



CHAPTER 3:

# existing conditions

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**Chapter 3** covers existing conditions, including the existing framework of policies guiding the creation of this document and background information about the communities pertinent to planning for new improvements, such as existing land use, existing pedestrian and bicycle facilities, local activity centers, high collision locations, the County Maintained Road System (CMRS), and the region's thriving local arts community.

## 3.1. EXISTING PLANS & POLICIES

This section summarizes existing plans and policies and highlights areas of overlap with the Morongo Basin Active Transportation Plan. Plans specific to the incorporated and unincorporated communities in the Morongo Basin are detailed first followed by county-wide and regional documents.

### **Yucca Valley General Plan:**

The Town of Yucca Valley General Plan promotes a vision through establishing a set of community values that guide decisionmaking, including maintaining a small town atmosphere, balancing growth, and promoting efficient infrastructure.

The Circulation Element lays out a network-based approach to Complete Streets planning in the Town. The Town specifies that implementation measures shall include:

- Implementing a Trails System, starting with the Parks and Recreation Master Plan (2008)
- Developing a comprehensive bicycle network
- Completing pedestrian infrastructure, as appropriate, to provide safe and accessible pedestrian facilities in high-use area
- Coordinating with the Morongo Basin Transit Authority (MBTA) to provide safe and convenient transit service.

Relevant goals include:

- Policy C 1-2: Pursue funding, including updating the transportation impact mitigation fee program, to assist in implementing the transportation system by expanding its roadway capacity, pedestrian sidewalk facilities, bicycle facilities, and trail facilities
- Policy C 1-7: Encourage development designs that integrate multiple modes of access, including pedestrian, bicycle, and public transportation
- Policy C 1-8: Apply complete street strategies that accommodate pedestrian, bicycle, and transit modes whenever practicable and feasible
- Policy C 1-9: Require sidewalk improvements concurrent with new development where commercial and school uses are planned and where residential densities exceed two units per acre, or as required by the Planning Commission
- Policy C 1-12: Encourage MBTA to implement regional transportation solutions that reduce vehicle miles traveled and greenhouse gas emissions

### **Yucca Valley Parks & Recreation Master Plan:**

This plan recommends a local trail system that enhances recreational opportunities in Yucca Valley, including a map of proposed trails. One

policy item (Policy 16.3) recommended is to "Encourage pedestrian and bicycle linkages between residential and commercial uses by developing and designating both on-road and off-road bicycle trails." Other recommendations include developing trails on public right-of-ways, separating bicyclists from other users, and providing access to future developments by walking and biking. There is also interest in working with the County of San Bernardino for access to the regional trail system and establishing sustainable funding levels for bikeways.

### **Old Town Yucca Valley Specific Plan**

This specific plan was developed with the intent of improving the economic vitality and livability of the Old Town area, which is located around SR-62. The plan envisions Old Town as a pedestrian-friendly "Main Street" and provides for pedestrian-oriented development and measures to enhance pedestrian safety (3.3-Circulation Plan), and pedestrian and bike linkages to other areas of Yucca Valley.

### **Twentynine Palms General Plan:**

The Circulation element of the general plan addresses the movement of people, goods, and

resources through the community. Main goals of the element include providing for alternative forms of transportation and providing a trail system for health and recreational benefits.

Relevant Implementation Policies include:

- Implementation Policy CI-1.3: Develop alternate transportation routes where possible
- Implementation Policy CI-2.3: Construct pedestrian facilities near school sites, along major transportation corridors, in the downtown area, and along open space corridors
- Implementation Policy CI-2.5: Develop bicycle systems to enhance tourism and recreation opportunities

The Recreation Element of the general plan maintains that parks, open spaces, and recreation facilities contribute to the community's economic prosperity while improving health and creating opportunities for social interaction. It provides for a multi-purpose trail network that utilizes natural scenic areas while connecting to popular destinations. Relevant Implementation Policies include:

- Implementation Policy RE-2.3: Require dedication of rights-of-way for Class I off-street trails. Secure a minimum twenty-five (25) foot wide right-of-way for trails, with forty-four (44) to fifty (50) foot optimum. Require trail dedications and improvements from new developments
- Implementation Policy RE-2.8: Provide a comprehensive trails system that provides access, connectivity and circulation throughout the planning area, as well as providing a source for recreation activity
- Implementation Policy RE-2.12: Require bicycle parking facilities and storage for commercial and institutional facilities located along planned bikeway routes

- Implementation Policy RE-2.14: Coordinate with CalTrans on the provision of non-motorized transportation routes, facilities, and enhancements within the SR-62 right-of-way
- Twentynine Palms is working on Project Phoenix, a plan to build affordable housing and a community center in the downtown area of Twentynine Palms that has potential for recreational opportunities

### Joshua Tree Community Plan

The Joshua Tree community plan guides the future use and development of land within the community. The plan notes that residents articulate a desire for a more pedestrian-friendly setting in the downtown district, and a desire to improve overall pedestrian and bicycle circulation. Priorities mostly focus on safe routes for crossing and travelling along SR-62 by pedestrians and bicyclists. The following policies designate specific priorities as to active transportation improvements:

- JT/LU 2.2: Integrate pedestrian-friendly walkways and public transit stops into downtown areas and other areas such as schools, hospital and clinics, and shopping areas
- JT/CI 2.1: Provide pedestrian improvements in the downtown area to enhance safety, provide a high quality visitor experience, enhance the character of the area and reduce the need for vehicular travel. Work with Caltrans to provide a pedestrian crossing at Hallee Road and SR-62. Where feasible, separate pedestrian and bicycle traffic from vehicular traffic particularly along SR-62
- JT/CI 2.2: Maintain and improve existing sidewalks, and provide additional sidewalks along main, paved streets in the central district

- JT/CI 2.3: Encourage new commercial developments to provide convenient pedestrian, handicap, and bicycle access, and bicycle parking.
- JT/CI 2.4: Where feasible, establish and coordinate a separate system of bikeway and pedestrian trails connecting residential areas, recreational facilities, activity centers, downtown Joshua Tree and the entrance to the National Park
- JT/CI 2.5: Promote safe and attractive pedestrian and bicycle crossings at logical points on SR-62, and pursue opportunities to separate pedestrian and bicycle traffic from vehicular traffic
- JT/CI 3.6: Provide bicycle lanes adjacent to SR-62 throughout the plan area to separate those uses from highway and vehicular traffic

### Morongo Valley Community Plan

Morongo Valley envisions for alternative modes of travel to be provided for by using right-of-way not needed for road construction during road widening and improvements (Policy MV/CI 2.1). Pedestrian improvements should be provided in commercial activity centers (MV/CI 2.2). It seeks the establishment of a plan for the development of a multi-purpose trail system, including separation of pedestrian, bicycle and equestrian traffic from vehicle traffic (MV/OS 3.2).

**Yucca Valley Area, Twentynine Palms Area, Pioneertown, Rimrock, Wonder Valley, and Landers do not currently have active transportation policies or a pedestrian or bicycle network specified.**

### **San Bernardino County-wide Vision:**

Adopted in 2011, the Countywide Vision calls for the collaboration between all sectors in San Bernardino County to work towards creating a healthier San Bernardino County and a more vibrant economy and community over the next 20 years. Part of the Vision includes envisioning San Bernardino as: "A sustainable system of high quality education, community health, public safety, housing, retail, recreation, arts and culture, and infrastructure, in which development complements our natural resources and environment."

The vision statement provides further details through several elements related to jobs, environment, infrastructure, and others. The transportation element emphasizes developing "clean and advanced modes of transportation and infrastructure", while the environment element focuses on protecting natural resources. A "lack of transportation option" was cited as an issue specifically encountered by those living in the Morongo Basin region of San Bernardino County.

### **San Bernardino County Community Transformation Plan 2015 - 2020 (June 2015):**

Following the adoption of the Countywide Vision, the Community Vital Signs Initiative was formed to address strategies to improve wellness in the county. A data-driven policy framework is used to promote programs that improve the health and quality of life in San Bernardino County.

The San Bernardino County Community Transformation Plan – developed by the Community Vital Signs – sets short- and long-term goals and more immediate strategies for several areas, including 'Access to Health and Wellness' and 'Safety'. The "Access to Health and Wellness" strategy seeks to increase the number of residents engaged in active living activities, including increasing options for residents to use active transportation. The "Safety" strategy seeks to improve children's perception of safety at school through partnering with law enforcement at school sites. It also seeks to support "Economy" by supporting wellness in the workforce.

### **San Bernardino County Non-Motorized Transportation Plan (NMTP):**

In 2011, the San Bernardino Association of Governments (SANBAG), now primarily known as the San Bernardino County Transportation Authority (SBCTA), adopted the Non-Motorized Transportation Plan which aims to coordinate and guide the provision of all bicycle and pedestrian related plans, programs, and projects within San Bernardino County. The Plan was most recently revised in June 2018. The NMTP makes proposals for a regional bikeways network and otherwise provides suggestions for active transportation improvements– including both the Town of Yucca Valley and the City of Twentynine Palms.

NMTP Goals include:

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

The NMTP Local Jurisdiction Plan includes proposals for 46 miles of bikeways in Yucca Valley and 18 miles in Twentynine Palms, and pedestrian improvements (to a more limited extent) as part of SRTS Plan Phase II and the Points of Interest Pedestrian Plan (PIPP). See below.

### **San Bernardino Safe Routes 2 School Strategy (Phase I & II):**

Building on the momentum of the NMTP, the SBCTA Safe Routes to School (SRTS) Strategy aims to address the active transportation needs of San Bernardino County students and school areas.

Phase I of the Strategy identified focus areas that could most benefit from SRTS improvements compared to other areas within the County. This was done by analyzing the relative impacts of SRTS improvements to safety and mode share. Additional analyses were conducted to determine priority schools in these focus areas based on project readiness, geographic distribution, and equity considerations.

Phase II of the Strategy, completed in 2017, focuses on developing and prioritizing more site-specific SRTS infrastructure improvements. Walk audits were conducted across 55 identified San Bernardino County schools to assess active transportation infrastructural needs and concerns and assemble an inventory of site-specific bicyclist and pedestrian network improvements.

### **SANBAG Points of Interest Pedestrian Plan (PIPP):**

The Points of Interest Pedestrian Plan (PIPP) assists local jurisdictions in the identification and prioritization of future pedestrian projects. It supplements the NMTP by identifying pedestrian projects, as the original document primarily focused on bike improvements. It identifies

pedestrian improvements for one location in each member city, including at Desert Hills Plaza Shopping Center in Yucca Valley and Luckie Park in Twentynine Palms.

### **Regional Transportation Plan / Sustainable Community Strategies (RTP/SCS) & SANBAG Countywide Comprehensive Transportation Plan (CTP):**

The Regional Transportation Plan/Sustainable Community Strategies (RTP/SCS) is updated by SCAG every four years. Outlining Southern California's long-range strategy to improve the region's mobility, economy, and sustainability, the RTP/SCS must show how it will reduce transportation GHG emissions in compliance with CA's Senate Bill (SB) 375 and meet air quality standards set forth by the Clean Air Act.

San Bernardino's Countywide Transportation Plan (CTP) is the County's input to the RTP/SCS – "...lay[ing] out a strategy for long-term investment in and management of San Bernardino County's transportation assets." (ES-1). Both the CTP and 2016 RTP/SCS provide a forecast year of 2040.

Relevant Goals of the CTP:

- Improve safety and mobility for all modes of travel in San Bernardino County by residents, businesses, employees, students and visitors.
- Integrate countywide transportation plans and initiatives, to better serve the needs of the county, and to coordinate transportation systems with other counties through the Regional Transportation Plan/Sustainable Communities Strategy.
- Support state, regional, and local environmental

and sustainability goals.

- Reduce vehicle hours traveled.
- Reduce vehicle emissions, both criteria pollutants and GHG emissions.
- Increase the share of people carpooling, bicycling, walking and taking transit.
- Reduce collision rates.

### **Measure I:**

Approved by voters in 1989 and extended in 2004, Measure I is a countywide half-cent sales tax increase used to fund transportation improvements within San Bernardino County. For the Morongo Basin, 70% of revenue collected is apportioned for Local Street Projects, allocated based on population and tax generation.

The Measure I 2010-2040 Strategic Plan – adopted in 2009 by SANBAG – establishes a policy framework that guides the implementation of Measure I projects/programs.

### **Complete Streets Act of 2008**

Assembly Bill (AB) 1358, also known as the Complete Streets Act of 2008, requires local agencies to integrate Complete Streets policies whenever there is a substantive revision to their General Plan, Circulation Element. This is intended to help reduce GHG emissions based on AB 32, the California Global Warming Solutions Act.

## **Morongo Basin Strategic Plan for Culture and the Arts (MBSPCA)**

Future public arts project opportunities will dovetail nicely with the newly developed Morongo Basin Strategic Plan for Culture and Arts (MBSPCA), a living document that emerged out of a cultural planning process which began in 2017. The MBSPCA works to advance the culture and arts of the Morongo Basin while strengthening the economic impact of these treasured resources. It was designed by community leaders from a variety of sectors including, the arts, education, business, local government, the military, and key Joshua Tree National Park staff in partnership with county representatives and Arts Connection and facilitated by the Cultural Planning Group. Implementation of the plan will be community led, although spearheaded by the nonprofit group, Joshua Tree living Arts (JTLA). The plan is focused on the following goals: model and expand cultural equity practices in Morongo Basin's arts and cultural community; build the market for arts and culture; expand arts education for children and lifelong learning in the arts for adults; and increase the economic impact of visitation to Morongo basin by enhancing tourism marketing with arts and culture.

Within these goals, certain strategies have been identified that would work in concert with the goals of the Plan. One example of this would be, "bringing cultural events to a wider audience." Equity, in part, is made possible by access to events; this could include providing wayfinding

signage and improved active transportation infrastructure. Additionally, public art projects funded through transportation resources can also assist in helping to build the market for arts and culture in this region, which has seen a rapid uptick in tourism. Public art works that aid in both wayfinding and increasing the visibility of hidden cultural assets will provide opportunities for artists to advance their careers professionally and financially, while also allowing for cultural and art organizations to expand their audiences increasing economic support in doing so.

The process of public art is collaborative, bringing together the community with the lead artist/artists and engaging all of them in civic dialogue. While the depth of community engagement can vary, it inevitably creates a shared sense of ownership and builds community cohesion.

The MBSPCA also looks to identify ongoing public arts revenue sources, which is a shared goal for the arts community in the region. Having a vibrant public art program has been shown to create multiple community and economic benefits.

**"It reflects and reveals our society, adds meaning to our cities and uniqueness to our communities. Public art humanizes the built environment and invigorates public spaces. It provides an intersection between past, present and future, between disciplines, and between ideas."**

***(American for the Arts Public Arts Network Council: Green Paper)***

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## 3.2. LAND USE

Three jurisdictions designate land uses within the Morongo Basin Active Transportation Plan project area: Twentynine Palms, Yucca Valley, and San Bernardino County. For this reason the standardized SCAG land use designations, which account for all three of these jurisdictions, are used in the accompanying map.

Consistent with the rural character of the Morongo Basin, only 18% of the roughly 760 square miles of land within the project area is currently considered utilized. Utilized land consists of land that is not designated as: Vacant, Unknown, or Under Construction. Utilized land includes areas that appear to be vacant, but are designated as Open Space Recreation.

Historically, the majority of new development in the region has been low density residential. Single family residential and rural residential land uses account for 25% and 54% of the number of utilized land parcels respectively. However, combined these land uses only account for 26% of all utilized land area, primarily due to the size of preserved open space.

More intensely developed areas are found along SR-62 within the communities of Joshua Tree, Twentynine Palms, Yucca Valley, and Morongo Valley. The areas adjacent to SR-62 are typically for commercial and

retail services and act as a buffer between low density housing and the busy highway. Although the majority of growth in the region has been in residential uses, there is an increasing demand for commercial and service oriented land uses that has driven new development along SR-62 and other commercial corridors.

Open space and recreation land uses account for the majority of the utilized land use area within the Morongo Basin. Although Open space and recreation land uses only account for 1% of parcels, they account for 61% of all utilized land. Joshua Tree National Park's border expanding into the project area alone accounts for 10% of the total project area.

Population growth between 2000 and 2016 was 25% in Yucca Valley and 77% in Twentynine Palms according to SCAG's Local Profiles report. These rates are at or above the 25% population growth rate of San Bernardino County during the same period.



Figure 3.2.1. Morongo Basin Land Use

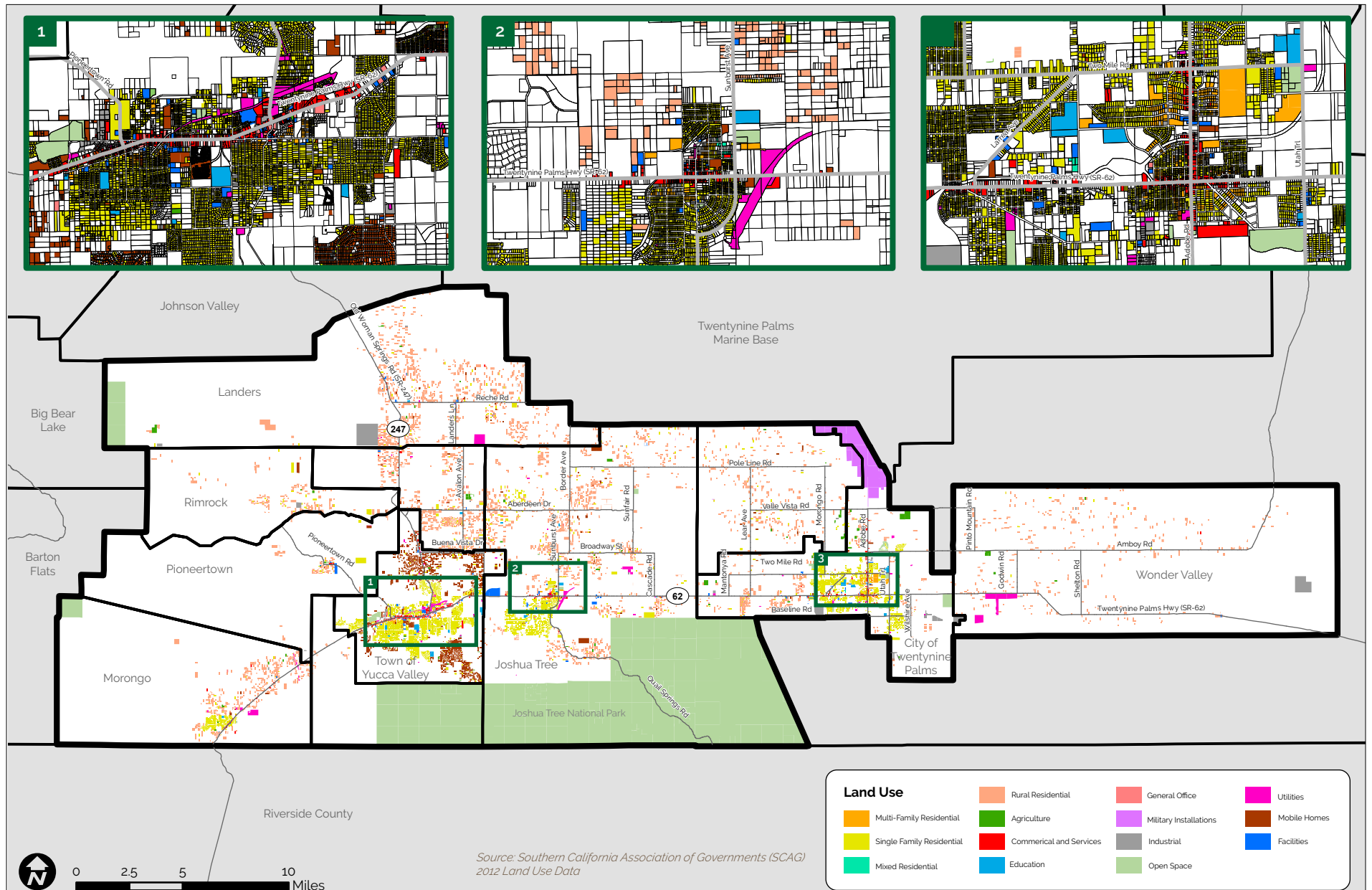


Figure 3.2.2. City of Twentynine Palms: Land Use

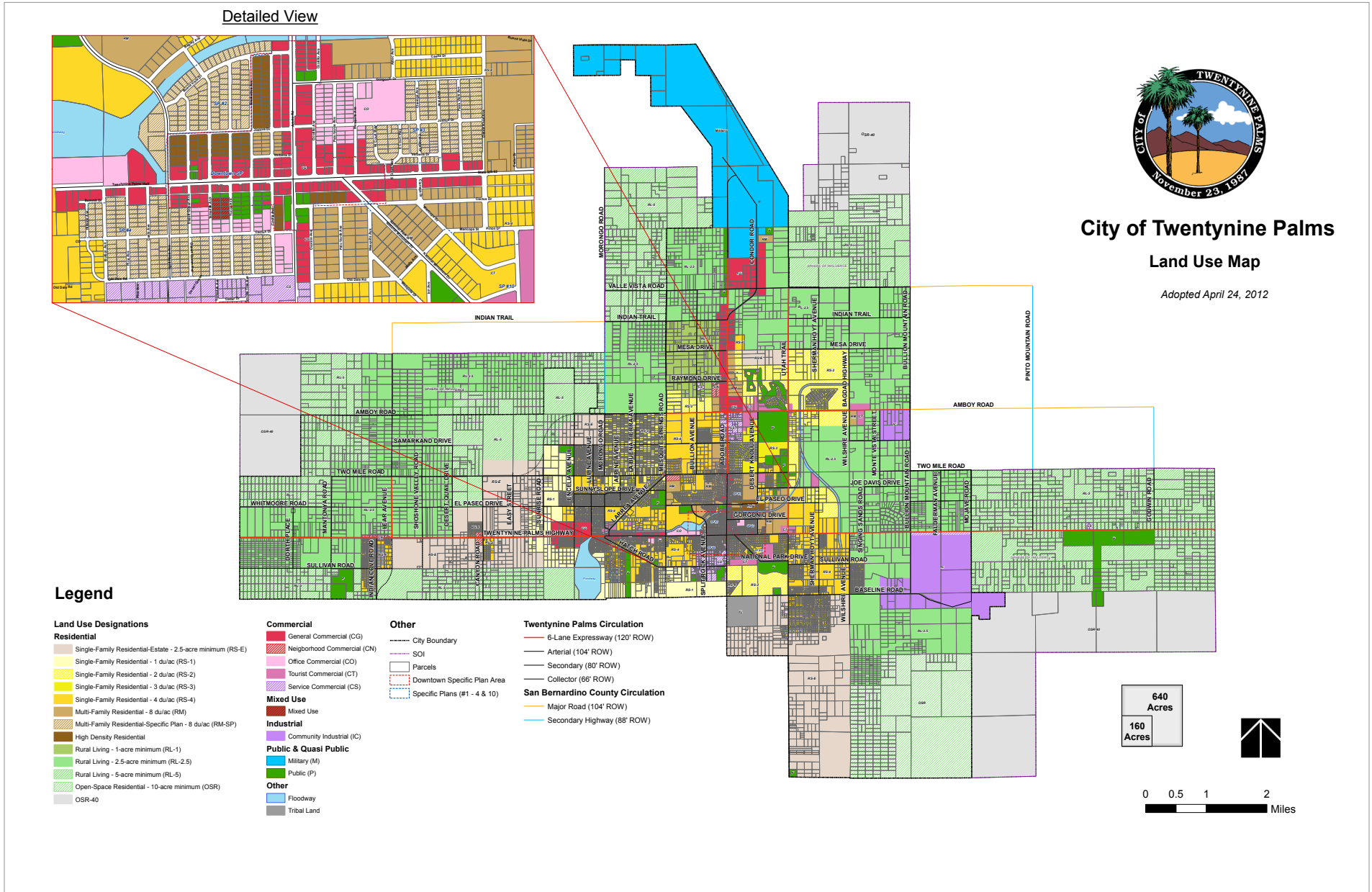
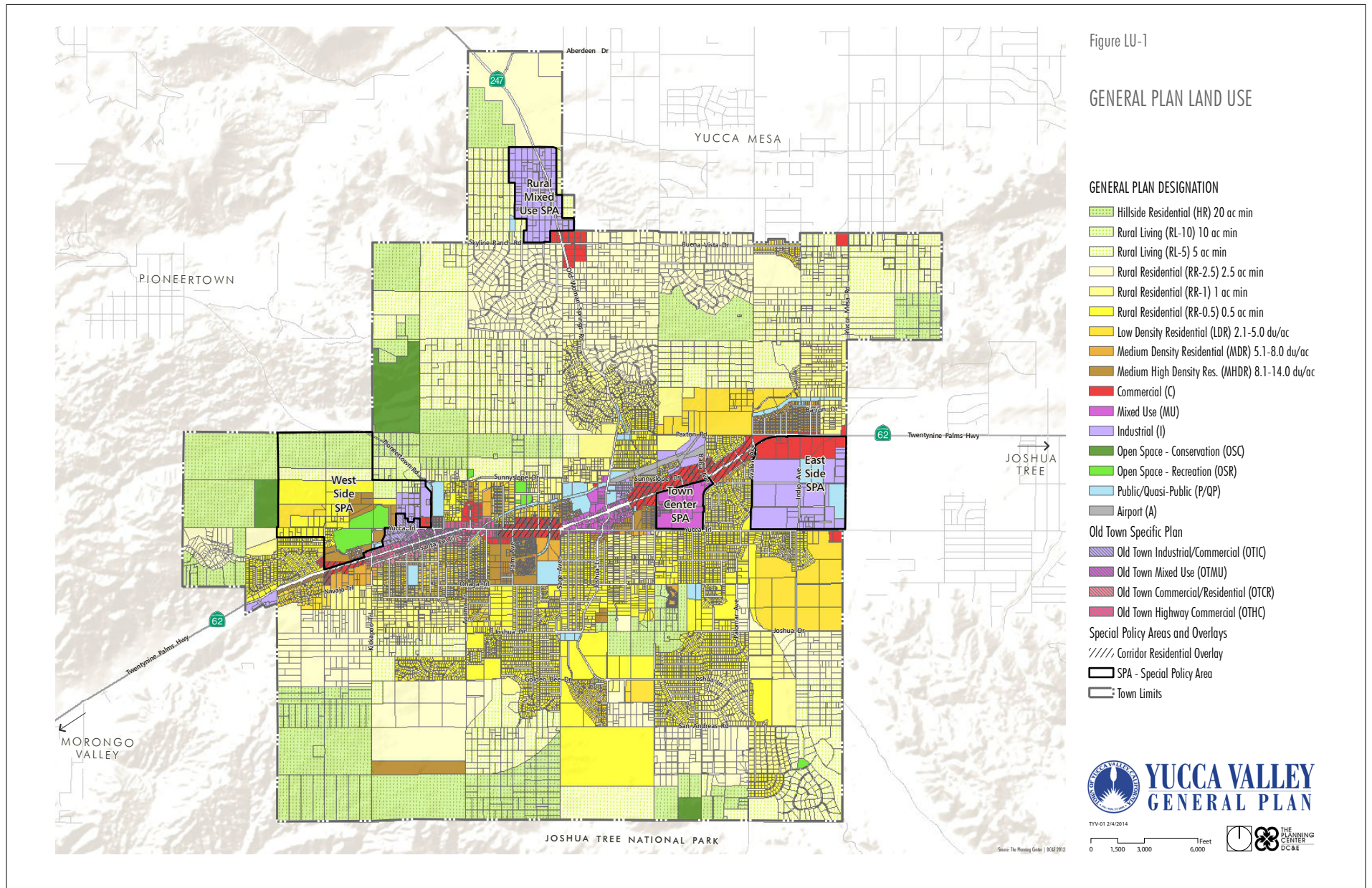


Figure 3.2.3. Town of Yucca Valley: Land Use



## 3.3. ACTIVITY CENTERS & DESTINATIONS

Identifying activity centers and destinations is vital to developing an active transportation network that suits the needs of pedestrians, cyclists, and transit users. Activity centers are defined as a community's major employers, office buildings, industrial sites, government sites, retail centers, hospitals, major attractions colleges, schools or open space.

### Origins

Creating connections between origins and destinations ensures that users are able to reach their destinations reliably and safely. As noted in the Land Use section, Low density housing is one of the most prominent land uses in the region. While housing and population density is spread out and sparse, there are clusters of residential uses that result in relatively higher density neighborhoods and generally have higher rates of walking, biking, and using public transit to get to work. The highest rate of walking, biking, and transit ridership to get to and from work occurs near Yucca Valley Town Hall and Community Center. Other high active transportation areas include Joshua Tree Community Center and Knotts Sky Park.

### Schools

There are 17 public school within the Morongo Basin, 10 of which were a part of the Safe Routes to School efforts for this Plan. Of the 17 public schools, one is a preschool, 11 are elementary schools, two are intermediate schools, and three are high schools. During the 2017-2018 school year there were over 8,000 students enrolled in 17 schools. Schools are especially significant destinations because they generally have high rates of walking, biking, and transit use.

### Commercial and Entertainment Centers

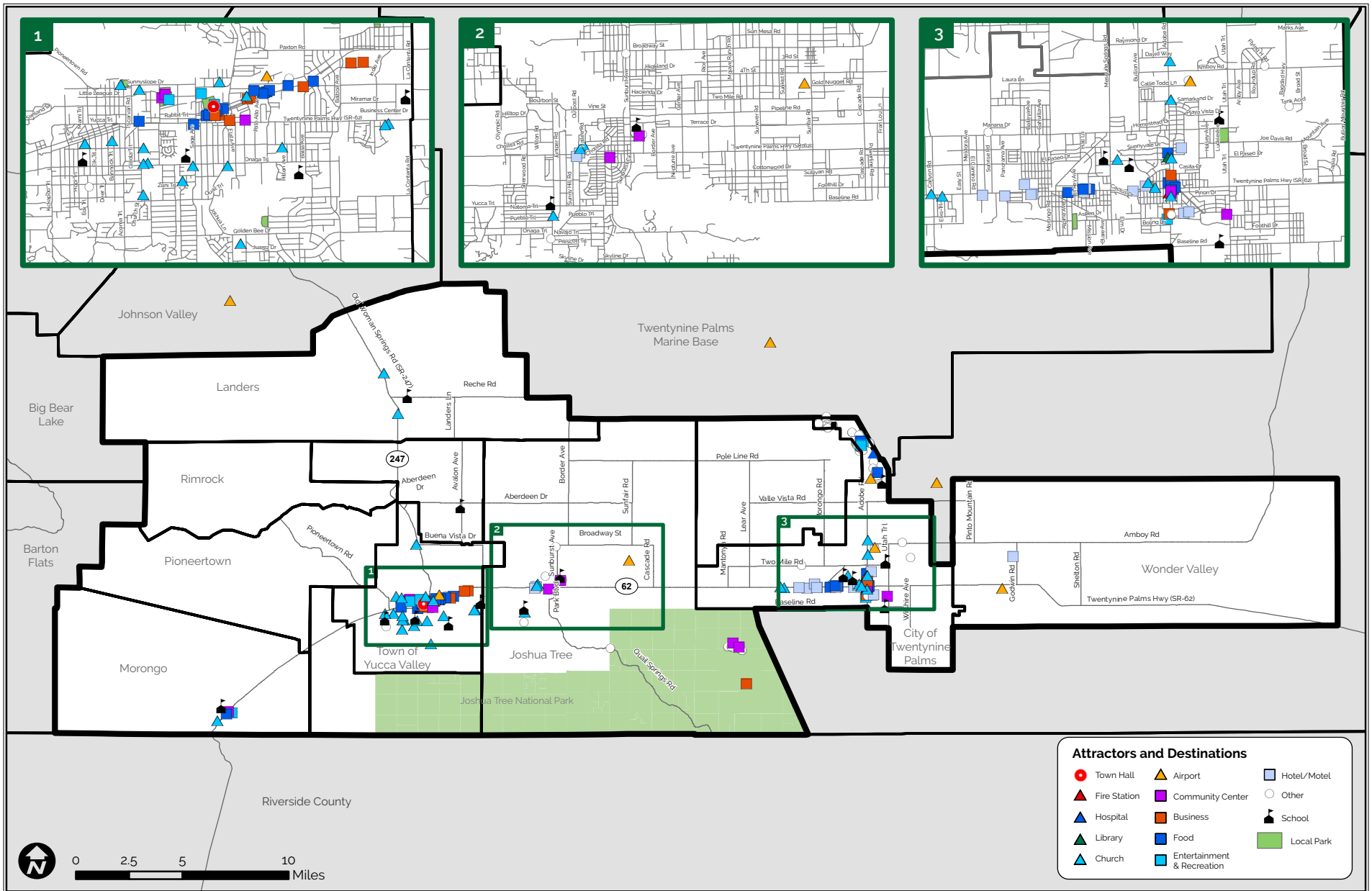
Commercial centers are largely located along key corridors throughout the Morongo Basin including SR-62 and Adobe Road and SR-62 and Joshua Lane. These locations also serve as job and entertainment centers within each community as well as areas of regional significance for commercial activities.

### Recreation

Local parks are located throughout the Morongo Basin including baseball fields, skate parks, and BMX parks, in addition to community parks. These locations are often adjacent to community centers, schools, and other civic uses.

The project area has two entrances to Joshua Tree National Park that served a combined 430,000 visitors according to 2017 National Park Service traffic counts. The park's total visitors reached a new high of 2.5 million visitors in 2016, an increase of 500,000 visitors from the previous year.

Figure 3.3.1. Activity Centers & Destinations



## 3.4. TRANSIT CONNECTIVITY

The Morongo Basin Transportation Authority (MBTA) provides local weekday and weekend transit service throughout the Morongo Basin from Twentynine Palms to Morongo Valley. MBTA also provides regional connecting service to Palm Springs International Airport on weekdays and weekends. MBTA operates 8 local and regional bus lines that travel through most communities within the Morongo Basin and manages the RoadRunner Shuttle service from the Joshua Tree community into the National Park. The routes are as follows:

- Route 1 – Yucca Valley – Twentynine Palms
- Route 3A - Twentynine Palms Marine Base
- Route 3B - Twentynine Palms Neighborhood
- Route 7A - North Yucca Valley
- Route 7B - South Yucca Valley
- Route 12 - Yucca Valley - Palm Springs
- Route - 15 MCAGCC - Palm Springs
- Route 21 - Landers - Yucca Valley
- RoadRunner Shuttle Service - Twentynine Palms, Joshua Tree National Park

Several key nodes within the transit network include the transit centers located in Twentynine Palms and Yucca Valley, SR-62 near Joshua Tree,

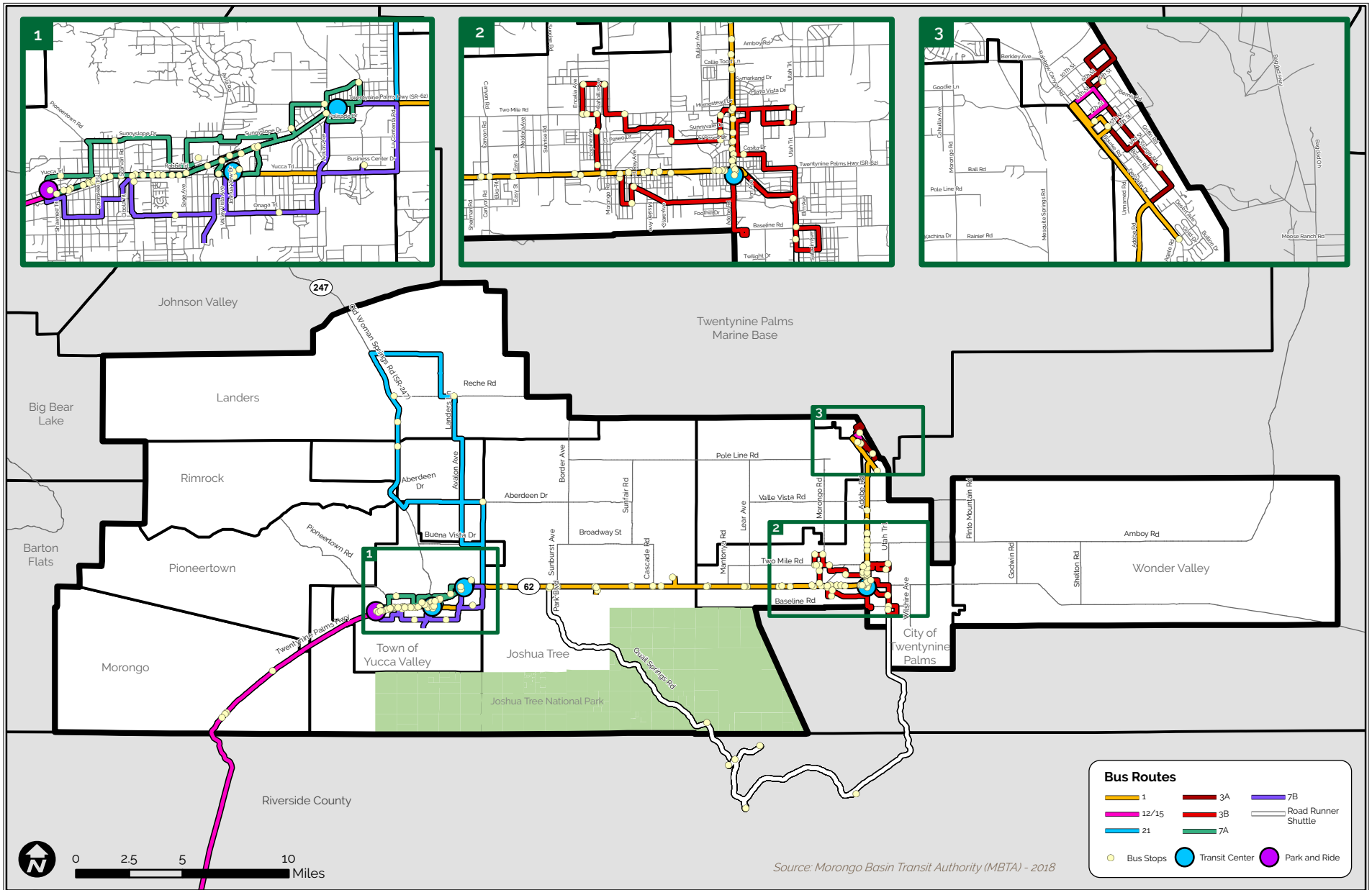
Copper Mountain College, and Marine Corps Air Ground Combat Center Twentynine Palms.

There are three transit stations within the Morongo Basin: Twentynine Palms Transit Center, Yucca Valley Transit Center, and the Walmart Shopping Center. Each of these transit centers serves multiple bus lines that help to directly or indirectly connect riders to the entire region.

Public transportation plays an important role for Morongo Basin residents with limited access to personal vehicles. Students with a Copper Mountain College ID receive a reduced fare. MBTA provides Ready Ride, an origin to destination service primarily for seniors and disabled passengers. Additionally, buses are allowed to deviate from their fixed routes by rider request, pending approval and with regard to distance.

To better serve first and last mile connections, MBTA buses are equipped with bicycle racks that allow riders to safely travel with their bicycle. This essentially expands the transit-shed, the distances and area of which people are willing to walk or bike to transit.

Figure 3.4.1. MBTA Bus Stops & Routes



- **Route 1 – Yucca Valley – Twentynine Palms**

Fixed Route Bus Service providing a Monday through Sunday schedule serving the Marine corp base and Twentynine Palms Transit Center, Walmart Center, and Yucca Valley Park and Ride Station.

- **Route 3A - Twentynine Palms Marine Base**

Fixed Route Bus Service providing a Monday through Sunday schedule serving the Marine corp base and Twentynine Palms Transit Center. The route provides improved frequency by shortening the route to provide better access to and from the Marine Corps Air Ground Combat Center Twentynine Palms.

- **Route 3B - Twentynine Palms Neighborhood**

Fixed Route Bus Service providing a Monday through Sunday schedule serving the Twentynine Palms neighborhood connecting to all schools in the city, the Twentynine Palms Theater, and Twentynine Palms Senior Center.

- **Route 7A - North Yucca Valley**

Fixed Route Bus Service providing a Monday through Sunday schedule serving the Yucca Valley neighborhood north of SR-62. This route connects to the Yucca Valley Transit Center, Yucca Valley Airport, Yucca Valley Townhall, and Yucca Valley Library.

- **Route 7B - South Yucca Valley**

Fixed Route Bus Service providing a Monday through Sunday schedule serving the Yucca Valley neighborhood South of SR-62. This route connects to the Yucca Valley Transit Center, Yucca Valley Elementary, Onaga Elementary, Yucca Valley High School, and Yucca Valley Library.

- **Route 12 - Yucca Valley - Palm Springs**

Fixed Route Bus Service providing a Monday through Sunday schedule serving the the entire Morongo Basin by providing regional connection from the Yucca Valley Transit Center and the Park and Ride location to Palm Springs International Airport . This route has limited departures from each station, excluding any service during the afternoon.

- **Route - 15 MCAGCC - Palm Springs**

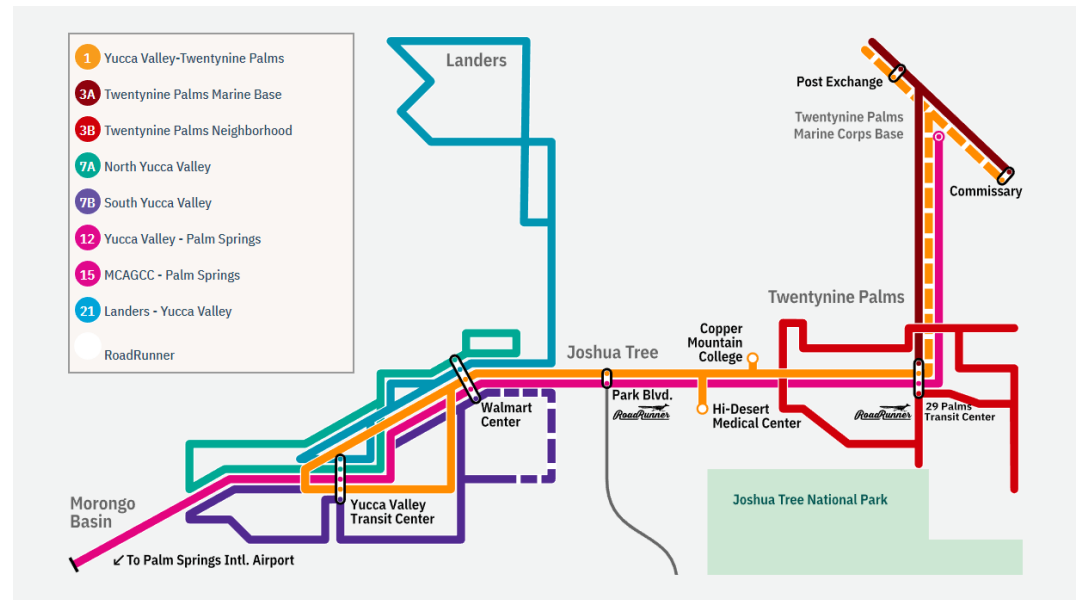
Fixed Route Bus Service providing a Friday through Sunday schedule serving the Marine Corps Air Ground Combat Center and Palm Springs. The limited weekend run of the busline provides is most suited for recreation trips to the Coachella Valley due to limited frequency and length of trip.

- **Route 21 - Landers - Yucca Valley**

Fixed Route Bus Service providing a Monday through Sunday schedule providing connections between Landers and Yucca Valley, connecting to the major destinations along SR-62.

- **RoadRunner Shuttle Service**

The roadrunner shuttle service is a pilot shuttle program that connects Joshua Tree and Twentynine Palms to several trailheads within Joshua Tree National Park. Trial periods are scheduled to run Winter 2018 thru Spring 2019.





### 3.5. HEALTH & ENVIRONMENT

**A community’s transportation network has the potential to encourage and facilitate healthy behaviors for all residents when it is designed to accommodate active transportation.**

Providing residents with connections to local and regional destinations enables opportunities to exercise by walking and biking for recreation, and provide connections to local destinations including schools, parks, and retail and entertainment opportunities.

Active transportation can play an important role in reducing the rate of obesity and other chronic conditions such as diabetes and cardiovascular disease resulting from increasingly sedentary lifestyles.

As noted in the 2017 San Bernardino Community Indicators Report (SBCIR), which analyzes a number of wellness indicators throughout the County,

**“A sedentary lifestyle and being overweight are among the primary risk factors for many health problems and premature death. Maintaining a healthy body weight may have positive impacts on physical and mental health, as well as reduce healthcare costs.”**

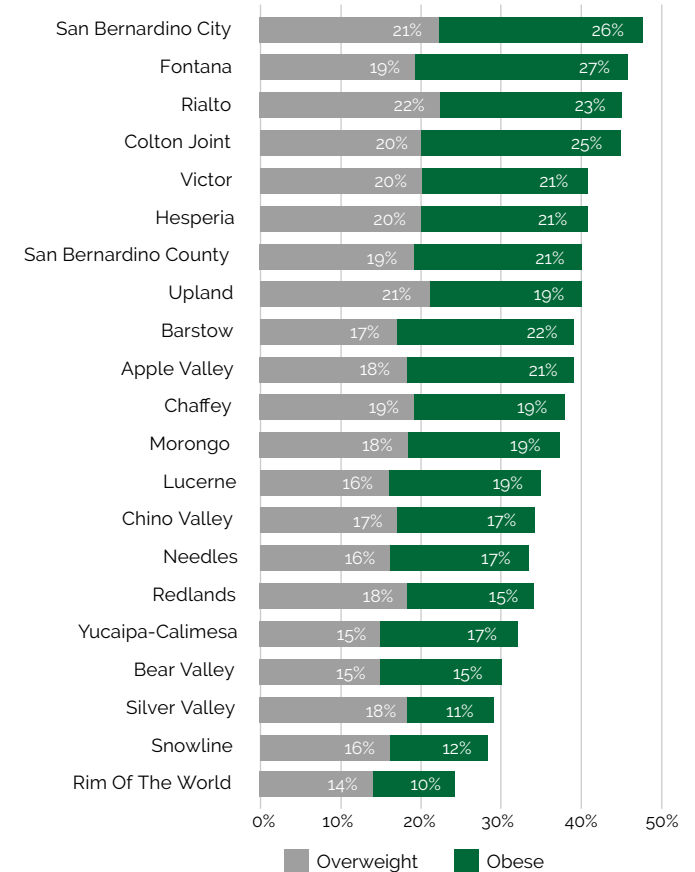
The SBCIR reports that 2 out of 5 students in the County are considered overweight

or obese. This level is consistent among students enrolled at schools part of the Morongo Unified School District with 18 percent of students considered overweight and 19 percent of students considered obese.

Of adults residing in San Bernardino County, 27 percent are considered overweight and 41 percent are considered obese. Compared to the overall California rates the County’s obesity rate is .4 percent less, however, the County’s overweight rate is 6.7 percent greater (SBCIR).

Chronic diseases such as diabetes, high blood pressure, and cardiovascular disease are largely preventable conditions, yet “contribute to approximately 70 percent of fatalities in the United States each year and account for about 75 percent of the nation’s health-related costs” according to the Center for Disease Control and Prevention (CDC). Within San Bernardino County the long-term trend for diabetes prevalence and deaths is on the rise despite short term declines. According to the SBCIR, deaths due to diabetes increased slightly from 32.4 in 2014 to 32.9 in 2015, but the longer-term trend is more severe, increasing 8 percent since 2006.

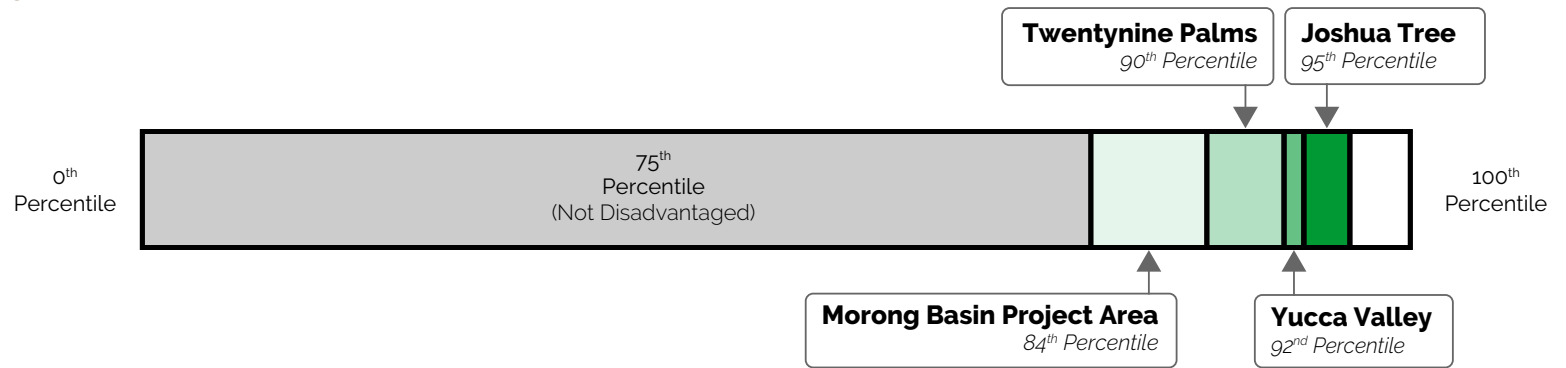
Figure 3.4.2. Percentage of Students with Unhealthy Body Composition by School District (San Bernardino County, 2016)



Source: California Department of Education Physical Fitness Test (<http://data1.cde.ca.gov/dataquest/>)

Figure 3.4.3. CalEnviroScreen 3.0 Heart Attack Emergency Department Visits (per 10,000 people by select Morongo Basin communities, 2011-2013)

**6 out of the 10 Morongo Basin Project Area Communities rank above the 75th percentile for prevalence of heart disease**



Furthermore, in 2015, 30.5 percent of adults in San Bernardino County had high blood pressure, a six percent increase from the previous year. San Bernardino County ranks highest among all counties compared in the SBCIR. In contrast, fatalities resulting from stroke have decreased 23 percent since 2006.

Data from CalEnviroScreen further demonstrates significant health complications among residents living in the Morongo Basin. CalEnviroScreen 3.0 is an index developed by the California Environmental Protection Agency (CalEPA) that utilizes environmental and socio-economic data to determine the most disadvantaged census tracts in California.

CalEnviroScreen 3.0 data shows that the overall project area ranks at the 40th percentile for most disadvantaged areas in California. Although the Morongo Basin project area is not generally considered as disadvantaged, or above the 75th

percentile of all census tracts, several individual factors are above that disadvantaged threshold. In line with the results from the SBCIR, the average rate of hospital visits related to cardiovascular disease within the project area ranks at the 84th percentile among all census tracts in California.

Poor air quality conditions can also lead to negative outcome. Ozone levels within the project area rank at the 94th percentile and peak as high as 98th percentile. As one of the main components of smog, ozone results largely from vehicle emissions and factories. Ozone levels are highest during afternoons and in areas with high heat or sun exposure. According to CalEPA, exposure to ozone may increase lung irritation and worsen chronic health conditions such as asthma. Children and the elderly are more susceptible to the negative effects of exposure to ozone. Although ozone levels in the Morongo Basin project area are high, the

instances of hospital visits related to asthma remain at the 46th percentile, below the level considered disadvantaged. The levels peak in the communities of Joshua Tree and Yucca Valley high rank above the 60th percentile.

Overall project area levels for the remaining exposure indicators remain below the 75th percentile disadvantaged threshold. However, some communities rank high for presence of drinking water contaminants, cleanup sites, and solid waste facilities.

Increasing physical activity opportunities and encouraging a less sedentary lifestyle through developing a safe active transportation network can help improve the overall health and well-being of Morongo Basin residents while contributing to developing a healthy environment.

## **3.6. COUNTY MAINTAINED ROAD SYSTEM (CMRS)**

In San Bernardino County, the County Department of Public Works Transportation Division performs routine maintenance, roadway improvements, and other operations on streets included within the County Maintained Road System (CMRS). If a road is not in the CMRS, the County is prohibited by law from spending County roadway funds on that street. As such, the County would not be able to apply for funding, match for any grant funds, or perform any maintenance on non-CMRS roads within the County. This, in turn, impacts the recommended on-street bicycle and pedestrian improvements for the Morongo Basin Active Transportation Plan.

**All recommended projects, as part of the Morongo Basin Active Transportation Plan, are within Caltrans, County, City of Twentynine Palms, and/or Town of Yucca Valley jurisdictions. This allows the respective agency or agencies to apply for the appropriate grant funding for project implementation.**

## 3.7. EXISTING PEDESTRIAN INFRASTRUCTURE

Due to the rural nature of Morongo Basin, there is a general lack of pedestrian infrastructure throughout the region. Around key areas, including schools, parks, commercial centers, and new development, pedestrian infrastructure has improved over time to better facilitate pedestrian activity within the region. Where these areas meet with older and more rural neighborhoods pedestrian infrastructure tends to end abruptly, resulting in large gaps in pedestrian infrastructure between these areas. Pedestrian infrastructure can be classified into five pedestrian infrastructure typologies that generally capture the diverse levels of existing pedestrian infrastructure throughout the region.