

ENTERING
Colorado River
Indian Reservation

Executive Summary

MPD 035-013

2014 Strategic Long-Range Transportation Plan *for the* *Colorado River Indian Tribes*

Prepared by:



Kimley-Horn
and Associates, Inc.

APRIL 2014 | PREPARED FOR:
COLORADO RIVER INDIAN TRIBES



2014 Strategic Long Range Transportation Plan for the Colorado River Indian Tribes

Final Executive Summary

Prepared by:



Prepared for:

COLORADO RIVER INDIAN TRIBES

APRIL 2014

RESOLUTION

COLORADO RIVER TRIBAL COUNCIL

A Resolution to Adopt the 2014 Colorado River Indian Tribes Long Range Transportation Planning Report and adopt it as the Tribe's current Long Range Transportation Plan

Be it resolved by the Tribal Council of the Colorado River Indian Tribes, in *special* meeting assembled on April 3, 2014

WHEREAS, the Colorado River Indian Tribes (Tribe) is a federally recognized Indian Tribe duly organized with a governing body known as the Tribal Council, according to provisions contained in the Indian Reorganization Act of June 18, 1934; and

WHEREAS, The Colorado River Indian Tribes was awarded funding from the Planning Assistance for Rural Area's (PARA) Grant through the Arizona Department of Transportation (ADOT) and selected Kimley-Horn and Associates Inc., to write the 2014 Colorado River Indian Tribes Long Range Transportation Plan under the supervision of the CRIT Planning Department and ADOT and the Technical Advisory Committee that was formed that identified road improvement and maintenance projects to meet tribal transportation needs; and

WHEREAS, the improvement, safety and maintenance projects identified in this 2014 Transportation Planning Report have been reviewed by the Bureau of Indian Affairs, Western Regional Office, Division of Transportation (BIAWRODOT) staff and changes and additions suggested made by BIAWRODOT have been incorporated into the Report; and

WHEREAS, there is a need to identify current tribal road safety, construction and maintenance priorities, incorporate the functional classifications contained in 25 CFR 170 and in ADOT regulations, and road inventory update changes included in the 2014 Report, and adopts the study as the tribe's current (2014) Long Range Transportation Plan as a means of reaffirming the Tribe's transportation needs and supporting changes to the Tribal Transportation Program (TTP) inventory, to implement projects to meet those needs; and

The foregoing resolution was on April 3, 2014 duly approved by a vote of 5 for, 0 against and 0 abstaining, by the Tribal Council of the Colorado River Indian Tribes, pursuant to authority vested in it by Sections 1., Article VI of the Constitution and By laws of the Tribes, ratified by the Tribes on March 1, 1975 and approved by the Secretary of the Interior on May 29, 1975, pursuant to Section 16 of the Act of June 18, 1934, (46 Stat. 984). This resolution is effective as of the date of its adoption.

COLORADO RIVER TRIBAL COUNCIL

By



Chairman



Secretary Acting

RESOLUTION NO. R- 111-14
APRIL 3, 2014
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NOW, THEREFORE BE IT RESOLVED that the Tribal Council of the Colorado River Indian Tribes hereby approves the April 2014 Colorado River Indian Tribes Long Range Transportation Planning Report to incorporate the Functional Classifications contained in 25 CFR 170 and adopts this document as their current (2014) Long Range Transportation Plan; and

BE IT FURTHER RESOLVED that the Tribal Council of the Colorado River Indian Tribes hereby authorizes the BIA — Western Regional Office, Division of Transportation, to take the necessary action to implement projects based on the Tribe's current road construction and maintenance priorities.

BE IT FINALLY RESOLVED that the Tribal Council Chairman and Secretary or their designated representatives, are authorized to execute any and all documents necessary to implement this action.

Project Management Team

Arizona Department of Transportation
206 S. 17th Ave.
Mail Drop: 310B
Phoenix, AZ 85007

Colorado River Indian Tribes
26600 Mohave Road
Parker, Arizona 85344

Don Sneed, ADOT Project Manager
Email: DSneed@azdot.gov
Telephone: 602-712-6736

Greg Fisher, Tribal Project Manager
Email: gregory.fisher@crit-nsn.gov
Telephone: (928) 669-1358
Mobile: (928) 515-9241

Tony Staffaroni, ADOT Community Relations
Project Manager
Email: AStaffaroni@azdot.gov
Phone: (602) 245-4051

Project Consultant Team

Kimley-Horn and Associates, Inc.
333 East Wetmore Road, Suite 280
Tucson, AZ 85705

Mary Rodin, AICP
Email: mary.rodin@kimley-horn.com
Telephone: 520-352-8626
Mobile: 520-256-9832

Field Data Services of Arizona, Inc.
21636 N. Dietz Drive
Maricopa, Arizona 85138

Sharon Morris, President
Email: smorris@fdsaz.com
Telephone: 520-316-6745

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Colorado River Indian Tribes 2014 Strategic Long Range Transportation Plan Executive Summary

The Colorado River Indian Tribes (CRIT) 2014 Strategic Long Range Transportation Plan (LRTP) is a strategic plan for improvements over five-, 10-, and 20-year periods, incorporating both roadway and multimodal needs within the CRIT Reservation area. Some key focus areas of the LRTP include road maintenance and safety programs, and improvement plans for bicycle, pedestrian, and transit systems. The LRTP also identifies updates to the Tribal Transportation Inventory and functional classification systems, which will assist in expanding the level and types of funding available for transportation projects.

The Reservation area is shown in **Figure 1**. It should be noted that although I-10 and other state routes are within the reservation area, the major focus of the study is on tribal and Bureau of Indian Affairs (BIA) routes.

1. Study Objectives

The objective of this study is the development of a Strategic LRTP with strong road maintenance, safety, transit, multimodal, and corridor operations elements resulting in a program of transportation projects for five-, 10-, and 20-year planning horizons.

2. Public Outreach

This project engaged the Tribal Community through two public open houses. Both open houses were scheduled to coincide with the CRIT monthly Community Awareness Night event to boost attendance. At the first public open house held on September 19, 2013 from 6-8 p.m., Community members were able to review display boards explaining the study, ask questions, and provide their input on transportation issues and needs in the community. A survey was provided for members to complete at the open house. Over 30 members of the community signed in at the open house though total attendance was closer to 50-75 people. Input was received on transportation needs and where persons travel to in order to assist with transit planning.

Public Open House 2 was held on February 13, 2014. Community members that attended the open house were able to review display boards explaining the study recommendations, ask questions, and provide feedback on transportation issues and needs in the community. A general comment form was also provided for members to complete at the open house. In total, 13 members of the community signed in at the open house, and a number of verbal comments were received after the meeting.

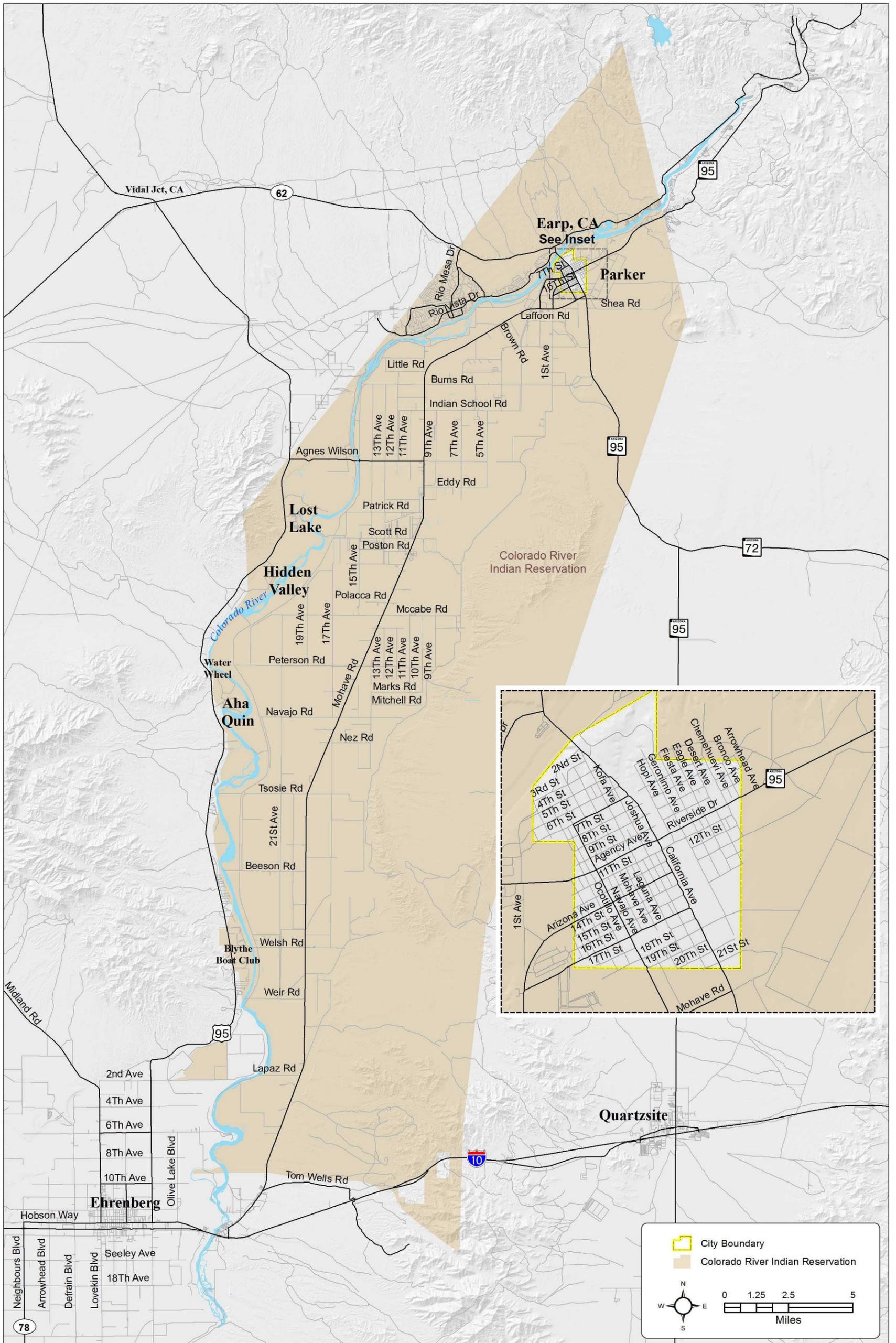


Figure 1 – Reservation Area Map

2.1 TECHNICAL ADVISORY COMMITTEE AND PROJECT MANAGEMENT TEAM

In addition to the public outreach, a Technical Advisory Committee (TAC) was established. The role of the TAC was to provide input on technical issues related to the study and to review and comment on study deliverables. The TAC met three times during the course of the project.

A core Project Management Team (PMT) provided project direction and input to the study. The PMT includes representatives of the Colorado River Indian Tribes, the Arizona Department of Transportation (ADOT) Multimodal Planning Division, ADOT Communications Office, and Kimley-Horn staff. Meetings were held monthly. Meeting topics include reviewing and discussing progress, findings, and recommendations of the study.

2.2 STAKEHOLDER INTERVIEWS

A number of stakeholders were interviewed to receive their perspectives on needed transportation projects. Stakeholders are people who use or work with the road system every day. Stakeholders included representatives from:

- Colorado River Indian Tribes Police Department
- Colorado River Indian Tribes Fire Department
- Colorado River Indian Tribes Education Department
- Colorado River Indian Tribes Housing Improvement Department
- Colorado River Indian Tribes Housing Department
- Head Start
- Mo-Chem-Ho-Na Senior Center
- Avi Suquilla Airport Manager
- Parker Unified School District Bus Barn Manager
- La Paz Transit
- Bureau of Indian Affairs Colorado River Agency Maintenance Department
- Tribal Council Members

Technical Advisory Committee Representation

- **Colorado River Indian Tribes**
 - Tribal Council
 - Police Department
 - Planning Department
 - Head Start
 - Museum
 - Environmental Protection Office
 - Behavioral Health and Social Services
 - Health Services
- **Arizona Department of Transportation**
 - Multimodal Planning Division – Planning, Transit, Environmental, and Aeronautics
 - Yuma Engineering District
 - Communications Office
- **California Department of Transportation – District 8**
- **Town of Parker Public Works Department**
- **La Paz County**
 - Public Works Department
 - Transit
- **Parker Unified School District**
- **Western Arizona Council of Governments**
- **Indian Health Service**
- **Bureau of Indian Affairs**

3. Identifying Transportation Needs

Transportation needs were developed through a process which considered:

- Stakeholder, Technical Advisory Committee, and general public input
- Traffic analysis
- Crash data assessment
- Field review of road conditions and pavement conditions
- 2013 CRIT Road Safety Assessment (RSA) findings

4. Overview of Transportation Projects

A brief overview of types of transportation projects that were identified included:

4.1 PEDESTRIAN PROJECTS

Pedestrian projects included:

- **Sidewalks** – Sidewalk construction is recommended in a number of areas with the objective of linking residences to activity centers such as the Tribal Headquarters, health care facilities, and schools. Providing connections to link the sidewalk system within the Town of Parker to Tribal roads was another consideration.
- **Pedestrian Crosswalks and Crossing Devices** – To address the need for additional pedestrian crossings in the Town of Parker, it is recommended that the CRIT work with the Town of Parker to evaluate the need for and implement pedestrian hybrid beacon (PHB) crossings at key locations at Riverside Drive/Eagle Avenue, River Drive/Chemuehuevi Avenue, and California Avenue/ 12th Street. Also known as a HAWK beacon (**H**igh-Intensity **A**ctivated cross**W**alk beacon), a PHB is a traffic signal used to stop road traffic and allow pedestrians to cross safely. The purpose of a PHB is to allow protected pedestrian crossings, stopping road traffic only as needed. Research has shown motorists' compliance with the PHB is much higher than with traditional pedestrian crossings.
- **Pedestrian Crossing Warning Signs** – A CRIT RSA conducted in early 2013 determined that pedestrian crossing warning signs are needed on Mohave Road at the approach to Poston Road.
- **Multiuse Paths** – Canal trails are recommended in two locations.

4.2 INTERSECTION IMPROVEMENT PROJECTS

- Ten intersection locations were identified for improvements through stakeholder interviews, the 2013 CRIT Road Safety Assessment findings, and crash analysis. The following table provides a brief overview of these projects.

Table 1 – Intersection Improvement Projects Identified

INTERSECTION	PROJECT DESCRIPTION
Mohave Road (Rte 1) / 1st Ave	Needs identified to install turn lanes, relocating speed zone sign east of curve, relocating reduced speed ahead sign east of curve
Mohave Road (Rte 1) / 2nd Ave	Needs identified to elevate flashing beacon, install street lighting, reduce speed limit, install signs for Tribal Headquarters
Booth Rd (Rte 4) / 4th Ave	Needs identified to limiting access to canal road along curve, Install additional chevron signs to define curve
Mohave Road (Rte 1) / Indian School Rd	Needs identified to reduce speed limit at Head Start, construct defined entrance for Head Start, Relocate mailboxes to Indian School Rd
Mohave Road (Rte 1) / Agnes Wilson Rd	Needs identified to reduce speed limit, extend left turn lanes, replace intersection warning signs
Mohave Road (Rte 1) / Poston Rd	Needs identified to improve roadway striping, upgrade lighting, install/upgrade sidewalks, install pedestrian warning signs on Mohave Rd
Mohave Road (Rte 1) / Patrick Rd	Needs identified to repair damaged guardrail and posts, install chevron signs to increase visibility.
Indian School Rd (Rte 14) / 4th Ave	Needs identified to remove stop signs and markings, replace and relocate arrow signs, improve markings and edgelines
Burns Rd (Rte 10) / SR 95	This project is currently programmed in the Tribal TIP and the scope is to extend Burns Rd and construct turn lanes at SR 95
Airport Road (Rte 45)/ Riverside Drive	Limited signing to direct travelers to the Airport

4.3 SAFETY PROJECTS

Safety projects recommended include:

- **Safety-Focused Education Campaign** – Continue the Tribal Motor Vehicle Injury Prevention program, which is funded by the Center for Disease Control and run by the CRIT Police Department.
- **Future CRIT RSA Locations** – It is also recommended that further evaluation of high crash locations be conducted. RSAs may be considered at the following locations:
 - Mohave Road (MP 10-35)
 - SR 95/ Moovalya Shopping Center
 - California Avenue/Agency Road

- **Signing and Striping Projects** – Key priorities are speed control on Mohave Road, upgraded striping on Mohave Road, safety -related signing (such as reminding drivers to use seatbelts, not to text while driving, and to not drink and drive), and replacement signing.
- **Canal Safety Improvements** – Dedicated funding for culvert and canal crossings that need improvements such as object markers, warning signs for narrow crossings, and in some cases, headwalls and possibly guardrails.
- **Street Lighting** – Street lighting needs were identified at the following locations during the RSA:
 - Mohave Road/Poston Road
 - Mohave Road /2nd Avenue
 - 1st Avenue from Mohave Road to the Hospital, along Mohave Road from 1st to 2nd Avenue, and from Mochem housing near Booth Road and 4th Avenue to the Tribal offices on 2nd Avenue
- **Tribal Safety Laws** – Other safety projects include promoting the passage of two tribal laws:
 - **A Primary Seat Belt Law** – Primary seat belt laws allow law enforcement officers to ticket a driver or passenger for not wearing a seat belt, without any other traffic offense taking place. Other tribal nations, such as the Navajo Nation, have shown dramatic increases in seat belt usage and reduction in injuries and fatalities in motor vehicle crashes with such a law.
 - **Lower the Blood Alcohol Content Legal Limit – A law lowering the definition of Driving under the Influence (DUI) to a blood alcohol content (BAC) of 0.08 from the current BAC of 0.10.** Blood alcohol content is the concentration of alcohol in blood. This change would make the laws regarding DUI on the Colorado River Indian Tribes Reservation consistent with laws for the State of Arizona.

4.4 PAVEMENT MAINTENANCE AND RECONSTRUCTION PROJECTS

Pavement reconstruction projects were recommended for 19 tribal road segments, based on the results of a pavement condition assessment. In addition, preventive maintenance was recommended for 16 road segments.

4.5 BRIDGE RECONSTRUCTION OR REHABILITATION PROJECTS

Bridge replacement projects at four locations and bridge rehabilitation projects at eight locations were identified based on the findings of Bureau of Indian Affairs bridge inspections. In addition, designated funding for an ongoing program of canal safety improvements is recommended. A key bridge improvement project is replacement of the bridge on Mohave Road (Rte 1) at Tyson Wash. Tyson Wash is one of the larger washes that enter the Colorado River. For this reason, and because it crosses Mohave Road, the major roadway through the CRIT Reservation, this bridge improvement is a priority. Based on correspondence with the BIA, Plans, Specification and Estimates (PS&E) documents have been prepared and submitted to FHWA for the replacement of Mojave Road Bridge H008 over Tyson Wash, using BIA - Tribal Bridge Program (TBP) funds at an estimated cost of \$9,465,000. BIA is working with FHWA to have TBP funding set aside for this project over the next three years, so construction can begin in FY 2016. This project is shown as a short-range project in this plan.

4.6 PAVING DIRT OR GRAVEL ROAD PROJECTS

Paving projects on 28 road locations were identified. Providing a paved road surface provides a number of benefits, including reduced levels of dust, reduced vehicle maintenance costs, and improved safety.

4.7 OTHER TRANSPORTATION PROJECTS

Other transportation-related projects identified include:

- Tribal Transportation Inventory Updates – It was recommended that approximately 165 miles of roads be considered for addition to the Tribal Transportation Inventory. The Tribal Transportation Facility Inventory is the new name (under MAP-21) for the Indian Reservation Roads Inventory. The inventory is used to determine relative transportation needs among Indian tribes, serving as a basis for allocation of funds.
- Functional Classification Updates – Potential federal functional classification changes are shown in **Table 2**. Adding roads to the system of federally functionally classified routes may provide greater opportunities for funding projects.

Table 2 – Potential Federal Functional Classification Changes

ROAD NAME	CURRENT FEDERAL FUNCTIONAL CLASSIFICATION	PROPOSED CHANGE
<ul style="list-style-type: none"> • Mohave Road, SR 95 to south Reservation boundary 	Rural major collector	Rural minor arterial
<ul style="list-style-type: none"> • Agnes Wilson Road, Mohave Road to US 95 	Rural major collector	Rural minor arterial
<ul style="list-style-type: none"> • Peterson Road, 9th Avenue to 23rd Avenue 	Unclassified	Minor collector
<ul style="list-style-type: none"> • Burns Road, 15th Avenue to 1st Avenue 	Unclassified	Major collector

- Parking lot paving needs for community facilities, such as:
 - Poston Fire Station parking lot
 - Mo-Chem-Ho-Na Senior Center
 - Ahakhav Preserve parking areas
 - Tribal-related businesses and department office parking lots
- Roadside vegetation control

4.8 TRANSIT SYSTEM DEVELOPMENT

A need for a Tribal transit system was identified in this study. Transit needs identified were:

1. A phased implementation of a fixed-route transit system.
 - a. Focused on the Tribal community near the Parker area.
 - b. Point-to-point fixed-route to outlying concentrations of tribal activity.
2. Phased implementation of demand-responsive service for rural communities.
 - a. Prioritization of rural focus areas by tribal leaders.
 - b. Reservation-wide services.

A separate Transit Technical Memorandum was developed that provided information on origins and destinations that residents travel to, surveys of Tribal members, and other information to support an implementation plan for a start-up transit system being developed under a separate Federal Transit Administration Section 5311(c) Tribal Transit Planning Grant.

4.9 AVIATION PROJECTS

Aviation projects were developed as part of the Avi Suquilla Airport Master Plan Update completed in 2013, and were referenced in this Long Range Transportation Plan. Projects related to the road system serving the airport include:

- Construct an all-weather perimeter road around the Airport.
- Provide signage upgrades and improve aircraft storage area.
- Provide drainage improvements and fire water line on Airport Road, including re-paving
- Construct parking lot as part of the terminal, ARFF Building, and hangar project
- Provide paving improvements to runways, apron areas, and perimeter road over time

5. Short, Mid-, and Long Range Projects

Transportation projects were developed to address the Colorado River Indian Tribes' transportation needs. The transportation projects are in the following categories:

- Pedestrian Facility Improvements
- Intersection Improvement Projects
- Safety Projects
- Pavement Maintenance and Rehabilitation Projects
- Transit Projects
- Bridge Improvement Projects
- Paving Dirt or Gravel Road Projects
- Other Transportation Projects

The transportation improvement projects were prioritized into the following categories:

Short-range projects (FY 2018 – 2022) – In general, short-range projects are those needed to address current needs and deficiencies, for which funding can reasonably be identified. Short-range projects also include currently programmed projects in the 2012 Tribal Transportation Improvement Plan (TTIP).

Mid-range projects (FY 2023 – 2027) – These higher-cost projects have higher priorities due to safety or connectivity. Mid-range projects also include projects that can be linked to projects currently programmed or planned in the mid-range time frame.

Long-range projects (2028 – 2038 and beyond) – These higher-cost projects may need additional lead time to obtain funding, or can be linked to long-range projects currently planned.

Project phasing was accomplished through a process that is summarized as follows:

- Projects were divided into broad categories and planning-level costs were developed.
- Paving projects and safety-related projects were given higher priority.
- Anticipated project benefits were identified, such as benefits to development and land uses.
- For resurfacing and preventive maintenance projects, pavement assessment scores and BIA functional class were reviewed.

The top projects in each category were assigned to short, mid- or long-range programs. The prioritization was reviewed at a workshop with CRIT and ADOT staff in November 2013.

5.1 RECOMMENDED SHORT-RANGE PROJECTS

Short-range transportation projects are those identified for implementation in the time frame 2018 – 2022. It would succeed the current Tribal Transportation Improvement Program, which runs from 2013 –2017. Should additional funding be available in the current Tribal Transportation Improvement Plan, some of these projects could potentially be implemented sooner.

The Bridge Replacement project on Mohave Road at Tyson Wash (Bridge H008) is shown in the short-range program, although funds may become available to construct this bridge sooner.

The total estimated cost of the short range program is \$16.625M, which is divided into the following project categories:

Table 3 – Short-Range Project Categories

PROJECT TYPE	COST (\$)
Resurfacing projects	4,241,000
Preventive maintenance projects	1,323,000
Bridge replacement or rehabilitation projects	9,547,000
Intersection Projects	274,000
Paving Dirt and Gravel road projects	454,000
Pedestrian projects	436,000
Other Projects	350,000
TOTAL	16,625,000

Funding assumptions for the short-range program are as follows:

Table 4 – Funding Assumptions for Short-Range Program

FUNDING SOURCE	ESTIMATED FUNDING FOR 5-YEAR PERIOD (\$)
BIA Construction funds (through Tribal Transportation Program Formula)	5,200,000
BIA Bridge Program	9,465,000
Tribal Transportation Safety Program	150,000
Highway Safety Improvement Program	1,000,000
Other sources of funds (Surface Transportation Program, Tribal funds, other non-tribal sources)	810,000
TOTAL	16,625,000

It should be noted that funding assumptions are estimates and can vary from year to year.

Projects on specific roads, intersections, or bridges are shown graphically in **Figure 2**. **Figure 2** also shows projects that are currently programmed in the Tribal Transportation Improvement Program (FY 2013 – 2017). **Table 5** summarizes the short-range projects.

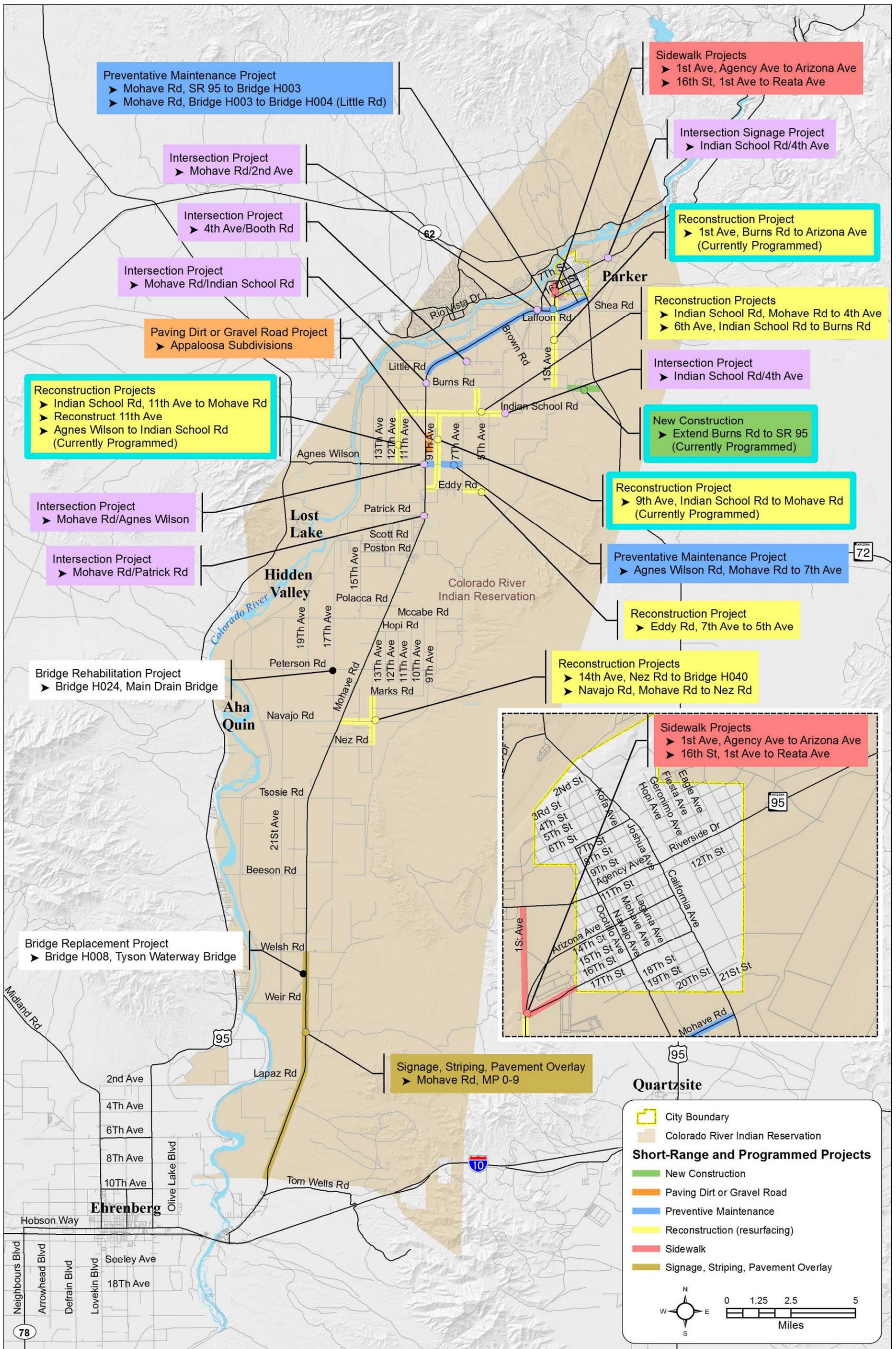


Figure 2 – Short-Range Projects

Table 5 – Short Range Projects

Street Name / BIA Route Number	From	To	Project Length (miles)	BIA Road Functional Classification*	Existing Roadway or Site Conditions	Proposed Improvement	Total Project Cost (\$)**	Existing and/or Proposed Development Served by Road
Resurfacing Projects								
14th Ave (Rte 117)	Nez Rd	Bridge H040	0.80	5	Paved road	Reconstruction	473,000	Agricultural, residential
6th Ave (Rte 99)	Indian School Rd	Burns Rd	1.00	5	Paved road	Reconstruction	591,000	Agricultural, residential
Eddy Rd (Rte 20)	7th Ave	canal crossing	0.80	5	Paved road	Reconstruction	473,000	Agricultural, residential
Indian School Rd (Rte 14)	Mohave Rd	4th Ave	3.00	4	Paved road	Reconstruction	2,028,000	Residential, agricultural, and Head Start School
Navajo Rd (Rte 38)	Mohave Rd	Bridge H039	1.00	4	Paved road	Reconstruction	676,000	Agricultural, residential
Preventive Maintenance Projects								
Mohave Road (Rte 1)	Bridge H003	SR 95	2.20	2	Paved road	Road maintenance	335,000	Commercial, residential, government and agricultural land uses.
Mohave Road (Rte 1)	Bridge H004	Bridge H003	5.00	2	Paved road	Road maintenance	760,000	Commercial, residential, government and agricultural land uses.
Agnes Wilson Road (Rte 18)	Mohave Road	7th Avenue	1.50	5	Paved road	Road maintenance	228,000	Agricultural, residential
Bridge Replacement or Rehabilitation								
Mohave Road (Rte 1) at Tyson Wash	H008	N/A	0.093	2	Bridge Sufficiency rating - 73.3	Bridge Replacement	9,465,000**	Serves multiple land uses
Peterson Road (Rte 34)	H024	N/A	0.014	4	Bridge Sufficiency rating - 25.9	Bridge Rehabilitation	82,000	Agricultural

Street Name / BIA Route Number	From	To	Project Length (miles)	BIA Road Functional Classification*	Existing Roadway or Site Conditions	Proposed Improvement	Total Project Cost (\$)**	Existing and/or Proposed Development Served by Road
Intersection Projects								
Mohave Road (Rte 1)	2nd Ave	N/A	N/A	2	Needs identified to elevate flashing beacon, install street lighting, reduce speed limit, install signs for Tribal Headquarters	Construction of safety improvements	121,000	Commercial, residential, government and agricultural land uses.
Booth Rd (Rte 4)	4th Ave	N/A	N/A	5	Needs identified to limiting access to canal road along curve, Install additional chevron signs to define curve	Construction of safety improvements	12,000	Commercial, residential, government and agricultural land uses.
Mohave Road (Rte 1)	Indian School Rd	N/A	N/A	2	Needs identified to reduce speed limit at Head Start, construct defined entrance for Head Start, Relocate mailboxes to Indian School Rd	Construction of safety improvements	12,000	Head Start School, residences
Mohave Road (Rte 1)	Agnes Wilson Rd	N/A	N/A	2	Needs identified to reduce speed limit, extend left turn lanes, replace intersection warning signs	Construction of safety improvements	79,000	Commercial, residential, government and agricultural land uses.

Street Name / BIA Route Number	From	To	Project Length (miles)	BIA Road Functional Classification*	Existing Roadway or Site Conditions	Proposed Improvement	Total Project Cost (\$)**	Existing and/or Proposed Development Served by Road
Mohave Road (Rte 1)	Patrick Rd	N/A	N/A	2	Needs identified to repair damaged guardrail and posts, install chevron signs to increase visibility.	Construction of safety improvements	27,000	Commercial, residential, government and agricultural land uses.
Indian School Rd (Rte 14)	4th Ave	N/A	N/A	4	Needs identified to remove stop signs and markings, replace and relocate arrow signs, improve markings and edgelines	Construction of safety improvements	18,000	
State Route 95 (Rte 95)	Airport Road	N/A	N/A	2	Paved Road	Informational signage	5,000	Avi Suquilla Airport
Paving Dirt and Gravel Roads Projects								
Appaloosa subdivision streets	Unnamed community roads that connect to 9th Ave	N/A	0.6	Unclassified	Unpaved roads	Paving	454,000	Serves Appaloosa Subdivision - approximately 30 homes
Pedestrian Projects								
1st Ave (Rte 3)	Agency Ave	16th Street	0.66	4	Paved road	Sidewalks	436,000	Office, business, residential land uses
16th Street	1st Ave	0.06 miles west of Reata Ave	0.34	Unclassified	Paved road	Sidewalks		residences

Street Name / BIA Route Number	From	To	Project Length (miles)	BIA Road Functional Classification*	Existing Roadway or Site Conditions	Proposed Improvement	Total Project Cost (\$)**	Existing and/or Proposed Development Served by Road
Other Transportation Projects								
Sign Replacement Program	Various locations	N/A	N/A	N/A	Various	Signing	50,000	Various
Educational programs	N/A	N/A	N/A	N/A	N/A	Safety education	50,000	Applies Reservation-wide
Street lighting projects	Various locations	N/A	N/A	N/A	To be determined	Street lighting	50,000	This is a lump sum that would be used to improve street lighting on an as-needed basis
Canal crossing improvements	Various locations	N/A	N/A	N/A	To be determined	Safety improvements	50,000	This is a lump sum that would be used to improve safety at canal crossings on an as-needed basis
Parking lot repaving for public facilities	Various locations	N/A	N/A	N/A	To be determined	Paving	25,000	This is a lump sum that would be used to address public facility paving needs.
Maintenance equipment	Specific equipment to be determined	N/A	N/A	N/A	N/A	Maintenance	50,000	This is to reserve funds to purchase maintenance equipment
Temporary traffic control equipment – portable variable message signs	N/A	N/A	N/A	N/A	N/A	Traffic control	25,000	To be used at various locations

Street Name / BIA Route Number	From	To	Project Length (miles)	BIA Road Functional Classification*	Existing Roadway or Site Conditions	Proposed Improvement	Total Project Cost (\$)**	Existing and/or Proposed Development Served by Road
Speed control – solar speed monitors (2)	Mohave Road – specific locations to be determined	N/A	N/A	2	This would fund solar speed monitors on Mohave Road	Safety	50,000	Speed control – solar speed monitors (2)
Total, Short range projects	\$16,625,000							

*Functional Class: 2=Rural minor arterial road; 4=Rural major collector road; 5=Rural local road

**Note: This bridge is planned to be constructed starting in FY 2016

*** Estimated costs are expressed in 2013 dollars and are general planning estimates. Actual costs for projects could vary at the time of implementation; therefore, when appropriate a detailed analysis should be performed on a case-by-case basis to determine actual project costs. The planning estimates include estimates for materials, and labor for design and construction. The cost estimates do not include right-of-way costs.

5.2 RECOMMENDED MID-RANGE PROJECTS

Mid-range projects are summarized in **Table 8**, and are shown in **Figure 3**. Mid-range projects are those that may be implemented in the time from FY 2023 – 2027. These projects require committed funds in order to be built.

Mid-range projects total \$7,717,000. The program comprises the following project types:

Table 6 – Mid-Range Project Types

PROJECT TYPE	COST (\$)
Resurfacing projects	3,447,000
Preventive maintenance projects	1,371,000
Bridge replacement or rehabilitation projects	1,438,000
Intersection Projects	256,000
Paving Dirt and Gravel road projects	546,000
Pedestrian projects	309,000
Other Projects	350,000
TOTAL	7,717,000

Funding assumptions for the mid-range program are as follows:

Table 7 – Funding Assumptions for Mid-Range Program

FUNDING SOURCE	ESTIMATED FUNDING FOR 5-YEAR PERIOD (\$)
BIA Construction funds (through Tribal Transportation Program Formula)	5,200,000
BIA Bridge Program	150,000
Tribal Transportation Safety Program	150,000
Highway Safety Improvement Program	1,000,000
Other sources of funds (Surface Transportation Program, Tribal funds, other non-tribal sources)	1,217,000
TOTAL	7,717,000

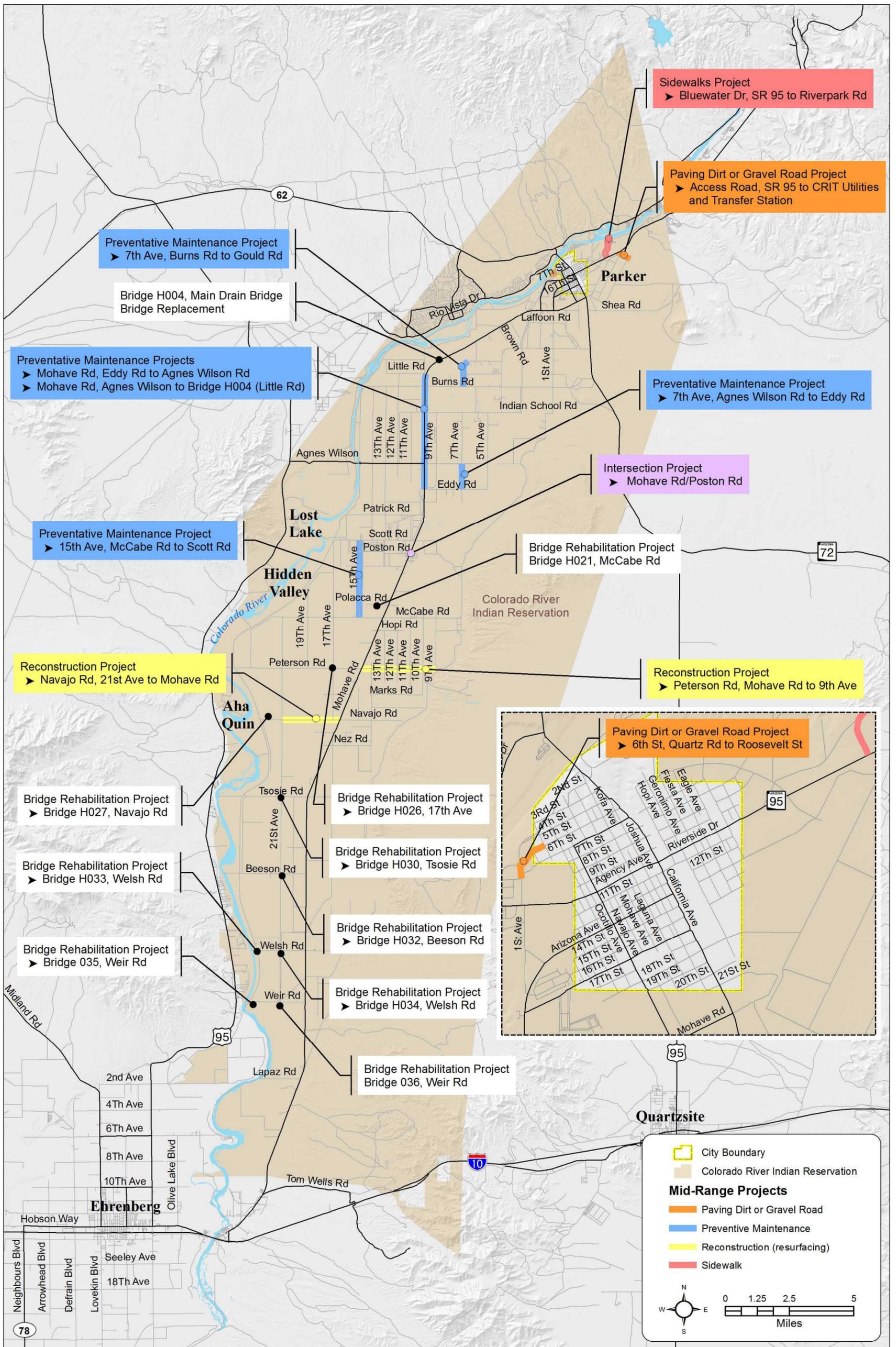


Figure 3 – Mid-Range Projects

Table 8 – Mid-Range Projects

Street Name / BIA Route Number	From	To	Project Length (miles)	BIA Road Functional Classification	Existing Roadway or Site Conditions	Proposed Improvement	Total Project Cost (\$)*	Existing and/or Proposed Development Served by Road
Resurfacing Projects								
Peterson Rd (Rte 34)	Mohave Rd	9th Ave	2.90	4	Paved road	Reconstruction	1,960,000	Agricultural, residential
Navajo Rd (Rte 38)	21st Ave	Mohave Rd	2.20	4	Paved road	Reconstruction	1,487,000	Agricultural, residential
Preventive Maintenance Projects								
Mohave Road (Rte 1)	Agnes Wilson Road	Bridge H004	3.30	2	Paved road	Road maintenance	502,000	Commercial, residential, government and agricultural land uses.
Mohave Road (Rte 1)	Eddy Road	Agnes Wilson Road	1.00	2	Paved road	Road maintenance	152,000	Commercial, residential, government and agricultural land uses.
7th Avenue (Rte 11)	Burns Road	Gould Road	0.80	5	Paved road	Road maintenance	122,000	Agricultural, residential
7th Avenue (Rte 11)	Eddy Road	Agnes Wilson Road	1.00	5	Paved road	Road maintenance	139,000	Agricultural, residential
15th Avenue (Rte 19)	McCabe Road	Scott Road	3.00	5	Paved road	Road maintenance	456,000	Agricultural, residential
Bridge Rehabilitation or Replacement Projects								
Mohave Road (Rte 1) Bridge Number H004	Bridge number H004		0.014	2	Sufficiency rating - 46.5	Bridge Replacement	120,000	serves multiple land uses

Street Name / BIA Route Number	From	To	Project Length (miles)	BIA Road Functional Classification	Existing Roadway or Site Conditions	Proposed Improvement	Total Project Cost (\$)*	Existing and/or Proposed Development Served by Road
17th Avenue (Rte 21) Bridge Number H026			0.014	4	Sufficiency rating - 68.0	Bridge Rehabilitation	79,000	Agricultural
McCabe Road (Rte 30) Bridge Number H021	N/A	N/A	0.017	4	Sufficiency rating - 56.8	Bridge Rehabilitation	74,000	Agricultural
Navajo Road (Rte 38) Bridge Number H027	N/A	N/A	0.011	4	Sufficiency rating - 60.0	Bridge Rehabilitation	56,000	Agricultural
Tsosie Road (Rte 44) Bridge H030	N/A	N/A	0.017	4	Sufficiency rating - 47.8	Bridge Replacement	89,000	Agricultural
Beeson Road (Rte 50) Bridge H032	N/A	N/A	0.015	5	Sufficiency rating - 49.8	Bridge Rehabilitation	40,000	Agricultural
Welsh Road (Rte 56) Bridge Number H033	N/A	N/A	0.014	5	Sufficiency rating – 54.0	Bridge Rehabilitation	167,000	Agricultural
Welsh Road (Rte 56) Bridge Number H034	N/A	N/A	0.014	5	Sufficiency rating – 59.5	Bridge Rehabilitation	115,000	Agricultural

Street Name / BIA Route Number	From	To	Project Length (miles)	BIA Road Functional Classification	Existing Roadway or Site Conditions	Proposed Improvement	Total Project Cost (\$)*	Existing and/or Proposed Development Served by Road
Weir Road (Rte 60) Bridge Number H035	N/A	N/A	0.011	5	Sufficiency rating – 58.5	Bridge Rehabilitation	98,000	Agricultural
Weir Road (Rte 60) Bridge Number H036	N/A	N/A	0.019	5	Sufficiency rating – 47.0	Bridge Replacement	600,000	Agricultural
Intersection Projects								
Mohave Road (Rte 1)	Poston Rd	N/A	N/A	2	Improvements to roadway striping, upgrade lighting, install / upgrade sidewalks, install pedestrian warning signs on Mohave Rd	Construction of safety improvements	256,000	Commercial developments
Paving Dirt and Gravel Roads projects								
6th Street	Quartz Ave	Roosevelt St	0.17	Unclassified	Unpaved	Not classified	129,000	Residences, offices

Street Name / BIA Route Number	From	To	Project Length (miles)	BIA Road Functional Classification	Existing Roadway or Site Conditions	Proposed Improvement	Total Project Cost (\$)*	Existing and/or Proposed Development Served by Road
Landfill Road to CRIT Utilities and Transfer Station	SR 95	Utilities and Transfer Station	0.16	Unclassified	Unpaved	Not classified	417,000	CRIT Utilities and Transfer Station
Pedestrian Projects								
BlueWater Drive (Rte 105)	SR 95	BlueWater Park	0.71	5		Sidewalks	309,000	Provides a sidewalk connection along BlueWater Drive to the BlueWater Resort and Casino and Colorado River waterfront
Other Transportation Projects								
Sign replacement Program	Various locations	N/A	N/A	N/A	Various	Signing	50,000	Various
Educational programs	N/A	N/A	N/A	N/A	N/A	Safety education	50,000	Applies Reservation-wide
Street lighting projects	Various locations	N/A	N/A	N/A	To be determined	Street lighting	50,000	This is a lump sum that would be used to improve street lighting on an as-needed basis
Canal crossing improvements	Various locations	N/A	N/A	N/A	To be determined	Safety improvements	50,000	This is a lump sum that would be used to improve safety at canal crossings on an as-needed basis

Street Name / BIA Route Number	From	To	Project Length (miles)	BIA Road Functional Classification	Existing Roadway or Site Conditions	Proposed Improvement	Total Project Cost (\$)*	Existing and/or Proposed Development Served by Road
Parking lot repaving for public facilities	Various locations	N/A	N/A	N/A	To be determined	Paving	25,000	This is a lump sum that would be used to address public facility paving needs
Maintenance equipment	Specific equipment to be determined	N/A	N/A	N/A	N/A	Maintenance	100,000	This is to reserve funds to purchase maintenance equipment
Temporary traffic control equipment – portable variable message signs	N/A	N/A	N/A	N/A	N/A	Traffic control	25,000	To be used at various locations
Total, Mid-range projects	7,717,000							

* Estimated costs are expressed in 2013 dollars and are general planning estimates. Actual costs for projects could vary at the time of implementation; therefore, when appropriate a detailed analysis should be performed on a case-by-case basis to determine actual project costs. The planning estimates include estimates for materials, and labor for design and construction. The cost estimates do not include right-of-way costs.

5.3 RECOMMENDED LONG-RANGE PROJECTS

Long-range projects are those that are recommended for implementation in the ten-year period from 2028 – 2038 and beyond. Additional funding sources for these projects will need to be identified. They are shown graphically in **Figure 4**. These projects total \$70.56M. It assumes the following project breakdown:

Table 9 – Long-Range Project Types

PROJECT TYPE	COST (\$)
Resurfacing projects	20,554,000
Preventive maintenance projects	3,875,000
Paving dirt and gravel road projects	38,448,460
Pedestrian projects	6,983,000
Other Projects	700,000
TOTAL	70,560,000

Estimated funding sources for the 10-year long range program are estimated to be:

Table 10 – Funding Assumptions for Long-Range Program

FUNDING SOURCE	ESTIMATED FUNDING FOR 10-YEAR PERIOD (\$)
BIA Construction funds (through Tribal Transportation Program Formula)	10,400,000
Tribal Transportation Safety Program	300,000
Tribal Bridge Program	300,000
Highway Safety Improvement Program	2,000,000
Surface Transportation Program (excluding state highways, but including bridges and Transportation Alternatives Programs)	4,000,000
State Highway Fund(SR 72 and 95)	2,000,000
Tribal funds	1,000,000
Other non-tribal sources(e.g. Town of Parker and other public and private sources)	400,000
TOTAL (ESTIMATED FUNDING)	20,400,000

Based on the limited availability of funding, a number of projects, particularly some of the larger paving projects for dirt and gravel roads, such as paving Levee Road, and some of the higher-cost pedestrian projects would likely shift to beyond a 20-year time frame.

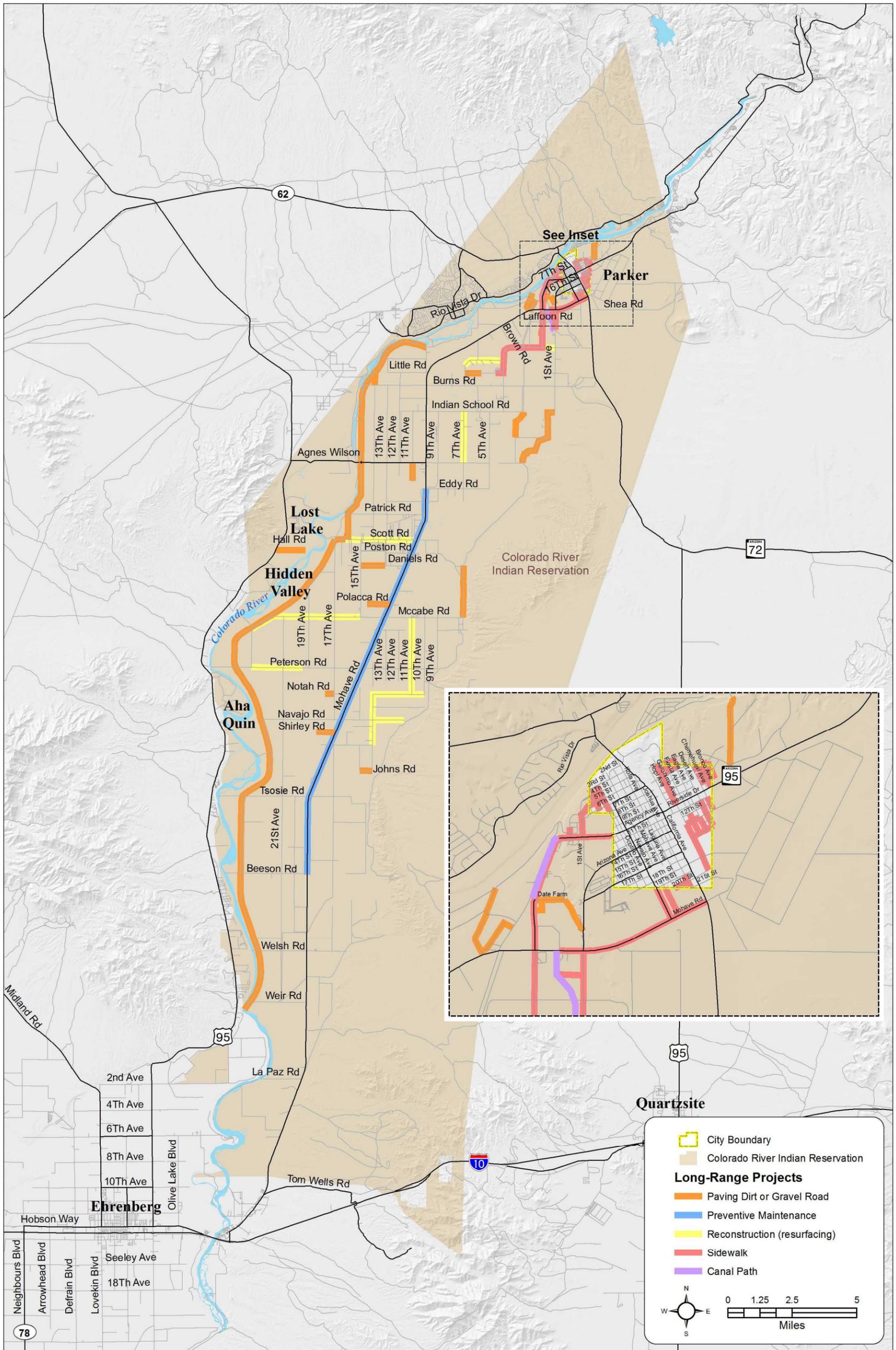


Figure 4 – Long Range Projects

6. Funding Sources for Transportation Projects

Potential funding sources for the transportation projects were identified and detailed in the CRIT LRTP Final Report, and include the following programs:

Roadway Project Funding Sources

- Tribal Transportation Program
- Tribal High Priority Projects Program
- Tribal Transportation Planning
- National Bridge and Tunnel Inventory
- Surface Transportation Program (STP)
- Planning Assistance for Rural Areas (PARA) Program
- Indian Community Development Block Grant Program

Safety Project Funding Sources

- Alcohol Impaired Driving
- Highway Safety Improvement Program (HSIP)
- Tribal Safety Program
- State & Community Highway Safety Grant Program
- Injury Prevention Program
- Road Safety Assessment

Pedestrian, Bicycle and Equestrian Project Funding Sources

- Transportation Alternatives Program
- Southwest Conservation Corps

Transit Funding Sources

- Section 5310, Enhanced Mobility of Seniors and Individuals with Disabilities Transit Program
- Section 5311, Rural Public Transportation Program and Section 5311(c) – Public Transportation on Indian Reservations (Tribal Transit Program)
- Rural Transit Assistance Program
- Section 5304 – Statewide Transportation Planning Program

Aviation Funding Sources

- Airport Improvement Fund
- FAA Facilities and Equipment Program
- State Aid to Airports