

02

EXISTING CONDITIONS



STUDY AREA

The Community Connectors project began with an analysis of the Coachella Valley's current characteristics, including the geography of its population, employment, and destinations; trip patterns within the region; socio-economic needs; infrastructure; and traffic safety. These factors influence the variability of active transportation activity in the region and this snapshot helped identify planning needs and opportunity areas for Community Connectors. The complete Existing Conditions Report, included as Appendix A, describes many of the assessments presented in this chapter in further detail.

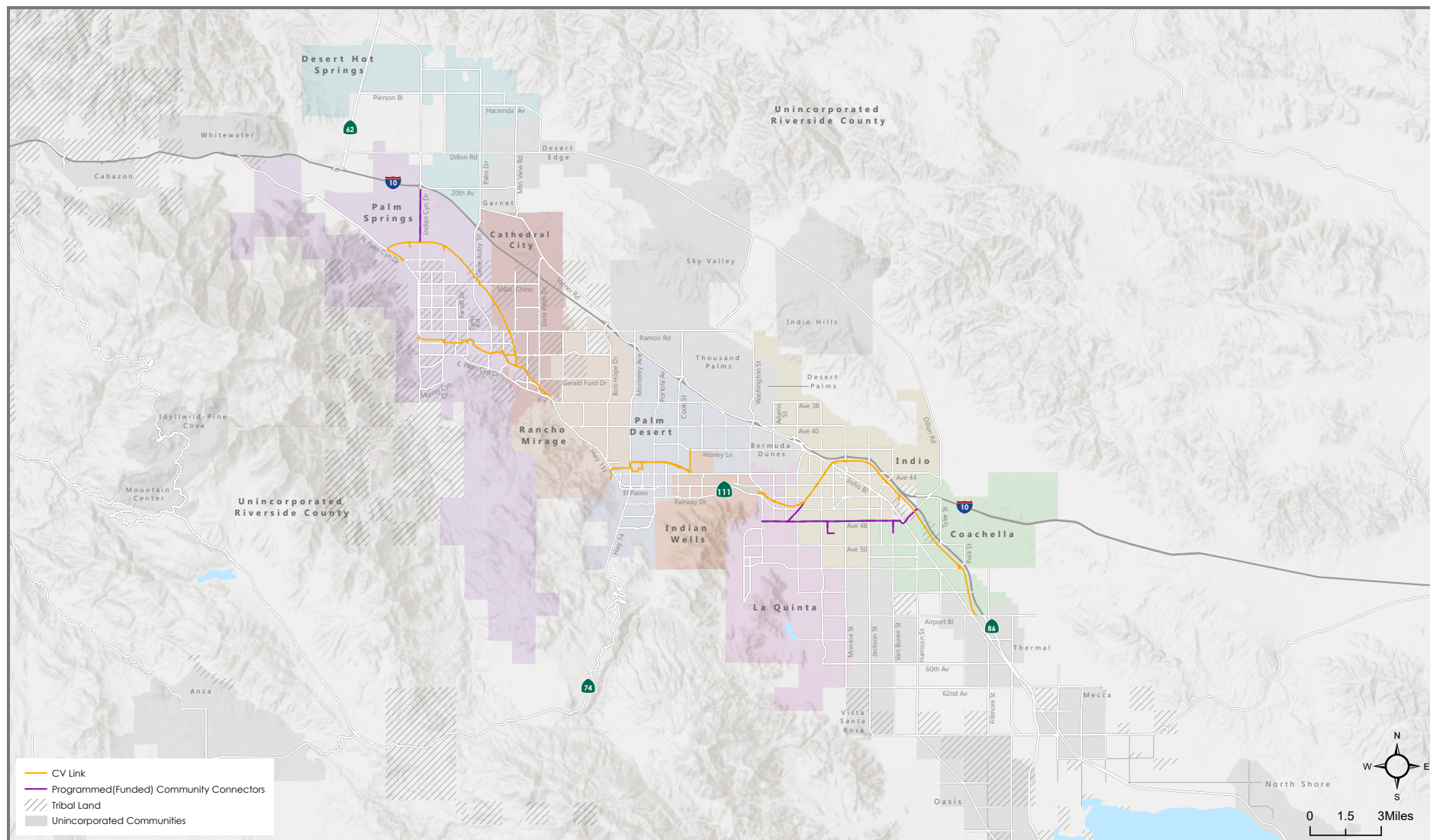
The Community Connectors study area spans part of the CVAG region from Desert Hot Springs in the northwest to the northern shore of the Salton Sea in the southeast. It surrounds the existing and under-construction sections of the CV Link and includes peripheral areas where potential northwestern and southeastern future extensions of the CV Link would be planned. The existing and in-construction CV Link can be seen in context within the jurisdictions and unincorporated communities of the Valley in **Figure 2.1**.

As of late 2026, CV Link has three completed sections with alignments primarily following the Whitewater River: a western section within Palm Springs and Cathedral City (in Palm Springs there are two branches; the southerly CV Link branch follows Tahquitz Creek), a central section within Palm Desert, and an eastern section within La Quinta, Indio, and Coachella. Future phases of the CV Link are envisioned to extend the corridor from Desert Hot Springs to the northern shore of Salton Sea, resulting in an approximately 40-mile regional network connecting cities and unincorporated communities throughout Coachella Valley. These extensions are currently in the planning phases.



CV Link at Magnolia Falls Drive and San Pablo Avenue in Palm Desert

Figure 2.1 Community Connectors Study Area



The jurisdictions within the study area include nine incorporated cities: Desert Hot Springs, Palm Springs, Cathedral City, Rancho Mirage, Palm Desert, Indian Wells, La Quinta, Indio, and Coachella; unincorporated Riverside County, including census designated communities like Thousand Palms, Desert Palms, Bermuda Dunes, Thermal, Mecca, and Oasis; as well as the Tribal lands of the Agua Caliente Band of Cahuilla Indians, Twenty-Nine Palms Band of Mission Indians, Cabazon Band of Cahuilla Indians, Torres Martinez Desert Cahuilla Indians, and Augustine Band of Cahuilla Indians. The study area covers three census identified urbanized areas: Indio-Palm Springs (containing eight incorporated cities and where most of the region's population lives), Desert Hot Springs, and Mecca. Surrounding the urbanized areas are agricultural lands and desert and mountain open spaces.

DEMOGRAPHICS AND COMMUTING

This section examines the geography of Coachella Valley's population, employment, commute mode share, socio-economic conditions, and activity center concentrations. These characteristics each have an influence on transportation behavior and trip patterns, and reveal parts of the region which have the strongest demand.



Town Square Park in Cathedral City

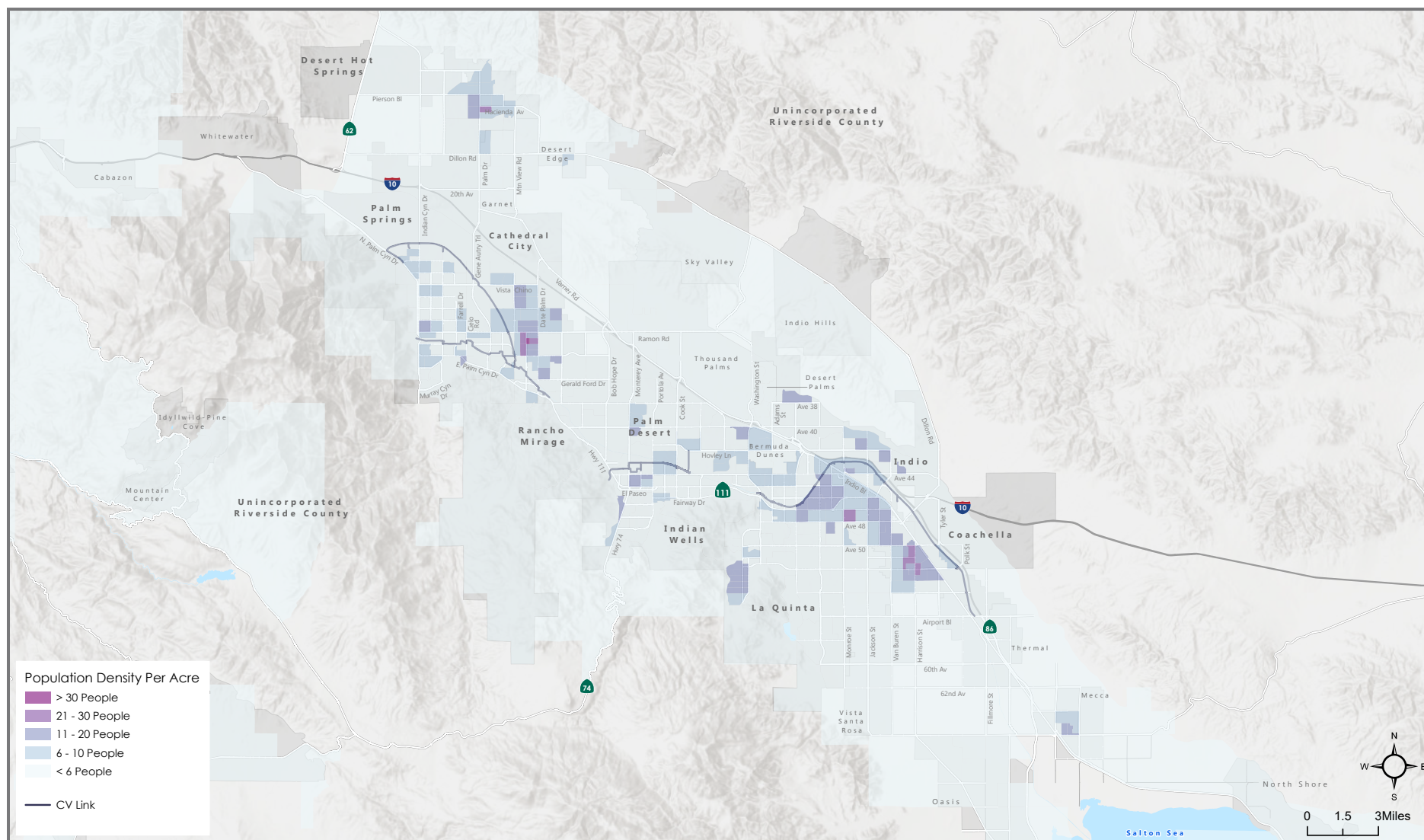


The Block shopping district in Downtown Palm Springs



A bicyclist at the intersection of Palm Drive and Hacienda Avenue in Desert Hot Springs

Figure 2.2 Population Density

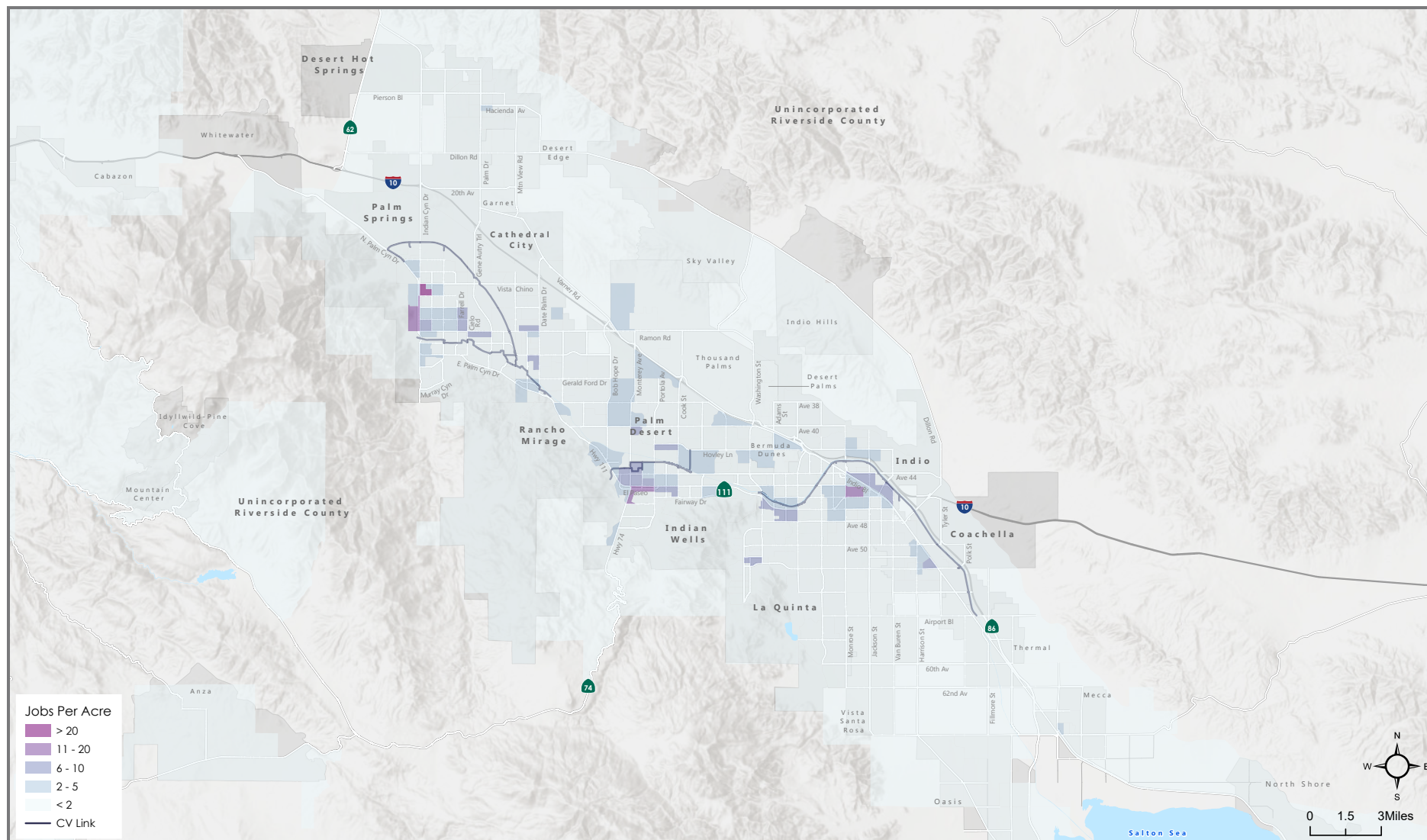


Population Density

The population of the study area, based on the combined populations of the Indio-Palm Springs, Desert Hot Springs, and Mecca urbanized areas, is just over 400,000.¹ **Figure 2.2** shows the distribution of that population. Population density is a helpful approximator for where many trip origins are likely to be generated. The most densely populated census block groups occur in the cities of Desert Hot Springs, Cathedral City, La Quinta, Indio, and Coachella.

¹ 2023 American Community Survey (5-year estimate)

Figure 2.3 Employment Density



Employment Density

While trips are typically generated from where people live, places of employment are typical trip endpoints. Understanding the spatial location of employment relative to where populations live helps identify where future transportation services and infrastructure improvements are needed.

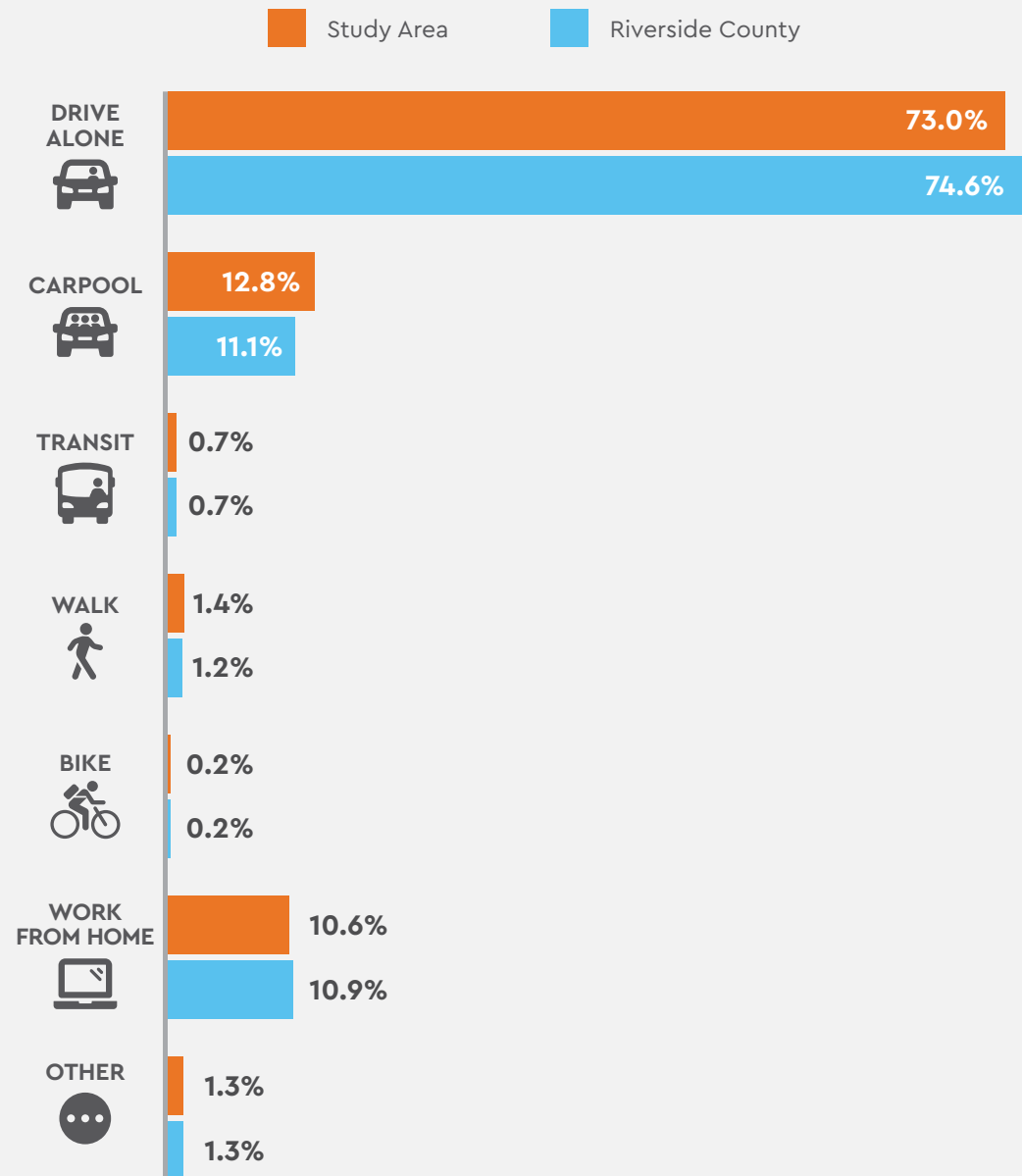
Figure 2.3 displays the density of jobs across the study area as identified by census block group. There are approximately 150,000 jobs² in the study area. As shown, the census block groups with the highest densities of jobs are in Palm Springs, Palm Desert, and Indio.

² U.S. Census Bureau, "OnTheMap" <https://onthemap.ces.census.gov/> (2023)

Means of Transportation to Work

Figure 2.4 summarizes the modes of transportation primarily used by commuters living in the study area. As shown, the vast majority (nearly three-quarters, or 73%) are primarily solo drivers when commuting. Fewer than 3% commuters combined primarily use transit, walk, or bicycle. The study area's commute mode share is roughly consistent with the entire Riverside County's commute mode share.

Figure 2.4 Commute Mode Share



Source: 2023 American Community Survey (5-year estimate)

Non-Auto Commuters By Acre

- > 1.00
- 0.07 - 1.00
- 0.02 - 0.06
- < 0.02

— CV Link

0 1.5 3Miles

COACHELLA VALLEY COMMUNITY CONNECTORS

Trip origins and destinations (OD) taken in the study area were estimated by Replica,³ a location-based services (LBS, or “Big Data”) platform which post-processes anonymized smart phone device signals into transportation data products. The OD data was aggregated by jurisdiction and community boundaries to analyze and visualize OD travel patterns. Palm Springs, due to its larger size, was divided into three separate zones for aggregation.

3 Riverside County Replica Origin-Destination Trip Patterns, Spring 2024 Weekday

Origin Destination Trips
 Trips Arriving in Block Group Centroid Points
 ● Higher Trips
 ● Lower Trips
 Estimated Trips Between Origin Destination Pairs
 ■ Higher Trips
 ■ Lower Trips
 — CV Link

Figure 2.6 quantifies trip flows between zones using weighted lines, while trips occurring within individual zones are represented by proportionally sized points. As shown, relatively stronger pairings include Indio-La Quinta, central Palm Springs-Cathedral City, Rancho Mirage-Palm Desert, Palm Desert-Indio, and Indio-Coachella. Higher concentrations of commute trips within the same zones occur in Indio and Palm Desert, with slightly lesser rates of inter-zone trips in central Palm Springs, Cathedral City, Rancho Mirage, La Quinta, and Coachella.

Transportation equity ensures that historically underserved communities have access to safe, reliable, and affordable mobility options.

An Equity Index, shown in **Figure 2.7**, identifies parts of the region that may face a higher degree of transportation-related challenges, based on an overlay of multiple measures:

- ▶ Percentage of Zero Vehicle Households (2023 ACS 5-Year Estimates)
- ▶ Percentage of Persons with Disabilities (2023 ACS 5-Year Estimates)
- ▶ Bicycle and Pedestrian Collision locations (2018 – 2023)
- ▶ Free and Reduced Lunch Program Eligibility (FRPM) 2023-2024
- ▶ CalEnviroScreen Score

The assessment methodology and individual maps of the Equity Index inputs are described in the complete Existing Conditions Report (**Appendix A**).

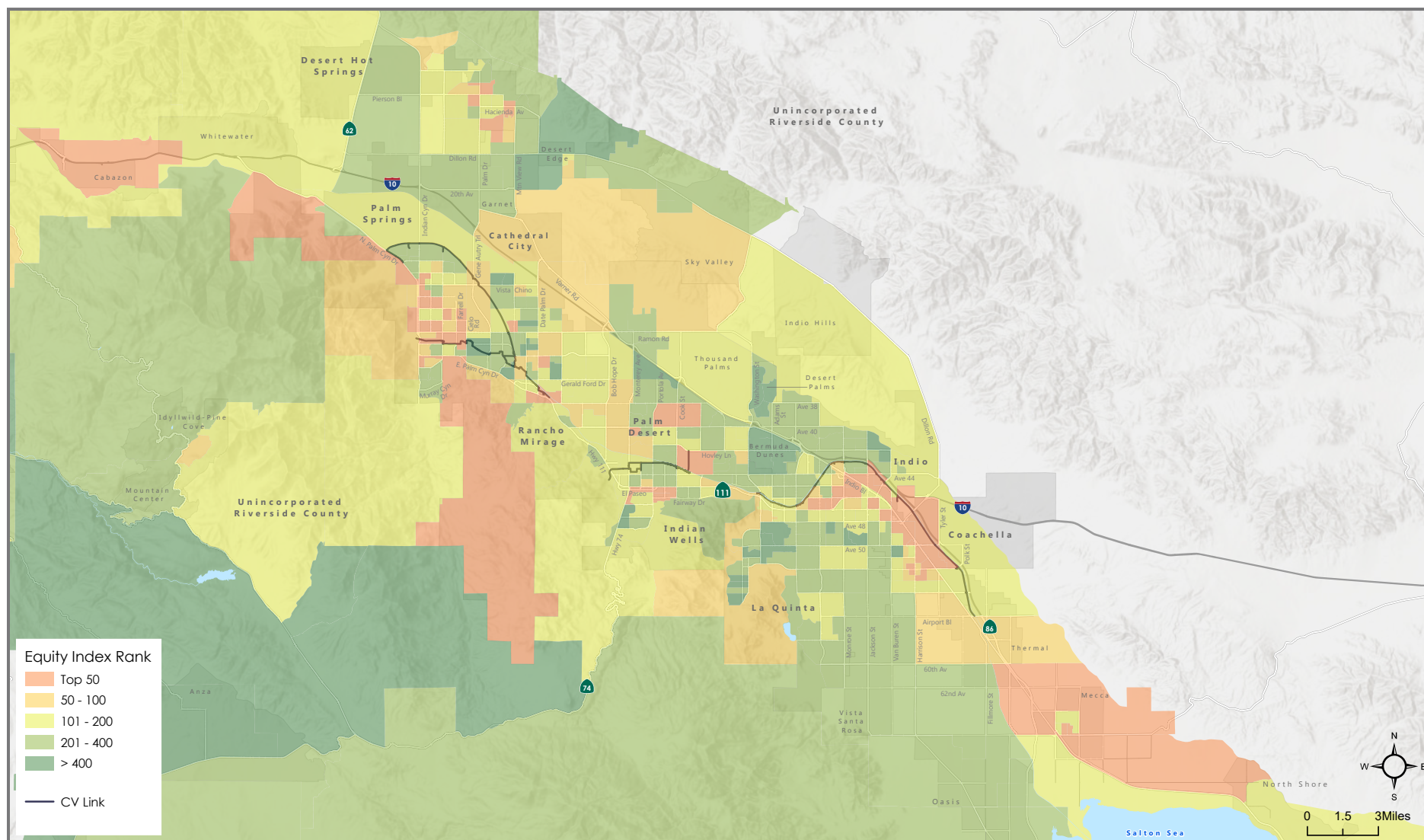


Historical Art Mural of Desert Hot Springs



Class III Bike Route in Downtown Coachella

Figure 2.7 Equity Index



As shown, there are clusters of high equity-need census tracts Valley-wide with notable concentrations in Palm Springs, Indio, Coachella, and near the planned southern extension of the CV Link through Thermal and Mecca. In relation to the CV Link, there are concentrations of high equity-need census tracts surrounding the CV Link Tahquitz Creek branch in southern Palm Springs and clustered around the CV Link in Indio and Coachella; there are smaller pockets close to the CV Link throughout the rest of the Valley.

Transportation investments in these areas may have outsized benefits for the people living, working, or visiting. These areas are indicative of relatively higher barriers to transportation, where additional investments can promote active transportation and increase transportation options, reduce VMT, and increase access to community resources, including affordable housing.

Community Resources

Community resources, such as schools, parks, civic facilities, grocery stores, and medical facilities are critical destinations that support residents' daily activities and needs. Understanding where these destinations are located and concentrated helps identify areas where bicycle and pedestrian improvements can provide the greatest benefit and improve access to essential services. These destinations were combined into a Community Resources Index to understand where relatively greater concentrations of these key destinations are located. The complete Existing Conditions Report (**Appendix A**) includes maps of each destination category used in the index and further explains the assessment methodology.



Indio Sports Park



The River at Rancho Mirage

Figure 2.8 Community Resources Index

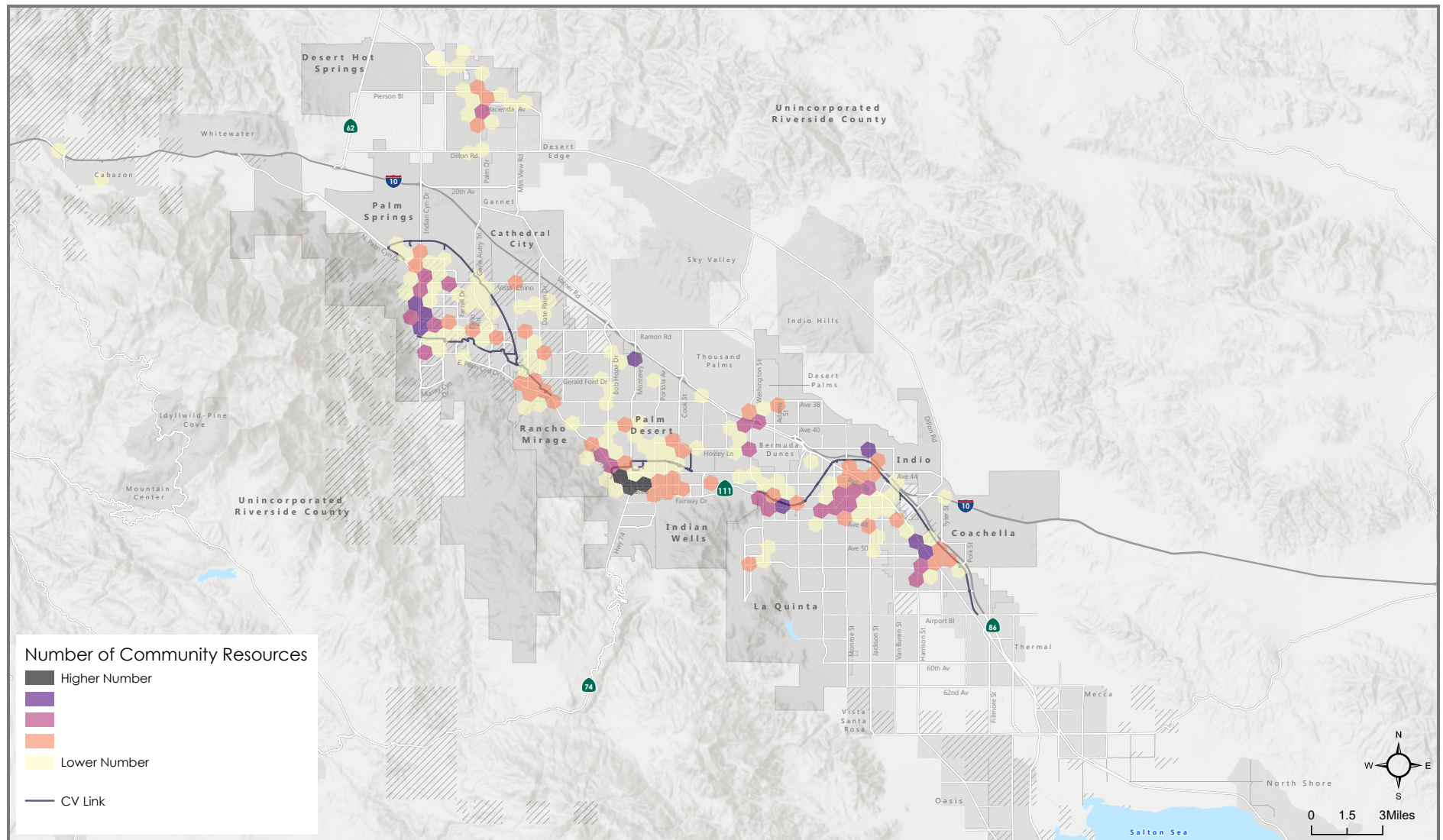


Figure 2.8 displays the resulting Community Resources Index. As shown, high concentration areas are in Palm Desert near El Paseo, in and around Downtown Palm Springs, and in Downtown Coachella. Additional areas of higher concentrations are located near Monterey Avenue on the border of Rancho Mirage and Palm Desert, Highway 111 in La Quinta, and in northern Indio near Avenue 42.

MOBILITY NETWORKS

This section presents a snapshot of mobility network infrastructure across the region for the core transportation modes: bicycling, walking, public transportation, and driving.

Bicycling

Existing bicycle facilities are depicted in **Figure 2.9**. The existing and in-construction portions of the CV Link are working as subregional backbones of the bicycle network. Palm Springs and Cathedral City have dense networks predominantly made up of Class II and Class III on-street bicycle facilities, supported by a more limited network of Class I facilities on East Palm Canyon Road and Sunrise Way. Rancho Mirage has a gridded network of Class I off-street paths. East of these areas, existing facilities are a wide grid of Class II bike lanes with more limited Class I and III facilities. Some Class I facilities in the figure below do not meet Caltrans' design standard for that classification. Where Community Connector alignments overlap with these facilities, recommendations include modifications to meet the standard where feasible.

Bike Facility Design Classifications



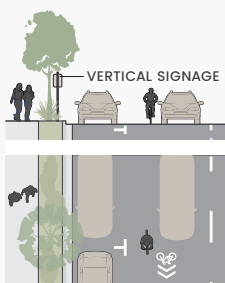
CLASS I, BIKE PATH

Also known as shared-use or multi-use paths. A completely separated right-of-way for exclusive use of bikes and pedestrians with minimal crossflows by motorists.



CLASS II, BIKE LANE

Striped lane (minimum 5') designated for exclusive or semi-exclusive use of bikes. Through travel by motorists or pedestrians is prohibited. Crossflows by motorists and pedestrians permitted.



CLASS III, BIKE ROUTE

Shared use of traffic lanes with bikes and motorists, identified by signage and/or street markings such as "sharrows" (arrow and bike). Best suited for low-speed, low-volume roadways.



CLASS IV, CYCLE TRACK

Also known as separated or protected bikeways. Designated exclusively for bike travel within the roadway and physically protected from vehicular traffic. Types of separation include, but are not limited to bollards, planter boxes, or on-street parking.

Figure 2.9 Existing Bicycle Facilities

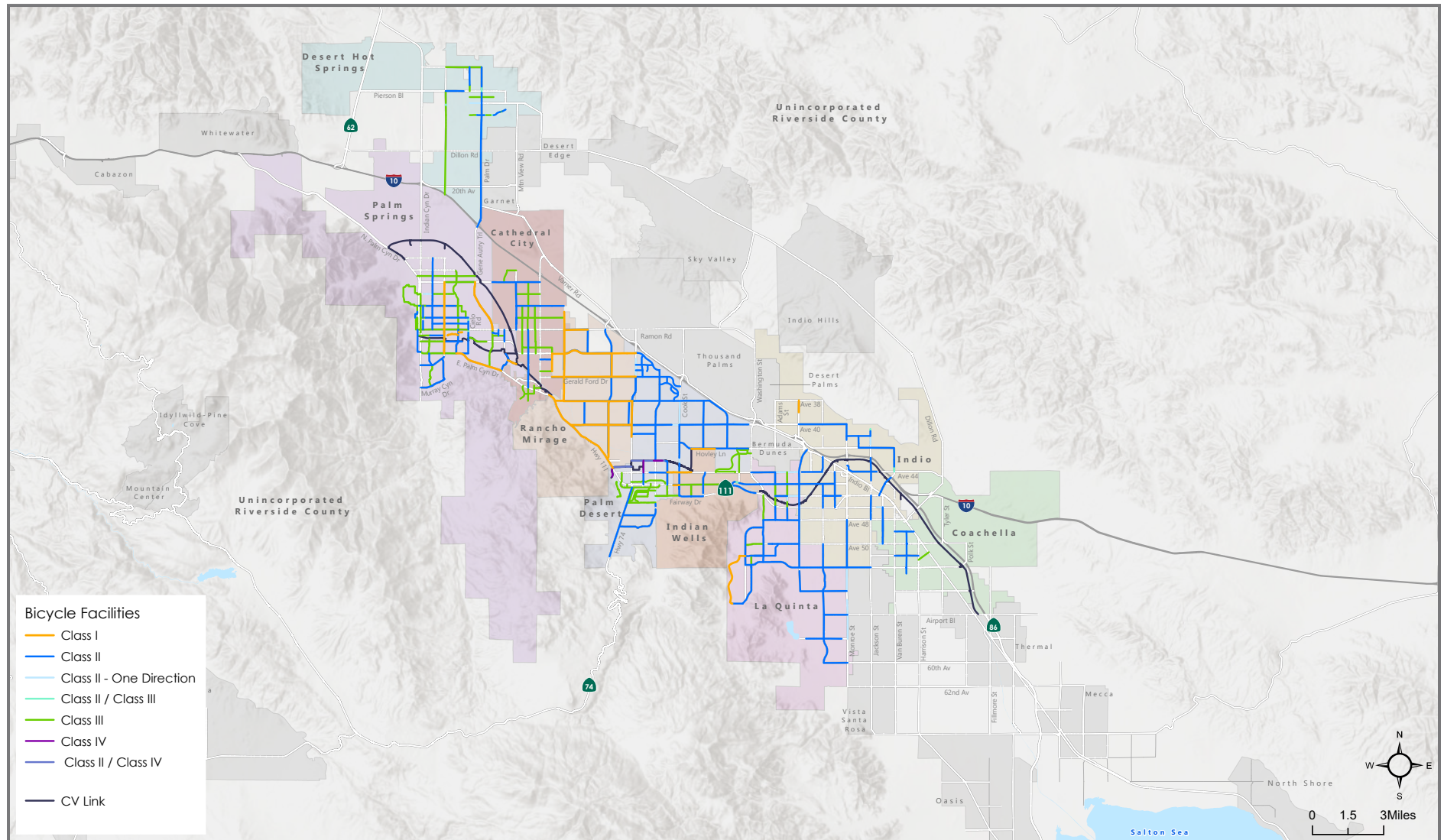


Figure 2.10 Existing and Planned Bicycle Facilities

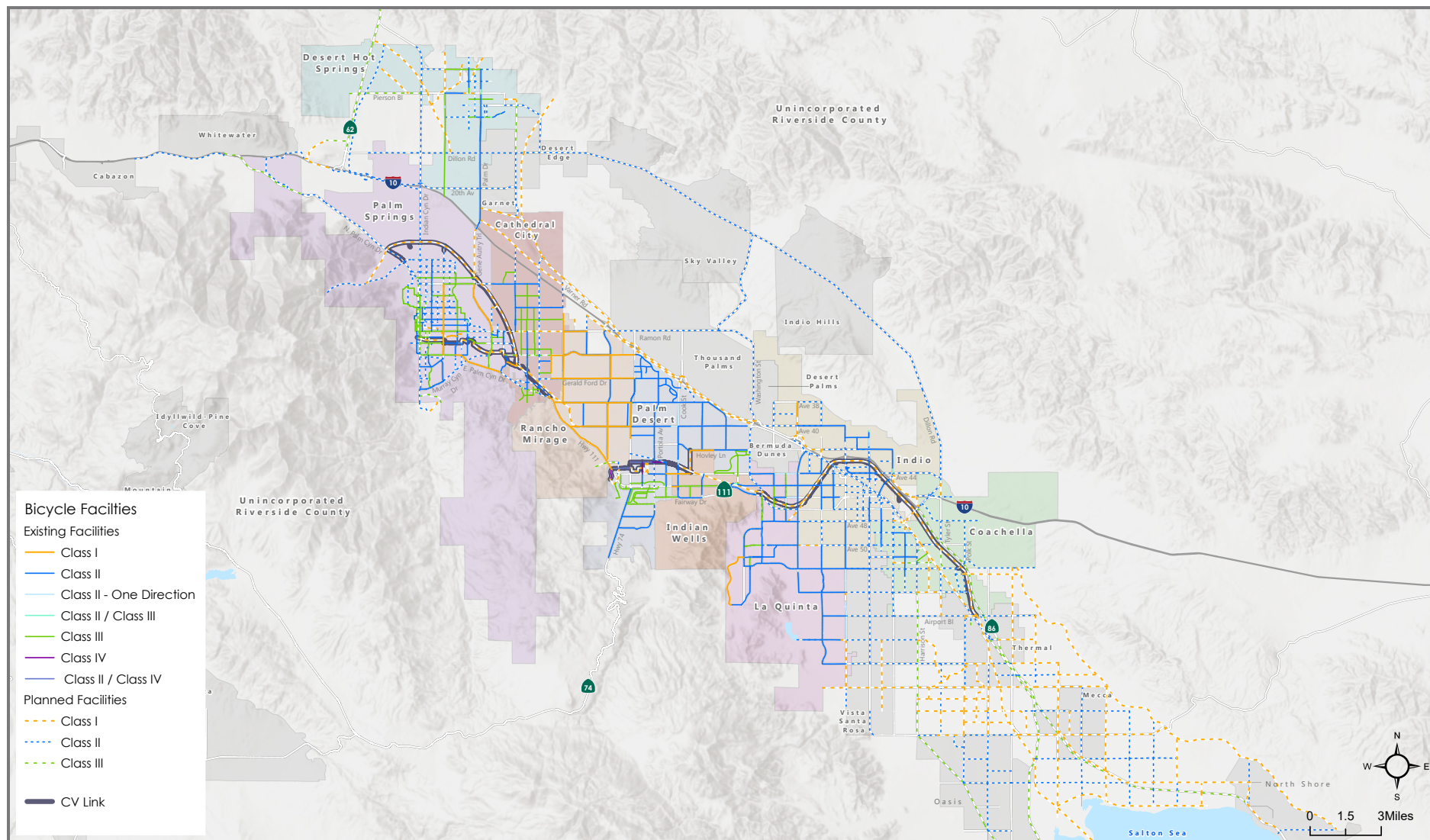
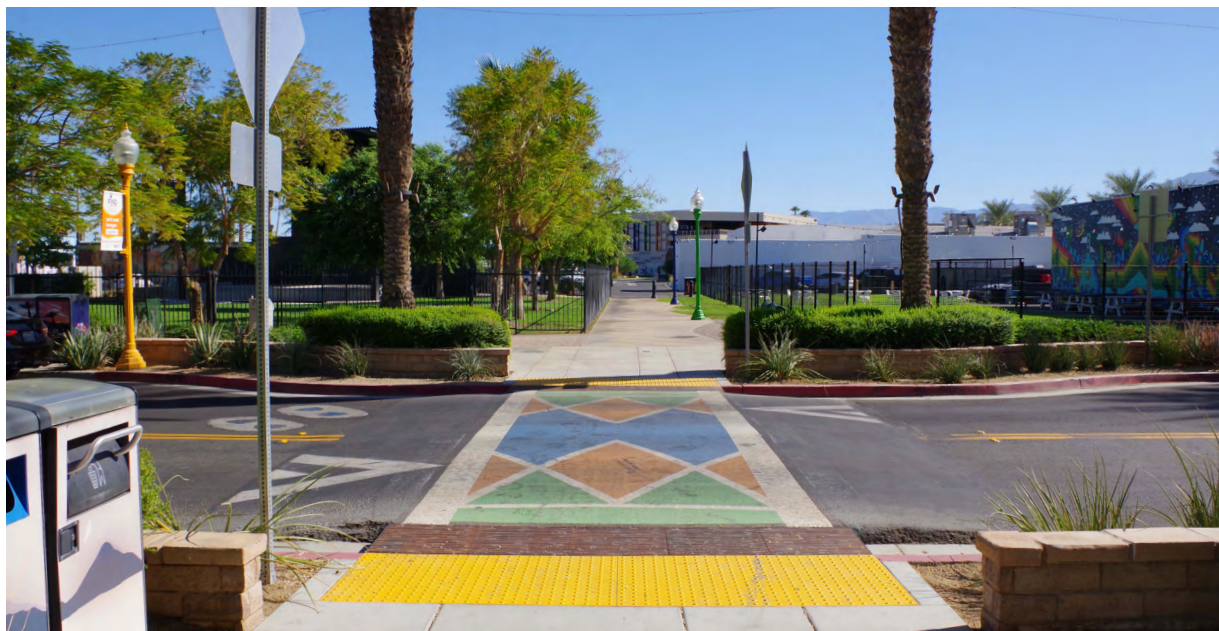


Figure 2.10 shows existing and planned bicycle facilities. The planned bicycle facilities are depicted as dashed lines to illustrate future network development and potential connectivity gaps. Regionally, from Cathedral City to Thousand Palms, there is a Class I facility planned parallel to I-10 and the Union Pacific Railroad right-of-way (ROW), running alongside the ROW's south side and terminating at the Long Canyon Trail.

More locally, the density and type of proposed bicycle facilities varies by jurisdiction. Palm Springs has proposed an infill of their existing network with primarily Class II facilities to create a denser grid. Central Coachella Valley primarily includes gap closure between the existing CV Link segments. In eastern Coachella Valley, Indio and Coachella propose the completion of their gridded and predominantly Class II bike network. To the southeast, Class I and II facilities are proposed extending from Coachella to the North Shore of the Salton Sea to create a gridded network.

Pedestrian Connections

Figure 2.11 shows streets with and without sidewalks within a half-mile walkshed of CV Link access points. This figure illustrates the distribution of pedestrian infrastructure near access points, highlighting potential opportunities to improve pedestrian access to this regional asset. As shown, sidewalks are less prevalent in the western half of Coachella Valley and become more prevalent at access points in the east.

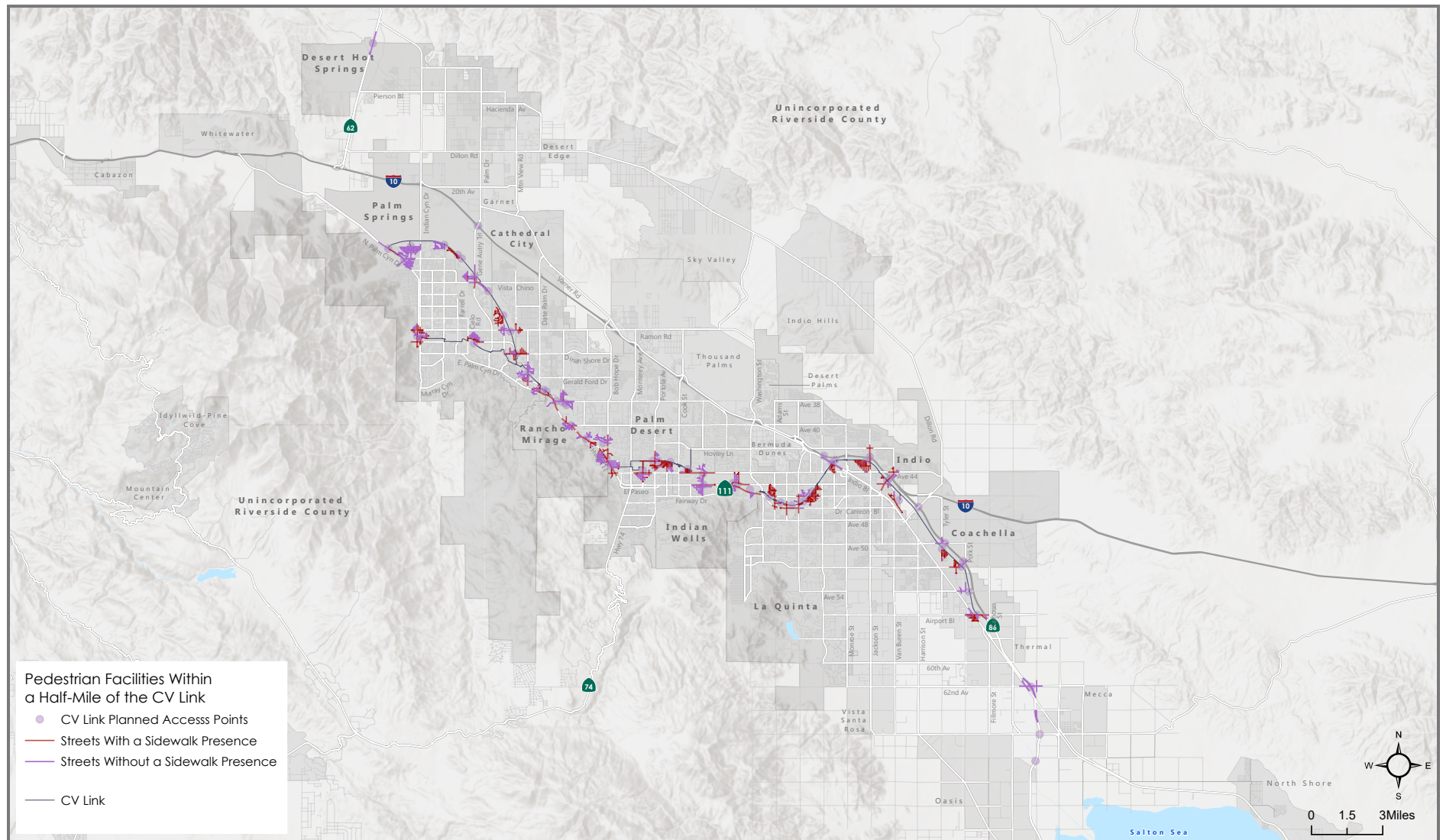


Decorative raised crosswalk in Downtown Indio



CV Link with crosswalks and protected intersection at El Cielo Road and Mesquite Avenue in Palm Springs

Figure 2.11 Pedestrian Facilities within ½ Mile of CV Link Access Points



Public Transportation

Existing transit routes in the study area are shown in **Figure 2.12**. SunLine Transit Agency (STA) operates nine local bus routes and a weekday long-distance commuter bus that travels from Indio through the Coachella Valley to the San Bernardino Transit Center. Additionally, Amtrak's inter-state line, Sunset Limited, stops several times per week at the Palm Springs Station, located just south of Interstate 10 at Indian Canyon Drive.

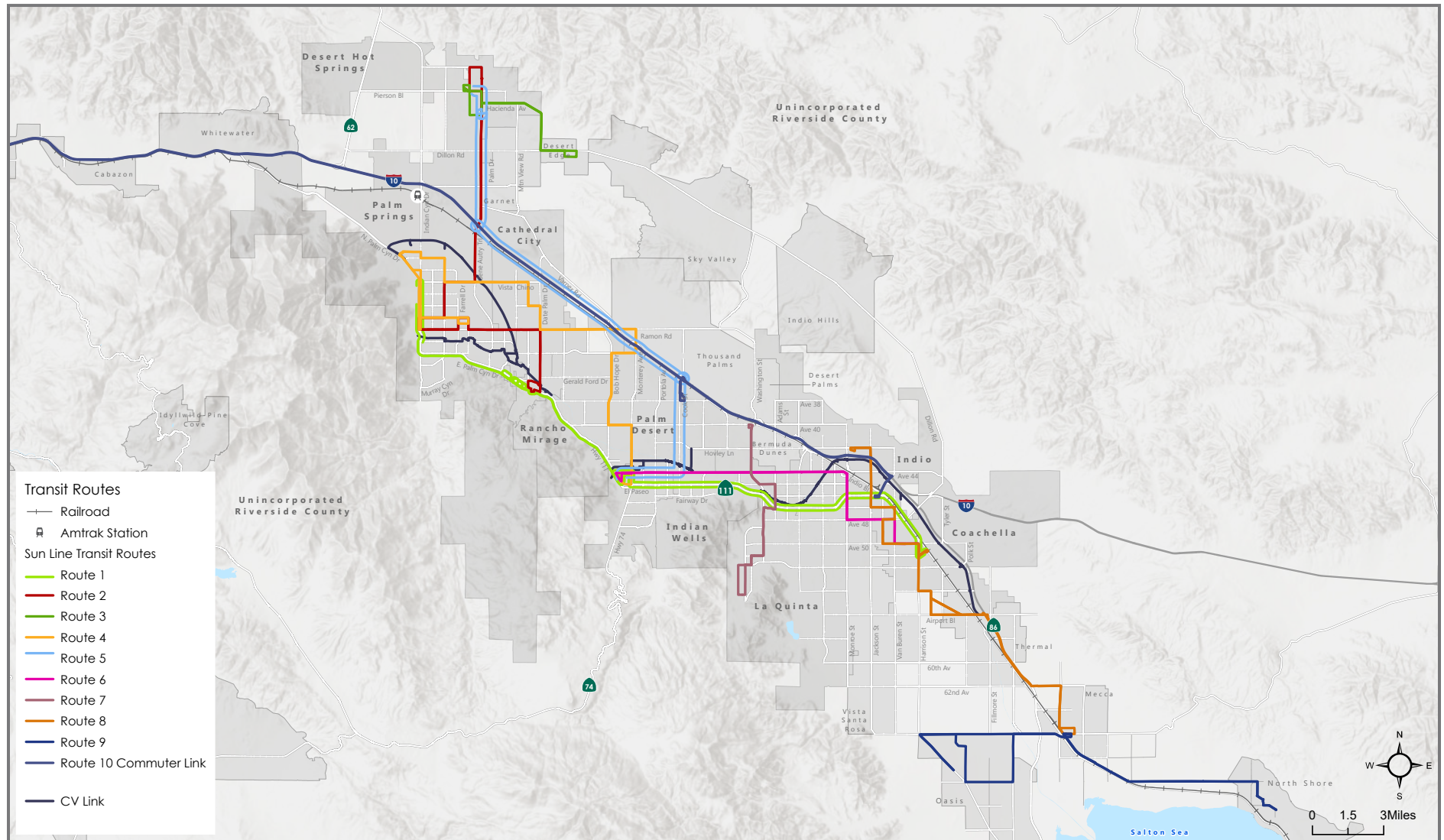


SunLine Transit bus in Desert Hot Springs



SunLine Transit service in Downtown Palm Springs provides convenient connections to local businesses

Figure 2.12 Existing Public Transportation



Posted Speed Limits

Figure 2.13 displays the posted speed limits in the study area, providing context for understanding pedestrian, bicycle, and NEV safety concerns, particularly along and across high-speed roadways. Posted speeds can also help inform the type and level of separation appropriate for bicycle facilities. Valley-wide, roads exceeding 30 miles per hour are spaced approximately one-mile apart within a grid. Speeds on streets in Palm Springs, Indio, and Coachella tend to be limited to 35 or 40 miles per hour, while the majority of other roads are at or exceed 45 miles per hour. As of 2025, State law now prohibits Class III facilities on roadways greater than 30 miles per hour.

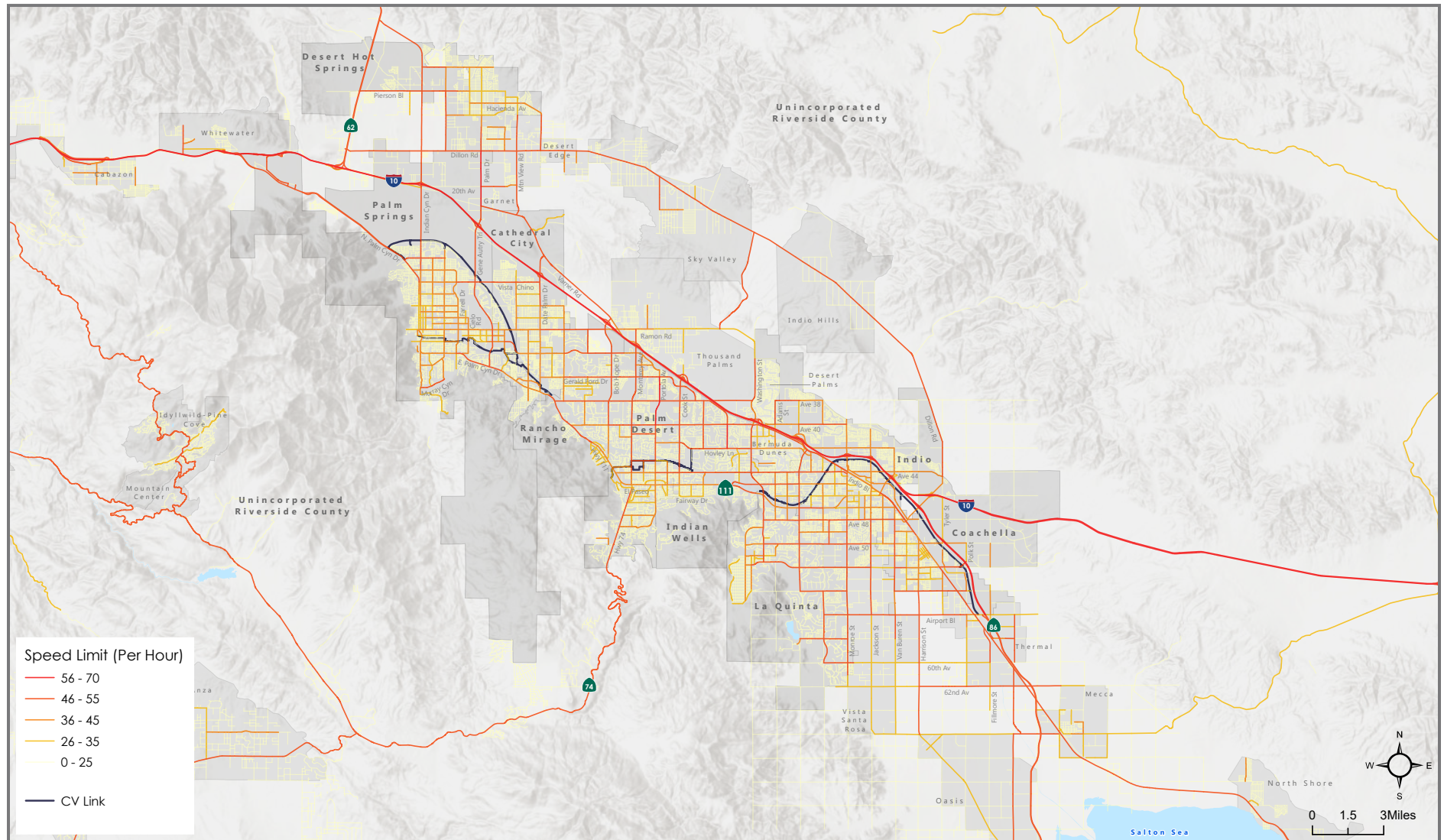


Senate Bill 1216 now prohibits Class III bike routes on roadways 35 mph or greater



High posted speed limit along Tahquitz Canyon Way in Palm Springs

Figure 2.13 Posted Speed Limits



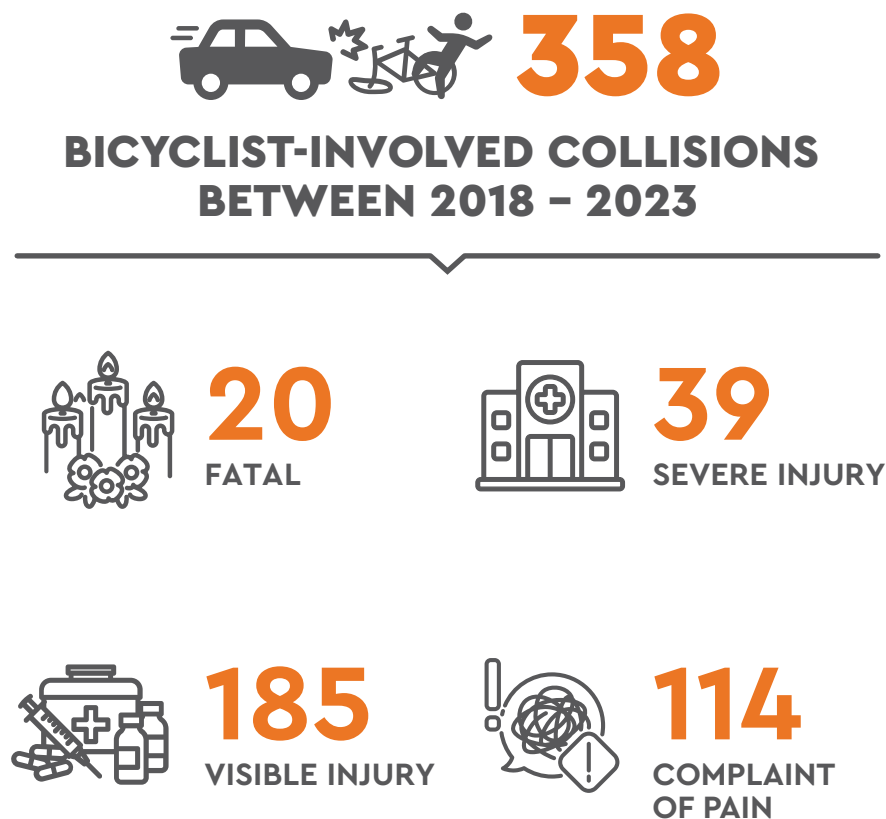
SAFETY

Between 2018 and 2023, over 300 bicyclist-involved collisions and over 500 pedestrian-involved collisions with vehicular traffic occurred in the Coachella Valley. This section describes the injury severity for each mode, the most common violation causes, and the most frequent collision locations.

Bicyclist-Involved Collisions

Figure 2.14 summarizes the level of injury severity reported for the 358 bicyclist-involved collisions that occurred in the study area between 2018 through 2023. As shown, over 16% of bicyclist-involved collisions resulted in severe or fatal injury.

Figure 2.14 Bicyclist-Involved Collisions by Injury Severity



Source: UC Berkeley TIMS (2024)

Figure 2.15 Bicyclist-Involved Collisions (2018-2023)

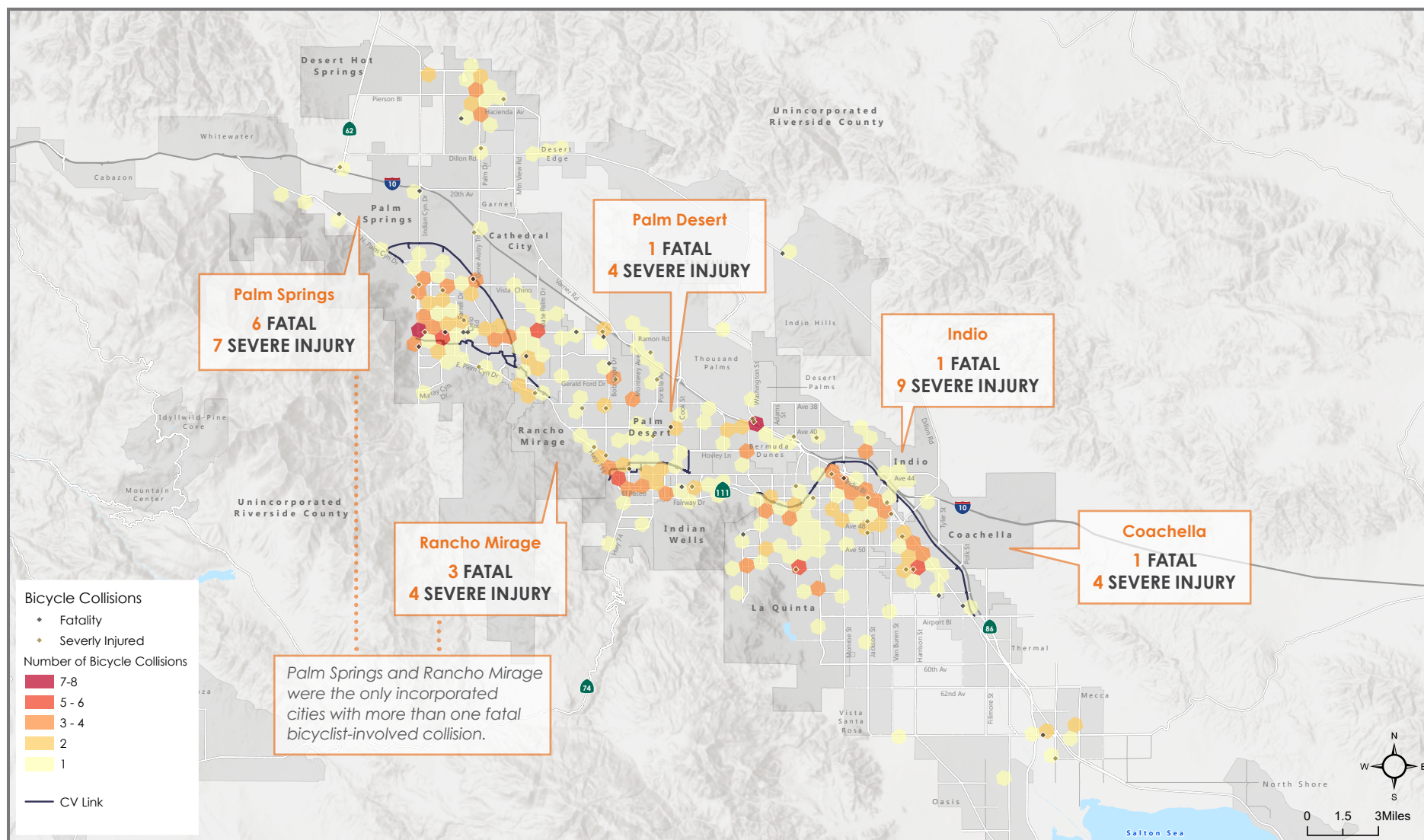


Figure 2.15 shows the density of bicyclist-involved collisions in the study area, with the locations of those with severe and fatal outcomes identified.

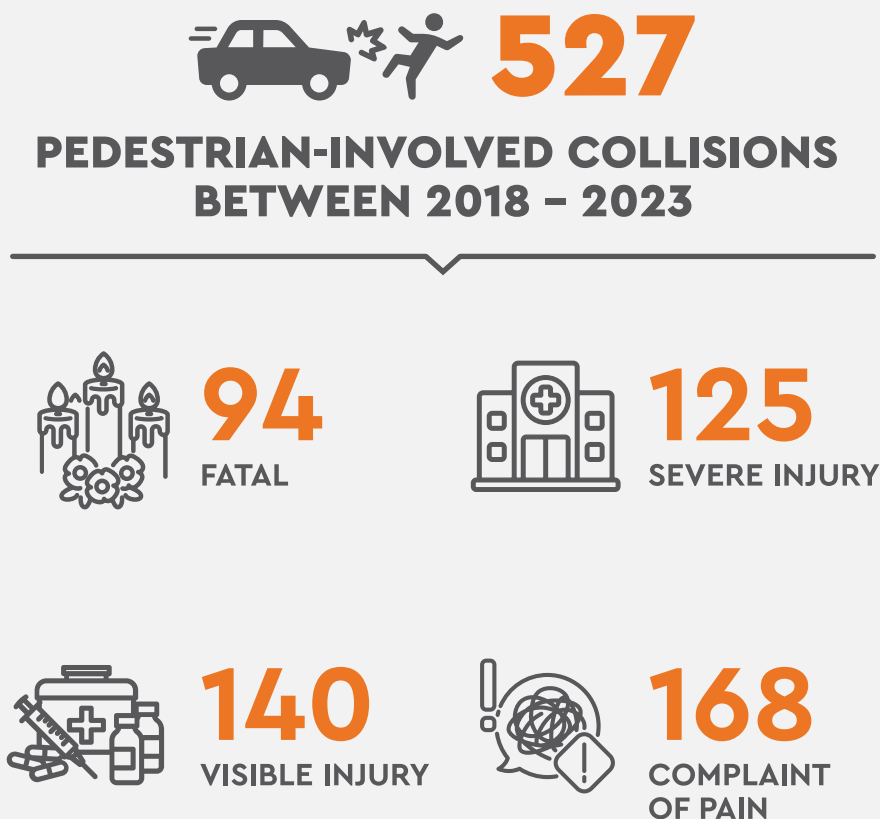
The highest concentration of bicyclist-involved collisions (eight incidents) is Downtown Palm Springs on East Ramon Road and South Indian Canyon Drive. Nearby, at East Ramon Road and Sunrise Way, is another hotspot with five collisions, including one fatality. The second highest (seven collisions) is located in the vicinity of the Interstate 10 and Washington Street interchange.

Three fatal collisions were reported on a less than one-mile stretch of East Ramon Road from east of South Sunrise Way to South Desert View Drive. Collisions that resulted in severe injury are spread throughout the Valley with a slightly higher density in Indio and Coachella.

Pedestrian-Involved Collisions

Figure 2.16 summarizes pedestrian-involved collisions by level of injury severity. As shown, pedestrians are more vulnerable to severe and fatal injuries (a combined 41.5%), compared to bicyclists (16.5%).

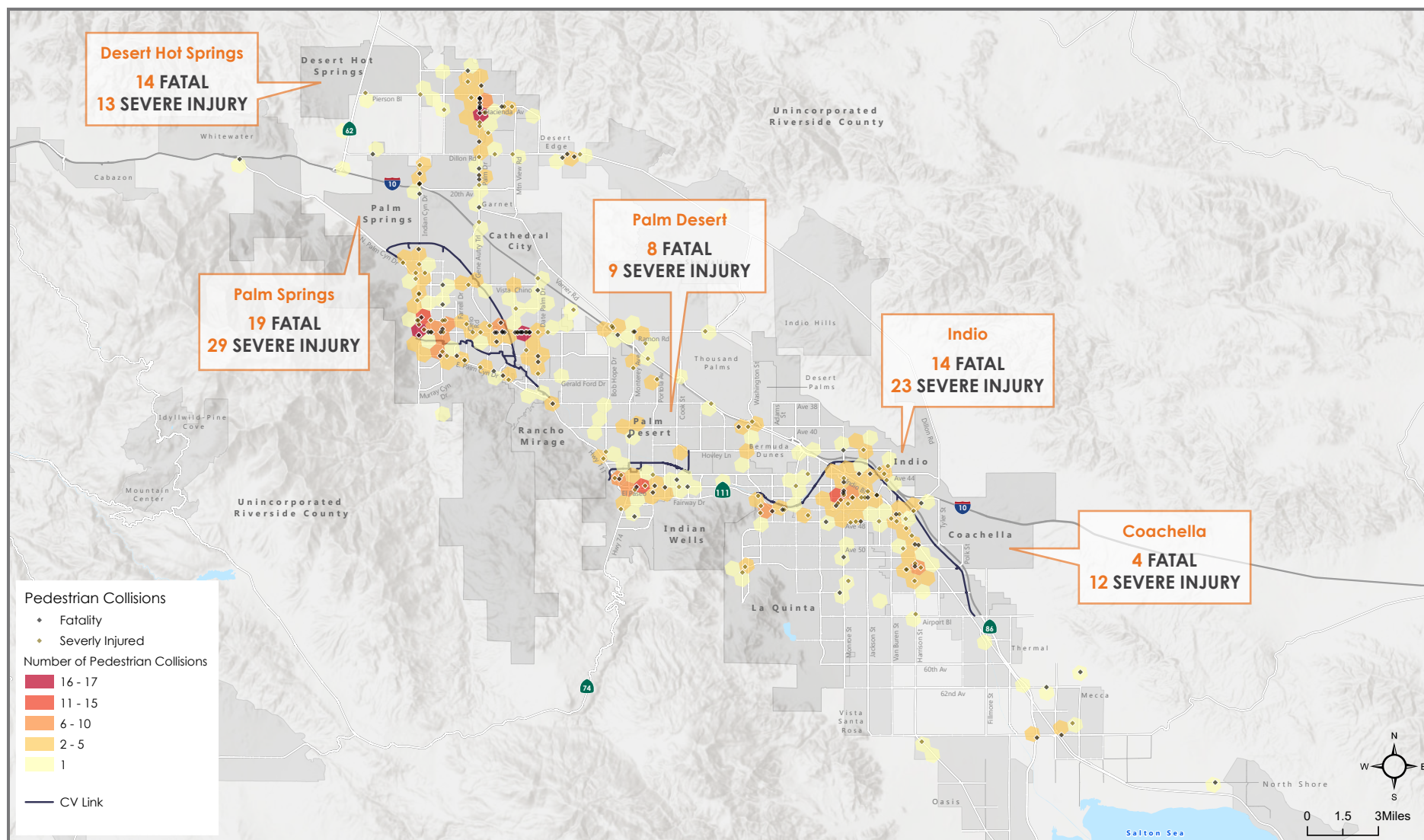
Figure 2.16 Pedestrian-Involved Collisions by Injury Severity



Source: UC Berkeley TMS (2024)

Figure 2.17 shows the density of the 527 pedestrian-involved collisions in the study area, with the locations of those with severe and fatal outcomes identified. The area with the highest concentration of pedestrian-involved collisions (17) is in Cathedral City on Ramon Road between Candlewood Drive and Avenida Alvera. Seven of the collisions on this roughly half-mile stretch resulted in fatalities. Two areas each had 16 collisions, the second highest concentration. The northernmost of these two areas is in Desert Hot Springs, primarily on Palm Drive and Ironwood Drive, where three of these 16 collisions were fatalities. The second location is in Downtown Palm Springs on South Palm Canyon Drive and South Indian Canyon Drive. This location also corresponds to the highest concentration of bicycle-involved collisions.

Figure 2.17 Pedestrian-Involved Collisions (2018–2023)



There were four additional locations with ten or more pedestrian-involved collisions, listed from west to east: The westernmost of these four locations is directly north of the previously described location in Downtown Palm Springs (13 collisions); Palm Drive near Hacienda Avenue in Palm Desert, Fred Waring Drive, and Town Center Way (10 collisions) is also a high-frequency bicycle collision location; Less than a mile to the east of the previous location, also in Desert Hot Springs, is another high-frequency area (11 collisions) centered around the Highway 111 and San Pablo Avenue intersection; Twelve (12) collisions occurred in the Indio area around Highway 111 and Monroe Street.

BICYCLE NETWORK QUALITY

This section evaluates the comfort and usability of the regional network using Bicycle Level of Traffic Stress (LTS) assessments to identify locations where there are networks of lower-stress environments and potential opportunities for improvement to connect the CV Link to key destinations.

The LTS methodology was developed in 2012 by researchers at the Mineta Transportation Institute. This approach evaluates the perceived comfort and safety of cyclists on roadway segments and intersections, classifying streets into four [MC12.1] categories:

- ▶ **LTS 1:** Suitable for all cyclists, including children; features strong separation from traffic or low-speed, low-volume streets.
- ▶ **LTS 2:** Tolerable for most adults; includes dedicated bike lanes or traffic-separated paths adjacent to moderate-speed traffic.
- ▶ **LTS 3:** Acceptable for experienced cyclists; involves interaction with moderate-speed or multilane traffic without dedicated bike facilities.
- ▶ **LTS 4:** High stress, suitable only for confident cyclists; entails close proximity to high-speed traffic with minimal or no separation.

Bicyclist Design User Profiles



LOW STRESS TOLERANCE		HIGH STRESS TOLERANCE	
LTS 1 LOW STRESS	LTS 2 LOW STRESS	LTS 3 HIGH STRESS	LTS 4 VERY HIGH STRESS
Corresponds to riders of all ages and abilities Suitable for all cyclists; including children; features strong separation from traffic or low-speed, low-volume streets	Corresponds to riders that are interested but concerned Tolerable for most adults; includes dedicated bike lanes or traffic-separated paths adjacent to moderate-speed traffic	Corresponds to riders that are enthused and confident Acceptable for experienced cyclists; involves interaction with moderate-speed or multilane traffic without dedicated bike facilities	Corresponds to riders that are strong and fearless High-stress, suitable only for confident cyclists; entails close proximity to high-speed traffic with minimal or no separation

Key factors influencing LTS classification include posted speed limits, roadway size, presence and type of bicycle facilities, and intersection design. The primary goal of the LTS methodology is to assess and enhance low-stress connectivity within bicycle networks, ensuring that cyclists can travel between destinations without encountering routes that exceed their comfort levels. This approach aids urban planners and transportation officials in identifying and addressing high-stress areas to create more inclusive and accessible cycling infrastructure.

Figure 2.18 *Bicycle Level of Traffic Stress*

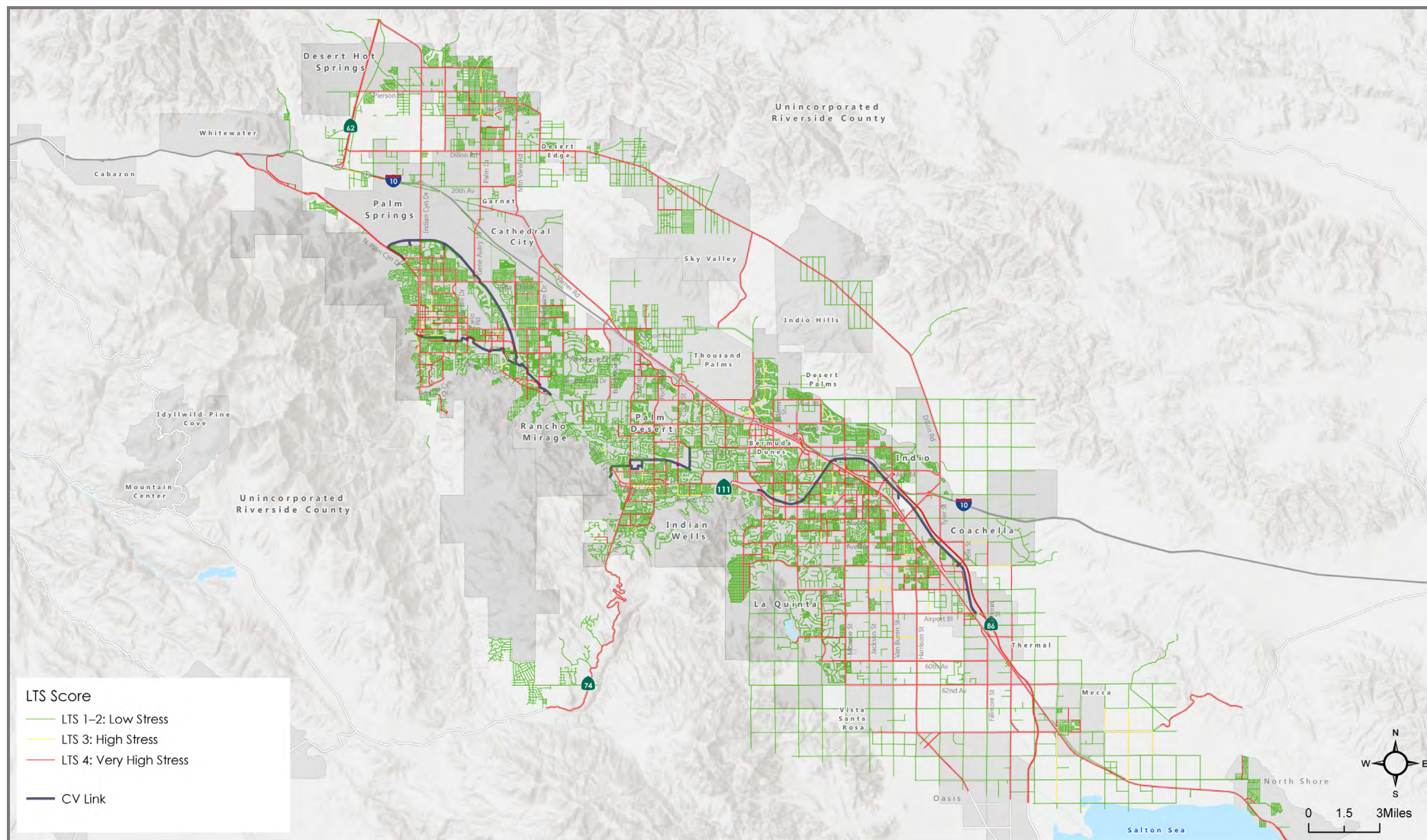


Figure 2.18 presents the LTS on all roadways where bicycles are permitted throughout the Valley.

The vast majority of neighborhoods between major streets and arterials are classified as LTS 1 or 2, indicating conditions that are generally comfortable for most riders. However, traveling between these neighborhoods may feel uncomfortable or unsafe for all but experienced and confident riders, despite many having existing Class II facilities. This is typically because of higher vehicle speeds and/or multiple travel lanes that require bicyclists to ride adjacent to higher-speed or higher-volume traffic. Potential improvements to increase bicyclist comfort include greater separation from moving vehicles through Class I or IV facilities, reductions in the number of vehicle travel lanes, and lower vehicle speeds.

CV Link

- CV Link Access Points
- CV Link, Approved Project
- CV Link, Alignment TBD

Existing Separated Bicycle Facilities

- Class I & Class IV

Commute Trips

- High Origin-Destination Connection (15k+ trips in one direction)
- Job Hot Spots for Commutes Under 10-mi
- Job Centers (SCAG)

Collisions

- High Collision Locations (10+ Ped and/or Bike combined; 5+ Bike)

Community Characteristics

- High Population (11+ people/acre)
- High Community Resource Locations (25+)
- High Equity Index Areas
- Tribal Land

Key Findings

Figure 2.19 highlights 11 areas where key existing conditions overlap, such as downtown Palm Springs, which has a high number of community resource locations and a high number of pedestrian and/or bicycle-involved collisions.

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