system.
- SANBAG shall, when feasible, support local education and safety efforts currently being implemented through local law enforcement, highway patrol, Caltrans and schools to better educate children and adults on the safe use of bicycles and to promote the non- motorized transportation system.
- SANBAG and member agencies shall conduct regular bicycle and pedestrian counts to monitor the effects of implementation of the NMTP. SANBAG shall work to identify funding for the monitoring of Class I, separated shared-use facilities, so that no financial impact is borne by the local jurisdictions for collection of count information. Counts conducted on Class II and Class III, on-street bicycle facilities, shall correspond with counting for intersections that are both on the non-motorized network and require CMP Monitoring as outlined in the Congestion Management Program. When counts for non-CMP intersections are desired, SANBAG shall be responsible for identifying funding for such counts.
- SANBAG shall use their Non-Motorized Transportation plan as the basis to allocate state, federal, and local funds for delivery of non-motorized transportation improvements. Fund types may include, but are not limited to, federal Transportation Enhancement (TE), Congestion Mitigation and Air Quality (CMAQ), state Bicycle Transportation Account (BTA), and Transportation Development Act (TDA) Article 3 funds
- SANBAG shall work with member agencies to identify state/federal bicycle and pedestrian infrastructure or planning grant opportunities. When funding opportunities arise, SANBAG shall work to support local jurisdiction grant applications or collaborate with local jurisdictions to directly submit grant applications for projects in the Plan.

Key Recommendations (relating to sustainable and active transportation)

Recommendations:

- Deliver the Class I, II and III identified in the subarea maps referenced in Chapter 3. Although the Class I facilities can be considered a backbone bicycle system, there is much more to the network than just Class I facilities. Other types of facilities can also be delivered more quickly and less expensively, improving regional connectivity.
- Develop a better "sense of a system" through improved signage, markings, and way- finding for both cyclists and pedestrians.
- Develop an improved inventory of end-of-trip facilities, particularly at transit stations, schools, other public buildings, and major employment centers.
- Proactively coordinate integration of cycling and walking access accommodations to and from transit stations.
- Continue safety education and promotion of cycling through schools, newsletters, and public websites.
- Proactively coordinate integration of cycling and walking accommodations with the State's Complete Streets requirements, once guidelines are finalized by the State.

SBCTA Passenger Rail Accessibility Plan (2020)

Study Area

Countywide

Plan Type

Master Plan

Plan Overview

This phase of the Regional Safe Routes to School (SRTS) Plan was created with the purpose of guiding strategic improvements to the safety and accessibility of non-motorized transportation networks around San Bernardino County schools.

Influence on SMP

Three schools within Redlands are included as selected school sites (Clement Middle School, Franklin Elementary School, and Lugonia Elementary School).

Key Recommendations (relating to sustainable and active transportation)

Goals of Phase II:

- Support the overall Countywide Vision and implementation strategy for providing safe routes to schools in San Bernardino County that encourage alternate mode choices for students and parents.
- Build upon the Phase I inventory and prioritization study to better integrate SRTS sites and corridors with Countywide active transportation efforts including the other components of the Active Transportation Plan.
- Develop a student data collection strategy to document the benefits of active transportation in order to leverage more SRTS funding for local jurisdictions.Conduct and document walk audits to better identify their exact infrastructural needs and provide access accommodations for students to bicycle and walk to school.
- Define a series of possible implementation efforts to identify and remove barriers, over time, to active transportation for all of the schools in the County.
- Address both actual and perceived safety concerns, together with strategies that could significantly decrease bicycle and pedestrian facilities and injuries.

Key Recommendations (relating to sustainable and active transportation)

Goals of SBCTA Regional SRTS Plan:

- Increased bicycle and pedestrian access. Expand bicycle and pedestrian facilities and access within and between neighborhoods, to employment centers, shopping areas, schools, and recreational sites.
- Increased travel by cycling and walking. Make bicycling and walking an integral part of daily life in San Bernardino County, particularly (for bicycle) for trips of less than five miles, by implementing and maintaining a bikeway network, providing end-of-trip facilities, improving bicycle/transit integration, encouraging bicycle use, and making bicycling safer and more convenient.
- Routine accommodation in transportation and land use planning. Routinely consider bicyclists and pedestrians in the planning and design of land development, roadway, transit, and other transportation facilities, as appropriate to the context of each facility and its surroundings.
- Improved bicycle and pedestrian safety. Encourage local and statewide policies and practices that improve bicycle and pedestrian safety.

Applicable Regulations

FEDERAL REGULATIONS

American with Disabilities Act (ADA)

These federal regulations include a set of standards for removing accessibility barriers in public places.

PROWAG (Public Right-of-Way Access Guidelines)

PROWAG are federal standards proposed by the United States Access Board. While this resource is in draft status as of 2020, many agencies apply PROWAG as a minimum in anticipation of formal adoption.

STATE REGULATIONS

California Complete Streets Act (AB 1358)

This act requires that the legislative body of a city or county, upon any substantive revision of the circulation element of the general plan, modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.

Active Transportation Program (ATP)

Requirements for ATP-compliant Active Transportation Plans, which are eligible for funding, include:

The estimated number of existing bicycle trips and pedestrian trips in the plan area, both in absolute numbers and as a percentage of all trips, and the estimated increase in the number of bicycle trips and pedestrian trips resulting from implementation of the plan.

The number and location of collisions, serious injuries, and fatalities suffered by bicyclists and pedestrians in the plan area, both in absolute numbers and as a percentage of all collisions and injuries, and a goal for collision, serious injury, and fatality reduction after implementation of the plan.

A map and description of existing and proposed land use and settlement patterns which must include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, major employment centers, and other destinations.

A map and description of existing and proposed bicycle transportation facilities.

A map and description of existing and proposed end-of-trip bicycle parking facilities.

A description of existing and proposed policies related to bicycle parking in public locations, private parking garages and parking lots and in new commercial and residential developments.

A map and description of existing and proposed bicycle transport and parking facilities for connections with and use

of other transportation modes. These must include, but not be limited to, parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.

A map and description of existing and proposed pedestrian facilities at major transit hubs. These must include, but are not limited to, rail and transit terminals, and ferry docks and landings.

A description of proposed signage providing wayfinding along bicycle and pedestrian networks to designated destinations.

A description of the policies and procedures for maintaining existing and proposed bicycle and pedestrian facilities, including, but not limited to, the maintenance of smooth pavement, freedom from encroaching vegetation, maintenance of traffic control devices including striping and other pavement markings, and lighting.

A description of bicycle and pedestrian safety, education, and encouragement programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the law impacting bicycle and pedestrian safety, and the resulting effect on accidents involving bicyclists and pedestrians.

A description of the extent of community involvement in development of the plan, including disadvantaged and underserved communities.

A description of how the active transportation plan has been coordinated with neighboring jurisdictions, including school districts within the plan area, and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, general plans and a Sustainable Community Strategy in a Regional Transportation Plan.

A description of the projects and programs proposed in the plan and a listing of their priorities for implementation, including the methodology for project prioritization and a proposed timeline for implementation.

A description of past expenditures for bicycle and pedestrian facilities and programs, and future financial needs for projects and programs that improve safety and convenience for bicyclists and pedestrians in the plan area. Include anticipated revenue sources and potential grant funding for bicycle and pedestrian uses.

A description of steps necessary to implement the plan and the reporting process that will be used to keep the adopting agency and community informed of the progress being made in implementing the plan.

A resolution showing adoption of the plan by the city, county or district. If the active transportation plan were prepared by a county transportation commission, regional transportation planning agency, MPO, school district or transit district, the plan should indicate the support via resolution of the city(s) or county(s) in which the proposed facilities would be located.

California Government Code §65302 (Complete Streets)

(2) (A) Commencing January 1, 2011, upon any substantive revisions of the Circulation Element, the legislative body shall modify the Circulation Element to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan.

(B) For purposes of this paragraph, 'users of streets, roads, and highways' means bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors.

California Green Code (CALGreen) - Part 11 of the California Building Standards Code

These bicycle parking requirements apply to all new residential and non-residential buildings:

- Bicycle Parking and Changing Rooms: Comply with sections 5.106.4.1 and 5.106.4.2; or meet local ordinance or the University of California Policy on Sustainable Practices, whichever is stricter.
- Short-Term Bicycle Parking: If the project is expected to generate visitor traffic, provide permanently anchored bicycle racks within 100 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack.
- Long-Term Bicycle Parking: For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of motorized vehicle parking capacity, with a minimum of one space. Acceptable parking facilities shall be convenient from the street and may include:
  - Covered, lockable enclosures with permanently anchored racks for bicycles
  - Lockable bicycle rooms with permanently anchored racks
  - Lockable, permanently anchored bicycle lockers

Deputy Directive 64 (DD-64-R1)

Caltrans must address the "safety and mobility needs of bicyclists, pedestrians, and transit users in all projects, regardless of funding."

Traffic Operations Policy Directive 09-06

This directive is designed to ensure the provision of bicycle and motorcycle detection on all new and modified approaches to traffic-actuated signals in the state o f California.

California Assembly Bill 1193 (2014)

This bill allows local bikeway designs to deviate from the California Highway Design Manual if designs are based on standards crafted by a national association of public agency transportation officials. The bill also enabled local governments to build protected cycle tracks.

California Assembly Bill 2245 (2014)

Planners are no longer required to conduct environmental impact reports (EIRs) for bike lane projects. Instead, cities and counties are required to prepare a traffic and safety study of the proposed bicycle lane project, file a CEQA-exemption notice with the state and County, and

conduct public hearings to discuss the project's impact.

California Senate Bill 1183 (2014)

Senate Bill 1183 allows jurisdictions to propose a small vehicle registration fee on their local ballot to fund bike trails and paths on park district lands. The fee must be no more than five dollars and requires approval from at least 2/3 of local voters

Article 3. California Bicycle Transportation Act

- Section 887: Construction of non-motorized transportation facilities on state highways
- Section 889: The state can identify and promote bicycle routes or significance
- Section 891: Local agencies must utilize minimum safety criteria established pursuant to Section 890.6
- Section 892.a: Rights-of-way established for other purposes by cities, counties, or local agencies shall not be abandoned unless the governing body determines that the rights-of-way or parts thereof are not useful as a non-motorized transportation facility.

California Government Code Title 7 Division 2 Chapter 4 Article 3 (Subdivision Dedications)

- 66475.1: Whenever a subdivider is required pursuant to Section 66475 to dedicate roadways to the public, the subdivider may also be required to dedicate additional land as may be necessary and feasible to provide bicycle paths for the use and safety of the residents of the subdivision.

California Streets and Highways Code Chapter 8 - Non-Motorized Transit:

- Division 13: Pedestrian Malls, Pedestrian Mall Law of 1960

LOCAL REGULATIONS

Redlands Municipal Code

- 10.48.010: Establishment of Crosswalks between intersections
- 10.48.020: Establishment of Crosswalks at intersections
- 10.48.040: Pedestrians must cross at right angles to the curb
- 12.12.110: Tress not to obstruct: It is unlawful to permit the branches or foliage of any tree, plant, hedge or bush growing on private property to obstruct the free passage of vehicles in the roadway of any street or of pedestrians upon the sidewalk portion thereof, or to hang over such portion of sidewalk within seven feet (7') of the surface thereof.
- Chapter 12.22: Dedication and Improvements for Nonsubdivision development projects - the developer must dedicate rights of way necessary to construct facilities identified in the City's General Plan. (This is also true when alteration work exceeds $10K)
- Chapter 12.52: Trees and Tree Protection Along Streets and in Public Places
- Chapter 12.55: Signs on Public Property
- Chapter 17.15: Subdivision dedications, reservations, and development fees:
- With parkland dedication, principal consideration shall be given to lands that offer (among other criteria) integration with hiking, riding and bicycle trails, natural stream reserves and other open space
- Chapter 18.16: Districts and Zoning Map
  - 18.164.070: Minimum Requirements for parking spaces
  - 18.164.310: Requirements for parking areas (including landscaping)

Roadway Maintenance

The City of Redlands Street Maintenance Division is responsible for the maintenance of roadways within city limits, including sidewalks and bike lanes. The Facilities & Community Services Department maintains a full-time crew responsible for pothole patching and other related asphalt pavement repairs. Sidewalk repairs are scheduled according to the following criteria:

- If vertical displacement is less than ½ inch along the entire length of the developed crack, no work will be required on the sidewalk.
- If the maximum vertical displacement is between ½ and 3 inches, the condition shall be rectified by wedging the uplifted sidewalk with asphalt or any other product approved by the Director.
- Vertical displacement exceeding 3 inches shall be wedged as described above and the damage sidewalk shall be scheduled for replacement as the budget allows.

Management Program (PMP)

In 2012, the City Council adopted a comprehensive Pavement Management Program (PMP) which provided a condition assessment of all City streets and guidelines for prioritization of street maintenance work. In developing the PMP, the physical condition of City streets was evaluated, rated, and the remaining projected life cycle determined. The PMP further identifies a schedule for maintenance and reconstruction of City streets at specified time intervals in order to extend the overall life-expectancy of all City streets in the most efficient and economical manner possible. In addition, the PMP establishes a comprehensive process to prioritize the rehabilitation of City streets and is a powerful tool to aid in the decision making process in order to best utilize financial resources.

The PMP takes into account the fact that patching and rehabilitating streets in poor condition can quickly decimate the City's street maintenance budget. Streets that are in relatively good condition require routine maintenance to prevent them from deteriorating to the point where more costly repairs will be required, which is why these streets may be prioritized over "failed" or "crisis" streets. Preventing the cycle of deterioration from beginning allow is staff to best utilize financial resources. However, full resurfacing is scheduled for poor condition streets and reconstruction is recommended for failed streets through the Department's capital improvement program.

As a part of the pavement management program update, a major element of work was to complete a comprehensive assessment of the existing street network and PMS database within the City. The 2020 Pavement Management Program (PMP) Report established segment priorities for repair and resurfacing, taking into account cost, distress quantity, area extent, type and severity of damage.

Recommendations in the City of Redlands Bicycle Master Plan

- Develop a schedule for bike, pedestrian, and multi-use path maintenance: (page 1-5).
- Maintain bicycle network and facilities on a regular basis. Include bicycle lane maintenance within the operating budget, and continue on an ongoing basis.
- Establish guidelines for maintenance of multi-use paths and bikeways that serve as bicycle commuter routes by 2020.
- Add bicycle lane sweeping as a standalone item.
- Bikeway maintenance and repair phone number should be included on a Redlands bicycle website

Recommendations in the Redlands Passenger Rail Accessibility Plan

- Roadway Resurfacing and Regular Maintenance and Monitoring: Roadway resurfacing should be prioritized for designated bikeways. In addition, ongoing maintenance of the on-street bikeway network should include street sweeping and periodic checks to identify areas where bike lane striping, stencils, and signs have been worn or damaged. Any signage that is missing should be replaced and any striping or stenciling that has become well worn should be refreshed. Maintenance activities should be incorporated into current road checks and by maintenance requests from the public.

Active Transportation Program (ATP) Requirements

The California Department of Transportation Active Transportation Program (ATP) is designed to increase walking and bicycling trips and safety, enhance environmental benefits from active transportation facilities, improve public health, cater to the needs of disadvantaged communities and provide a variety of projects for many types of non motorized facility users. For an ATP-compliant Active Transportation Planto be eligible for funding, it must include (among other requirements) a description of the policies and procedures for maintaining existing and proposed bicycle and pedestrian facilities, including, but not limited to, the maintenance of smooth pavement, freedom from encroaching vegetation, maintenance of traffic control devices including striping and other pavement markings, and lighting.

Existing Programs

EDUCATION PROGRAMS

- Redlands Police Department Bike Safety Rodeos
- Redlands Children's Bicycle Health and Safety Expo (annual event hosted by RPD)
- Inland Empire Bicycle Alliance (IEBA) Education Programs (including maintenance clinics, Safe Routes to School, adult and youth education classes, Buddies Program)

ENCOURAGEMENT PROGRAMS

- Redlands International Bicycle Classic
- Bike BBQ (Bike Kitchen with permanent location and pop-ups)
- Redlands Interscholastic Cycling Organization
- Redlands Waterbottle Transit Company (RWBTC)
- Ride Yourself Fit and Walk Yourself Fit clubs
- Moore Middle School Bike Club
- Strada Corsa
- Inland Empire Biking Alliance (IEBA) Encouragement Programs (including events, a Bicycle Friendly Business program, bicycle valet, trailbuilding partnership, employer bikeshare, bike rentals, Lights for Life program, and Student Survival Kits)

EVALUATION PROGRAMS

- IEBA Bicycle and Pedestrian Counts

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Appendix B

List of Data Sources

Data Sources

The data set listed in the following table were downloaded and used throughout this document.

SOURCE
Statewide Integrated Traffic Records System (SWITRS)/ Transportation Injury Mapping System (TIMS)
City of Redlands
California Office of Environmental Health Hazard Assessment (OEHHA)
Southern California Association of Governments (SCAG)
California Department of Education
The California Healthy Places Index (HPI)
San Bernardino County Transit Authority
US Census / Census Reporter
OmniTrans

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Appendix C

Walk/Bike Audit Observations

Bicycle and Pedestrian Walk Audit #1

The first Bicycle and Pedestrian Audit was conducted on September 22, 2020. ***The walk audit location included Lugonia Elementary School and Clement Middle School, bounded by Lugonia Avenue, Orange Street, San Bernardino Avenue, and Church Street.*** Ten community members participated in the audit to share their experiences walking and biking around the audit location. Within the area, important topics of conversation and areas of focus included, the Community Park during football and baseball season, the two schools and the safety of the surrounding streets, lack of shade, and narrow sidewalks. The project team made stops at intersections, crossings, bike facilities, and other popular streets that community members identified.

The audit was framed as an ongoing conversation, during which participants were encouraged to call out comments or add them to the chat.

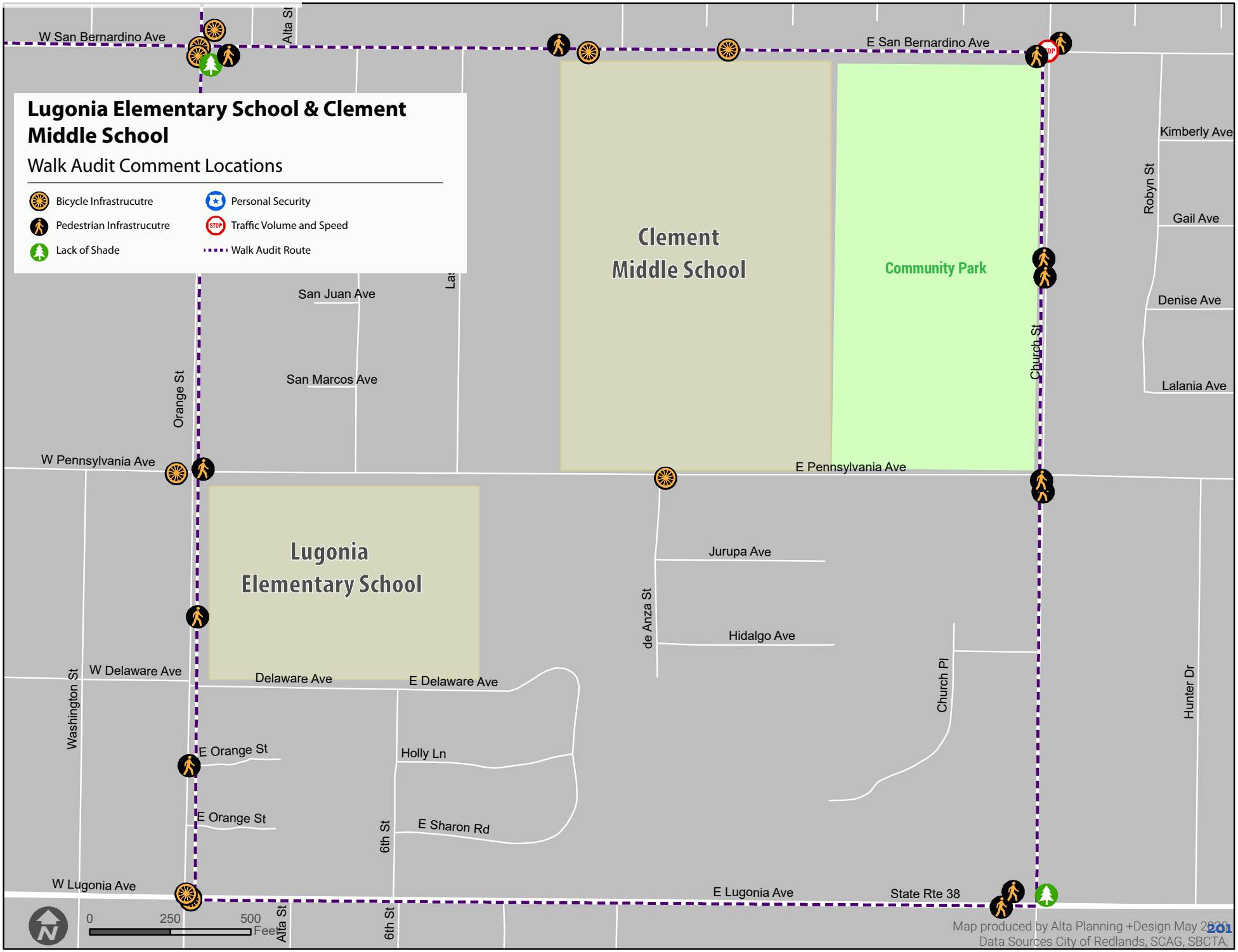
Key Attendee Observations

Participants who attended this Bicycle and Pedestrian Audit were very familiar with this area and were eager to share their experiences navigating most of these facilities.

Narrow sidewalks were seen as a common obstacle for pedestrians. Participants also brought up the lack of shade around this location. Participants found the walking environment to be very uncomfortable, especially during the summer months, and expressed the importance of having shade at bus stops and along sidewalks. Lack of crossing opportunities along San Bernardino Avenue and Church Street were brought up as an obstacle, especially during the football and baseball seasons at the Community Park.

For bicycle facilities, participants expressed concern about the lack of bike facilities along Lugonia Avenue and Orange Street. Participants were generally happy with the protected bike lane on San Bernardino Avenue and Church Street, but noted that there should be more protection for bicyclists on San Bernardino Avenue.

Figure 51. Walk Audit #1 Comments



Bicycle and Pedestrian Walk Audit #2

The second Bicycle and Pedestrian Audit was conducted on September 24, 2020. ***The audit location included Citrus Valley High School, Pioneer Avenue, Texas Street, Orange Street, and San Bernardino Avenue.*** Five community members participated in the audit to share their experiences walking and biking around the audit location. Within the area, important topics of conversation and areas of focus included, access to the Mountain Grove Shopping Center, freeway underpasses, lack of sidewalks, and future improvements around the school.

The walk audit was framed as an ongoing conversation, during which participants were encouraged to call out comments or add them to the chat.

Key Attendee Observations

Participants who attended this Bicycle and Pedestrian Audit were very familiar with this area and were eager to share their experiences navigating most of these facilities.

For pedestrians, one major theme was the lack of pedestrian facilities near the freeway underpasses. Participants mentioned that many people walk on the street due to missing sidewalks. Also, participants mentioned that sidewalks should be wider on Pioneer Avenue and obstacles such as trees located in the middle of the sidewalk should be moved elsewhere. There were concerns about future development removing street trees. Community members want to make sure there is shade in the northwestern part of the city.

For bicycle facilities, one major theme was access to the Mountain Grove Shopping Center. A few avid bicyclists said that it is almost impossible to navigate the freeway underpasses going eastbound. Participants also talked about the lack of bicycle facilities in this area, especially since the high school is located here. Participants mentioned that they wanted to see an increase in bicycle facilities in this part of Redlands.

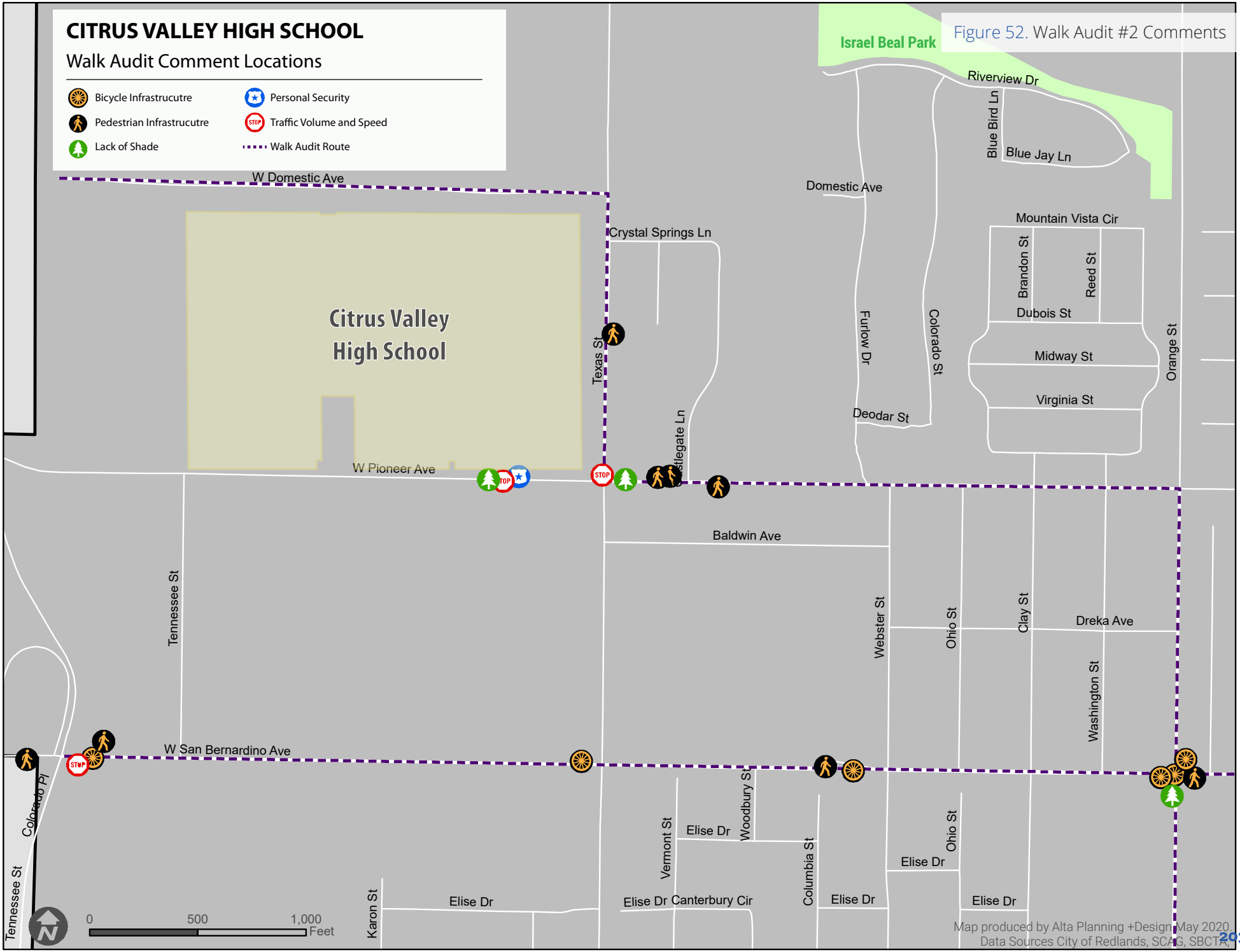


Figure 52. Walk Audit #2 Comments

Bicycle and Pedestrian Walk Audit #3

The third Bicycle and Pedestrian Audit was conducted on September 29, 2020. ***The walk audit location included the ESRI campus, Redlands Adventist Academy, and several large apartment complexes, bounded by Redlands Boulevard, Tennessee Street, Brookside Avenue, and Center Street.*** Five community members participated in the audit to share their experiences walking and biking around the area. Within the area, important topics of conversation and areas of focus included commuting to and from the ESRI campus, the future Arrow station, challenges with biking along and crossing major streets, and incomplete sidewalks. The project team made stops at intersections, crossings, bike facilities, and other popular streets that community members identified.

The audit was framed as an ongoing conversation, during which participants were encouraged to call out comments or add them to the chat.

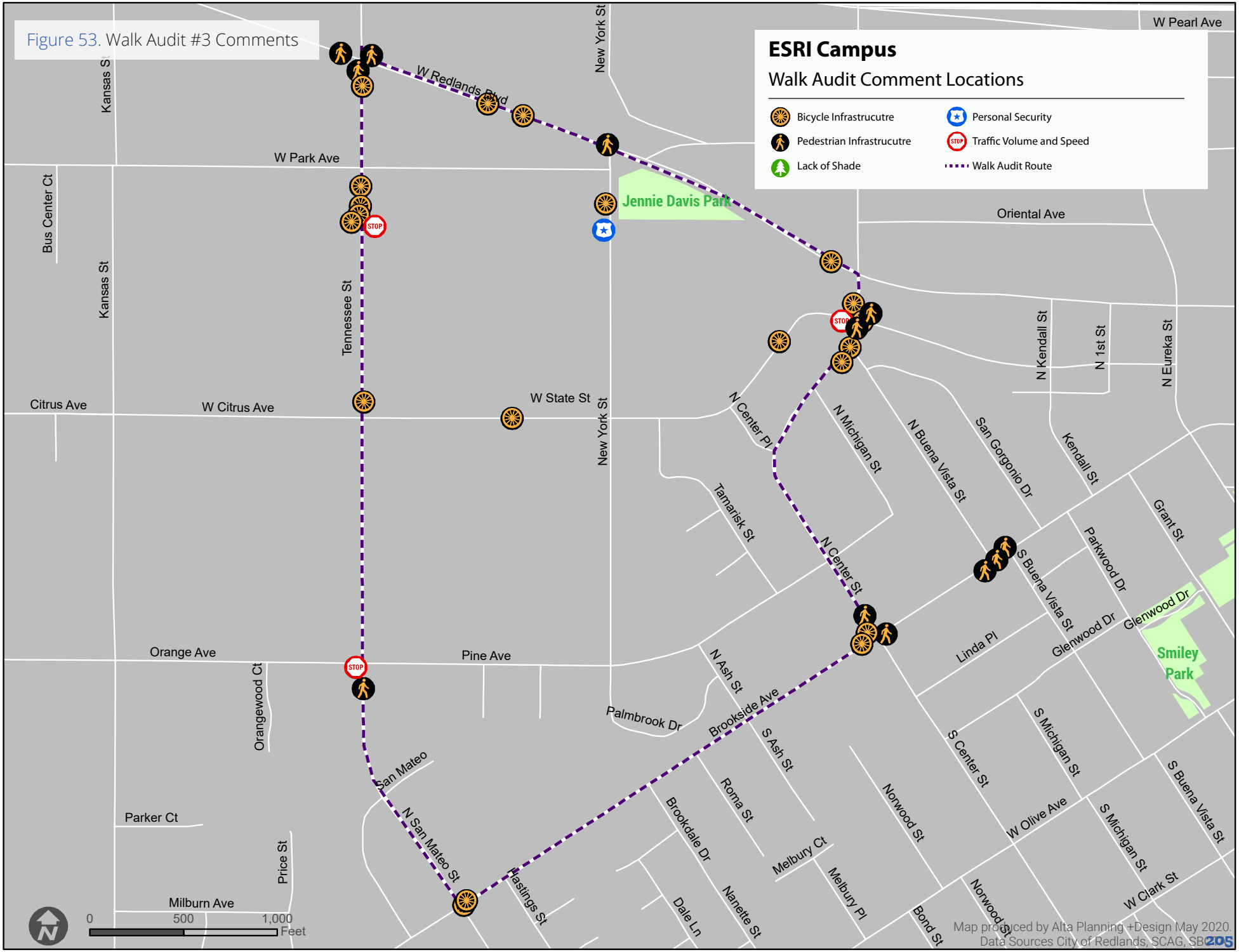
Key Attendee Observations

Participants who attended this Walk Audit were very familiar with the area and had ample experience navigating most of the facilities.

For pedestrians, the inconsistent or incomplete sidewalk facilities were seen as a problem needing attention. There were also missing curb ramps at Redlands and Tennessee, raised medians at Brookside and Center, and other hazards for pedestrians using a mobility device. Participants also brought up that Brookside is a common street for people to try to cross mid-block and they felt that adding some mid-block crossings would make this safer. Tennessee was mentioned as a good walking street that felt safe for school-age children and the many other users who travel that corridor.

In terms of bicycle facilities, attendees generally felt neutral to positive about Tennessee Ave as a biking street, and State Street was also a very popular route, especially for ESRI employees. While the bike lanes on Brookside were seen favorably, there were concerns about lack of buffering between bicyclists and cars. The other issue along Brookside was the difficulty of safely getting from the bike lane to make a left turn across traffic. Audit attendees mentioned that they considered this a more advanced maneuver, limiting who could use the Brookside bike lanes. Intersections with large streets in general were a consistent concern, including large street crossings (such as those at Redlands Blvd) and also those with poor visibility and lack of consideration (especially State Street and Center).

Figure 53. Walk Audit #3 Comments



Bicycle and Pedestrian Walk Audit #4

The fourth and final Bicycle and Pedestrian Audit was conducted on October 1, 2020. ***The walk audit location included the Citrus Valley Shopping Center, bounded by Cypress Avenue, Cajon Street, Highland Avenue, and Roosevelt Street.*** Six community members participated in the audit to share their experiences walking and biking around the audit location. Within the area, important topics of conversation and areas of focus included shopping center, Prospect Park, Cajon Street, and concerns about Redlands Blvd. We made stops at intersections, crossings, bike facilities, and other popular streets that community members identified.

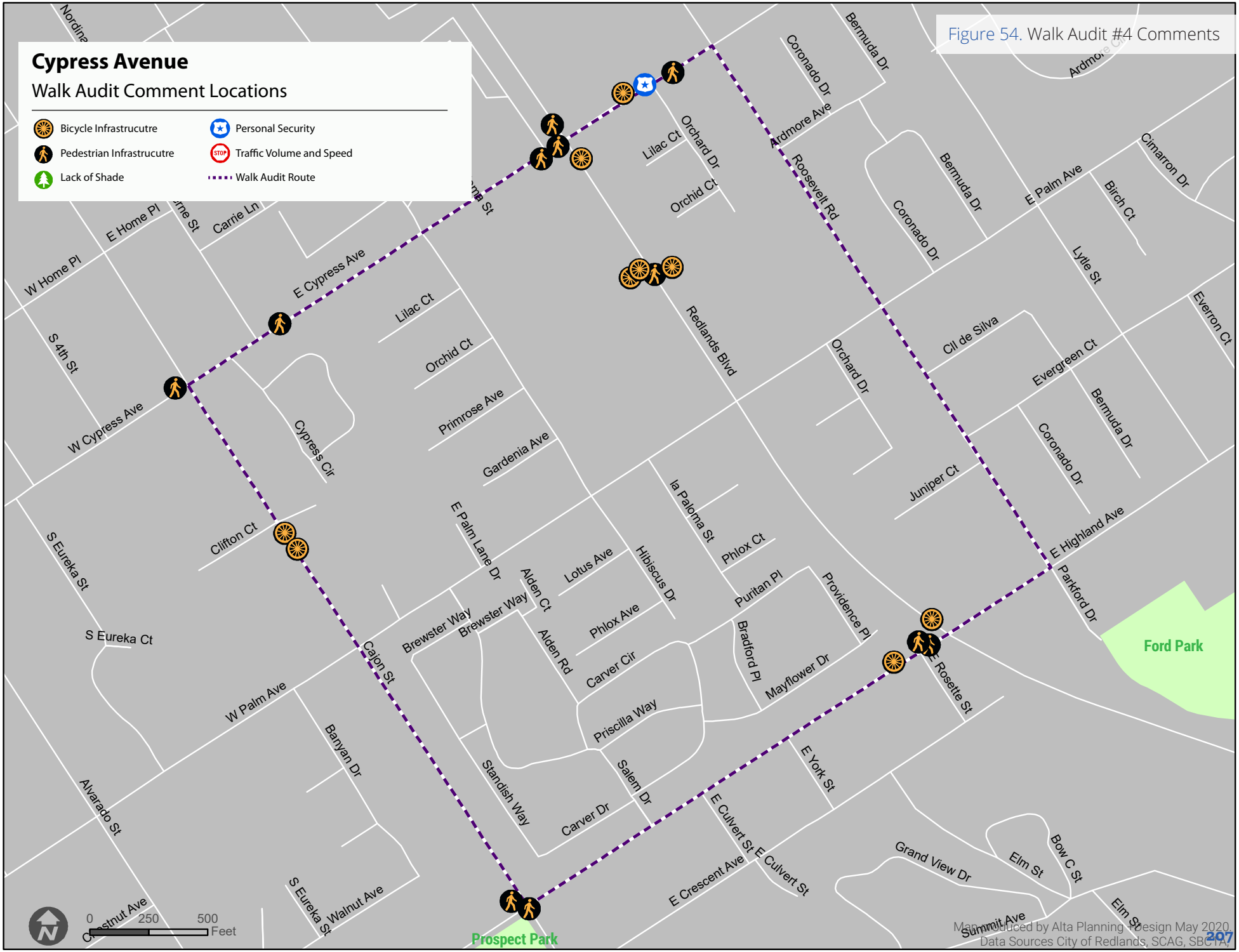
The audit was framed as an ongoing conversation, during which participants were encouraged to call out comments or add them to the chat.

Key Attendee Observations

Participants who attended this Bicycle and Pedestrian Audit were very familiar with this area and were eager to share their experiences navigating most of these facilities.

Participants were generally pleased with the walking environment along Cajon St, especially the fact that pedestrians are separated from vehicle traffic by landscaping. Some of the obstacles identified for pedestrians in this study area included long blocks without mid-block crossings, shopping center entrances where drivers tended to be distracted, the lack of sidewalks on Redlands Blvd or Highland Ave, and crossings where visibility could be improved. The area near Prospect Park was highlighted as a place where greater attention could be given to creating an inviting pedestrian environment, since this is a popular destination.

In terms of bicycle facilities, participants expressed their enthusiasm regarding Highland Avenue as a bike route. They felt that this street was an enjoyable and comfortable route that many bicyclists used. Cajon was also mentioned as being extremely popular despite the dangers created by the adjacent parking lane (such as potential to be hit by opening doors and cars that are parked partially in the bike lane). Participants had concerns about Redlands Blvd being developed as an on-street bicycle route, since many felt the speeds were simply too high to make this change safely.


Cypress Avenue
Walk Audit Comment Locations
Bicycle Infrastrucutre
Pedestrian Infrastrucutre
Lack of Shade
Personal Security
Traffic Volume and Speed
Walk Audit Route
Figure 54. Walk Audit #4 Comments
Bermuda Dr
Coronado Dr
Ardmore Ave
Roosevelt Rd
Lilac Ct
Orchard Dr
Orchid Ct
E Palm Ave
Cimarron Dr
Birch Ct
Lytle St
Everron Ct
E Home Pl
Carrie Ln
W Home Pl
E Cypress Ave
Redlands Blvd
Cll de Silva
Evergreen Ct
S 4th St
W Cypress Ave
Cypress Cir
Primrose Ave
Gardenia Ave
Juniper Ct
E Highland Ave
Parkford Dr
Clifton Ct
S Eureka St
E Palm Lane Dr
la Paloma St
Phlox Ct
Lotus Ave
Hibiscus Dr
Alden Ct
Alden Rd
Brewster Way
Puritan Pl
Providence Pl
Bradford Pl
Mayflower Dr
Phlox Ave
Carver Cir
Priscilla Way
S Eureka Ct
Cajon St
W Palm Ave
Banyan Dr
Standish Way
Salem Dr
Carver Dr
E Rosette St
E York St
E Culvert St
Alvarado St
S Eureka St
Walnut Ave
E Crescent Ave
Grand View Dr
Elm St
Bow C St
Summit Ave
Ford Park
Prospect Park
0
250
500
Feet
Map produced by Alta Planning + Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA.

Appendix D

School Site Assessm

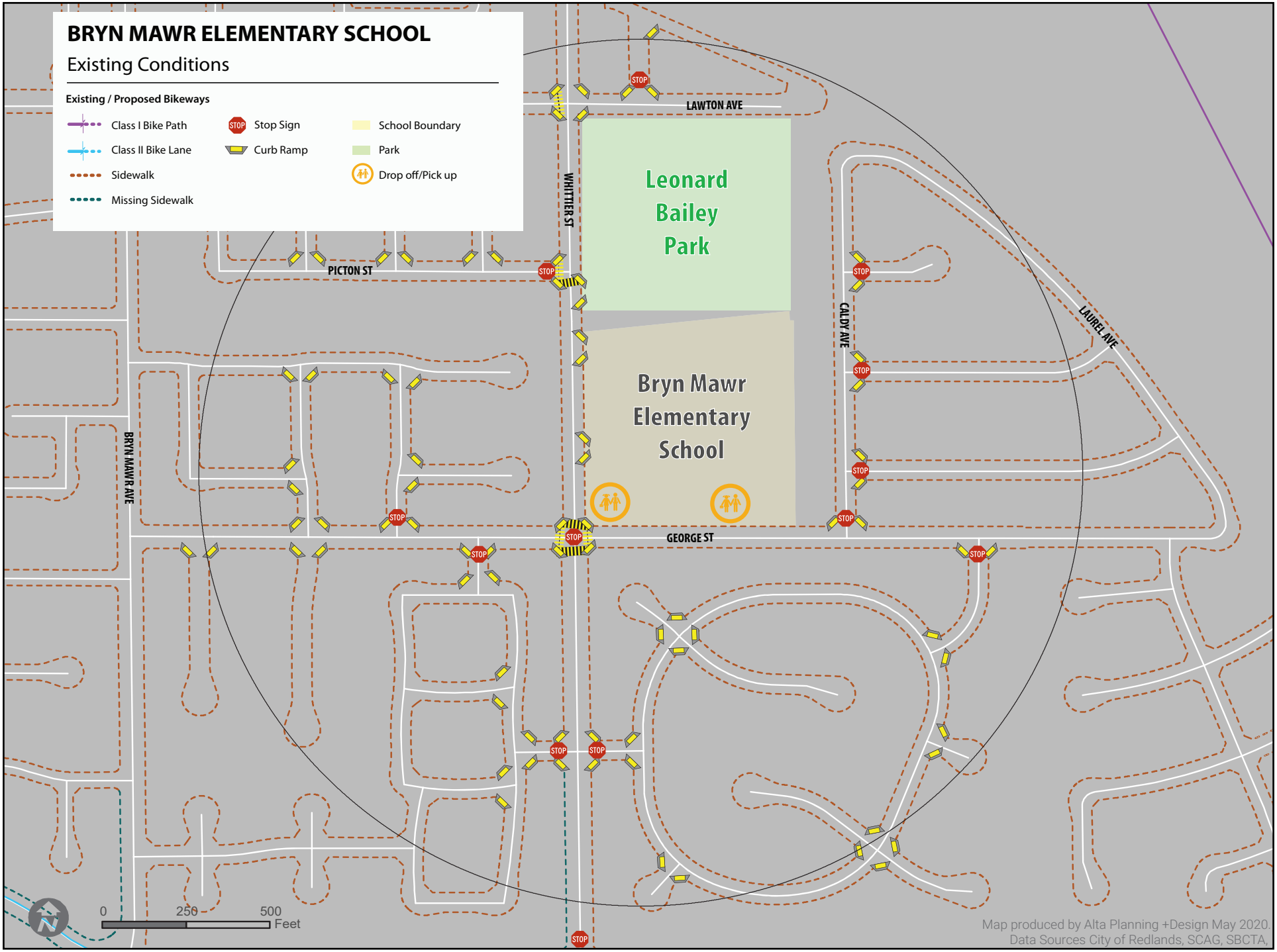
School Site Assessments

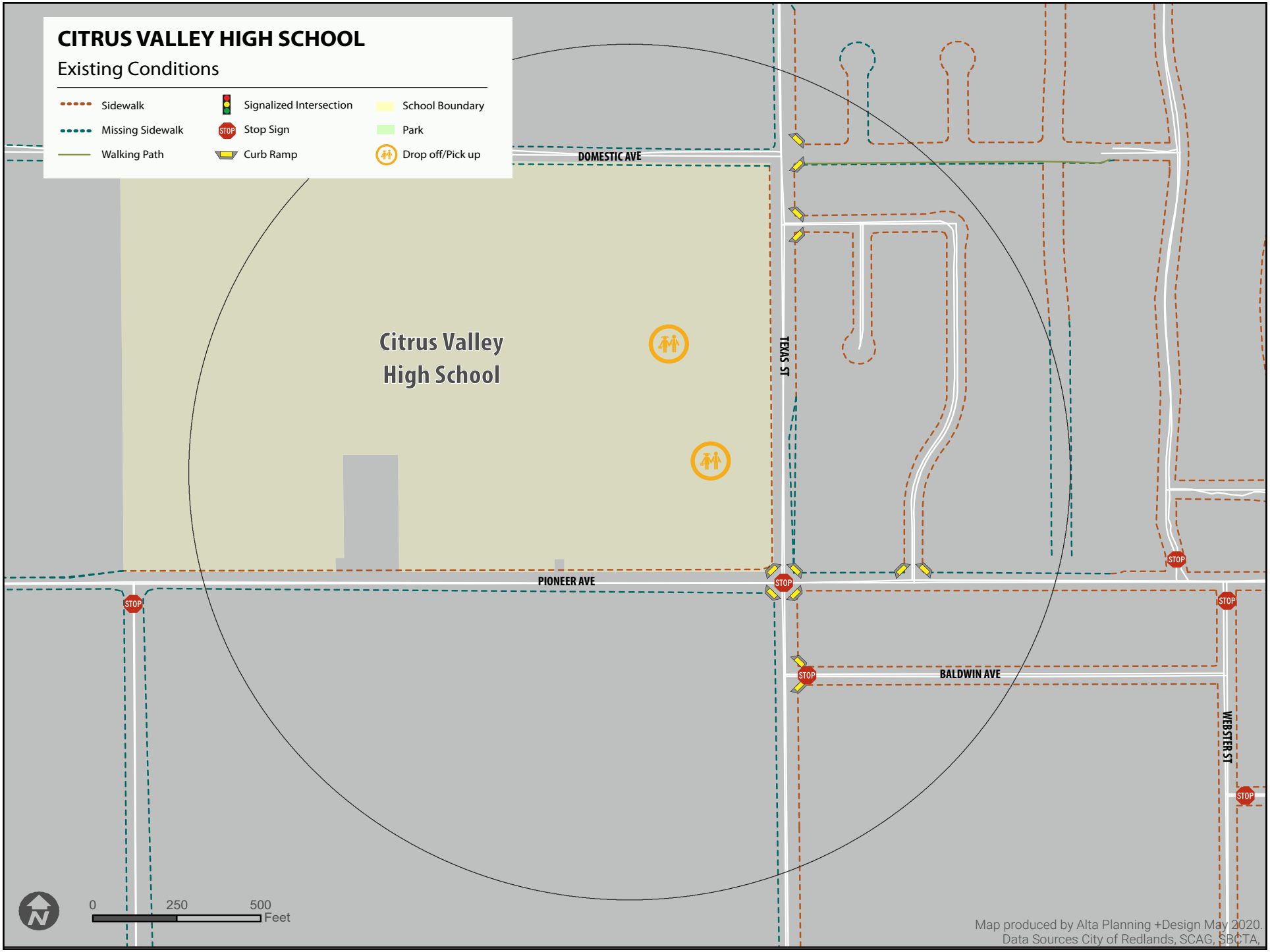
The Project Team identified the existing conditions at a quarter mile buffer around 12 schools serving Redlands. Assessing the existing conditions around schools is an important component when creating recommendations. The overall school site assessment reviewed existing conditions, including existing bikeways, existing sidewalks, missing sidewalks, stop signs, curb ramps, signage, etc.

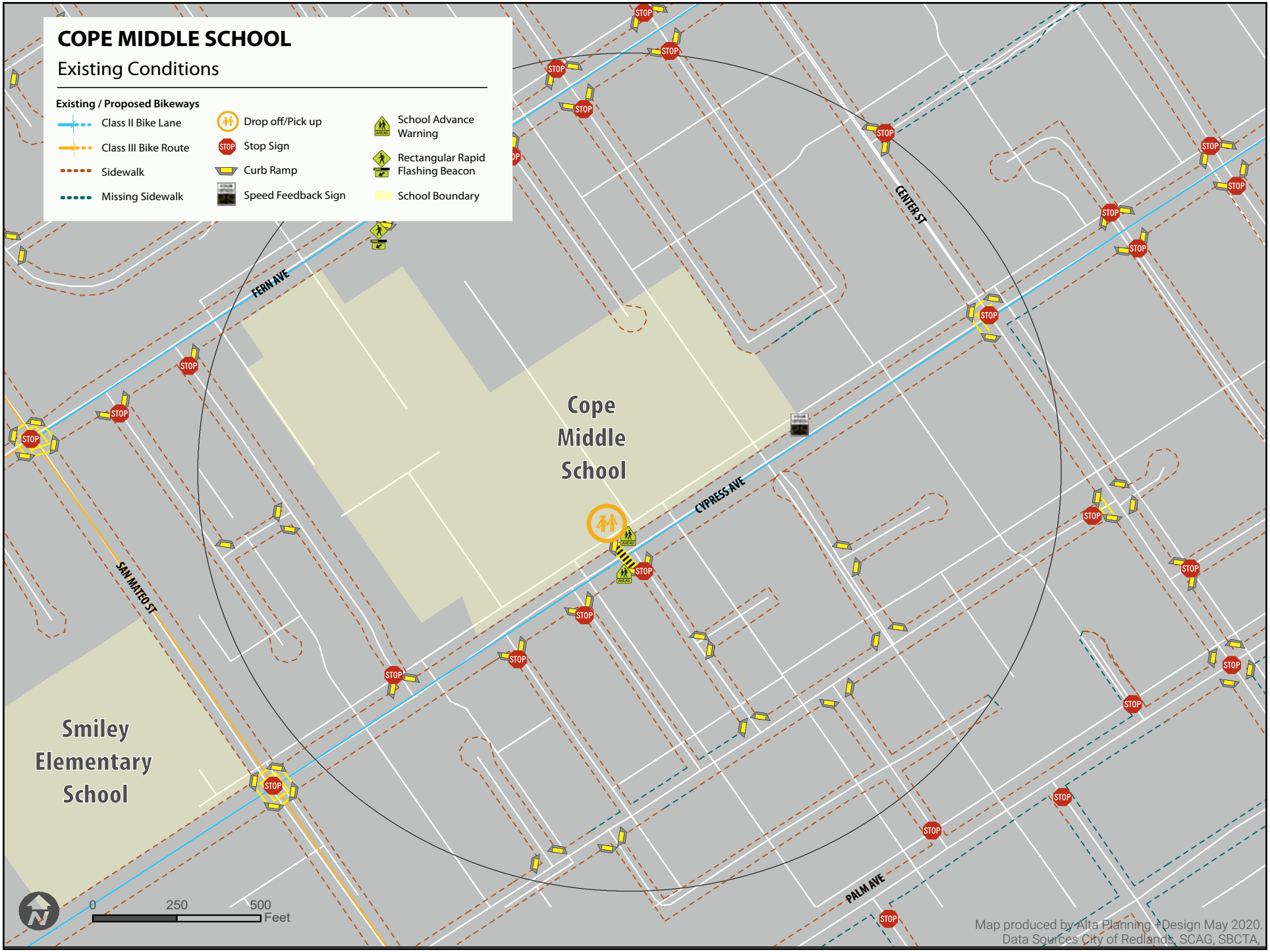
Below are the 12 schools that were reviewed:

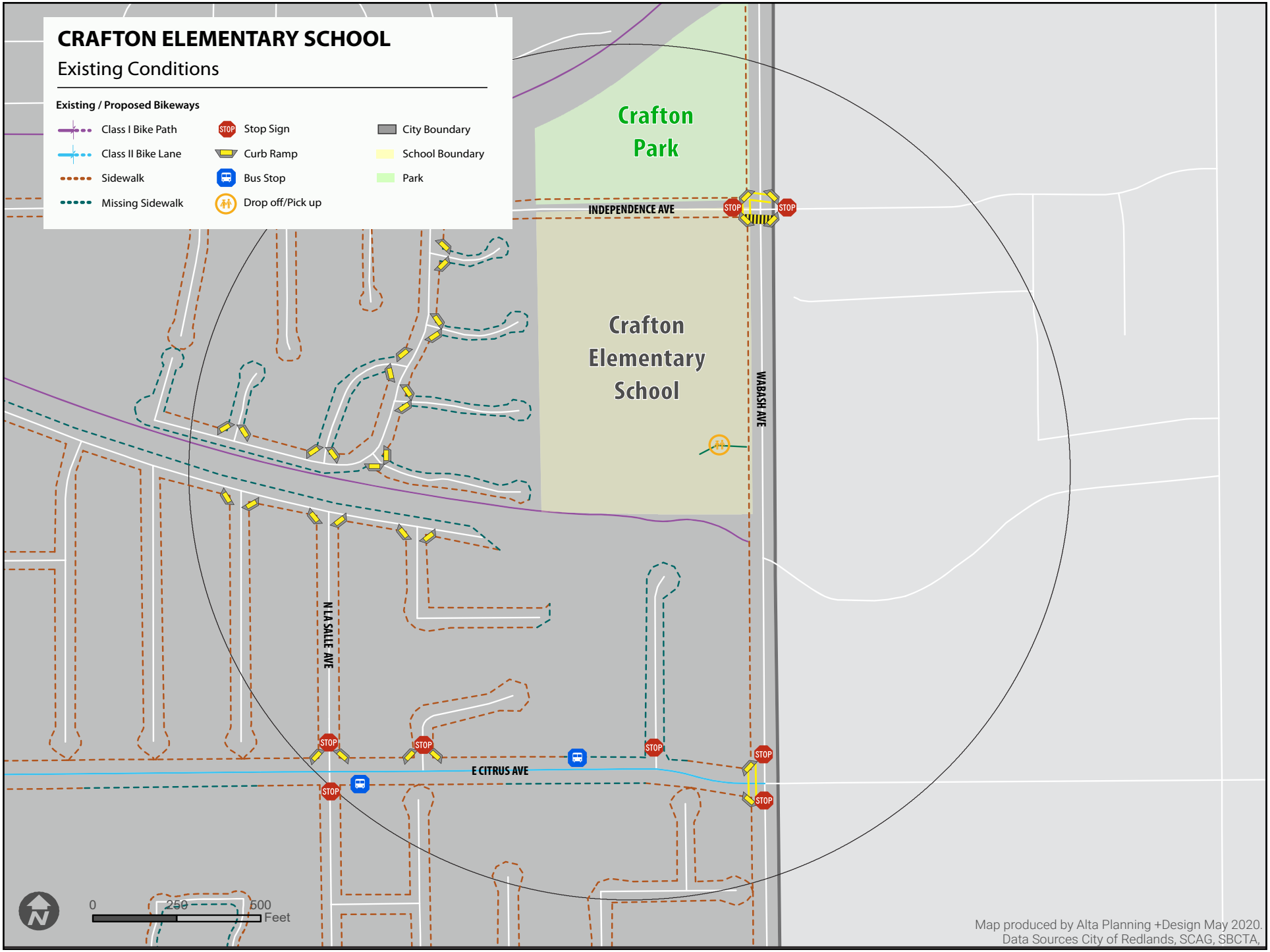
- Bryn Mawr Elementary School
- Citrus Valley High School
- Cope Middle School
- Crafton Elementary School
- Franklin Elementary School
- Kingsbury Elementary School
- McKinley Elementary School
- Mentone Elementary School
- Moore Middle School
- Orangewood High School
- Smiley Elementary School
- Victoria Elementary School

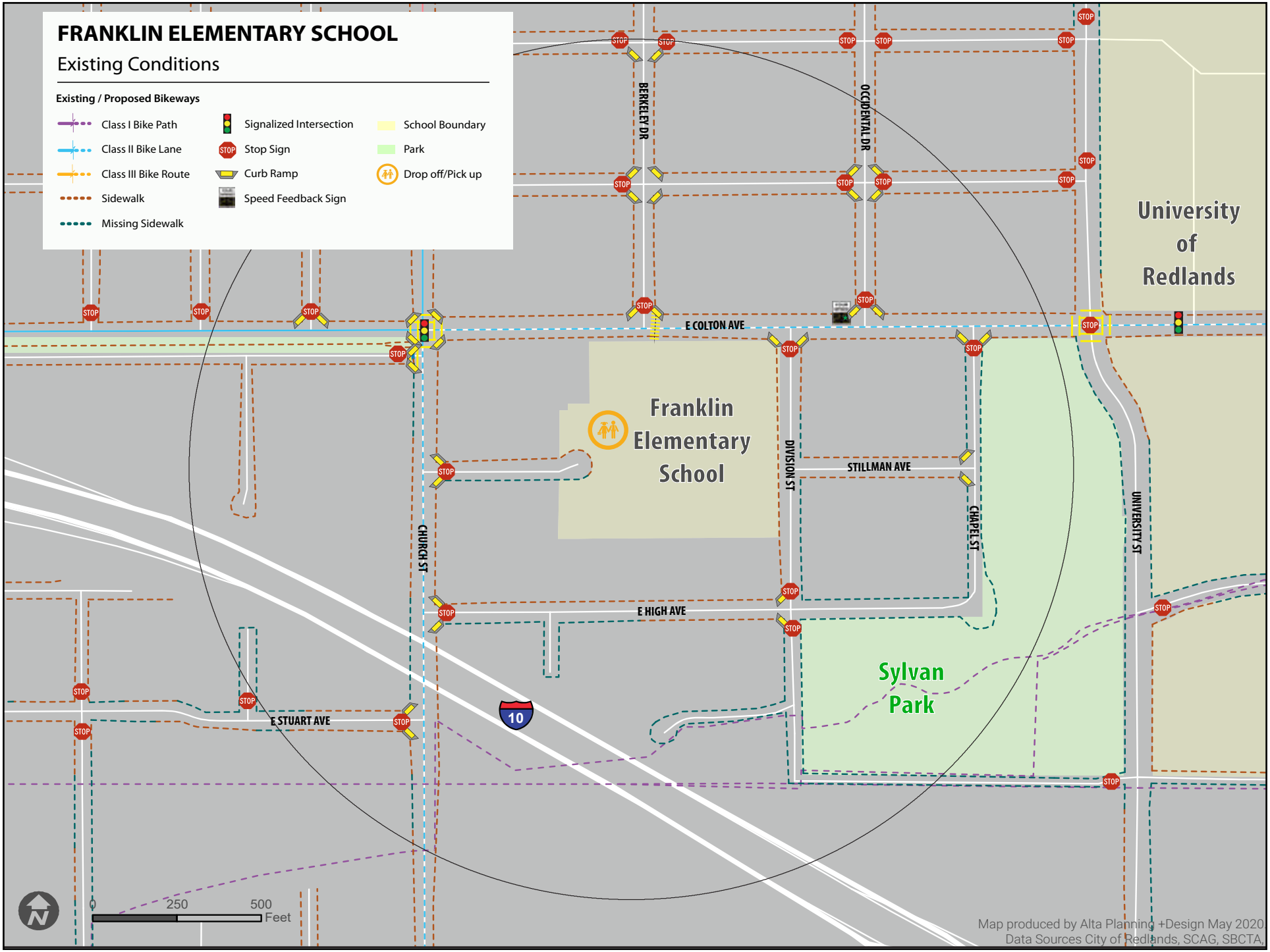
** Note: Bryn Mawr Elementary School, Mentone Elementary School, and Victoria Elementary School are not within the City Boundary, but are in the City's School Enrollment Boundaries. The SMP will evaluate the accessibility to these three schools within the City of Redlands.*

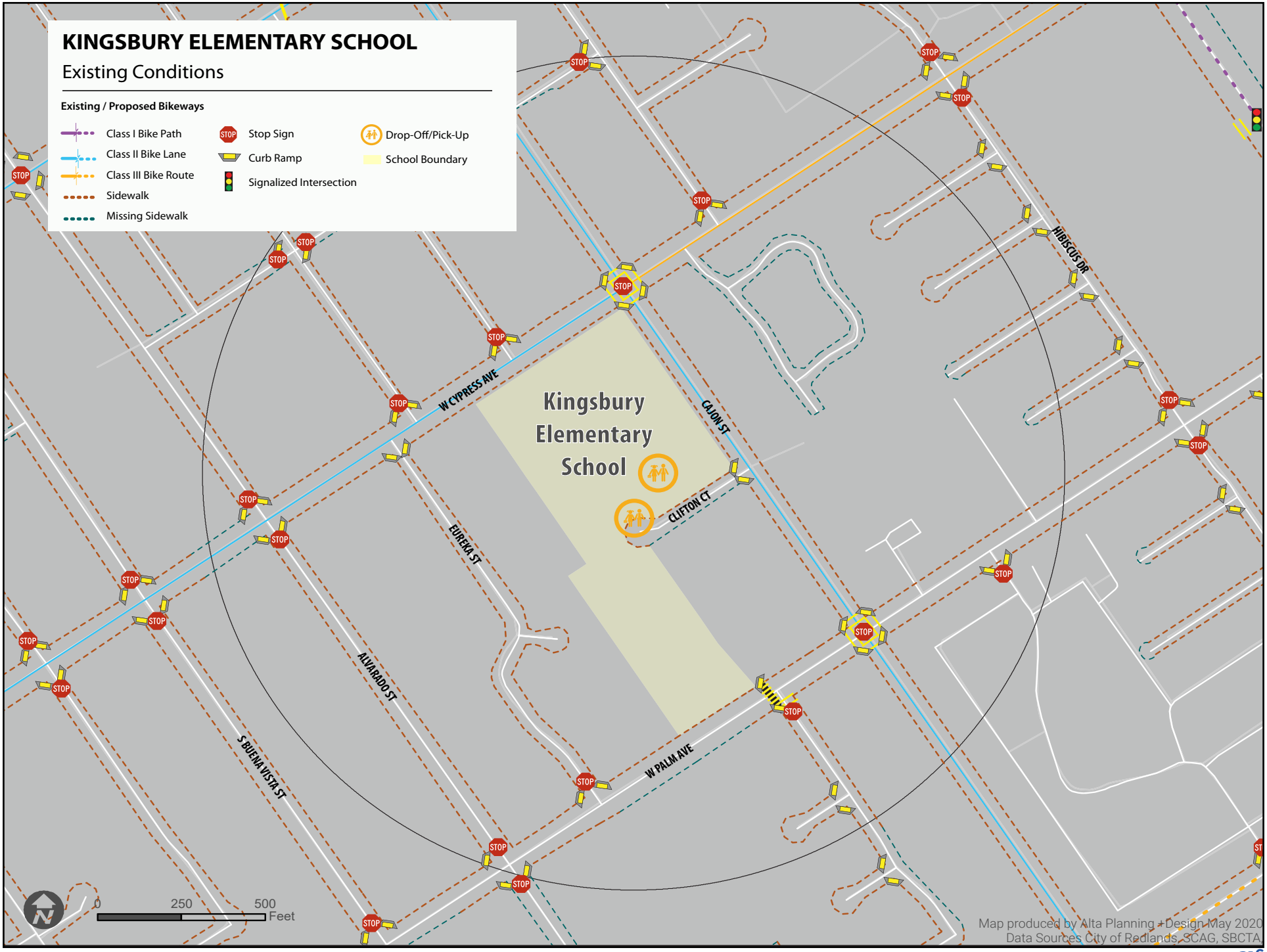

BRYN MAWR ELEMENTARY SCHOOL
Existing Conditions
Existing / Proposed Bikeways
Class I Bike Path
Class II Bike Lane
Sidewalk
Missing Sidewalk
Stop Sign
Curb Ramp
School Boundary
Park
Drop off/Pick up
LAWTON AVE
WHITTIER ST
PICTON ST
Leonard Bailey Park
Bryn Mawr Elementary School
CALDY AVE
LAUREL AVE
BRYN MAWR AVE
GEORGE ST
STOP
0
250
500
Feet
Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA.

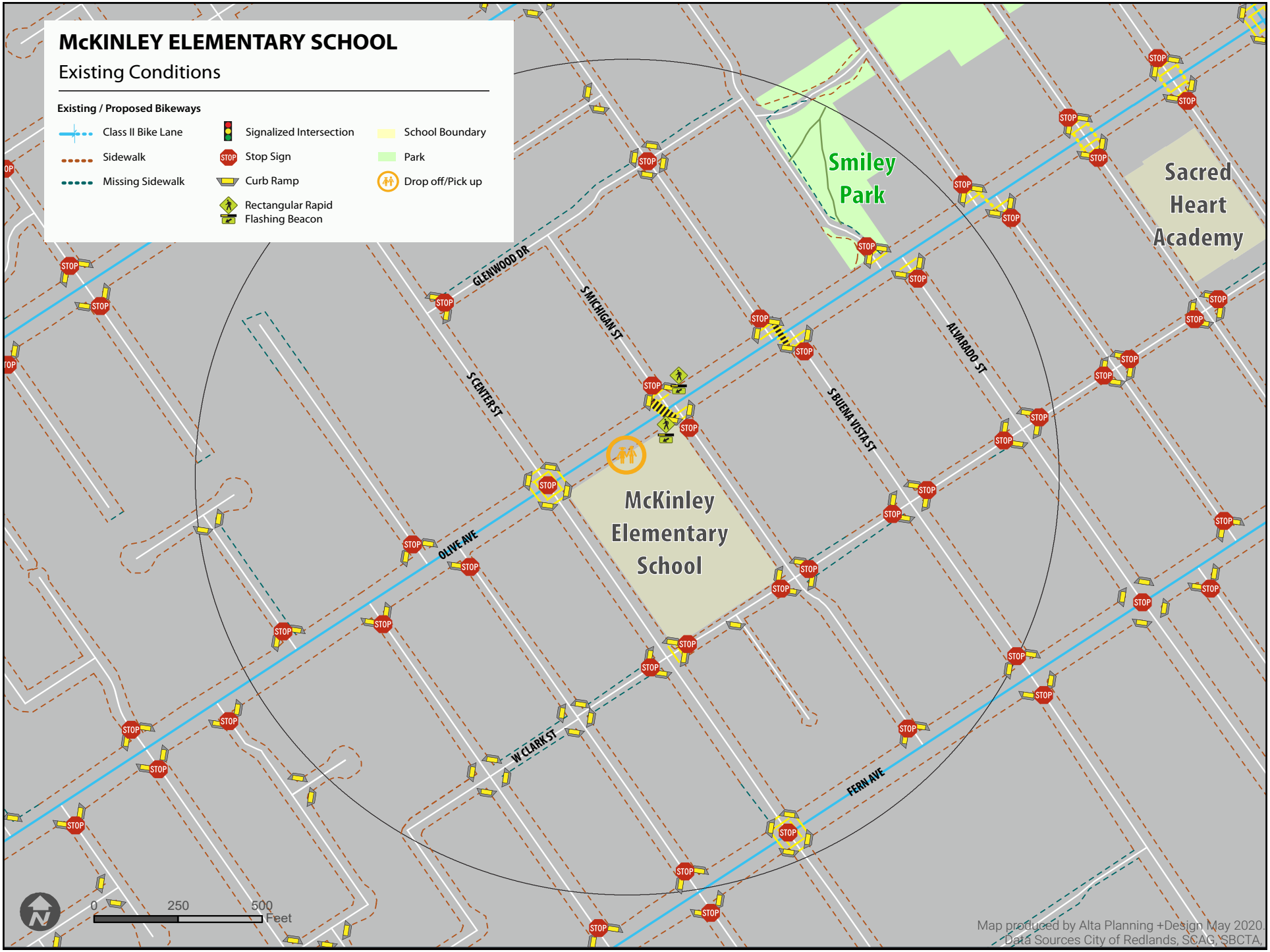

CITRUS VALLEY HIGH SCHOOL
Existing Conditions
Sidewalk
Missing Sidewalk
Walking Path
Signalized Intersection
Stop Sign
Curb Ramp
School Boundary
Park
Drop off/Pick up
DOMESTIC AVE
Citrus Valley
High School
TEXAS ST
PIONEER AVE
BALDWIN AVE
WEBSTER ST
STOP
0
250
500
Feet
Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA.

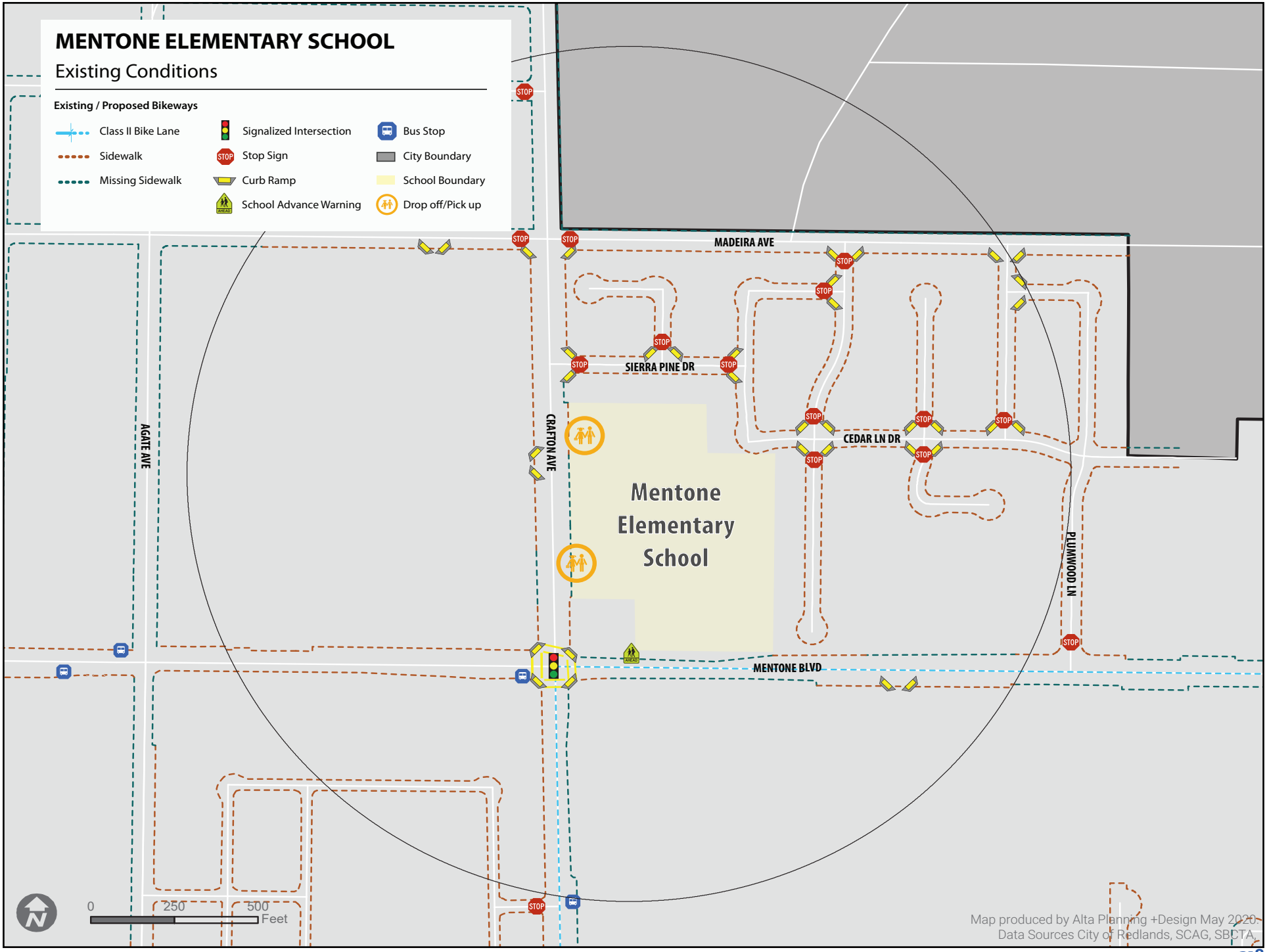

COPE MIDDLE SCHOOL
Existing Conditions
Existing / Proposed Bikeways
Class II Bike Lane
Class III Bike Route
Sidewalk
Missing Sidewalk
Drop off/Pick up
Stop Sign
Curb Ramp
Speed Feedback Sign
School Advance Warning
Rectangular Rapid Flashing Beacon
School Boundary
FERN AVE
CENTER ST
CYPRESS AVE
SAN MATEO ST
PALM AVE
Cope Middle School
Smiley Elementary School
0
250
500
Feet
Map produced by Alta Planning + Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA.

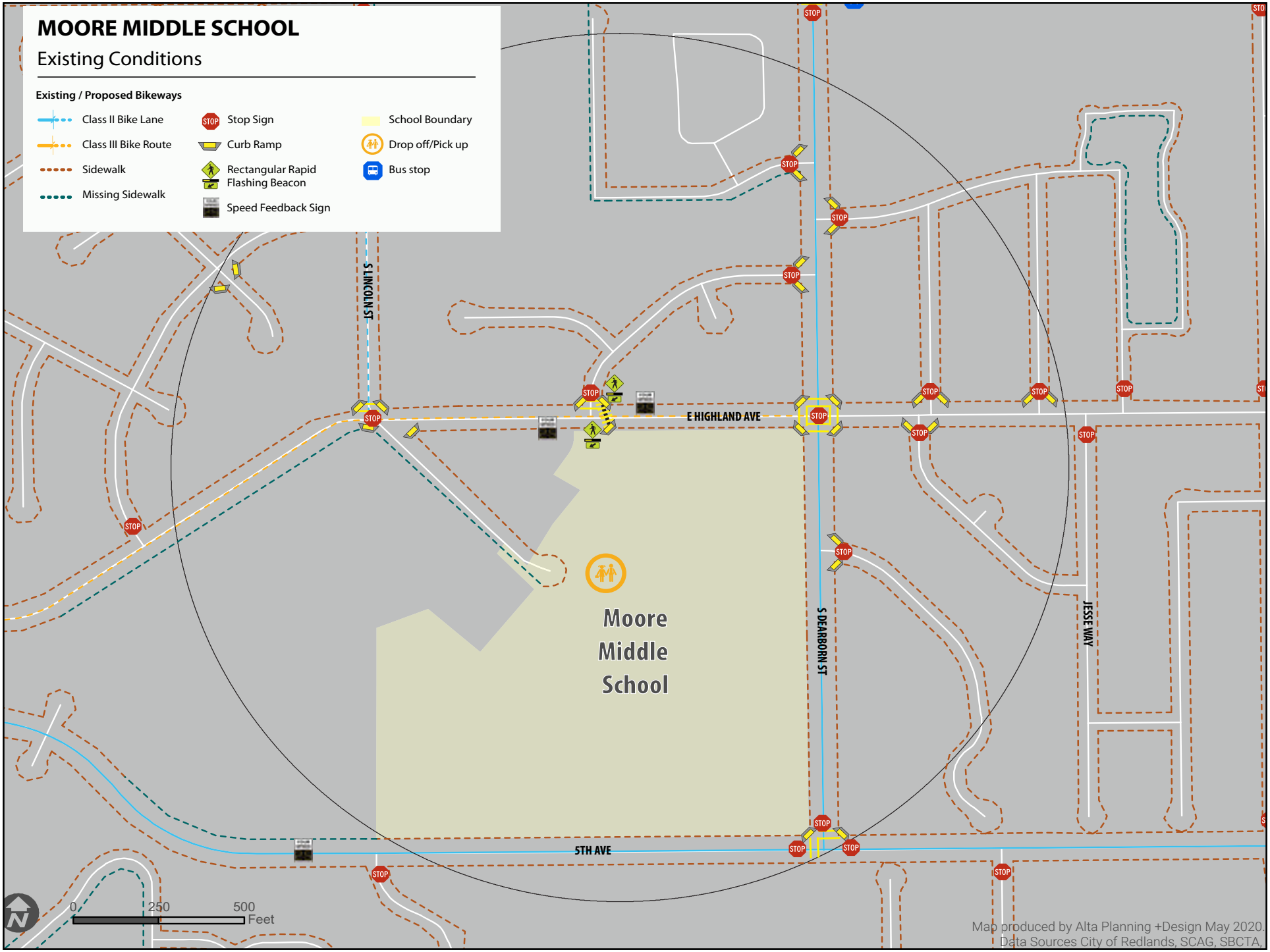

CRAFTON ELEMENTARY SCHOOL
Existing Conditions
Existing / Proposed Bikeways
Class I Bike Path
Class II Bike Lane
Sidewalk
Missing Sidewalk
Stop Sign
Curb Ramp
Bus Stop
Drop off/Pick up
City Boundary
School Boundary
Park
Crafton Park
Crafton Elementary School
INDEPENDENCE AVE
WABASH AVE
N LA SALLE AVE
E CITRUS AVE
STOP
0
250
500
Feet
Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA.

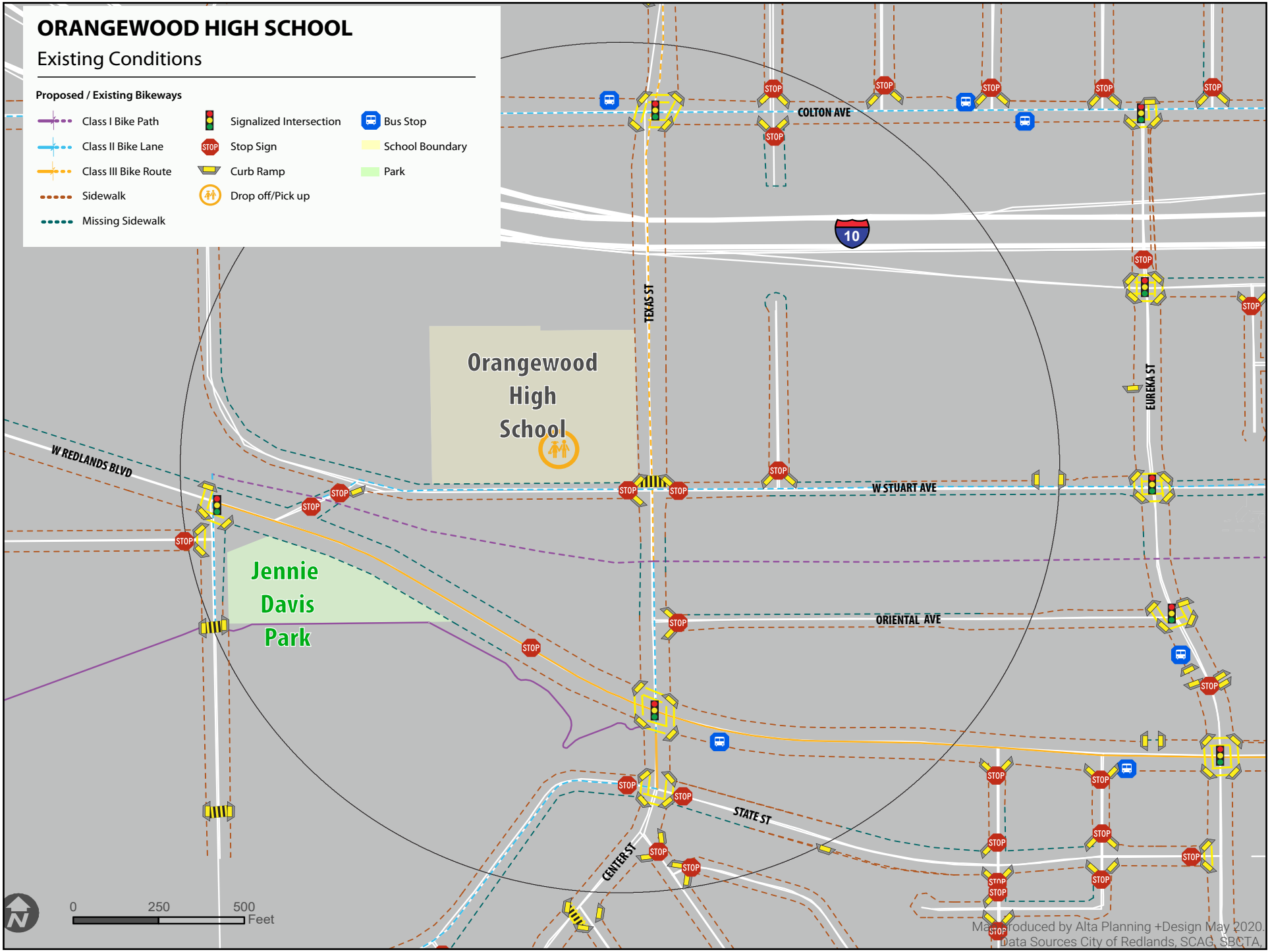

FRANKLIN ELEMENTARY SCHOOL
Existing Conditions
Existing / Proposed Bikeways
Class I Bike Path
Class II Bike Lane
Class III Bike Route
Sidewalk
Missing Sidewalk
Signalized Intersection
Stop Sign
Curb Ramp
Speed Feedback Sign
School Boundary
Park
Drop off/Pick up
BERKELEY DR
OCCIDENTAL DR
E COLTON AVE
University of Redlands
Franklin Elementary School
DIVISION ST
STILLMAN AVE
CHAPEL ST
UNIVERSITY ST
CHURCH ST
E HIGH AVE
Sylvan Park
E STUART AVE
10
0
250
500
Feet
Map produced by Alta Planning +Design May 2020
Data Sources City of Redlands, SCAG, SBCTA

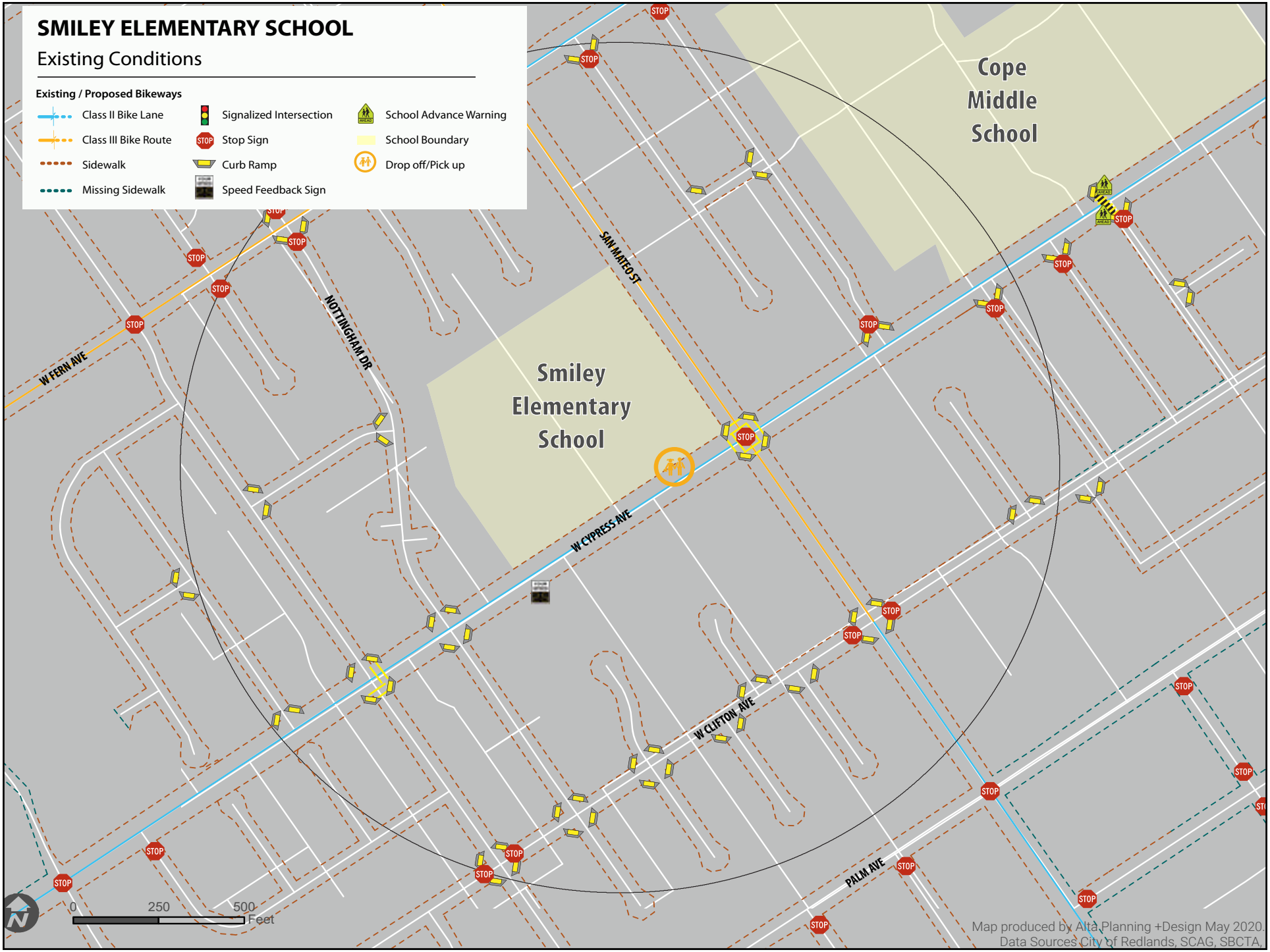

KINGSBURY ELEMENTARY SCHOOL
Existing Conditions
Existing / Proposed Bikeways
Class I Bike Path
Class II Bike Lane
Class III Bike Route
Sidewalk
Missing Sidewalk
Stop Sign
Curb Ramp
Signalized Intersection
Drop-Off/Pick-Up
School Boundary
Kingsbury Elementary School
W CYPRESS AVE
CAJON ST
CLIFTON CT
EUREKA ST
ALVARADO ST
S BUENA VISTA ST
W PALM AVE
HIBISCUS DR
0
250
500
Feet
Map produced by Alta Planning + Design May 2020
Data Sources City of Redlands, SCAG, SBCTA

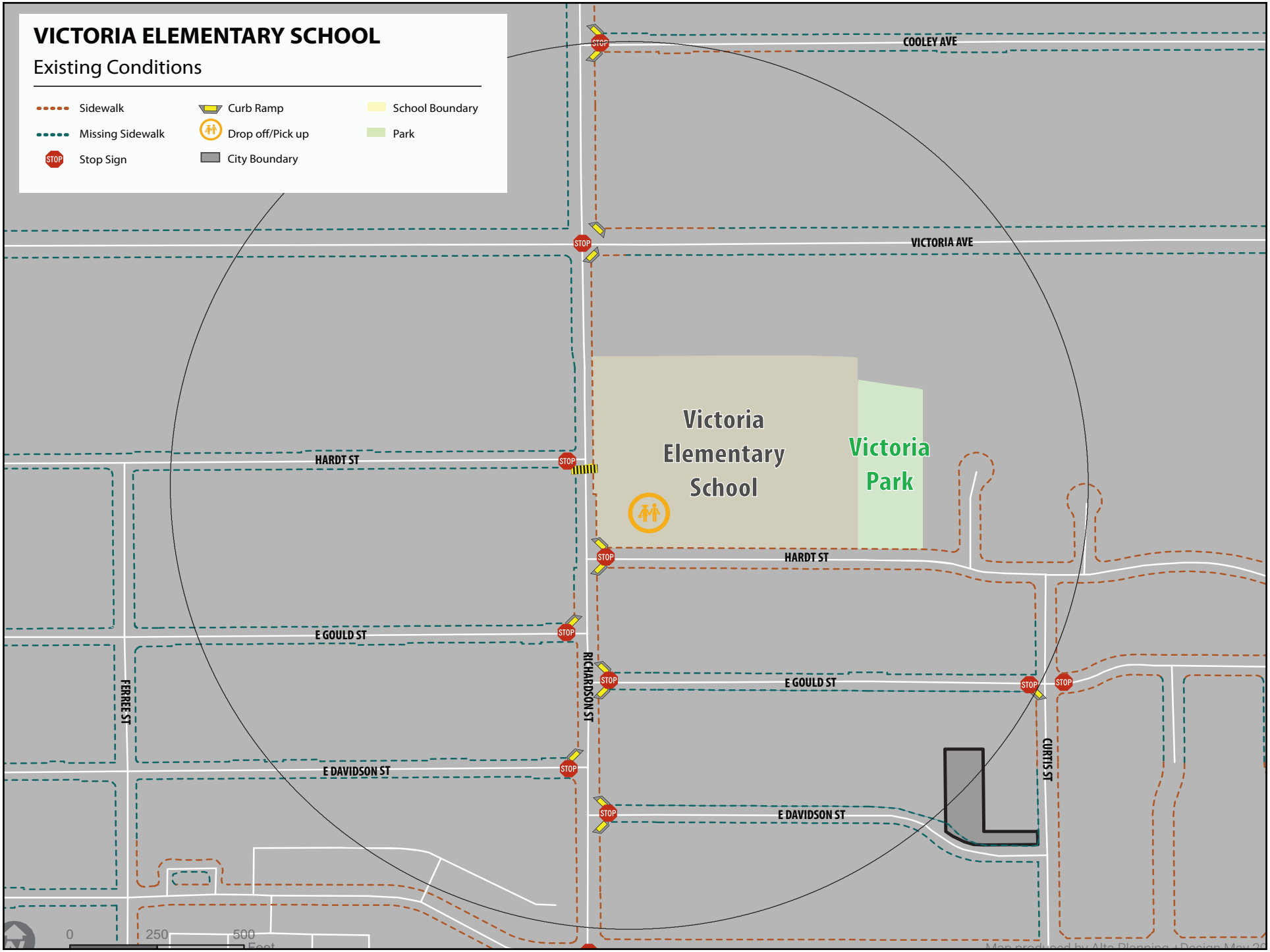

McKINLEY ELEMENTARY SCHOOL
Existing Conditions
Existing / Proposed Bikeways
Class II Bike Lane
Sidewalk
Missing Sidewalk
Signalized Intersection
Stop Sign
Curb Ramp
Rectangular Rapid Flashing Beacon
School Boundary
Park
Drop off/Pick up
Smiley Park
Sacred Heart Academy
McKinley Elementary School
GLENWOOD DR
S MICHIGAN ST
S CENTER ST
S RUENA VISTA ST
ALVARADO ST
OLIVE AVE
W CLARK ST
FERN AVE
STOP
0
250
500
Feet
Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA.


MENTONE ELEMENTARY SCHOOL
Existing Conditions
Existing / Proposed Bikeways
Class II Bike Lane
Sidewalk
Missing Sidewalk
Signalized Intersection
Stop Sign
Curb Ramp
School Advance Warning
Bus Stop
City Boundary
School Boundary
Drop off/Pick up
MADEIRA AVE
SIERRA PINE DR
CEDAR LN DR
CRAFTON AVE
AGATE AVE
PLUMWOOD LN
MENTONE BLVD
Mentone Elementary School
0
250
500
Feet
Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA


MOORE MIDDLE SCHOOL
Existing Conditions
Existing / Proposed Bikeways
Class II Bike Lane
Class III Bike Route
Sidewalk
Missing Sidewalk
Stop Sign
Curb Ramp
Rectangular Rapid Flashing Beacon
Speed Feedback Sign
School Boundary
Drop off/Pick up
Bus stop
S LINCOLN ST
E HIGHLAND AVE
S DEARBORN ST
JESSE WAY
5TH AVE
Moore Middle School
0
250
500
Feet
Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA.


ORANGEWOOD HIGH SCHOOL
Existing Conditions
Proposed / Existing Bikeways
Class I Bike Path
Class II Bike Lane
Class III Bike Route
Sidewalk
Missing Sidewalk
Signalized Intersection
Stop Sign
Curb Ramp
Drop off/Pick up
Bus Stop
School Boundary
Park
COLTON AVE
10
TEXAS ST
EUREKA ST
Orangewood High School
W REDLANDS BLVD
W STUART AVE
Jennie Davis Park
ORIENTAL AVE
STATE ST
CENTER ST
0
250
500
Feet
Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA.


SMILEY ELEMENTARY SCHOOL
Existing Conditions
Existing / Proposed Bikeways
Class II Bike Lane
Class III Bike Route
Sidewalk
Missing Sidewalk
Signalized Intersection
Stop Sign
Curb Ramp
Speed Feedback Sign
School Advance Warning
School Boundary
Drop off/Pick up
Cope Middle School
Smiley Elementary School
W FERN AVE
NOTTINGHAM DR
SAN MATEO ST
W CYPRESS AVE
W CLIFTON AVE
PALM AVE
0
250
500
Feet
Map produced by Alta Planning +Design May 2020.
Data Sources City of Redlands, SCAG, SBCTA.


VICTORIA ELEMENTARY SCHOOL
Existing Conditions
Sidewalk
Missing Sidewalk
Stop Sign
Curb Ramp
Drop off/Pick up
City Boundary
School Boundary
Park
COOLEY AVE
VICTORIA AVE
HARDT ST
HARDT ST
E GOULD ST
E GOULD ST
E DAVIDSON ST
E DAVIDSON ST
FERREE ST
RICHARDSON ST
CURTIS ST
Victoria Elementary School
Victoria Park
STOP
0
250
500
Feet

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Appendix E

Bicycle & Pedestrian Network Recommen

Proposed Bicycle Network

The table below lists all of the recommended projects that were sourced from previous plans and community input.

STREET	TO/FROM	PROPOSED PROJECT	LENGTH (MI)
Santa Ana River Trail	Mountain View to Greenspot Rd	I	8.2
Ford St	Highland Ave to Elizabeth St	II	1.7
Pioneer Ave	Citrus Valley HS to Orange St	I	0.5
Orange St	North City Limit to Pioneer Ave	I	1.2
Orange Blossom Trail	Mountain View Ave to Bryn Mawr Ave	I	1.4
Zanja Creek Trail	OBT to Grove St	I	0.7
Orange Blossom Trail	New York St to Naples St	I	2.0
San Timoteo Creek Trail	Beaumont Ave to South City Limit	I	3.9
Nevada St	Santa Ana River Trail to Palmeto St	I	0.2
Palmetto Ave	California St to Nevada St	I	0.3
San Jacinto St	Highland Ave to Crescent Ave	III	0.2
San Timoteo Canyon Rd	Barton Rd to Live Oak Rd	III	4.1

STREET	TO/FROM	PROPOSED PROJECT	LENGTH (MI)
Serpentine Dr and Sunset Dr	Highland Ave to Alessandro Rd	III	1.3
Sunset Dr S	Alessandro Rd to Alta Vista Dr	III	3.4
Highland Ave	Serpentine Dr to Redlands Blvd	III	1.7
Wabash Ave	Reservoir Rd to Palo Alto Dr	III	1.0
Alessandro Rd	Crescent Ave to San Timoteo Canyon Rd	III	1.6
Hilton Ave and Sunset Dr	Garden St to Alta Vista Dr	III	3.0
Mariposa Dr	Sunset Dr to Rossmont Dr	III	1.0
Reservoir Rd	Ford St to Wabash Ave	III	1.1
Elizabeth St	Crescent Ave to Mariposa Dr	III	1.5
Garden St	Cajon St to Elizabeth St	III	0.8
South Ave	Cajon St to Henrietta St	III	0.2
Beaumont Ave	San Timoteo Canyon Rd to City Limit	II / III	0.4

STREET	TO/FROM	PROPOSED PROJECT	LENGTH (MI)
Cajon St	Highland Ave to South Ave	III	0.6
Redlands Blvd	Fern Ave to Ford St	III	1.4
Alta Vista Dr	Outer Highway 10 to Sunset Dr	III	0.8
Henrietta St	South Ave to Elizabeth St	III	0.2
Church St	Santa Ana River Trail to San Bernardino Ave	III	0.7
Cajon St	Citrus Ave to Olive Ave	III	0.2
Orange St	Colton Ave to Citrus Ave	II / III	0.5
Highland Ave	Ford St to Dearborn St	III	0.5
Church St	Riverview Dr to San Bernardino Ave	III	0.5
Orange St	N City Limit to Colton Ave	II	2.5
Redlands Blvd	Fern Ave to Ford St	II	1.4
Eureka St	State St to Brookside Ave	II	0.1
Zanja/Orange Connect	Zanja Creek Trail to Orange Blossom Trail	II	0.1

STREET	TO/FROM	PROPOSED PROJECT	LENGTH (MI)
San Timoteo Canyon Rd	Barton Rd to Nevada St	II	0.4
Mountain View Ave	OBT to I-10 ramp	II	0.3
Alabama St	Santa Ana River Trail to Donut Hole	II	0.2
San Bernardino Ave	Wabash Ave toward Suffel St	II	0.1
Naples Ave	Wabash St to OBT	II	0.1
Colton Ave	Dearborn St to OBT	II / IV	0.5
Live Oak Rd	San Timoteo Canyon Rd to W City Limits	II	2.7
Mentone Blvd	Crafton Ave to Brant St	II	0.8
Garnet Ave	City Limits	II	0.2
Greenspot Rd	City Limit to Florida Ave	II	0.2
Orange Grove Trail	Bryn Mawr Ave to San Bernardino Ave	II	0.7
Center St	State St to Crescent Ave	II	1.8
University St	San Bernardino Ave to Cypress Ave	II	1.7

STREET	TO/FROM	PROPOSED PROJECT	LENGTH (MI)
Lincoln St	Lugonia Ave to Highland Ave	II	1.2
Park Ave	OBT to Kansas St	II	1.2
Orange Blossom Connector	Stuart Ave to Redlands Blvd	II	0.0
6th St	Stuart Ave to OBT	II	0.0
Stuart Ave	New York St to 6th St	II	0.8
New York St	Lugonia Ave to Stuart Ave	II	0.7
New York St	OBT to End of New York St	II	0.2
Texas St	Santa Ana River Trail to State St	II	2.2
Grove St	Brockton Ave to Citrus Ave	II	0.7
Redlands Blvd	Colton Ave to Fern Ave	II	2.2
San Bernardino Ave	OBT to California St	II	1.0
Wabash Ave	Sessums Dr to Reservoir Rd	II	2.6
Lugonia Ave	California St to Wabash St	II	4.2

STREET	TO/FROM	PROPOSED PROJECT	LENGTH (MI)
Pioneer Ave	Buckeye St to Wabash Ave	II	3.6
State St	Alabama St to Eureka St	II	1.4
Nevada St	Lugonia Ave to Barton Rd	II	1.5
Alabama St	N City Limit to Santa Ana River Trail	II	0.7
Santa Ana River Trail	Greenspot Dr to Cone Camp Rd	II	0.2
Brockton Ave / Nice Ave	Wabash Ave to Opal Ave	II	0.2
Colton Ave	California St to Dearborn St	II	4.0
Ford St	Santa Ana River Trail to San Bernardino Ave	II	0.5
Tennessee St	San Bernardino Ave to State St	II	1.2
Fern Ave	San Timoteo Canyon Rd to Terracina Blvd	II	0.4
Brookside Ave	Terracina Blvd to Lakeside Ave	II	0.6
Dearborn St	Pioneer Ave to Lugonia Ave	II	0.9

STREET	TO/FROM	PROPOSED PROJECT	LENGTH (MI)
Terracina Blvd	Olive Ave to Smiley Heights Dr	II	0.5
San Bernardino Ave	E Donut Hole to Texas St	II	0.5
Alabama St	Lugonia Ave to Park Ave	II	0.8
None	California St	I	0.2
None	Santa Ana River Trail to San Bernardino Ave	I	0.6
None	City Limits to Santa Ana River Trail	II / III	0.2
None	Sylvan Blvd to Wabash Ave	I	0.7
6th St	Lugonia Ave to Olive Ave	II	1.1
Clay St	Colton Ave to Pioneer Ave	III	1.2
Eureka St	Citrus Ave to Fern Ave	III	0.5
Eureka St	Colton Ave to Citrus Ave	II	0.5
None	Redlands HS Stadium	I	0.1

STREET	TO/FROM	PROPOSED PROJECT	LENGTH (MI)
W Park Ave		Bike Rack at Post Office	
Tennesee St at OBT		Intersection Improvement	
Kansas St		Bike/Ped Bridge	
W Citrus Ave and New York St		Intersection Improvement	
W State St and N Center St		Intersection Improvement	
Texas St b/w W Stuart Ave and Oriental Ave		Safer grate	
W Redlands Blvd and 3rd St		Better bike detection	
Brookside Ave and N Center St		Make more intuitive (signage?)	
Linda Place and S Center St		Left turn safety improvements for bikes traveling south	
W Citrus Ave and Cajon St		Better bike detection	
Orange St and E State St		Better bike detection	
S 5th St		Bike parking needed here	

STREET	TO/FROM	PROPOSED PROJECT	LENGTH (MI)
E State St		Bike parking needed here	
E Citrus Ave and Olive Ave		Improved left turns from Citrus to Olive when traveling west	
E State St and E Citrus Ave		Intersection Improvement	
Citrus Ave and S Church		Improved crossing safety for left turns from Citrus to Church; Bicycle sensor needs to detect bikes	
Cypress Ave and Redlands Blvd		Improved turning from Cypress onto Redlands Blvd	
E Stuart Ave and S Church St		Improved crossing safety from Stuart onto Church	
E Lugonia Ave and Church St		Bike rack needed at shopping center	
W Lugonia Ave and 6th St		Redesigned medians	
N University St and Lugonia Ave		Improved safety conditions for bicycles traveling through this intersection	
N University St and E Brockton Ave		Improved turning	
N University St and Campus Ave		Improved crossing safety	
University St and Sylvan Blvd		Mid-block crossing Improvement	

STREET	TO/FROM	PROPOSED PROJECT	LENGTH (MI)
E Citrus Ave and Grove St		Improved turning from Citrus onto Grove	
E Palm Ave and Redlands Blvd		Improved turning from Palm onto Redlands	
Ford Park (W corner)		Improved entrance to park with bike racks, smooth sidewalks, signage, etc.	
University St and San Bernardino Ave		Improved turning safety for left turns from University to San Bernardino	
Dearborn St and E Lugonia Ave		Better bike detection	
Alabama St and Orange Tree Ln		Improved turning safety for left turns from Alameda to Orange Tree	
N Center St and Buena Vista St		Improved turning safety for turns from Center to Buena Vista	
W State St and Tennessee St		Improved turning safety for bikes	
New York St at OBT		Improved wayfinding at this crossing	
N San Mateo St and Brookside Ave		Separate bike signal	
W San Bernardino Ave and Orange St		Better bike detection	

Proposed Pedestrian Network

The table below lists all of the recommended projects that were sourced from previous plans and community input.

STREET	TO/FROM	PROPOSED PROJECT
Texas Street	Between I-10 and Redlands Blvd	Pedestrian Path
Redlands Blvd	Between Kansas and 1st	Pedestrian Path
New York St / Stuart Ave	Between Colton and Texas	Pedestrian Path
Park Ave	Between Church and Cook	Pedestrian Path
Parallel to Redlands Rail Corridor	University to Grove	Pedestrian Path
Central Ave	Between University and Judson	Pedestrian Path
Sylvan Blvd	Between University and Judson	Pedestrian Path
Cook St	Between Sylvan and Citrus	Pedestrian Path
University	Between Central and I-10 off-ramp	Pedestrian Path
University	Between Park and Central	Pedestrian Path
University	Between Brockton and Sylvan	Pedestrian Path
New Street	Between Sylvan and Central	Pedestrian Path

STREET	TO/FROM	PROPOSED PROJECT
Pioneer Ave	SR 210	Improved sidewalks
W San Bernardino Ave	SR 210	Improved sidewalks
W Lugonia Ave	SR 210	Improved sidewalks
Nevada St	I-10	Improved sidewalks
W Lugonia Ave	Mountain View Ave	Off-street path
Barton Rd	California St to Nevada St	Improved sidewalks
Iowa St	Hyacinth to Park	Improved sidewalks
Orange Ave	Orangewood Ct to Kansas St	Improved sidewalks
New off-street path	Tennessee to Brookside	Off-street path
Brookside Ave	Tennessee Street	Improved sidewalks
W Olive Ave	San Rafael St to San Mateo St	Improved sidewalks
W Olive Ave	Roberts Rd to Bellevue Ave	Improved sidewalks
W Fern Ave	San Timoteo Canyon Rd to Terracina Blvd	

STREET	TO/FROM	PROPOSED PROJECT
San Timoteo Canyon Rd	W Fern Ave to Frontage Rd	Pedestrian Access
W Crescent St	Alessandro Rd to S Center St	Sidewalk
Cajon St / E Franklin Ave	Summit Ave to Garden St	Improved sidewalks
W Sunset Dr	Crown St to Ridge St	Improved sidewalks and lighting
Alessandro Rd	W Sunset Dr to San Timoteo Canyon Rd	Improved pedestrian safety
W Lugonia Ave	Texas St to Clay St	Improved sidewalks
New off-street path	Riverside Dr to Riverside Dr	Off-street path
New off-street path	Domestic Ave to Orange St	Off-street path
W Stuart Ave	Small area between Texas St and Lawton St	Sidewalk
Orange Blossom Trail	Tennessee St to Alabama St	Sidewalk
Alabama St	Calvary Cir to Orange Ave	Sidewalk
E Redlands Blvd	E Fern Ave to Ford St	Sidewalk
Ford St	Crestview Dr S to sidewalk	Sidewalk

STREET	TO/FROM	PROPOSED PROJECT
Ford St	I-10	Sidewalk
E Highland Ave	I-10	Sidewalk
E Palm Ave	I-10	Sidewalk
Lytle St	E Cypress Ave to S University St	Lighting
E Cypress Ave	I-10 underpass to E Citrus Ave	Sidewalk
Church St	I-10	Sidewalk
N Lincoln St	Sylvan Blvd to Laramie Ave	Sidewalk
S University Ave	E Citrus Ave to E Cypress Ave	Sidewalk
Highland Ave	Monterrey St to I-10	Sidewalk
Church St	E Pennsylvania Ave to Church Pl	Sidewalk
Pioneer Ave	Tennessee St to Furlow Dr	Sidewalk, Lighting, Shade
Texas Street	North of W Pioneer Ave	Sidewalk
San Bernardino Ave	Tennessee St to Webster St	Sidewalk

STREET	TO/FROM	PROPOSED PROJECT
San Bernardino Ave	Hanford St to Torino St	Sidewalk
Extension path to Redlands HS stadium		Pedestrian Path
Pedestrian promenade		Pedestrian Path
Pedestrian promenade		Pedestrian Path
Sunset Dr		Walking Path
New York St		Underpass Improvement
Texas St		Underpass Improvement
Eureka St		Underpass Improvement
Orange St		Underpass Improvement
6th St		Underpass Improvement
Park Ave		Underpass Improvement
University St		Underpass Improvement
Citrus Ave		Underpass Improvement

STREET	TO/FROM	PROPOSED PROJECT
Texas St and Colton Ave		Intersection Improvement
Eureka St and Colton Ave		Intersection Improvement
Orange St and Colton Ave		Intersection Improvement
6th St and Colton Ave		Intersection Improvement
Tennessee St and Redlands Blvd		Intersection Improvement
New York St and Redlands Blvd		Intersection Improvement
Texas St and Redlands Blvd		Intersection Improvement
Eureka St and Redlands Blvd		Intersection Improvement
Orange St and Redlands Blvd		Intersection Improvement
5th St and Redlands Blvd		Intersection Improvement
6th St and Redlands Blvd		Intersection Improvement
Citrus Ave and Eureka St		Intersection Improvement
Citrus Ave and Orange St		Intersection Improvement

STREET	TO/FROM	PROPOSED PROJECT
Citrus Ave and 6th St		Intersection Improvement
4th St and Vine St		Intersection Improvement
6th St and Vine St		Intersection Improvement
Parkwood Dr and Glenwood Dr		Intersection Improvement
University St and Park Ave		Intersection Improvement
Citus Ave and Cypress Ave		Intersection Improvement
Colton Ave and University St		New Signalized Intersection
Central Ave and University St		New Signalized Intersection
University St and Sylvan Blvd		Mid-block crossing Improvement
Orange St and Oriental Ave		New Signalized Intersection
Citrus Ave and 4th St		Mid-block crossing Improvement
Brookside Ave and Grant St		Mid-block crossing Improvement
Grant St and Glenwood Dr		Mid-block crossing Improvement

STREET	TO/FROM	PROPOSED PROJECT
Eureka St		Mid-block crossing Improvement
Olive St and Grant St		Mid-block crossing Improvement
E Cypress Ave		Underpass Improvement
Brookside Ave and N Center St		Intersection Improvement
Brookside Ave and Brookdale Dr		Mid-block crossing Improvement
Cajon St and W Vine St		Intersection Improvement
9th St and E Redlands Blvd		Intersection Improvement
Citrus Ave and E Olive Ave		Intersection Improvement
Cajon St and W Home St		Intersection Improvement
E State St and E Redlands Blvd		Intersection Improvement
6th St and E Stuart Ave		Intersection Improvement
N University St and Campus Ave		Intersection Improvement
W Sun Ave and Orange St		Intersection Improvement

STREET	TO/FROM	PROPOSED PROJECT
6th St and Lugonia Ave		Intersection Improvement
Texas St and W Brockton Ave		Intersection Improvement
Pioneer Avenue underpass SR 120		Underpass Improvement
Domestic Ave and Clementine St		Intersection Improvement
W State St and N Center St		Intersection Improvement
New York St and State St		Intersection Improvement
Tennesee St at OBT		Mid-block crossing Improvement
Kansas St North of Orange Ave		Bridge
W Olive Ave and San Mateo St		Intersection Improvement
Dana St and W Palm Ave		Intersection Improvement
W Highland Ave and Alvarado St		Intersection Improvement
E Palm Ave and Hibiscus Dr		Intersection Improvement
E Palm Ave and La Paloma St		Mid-block crossing Improvement
E Cypress Ave and Lytle St		Intersection Improvement

STREET	TO/FROM	PROPOSED PROJECT
E Cypress Ave and S University St		Intersection Improvement
N Grove St at OBT		Access improvement
Ford St and Redlands Blvd		Intersection Improvement
Ford St underpass at I-10		Underpass Improvement
Ford St and Parkford Dr		Intersection Improvement
E Sunset Dr S and Rossmont Dr		Intersection Improvement
Orange Ave and Tennessee St		Intersection Improvement
E Cypress Ave and Redlands Blvd		Intersection Improvement
Redlands Blvd at Shopping Center		Driveway crossing improvement
Cajon st and W Highland Ave		Intersection Improvement
W Cypress Ave and Cajon St		Intersection Improvement
W Pennsylvania Ave and Orange St		Intersection Improvement
W Pennsylvania Ave and Church St		Intersection Improvement
Lugonia Ave and Church St		Bus stop improvement

STREET	TO/FROM	PROPOSED PROJECT
Texas Street north of Pioneer Ave		Mid-block crossing Improvement
E Brockton and N University St		New Signalized Intersection
Brookside Ave and N Buena Vista St		Mid-block crossing Improvement

Proposed Bicycle and Pedestrian Network on Major Corridors

The table below lists all of the recommended projects organized by major corridors in Redlands.

STREET	TO/FROM	PROPOSED PROJECT
Colton Ave	California S to Dearborn St	Class II Bike Lane
Colton Ave	Dearborn St to OBT	Class II Bike Lane or Class IV Protected Bike Lane
Colton Ave	University Ave	New Signalized Intersection
Highland Ave	Serpentine Dr	Class III Bike Route
Highland Ave	Monterrey St to I-10	Pedestrian Path
E Highland Ave	I-10	Pedestrian Path
Cajon st and W Highland Ave		Intersection Improvement
W Highland Ave and Alvarado St		Intersection Improvement
Lugonia Ave	California St to Wabash St	Class II Bike Lane
W Lugonia Ave & 6th St		Redesign Median
E Lugonia Ave and Church St		Bike rack needed at shopping center
Lugonia Ave	Texas St to Clay St	Pedestrian Path Connection

STREET	TO/FROM	PROPOSED PROJECT
Lugonia Ave	Church St	Bus Stop Improvement
W Lugonia Ave	SR 210	Pedestrian Path
W Lugonia Ave	Mountain View Ave	Pedestrian Path
Orange St	Colton Ave to Citrus Ave	Class II Bike Lane or Class III Bike Route
Orange St	N City Limit to Colton Ave	Class II Bike Lane
Orange St	N City Limit to Pioneer Ave	Class I Bike Path
Orange St & E State St		Bike Detection Improvement
Orange St	Colton Ave	Intersection Improvement
Orange St	I-10 Underpass	Underpass Improvement
Orange St	Redlands Blvd	Intersection Improvement
Orange St	Oriental Ave	New Signalized Intersection
Redlands Blvd	Colton Ave to Fern Ave	Class II Bike Lane
Redlands Blvd	Fern Ave to Ford St	Class II Bike Lane
Redlands Blvd	Fern Ave to Ford St	Class III Bike Route

STREET	TO/FROM	PROPOSED PROJECT
W Redlands Blvd and 3rd St		Better bike detection
Redlands Blvd	Between Kansas and 1st	Pedestrian Path Connection
E Redlands Blvd	E Fern Ave to Ford St	Pedestrian Path
9th St and E Redlands Blvd		Intersection Improvement
E State St and E Redlands Blvd		Intersection Improvement
Tennessee St and Redlands Blvd		Intersection Improvement
Eureka St and Redlands Blvd		Intersection Improvement
Redlands Blvd at Shopping Center		Driveway crossing improvement
E Cypress Ave and Redlands Blvd		Intersection Improvement
Ford St and Redlands Blvd		Intersection Improvement
San Bernardino Ave	OBT to California St	Class II Bike Lane
W San Bernardino Ave & Orange St		Bike Detection Improvement
San Bernardino Ave	E Donut Hole to Texas St	Class II Bike Lane
San Bernardino Ave	Wabash Ave toward Suffel St	Class II Bike Lane

STREET	TO/FROM	PROPOSED PROJECT
University St and San Bernardino Ave		Improved left turns from Univ onto SB
San Bernardino Ave	Tennessee St to Webster St	Pedestrian Path Connection
W San Bernardino Ave	SR 210	Pedestrian Path
San Bernardino Ave	Hanford St to Torino St	Pedestrian Path

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Appendix F

Bicycle & Pedestrian Prioritized Projects

Tier 2 Bicycle Prioritized Projects

The table below lists the Tier 2 bicycle prioritized projects.

STREET	TO/FROM	PROPOSED PROJECT
Brookside Ave	Terracina Blvd to Lakeside Ave	Class II Bike Lane
Eureka St	Citrus Ave to Fern Ave	Class III Bike Route
Eureka St	Colton Ave to Citrus Ave	Class II Bike Lane
Santa Ana River Trail	Mountain View to Greenspot Rd	Class I Bike Path
Orange Blossom Connector	Stuart Ave to Redlands Blvd	Class II Bike Lane
San Timoteo Canyon Rd	Barton Rd to Nevada St	Class II Bike Lane
Ford St	Highland Ave to Elizabeth St	Class II Bike Lane
Wabash Ave	Sessums Dr to Reservoir Rd	Class II Bike Lane
Zanja/Orange Connect	Zanja Creek Trail to Orange Blossom Trail	Class II Bike Lane
Brockton Ave / Nice Ave	Wabash Ave to Opal Ave	Class II Bike Lane
Redlands Blvd	Fern Ave to Ford St	Class II Bike Lane
Redlands Blvd	Fern Ave to Ford St	Class III Bike Route

STREET	TO/FROM	PROPOSED PROJECT
Highland Ave	Serpentine Dr to Redlands Blvd	Class III Bike Route
Orange St	North City Limit to Pioneer Ave	Class I Bike Path
Alabama St	N City Limit to Santa Ana River Trail	Class II Bike Lane
Eureka St	State St to Brookside Ave	Class II Bike Lane
San Timoteo Canyon Rd	Barton Rd to Live Oak Rd	Class III Bike Route
Alabama St	Santa Ana River Trail to Donut Hole	Class II Bike Lane
Mountain View Ave	OBT to I-10 ramp	Class II Bike Lane
San Bernardino Ave	Wabash Ave toward Suffel St	Class II Bike Lane
Naples Ave	Wabash St to OBT	Class II Bike Lane
None	Redlands HS Stadium	Class I Bike Path
Lincoln St	Lugonia Ave to Highland Ave	Class II Bike Lane
Pioneer Ave	Citrus Valley HS to Orange St	Class I Bike Path
Church St	Riverview Dr to San Bernardino Ave	Class III Bike Route
Fern Ave	San Timoteo Canyon Rd to Terracina Blvd	Class II Bike Lane

STREET	TO/FROM	PROPOSED PROJECT
Hilton Ave and Sunset Dr	Garden St to Alta Vista Dr	Class III Bike Route
Orange Grove Trail	Bryn Mawr Ave to San Bernardino Ave	Class II Bike Lane
W Redlands Blvd and 3rd St		Better bike detection
E Stuart Ave and S Church St		Improved crossing safety from Stuart onto Church
Citrus Ave and S Church		Improved left turns from Citrus to Church
N University St and E Brockton Ave		Left turn improvements
N University St and Campus Ave		Improved crossing safety
W State St and N Center St		Intersection Improvement
N Center St and State St		Improved turns from Center to BV
W Citrus Ave and New York St		Intersection Improvement
University St and San Bernardino Ave		Improved left turns from Univ onto SB
Brookside Ave and N Center St		Make more intuitive (signage?)
S 5th St		Bike parking needed here
N San Mateo St and Brookside Ave		Separate bike signal

Tier 3 Bicycle Prioritized Projects

The table below lists the Tier 3 bicycle prioritized projects.

STREET	TO/FROM	PROPOSED PROJECT
Dearborn St	Pioneer Ave to Lugonia Ave	Class II Bike Lane
Elizabeth St	Crescent Ave to Mariposa Dr	Class III Bike Route
San Timoteo Creek Trail	Beaumont Ave to South City Limit	Class I Bike Path
Sunset Dr S	Alessandro Rd to Alta Vista Dr	Class III Bike Route
Terracina Blvd	Olive Ave to Smiley Heights Dr	Class II Bike Lane
Highland Ave	Ford St to Dearborn St	Class III Bike Route
Garden St	Cajon St to Elizabeth St	Class III Bike Route
Mariposa Dr	Sunset Dr to Rossmont Dr	Class III Bike Route
Nevada St	Santa Ana River Trail to Palmeto St	Class I Bike Path
Ford St	Santa Ana River Trail to San Bernardino Ave	Class II Bike Lane
Cajon St	Highland Ave to South Ave	Class III Bike Route

STREET	TO/FROM	PROPOSED PROJECT
Mentone Blvd	Crafton Ave to Brant St	Class II Bike Lane
None	California St	Class I Bike Path
San Jacinto St	Highland Ave to Crescent Ave	Class III Bike Route
Wabash Ave	Reservoir Rd to Palo Alto Dr	Class III Bike Route
Garnet Ave	City Limits	Class II Bike Lane
Palmetto Ave	California St to Nevada St	Class I Bike Path
Greenspot Rd	City Limit to Florida Ave	Class II Bike Lane
Henrietta St	South Ave to Elizabeth St	Class III Bike Route
None	Santa Ana River Trail to San Bernardino Ave	Class I Bike Path
None	Sylvan Blvd to Wabash Ave	Class I Bike Path
Serpentine Dr and Sunset Dr	Highland Ave to Alessandro Rd	Class III Bike Route
Reservoir Rd	Ford St to Wabash Ave	Class III Bike Route
Alessandro Rd	Crescent Ave to San Timoteo Canyon Rd	Class III Bike Route

STREET	TO/FROM	PROPOSED PROJECT
Alta Vista Dr	Outer Highway 10 to Sunset Dr	Class III Bike Route
Beaumont Ave	San Timoteo Canyon Rd to City Limit	Class II Bike Lane / Class III Bike Route
None	City Limits to Santa Ana River Trail	Class II Bike Lane /Class III Bike Route
Live Oak Rd	San Timoteo Canyon Rd to W City Limits	Class II Bike Lane
South Ave	Cajon St to Henrietta St	Class III Bike Route
Santa Ana River Trail	Greenspot Dr to Cone Camp Rd	Class II Bike Lane
E State St		Bike parking needed here
Texas St b/w W Stuart Ave and Oriental Ave		Safer grate
E Citrus Ave and Grove St		Improved turning from Citrus onto Grove
Cypress Ave and Redlands Blvd		Improved turning from Cypress onto Redlands
Kansas St		Bike/Ped Bridge
Linda Place and S Center St		Improve left turn for bikes traveling south
E Lugonia Ave and Church St		Bike rack needed at shopping center

STREET	TO/FROM	PROPOSED PROJECT
W Park Ave		Bike Rack at Post Office
E Palm Ave and Redlands Blvd		Improved turning from Palm onto Redlands
Dearborn St and E Lugonia Ave		Better bike detection
Ford Park (W corner)		Improved entrance to park

Tier 2 Pedestrian Prioritized Projects

The table below lists the Tier 2 pedestrian prioritized projects.

STREET	TO/FROM	PROPOSED PROJECT
Iowa St	Hyacinth to Park	Pedestrian Path
New off-street path	Tennessee to Brookside	Pedestrian Path
Pedestrian promenade		Pedestrian Path
Pioneer Ave	Tennessee St to Furlow Dr	Pedestrian Path
Pedestrian promenade		Pedestrian Path
S University Ave	E Citrus Ave to E Cypress Ave	Pedestrian Path
Barton Rd	California St to Nevada St	Pedestrian Path
Church St	I-10	Pedestrian Path
Extension path to Redlands HS stadium		Pedestrian Path
Brookside Ave	Tennessee Street	Pedestrian Path
Texas Street	North of W Pioneer Ave	Pedestrian Path
W Olive Ave	San Rafael St to San Mateo St	Pedestrian Path

STREET	TO/FROM	PROPOSED PROJECT
W San Bernardino Ave	SR 210	Pedestrian Path
W Lugonia Ave	SR 210	Pedestrian Path
Nevada St	I-10	Pedestrian Path
New off-street path	Domestic Ave to Orange St	Pedestrian Path
W Olive Ave	Roberts Rd to Bellevue Ave	Pedestrian Path
E Redlands Blvd	E Fern Ave to Ford St	Pedestrian Path
Highland Ave	Monterrey St to I-10	Pedestrian Path
Orange Ave and Tennessee St		Intersection Improvement
Olive St and Grant St		Mid-block crossing Improvement
New York St		Underpass Improvement
9th St and E Redlands Blvd		Intersection Improvement
Citrus Ave and 4th St		Mid-block crossing Improvement
New York St and Redlands Blvd		Intersection Improvement

STREET	TO/FROM	PROPOSED PROJECT
Eureka St and Colton Ave		Intersection Improvement
E State St and E Redlands Blvd		Intersection Improvement
Tennessee St and Redlands Blvd		Intersection Improvement
6th St and E Stuart Ave		Intersection Improvement
Tennesee St at OBT		Mid-block crossing Improvement
6th St and Vine St		Intersection Improvement
Eureka St and Redlands Blvd		Intersection Improvement
Citrus Ave and E Olive Ave		Intersection Improvement
N University St and Campus Ave		Intersection Improvement
Texas St		Underpass Improvement
E Brockton and N University St		New Signalized Intersection
Brookside Ave and Buena Vista St		Mid-block crossing improvement
Eureka St		Mid-block crossing Improvement

STREET	TO/FROM	PROPOSED PROJECT
Brookside Ave and N Center St		Intersection Improvement
4th St and Vine St		Intersection Improvement
Cajon St and W Vine St		Intersection Improvement
E Cypress Ave and S University St		Intersection Improvement
Brookside Ave and Brookdale Dr		Mid-block crossing Improvement
Pioneer Avenue underpass SR 120		Underpass Improvement
New York St and State St		Intersection Improvement

Tier 3 Pedestrian Prioritized Projects

The table below lists the Tier 2 pedestrian prioritized projects.

STREET	TO/FROM	PROPOSED PROJECT
Lytle St	E Cypress Ave to S University St	Pedestrian Path
New off-street path	Riverside Dr to Riverside Dr	Pedestrian Path
Pioneer Ave	SR 210	Pedestrian Path
Ford St	Crestview Dr S to sidewalk	Pedestrian Path
N Lincoln St	Sylvan Blvd to Laramie Ave	Pedestrian Path
W Lugonia Ave	Mountain View Ave	Pedestrian Path
Ford St	I-10	Pedestrian Path
E Cypress Ave	I-10 underpass to E Citrus Ave	Pedestrian Path
W Crescent St	Alessandro Rd to S Center St	Pedestrian Path
San Timoteo Canyon Rd	W Fern Ave to Frontage Rd	Pedestrian Path
W Fern Ave	San Timoteo Canyon Rd to Terracina Blvd	Pedestrian Path
Alessandro Rd	W Sunset Dr to San Timoteo Canyon Rd	Pedestrian Path

STREET	TO/FROM	PROPOSED PROJECT
E Highland Ave	I-10	Pedestrian Path
Cajon St / E Franklin Ave	Summit Ave to Garden St	Pedestrian Path
E Palm Ave	I-10	Pedestrian Path
W Sunset Dr	Crown St to Ridge St	Pedestrian Path
San Bernardino Ave	Hanford St to Torino St	Pedestrian Path
Sunset Dr		Pedestrian Path
W State St and N Center St		Intersection Improvement
Texas St and W Brockton Ave		Intersection Improvement
W Olive Ave and San Mateo St		Intersection Improvement
W Pennsylvania Ave and Church St		Intersection Improvement
Eureka St		Underpass Improvement
Texas Street north of Pioneer Ave		Mid-block crossing Improvement
Citus Ave and Cypress Ave		Intersection Improvement

STREET	TO/FROM	PROPOSED PROJECT
Parkwood Dr and Glenwood Dr		Intersection Improvement
Domestic Ave and Clementine St		Intersection Improvement
Cajon St and W Home St		Intersection Improvement
Kansas St North of Orange Ave		Bridge
Redlands Blvd at Shopping Center		Driveway crossing improvement
E Cypress Ave and Lytle St		Intersection Improvement
E Cypress Ave and Redlands Blvd		Intersection Improvement
N Grove St at OBT		Access improvement
W Cypress Ave and Cajon St		Crosswalk Improvement
E Cypress Ave		Underpass Improvement
Cajon st and W Highland Ave		Intersection Improvement
Ford St underpass at I-10		Underpass Improvement
Ford St and Redlands Blvd		Intersection Improvement

STREET	TO/FROM	PROPOSED PROJECT
Ford St and Parkford Dr		Intersection Improvement
W Highland Ave and Alvarado St		Intersection Improvement
E Palm Ave and Hibiscus Dr		Intersection Improvement
E Palm Ave and La Paloma St		Mid-block crossing Improvement
Dana St and W Palm Ave		Intersection Improvement
E Sunset Dr S and Rossmont Dr		Intersection Improvement

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Appendix G

Funding Opportunities

Funding Opportunities

LOCAL

Redlands Measure T

In November 2020 Redlands voters passed Measure T, a one-cent sales tax to preserve the quality of life and city services in Redlands. Measure T funds can be used to keep public areas such as parks and recreation areas clean and maintained. The money can also be used to maintain sidewalks and curbs. All Measure T money is required to be used in the City.

Redlands Adopt- a- Street and Adopt-a-Path

The City offers opportunities for interested groups to adopt a section of the City's streets or trails . In return for the group completing regular clean ups on the street or trail, the City rewards the group with signage located on corridor. Clean ups must occur at least 4 times per year for a 1- or 2-year period. The City provides the cleanup supplies to the groups.

SBCTA Measure I

Measure I is a half-cent sales tax in San Bernardino County used for transportation improvements. The original measure was approved for the years 1989-2004, but it was extended to 2040. Funding is distributed based on the Measure I 2010-2040 Ordinance and Expenditure Plan and the Strategic Plan. 20% of Measure I revenue is devoted to Local Streets Programs and 20% is devoted to Major Streets Programs. SBCTA administers the revenue and is responsible for ensuring funds are used properly.

SBCTA Transportation Development Act (TDA)

In 1999 Article 3 of the TDA approved funding for building and maintaining bicycle and pedestrian facilities. Funds can also be distributed to improve public transit stops, including construction of new sidewalk near a bus stop. SBCTA oversees the distribution of these funds. Bicycle projects must be included in the SBCTA Non-Motorized Transportation Plan. Funding is available to cover up to 90% of total project costs, and 50% of the total funding available is reserved for smaller projects under $250,000.

SCAG Sustainable Communities Program

Created in 2005, SCAG's Sustainable Communities Program has provided resources and assistance to jurisdictions to complete local planning efforts. The SCP provides resources to support active transportation and multimodal efforts and sustainability, equity in transportation planning, reductions in motorized vehicle miles traveled and reductions in greenhouse gas emissions. The SCP also supports quick build projects, and network visioning to help jurisdictions install active transportation networks.

SCAG Local Community Engagement and Safety Mini-Grants

As part of SCAG's Go Human Campaign, community-based organizations may apply for up to $10,000 in funding for projects which increase the safety of vulnerable street users, including pedestrians and bicyclists. Mini-grants fund projects which educate mobility users on safe practices, increase access to safe routes for users, and envision safety improvements to transportation infrastructure that prioritizes vulnerable users.

Development Impact Fees

Developer impact fees are collected from new developments by local governments. These fees offset the costs of building and maintaining new facilities for transportation, parks, and other public facilities. 25% of Redlands development impact fees are devoted to the Open Space Fund to be used for preserving and improving outdoor recreation, open space, and conservation. The Open Space Fund can be used to preserve scenic routes and trails.

REGIONAL

California Office of Traffic Safety Grants

The Office of Traffic Safety's goal is to prevent serious injury and death from motor vehicle crashes. Funding is available for projects which relate to one of the priority program areas, including pedestrian and bicycle safety. Bike and pedestrian safety programs include educational outreach particularly for high-risk populations, youth bicycle trainings and walking courses, and outreach for underserved older communities to identify safety issues. Grant applications must be submitted by January 30.

Caltrans Transportation Development Act (TDA)

The Transportation Development Act (TDA) provides funding annually to be allocated to transit and non-transit related purposes that comply with regional transportation plans. Funding is based on sales tax collected in each county, but has generated approximately $1.9 million. The TDA funds a wide variety of transportation programs, including planning and program activities, pedestrian and bicycle facilities, community transit services, public transportation, and bus and rail projects.

California Transportation Commission Local Partnership Program

This program provides $200 million in funding for local and regional transportation agencies with voter approved taxes, tolls, or fees, which are dedicated solely to transportation improvements. The program provides funding for aging infrastructure, road conditions, active transportation, transit and rail, and health and safety benefits. The Local Partnership Program funds are distributed through a 40% statewide competitive component and a 60% formulaic component.

California Department of Parks and Recreation Habitat Conservation Fund

This fund allocates approximately $2 million each year to cities, counties, and districts for nature interpretation programs to bring urban residents into park and wildlife areas, protection of various plant and animal species, and the acquisition and development of wildlife corridors and trails. Funds are available for trail maintenance, interpretive signage, lighting and waysides. The program requires a 50% match.

Caltrans State Transportation Improvement Program (STIP)

The STIP is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources. Funding consists of two components: Caltrans' Interregional Transportation Improvement Program (ITIP) and regional transportation planning agencies' Regional Transportation Improvement Program (RTIP). Pedestrian and bicycle projects may be programmed under ITIP and RTIP. STIP programming occurs every two years.

Affordable Housing and Sustainable Communities (AHSC)

The California Strategic Growth Council funds healthier communities and protects the environment by increasing the supply of affordable places to live near jobs, stores, transit, and other daily needs. Funded by Cap-and-Trade revenue, the AHSC program makes it easier for Californians to drive less by engaging in active transportation, such as walking, biking, and using transit. Eligible projects include sustainable transportation infrastructure, such as new transit vehicles, sidewalks, and bike lanes; transportation-related amenities, such as bus shelters, benches, or shade trees; and other programs that encourage residents to walk, bike, and use public transit. Previous projects have been awarded up to $30 million.

Transformative Climate Communities (TCC)

The California Strategic Growth Council funds community-led development and infrastructure projects that achieve major environmental, health, and economic benefits in California's most disadvantaged communities. Funded by California's Cap-and-Trade Program, TCC empowers the communities most impacted by pollution to choose their community vision, strategies, and projects to enact transformational change – all with data-driven milestones and measurable outcomes. Approximately $56.4 million is available to use for implementation and planning projects.

Rubberized Pavement Grant Program

The California Department of Resources Recycling and Recovery (Cal Recycle) provides the Rubberized Pavement Grant Program, formerly called the Rubberized Asphalt Concrete (RAC) Grant Program, to promote markets for recycled-content surfacing products derived from waste tires generated in California and decrease the adverse environmental impacts created by unlawful disposal and stockpiling of waste tires. There is $4,000,000 available funding. $350,000 is the maximum for individual application. If applying for a regional application, the maximum is $500,000.

Statewide Park Development and Community Revitalization Program (SPP)

The Statewide Park Development and Community Revitalization Program is the largest park related grant program in California. The California Department of Parks and Recreation provides this competitive grant program that will create new parks and new recreation opportunities in critically underserved communities. The types of projects that are eligible for funding include new parks, expanding an existing park, and renovating an existing park. All projects must create or renovate at least one recreation feature such as non-motorized trails, equestrian centers, aquatic centers, regional sports complexes, playgrounds, open spaces, plazas, public art, lighting etc. Applicants can receive funding between $200,00 and $8,500,000. There is no match required.

Regional Park Program

The California Department of Parks and Recreation provides a Regional Parks Program which provides competitive grants that will create, expand, and improve regional parks. Projects will create at least one new recreation feature that attracts visitors from at least a 20-mile radius or county-wide population to a regional park. Applicants can receive funding between $200,00-$3 million. Projects eligible for this grant should include new recreation features such as non-motorized trails, equestrian centers, aquatic centers, regional sports complexes, playgrounds, open spaces, plazas, public art, lighting etc. There is no match required.

Environmental Enhancement and Mitigation Funds

The California Natural Resources Agency provides grants to projects that indirectly mitigate the environmental impacts of new transportation facilities. Funds are available for land acquisition and construction and should fall into one of the following three categories: urban forestry projects, resource lands projects, or mitigation projects beyond the scope of the lead agency. The local Caltrans district must support the project. The maximum award amount is $500,000. The application deadline usually falls in June.

Caltrans Sustainable Transportation Planning Grant Program

The Sustainable Transportation Planning Grant Program supports transportation planning processes which address local and regional transportation needs and issues. The program offers two types of grants: Strategic Partnerships and Sustainable Communities. The Sustainable Communities Grants has $29.5 million in funding to encourage local and regional planning that furthers state goals. The Strategic Partnership Grant has $4.5 million to identify and address statewide or regional deficiencies on the State highway system in partnership with Caltrans. The overarching objectives to guide grant applications are sustainability, preservation, mobility, safety, innovation, economy, health and social equity.

Active Transportation Program (ATP)

The California State Legislature created the Active Transportation Program to encourage active modes of transportation. Senate Bill 1 (SB 1) stipulates that $100,000,000 of revenues from the Road Maintenance and Rehabilitation Account will be available annually to the ATP. The ATP consolidates existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S), into a single program with a focus to make California a national leader in active transportation. Applications are to be submitted typically in July.

Eligible projects include infrastructure projects, education, encouragement and enforcement non-infrastructure projects which further the goals of the ATP, a combination of infrastructure and non-infrastructure activities, and development of active transportation plans in disadvantaged communities.

Funding Sources:

- State and Federal Funding
- $34 million in State Highway Account (per-year)
- $88.5 million In Federal (per-year)
- $10 million (California Climate Investments)-Cycle 3 one-time program
- $100 million (SB1 State Funds per-year)

Goals of the ATP are currently defined as the following:

- Increasing the proportion of trips accomplished by walking;
- Increasing safety and mobility for active transportation users;
- Advancing active transportation efforts of regional agencies to achieve the greenhouse gas reduction goals;
- Enhancing public health;
- Ensuring that disadvantaged communities fully share in the benefit of the program; and,
- Providing a broad spectrum of projects to benefit many types of active transportation users.

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Highway Safety Improvement Program (HSIP)

The Highway Safety Improvement program's purpose is to reduce traffic fatalities and serious injuries on public roads. Eligible projects include installation of pedestrian hybrid beacons, roadway improvements that provide separation between pedestrians and motor vehicles, and other physical infrastructure projects. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance. Funding is available up to $10 million.

The Better Utilization Investments to Leverage Development Discretionary Grant (BUILD)

Since 2009 the Program has provided $9 billion in funding to projects across the nation. The BUILD (formerly TIGER) reimbursement grant, available through the U.S. Department of Transportation, allows sponsors at the State and local levels to obtain funding for multi-modal, multi-jurisdictional projects that are more difficult to support through traditional funding initiatives. Eligible projects include road or bridge projects, public transportation projects, and surface transportation facilities.

Federal Transit Administration Urbanized Area Formula Program

The Urbanized Area Formula Funding program funds transit capital and transportation-related planning projects. Funding is available to governors, local officials and private transit operators and can be used for planning, engineering, and design as well as transit-related studies, crime prevention and security equipment, construction and maintenance of passenger facilities, and mobility management programs. The federal share is not to exceed 80% of the net project cost for capital expenditures.

Federal Transit Administration Enhanced Mobility Grants

The Enhanced Mobility Grant program provides formula funding to states for the purpose of assisting private nonprofit groups in meeting the transportation needs of older adults and people with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs. Recipients in urban areas are chosen by the governor. Eligible activities include building an accessible path to a bus stop including curb-cuts, sidewalks, and pedestrian signals; and improved wayfinding signage. The federal share of eligible capital costs may not exceed 80%, and 50% for operating assistance. The 10% that is eligible to fund program administrative costs including administration, planning, and technical assistance may be funded at 100% federal share.

National Endowment for the Arts Our Town

The Our Town grant program supports projects that integrate arts, culture, and design activities into efforts that strengthen communities by advancing local economic, physical, and/or social outcomes. Creative placemaking is when art is deliberately integrated into community revitalization work - placing arts at the table with land-use, transportation, economic development, education, housing, infrastructure, and public safety strategies. Grant applicants require partnerships between arts organizations and government. Funding ranges from $25,000-$200,000 per project with a minimum cost share/match equal to the grant amount. This program occurs on

a yearly basis and the application deadline typically falls in August.

People for Bikes

Established in 1999, and funded by partners in the industry, PeopleForBikes is a partnership of bicycle advocates that has awarded more than $3.5 million dollars in grants for bike projects and bike advocacy initiatives. In 2019, PeopleForBikes contributed $700,000 for investments in bicycle infrastructure, education for children who bike, mountain biking trails, and bike share technology.

Robert Wood Johnson Foundation

The Robert Wood Johnson Foundation is the nation's largest philanthropy dedicated to health. Some grants offered by RWJF support planning and demonstration projects and programs which are devoted to expanding public health in the built environment. Grants are developed in consultation with leading experts in the field and can provide funding and technical assistance.

America Walks Community Change Grant

In partnership with the CDC's Active People, Healthy Nation initiative, America Walks awards grants of $1,500 for projects related to creating healthy, active, and engaged places to live, work, and play. Projects should have a foundation of equity, and should lead to increased physical activity and active transportation in a community. Projects can infrastructure related, or programmatic such as Safe Routes to School programs.

Kresge Foundation

The Kresge Foundation is a national foundation which invests in arts and culture, education, environment, health, human services, and community development with the goal of creating pathways for people with low incomes to improve their life circumstances and join the economic mainstream. One of the foundation's eight focus areas is American Cities, which provides funding to make cities more connected and create reliable public transportation options. Another of the foundation's focuses is the Environment, which offers grants to projects which helps communities reduce and prepare for the impacts of climate change.

Potential Funding Strategies for Tier 1 Bicycle Projects

The table below lists potential funding stratgies for Tier 1 bicycle recommendations.

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
Redlands Blvd	Colton Ave to Fern Ave	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, AHSC, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
New York St	Lugonia Ave to Stuart Ave	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Colton Ave	California St to Dearborn St	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Orange Blossom Trail	New York St to Naples St	Class I Bike Path	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, Regional Park Program, California Department of Parks and Recreation Habitat Conservation Fund, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, Development Impact Fees, California Transportation Commission Local Partnership Program, TCC, SPP, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
Lugonia Ave	California St to Wabash St	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, AHSC, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Orange St	Colton Ave to Citrus Ave	Class II Bike Lane or Class III Bike Route	HSIP, Measure I, TDA, ATP, STIP, AHSC, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Orange St	N City Limit to Colton Ave	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, AHSC, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Texas St	Santa Ana River Trail State St	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Alabama St	Lugonia Ave to Park Ave	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
6th St	Lugonia Ave to Olive Ave	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
State St	Alabama St to Eureka St	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
San Bernardino Ave	OBT to California St	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Tennessee St	San Bernardino Ave to State St	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, AHSC, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Church St	Santa Ana River Trail to San Bernardino Ave	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
University St	San Bernardino Ave to Cypress Ave	Class III Bike Route	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
New York St	OBT to End of New York St	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Stuart Ave	New York St 6th St	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Cajon St	Citrus Ave Olive Ave	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Grove St	Brockton Ave Citrus Ave	Class III Bike Route	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
W Lugonia Ave & 6th St		Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
W San Bernardino Ave & Orange St		Redesign Median	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC
Nevada St	Lugonia Ave to Barton Rd	Bike Detection Improvement	HSIP, Measure I, TDA, ATP, STIP, AHSC, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC
6th St	Stuart Ave to OBT	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
San Bernardino Ave	E Donut Hole to Texas St	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, AHSC, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
Park Ave	OBT to Kansas St	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
W Citrus Ave & Cajon St		Bike Detection Improvement	HSIP, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC
University St & Sylvan Blvd		Mid-block Crossing Improvement	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Orange St & E State St		Bike Detection Improvement	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC
E State St & E Citrus Ave		Intersection Improvement	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
Colton Ave	Dearborn St to OBT	Class II Bike Lane or Class IV Protected Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Pioneer Ave	Buckeye St to Wabash Ave	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Orange Blossom Trail	Mountain View Ave to Bryn Mawr Ave	Class I Bike Path	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Center St	State St to Crescent Ave	Class II Bike Lane	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Zanja Creek Trail	OBT to Grove St	Class I Bike Path	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
Clay St	Colton Ave to Pioneer Ave	Class III Bike Route	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Tennessee St at OBT		Intersection Improvement	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
W State St & Tennessee St		Intersection Improvement	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
New York St at OBT		Improve Wayfinding	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
Alabama St & Orange Tree Ln		Intersection Improvement	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
E Citrus Ave & olive Ave		Intersection Improvement	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation
N University St & Lugonia Ave		Safety Improvements	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, People for Bikes, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, Kresge Foundation

Potential Funding Strategies for Tier 1 Pedestrian Projects

The table below lists potential funding stratgies for Tier 1 pedestrian recommendations.

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
6th St	Colton Ave	Intersection Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
University St	Sylvan Blvd	Mid-Block Crossing Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Orange St	Colton Ave	Intersection Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, AHSC, Federal Transit Administration Enhanced Mobility Grants, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
Orange St	I-10 Underpass	Underpass Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, AHSC, Federal Transit Administration Enhanced Mobility Grants, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Central Ave	University St	New Signalized Intersection	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant
University St	I-10 Underpass	Underpass Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Citrus Ave	6th St	Intersection Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
Citrus Ave	Orange St	Intersection Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
New York St	Between Colton and Texas	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
6th St	Redlands Blvd	Intersection Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Orange St	Redlands Blvd	Intersection Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, AHSC, Federal Transit Administration Enhanced Mobility Grants, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
Texas St	Redlands Blvd	Intersection Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
5th St	Redlands Blvd	Intersection Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Citrus Ave	Eureka St	Intersection Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
6th St	I-10 Underpass	Underpass Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
University St	Between Park and Central	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Redlands Blvd	Between Kansas and 1st	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, AHSC, Federal Transit Administration Enhanced Mobility Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Park Ave	Between Church and Cook	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Brookside Ave	Grant St	Mid-Block Crossing Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, AHSC, Federal Transit Administration Enhanced Mobility Grants, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
Grant St	Glenwood Dr	Mid-Block Crossing Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
6th St	Lugonia Ave	Intersection Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Citrus Ave	I-10 Underpass	Underpass Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
University St	Between Central and I-10 Off Ramp	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Lugonia Ave	Texas St to Clay St	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
Texas St	Between I-10 to Redlands Blvd	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
University St	Park Ave	Intersection Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Texas St	Colton Ave	Intersection Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Pennsylvania Ave	Orange St	Intersection Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
Lugonia Ave	Church St	Bus Stop Improvement	HSIP, Measure I, TDA, ATP, STIP, AHSC, Federal Transit Administration Enhanced Mobility Grants, SCP, Local Community Mini Grants, BUILD, Federal Transit Administration Urbanized Area Formula Program, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Colton Ave	University Ave	New Signalized Intersection	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Orange St	Oriental Ave	New Signalized Intersection	HSIP, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Central Ave	Between University and Judson	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
Sylvan Ave	Between University and Judson	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Sun Ave	Orange St	Intersection Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Park Ave	I-10 Underpass	Underpass Improvement	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, SCP, Local Community Mini Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
University Ave	Between Brockton and Sylvan	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Orange Ave	Orangewood Ct to Kansas St	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
Alabama St	Calvary Cir to Orange Ave	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Redlands Rail Corridor	University Ave to Grove St	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Church St	Pennsylvania Ave to Church Pl	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Cook St	Sylvan Ave to Citrus Ave	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
Orange Blossom Trail	Tennessee St to Alabama St	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation

STREET	TO/FROM	PROPOSED PROJECT	POTENTIAL FUNDING STRATEGIES
Stuart Ave	Between Texas and Lawton	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
New St	Between Sylvan and Central	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation
San Bernardino Ave	Tennessee St to Webster St	Pedestrian Path Connection	HSIP, Redlands Measure T, Measure I, TDA, ATP, STIP, AHSC, Federal Transit Administration Enhanced Mobility Grants, BUILD, Caltrans Sustainable Transportation Planning Grant, California Transportation Commission Local Partnership Program, TCC, America Walks Community Change Grant, Kresge Foundation

Active Transportation Program Scoring Rubric

The table below lists the scoring rublic from the 2019-2020 Active Transportation Program, and can be utilized to determine potential project competitiveness for grant awards

POINTS	APPLICANT'S ABILITY TO DEMONSTRATE THE PROJECT WILL RESULT IN A DIRECT BENEFIT TO THE DISADVATAGED COMMUNITY.
4 Points	The application clearly and convincingly Explains how the project closes a gap, provides connections to, or addresses a deficiency in an active transportation network and/or meets an important disadvantaged community need.
3 Points	The application convincingly explains how the project closes a gap, provides connections to, or addresses a deficiency in an active transportation network or meets an important disadvantaged community need.
2 Points	The application somewhat explains how the project closes a gap, provides connections to, and/or addresses a deficiency in an active transportation network. It may meet an important disadvantaged community need.
1 Points	The application does not clearly explain how the project closes a gap, provides connections to, or addresses a deficiency in an active transportation network. It minimally meets an important disadvantaged community need.
0 Points	Evaluators can award a score of zero if they believe the application does not address how the project will directly benefit a disadvantaged community.

POINTS	APPLICANT'S ABILITY TO DEMONSTRATE THE PROJECTIS LOCATED WITHIN A DISADVANTAGED COMMUNITY.
2 Points	Project location(s) are/is fully (100%) located within a disadvantaged community.
1 Point	Project location(s) are/is partially (less than 100%) within a disadvantaged community.
0 Points	None of the project location(s) are/is within a disadvantaged community.

POINTS	MEDIAN HOUSEHOLD INCOME (MHI) CRITERIA – MHI = $56,982
0 Points	Greater than 80% of the MHI Greater than 80% of the MHI
1 Point	75% through <80% of MHI $53,421 through $56,982.40
2 Points	70% through <75% of MHI $49,859.60 through $53,421
3 Points	65% through <70% of MHI $46,298.20 through $49,859.60
4 Points	< 65% of MHI less than $46,298.20

POINTS	CALENVIROSCREEN CRITERIA
0 Points	Above 25% most disadvantaged less than 39.34
1 Point	20% through 25% most disadvantaged 39.34 through 42.86
2 Points	15% through < 20% most disadvantaged 42.87 through 46.63
3 Points	10% through < 15% most disadvantaged 46.64 through 51.18
4 Points	< 10% most disadvantaged 51.19 through 94.09

POINTS	FREE OR REDUCED LUNCHES
0 Points	ALess than 75% of students receive free or reduced lunches
1 Point	≥ 75% through 80% of students receive free or reduced lunches

POINTS	FREE OR REDUCED LUNCHES
2 Points	> 80% through 85% of students receive free or reduced lunches
3 Points	> 85% through 90% of students receive free or reduced lunches
4 Points	> 85% through 90% of students receive free or reduced lunches

POINTS	HEALTHY PLACES INDEX PERCENTILE
0 Points	Healthy Places Index Score above 25 Percentile
1 Point	Healthy Places Index Score 20 through 25 Percentile
2 Points	Healthy Places Index Score 15 through <20 Percentile
3 Points	Healthy Places Index Score 10 through <15 Percentile
4 Points	Healthy Places Index Score <10 Percentile

CATEGORY	POINTS	OTHER DAC CRITERION
Other MHI or CalEnviroScreen Assessment	0 or 1 point	If a project applicant believes a project benefits a disadvantaged community but the project does not meet the aforementioned criteria due to a lack of accurate Census data or CalEnviroScreen data that represents a small neighborhood or unincorporated area, the applicant must submit for consideration a quantitative assessment, to demonstrate that the community's median household income is at or below 80% of that state median household income.
Regional Definition	0 or 1 point	If the applicant believes a project benefits a disadvantaged community based on an adopted regional definition, the applicant must submit for consideration the regional definition, as well as how their specific community qualifies under that definition.

CATEGORY	POINTS	OTHER DAC CRITERION
Federally Recognized Tribal Lands	4 points	Projects located within Federally Recognized Tribal Lands (typically within the boundaries of a Reservation or Rancheria).

POINTS	APPLICANT'S ABILITY TO DEMONSTRATE A SPECIFIC ACTIVE TRANSPORTATION NEED.
19-24 Points	The application compellingly demonstrates "need" in the project area, and documents all of the following in a clear narrative: ◆ the lack of connectivity, ◆ the lack of mobility for non-motorized users, ◆ data showing the local health concerns, including a comparison to statewide health data AND if applicable ◆ For projects benefiting a disadvantaged community – the need for the project in that community, ◆ For NI components – the need for the education, encouragement and/or enforcement program
13-18 Points	The application duly demonstrates "need" in the project area, and documents: only 2 of the following clearly, and at least one other partially: ◆ the lack of connectivity, ◆ the lack of mobility for non-motorized users, ◆ data showing the local health concerns, including a comparison to statewide health data AND if applicable ◆ For projects benefiting a disadvantaged community – the need for the project in that community, ◆ For NI components – the need for the education, encouragement and/or enforcement program
7-12 Points	The application demonstrates "need" in the project area, and documents: only 1 of the following clearly, and at least one other partially: ◆ the lack of connectivity, ◆ the lack of mobility for non-motorized users, ◆ data showing the local health concerns, including a comparison to statewide health data AND if applicable ◆ For NI components – the need for the education, encouragement and/or enforcement program

POINTS	APPLICANT'S ABILITY TO DEMONSTRATE A SPECIFIC ACTIVE TRANSPORTATION NEED.
1-6 Points	The application minimally demonstrates "need" in the project area, and partially documents 1 of the following: ◆ the lack of connectivity, ◆ the lack of mobility for non-motorized users, ◆ local health concerns AND if applicable ◆ For NI components – the need for the education, encouragement and/or enforcement program
0 Points	The application does not demonstrate "need" in any way in the project area in any of the three areas of need, and there is no mention of the need of the disadvantaged community and there is no mention of the NI program (if applicable).

POINTS	APPLICANT'S ABILITY TO DEMONSTRATE THE ACTIVE TRANSPORTATION NEEDS OF STUDENTS.
2 Points	The application addresses the active transportation needs of students
0 Points	The application does not address or mention the active transportation needs of students

POINTS	APPLICANT'S ABILITY TO MAKE A CASE THAT THE PROJECT WILL ADDRESS NEED FOR ACTIVE TRANSPORTATION.
20-25 Points	The application clearly and convincingly demonstrates that the project will best address the active transportation need presented in part A by: ◆ creating or improving links or connections, ◆ encouraging use of routes to very important destinations and community identified destinations.
13-19 Points	The application demonstrates that the project will likely address the active transportation need presented in part A by: ◆ creating or improving links or connections, ◆ encouraging use of routes to very important destinations and community identified destinations.

POINTS	APPLICANT'S ABILITY TO MAKE A CASE THAT THE PROJECT WILL ADDRESS NEED FOR ACTIVE TRANSPORTATION.
7-12 Points	The application somewhat demonstrates that the project will address the active transportation need presented in part A by: (at least 1 of the following) ◆ creating or improving links or connections, ◆ encouraging use of routes to very important destinations and community identified destinations.
1-6 Points	The application minimally demonstrates that the project may address the active transportation need presented in part A by: (partially 1 or more of the following) ◆ creating or improving links or connections, ◆ encouraging use of routes to very important destinations and community identified destinations.
0 Points	The application did not demonstrate the project would address the need presented in Part A.

POINTS	APPLICANT'S ABILITY TO MAKE A CASE THAT THE PROPOSAL THAT WILL INCREASE THE NUMBER OF ACTIVE TRANSPORTATION TRIPS ACCOMPLISHED BY STUDENTS.
1 Point	The project will increase the proportion of active transportation trips accomplished by students
0 Points	The project will not increase the proportion of active transportation trips accomplished by students

POINTS	APPLICANT'S ABILITY TO DEMONSTRATE THE PROJECT LOCATION REPRESENTS ONE OF THE AGENCY'S TOP PRIORITIES FOR ADDRESSING ONGOING SAFETY. AND APPLICANT'S ABILITY TO DEMONSTRATE THAT THEY HAVE ANALYZED THEIR PAST CRASH/SAFETY DATA AND THE PROPOSED SAFETY IMPROVEMENTS CORRESPOND TO THE TYPES AND LOCATIONS OF THE PAST COLLISIONS.
9-12 Points	The applicant included a Project Area Collision Map that demonstrates that the past collision locations are within the Influence Area of the proposed safety improvements. Collision Summaries and collision lists/reports demonstrate the overall number of collisions is significant and that collision trends, collision types, and collision details will be positively impacted by the proposed safety improvements, OR an applicant was able to clearly and convincingly explain why they are building the project despite the lack of collision data and why this location is one of the top safety concerns despite the collision history. The application clearly and convincingly shows: ◆ That the past crash/safety data was analyzed by the applicant to identify the specific crash-type trends that will likely occur in the future if no action is taken, ◆ Collision types and collision details will be positively impacted by the proposed safety improvements. ◆ there are significant safety threats to pedestrians and/or bicycles that can be mitigated by ATP eligible improvements. AND if applicable ◆ For NI components – clearly explains how the project educates bicyclists, pedestrians, and/or drivers about safety hazards and encourages safe behavior which can include enforcement.
5-8 Points	The applicant included a Project Area Collision Map demonstrates that some of the past collision locations are within the "Influence area" of the proposed safety improvements. Collision Summaries and collision lists/reports demonstrate the overall number of collisions is significant and that collision trends, collision types, and collision details will be positively impacted by the proposed safety improvements, OR an applicant was able to convincingly explain why they are building the project despite the lack of collision data and why this location is one of the top safety concerns despite the collision history. The application convincingly shows: that the past crash/safety data was analyzed by the applicant to identify the specific crash-type trends that will likely occur in the future if no action is taken, ◆ Collision trends, collision types, and collision details will be somewhat impacted by the proposed safety improvements. ◆ there are moderate safety threats to pedestrians and/or bicycles that can be mitigated by ATP eligible improvements. AND if applicable ◆ For NI components – moderately explains how the project educates bicyclists, pedestrians, and/or drivers about safety hazards and encourages safe behavior which can include enforcement.

POINTS	APPLICANT'S ABILITY TO DEMONSTRATE THE PROJECT LOCATION REPRESENTS ONE OF THE AGENCY'S TOP PRIORITIES FOR ADDRESSING ONGOING SAFETY. AND APPLICANT'S ABILITY TO DEMONSTRATE THAT THEY HAVE ANALYZED THEIR PAST CRASH/SAFETY DATA AND THE PROPOSED SAFETY IMPROVEMENTS CORRESPOND TO THE TYPES AND LOCATIONS OF THE PAST COLLISIONS.
1-4 Points	The applicant included a Project Area Collision Map demonstrates that a few of the past collision locations are within the Influence Area of the proposed safety improvements. Collision Summaries and collision lists/reports demonstrate the overall number of collisions is significant and that collision trends, collision types, and collision details will be positively impacted by the proposed safety improvements, OR an applicant was able to somewhat explain why they are building the project despite the lack of collision data and why this location is one of the top safety concerns despite the collision history. The application somewhat shows: that the past crash/safety data was looked at by the applicant to identify the specific crash-type trends that will likely occur in the future if no action is taken, ◆ Collision trends, collision types, and collision details will be minimally impacted by the proposed safety improvements. ◆ there are minimal safety threats to pedestrians and/or bicycles that can be mitigated by ATP eligible improvements. AND if applicable ◆ For NI components – minimally explains how the project educates bicyclists, pedestrians, and/or drivers about safety hazards and encourages safe behavior which can include enforcement.
0 Points	The applicant included a Project Area Collision Map demonstrates that a few of the past collision locations are within the Influence Area of the proposed safety improvements. Collision Summaries and collision lists/reports demonstrate the overall number of collisions is significant and that collision trends, collision types, and collision details will be positively impacted by the proposed safety improvements, OR an applicant was able to minimally explain why they are building the project despite the lack of collision data and why this location is one of the top safety concerns despite the collision history. The application doesn't really show: that the past crash/safety data was analyzed by the applicant to identify the specific crash-type trends that will likely occur in the future if no action is taken, ◆ ·there are almost no safety threats to pedestrians and/or bicycles that can be mitigated by ATP eligible improvements. ◆ AND if applicable ◆ ·For NI components – does not explain how the project educates bicyclists, pedestrians, and/or drivers about safety hazards or encourages safe behavior which can include enforcement.

POINTS	APPLICANT'S ABILITY TO DEMONSTRATE THE PROJECT WILL REMEDY (ONE OR MORE) POTENTIAL SAFETY HAZARDS WITH THE PROJECT LIMITS.
11-13 Points	The applicant clearly and convincingly demonstrates that: ◆ the proposed countermeasure(s) have a proven track record for addressing the past crash/safety needs addressed in Part A, ◆ the applicant has described remedies for each need addressed in Part A, AND ◆ the proposed implementation of the countermeasure(s) should fully mitigate the potential for future non-motorized crashes in the area of the project.
7- 10 Points	The applicant demonstrates fairly well that: ◆ the proposed countermeasure(s) have a proven track record for addressing the past crash/safety needs addressed in Part A, ◆ the proposed countermeasure(s) should significantly (but not fully) mitigate the potential for future non-motorized crashes in the area of the project.
4-6 Points	The applicant somewhat demonstrates that: ◆ the proposed countermeasure(s) address the past crash/safety needs addressed in Part A, ◆ the proposed implementation of the countermeasure(s) should somewhat mitigate the potential for future non-motorized crashes in the area of the project.
1-3 Points	The applicant minimally demonstrates that: ◆ the proposed countermeasure(s) have a track record for addressing the past crash/safety needs addressed in Part A, ◆ there are doubts as to whether the implementation of the proposed countermeasure(s) will mitigate the potential for future non-motorized crashes in the area of the project.
0 Points	◆ Evaluators can award a score of zero if they believe that the application does not prove the safety need of the proposed project and the countermeasures explained do not have the potential to mitigate the potential for future collisions

POINTS	APPLICANT'S ABILITY TO DEMONSTRATE WHAT THE PROCESS TO PREPARE FOR EXISTING AND FUTURE NEEDS OF USERS OF THIS PROJECT WAS, WHO WAS ENGAGED IN THE PUBLIC PARTICIPATION AND PLANNING PROCESS AND HOW THE STAKEHOLDERS WILL CONTINUE TO BE ENGAGED IN THE IMPLEMENTATION OF THE PROJECT.
9-10 Points	The applicant clearly and convincingly demonstrates that: ◆ The project scope was developed through a comprehensive technical planning process (appropriate for the complexity and magnitude of the project) ◆ The planning process considered the existing and future needs of the project users and transportation system ◆ The planning process was effectively integrated into the public participation process and reached out to all necessary stakeholders. ◆ •AND the applicant attached documentation that supports a thorough and effective public engagement process.
6-8 Points	The applicant demonstrates fairly well that: ◆ The project scope was developed through a comprehensive technical planning process (appropriate for the complexity and magnitude of the project) ◆ The planning process considered the existing and future needs of the project users and transportation system ◆ The planning process was effectively integrated into the public participation process. ◆ AND the applicant attached documentation that supports a thorough and effective public engagement process.
3-5 Points	The applicant somewhat demonstrates that: ◆ The project scope was developed through a technical planning process (appropriate for the complexity and magnitude of the project) ◆ The planning process considered the existing and future needs of the project users and transportation system ◆ The planning process was somewhat integrated into the public participation process. ◆ AND the applicant attached documentation that supports a public engagement process.
1-2 Points	The applicant minimally demonstrates that: ◆ The project scope was developed through a technical planning process (appropriate for the complexity and magnitude of the project) ◆ The planning process considered the existing and future needs of the project users and transportation system ◆ The planning process was minimally integrated into the public participation process. ◆ AND the applicant did not attach documentation or attached very little documentation to support a thorough public engagement process

POINTS	APPLICANT'S ABILITY TO DEMONSTRATE WHAT THE PROCESS TO PREPARE FOR EXISTING AND FUTURE NEEDS OF USERS OF THIS PROJECT WAS, WHO WAS ENGAGED IN THE PUBLIC PARTICIPATION AND PLANNING PROCESS AND HOW THE STAKEHOLDERS WILL CONTINUE TO BE ENGAGED IN THE IMPLEMENTATION OF THE PROJECT.
0 Points	Evaluators can award a score of zero if they believe that the application does not prove the project scope is a result of technical planning, that the applicant did not consider the existing and future needs of the project users, and the planning process was not in any way integrated into the public engagement process.

POINTS	EVALUATING LAYOUTS/MAPS
1 Point	The submitted layouts/maps are complete, clear, and/or provide sufficient detail to determine the full scope of the proposed project.
0 Point	The submitted layouts/maps are poorly developed or vague in outlining the various elements of the proposed project, or the applicant failed.

POINTS	EVALUATING ENGINEER'S ESTIMATE
1 Point	The submitted estimate is thorough and consistent with the elements and phases of the proposed project.
0 Point	The applicant failed to provide an estimate that matches the proposed elements.

POINTS	EVEVALUATING THE PROJECT SCHEDULE
1 Point	The submitted schedule fully incorporates all necessary phases and provides adequate time to complete the phases (PA&ED, PS&E, ROW, CON and CON-NI).
0 Point	The submitted schedule failed to incorporate all necessary phases and/or does not provide adequate time to complete the phases (PA&ED, PS&E, ROW, CON and CON-NI).

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REDLANDS

Sustainable Mobility Plan