

E

Existing Conditions Analysis: Full Report



INTRODUCTION

This appendix contains a detailed report of the analysis briefly discussed in Chapter 3, Existing Conditions. The project team analyzed four categories of data to understand the existing conditions that pertain to active transportation in the city.

- Demographic statistics
- Travel characteristics
- Health and safety
- Environment and infrastructure conditions

Table E-1. Data collected and analyzed

Category	Description	Source(s)
Demographic Statistics	Demographic characteristics such as race, median household income, age, and language capabilities give a snapshot of who lives in San Bernardino and what their needs might be.	2018 American Community Survey
Travel Characteristics	An understanding of travel characteristics allows for development of recommendations that can encourage active transportation in the city.	2018 American Community Survey
Health and Safety	Analysis of health and safety indicators provides an understanding of the community’s potential needs for active transportation facilities.	Transportation Injury Mapping System (TIMS) (2015–2019), CalEnviroScreen 3.0
Land Use and Infrastructure	Existing infrastructure shows physical locations that can benefit from infrastructure improvements.	Existing planning documents, Field observations, Comprehensive Pedestrian Sidewalk Inventory Plan (San Bernardino County Transportation Authority)

POPULATION CHARACTERISTICS

According to the 2018 American Community Survey, the City of San Bernardino had approximately 200,000 people. The median household income (MHHI) in the city was \$45,834, which is below the countywide median of \$63,362. Within the city, a high proportion of low-income households reside in downtown San Bernardino, east of Interstate 215 (I-215) and north of Mill Street. The majority of the City of San Bernardino’s population was younger than 35 years old (57.2%). Of this population, almost 33% are 19 years of age or younger.

A large percentage of households in the city have limited English capabilities. Spanish-speaking households formed a majority, with 60.4% of San Bernardino’s population being Hispanic or Latino. Limited English households within the City are located predominantly in central and downtown San Bernardino.

Table E-2. Median Household Income Distribution, City of San Bernardino

Median Household Income	Percent
<\$25,000	26.9%
\$25,000 - \$49,999	27.3%
\$50,000 - \$74,999	17.2%
\$75,000 - \$99,999	12.0%
\$100,000 - \$149,999	11.0%
\$150,000 or More	5.6%

Source: 2018 American Community Survey

Table E-3. Population Age Distribution, City of San Bernardino

Age	Percent
19 or younger	32.8%
20 - 34	24.4%
35 - 49	18.6%
50 - 64	15.2%
65 or older	9.1%

Source: 2018 American Community Survey

COMMUTE CHARACTERISTICS

The majority of residents (79.3%) used personal automobiles to commute to work, while 4% commute via walking, bicycling or public transportation, excluding rideshare, to get to and from work. Nearly zero percent of residents bike as their primary mode of transportation for work. When combined with carpooling, over 90% of all commute modes involved the use of a personal vehicle.

More than a third (35.5%) of San Bernardino City residents have a commute time that is longer than 30 minutes. The largest percentage (41.4%) of residents have a commute time that is between 15 to 29 minutes.

Table E-4. Commuting Modes of Residents

Commute Mode	Percent
Walk	1.8%
Bike	0.0%
Carpool	11.6%
Public Transportation	2.2%
Work from Home	3.6%
Personal Vehicle	79.3%

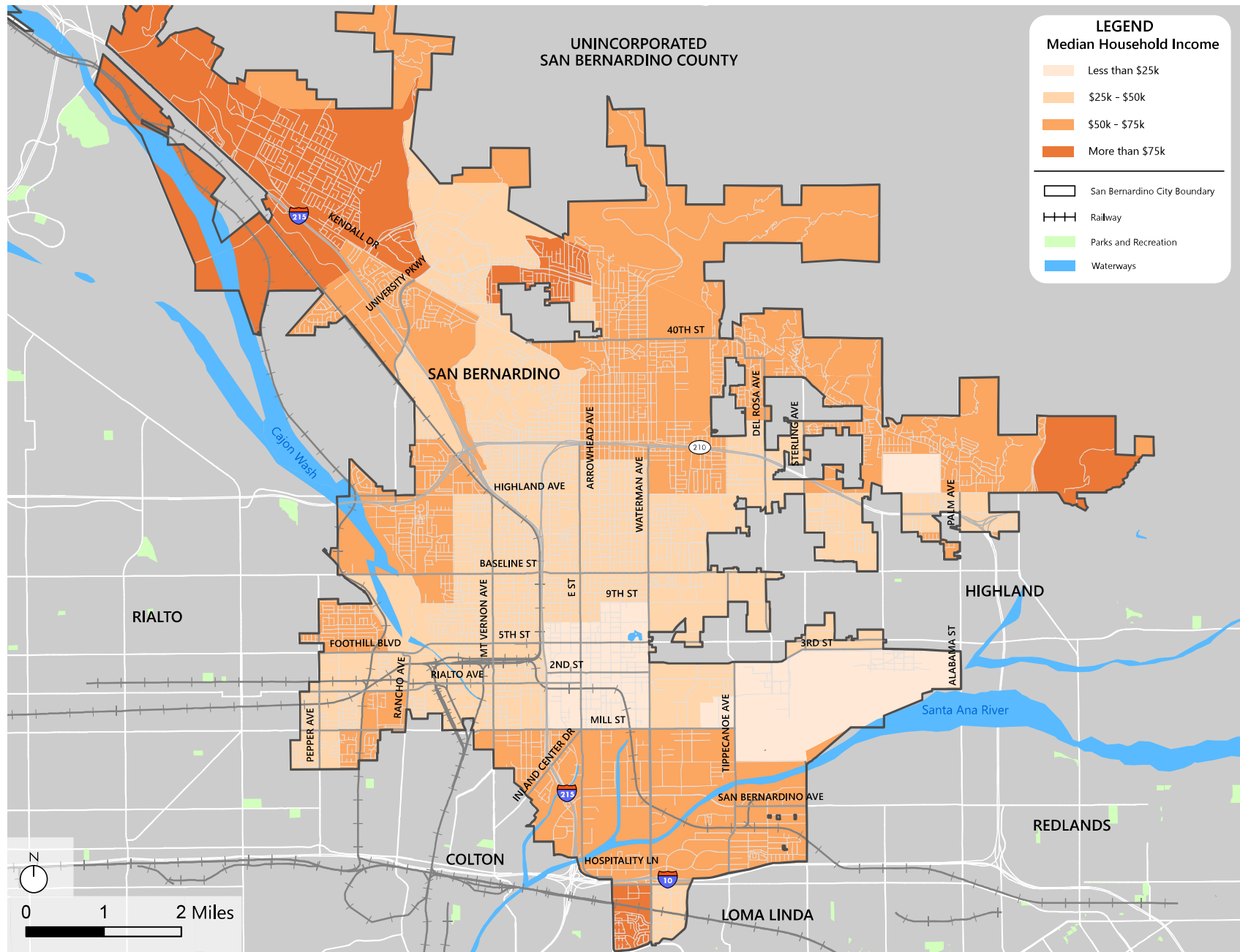
Source: 2018, US Census Population Estimates, American Community Survey

Table E-5. Commute Time of Residents

Time	Percent
< 15 Minutes	23.2%
15 – 29 Minutes	41.4%
30 – 44 Minutes	21.2%
45 Minutes or More	14.3%

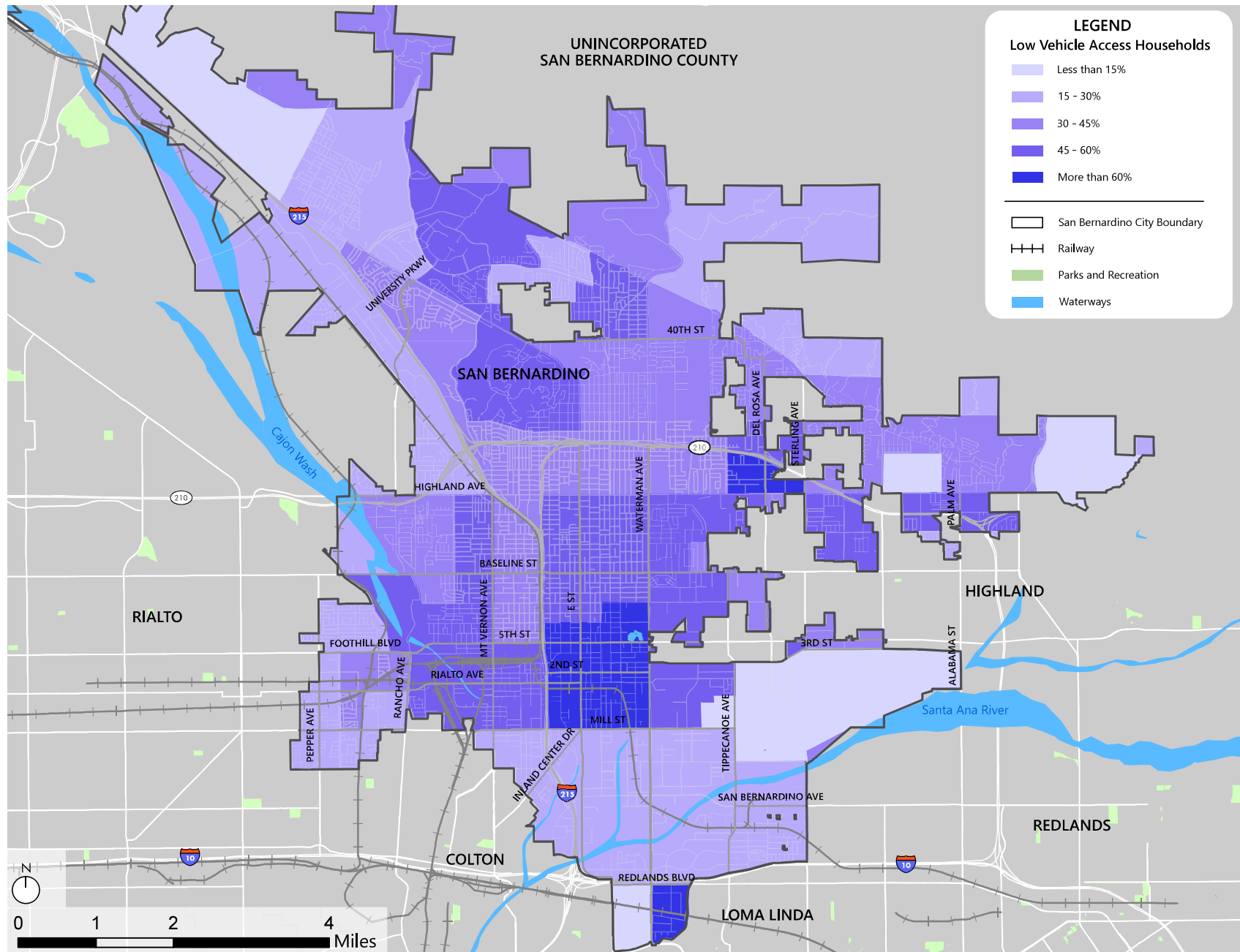
Source: 2018, US Census Population Estimates, American Community Survey

Figure E-1. Median Household Income in San Bernardino



Source: 2018, US Census Population Estimates, American Community Survey

Figure E-2. Limited Vehicle Households in San Bernardino



Source: 2018, US Census Population Estimates, American Community Survey

COLLISION ANALYSIS

Collision data from January 2015 to December 2019 was obtained from UC Berkeley's Transportation Injury Mapping System (TIMS). Between 2015 to 2019, a total of 735 collisions that involved pedestrians and bicyclists were reported in the City of San Bernardino. Of these, 527 were pedestrian-involved and 208 were bicyclist-involved. These collisions accounted for approximately 11% of all collisions within the 5-year time period.

The California Office of Traffic Safety (OTS) develops rankings for comparison of traffic safety statistics between cities with similar-sized populations. The OTS provides statistics based on rates of victims killed and injured per "1,000 daily-vehicle-miles-of-travel", per "1,000 average population", and groups cities based on population. The City of San Bernardino is ranked in a 59-city group (OTS Group B) classified by populations between 100,001 and 250,000. According to the 2018 OTS report, of the 59 California cities, San Bernardino ranked 40th based on average population for bicyclist-involved collisions and 38th for bicyclist under 15-years-old -involved collisions. San Bernardino ranks 19th in Group B for total fatal and injury in all collisions. Number 1 in the rankings is the highest, or "worst" and 59 in the rankings is the lowest or "best".

PEDESTRIAN-INVOLVED COLLISION HOTSPOTS

Of the 527 pedestrian-involved collisions, approximately 33% occurred along five different corridors. The top five pedestrian-involved collision corridors are:

1. Highland Avenue – 60 collisions
2. Baseline Street – 42 collisions
3. Waterman Avenue – 40 collisions
4. Arrowhead Avenue – 17 collisions
5. 5th Street – 16 collisions

BICYCLIST-INVOLVED COLLISION HOTSPOTS

Of the 208 bicyclist-involved collisions, 30% occurred on five different corridors. The top five corridors where bicyclist-involved collisions occurred are:

1. Baseline Street – 18 collisions
2. Ninth Street – 15 collisions
3. Highland Avenue – 12 collisions
4. Sierra Way – 11 collisions
5. Tippecanoe Avenue – 7 collisions



Table E-6. Summary of total pedestrian and bicycle collisions and injury status of victims involved

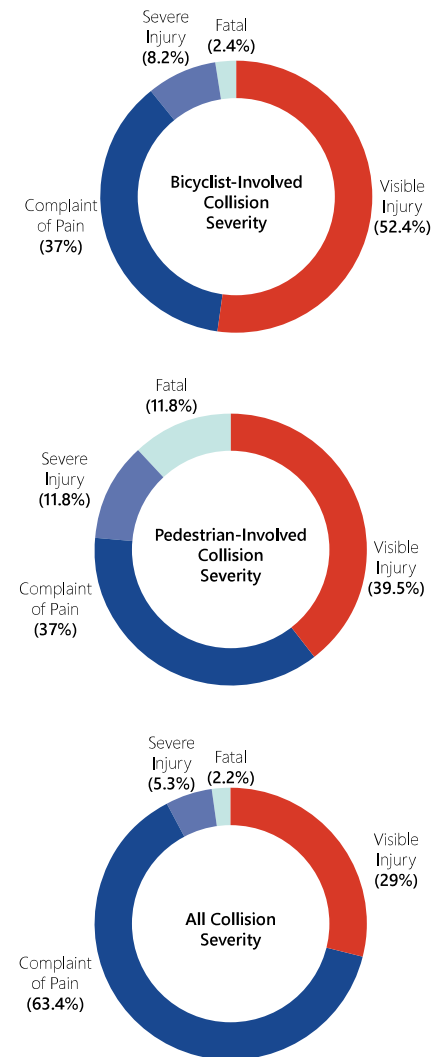
Year	Bicyclist-Involved			Pedestrian-Involved			Total Collisions
	Fatal	Injury	Total	Fatal	Injury	Total	
2015	0	52	52	12	91	103	155
2016	0	44	44	12	78	90	134
2017	4	41	45	14	106	120	165
2018	0	41	41	10	83	93	134
2019	1	25	26	14	107	121	147
Total	5	203	208	62	465	527	735

Source: Transportation Injury Mapping System (TIMS) 2015-2019

COLLISIONS BY SEVERITY

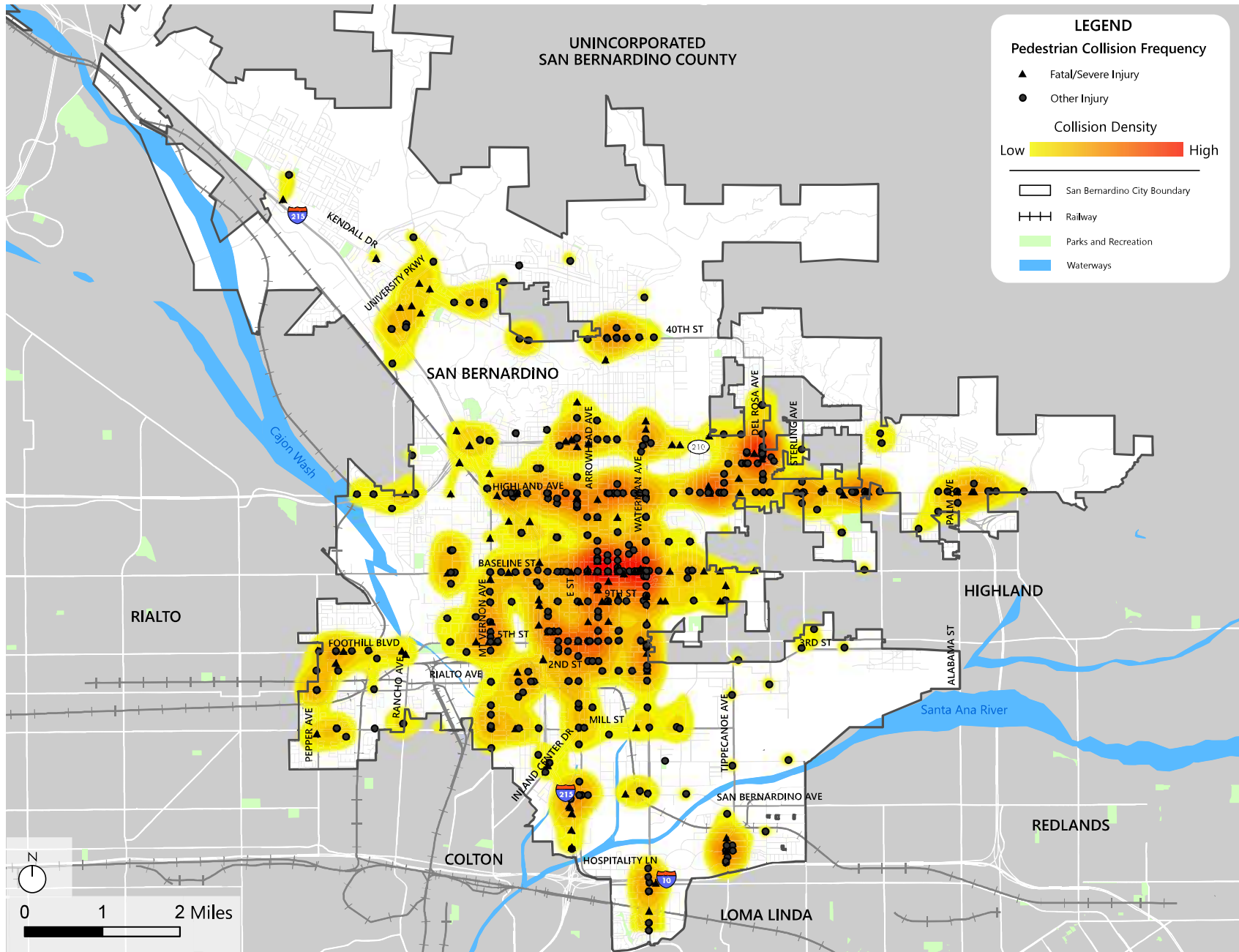
Approximately 24% of all pedestrian-involved collisions resulted in a fatality or a severe injury, while approximately 11% of bicycle-involved collisions and 8% of total collisions citywide (including non-active transportation collisions) resulted in a fatality or a severe injury. In the collision data time frame, the proportion of pedestrian-involved collisions with fatal or severe injury is two times more than those of bike-involved collisions.

Figure E-3. Pedestrian and Bicyclist-Involved Collision Severities



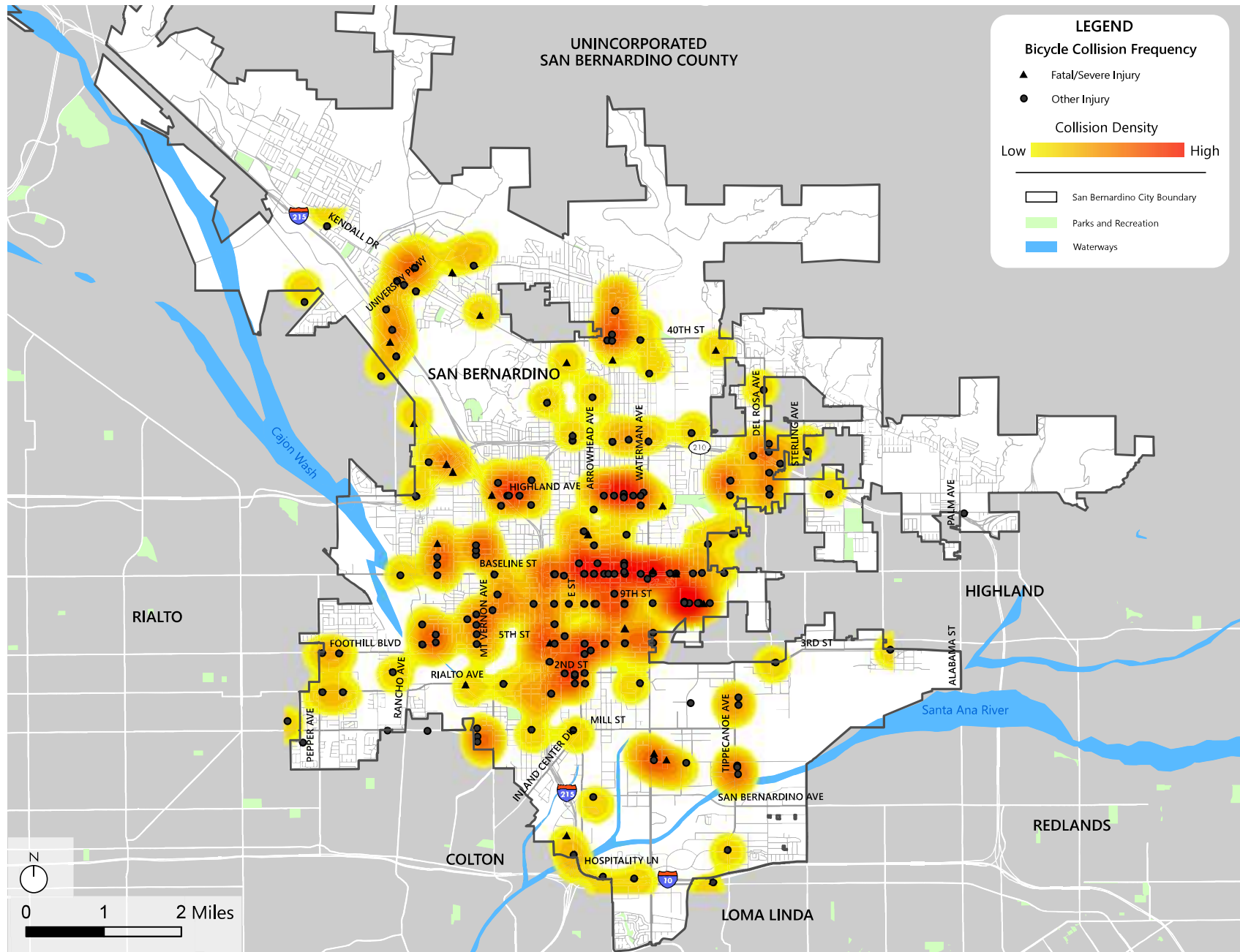
Source: Transportation Injury Mapping System (TIMS) 2015–2019

Figure E-4. Pedestrian-involved collision hotspots in San Bernardino



Source: Transportation Injury Mapping System (TIMS) 2015-2019

Figure E-5. Bicyclist-involved collision hotspots in San Bernardino



Source: Transportation Injury Mapping System (TIMS) 2015-2019

Table E-7. Collisions by Time of Day

	12:00 AM – 2:59 AM	3:00 AM – 5:59 AM	6:00 AM – 8:59 AM	9:00 AM – 11:59 AM	12:00 PM – 2:59 PM	3:00 PM – 5:59 PM	6:00 PM – 8:59 PM	9:00 PM – 11:59 PM
Vehicle	6%	4%	11%	12%	17%	22%	17%	11%
Bicycle	2%	3%	9%	14%	20%	23%	17%	12%
Pedestrian	4%	5%	8%	8%	11%	17%	29%	18%

Source: Transportation Injury Mapping System (TIMS) 2015-2019

COLLISIONS BY TIME OF DAY AND DAY OF THE WEEK

Between 2015 to 2019, nearly 25% of bicyclist-involved collisions occurred between 3:00 PM and 6:00 PM. The most prevalent pedestrian-involved collisions occurred after 6:00 PM. Vehicle-only collisions followed a similar temporal trend as bicyclist-involved collisions.

On average, bicyclist and pedestrian-involved collision rates during the weekdays were 1.3 times higher than on weekend days. Pedestrian-involved collisions declined on weekends with the lowest rate on Sunday. Bicyclist-involved collisions followed a constant trend throughout the week with a peak on Wednesday.

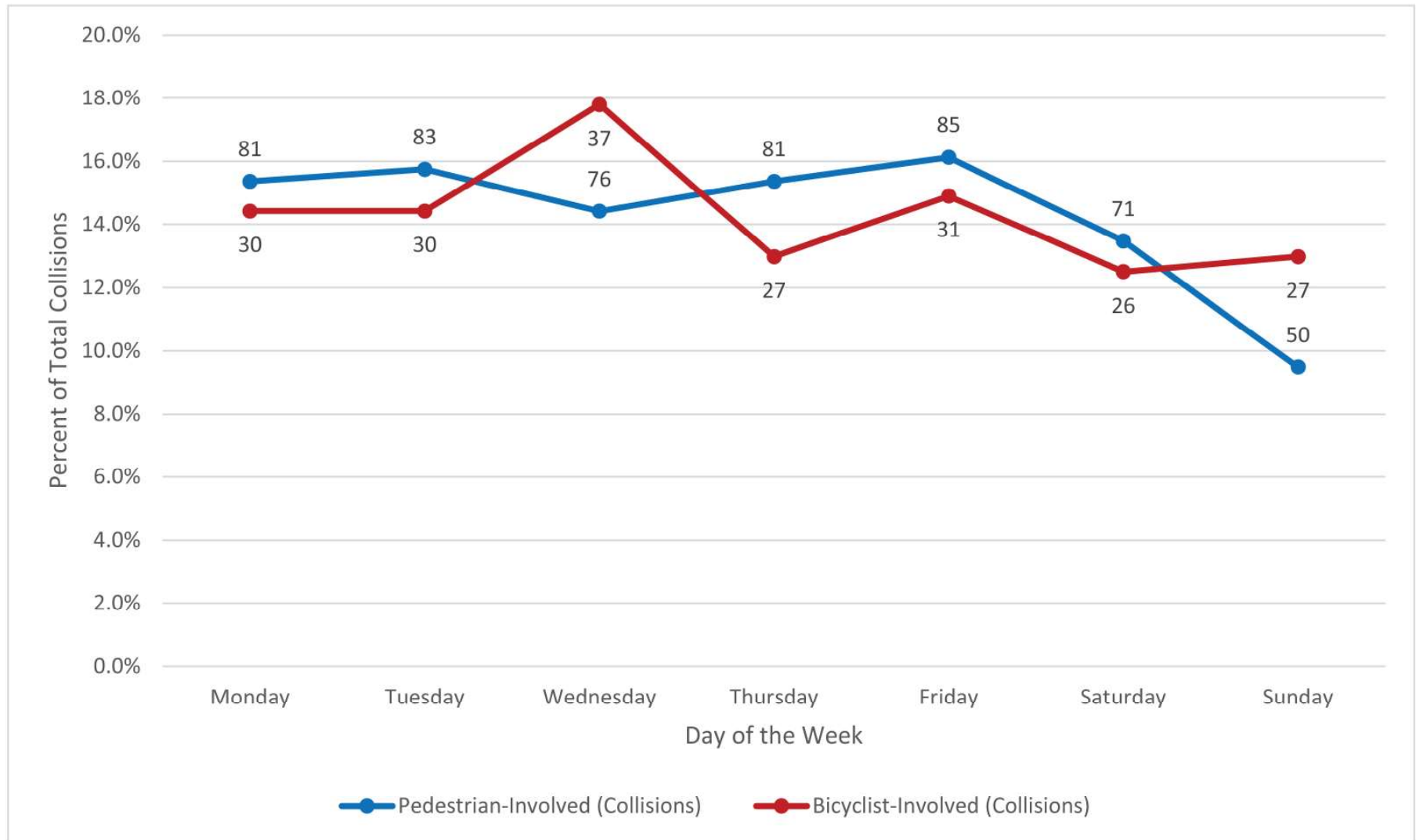
Higher bicyclist- and pedestrian-involved collision rates during weekdays are supported by the higher volume of trips to and from school and work.

COLLISIONS BY PRIMARY COLLISION FACTOR (PCF VIOLATION CATEGORY)

The traffic law violation that likely caused a collision to occur is classified as the Primary Collision Factor (PCF). Of the 527 pedestrian-involved collisions, the pedestrian was at fault 50% of the time. This was likely a result of a pedestrian violating the vehicle’s right-of-way. Collisions where the motorist was at fault were likely due to the motorist not yielding to the pedestrian right-of-way and turning improperly.

Of the 208 bicyclist-involved collisions, the bicyclist was at fault 57% of the time. This was a result of not properly yielding to the automobile right-of-way, not abiding to traffic signals and signs, and riding on the wrong side of the road.

Figure E-6. Collisions by Day of the Week



Source: Transportation Injury Mapping System (TIMS) 2015-2019

Table E-8. Primary Collision Factors (PCF) for Pedestrian-Involved Collisions

Primary Collision Factor (PCF)	Total	% of Total
Pedestrian Violation	275	52.6%
Pedestrian ROW	87	16.6%
Unsafe Speed	34	6.5%
Improper Turning	32	6.1%
Unknown/Blank	22	4.2%
Other Improper Driving	15	2.9%
Traffic Signals & Signs	13	2.5%
Driving/Bicycling Under the Inf.	11	2.1%
Other Than Driver	10	1.9%
Unsafe Starting or Backing	9	1.7%
Automobile ROW	5	1.0%
Improper Passing	3	0.6%
Other Hazardous Violation	2	0.4%
Wrong Side of Road	2	0.4%
Impeding Traffic	2	0.4%
Other Equipment	1	0.2%

Source: Transportation Injury Mapping System (TIMS) 2015-2019

Table E-9. Primary Collision Factors (PCF) for All Bicyclist-Involved Collisions

Primary Collision Factor (PCF)	Total	% of Total
Wrong Side of Road	49	23.8%
Traffic Signals & Signs	37	18.0%
Automobile ROW	32	15.5%
Improper Turning	28	13.6%
Unsafe Speed	22	10.7%
Unknown/Blank	11	5.3%
Pedestrian Violation	10	4.9%
Pedestrian ROW	4	1.9%
Improper Passing	3	1.5%
Other Hazardous Violation	2	1.0%
Unsafe Lane Change	2	1.0%
Other Than Driver	2	1.0%
Other Improper Driving	2	1.0%
Unsafe Starting or Backing	1	0.5%
Lights	1	0.5%
Following Too Closely	1	0.5%
Brakes	1	0.5%

Source: Transportation Injury Mapping System (TIMS) 2015-2019

COLLISION BY CRASH TYPE

Analyzing the collision crash type is valuable for understanding the initial impact of a collision and its involved parties. The top bicyclist-involved collision type was broadside (32%), which is classified as a T-Bone or side collision, often resulting from improper lane changes, failure to yield to traffic signals and signs, speeding, improper turning, and/or improper passing.

More than 86% of all pedestrian-involved collisions were classified as a vehicle/pedestrian collision. This collision

type is of broad stature, as it does not denote the specifics of the impact between the motorist and the pedestrian. The pedestrian was at fault in 265 of the 527 collisions, or 50% of the time. Of the pedestrian at fault collisions, 234 (88%) had the vehicle/pedestrian collision type designation. Considering the pedestrian was at fault in a majority of the collisions with this designation, we can assume that the pedestrian was improperly yielding to the automobile right-of-way or improperly using existing pedestrian facilities (walking in the road, crossing at the midblock, etc.).

Table E-10. Collision Types for Bicyclist-Involved Collisions

Primary Collision Factor (PCF)	Total	% of Total
Broadside	67	32.2%
Vehicle/Pedestrian	52	25.0%
Other	30	14.4%
Head-On	20	9.6%
Sideswipe	18	8.7%
Rear-End	16	7.7%
Not Stated	3	1.4%
Hit Object	2	0.9%

Source: Transportation Injury Mapping System (TIMS) 2015-2019

Table E-11. Collision Types for Pedestrian-Involved Collisions

Crash Type	Total	% of Total
Vehicle and Pedestrian	456	86.5%
Head-On	30	5.6%
Sideswipe	22	4.2%
Broadside	6	1.1%
Rear-End	5	0.9%
Hit Object	3	0.6%
Not Stated	3	0.6%
Other	2	0.4%

Source: Transportation Injury Mapping System (TIMS) 2015-2019

PEDESTRIAN-INVOLVED COLLISIONS BY PEDESTRIAN ACTION

Roughly 83% of pedestrian-involved collisions occurred because the pedestrian was crossing outside of a crosswalk or was using the shoulder of the road rather than a designated sidewalk, or if sidewalk was nonexistent. Of these, 59% violated California Vehicle Code (CVC) 21954, which states that “Every pedestrian upon a roadway at any point other than within a marked crosswalk or within an unmarked crosswalk at an intersection shall yield right-of-way to all vehicles upon the roadway so near as to constitute an immediate hazard.” In addition, of the pedestrian-involved collisions occurring due to the pedestrian not using the crosswalk or walking on the shoulder of the road, 102 (31%) resulted in a fatality or a severe injury.

Considering that more than half of pedestrian-involved collisions are as a result of improper usage of pedestrian facilities, as defined by the “Crossing Not at Crosswalk” and “In Road, Using Shoulder” pedestrian actions, the enhancement and/or expansion of existing pedestrian infrastructure could potentially reduce the amount of pedestrian-involved collisions.

Table E-12. Pedestrian-Involved Collisions by Pedestrian Action and Severity

Pedestrian Action	Count	Percent	Fatal/Severe Injury Count	Fatal/Severe Injury Percent
Crossing Not at Crosswalk	228	43.3%	60	48.8%
In Road, Including Shoulder	106	20.1%	42	34.1%
Using Intersection Crosswalk	144	27.3%	17	13.8%
Not in Road	37	7.0%	4	3.25%
Not Stated	9	1.7%	0	0.0%
Crossing in Crosswalk Not at Intersection	3	0.6%	0	0.0%

Source: Transportation Injury Mapping System (TIMS) 2015-2019

HEALTH

DISADVANTAGED COMMUNITIES

The City of San Bernardino is home to approximately 215,000 residents and a large percentage live in areas designated as a “Disadvantaged Community”. Census tracts are quantified as a disadvantaged community through the CalEnviroScreen 3.0 tool. Developed by the California Environmental Protection Agency (CalEPA), CalEnviroScreen 3.0 is an index that utilizes environmental and socio-economic data to identify California communities that are disproportionately burdened by, and vulnerable to, multiple sources of pollution. Census tracts that score above the 75th percentile are designated as California’s disadvantaged communities.

The City has 48 census tracts fully within the city boundary and 36 census tracts (75%) score as a disadvantaged community. In addition, 21 census tracts (44%) score in the 90 percentile for disadvantaged communities, and together the city ranks in the 82nd percentile among all census tracts within California.

DIABETES AND HEART DISEASE RATES

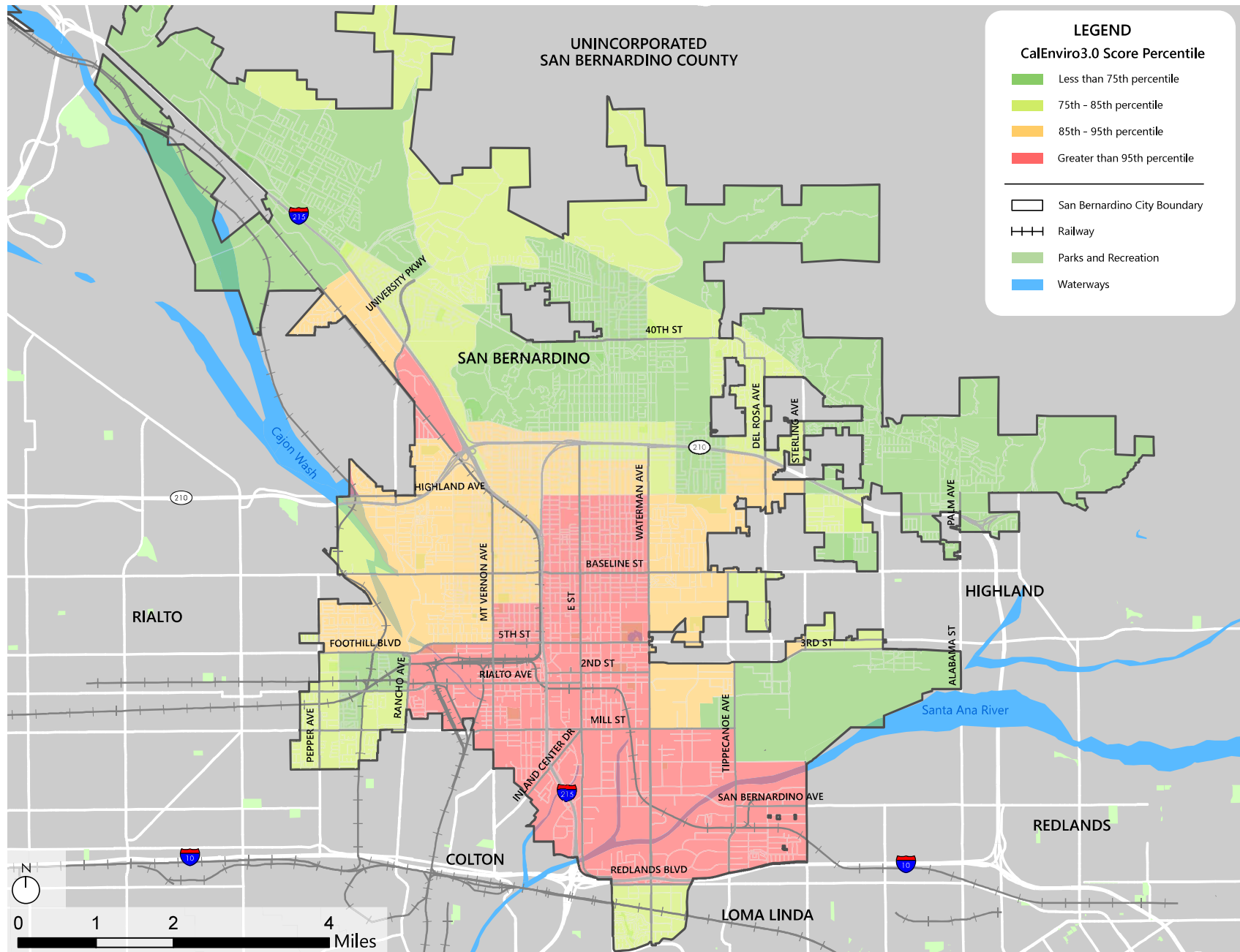
Through more active transportation facilities and programs, the City can enhance opportunities for physical activities. This can help reduce the prevalence of diabetes and heart disease in San Bernardino. Diagnosed diabetes and heart disease scores measure the number of adults over the age of 18 who report having ever been told by a medical professional that

they have diabetes or heart disease. The City has an adult diabetes rate of approximately 11%, which is below the County rate of 14.6% (SCAG 2019 Local Profiles – San Bernardino). Additionally, San Bernardino has an adult heart disease rate of 4.8%, significantly lower than the County’s rate of 7.6% (SCAG 2019 Local Profiles – San Bernardino).

ASTHMA RATE

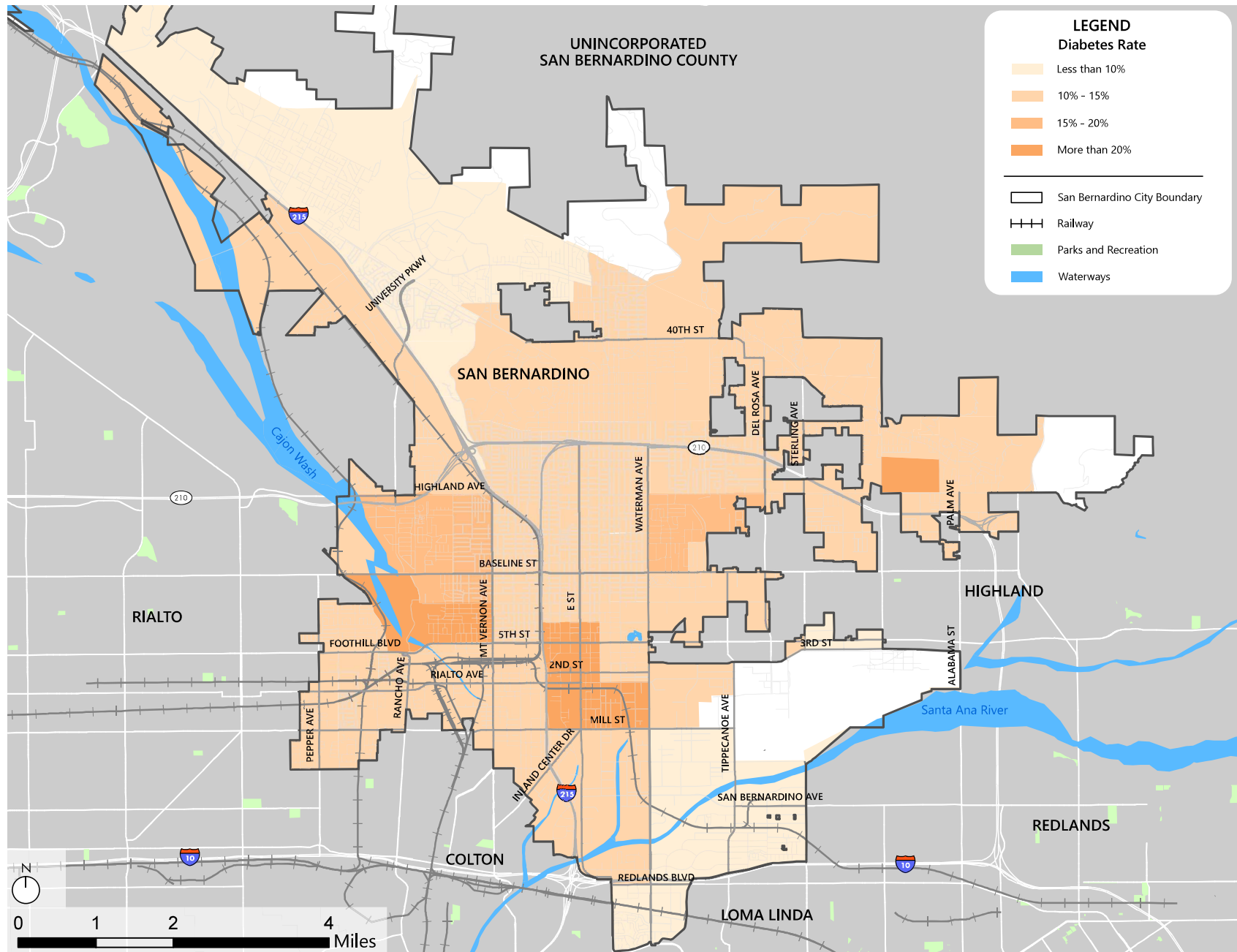
Opportunities for more active transportation activities to take place can help replace trips taken by vehicles which can help improve air quality conditions. This in turn can help reduce chronic diseases such as cardiovascular disease and asthma where poor air quality conditions are major causes of the diseases (U.S. EPA, Health and Environmental Effects of Particulate Matter (PM)). Poor air quality conditions resulting from vehicle emissions and toxic releases from facilities have a strong correlation with increased rates of asthma. The City of San Bernardino has an asthma rate of 13.1%, slightly lower than San Bernardino County’s rate of 15.1% (SCAG 2019 Local Profiles – San Bernardino).

Figure E-7. Disadvantaged Communities



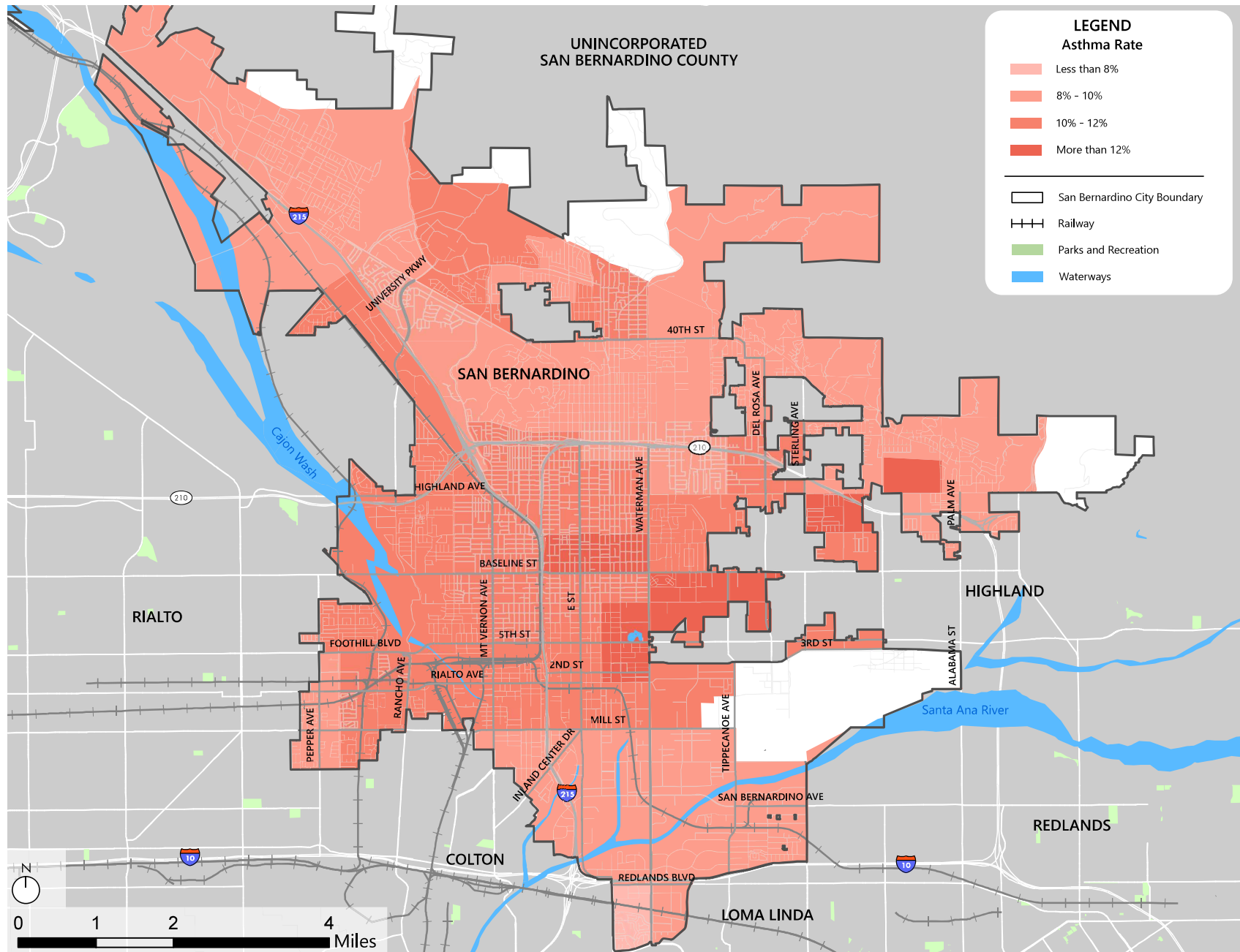
Source: CalEnviroScreen 3.0

Figure E-8. Percentile of Areas with Diabetes



Source: Healthy Places Index

Figure E-9. Percentile of Areas with Asthma



Source: Healthy Places Index

ENVIRONMENT AND INFRASTRUCTURE

URBAN FORM AND LAND USE

The City of San Bernardino's land uses are mainly comprised of residential, public and open spaces, and specific plan land uses. Specific plan land uses form the largest portion of land use zones and are located in the north and northwest corners of the city. The specific plans include the university (California State University San Bernardino) main campus, University Hills, Paseo Las Placitas, Rancho Palma, and Waterman and Baseline. The land uses within the specific plan are largely single-family residential with some commercial and civic functions.

Commercial and multi-family residential land use zones are located predominantly in the central and southern parts of the city and along the Interstate 10 (I-10) and Interstate 210 (I-210) corridors. Industrial zones are located in the western and southern parts of the city, close to the San Bernardino International Airport and the BNSF rail yard.

Note: As of this writing, the City is updating its General Plan. As a result, some future land uses may change.

KEY ATTRACTORS

Key attractors in the city can be categorized into four general groups: civic facilities, parks, schools, and shopping centers. Some of the biggest attractors in the city include California State University San Bernardino, San Manuel Stadium, and Downtown San Bernardino.

The downtown area hosts many civic institutions such as the San Bernardino Superior Court and Justice Facility, City Hall, Social Security Administration, and San Bernardino Transit Center. Shopping Centers on the other hand are located further away from the downtown core of the city and are located along major intersecting corridors and near the Interstate 10 (I-10) and Interstate 210 (I-210) freeways. The proximity of the shopping centers, for example at East Hospitality Lane and Tippecanoe Avenue, houses large big box stores including Costco, Sam's Club, Home Depot, and Best Buy provide ease of access to the freeways and are also only a few miles away from neighboring cities including Loma Linda and Redlands. Schools and parks are in general distributed within or close to residential zoning. Overall, most of the key attractors seem to be evenly distributed throughout the city, but are scarce in the south and southeast areas of the city where industrial land uses and the airport are located.

EXISTING BIKEWAY FACILITIES

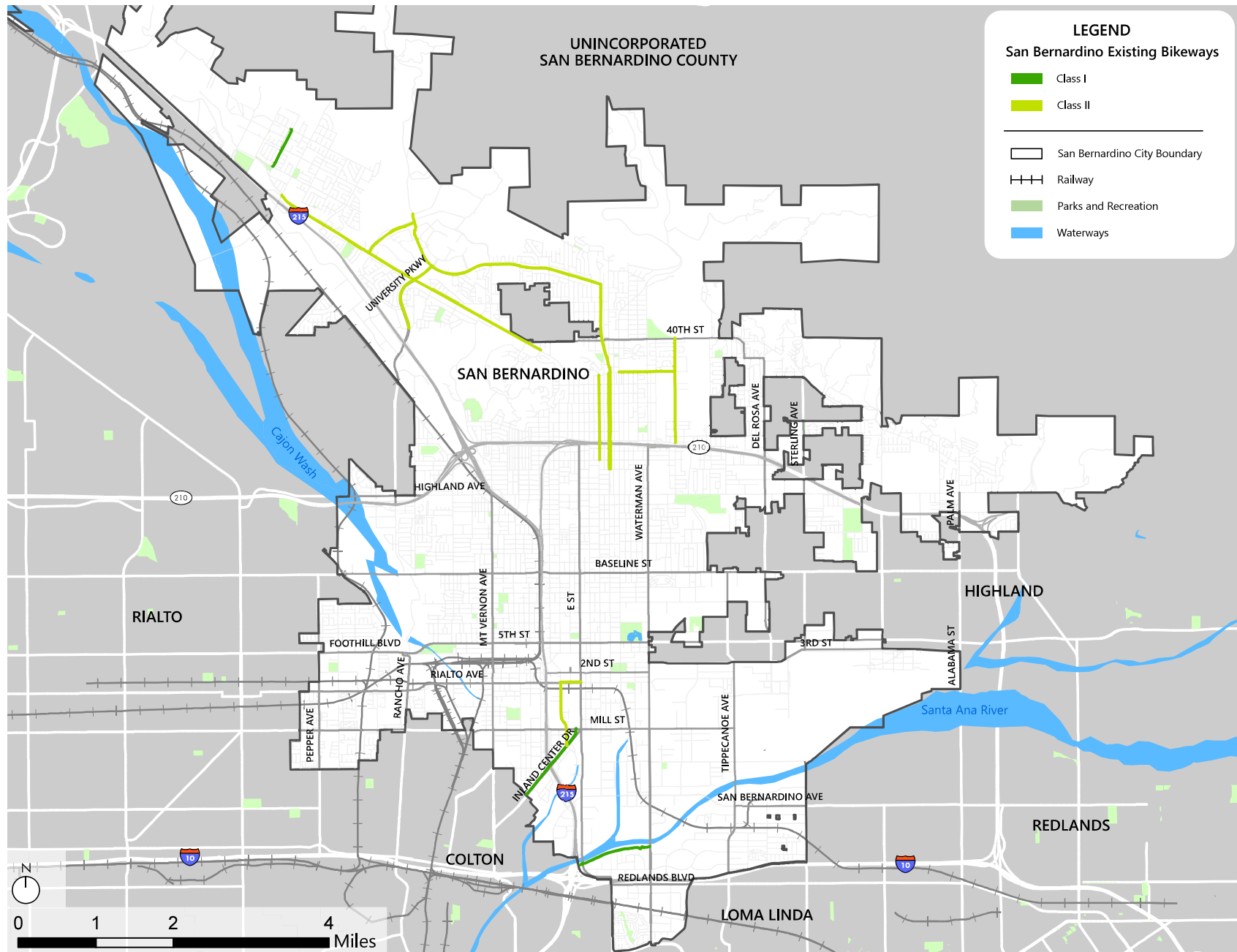
The City of San Bernardino's existing bike infrastructure consists of 2.56 miles of Class I Bike Paths and 16.5 miles of Class II Bike Lanes. The existing bike facilities within the City boundary are as follows:

- Class II Bike Lane on Kendall Drive – 3.90 miles; from Palm Avenue to Shandin Hills Crest
- Class II Bike Lane on Northpark Boulevard – 3.00 miles; from Campus Parkway to Electric Avenue
- Class II Bike Lane on Mountain View Avenue – 2.55 miles; from Electric Avenue/38th Street to 27th Street
- Class II Bike Lane on Valencia Avenue – 1.34 miles; from 40th Street to 30th Street
- Class II Bike Lane on Arrowhead Avenue – 1.09 miles; from Thompson Place to 28th Street
- Class II Bike Lane on Electric Avenue – 1.08 miles; from Northpark Boulevard to Mountain View Avenue/38th Street
- Class II Bike Lane on University Parkway – 1.01 miles; from Northpark Boulevard to Varsity Avenue
- Class II Bike Lane on G Street – 0.83 mile; from Rialto Avenue to Inland Center Drive
- Class II Bike Lane on Campus Parkway – 0.73 mile; from Kendall Drive to Northpark Boulevard
- Class II Bike Lane on Parkdale Street – 0.72 mile; from Sierra Way to Valencia Avenue
- Class II Bike Lane on Rialto Avenue – 0.26 mile; from G Street to E Street
- Class I Bike Path (Inland Center Drive Bike Path) – 1.07 miles; from south city limits to Mill Street
- Class I Bike Path (Santa Ana River Trail) – 0.95 mile; from west city limits to Waterman Avenue
- Class I Bike Path (Chestnut Avenue Bike Path) – 0.54 mile; from Ohio Avenue to Irvington Avenue

The most prominent existing bikeway facilities are the Class I Bike Path on Inland Center Drive and the Class II Bike Lanes and connecting routes along Kendall Drive and Northpark Boulevard. The Inland Center Drive Class I Bike Path and the connecting Class II Bike Lanes along G Street and Rialto Avenue provide important bike access from the downtown San Bernardino Transit Center to San Manuel Stadium, National Orange Show Event Center, Inland Center Mall, and within a few blocks to San Bernardino Valley College and the City of Colton. The City is also the current northeastern terminus of the Santa Ana River Trail Class I Bike Path which runs from the Hidden Valley Wildlife Refuge in Riverside County through the cities of Riverside and Colton to Waterman Avenue in San Bernardino with planned extensions to the City of Redlands in the east and the Orange County Santa Ana River Trail to the southwest.

The existing bikeway facilities along Kendall Drive and Northpark Boulevard provide the local east-west connection to California State University San Bernardino. Electric Avenue and Mountain View Avenue provide the local southern connection to California State University San Bernardino from just south of I-210 going north to Northpark Boulevard. There is a connectivity gap in central San Bernardino, as well as missing links between the transit hub with the university in the north and the Santa Ana River Trail in the south.

Figure E-10. Existing Bikeway Facilities



Source: City of San Bernardino

EXISTING PEDESTRIAN FACILITIES – SIDEWALK INFRASTRUCTURES

The City’s existing sidewalk infrastructure is evenly spread throughout the city. The majority of the existing sidewalk infrastructure is located in the middle and eastern portion of the City where residential and commercial zones are located. Missing sidewalks are located primarily on more rural stretches of road in the northern half of the city leading up to the base of the mountains. Other areas missing sidewalk infrastructure are located in industrial zones close to the San Bernardino International airport.

According to data retrieved from the Comprehensive Pedestrian Sidewalk Inventory Plan, the City needs 7,948,224 feet of sidewalk. The City currently has 5,842,836 feet of existing sidewalk, which represents 73.51% of the total sidewalk infrastructure needed. A little over a quarter (26.49%) or 2,105,388 feet of the city’s roadway could benefit from having sidewalk infrastructure.

Table E-13. Sidewalk Length in the City of San Bernardino

Sidewalk (ft.)	No Sidewalk (ft.)	Grand Total (ft.)
5,842,836	2,105,388	7,948,224
73.51%	26.49%	100%

Source: Comprehensive Pedestrian Sidewalk Inventory Plan

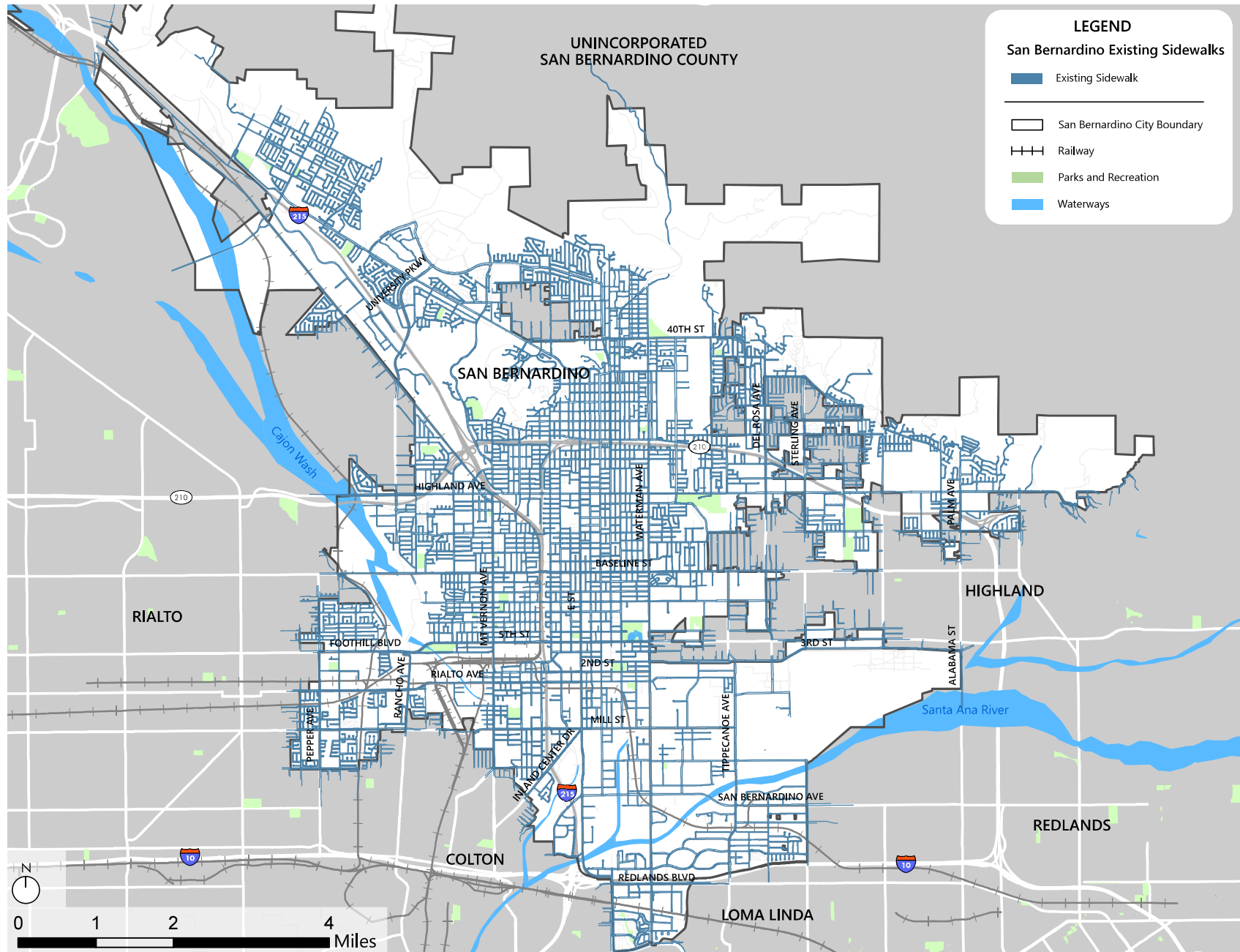
TRANSIT CONNECTIVITY

Active transportation is an important mode of transportation for community members to reach to and from transit facilities. It provides a critical alternative solution to what is commonly known as the “first mile/last mile” problem for transit. The problem refers to 1) how a traveler gets to a transit facility from their origin location, and 2) after they get off transit, how do they reach their final destination. Transit users in the City have a variety of transit services to choose from. Bus transit services are provided by Omnitrans, Riverside Transit, Mountain Transit, Pass Transit, and Victor Valley Transit Agency. Meanwhile, Metrolink offers commuter rail services to regional destinations. Each bus transit provider connects the City to multiple counties and cities within Southern California. Omnitrans provides intra-city connectivity and services to adjacent cities, as well as the greater San Bernardino County.

SAN BERNARDINO TRANSIT CENTER

The San Bernardino Transit Center is a major first/last-mile connectivity center for intra-city and regional bus and rail transit services by many regional transit agencies. The Metrolink San Bernardino Line and Inland Empire-Orange County Line stop at the transit center. The San Bernardino Transit Center is also the future terminus for the commuter rail line Arrow and will run between the transit center in downtown San Bernardino and the University of Redlands in Redlands, CA.

Figure E-11. City of San Bernardino Existing Sidewalks



Source: Comprehensive Pedestrian Sidewalk Inventory Plan

Table E-14. Omnitrans transit routes in San Bernardino

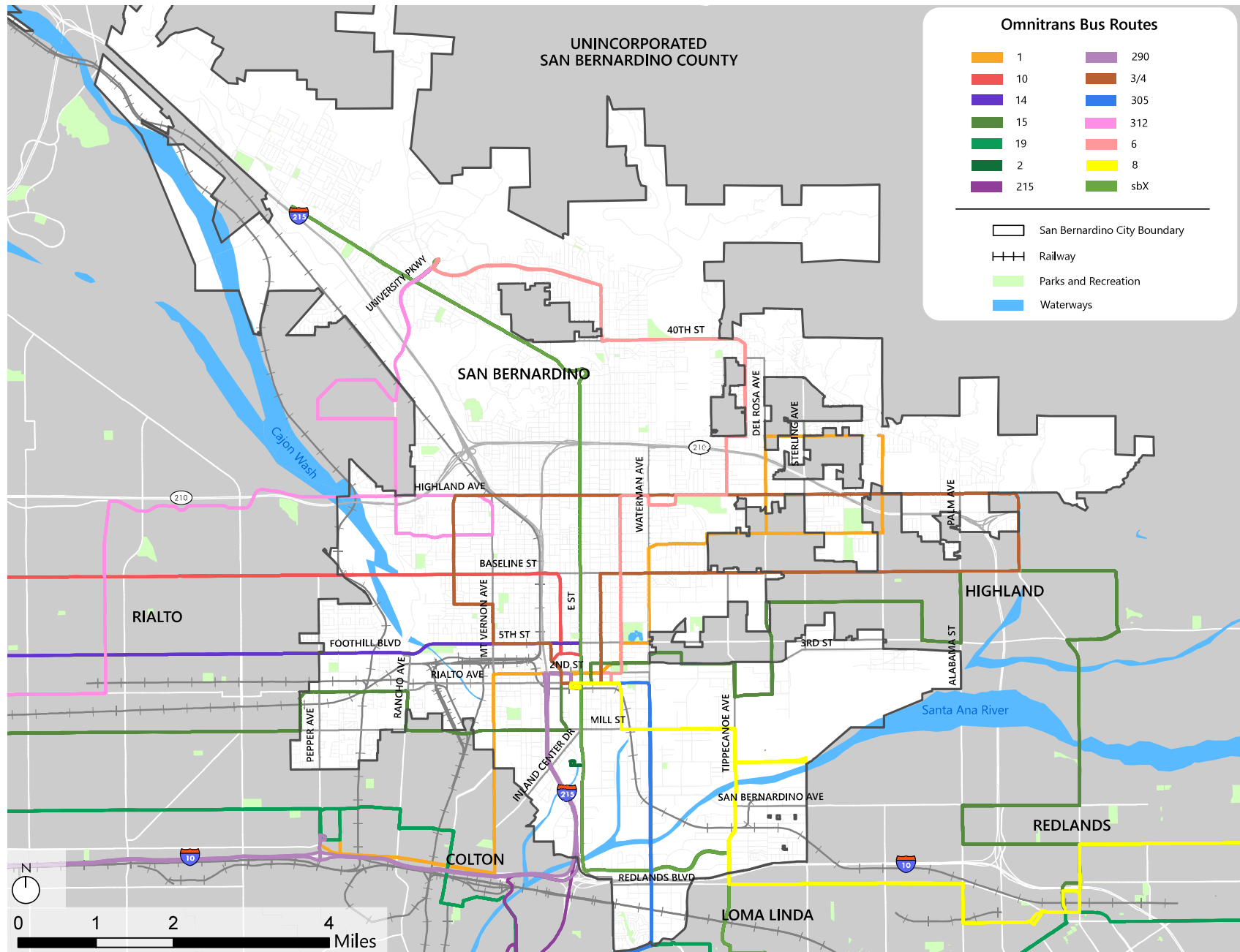
Line/Route	Cities Serviced From San Bernardino	Major Destinations
Omnitrans		
SbX Green Line	San Bernardino, Loma Linda	San Bernardino Transit Center, Inland Center Mall, Cal State San Bernardino, Loma Linda University, and Medical Center
Route 1	San Bernardino, Colton, Highland	Arrowhead Regional Medical Center, Valley College, San Bernardino Transit Center, and Pacific High School
Route 2	San Bernardino, Loma Linda	Cal State San Bernardino, Hospitality Lane shopping centers, VA Hospital, Inland Center Mall, and San Bernardino Transit
Route 3/4	San Bernardino, Highland	San Bernardino Transit Center, San Bernardino Medical Center, State hospital, and San Bernardino County Government Center/Court House
Route 6	San Bernardino, Sierra Way	Cal State San Bernardino, Del Rosa community, San Bernardino Medical Center, and San Bernardino Transit Center
Route 8	San Bernardino, Redlands, Mentone, Yucaipa	San Bernardino Transit Center, Amazon Fulfillment Center, VA Hospital, University of Redlands, Redlands Mall, and Crafton Hills College
Route 10	San Bernardino, Fontana, Rialto	San Bernardino Transit Center, Arroyo Valley High School, Baseline Rd shopping, and Fontana Metrolink Transit Center
Route 14	San Bernardino, Fontana, Rialto	San Bernardino Transit Center, Foothill Blvd shopping, and Fontana Metrolink Transit Center
Route 15	San Bernardino, Colton, Fontana, Highlands, Redlands, Rialto	Fontana Metrolink Transit Center, San Bernardino Transit Center, and Redlands Mall

Source: Omnitrans

Table E-14. (Continued) Omnitrans transit routes in San Bernardino

Line/Route	Cities Serviced From San Bernardino	Major Destinations
Omnitrans		
Route 215	San Bernardino, Colton, Riverside	Riverside Metrolink, Cooley Ranch shopping, and San Bernardino Transit Center
Route 290	San Bernardino, Colton, Montclair, Ontario	San Bernardino Transit Center, Arrowhead Medical Center, Ontario Mills, Montclair Transit Center
Route 305	San Bernardino, Colton, Grand Terrace	Barton Rd shopping, Waterman Ave shopping, and San Bernardino Transit Center
Route 312	San Bernardino, Fontana, Muscoy, Rialto	Fontana Metrolink Transit Center Amazon Fulfillment Center, Renaissance Marketplace, and Cal State San Bernardino

Figure E-12. Omnitrans Routes Through the City of San Bernardino



Source: Omnitrans

PROJECT SURVEY FINDINGS

A project survey was administered to gain insights on walking and biking behaviors and preferences in the City of San Bernardino. The survey was conducted between February and July 2021 through the San Bernardino project website. It was available in both English and Spanish to allow participation from the City's large Spanish-speaking population. Collectively, 64 surveys were received, 63 in English and 1 in Spanish.

CHARACTERISTICS OF SURVEY RESPONDENTS

Of the 64 surveys collected, 82.5% of respondents live in the City of San Bernardino. Approximately a quarter (25.4%) of respondents were between the ages of 35-44, and approximately half (48.4%) identified as "Hispanic, Latino, Latina, or Latinx." Over half (52.4%) were female respondents.

Respondents live and work in various areas of San Bernardino. The highest number of respondents live in the Verdemont neighborhood (13.7%), followed by the Del Rosa neighborhood (9.8%). Almost a third (30.8%) live in the 7th Council Ward district and one fifth (19.2%) reside in the 5th Council Ward. Of the respondents, approximately a third (30.4%) work in the 1st Council Ward and another 26.1% have employment in the 5th Council Ward.

TRAVEL BEHAVIOR

Survey respondents walk frequently to get around the city. Of the 38 respondents who answered the question related to travel behavior, 77.8% walk daily, 78.9% walk several times a week, and 64.7% walk once or twice a week. (Respondents could select multiple answers to question). Conversely, the majority of respondents never bike or take transit (76.3% and 76.3%) respectively.

POPULAR DESTINATIONS FOR ACTIVE TRANSPORTATION

Respondents like to walk, bike, and take transit to many destinations in the city. Among the most popular destinations for walking include neighbor's, friend's, or relative's house (79.2%), parks or community centers (73.3%), and walking or biking trails (67.7%). The most popular destination for biking is walking or biking trails. Lastly, the most favorable destinations to take transit is to work (72.2%), retail/shopping centers (61.1%), and restaurants and bars (50%). (Respondents could select multiple answers to question).



REASONS FOR WALKING AND BIKING

Survey respondents offered many reasons for walking and biking in the city. The top three reasons that respondents walk are: to exercise or improve health (90.2%), to socialize with friends and neighbors (88%), and don't have access to a vehicle (83.3%). Meanwhile, the top three reasons for biking include preference to not drive (100%), save money (77.8%), and the desire to improve the environment (64.7%). (Respondents could select multiple answers to a question).

BEHAVIORS AND CHARACTERISTICS FOR TAKING TRANSIT

Of the respondents, about half (43.5%) reported they rarely or never use public transit, 11.3% of participants take the bus or ride the train to save money or due to convenience, and 6.5% do not have access to a car.

ACTIVE TRANSPORTATION INFRASTRUCTURE IMPROVEMENTS

Survey respondents expressed support for many types of active transportation infrastructure improvements. When asked about the kind of improvements that would encourage walking more in the City, respondents reported safer ways to cross streets (56.5%), better lighting at night (46%), and sidewalk connectivity (45.2%) as the top three improvements. More walking trails would encourage 46.8% of respondents to walk more. Additional bike trails/paths (41.3%), protected bike lanes (46%), and more regular bike lanes (39.7%) were reported as the top three improvements that would encourage respondents to bike more.

TRANSIT-RELATED IMPROVEMENTS

The top three encouragements that would encourage respondents to take transit include better security (36.5%), more shade at bus stops (31.7%), and more convenient ways to walk and bike to bus stop/transit station (30.2%). Respondents also showed interest in using transit more if there were more frequent buses or trains (30.2%), more lighting near bus stops (20.6%), and real-time bus arrival signage (20.6%).

PRIORITY FOR ACTIVE TRANSPORTATION IMPROVEMENTS

Most survey respondents reported that it is important for the City of San Bernardino to prioritize walking and biking improvements to create a safer environment for pedestrian and bicyclists (81%). In a close tie for second and third place, 66.7% of respondents reported it is important to improve the community's public health outcomes and reduce the impacts of driving on the environment, while 65.1% reported it is important to provide better access to jobs, transit, schools, parks, goods, and services without the need for a car. Of the five choices available in the question, the importance of having a local network of connected bicycle and pedestrian facilities, received the second lowest selection, with the least popular option being "other". (Survey respondents could select multiple options for this question.)