



# ACTIVE TRANSPORTATION PLAN 2022



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## **WHAT'S INSIDE THE SUMMARY REPORT?**

The Caltrans District 8 Active Transportation Plan (Plan) identifies pedestrian and bicycle needs on and across the State Highway System (SHS) and prioritizes highway segments and crossings to inform future investments. The Plan's main outputs are lists and maps of location-based needs, prioritized highway segments, and prioritized highway crossings.

The following sections present key information about the planning process and identify next steps to support implementation.

### **STATEWIDE CONTEXT**

How the goals of the Caltrans Statewide Bicycle and Pedestrian Plan, *Toward an Active California*, guided the development of the Plan, and how the Plan fulfills the next step in the process of addressing active transportation needs along the SHS.

### **PUBLIC ENGAGEMENT**

Stakeholder and public engagement efforts Caltrans undertook to learn directly from people who walk and bicycle along and across the District 8 SHS.

### **WALKING AND BICYCLING IN DISTRICT 8 TODAY**

What it is like to walk or bicycle along the SHS in District 8 today, and where there are opportunities to replace driving trips with walking and bicycling trips.

### **NEEDS FOR PEOPLE WALKING AND BICYCLING ON THE STATE HIGHWAY SYSTEM**

Location-based needs identification and prioritization process to address existing barriers and gaps in the District 8 SHS pedestrian and bicycle network.

### **NEXT STEPS FOR IMPLEMENTATION**

Coordination, facilitation, and project development steps for Caltrans District 8.



# KEY TERMS

The list below defines key terms used throughout the Caltrans District 8 Active Transportation Plan (“the Plan”).

## ROADWAY NETWORK

**Conventional highway:** At-grade highways with intersections rather than interchanges, allowing direct private property access, and with one or more motor vehicle lanes in each direction.

**Freeway:** Highways with full access control, interchanges providing connections to other routes, and two or more motor vehicle lanes in each direction.<sup>1</sup>

**Highway:** A State Highway System route which may be comprised of roads, streets, parkways, and connected infrastructure elements such as on- and off-ramps, bridges, and tunnels. This plan often discusses highways in their land use contexts, as in *rural or urban conventional highways* and *rural or urban freeways*.

**Main street:** A community street on the SHS that typically has posted speed limits of less than 40 mph and serves pedestrians, bicyclists, transit users, and drivers.<sup>2</sup>

**State Highway System (SHS):** Legislatively designated highway network that supports the movement of people and goods across California. The California SHS includes a variety of highway infrastructure assets, including but not limited to pavement lane miles, bridges, tunnels, and culverts.

## ANALYSIS

**Active Transportation:** This document refers to the active transportation as the mode of travel for bicyclists and pedestrians and users of other wheeled-devices described under the bicycle and pedestrian definitions.

**Barrier:** A physical feature that restricts movement between elements of the pedestrian or bicycle network. Examples include uncontrolled freeway on- or off-ramps, which are challenging to cross.

**Bicyclist:** This document uses the term *bicyclist* broadly to include people riding traditional bicycles and a wide variety of other human-powered devices that use typical bicycle facilities. These include electric-assisted bicycles, recumbent bicycles, bicycles or tricycles adapted for use by people with disabilities, and others.

**Complete Streets:** A transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorists appropriate to the function and context of the facility.

**Equity priority communities:** The term equity priority communities is used across all Caltrans District-Level Active Transportation Plans to refer to communities most in need of investments and policies to help address existing transportation inequities and improve mobility outcomes for those facing greatest environmental and social disadvantages. Each District defines such communities differently; this District 8 Plan defines equity priority communities based on the [SB 535](#) and [AB 1550](#) disadvantaged community designations.

**Gap:** Specific locations where pedestrian facilities (like sidewalks and crossing treatments) or bicycle facilities (like bike lanes) are missing, narrow, or incomplete.

**Land use context:** The built and natural environment surrounding the SHS, which shapes travel needs and influences user expectations.

**Location-based need:** A specific location on the SHS where existing infrastructure may have a gap or deficiency that creates a challenging or uncomfortable condition for people walking or biking along or across the system. These include the absence of sidewalks or bicycle facilities, sidewalks in poor condition, stressful bicycle and pedestrian crossings, excessive speed limits, and other factors.

**Pedestrian:** In this document, the terms *pedestrian* and *walking* are applied broadly to all users of sidewalks, including people walking, rolling, and using mobility assistance devices such as walkers, strollers, or wheelchairs.

**Level of Traffic Stress (LTS):** An approach that quantifies the discomfort people feel when they bicycle close to vehicular traffic. The numeric score includes factors such as traffic speed, traffic volume, number of lanes, parking, intersection crossings, and others.

1 Federal Highway Administration, “Highway Performance Monitoring System Field Manual.” [https://www.fhwa.dot.gov/policyinformation/hpms/fieldmanual/hpms\\_field\\_manual\\_dec2016.pdf](https://www.fhwa.dot.gov/policyinformation/hpms/fieldmanual/hpms_field_manual_dec2016.pdf)

2 California Department of Transportation, “Main Street, California.” <https://dot.ca.gov/-/media/dot-media/programs/design/documents/main-street-3rd-edition-a11y.pdf>



Michael D. Beauchamp  
District 8 Director

## MESSAGE FROM THE DISTRICT DIRECTOR

I am pleased to present the Caltrans District 8 Active Transportation Plan (Plan) for San Bernardino and Riverside counties. This Plan is aligned with the State Bicycle and Pedestrian Plan, *Toward an Active California* (2017), which established statewide policies, strategies, and actions to advance active transportation and transit safety, mobility, preservation, and equity.

District 8 is committed to embracing a Complete Streets approach to planning, project development, operation, and maintenance activities. This Plan identifies and prioritizes active transportation needs based on best practices, public input, and close coordination with local and regional agencies, and community organizations.

This Plan will be used early and continuously throughout planning and project development activities to guide

investments to support walking and biking and connect people with jobs, services, and recreation while seeking to reconnect communities where the State Highway System has created a barrier.

I want to acknowledge and thank all who participated in this process, with special recognition of the vital role and contribution of the Active Transportation Plan Working Group and our partners and members of the public that contributed to our mapping survey, which guided the development of the Plan. We look forward to working with our partners and communities to build a safe and sustainable active transportation network in the Inland Empire that serves all people in our communities.

Michael D. Beauchamp  
District 8 Director



# PURPOSE AND OVERVIEW OF PLAN

The Caltrans Active Transportation Plan for District 8 (Plan) is part of a comprehensive effort to identify locations with bicycle and pedestrian needs in each Caltrans district across California. It is a critical step in implementing *Toward an Active California*. Caltrans and its agency partners will use the Plan to address active transportation needs along and across the SHS in future planning, construction, and maintenance projects. Data and analysis developed in this plan will be used for asset management, as a basis for setting Complete Streets targets, and as a starting point during project development.

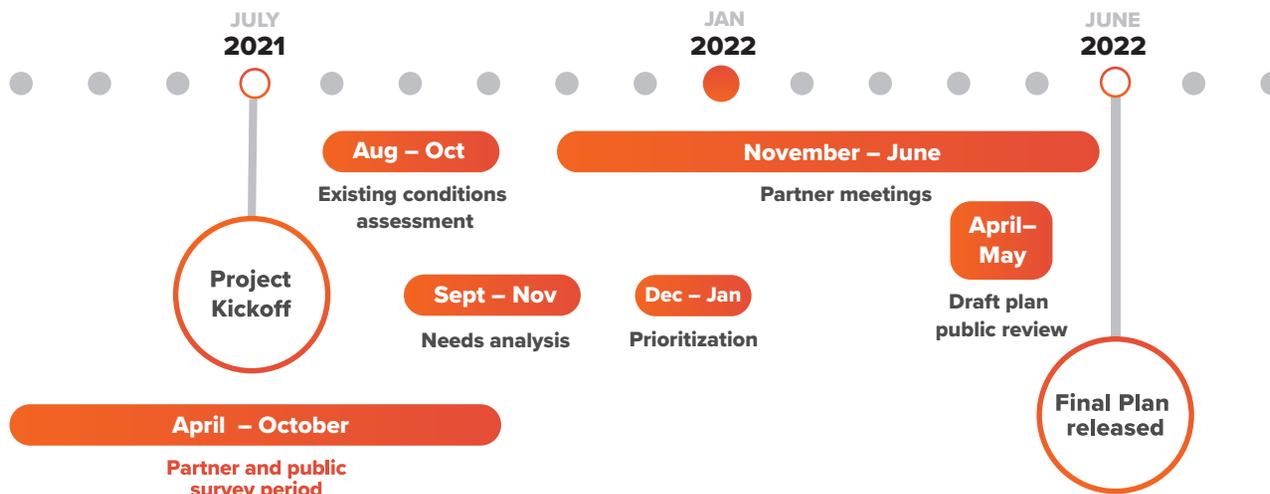
The Plan identifies challenges to people’s ability to walk and bicycle on and across the State Highway System (SHS), which provides critical transportation routes in towns and cities across California. State highways serve as main streets, provide access to destinations people visit every day, and are often the primary routes connecting communities. When these communities are walkable, bikeable, and transit-rich, people benefit from improved air quality, health, social equity, quality of life,

and economic opportunity. The Plan identifies gaps and barriers on the SHS and recommends priorities among locations with walking and biking needs. This represents a crucial step in making walking and bicycling safer, more comfortable, and more convenient.

The Plan consists of two elements:

- ▶ This Summary Report provides an overview of walking and bicycling conditions on the SHS today, identifies locations where needs exist, recommends priorities, and describes next steps in the implementation process. The methodology for the planning analysis can be found on the District 8 page of the [Caltrans Active Transportation Plan website](#).
- ▶ A companion online [Story Map](#) provides an opportunity to view and interact with a series of District 8 maps that highlight the pedestrian and bicycling issues, needs, and opportunities described in this report.

## District 8 Active Transportation Plan Process Timeline



Bring Child to Work Day Bike Lane Demo

# TOWARD AN ACTIVE CALIFORNIA VISION STATEMENT

By 2040, people in California of all ages, abilities, and incomes can safely, conveniently, and comfortably walk and bicycle for their transportation needs.

## STATEWIDE CONTEXT

In alignment with the vision in the Caltrans statewide active transportation plan, *Toward an Active California*, this plan establishes methods for identifying and evaluating pedestrian and bicycle needs on and across the SHS. It focuses on increasing social equity throughout the planning process, strengthening community partnerships, and improving connections between the State and local networks.

*Toward an Active California* outlines four goals, which guided the development of the District 8 Active Transportation Plan:



### ► MOBILITY

Increase walking and bicycling in California.



### ► SAFETY

Reduce the number, rate, and severity of bicycle and pedestrian involved collisions.



### ► EQUITY

Invest resources in communities that are most dependent on active transportation and transit.



### ► PRESERVATION

Maintain a high-quality active transportation system.

The District 8 Active Transportation Plan contains the second of six steps for delivering active transportation infrastructure in California, as shown in the graphic on this next page. The work will continue as Caltrans collaborates with local partners to identify, fund, construct, and maintain pedestrian and bicycle projects.

## BUILDING A MORE EQUITABLE FUTURE

Caltrans has an important role to play in advancing equity in California so that everyone can thrive, starting with the most vulnerable people and regardless of their race, socioeconomic status, identity, or where and how they travel. Although the goal of a modern transportation network should be to connect communities to jobs and other destinations, transportation systems including freeway expansion projects, have historically severed communities and acted as barriers to mobility. Freeways, expressways, and high-speed arterials act as barriers, often disconnecting people from the services and locations they need to access creating inequities within communities.

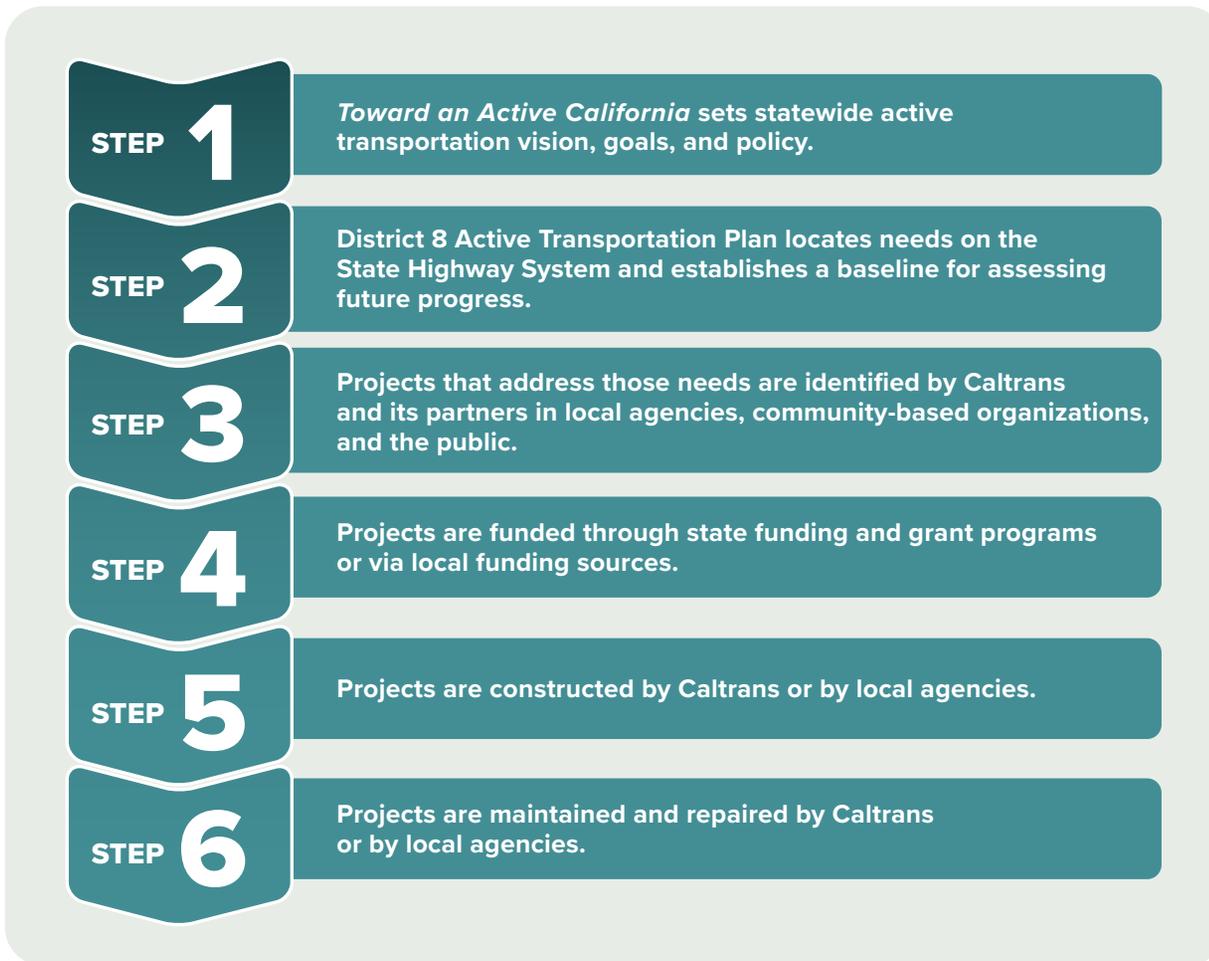
Today, many communities continue to be at a disadvantage due to lingering impacts from transportation infrastructure projects, including disconnected neighborhoods with limited access to basic services and overall unhealthy environmental conditions.

In response to these factors, Caltrans aims to reconnect communities that have been divided by previous SHS construction projects. This plan, alongside *Toward an Active California* and all of the Caltrans Active Transportation Plans, positions equity as a primary goal in support of the agency's broader equity commitments.

As part of that goal, the Plan uses CalEPA definitions in Senate Bill (SB) 535 and the Assembly Bill (AB) 1550 as well as other social equity measures and tribal boundaries to locate equity priority communities and influence the prioritization of location-based needs. Additionally, the public engagement activities were focused on locations near the SHS and within or adjacent to disadvantaged communities.

## HOW CALTRANS MEETS ACTIVE TRANSPORTATION NEEDS

While Caltrans has addressed active transportation needs throughout the state in the past, this Active Transportation Plan is part of an updated process that aims to better meet those needs in the future. The six steps are described below.



### VISION ZERO INITIATIVES AND THE CALTRANS TOWARD ZERO DEATHS GOAL

Vision Zero is an organizing framework for eliminating fatalities and serious injuries caused by traffic crashes. Agencies and jurisdictions around the world have adopted Vision Zero goals to reduce the loss of life on local roadways and work towards safer roadways through engineering and programming changes. A defining feature of Vision Zero Action Plans is their ability to coordinate and focus the ongoing work of agency departments and partner jurisdictions towards this singular goal. Caltrans developed its Toward Zero Deaths goal as its expression of the Vision Zero approach. The need for the initiative is critical: between 2015 and 2019, more than 4,548 crashes that involved pedestrians or bicyclists occurred on roads in District 8. Of these, 472 were fatal and 653 involved at least one serious injury. This Plan is just one component of Caltrans' overall strategy towards achieving the Towards Zero Death Goal.

## PUBLIC ENGAGEMENT

People who travel through their communities every day have valuable first-hand knowledge about the challenges they face when walking and biking. Engagement efforts for this plan were focused on the following objectives:

- ▶ Educate the public and partner agencies regarding the purpose and background of the District 8 Active Transportation Plan, its role in the District's bicycle and pedestrian policy framework, and its relationship to Caltrans' mission and to regional and local frameworks for active transportation.
- ▶ Build relationships and commitments to support implementation of the District 8 Active Transportation Plan within Caltrans and with its government partners across the District.
- ▶ Develop and implement a flexible set of communication and outreach tools that are relevant to a range of target audiences and diverse stakeholder interests, and provide interactive opportunities for public engagement.
- ▶ Collect location-based input from the public and government partners to help identify where there are needs for improvement or investments on the mobility network.

## COORDINATION WITH PARTNER AGENCIES AND ADVOCATES

The District 8 project team convened the Active Transportation Advisory Group, which included representatives from government agencies in each county. Participants included regional transportation agencies, local public agencies, community-based organizations, public health providers, and others with a demonstrated interest in active transportation.

The purpose of the Active Transportation Advisory Group was to guide the context-sensitive development of the Plan. Members were responsible for providing input on linkages to local planning efforts, delivering feedback on how needs should be prioritized, reviewing the draft plan, and promoting the survey within their agencies and to their communities.

In addition to working with the Active Transportation Advisory Group, the project team also presented at Technical Advisory Committee meetings across the region to update stakeholders on the progress of the Plan and promote the public and agency surveys.

## PUBLIC OUTREACH AND ENGAGEMENT

Due to the COVID-19 pandemic and related restrictions for in-person engagement, District 8 relied on online and remote outreach strategies to raise awareness about the Plan and inform community members of input opportunities. These included online map-based surveys (described below), press releases, a public map survey hosted in English and Spanish, social media posts, distributing flyers, and content hosted on the [District 8 Active Transportation Plan website](#).

The project team focused their engagement efforts in places that have the following characteristics:

- ▶ Census tracts that are within the top quartile of environmentally disadvantaged communities, as defined by [SB 535](#)
- ▶ Census tracts where median household incomes are 80% or less of the statewide median incomes
- ▶ Public and private schools located within 2 miles of the SHS
- ▶ Native American Tribal lands, regardless of federal recognition status.

## ONLINE SURVEY AND INTERACTIVE MAPS

A public online survey and interactive map provided an opportunity for members of the public to submit comments and identify locations in need of improvement for people walking and biking on, across, and along the SHS. Examples include locations with missing sidewalks or crosswalks or factors that make for uncomfortable walking and biking, such as high traffic speed or lack of lighting. A similar interactive mapping tool was shared with regional and local agency partners and organizations.

The public survey and maps featured a set of demographic questions for participants to answer after entering comments on the map. The demographics questions gauged the extent to which this survey was able to reach members of equity priority communities. Over 1,500 comments were received on the public map and 110 comments were received from agency partners.

## HOW PUBLIC ENGAGEMENT INFORMED THIS PLAN

### WHAT WE HEARD

Input received from stakeholders and members of the public ranged from general statements about the state of active transportation in the district to specific location-based needs.

#### **PARTICIPANTS IDENTIFIED THESE CHALLENGES:**

- ▶ Sidewalk gaps or missing pedestrian infrastructure.
- ▶ Intersections without marked crosswalks.
- ▶ High traffic speeds.

#### **PARTICIPANTS SHARED THEIR DESIRE FOR:**

- ▶ Addressing high speeds (traffic calming).
- ▶ Crossing opportunities.
- ▶ Pedestrian and bicycle paths.
- ▶ Improved lighting and signage.

## NEXT STEPS FOR PUBLIC ENGAGEMENT

### CONTINUING CONVERSATIONS

The level of committed engagement included in the Plan's development does not end with its publication. District 8 will continue these conversations as the Plan's recommendations are implemented and projects are developed to ensure investments reflect local community needs and priorities. More concentrated effort is needed to engage schools along state highways, communities that do not have convenient access to the internet, and people from historically underrepresented groups who are dependent on multimodal transportation for commuting. These will be ongoing, collaborative efforts that involve Caltrans, agency partners, community-based organizations, and the public.

### COORDINATION WITH ACTIVE AND ONGOING LOCAL AND REGIONAL PLANS

Local and regional public agencies provided active transportation infrastructure and planning data from completed and ongoing plans, as well as other input that was used to identify the location-based needs that fed into the Plan. Caltrans continues to collect information from stakeholders and the public about local needs to help us inform project nomination and planning efforts.

# WALKING AND BIKING IN DISTRICT 8 TODAY

The District 8 project team conducted a detailed analysis to better understand the experience of walking and bicycling along the SHS. The analysis examined various datasets related to the SHS within District 8, and these are shown in full on the project [Story Map](#). This section summarizes the key findings from the Existing Conditions analysis.

## WHO USES THE STATE HIGHWAY SYSTEM?

A wide range of people use the SHS for all kinds of daily and recreational needs, such as to walk and bike to work or school, for grocery shopping or other errands, or to access trailheads. The diversity in land use context along the SHS within District 8 means that needs and recommendations to serve pedestrians and bicyclists might vary based on the relationship between the highway and its surrounding land use. For example, people walking or biking along or across the SHS in more urban areas, such as along State Route (SR) 83 in Ontario, may be more likely to be commuting to work or school or making short-distance errands, while people walking or biking along or across the SHS in rural areas may be more likely to be walking for recreation. Local needs and contexts should be discussed with local partners and stakeholders to inform appropriate design treatments during the project development stage.

## SURROUNDING LAND USE CONTEXT

District 8 includes Riverside and San Bernardino Counties and covers the area from the eastern urbanized extension of the Los Angeles Metropolitan Area, commonly known as the Inland Empire, all the way to the border of Arizona and Nevada. While more than half of the district's 1,820 centerline miles of SHS roadways border various rural and natural areas, such as Joshua Tree National Park and Mojave National Preserve, District 8 is also home to large urban and suburban concentrations (such as Victorville, Palm Springs, San Bernardino, Ontario, and Riverside) and large tribal reservations.

The diversity of land use contexts means that recommendations to improve walking and biking will differ in response to the relationship between the roadway and its land use context. For instance, considerations for people walking along and across SR 62, a main street in Joshua Tree, are different than the needs of people using SR 79, a rural roadway in Beaumont. This plan uses three land use context categories for the SHS.

**MAIN STREETS** are highways that provide direct access to commercial districts, typically with frequent cross streets and on-street parking. Many such roadways exist in Lake Arrowhead, Big Bear Lake and Big Bear City, Yucca Valley, Idyllwild, Lake Elsinore, Ontario, and other rural towns and unincorporated settlements.

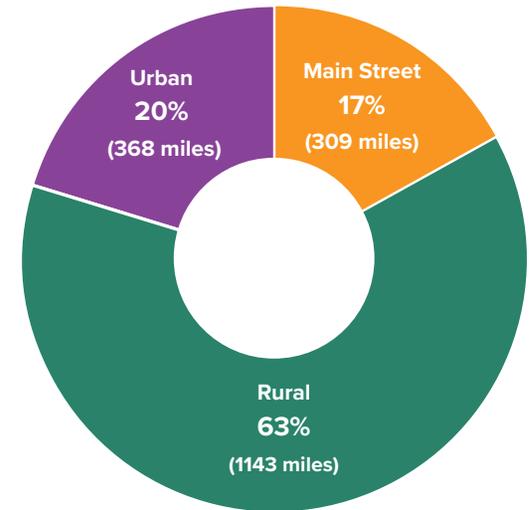
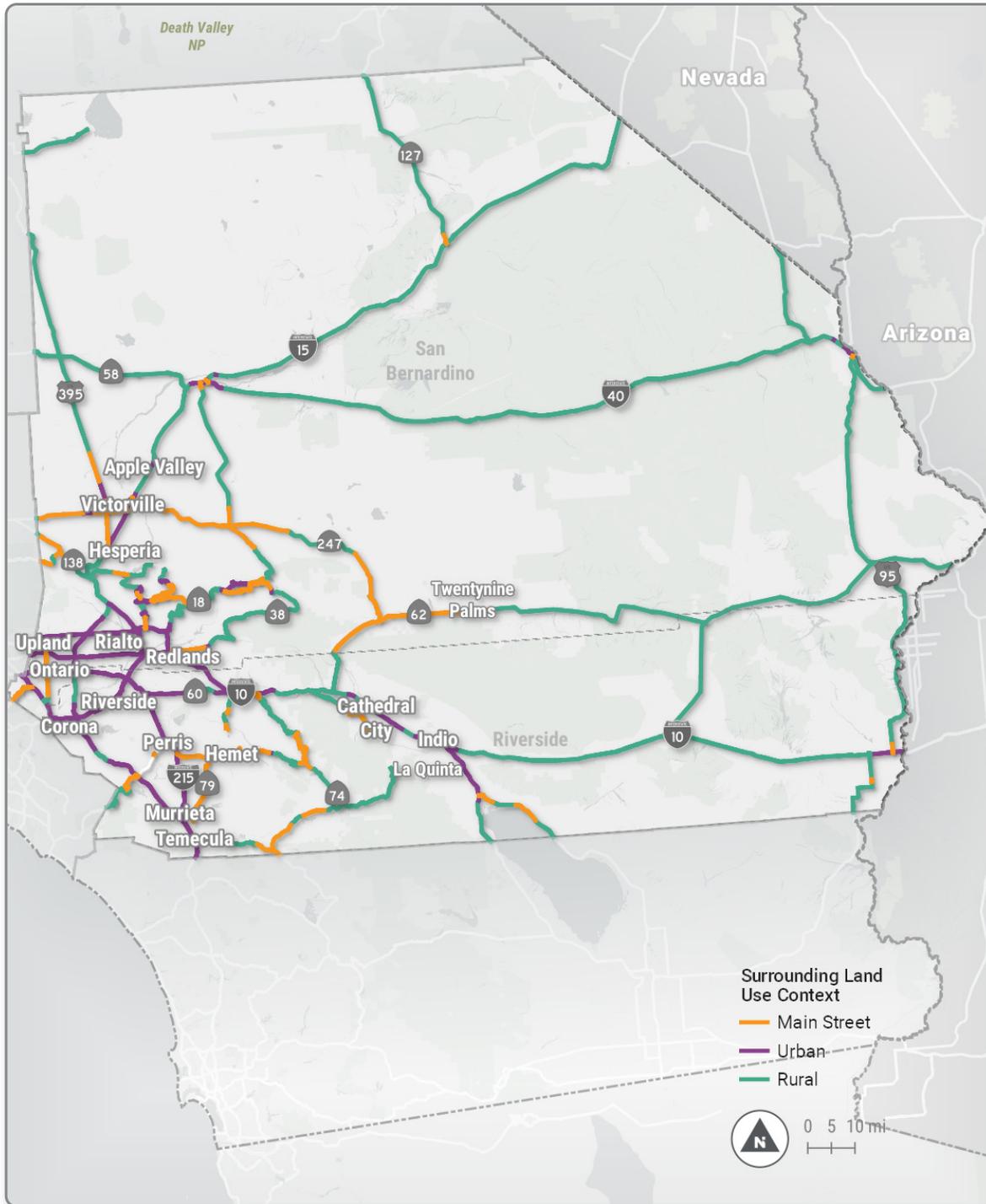
**RURAL ROADWAYS** are at-grade highways that pass through undeveloped or sparsely settled areas such as farm and range land, forest and park lands, mountain ranges, and river canyons. These highways make up the majority of SHS miles in District 8. Examples of rural highways include Interstate 10 east of Indio, SR 62 east of Twentynine Palms, Interstate 40, and most of the SHS roadways near or outside of Apple Valley north of Victorville. Biking and walking are not permitted on many rural highways, which must often be crossed using under- or over-crossings.

**URBAN HIGHWAYS** do not function as main streets and are often grade-separated freeways. They include Interstate 15 through the Inland Empire, Interstate 10 from the eastern edge of the district through Banning, and much of Interstate 215 and State Routes 210, 60, and 91.



A group of cyclists ride in the Coachella Valley

Land use and transportation context of The SHS



Distribution of SHS Centerline Miles by Land Use Context

Source: Caltrans Transportation System Network

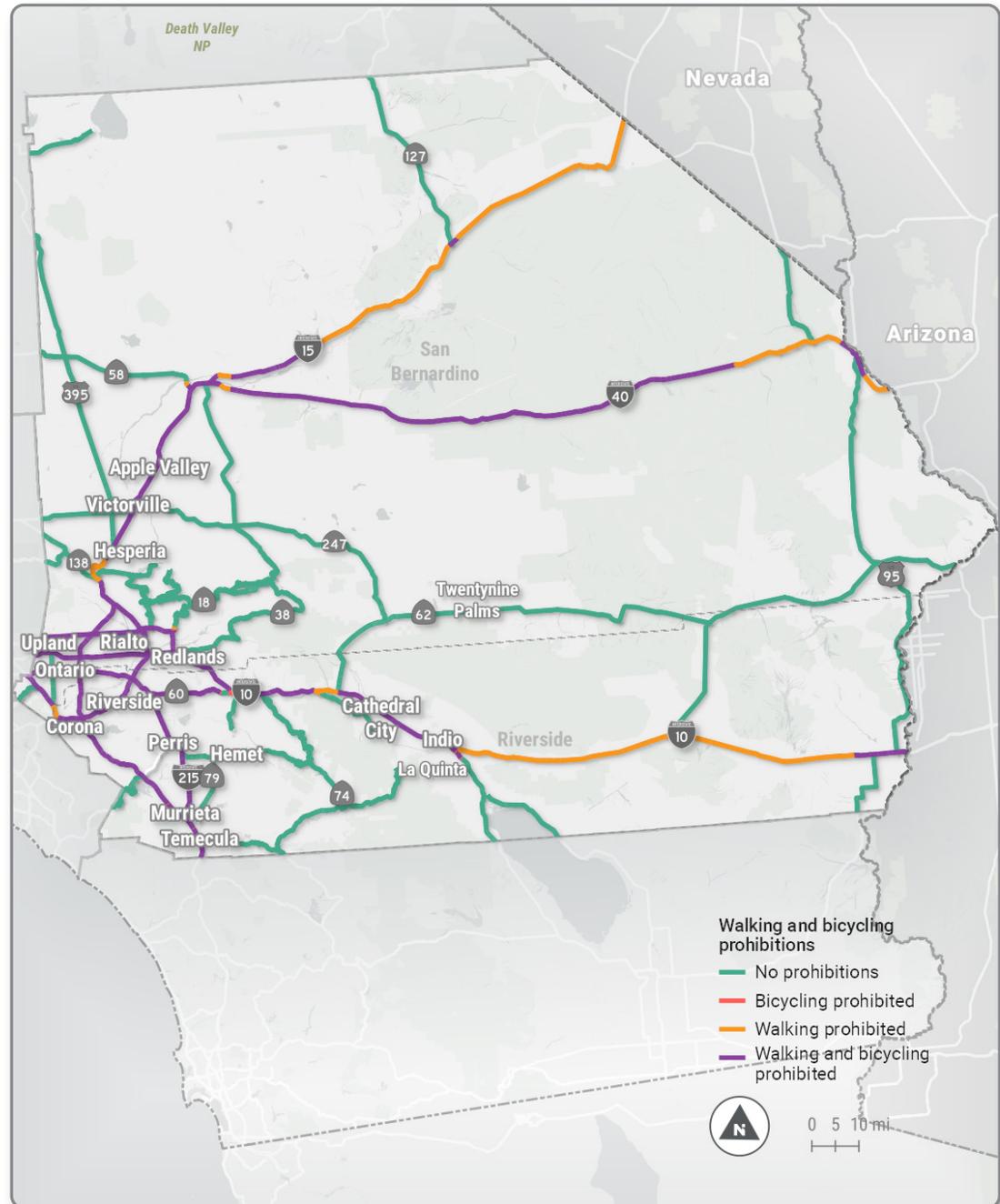
# WALKING AND BICYCLING PROHIBITIONS

Many Caltrans roadways were built specifically to serve the needs of motor vehicles. As a result, 42% of SHS centerline miles in District 8 prohibit walking and 29% prohibit bicycling. These prohibitions vary by land use context and mode of travel. People can walk or bicycle on any main street in the District. Rural highways offer more access than other land use contexts, with only 39% of centerline miles prohibiting walking and just 20% prohibiting bicycling. Walking and bicycling are generally prohibited on urban SHS segments, many of which are freeways, but if there are no alternate parallel routes, bicyclists are allowed on freeway shoulders. Despite these prohibitions there are many opportunities to adapt roadways to be safer and more inviting to people walking and biking, especially in places where active transportation demand is relatively high.

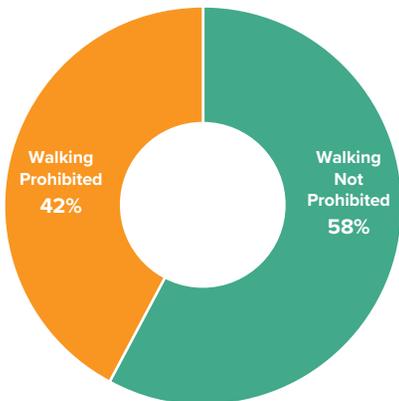
Where people can walk or bike on the SHS they may need sidewalks and crossing enhancements to do so comfortably; by contrast, in locations where walking and biking are prohibited design treatments like overcrossings can provide for continuous travel along nearby networks on foot or by bike.

Caltrans and its partner agencies use several considerations to determine whether to adjust access prohibitions. These include whether the location has been identified as a major priority for improvement in an adopted plan like this one, whether more favorable local alternatives exist, and whether local plans have prioritized improvements to alternate routes.

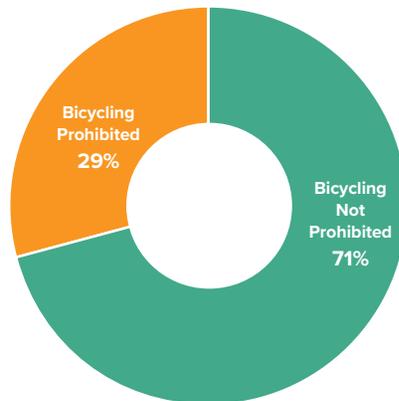
Walking and bicycling prohibitions along The SHS



Percentage of roadways that allow pedestrian travel along the SHS in District 8 (centerline miles)

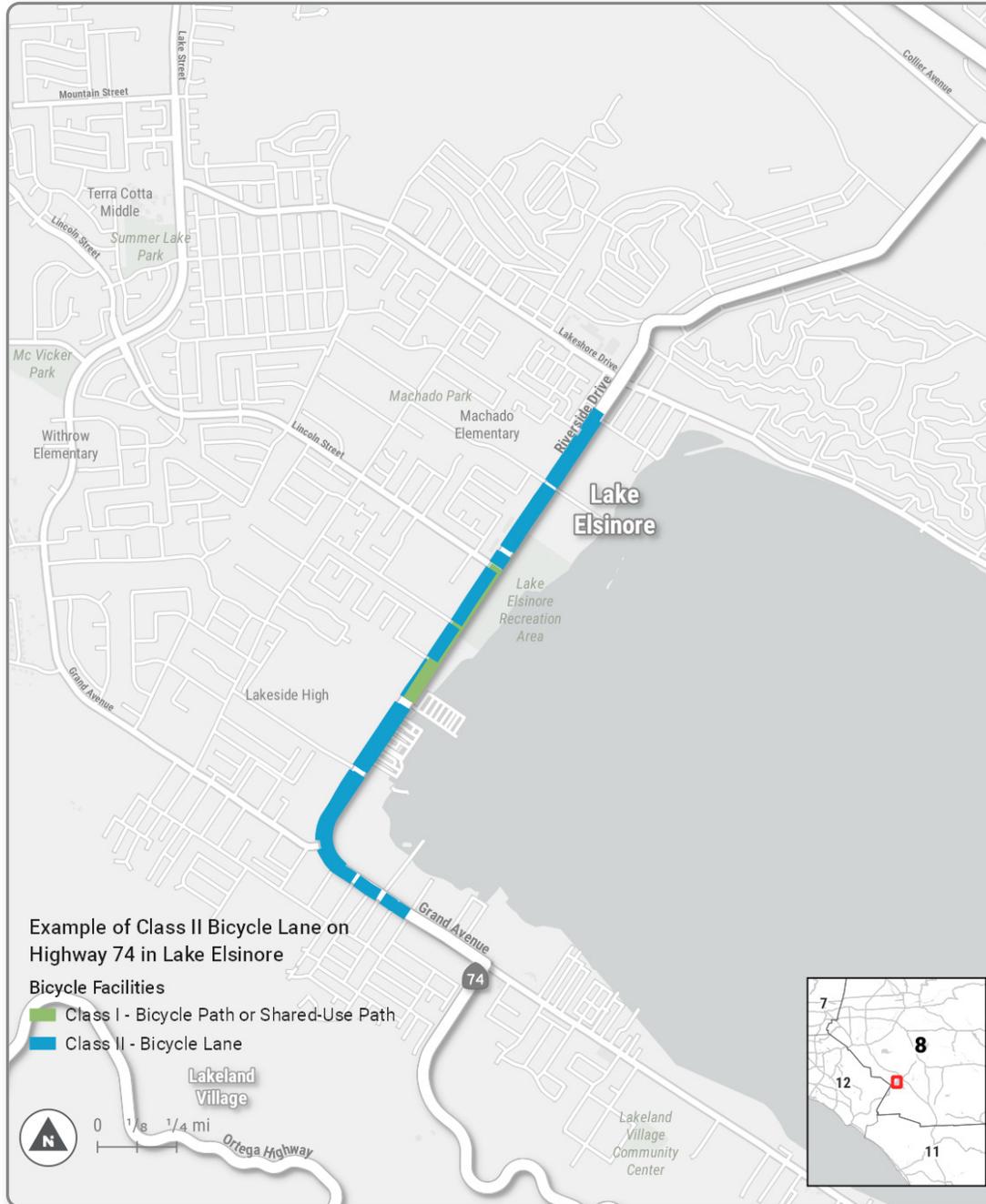


Percentage of roadways that allow bicycle access along the SHS in District 8 (centerline miles)



Sources: California Transportation System Network (2019), OpenStreetMap (2019)

## Class I Bicycle Path and Class II Bicycle Lane on SR 74 in Lake Elsinore



## BICYCLE FACILITIES

Bicycle infrastructure is most useful when it forms a complete network and offers a comfortable and inviting experience. Caltrans classifies bicycle facilities in four ways:

- ▶ **Class I** shared use paths are physically separated from vehicular roadways.
- ▶ **Class II** bike lanes provide dedicated space adjacent to vehicle travel lanes, either with or without painted buffers.
- ▶ **Class III** bike routes share roadway lane space with vehicles.
- ▶ **Class IV** separated bike lanes are protected by hardened infrastructure, such as raised curbs.

District 8 has more than 13 miles of designated bikeways on the SHS. Most of these facilities are Class II bike lanes in main street contexts, providing important bicycle access to local commercial and other destinations. Most of the district's miles of main street SHS roadways are not yet served by designated bicycle facilities. Class III and IV facilities were excluded from this plan's analysis due to statewide inconsistencies in how these types of facilities are defined and counted.

### Number of State Highway System Miles with a Class I or Class II Bicycle Facility where Bicycling is Not Prohibited

LAND USE	CLASS I MILEAGE	CLASS II MILEAGE
Main street	0.5	11.6
Rural	–	0.9
Urban	0.5	–
<b>Total</b>	<b>1.1</b>	<b>12.5</b>

Source: Active Transportation Asset Inventory, District 8 Facility Inventory

## WALKING AND BICYCLING TRIP POTENTIAL

Land use patterns, demographics, and characteristics of the built environment influence the extent to which a person can or will choose to walk or bike for everyday travel. Several factors can help determine the likelihood of people taking future trips on foot or by bike. Distance is one of the simplest determinants of bicycle and pedestrian trips. Many adults can comfortably make trips of less than 1 mile on foot or less than 2.5 miles by bicycle (and electric bicycles enable even longer trips by reducing physical effort). By investing in safe, comfortable, and convenient walking and bicycling infrastructure in places where people frequently make short trips, Caltrans and its partners can encourage people to choose to walk or bicycle instead of driving.

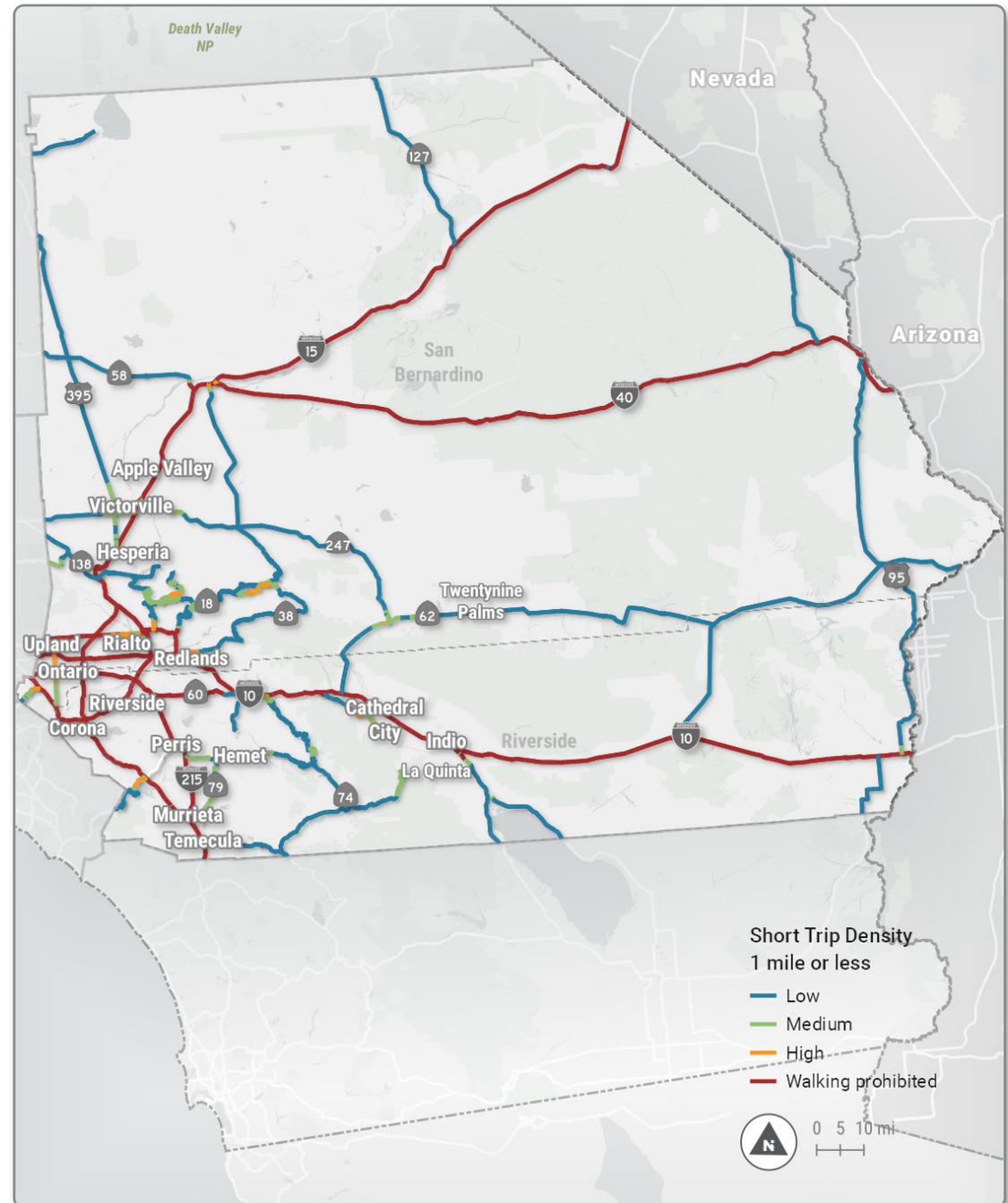
Main streets, the land use type where housing and other destinations are most likely to be located in close proximity, represent most of the SHS miles where very short trips in District 8 are highly concentrated. In fact, almost all of the short-trip opportunity zones (where 0- to 1-mile trips and 0- to 2.5-mile trips are most concentrated) in District 8 are near main streets. SHS corridors with the highest short trip potential include SR 83 in Ontario, SR 66 in San Bernardino, and short segments in Chino Hills, Hemet, Redlands, Lake Elsinore, and Redlands. While these are larger population centers, short trips also concentrate near small and rural communities, such as on SR 247 in Barstow. When these short trip opportunity zones are in close proximity to high quality transit connections, there is a higher likelihood that people will choose to walk or bicycle to transit instead of driving.

**Percent of SHS centerline miles by land use type with high concentrations of very short trips (less than 1 mile) and short trips (less than 2.5 miles), excluding segments where pedestrians are prohibited**

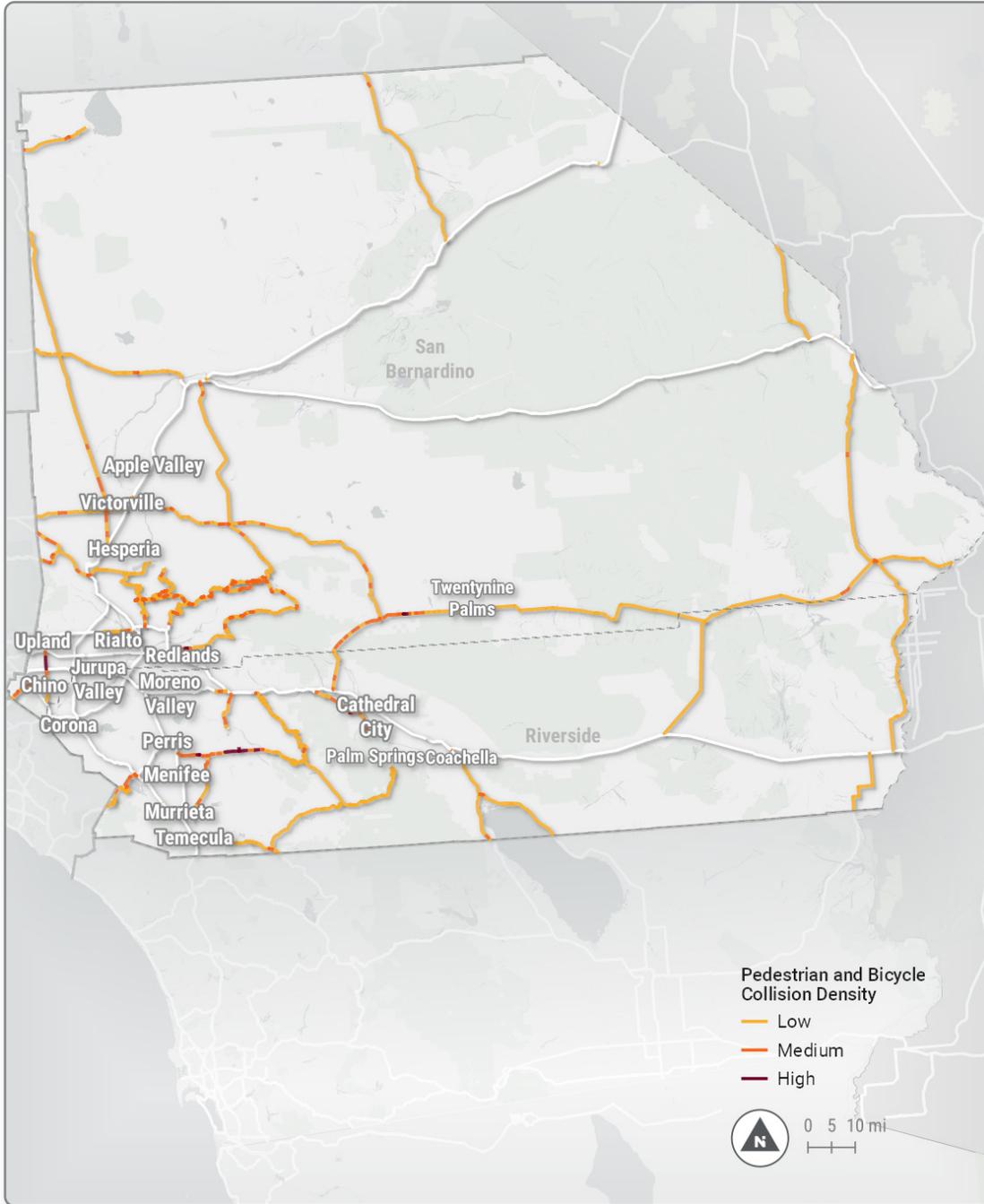
LAND USE	DISTRIBUTION OF SEGMENTS WHERE TRIPS OF LESS THAN 1 MILE ARE CONCENTRATED	DISTRIBUTION OF SEGMENTS WHERE TRIPS OF LESS THAN 2.5 MILES ARE CONCENTRATED
Main street	100%	88%
Rural	–	–
Urban	–	12%

Source: Active Transportation Asset Inventory, District 8 Facility Inventory;

Density of very short trips (1 mile or less) near The SHS



Density of collisions involving pedestrians and/or bicyclists on The SHS, 2015–2019



## COLLISIONS INVOLVING PEOPLE WALKING OR BICYCLING

People walking and biking are vulnerable road users because they face elevated risks of death or injury if struck by a motor vehicle. Collision density is a key indicator of safety risk. This metric summarizes the density of collisions within 250 feet of the SHS which involved people walking or biking. Between 2015 and 2019, 4,589 such collisions occurred on the District 8 SHS over one-quarter of the district’s centerline miles. More than 10% of these collisions involved a fatality and nearly 15% resulted in at least one serious injury. Caltrans has developed a *Toward Zero Deaths* goal to reduce the number, rate, and severity of collisions involving people walking and bicycling.

Collisions on the SHS involving people walking and biking are most concentrated where people are most likely to be traveling by car, bike, or foot: in and near cities and towns. Collisions in District 8 are most densely concentrated around Riverside, Ontario, Hemet, San Bernardino, Redlands, and Joshua Tree. Indeed, more than one-third of the main street centerline miles had at least one collision involving someone walking, and about one-quarter had at least one collision involving someone walking, during the study period. Because main streets are so heavily used and face high collision risks they are strong candidates for targeted infrastructure investments that can reduce the frequency and severity of collisions.

### Percentage of centerline miles with pedestrian and/or bicyclist involved collision, 2015–2019

PEDESTRIAN AND BICYCLE COLLISION DENSITY BY MILE	PERCENT OF PEDESTRIAN AND/OR BICYCLIST INVOLVED COLLISIONS
High (>5 collisions)	1%
Medium (1–5 collisions)	24%
Low (none)	75%
<b>Total</b>	<b>100%</b>

Note: These statistics include roadways where bicycling is prohibited.  
Source: SWITRS, 2015-2019]

## EQUITY PRIORITY COMMUNITIES

The term *equity priority communities* is used across all Caltrans District-Level Active Transportation Plans to refer to communities most in need of investments and policies to help address existing transportation inequities and improve mobility outcomes for those facing greatest environmental and social disadvantages. Each District defines such communities differently; this Plan identifies District 8's equity priority communities using disadvantaged community definitions from the 2012 Senate Bill 535 (SB 535) and the 2016 Assembly Bill 1550 (AB 1550). **SB 535** identifies priority areas in a way that targets California's most pollution-burdened and socioeconomically disadvantaged communities. **AB 1550's** definition includes census tracts that are at or below 80% of the statewide median income or at or below the threshold designated as low-income by the California Department of Housing and Community Development. It is important to note that this equity priority community definition does not capture all equity measures that were used in the prioritization phase of this Plan. Additional measures, such as tribal boundaries and percent of students who receive Free or Reduced Priced Meals factored in to the prioritization of location-based needs.

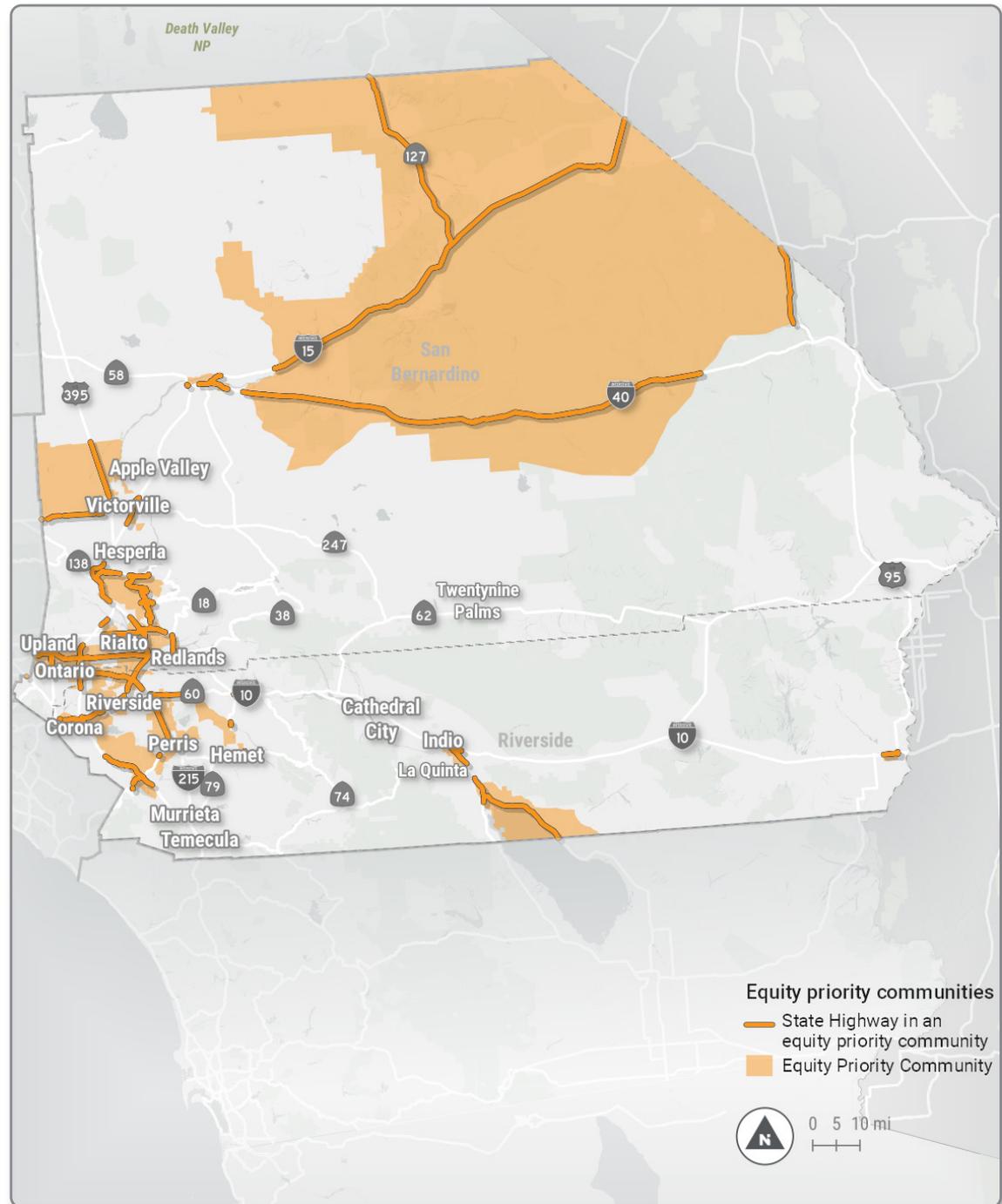
Equity priority communities are located throughout District 8 but are most concentrated in the Inland Empire region on its western edge. More than 1.3 million people, or more than 30% of the population, live in the District's equity priority communities and nearly a third of the District's SHS centerline miles pass through equity priority communities. More than half of those SHS centerline miles are located in rural communities. Improving bicycling and walking along and across the SHS in urban areas can improve economic and social opportunities in these communities without requiring access to a car.

### Percentage of District 8 SHS Centerline Miles in Equity Priority Communities by Land Use, 2015–2019

LAND USE CONTEXT	PERCENT OF SHS IN EQUITY PRIORITY COMMUNITIES
Main street	9%
Rural	58%
Urban	34%
Total	100%

Source: OEHHA, AB1550

## D8 Equity Priority Communities



# NEEDS FOR PEOPLE WALKING AND BIKING ON CALTRANS HIGHWAYS

The primary purpose of this planning effort was to identify and prioritize location-based needs, or specific locations on the SHS where existing infrastructure may have a gap or deficiency that creates a challenging or uncomfortable condition for people walking or biking along or across the system. To identify these needs, the project team analyzed data to identify gaps and barriers on the SHS that impact walking and bicycling. Additional needs were included that were identified by agency partners and from previously completed plans and studies. Location-based needs are available for review on the online [Story Map](#).

## IDENTIFYING NEEDS

### NEEDS IDENTIFIED BY AGENCY PARTNERS

Caltrans and its local and regional partners have documented the need for pedestrian and bicycle infrastructure along the SHS over time in various adopted plans and needs inventories. Where spatial data for these plans was available, needs from these plans were incorporated into the data analysis described below. For areas without plans that included spatial data, the District 8 project team encouraged partner agencies to document additional needs by completing the partner map-based survey.

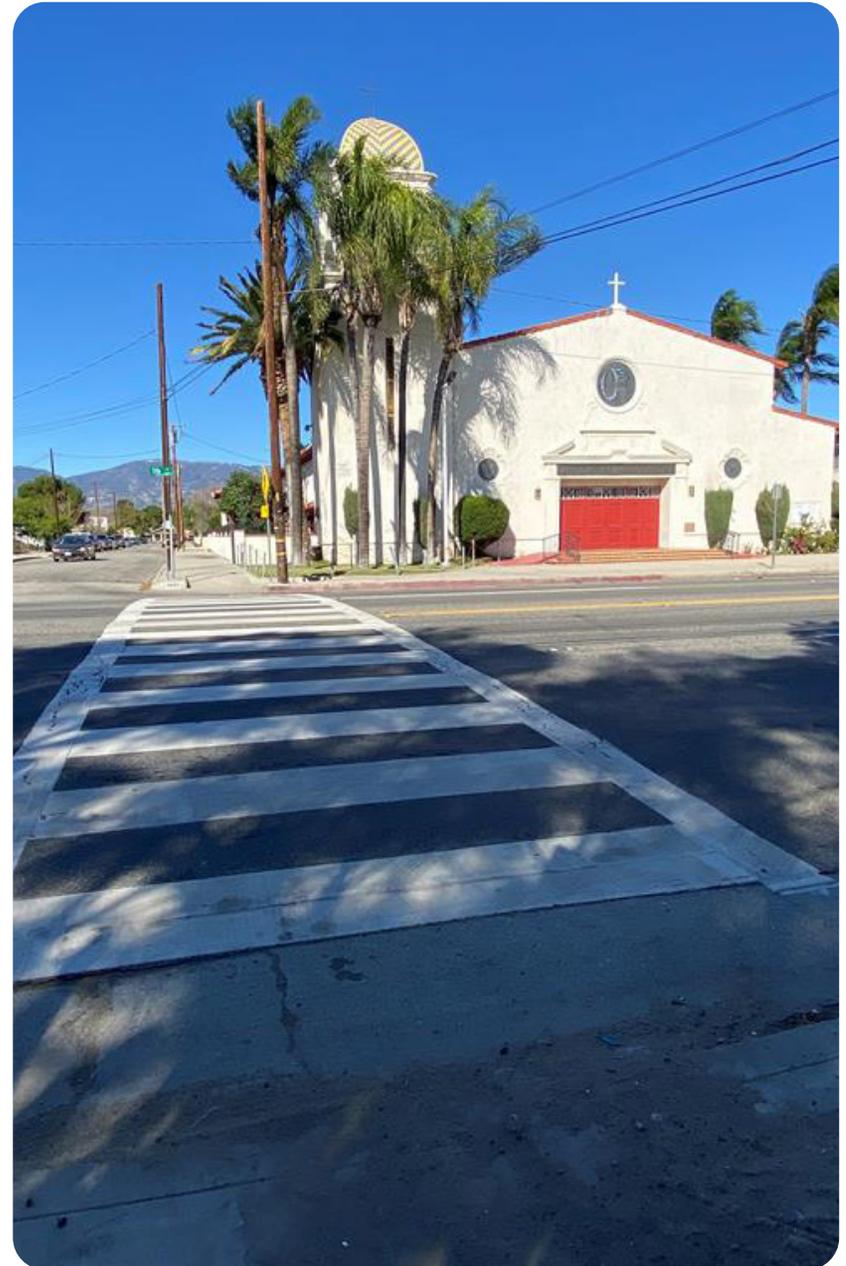
### NEEDS IDENTIFIED BY THE PUBLIC

As described in the Public Engagement section, the public identified needs using the Caltrans map-based survey. These locations were not assessed in this plan's data-driven process, but public input informed prioritization of needs. Public comments have been preserved as part of this plan's final data package to inform future project development efforts.

### NEEDS IDENTIFIED BY DATA ANALYSIS

The project team conducted detailed automated and manual analyses of SHS data to identify needs of the following types.

These analyses resulted in maps and lists of individual location-based needs, where gaps and barriers may exist for people walking and bicycling along or across the highway.



A crosswalk at an uncontrolled intersection on SR-66 in San Bernardino.

## TYPES OF ACTIVE TRANSPORTATION NEEDS



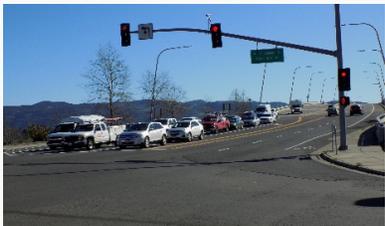
**MAIN STREET SIDEWALK GAPS.** Main street locations lacking sidewalks on one or both sides of the road.



**SIDEWALKS IN FAIR OR POOR CONDITION.** SHS segments with sidewalks in fair or poor condition, as determined by Caltrans staff.



**SIDEWALKS ALONG HIGHER-SPEED HIGHWAYS.** SHS segments with sidewalks along highways with a posted speed limit of 35 mph or higher.



**STRESSFUL PEDESTRIAN CROSSINGS.** Intersections that are stressful for people to cross by walking, located on at-grade highways that are not access-controlled. This analysis accounts for characteristics like the presence or absence of median islands and marked crossings, posted speed limits, distance from low-stress crossing opportunities, and other factors.

**STRESSFUL BICYCLE CROSSINGS.** This metric uses a similar stress analysis to the one described for pedestrian crossings above, but applies it to places where people cross conventional state highways by bicycle.



**INFREQUENT CROSSINGS.** Freeway sections where pedestrian crossings (like bridges or undercrossings) are infrequent. This analysis considers the local land use (e.g., the presence of destinations on both sides of the road), but it does not consider the quality of the surrounding pedestrian network.

## TYPES OF ACTIVE TRANSPORTATION NEEDS



**STRESSFUL BICYCLE ROUTES.** This need type is identified by conducting a Bicycle Level of Traffic Stress Analysis along the SHS. Locations with higher speeds and higher traffic volumes, and with absent or narrow bicycle facilities, are more stressful for bicyclists.



**FREEWAY CROSSING NEEDS.** Locations where freeway over-crossings, under-crossings, or interchanges exist but present challenging conditions for people walking and bicycling. Crossing needs include narrow sidewalks, a lack of sidewalks, uncontrolled or unmarked crossings at highway on- or off-ramps, or poor crosswalk visibility.

## PRIORITIZING NEEDS

Location-based needs on the SHS were evaluated and prioritized according to the goals of *Toward an Active California*: mobility, safety, equity, and preservation. Prioritization may inform future Caltrans efforts in seeking competitive project funds.

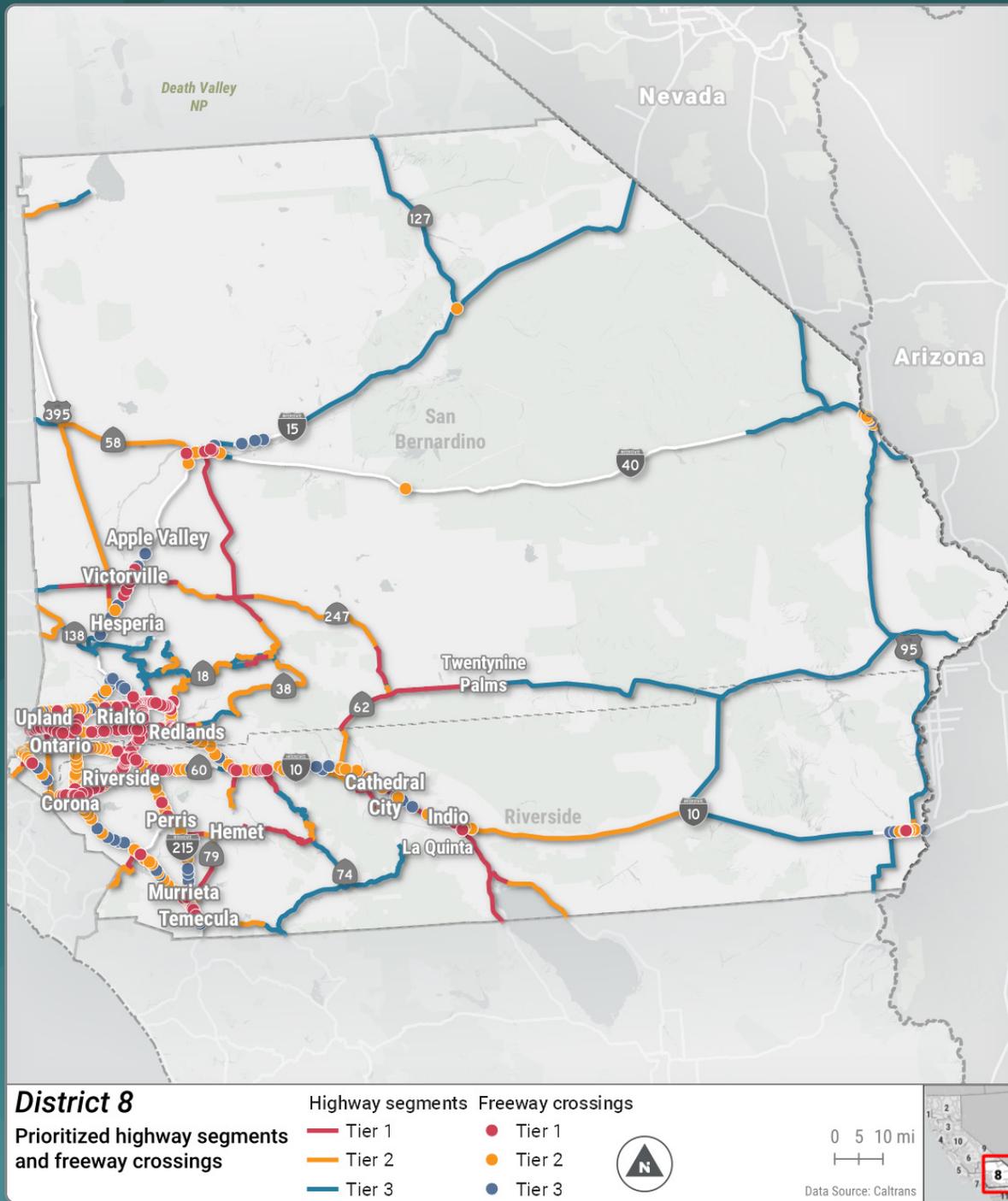
The first step in the prioritization process was to disaggregate the SHS within District 8 into smaller segments, such as areas around freeway crossings, between major intersections, at jurisdictional boundaries, and where the transportation and land use context changes. The project team scaled these segments to roughly align in scale with segments Caltrans uses to develop improvement projects on the SHS, allowing individual needs to be grouped together with other projects on the system.

As a second step, each highway segment and freeway crossing location-based need was scored based on the measures shown to the right, which align with the Walking and Bicycling in District 8 Today section of this report. These include the potential to shift short trips from driving to walking or bicycling, the history of pedestrian and bicyclist collisions, various equity measures, and the condition of sidewalks, crosswalks, and bikeways along the facility. Each segment and freeway crossing received a score based on these and other factors.

The scoring calculations incorporated input from the Active Transportation Advisory Group and the District 8 project team. Safety and equity remain top priorities for Caltrans; this is consistent with the state’s efforts to eliminate fatalities and serious injuries due to traffic collisions and invest resources in communities that most dependent on active transportation and transit.

GOAL	WEIGHT	MEASURE(S)
<b>Mobility</b>	25%	1- and 2.5-mile short trip potential; 1- and 2.5-mile short trip potential near low-income communities; main street land use context; job density; proximity to major transit station; public/partner comments
<b>Safety</b>	30%	Pedestrian crash density (total and severity-weighted); bicycle crash density (total and severity-weighted); proximity to schools; posted speed limits
<b>Equity</b>	30%	SB 535 disadvantaged communities; median household income; free or reduced-price school meal program participation rates; tribal boundaries
<b>Preservation</b>	15%	Potential to improve existing bike lanes, sidewalks, or crosswalks
<b>Total</b>	100%	

Prioritized Highway Segments and Freeway Crossings



Finally, scored segments and freeway crossings were ranked and sorted into three tiers based on their relative need, with Tier 1 representing the highest concentration of need. The maps following this section show tiered highway segments and freeway crossings in District 8.

This process provides a comparative indication of need, but active transportation needs like these are rarely addressed through independently developed projects. Regardless of their assigned tier, active transportation needs should always be considered when developing nearby projects on the SHS. Caltrans has access to datasets with additional details describing the specific infrastructure conditions that resulted in individual needs being identified at specific locations. These details are intended to be used to support the project development process. The needs in the Plan will also be used to develop Complete Streets performance targets used in the State Highway Operation and Protection Program and Transportation Asset Management Plan.

## STORY MAP

This Summary Report has a companion [Story Map](#). This interactive tool uses maps to provide a visual companion to this Summary Report. Its “Explore” section is a full-scale interactive map that provides even greater detail on a full range of existing conditions measures and that illustrates the individual and prioritized location-based needs. The map also provides additional information about highway segments with needs on them:

- ▶ Whether the need location is along or across the highway
- ▶ Whether the need is for bicyclists or pedestrians
- ▶ Relative priority (Tier 1, Tier 2, or Tier 3) of highway segments
- ▶ Prioritization goal scores for highway segments

The [Story Map](#) and Explore Map can help stakeholders and the public understand where needs and opportunities exist in their communities, as well as the nature of those needs and how those needs relate to the full picture of active transportation conditions and needs across the district.

## HOW TO USE THIS PLAN'S DATA AND ANALYSIS

This plan provides a strong foundation for understanding walking and bicycling needs on the SHS in District 8. However, data-driven processes cannot fully capture all needs that exist on the state's highways. The absence of a need from the Plan's datasets does not mean the need does not exist or is not important. Similarly, the prioritization criteria provide a sense of how areas of need align with the statewide goals, but the analytic process may not always reflect the local significance of any one walking or bicycling need. Needs that were not captured by this plan or that were not assigned to the top priority tier should still be considered for project development and funding.

Collaboration between Caltrans, its agency partners, and the public will be essential to all future project development activities. While this plan identifies general need locations and the kinds of challenges people walking and biking are likely to encounter, these must be validated and refined by gathering local knowledge, reviewing partner agency plans, collecting field data, and considering how that location on the SHS fits into the land use and transportation context.

When addressing walking and bicycling needs on the SHS, Caltrans and its partners may consider solutions both on and off the highways themselves. For example, the safest, most comfortable, or most direct new walkway or bikeway may be on an alignment away from rather than on or immediately adjacent to the SHS. For needs that relate directly to access issues on the SHS—such as crossing a highway or reaching a destination adjacent to a highway—improvements to the SHS will be most appropriate. Caltrans and its partners will work with local communities to understand their specific walking and bicycling needs and explore a range of possible solutions.

# NEXT STEPS FOR IMPLEMENTATION

This plan serves as a critical step in implementing the Caltrans vision for improving the walking and bicycling experience along the SHS in Riverside and San Bernardino Counties. Caltrans, partners in local agencies, and community-based organizations all have important roles to play in supporting highway improvement projects that meet the needs of people walking and bicycling, including the needs identified in this plan. Next steps for Caltrans to take to address location-based needs are described below.

## CONTINUE TO ENGAGE PUBLIC AND PARTNERS

This plan will be used to help scope planning efforts and projects located on or near the SHS. While the data-driven planning process provides information about the general location and nature of each need, this information is approximate and must be refined before solutions can be developed. Moving forward, Caltrans will use survey data to validate its understanding of needs at specific locations and to inform project development. Since needs and priorities will shift over time, Caltrans will continue to collect input from the public and partner organizations beyond the publication of this plan. To collect public input, potential outreach and engagement strategies may include project-specific community meetings, corridor planning stakeholder meetings, public surveys, and demonstration projects among other strategies

## INTEGRATE PLAN DATA INTO STATEWIDE DATABASES AND PROCESSES

District 8 will retain the data and analysis developed for this plan, including existing conditions, public and partner input, individual data-driven needs, and prioritized segments. This data package will support a range of future Caltrans activities, such as the management of statewide active transportation initiatives, setting Complete Streets targets, and tracking progress toward statewide goals and performance metrics.

## IDENTIFY AND INITIATE PROJECTS

The District 8 project team will work with other district divisions, headquarters, and regional partners to use the Plan-identified needs and priorities in scoping candidate planning projects for the various state-sponsored competitive funding programs. Examples of potential strategies to address location-based needs are included in the table to the right.

PEDESTRIAN OR BICYCLE NEED	POTENTIAL ACTION
Stressful bicycle routes	<ul style="list-style-type: none"> <li>• Add bike facility or upgrade existing bike facility</li> <li>• Add paved shoulder or widen existing paved shoulder</li> <li>• Identify parallel route</li> <li>• Implement speed management</li> </ul>
Stressful bicycle crossings	<ul style="list-style-type: none"> <li>• Improve intersection for bikes</li> <li>• Add signal detection and actuation</li> <li>• Install bicycle signal head</li> <li>• Add green bike box</li> </ul>
Sidewalk gaps on pedestrian routes	<ul style="list-style-type: none"> <li>• Add new sidewalk or improve existing sidewalk</li> </ul>
Stressful pedestrian crossings	<ul style="list-style-type: none"> <li>• Add crosswalk or improve existing crosswalk</li> <li>• Add pedestrian bridge</li> <li>• Improve interchange</li> <li>• Add pedestrian crossing island</li> <li>• Add rapid flashing beacons</li> <li>• Install raised crosswalks</li> <li>• Install curb extensions</li> <li>• Add push button for extended cross time</li> </ul>
Freeway barriers	<ul style="list-style-type: none"> <li>• Add pedestrian and bicycle over/under crossing</li> <li>• Retrofit interchange to be more pedestrian/bicycle-friendly</li> </ul>
Trail network gaps	<ul style="list-style-type: none"> <li>• Add shared-use path/trails</li> </ul>

# ACKNOWLEDGEMENTS

Current and past District 8 and Caltrans Headquarters team members in collaboration with partner organizations, advocacy groups, and community members shaped this plan with continued dedication and guidance. The following organization and individuals made significant contributions to the Plan that were instrumental in its development and completion.

## CALTRANS PROJECT TEAM

- ▶ Thanya Espericueta, Multimodal System Planning Branch Chief
- ▶ Anna Strahan, Project Lead
- ▶ Reyna Baeza-Oregel, Landscape Architect
- ▶ Daniel Arellano, Associate Transportation Planner
- ▶ Ronnie Escobar, Transportation Planner

## COMMUNITY PARTNERS

- ▶ Riverside County Transportation Commission
- ▶ Riverside Transit Agency
- ▶ Omnitrans
- ▶ Inland Empire Biking Alliance
- ▶ Riverside County Office of Education
- ▶ Western Riverside Council of Governments
- ▶ San Bernardino County Public Health Departments
- ▶ Riverside County Public Health Departments
- ▶ Mountain Transit
- ▶ County of Riverside
- ▶ San Bernardino County Transportation Authority
- ▶ City of Indian Wells
- ▶ City of La Quinta
- ▶ City of Yucaipa

## CONSULTANT TEAM

- » Toole Design
- » WSP
- » Cambridge Systematics
- » MIG
- » Tierra Plan

## CONTACTING CALTRANS

Additional information about this planning effort can be found on the [District 8 Active Transportation Plan webpage](#). Caltrans District 8 staff can provide additional information about upcoming projects in your community, provide input, and coordinate on project identification, development, and implementation.

The District 8 staff contact for the Active Transportation Plan is: Thanya Espericueta, [Thanya.Espericueta@dot.ca.gov](mailto:Thanya.Espericueta@dot.ca.gov), 909-806-3926.



**ACTIVE  
TRANSPORTATION  
2022 PLAN**

SUMMARY REPORT

