



CHAPTER 6:

# implementation plan

**IN THIS CHAPTER:**

1. Cost Summary
2. Project Prioritization
3. Funding Opportunities
4. Project Phasing
5. Performance Measures
6. Implementation & Next Steps

The Implementation Plan in **Chapter 6** provides tools for realizing this vision of change. Projects are prioritized according to greatest benefit and grouped into an appropriate schedule based on funding and construction timeline. A detailed cost estimate is provided for the recommendations along with a set of funding sources that have the potential to cover these costs.

## 6.1. COST SUMMARY

This section summarizes overall cost estimates for implementation.

### COST ASSUMPTIONS

Unit costs for planning cost estimates are derived from KOA's extensive experience in providing engineering services to communities across Southern California.

Project costs are estimated to reflect actual cost of construction as accurately as possible, based on 2018 dollars. Cost tables for each corridor and local focus area can be found in [Appendix C](#) and [Appendix D](#).

Cost assumptions include considerations for design, environmental, construction management, mobilization, and traffic control in order to provide as accurate of a cost for implementation as possible. While other project specific factors such as grading, acquisition costs, or landscaping may increase the actual cost of construction, an additional 15 percent contingency has been added to each project to account for these factors that may arise during the design phase.

As the County and local jurisdictions pursue funding for these projects, it should be noted that construction costs may fluctuate based on when funding actually becomes available.

Table 6.11. Regional Corridor Total Costs

REGIONAL CORRIDOR (PART 1)	TOTAL COST
Aberdeen Drive	\$4,219,065
Acoma Trail	\$1,623,922
Adobe Road	\$998,038
Alta Loma Drive/Sunny Vista Road	\$4,407,006
Amboy Road	\$5,552,565
Balsa Avenue	\$664,093
Balsa Avenue/Emerson Avenue	\$653,252
Border Avenue	\$4,123,948
Buena Vista Drive	\$1,504,853
Camino Del Cielo Trail	\$1,539,410
Canyon Road	\$112,637
Hatch Road/Adobe Road/Baseline Road	\$3,279,425
Indian Trail	\$4,676,855
Joshua Drive	\$765,275
Joshua Lane	\$2,153,366
Landers Lane/Avalon Avenue	\$3,676,651
Lear Avenue/Pole Line Road	\$6,033,506
Linn Road/Belfield Boulevard	\$3,588,973
Mesquite Springs Road/Larrea Avenue	\$3,668,344
Morongo Area	\$2,299,905
Morongo Road	\$2,143,741
Onaga Trail	\$2,387,682
Palomar Avenue/Avalon Avenue	\$2,471,307

  
cont'd

Table 6.1.2. Regional Corridor Total Costs (continued)

REGIONAL CORRIDOR (PART 2)	TOTAL COST
Park Boulevard	\$466,867
Paxton Road/Barron Drive	\$1,632,432
Pipes Canyon Road/Pioneertown Road	\$7,138,548
Reche Road	\$4,467,305
Sage Avenue	\$2,030,174
San Andreas Road	\$2,949,717
Santa Barbara Drive Loop	\$157,455
State Route 247	\$9,397,458
State Route 62 (a)	\$3,265,890
State Route 62 (b)	\$3,277,369
State Route 62 (c)	\$4,561,472
State Route 62 (d)	\$4,631,819
State Route 62 (e)	\$3,459,070
Sunburst Avenue	\$2,246,534
Sunnyslope Drive/El Paseo Drive/Encelia Avenue	\$2,371,012
Sunnyslope Drive	\$1,467,953
Twentynine Palms Flood Channel	\$6,475,007
Two Mile Road (East)	\$3,944,213
Utah Trail	\$1,800,343
Valle Vista Road/Pinto Mountain Road	\$4,854,912
Yucca Mesa Road/La Contenta Road	\$1,144,956
Yucca Trail/Kickapoo Trail/Santa Fe Trail	\$1,497,471
Yucca Valley Flood Channel	\$4,699,371
<b>REGIONAL TOTAL =</b>	<b>\$140,481,167</b>

Table 6.1.3. Local Focus Area Total Costs

FOCUS AREA	TOTAL COST
Friendly Hills Elementary School	\$1,013,371
La Contenta Middle School & Black Rock High School	\$2,818,753
Landers Elementary School	\$174,894
Morongo Valley Elementary School	\$1,206,277
Twentynine Palms High School	\$1,248,324
Twentynine Palms Junior High School	\$1,862,975
Yucca Mesa Elementary School	\$551,081
Adobe Road & State Route 62	\$730,779
Baseline Road & Utah Trail	\$910,221
Copper Mountain College	\$301,447
El Paseo Drive & Hillside Avenue	\$2,236,852
Onaga Trail & Balsa Avenue	\$2,669,973
Onaga Trail & Hopi Trail	\$2,251,902
Onaga Trail & Sage Avenue	\$1,991,170
Palm Avenue & Sunland Drive	\$1,149,352
Park Boulevard & State Route 62	\$2,566,230
State Route 62 & Avalon Avenue	\$495,678
State Route 62 & Park Avenue	\$1,788,713
State Route 62 & Warren Vista Drive	\$889,459
Sullivan Road & El Sol Avenue (Knotts Sky Park)	\$631,272
Yucca Trail & Airway Avenue	\$810,009
Yucca Valley Town Hall & County Library	\$627,886
<b>LOCAL TOTAL =</b>	<b>\$28,926,618</b>

## 6.2. PROJECT PRIORITIZATION

The purpose of a prioritization analysis is to provide all agencies with an implementation guide to the projects that offer the greatest potential benefit to people walking and biking in the Morongo Basin.

While projects with higher rankings should be considered for implementation before projects with a lower rank, agencies may choose to advance specific projects for other interests or as certain types of funding become available. Additional analyses should be conducted periodically in response to major changes in population, the environment, and transportation network.

The project prioritization model used for this Plan was developed with considerations to seven key categories:

1. Network Connectivity
2. Need
3. Health
4. Equity
5. Community Support
6. Economic Efficiency
7. Project Feasibility

The specific measures for each category are shown in Table 6.18. Weighting factors were adjusted to provide higher prioritization on some criteria than others based on City input. The assigned weights determine an overall cumulative score that balances benefits to potential users and overall implementation feasibility and cost.

Due to the Morongo Basin region's more rural characteristics, scoring of specific categories may be lower when compared to more densely populated areas of the region and overall scores may be lower in comparison to more urbanized areas outside of the region. Due to the many factors considered within the project prioritization, regional corridors and local focus areas can score well in some categories, but not as high as others. As a result, the County and local agencies should consider scoring across all categories, as well as the overall score when evaluating a project for funding.

Tables 6.2.2, 6.2.3, and 6.2.4 provide a list of the prioritized Regional Corridors and Local Focus Areas and a breakdown of each cumulative score by ranking criteria.

Figures 6.2.1 and 6.2.3 illustrate the corridors not only by ranking, but by scores. Figures 6.2.2 and 6.2.4 further show the corridors by a high and low priority ranking level based on the cumulative scores.

Table 6.2.1. Prioritization Criteria & Weights

CATEGORY	CRITERIA	DESCRIPTION	MEASURED BY	REGIONAL SCORE	LOCAL SCORE
Network Connectivity	System-wide Significance	Quantifies the impact of pedestrian and bicycling infrastructure improvements proposed that close gaps and extend existing features	Presence or absence of dedicated pedestrian, bicycling, and public transportation facilities along the corridor.	10	10
	Safety	Addresses accident clusters, high volume locations or poor existing conditions and potential safety hazards for those walking and bicycling	Number of pedestrian- and bicycle-involved collisions within an 100' buffer of the corridor (5 yr TIMS); normalized.	5	5
Need	Active Transportation To Work	Quantifies the number of people who use the bus or trolley to work, a quarter-mile from each corridor; normalized.	Number of people who walk, bike, or ride the public transit to work.	5	5
	Number of Attractors	Number of activity centers/destinations for pedestrian and bicycle access such as retail, schools, parks, and public services.	Total number of attractors within each corridor	5	5
	Population Density	Quantifies the number of people living within a quarter-mile from each corridor.	Number of people living within each identified corridor.	5	5
	Employment Density	Quantifies the number of people working within a quarter-mile from each corridor.	Number of people working within each identified corridor.	5	5
	School Enrollment	Number of students enrolled along corridor represented schools	Total number of students enrolled in gradeschool.	5	5
	Adjacent Schools	Quantifies the number of schools along the corridor	Total number of public schools along the corridor	5	5
	Health	Disadvantaged Community	CalEnviroScreen 3.0 to gauge disadvantaged communities; increased weight	Overall CalEnviroScreen 3.0 Percentile Score	5
Equity	Median Household Income	Median household income to gauge economic resources available	Median household income by Census Block Group	5	5
	Free & Reduced Lunch	Students currently eligible to receive Free or Reduced Price Meals (FRPM)	Total number of students enrolled in FRPM programs along schools along each corridor	5	5
	Vehicle Ownership	Vehicle ownership within the tracts that the schools along the corridor represent to gauge reliance on active transportation	Number of households with one vehicle or less.	5	5
	Level of Traffic Stress (LTS)	Quantifies the average level of comfort for each proposed corridor; only used in regional corridor prioritization.	Number of households with one vehicle or less.	5	0
Community Support	Community Support	The project has shown diverse (e.g. broad) community support previously or during project.	Presence/Absence	10	10
Economic Efficiency	Resource Synergy	Potential for cost sharing and coordination with other agencies; opportunities to implement pedestrian/bicycling facilities as part of other infrastructure projects would generate efficiencies.	Agency judgment	5	5
	Cost	Total project cost.	Cost for project implementation	10	10
Feasibility	Projects feasibility	The project requires a scalable quantity of feasibility as assessed by engineering judgment (i.e. ROW accessibility, easements, dedications, barriers, etc.)	Engineering judgment of assessed feasibility	5	5
<b>TOTAL SCORE</b>				<b>100</b>	<b>100</b>

Table 6.2.2. Regional Prioritization Scores & Corridor Rankings

Rank	Regional Corridor	Overall Score	Network Connectivity (0 - 10)	Need (0 - 35)	Health (0 - 5)	Equity (0 - 20)	Community Support (0 - 10)	Economic Efficiency (0 - 15)	Feasibility (0 - 5)
1	Twentynine Palms Flood Channel	77.3	9.4	29.8	2.8	15.1	9.0	7.1	4.0
2	State Route 62 (b)	71.9	9.8	29.4	3.9	11.3	9.0	7.6	1.0
3	Alta Loma Drive/Sunny Vista Road	71.0	7.1	25.0	2.3	11.3	10.0	10.4	5.0
4	Onaga Trail	66.5	6.2	22.2	3.2	11.4	10.0	10.5	3.0
5	Yucca Valley Flood Channel	64.4	8.4	22.5	4.4	12.1	7.0	8.1	2.0
6	State Route 62 (d)	62.3	10.0	22.8	3.5	6.9	8.0	8.1	3.0
7	Adobe Road	60.5	8.4	16.7	1.4	8.0	10.0	13.0	3.0
8	Hatch Road/Adobe Road/Baseline Road	56.1	7.4	13.9	2.4	10.8	7.0	10.6	4.0
9	Yucca Trail/Kickapoo Trail/Santa Fe Trail	55.6	7.3	12.7	4.2	10.9	6.0	11.5	3.0
10	Acoma Trail	53.5	6.8	12.4	3.8	8.2	8.0	11.4	3.0
11	Sage Avenue	52.8	6.2	14.7	3.6	8.4	8.0	9.9	2.0
12	Joshua Lane	51.5	6.4	17.6	3.1	4.6	7.0	10.8	2.0
13	Utah Trail	51.3	5.3	7.4	2.7	10.6	9.0	12.2	4.0
14	Palomar Avenue/Avalon Avenue	50.3	5.2	11.3	3.1	7.1	10.0	10.5	3.0
15	Sunnyslope Drive/El Paseo Drive_Encelia Avenue	50.0	6.2	14.6	0.6	9.0	6.0	10.6	3.0
16	Park Boulevard	48.1	5.6	8.5	2.9	4.4	10.0	12.6	4.0
17	Sunnyslope Drive	48.0	6.0	10.8	4.9	7.7	5.0	11.5	2.0
18	Mesquite Springs Road/Larrea Avenue	46.4	6.3	11.1	0.0	9.9	7.0	10.2	2.0
19	Camino Del Cielo Trail	45.6	5.6	5.4	4.5	10.7	5.0	11.5	3.0
20	Yucca Mesa Road/La Contenta Road	44.8	5.2	5.7	2.1	8.9	7.0	12.9	3.0
21	State Route 62 (c)	44.7	6.7	13.5	1.5	5.8	8.0	7.2	2.0
22	Balsa Avenue/Emerson Avenue	44.7	5.1	7.4	2.8	9.9	5.0	12.4	2.0
23	Sunburst Street	44.7	5.5	11.0	0.7	9.8	5.0	10.7	2.0

Figure 6.2.3. Regional Prioritization Scores & Corridor Rankings (continued)

Rank	Regional Corridor	Overall Score	Network Connectivity (0 - 10)	Need (0 - 35)	Health (0 - 5)	Equity (0 - 20)	Community Support (0 - 10)	Economic Efficiency (0 - 15)	Feasibility (0 - 5)
24	Two Mile Road (East)	44.3	5.9	9.0	2.2	9.3	7.0	8.9	2.0
25	San Andreas Road	43.3	5.0	6.2	3.1	9.1	8.0	9.9	2.0
26	Pipes Canyon Road/Pioneertown Road	43.1	6.5	8.5	4.9	11.8	4.0	5.4	2.0
27	Santa Barbara Drive Loop	41.2	5.0	1.9	2.9	8.4	4.0	14.0	5.0
28	Balsa Avenue	40.7	5.5	4.7	3.8	6.3	5.0	12.4	3.0
29	Paxton Road/Barron Drive	39.8	5.5	5.1	4.2	5.6	6.0	11.4	2.0
30	Morongo Area	39.8	0.3	6.6	4.8	10.3	4.0	11.6	2.0
31	Buena Vista Drive	39.5	5.0	3.1	3.3	6.6	6.0	11.5	4.0
32	State Route 62 (a)	39.2	0.5	8.4	4.6	9.2	4.0	9.6	3.0
33	Joshua Drive	38.5	5.1	6.0	3.2	5.8	4.0	12.3	2.0
34	State Route 247	36.3	6.5	10.9	4.3	4.7	5.0	2.0	3.0
35	Canyon Road	35.3	0.5	0.7	3.7	7.4	5.0	14.0	4.0
36	Indian Trail	34.0	5.3	0.9	2.0	6.7	7.0	8.1	4.0
37	Morongo Road	33.1	0.8	5.3	1.0	6.2	5.0	10.8	4.0
38	State Route 62 (e)	32.6	0.0	0.1	5.0	5.0	10.0	9.4	3.0
39	Landers Lane/Avalon Avenue	32.3	0.1	2.4	3.1	7.5	5.0	10.2	4.0
40	Linn Road/Belfield Boulevard	31.0	0.0	0.4	4.3	10.0	4.0	9.3	3.0
41	Amboy Road	30.6	5.6	1.2	4.2	6.5	4.0	6.1	3.0
42	Valle Vista Road/Pinto Mountain Road	30.0	5.2	0.3	4.0	6.7	3.0	7.9	3.0
43	Aberdeen Drive	29.6	0.1	4.6	1.8	7.6	5.0	8.6	2.0
44	Reche Road	28.1	0.2	1.9	3.6	7.1	3.0	8.3	4.0
45	Lear Avenue/Pole Line Road	25.4	0.3	1.2	3.7	6.6	5.0	6.6	2.0
46	Border Avenue	25.2	0.0	0.5	1.5	6.5	5.0	8.7	3.0

Figure 6.2.1. Regional Prioritization Scores Map

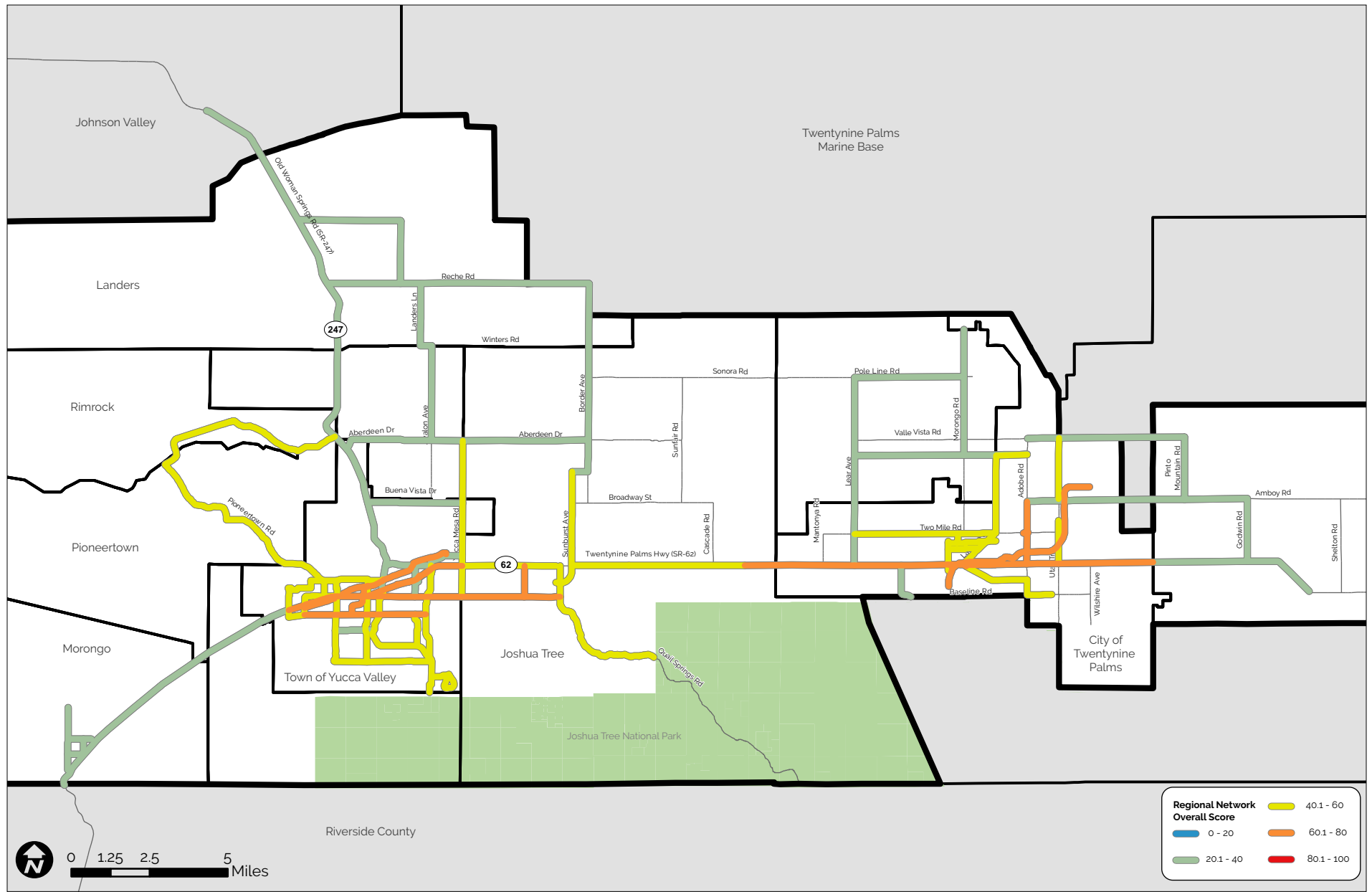




Figure 6.2.2. Regional Corridor Prioritization Rankings Map

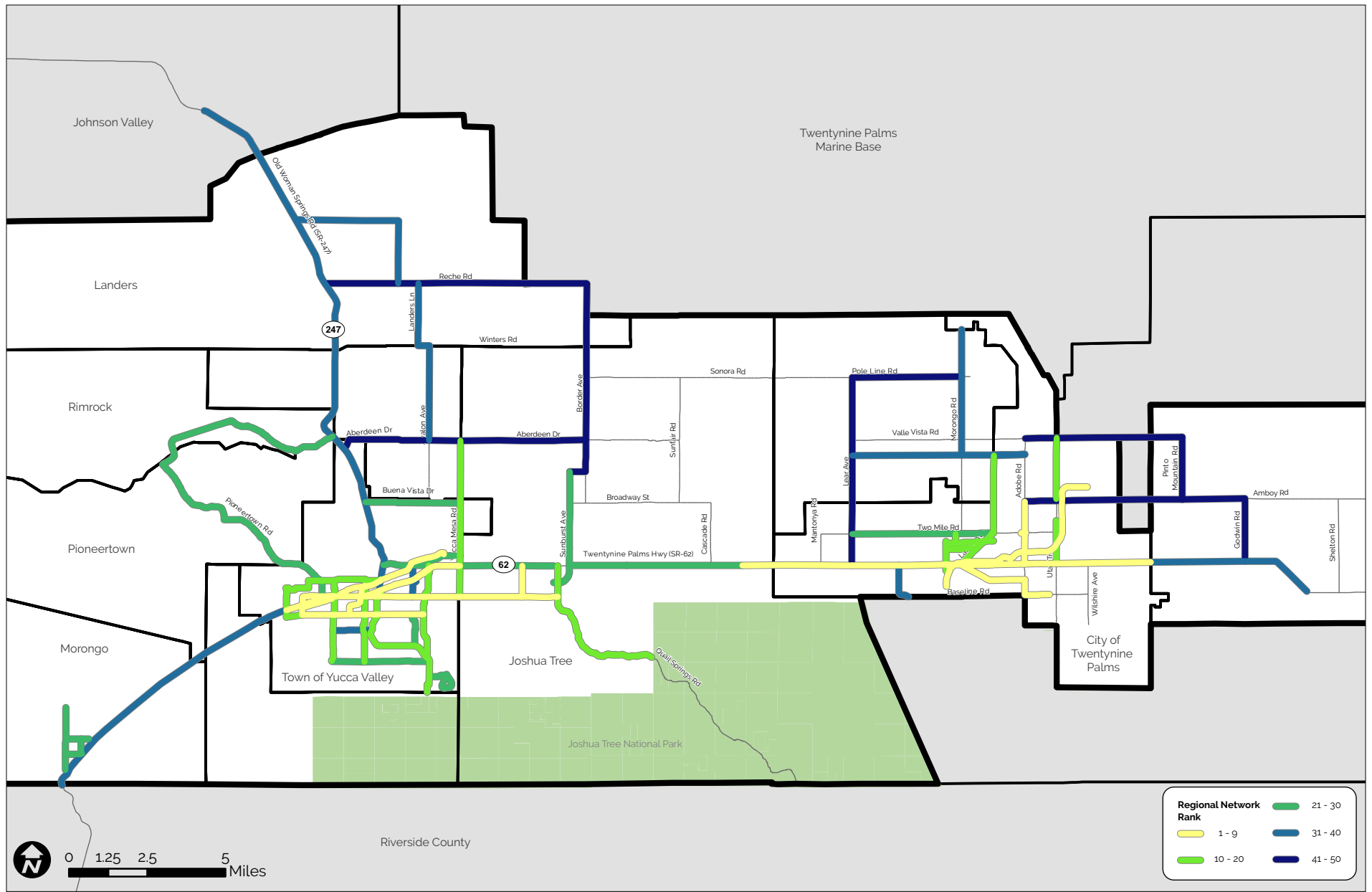


Table 6.2.4. Local Focus Area Prioritization Scores & Rankings

Rank	Focus Area	Overall Score	Network Connectivity (0 - 10)	Need (0 - 35)	Health (0 - 10)	Equity (0 - 15)	Community Support (0 - 10)	Economic Efficiency (0 - 15)	Feasibility (0 - 5)
1	El Paseo Drive & Hillside Avenue	74.3	10.0	28.3	5.5	13.3	8.0	6.2	3.0
2	Adobe Road & State Route 62	65.5	8.3	17.1	6.8	6.4	10.0	11.9	5.0
3	Twentynine Palms Junior High School	61.6	6.7	18.8	4.7	8.8	10.0	8.6	4.0
4	Yucca Valley Town Hall & County Library	58.5	6.9	10.4	8.7	4.2	10.0	13.3	5.0
5	Onaga Trail & Hopi Trail	56.7	6.8	17.4	7.3	7.0	8.0	7.1	3.0
6	Onaga Trail & Sage Avenue	54.5	6.4	13.0	6.7	9.3	8.0	7.1	4.0
7	Palm Avenue & Sunland Drive	53.2	6.7	9.7	9.9	5.7	6.0	10.3	5.0
8	Park Boulevard & State Route 62	47.6	6.3	18.5	1.9	7.0	6.0	5.0	3.0
9	Baseline Road & Utah Trail	47.3	5.6	3.0	9.4	4.0	8.0	12.2	5.0
10	Twentynine Palms High School	46.7	5.8	9.7	2.2	4.0	10.0	10.9	4.0
11	Morongo Valley Elementary School	44.2	0.3	5.1	10.0	4.8	10.0	10.1	4.0
12	Landers Elementary School	43.3	0.0	1.8	8.9	4.6	10.0	13.0	5.0
13	State Route 62 & Avalon Avenue	42.9	5.6	2.5	8.6	3.5	8.0	11.8	3.0
14	Onaga Trail & Balsa Avenue	42.0	5.3	7.3	5.7	4.2	10.0	5.6	4.0
15	La Contenta Middle School & Black Rock High School	42.0	5.3	7.8	5.4	6.6	10.0	4.0	3.0
16	Sullivan Road & El Sol Avenue (Knott's Sky Park)	40.3	1.9	9.1	0.0	4.9	6.0	13.3	5.0
17	Yucca Trail & Airway Avenue	39.2	2.2	7.6	7.1	3.7	6.0	9.6	3.0
18	State Route 62 & Warren Vista Drive	37.6	1.9	7.3	7.5	3.6	6.0	9.3	2.0
19	State Route 62 & Park Avenue	35.7	0.6	3.6	10.0	3.6	4.0	8.9	5.0
20	Friendly Hills Elementary School	34.8	0.0	4.9	3.2	2.8	10.0	10.8	3.0
21	Copper Mountain College	34.3	0.3	0.0	7.5	5.0	4.0	12.5	5.0
22	Yucca Mesa Elementary School	34.1	0.0	2.7	3.9	4.9	6.0	12.6	4.0

Figure 6.2.3. Local Focus Area Prioritization Scores Map

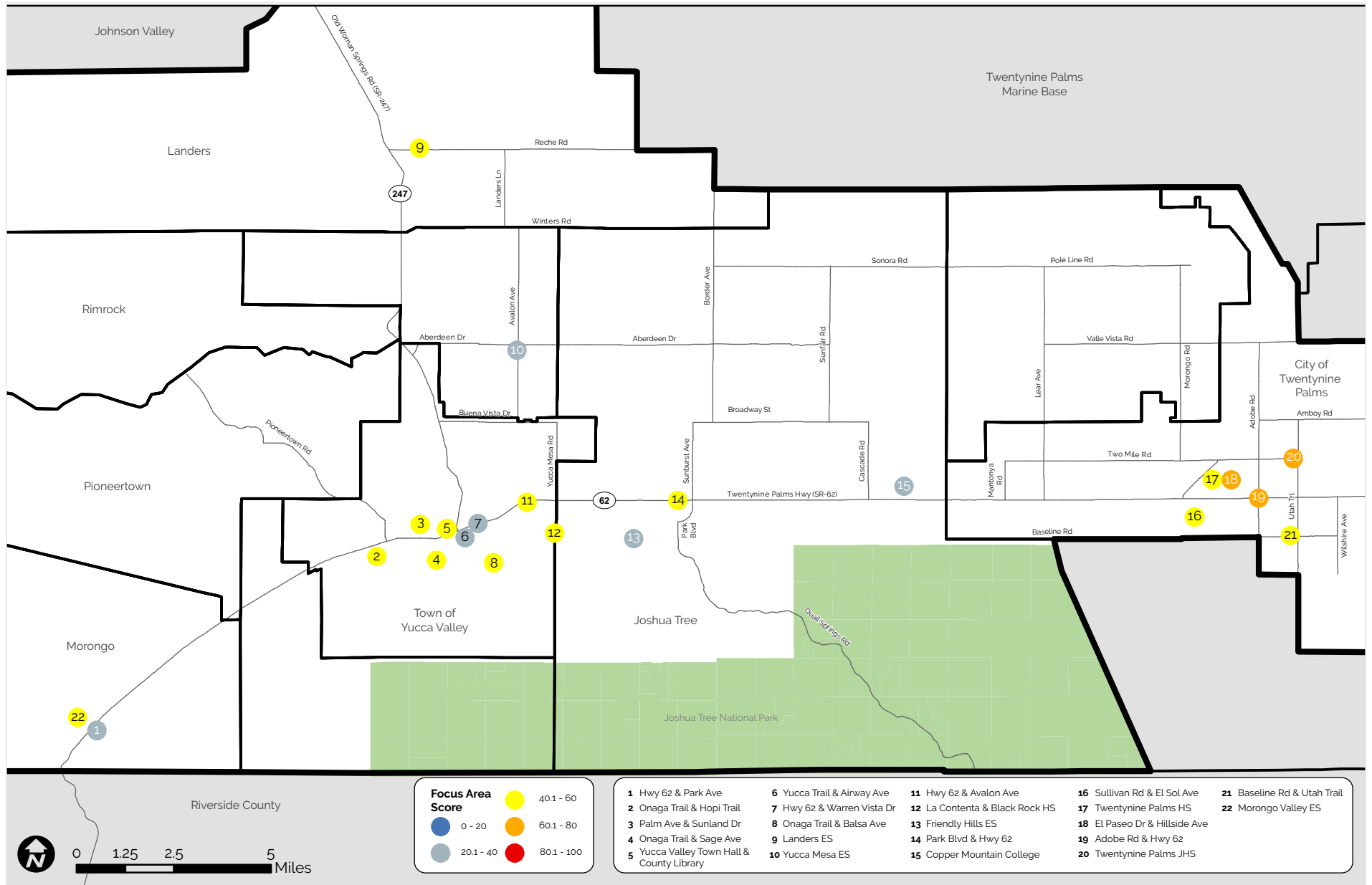
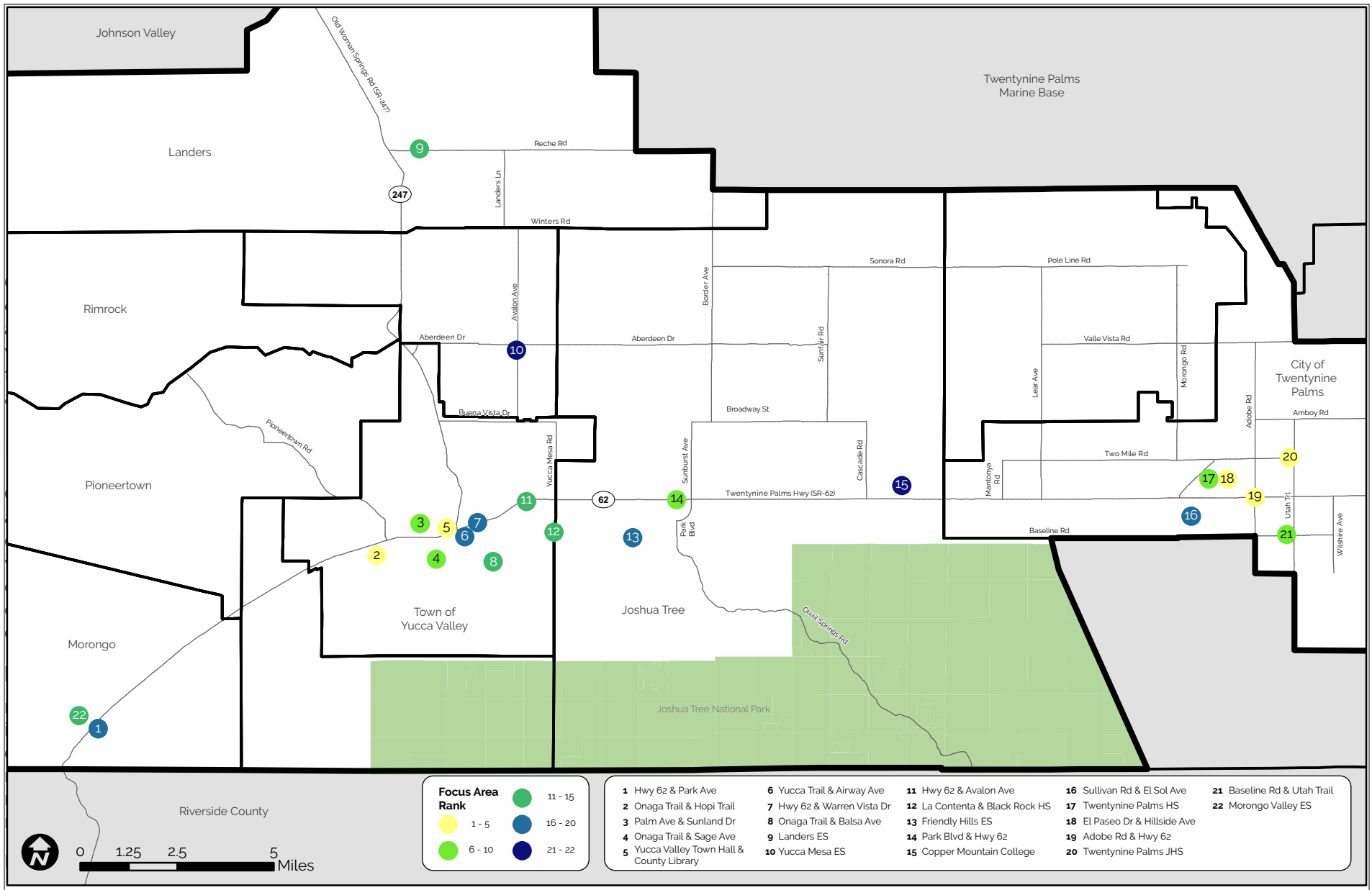


Figure 6.2.4. Local Focus Area Prioritization Rankings Map



## 6.3. FUNDING OPPORTUNITIES

This section presents potential federal, state, regional, and local funding sources that the County or cities can seek for Plan implementation.

The following pages list funding opportunities by source, agency, program name, project eligibility, and provides a brief description for context. The County or cities can consider applying for a variety of funding opportunities to implement both infrastructure and non-infrastructure recommendations.

Based on the project prioritization detailed in the previous section, the County or cities could seek grant funding to design and construct the recommended infrastructure projects using the prioritization rankings as a guide. The County or cities may individually advance the implementation of a project where there is interest, funding is available, or there is incorporation into an existing infrastructure improvement project or feasibility study.

Table 6.3.1. Funding Sources

SOURCE	AGENCY	PROGRAM	ELIGIBILITY	DESCRIPTION
Federal	Federal Highway Administration (FHWA)	Surface Transportation Block Grant Program (STBGP) for Transportation Alternatives (TA)	Infrastructure	<p>Under the Fixing America's Surface Transportation (FAST) Act, the Moving Ahead for Progress in the 21st Century Act (MAP-21) was eliminated and the STBGP replaced the long-standing Surface Transportation Program (STP). STBGP has an apportionment set-aside for Transportation Alternatives (TA), which funds smaller projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, historic preservation, and other community improvements.</p> <p>The Act strives to improve mobility on America's highways, create jobs and support economic growth, and promote innovation; it provides \$226.3 billion of federal funding for surface transportation programs for FY 2016 to 2020. Specifically in California, STBGP funds are allocated through the state's Regional Surface Transportation Block Grant Program (RSTP) and the set-aside TA funds are allocated through the Active Transportation Program (ATP).</p>
Federal	Federal Highway Administration (FHWA)	Highway Safety Improvement Program (HSIP)	Infrastructure & Non-Infrastructure	<p>The Highway Safety Improvement Program (HSIP) is a federal-aid program that was created from the FAST Act. The purpose of the program is to reduce fatalities and serious injuries on all public roads. In California, the HSIP funds are managed by the Division of Local Assistance (DLA). The City can apply for HSIP funds toward any public road or publicly owned bicycle or pedestrian pathway or trail in order to improve the safety for its users.</p>
Federal	United States Department of Transportation (USDOT)	Better Utilizing Investments to Leverage Development (BUILD) <i>(formerly TIGER)</i>	Infrastructure	<p>The BUILD grant replaced the Transportation Investment Generating Economic Recovery (TIGER) Grant Program, which was launched in 2009. The Consolidated Appropriations Act of 2018 made available \$1.5 billion for the BUILD Transportation Discretionary grants through September 2020. Eligible recipients include: state, local and tribal governments, including U.S. territories, transit agencies, port authorities, metropolitan planning organizations (MPOs), and other political subdivisions of state or local governments. The grant focuses on projects with significant regional or local impact and requires a 20% local match. While biking and walking projects are eligible, the emphasis is on larger transportation projects.</p>
Federal	Housing and Urban Development (HUD)	Community Development Block Grant (CDBG)	Infrastructure & Non-Infrastructure	<p>CDBG is a flexible program that provides communities with resources to address a wide range of unique community development needs. The federally-funding program is administered by the Department of Housing and Urban Development (HUD). On the local level, these funds are administered by the Riverside County Economic Development Agency (EDA) and can fund a range a projects including neighborhood revitalization, transportation services, public safety programs, flood and drainage facilities, water/sewer improvements, street improvements/sidewalks, etc.</p>
State	California Department of Transportation (CALTRANS)	Community-Based Transportation Planning Grant (CBTP) Program	Non-Infrastructure	<p>The Community-Based Transportation Planning grant program aims to engage the community in transportation and land use projects. Projects support concepts such as livable and sustainable communities with a transportation or mobility focus. They should also promote community identity and quality of life, as well as, provide transportation and land use benefits to communities.</p>

SOURCE	AGENCY	PROGRAM	ELIGIBILITY	DESCRIPTION
State	California Department of Transportation (CALTRANS)	Active Transportation Program (ATP)	Infrastructure & Non-Infrastructure	The Active Transportation Program (ATP) was signed into legislation by Governor Brown in 2013. It consolidated existing federal and state transportation programs such as the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and Safe Routes to School (SR2S) into a single program. The Road Repair and Accountability Act of 2017 added approximately \$100 million per year in available funds for the ATP. This ATP is supported with funding from the Surface Transportation Block Grant Program (STGB) administered by the FHWA. The program recently completed its fourth funding cycle.
State	California Office of Traffic Safety (OTS)	OTS Grants	Non-Infrastructure	The Office of Traffic Safety Grants seeks to reduce traffic deaths, injuries, and economic losses. The grants have ten areas of concentration; of these, projects identified in this Plan qualify for the following: <ol style="list-style-type: none"> <li>1. Pedestrian and Bicycle Safety</li> <li>2. Police Traffic Services</li> <li>3. Public Relations, Advertising, and Marketing Program</li> <li>4. Roadway Safety and Traffic Records</li> </ol>
State	California Department of Transportation (CALTRANS)	Systemic Safety Analysis Report Program (SSARP)	Non-Infrastructure	The Systemic Safety Analysis Report Program (SSARP) is a state-funded program that was established in 2016. The intent of the program is to help local agencies perform collision analysis, identify safety issues on their street network, and develop a list of countermeasures that can be used to prepare for future applications related to safety improvements. These safety improvements can help reduce collisions where vehicles interact with vulnerable road users (pedestrians, bicyclists, and motorcycles).
State	California Natural Resources Agency	Urban Greening Grant Program	Infrastructure	"The Urban Greening Program receives its funding from revenue generated from the state's Cap and Trade program. The program is administered by the California Natural Resources Agency which has allocated \$80 million to the program. Projects that are qualified for grants from the program are required to show net GHG benefits along with other benefits; additionally, they must include one of three project activities: <ol style="list-style-type: none"> <li>1. Sequester and store carbon by planting trees</li> <li>2. Reduce building energy use by strategically planting trees to shade buildings</li> <li>3. Reduce commute vehicle miles traveled by constructing bicycle paths, bicycle lanes or pedestrian facilities that provide safe routes for travel between residences, workplaces, commercial centers, and schools."</li> </ol>
State	California Department of Transportation (CALTRANS)	Environmental Enhancement and Mitigation (EEM) Program	Infrastructure	The Environmental Enhancement and Mitigation Program seeks to mitigate the environmental effects of transportation facilities. As provided by California Streets and Highways Code Section 164.56, the state legislature can allocate up to \$7 million from the Highway Users Tax Account toward this program. One category for which funding is provided is the acquisition or enhancement of resource lands to mitigate the loss of, or the detriment to, resource lands lying within or near the right of way acquire for transportation improvements, including roadside recreational facilities.

SOURCE	AGENCY	PROGRAM	ELIGIBILITY	DESCRIPTION
State	California Department of Transportation (CALTRANS)	State Highway Operation and Protection Program (SHOPP)	Infrastructure	The State Highway Operation and Protection Program (SHOPP) offers funding for capital improvement projects that relates to the state highway system. Projects focus on reducing collisions, enhancing mobility, restoring damage to roadways, and preserving bridges and roadways. This can include pedestrian and bicycle facility projects.
State	California Department of Transportation (CALTRANS)	Sustainable Communities	Non-Infrastructure	Sustainable Communities grants are intended to encourage local and regional multi-modal transportation and land use planning that furthers the region's Regional Transportation Plan/Sustainable Communities Strategy, where applicable. Successful projects will also contribute to the State's greenhouse gas reduction targets, employ the goals and best practices cited in the 2017 RTP Guidelines, and address the needs of disadvantaged communities. An estimated \$17 million in competitive grants is available for the FY 2019-20 grant cycle. The program requires a 11.47 % local match. Grants are available in amounts ranging from a minimum of \$100,000 (\$50,000 for disadvantaged communities) to a maximum of \$1,000,000 (MPOs may only apply with sub-applicants for the competitive grants).
State	California Department of Transportation (CALTRANS)	Strategic Partnerships	Non-Infrastructure	Strategic Partnerships grants are intended to identify and address statewide, interregional, or regional transportation deficiencies on the State highway system in partnership with Caltrans. Successful Strategic Partnerships will strengthen government-to-governments relationships and result in programmed improvements. A total of \$4.5 million in competitive grants is available for the FY 2019-20 grant cycle. Example project types include corridor studies, and corridor preservation studies, studies that identify interregional, inter-county, and/or statewide mobility and access needs, and projects that evaluate accessibility and connectivity of the multi-modal transportation network.
Regional / Local	Southern California Association of Governments (SCAG)	Sustainable Planning Grant	Non-Infrastructure	<p>The Sustainability Planning Grant Program (formerly known as the Compass Blueprint Grant Program) provides technical support to members in SCAG's jurisdictions. Grants can be used toward planning and policy efforts that allow for the implementation of the regional RTP/SCS. Grants in the program falls into three categories:</p> <ol style="list-style-type: none"> <li>1. Integrated Land Use – Sustainable Land Use Planning, Transit Oriented Development (TOD) and Land Use &amp; Transportation Integration</li> <li>2. Active Transportation – Bicycle, Pedestrian and Safe Routes to School Plans</li> <li>3. Green Region – Natural Resource Plans, Climate Action Plans (CAPs) and Green House Gas (GHG) Reduction programs</li> </ol>
Regional / Local	The Community Foundation	[various]	Non-Infrastructure	The Community Foundation strives to improve the quality of life in the San Bernardino, Riverside, and Coachella Valley regions by investing in programs that address community needs. They award grants to 501(c) 3 nonprofit organizations and provides student scholarships. Program areas include: educational scholarships, health and human services, civic and environmental benefit, arts and culture, and children and families.



## PUBLIC ART-RELATED FUNDING SOURCES & PARTNERS

Opportunities to include creative placemaking in projects should be explored within typical infrastructure and non-infrastructure active transportation funding when possible. However, outside grant funding is also recommended as a resource for public art-related projects.

### Public Arts Local Partners & Stakeholders

The following stakeholders can help broaden the potential funding sources for the project and should be consulted as the implementation of the plan progresses. Conversations exploring how Plan goals may align with their stated missions and public service objectives can prove to be beneficial both mutually and for the community.

- **Mojave Desert Land Trust (MDLT)** - Their mission of conservation, land acquisition, sustainability, protection of natural habitat and guidelines for artists working in the desert environment makes them an excellent partner for project designers to be proactive in developing infrastructure that is sensitive to the desert terrain.
- **Joshua Tree National Park** has supported arts programming through partnerships with associated organizations: the *Joshua Tree National Park Association* helps produce an annual Arts Festival; the *Desert Institute* is a part of the Association and offers various educational and art-related public programs in the park for a fee; *The Joshua Tree National Park Council for the Arts* organizes an annual Juried Show and Art Expo; and a grant-funded

initiative, the *Joshua Tree Art Innovation Laboratory (JT Lab)* that has allowed the Park to explore ways the creative community can support the park service's mission of preservation and engagement and help solve problems using more creative approaches. The Park also has a long-standing Artist-In-Residence program that is currently being restructured, and a weekly volunteer program program, Artists' Tea, which convenes local artists to strengthen community. All of these organizations could help to circulate information, connecting artists with RFQs and RFPs while serving their respective missions.

- **Joshua Tree Living Arts (JTLA)** - JTLA is a non-profit organization dedicated to strengthening the community through the arts by providing resources and programs that create an economically-viable, sustainable, vibrant, and interconnected living arts community for all generations. They were selected by a group of local arts leaders to guide the implementation of the recently developed Morongo Basin Strategic Plan for Culture and Arts. JTLA is working in partnership with other local arts organizations, government agencies, and businesses to achieve the plan's established goals. The agency could act as a liaison to education focused projects including aspects of "Safe Routes to School," and painted crosswalks to improve visibility.
- **Copper Mountain Community College (CMCC)** CMCC's mission is to provide educational opportunities for diverse desert communities and beyond through a comprehensive curriculum and support services that demonstrate a passion for the success of every individual student. In addition to their vibrant studio arts program, they also promote the study of desert living including desert ecosystems, desert cultures, and sustainable desert practices. These complementary foci and their comprehensive reach in the Morongo Basin make them suited to spearhead efforts in creating student-led projects including bus shelters, shade structures,

and other temporary activation projects within the transportation corridor.

- **City of Twentynine Palms Public Arts Advisory Committee (PAAC)** - PAAC members oversee the Art in Public Places program, supports Youth and the Arts projects in the community, and sponsors Art in Public Places exhibitions at the City's Twentynine Palms Visitor Center & Art Gallery and Chamber of Commerce. Their vision of creating and promoting the economic and social wellbeing of its residents is guided by principles of sustainability and adaptability, and embraces the development of a strong and diversified local economy with a focus on arts and cultural tourism. They are a resource for helping to leverage matching funds through other civic transportation and healthy community grant opportunities.
- **San Bernardino County** - County resources should be identified as part of the economic sustainability of the arts community and integrated with county funded initiatives like, health, transportation, education, sustainability and tourism. These areas all relate back to goals of this Plan.
- **San Bernardino County Transportation Authority (SBCTA)** - SBCTA, which allocates and programs State and Federal funds for regional transportation projects throughout the County, will also be a crucial partner in providing funding for the integration of arts-inclusive active transportation projects.

### Specific Grant Funding Sources

The Project Team has identified grants on the following page that may also be considered to secure funding for public art opportunities associated with education, community engagement and infrastructure for the project.

Table 6.3.2. Funding Sources for Public Art-Related Elements

SOURCE	ORG	PROGRAM	ELIGIBILITY	DESCRIPTION
National	National Endowment for the Arts	OUR TOWN: Place-based Projects	Infrastructure	Our Town is the National Endowment for the Arts' creative placemaking grants program. Through project-based funding, we support projects that integrate arts, culture, and design activities into efforts that strengthen communities by advancing local economic, physical, and/or social outcomes. Successful Our Town projects ultimately lay the groundwork for systemic changes that sustain the integration of arts, culture, and design into strategies for strengthening communities. These projects require a partnership between a local government entity and nonprofit organization, one of which must be a cultural organization; and should engage in partnership with other sectors (such as agriculture and food, economic development, education and youth, environment and energy, health, housing, public safety, transportation, and workforce development). The Public Space design category encourages projects related to public infrastructure or spaces where people congregate (parks, plazas, and artist-produced elements of streetscapes.)
National	National Endowment for the Arts	Art Works	Non-Infrastructure	Art Works is the National Endowment for the Arts' principal grants program. Through project-based funding, Art Works supports public engagement with, and access to, various forms of excellent art across the nation, the creation of art that meets the highest standards of excellence, learning in the arts at all stages of life, and the integration of the arts into the fabric of community life. Projects may be large or small, existing or new, and may take place in any part of the nation's 50 states, the District of Columbia, and U.S. territories. Grants generally will range from \$10,000 to \$100,000. No grants will be made below \$10,000. Grants of \$100,000 or more will be made only in rare instances, and only for projects that Art Works determines demonstrates exceptional national or regional significance and impact. In the past few years, well over half of the agency's grants have been for amounts less than \$25,000.
State	California Arts Council	Creative California Communities	Infrastructure & Non-infrastructure	The Creative California Communities (CCC) program supports collaborative projects that harness arts and culture as a creative placemaking strategy. Projects should benefit residents and visitors in California's communities by leveraging the assets of the creative sector (artists, cultural organizations and arts-related businesses) to address community needs or priorities. Proposed projects must be designed and developed in partnership between the applicant organization and at least one partnering organization and should include California artists and their work as central to project design and implementation. The purpose is to revitalize neighborhoods or communities using arts as the central project activity and artists as key participants in that effort. Develops innovative arts or culturally related approaches to cultural economic development tailored to the specific communities or circumstances.

SOURCE	ORG	PROGRAM	ELIGIBILITY	DESCRIPTION
State	California Arts Council	Artists in Communities	Infrastructure & Non-Infrastructure	Artists in Communities (AC, formerly Artists Activating Communities) supports sustained artistic residencies in community settings, demonstrating that artists are integral to healthy communities and that the arts are a societal cornerstone that brings people together, builds community, and fosters social progress. AC centralizes artists and their artistic processes as vehicles for community vitality. AC Projects are artist-driven and engage community members as active participants. The application for this program must be submitted by an organization, but project must be developed in partnership with one or more California-based artists, and the artists' work must be the focus of the project. An applicant must be one of the following: a California-based nonprofit arts organization, unit of government, OR a social service/community nonprofit organization. Organizations such as libraries, housing agencies, senior centers, cultural centers, or hospitals may be eligible to apply. Use of fiscal sponsors is allowed in this program.
State	National Endowment for the Arts	Challenge America	Non-Infrastructure	The Challenge America category offers support primarily to small and mid-sized organizations for projects that extend the reach of the arts to underserved populations -- those whose opportunities to experience the arts are limited by geography, ethnicity, economics, or disability. These grants are for a fixed amount of \$10,000 and require a minimum of 100% match.
Federal	Economic Development Administration	Public Works and Economic Development Act of 1965 (PWEDA)	Non-Infrastructure	<p>The Economic Development Administration (EDA) was established and currently operates under the Public Works and Economic Development Act of 1965 (PWEDA). It aims to promote competitiveness and growth in rural and urban distressed communities by providing assistance for job creation, collaboration, and innovation. While it supports a range of activities, most of its funding is devoted to infrastructure development, job training, and support for new and struggling industries.</p> <p>PWEDA grants can potentially be used for a range of arts-related activities:</p> <ul style="list-style-type: none"> <li>Building arts-related infrastructure</li> <li>Public art projects</li> <li>Incorporating the arts into transportation and public housing projects</li> <li>Supporting cultural heritage sites</li> <li>Designing a regional creative economy plan</li> <li>Developing partnerships between nonprofit and for-profit arts communities</li> </ul>

*\*For additional funding sources that can be explored, refer to the **Morongo Basin Strategic Plan for Culture and the Arts (MBSPCA)**'s 'Potential Funding Sources' research summary.*

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## 6.4. PROJECT PHASING

Project phasing gives guidance about the amount of time and effort it takes to implement the projects recommended as part of this plan. It also helps municipalities plan for projects that can be implemented in the near future versus the projects which will not be foreseeable until several years from now. The categories below group projects by corridor for both pedestrians and bicyclists, designed to distinguish project phasing that is chronologically scalable and fiscally conscious.



### SHORT-TERM (0-3 YEARS)

Short-term projects are those with a high “readiness” factor, meaning the proposed projects can be quickly implemented. Both pedestrian corridor projects and bicycle corridor projects within the Morongo Basin that are phased as “short-term” present opportunities for more rapid implementation and require less intensive engineering, design, construction costs/resources, and funding.

ADA curb ramps, high visibility crosswalks, pavement markings, signage, RRFB's

Class II bike lane striping (where roadway width permits and does not require re-striping), Class II and Class III roadway signage, and pavement markings (i.e. sharrows)

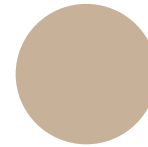


### MID-TERM (3-7 YEARS)

Projects included in the mid-term phasing are chronologically scaled beyond the short-term projects due to their complexity and cost. The amount of expenditures associated with mid-term projects is higher than short-term projects due to more intensive engineering, design, construction costs, and funding necessary to be implemented.

Sidewalk (with curb and gutter), curb extensions / bulbouts

Class II bike lane striping and restriping (where removal of parking and shoulder pavement additions can be made)



### LONG-TERM (7-10 YEARS)

These projects can be considered as forecasted projects and require added resources prior to implementation. These projects require more attention in the engineering and design phases or include features with high unit costs.

Traffic signals, roundabouts and any project that requires re-wiring

Class I bike path (installation and associated features), Class II bike lane (installation that involves more attention to re-striping, and roadway width alterations)



## 6.5. PERFORMANCE MEASURES

Performance measures are specific variables that evaluate the effectiveness of active transportation planning and implementation with quantitative data. Performance measures provide several benefits to agencies that use them. They show the value of projects to community stakeholders, inform smart budgeting decisions, and demonstrate to grant administrators the importance of and need for project funding.

The following performance measures are recommended to help ensure the success of the goals and objectives laid out at the beginning of this Plan. A suggested performance measure is provided for each of the listed objectives, including the data source required to track and assess this metric.

Table 6.5.1. Performance Measures

<b>GOAL</b>	<b>OBJECTIVE</b>	<b>PERFORMANCE MEASURE</b>	<b>DATA SOURCE</b>
<b>Improve Safety</b>	Develop efficient procedures for maintaining pedestrian and bicycle facilities	Mileage of bike lanes implemented through paving/routine maintenance projects	City/Town/County Inventory
	Reduce bicyclist and pedestrian fatalities and injuries resulting from collisions	Number of bicycle/pedestrian fatalities and serious injuries over 5 years	SWITRS/TIMS
<b>Support Healthy Options</b>	Encourage classes and events at schools and community centers to teach residents safe and healthy biking and walking habits (Countywide Vision)	Number of staff or teachers trained in walking and bicycling issues, number of trainings per year	City/Town/County Inventory
	Invest in active transportation facilities that will provide opportunities for exercise and recreation	Obesity rates, physical activity rates	CalEnviroScreen / Healthy Places Index
<b>Connect People and Places</b>	Invest in active transportation infrastructure that links population centers to regional trails, parks, schools, and transit stations	Number of attractors within a half-mile of a bikeway facility or regional corridor	Morongo Basin Active Transportation Plan
	Support public art-related projects, open streets events, and programming that encourage walking and biking within the Morongo Basin community	Number of public art-related projects, open streets events, and active transportation programs per year	City/Town/County Inventory
<b>Enhance the Local Environment</b>	Reduce vehicle emissions and pollution by increasing the number of walking and biking trips	Criteria Pollutant emissions	CalEnviroScreen
	Maintain and enhance the local trail network	Miles of Class I bike routes installed / maintained	City/Town/County Inventory
<b>Promote a Vibrant Economy</b>	Improve accessibility to jobs by walking and biking	Increase work mode share of bicycle/pedestrian trips	American Community Survey
	Invest in active transportation facilities that will attract new businesses, promote tourism, and bring economic growth to the region	Number of jobs added to the economy as a result of improved transportation conditions	REMI model via SCAG

## 6.6. IMPLEMENTATION & NEXT STEPS

The Morongo Basin Active Transportation Plan includes projects and programs that will help to make the region safer, more active, more vibrant, and more connected. The Town of Yucca Valley, City of Twentynine Palms, and County of San Bernardino are responsible for leading the implementation of this Plan, coordinating as necessary to ensure the regional and local benefits of proposed infrastructure and non-infrastructure recommendations. The County and local agencies should also consider opportunities to integrate public art and creative placemaking strategies to support walking and biking infrastructure and programs. Collaboration between community groups, stakeholders, local institutions, and other organizations is also key for project implementation.

Chapter 6 has provided several strategies that these agencies can use to pursue the recommendations listed in Chapters 5 and detailed in Appendices A and B. The project prioritization provided in section 6.2 should be used as guidance

for the projects and opportunities likely to produce the most public benefits. Higher prioritized projects may be more likely to have success with grant funding as they are likely to demonstrate a high project need. Project phasing in section 6.4 helps agencies identify the projects that are likely to see implementation sooner than others once pursued. This allows the Plan to be flexible enough to accommodate each agency's preference for improvements that are quickly visible versus longer-term projects that could produce long-lasting benefits. The funding tables in section 6.3 assists in identifying opportunities would fund each chosen segment and project. Together, these elements can help cities plan for a future that best meets their needs and resources.

This Plan is intended to be dynamic over time. Performance measures in section 6.5 can be used to gauge the effectiveness of investments, demonstrate the impacts of projects funded, and change priorities as

necessary. The performance measures will also help translate how the concrete projects and programs pursued fit into the broader goals established at the outset. This gives residents and stakeholders the ability to holistically evaluate the strategies pursued by each agency.

New pedestrian and bicycle facilities can be exciting projects for the Morongo Basin area. However, incorporated cities and the County should consider on-going maintenance needs for both new and existing facilities. This Plan recommends that bicycle and pedestrian facilities continue to be maintained as part of the Town of Yucca Valley, City of Twentynine Palms, and the County's regular roadway and public right-of-way maintenance programs. As new facilities are implemented, maintenance spending shall also be reevaluated for the potential need of an increased budget.



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