# TULE RIVER ACTIVE TRANSPORTATION PLAN

20 MPH

December 2022



**Prepared By** 



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#### Section 1 | Introduction

#### PURPOSE AND OBJECTIVES

The Tule River Active Transportation Plan (ATP) was prepared by 4-Creeks Inc. (Consultant) in coordination with the Tule River Tribe, Tulare County Association of Governments (TCAG), and the City of Porterville (City). The ATP study was completed in accordance with tasks identified in the Tule River Active Transportation Plan Request for Proposal and within the scope of work agreement between TCAG and the Consultant, dated February 3, 2022.

The purpose of the ATP is to develop a comprehensive multimodal active transportation plan to facilitate safe, easy, and comfortable movement throughout the Tule Tribe Reservation with connections to the new Eagle Mountain Casino, City of Porterville Airport and other key regional recreational facilities. The ATP will also provide information on existing safety and traffic-related issues and identify strategies to improve safety for all forms of mobility including pedestrians, bicyclists and cars. In addition, the ATP will identify possible funding opportunities, constraints, and project costs to implement the design concepts.

#### **PROJECT LOCATION**

The Tule River Reservation is located approximately 20 miles southeast of Porterville, Tulare County in southern San Joaquin Valley (Figure 1.1). The Tule River Tribe is a sovereign nation that is home to approximately 1,600 tribal members and relatives with an estimated additional 3,000 tribal members living in the vicinity of the Reservation with Tulare, Kings, Fresno, and Kern Counties (C2 Consult Corp, 2018). The reservation stretches approximately 128 square miles of Tulare County with a Village Area in the central western portion of the reservation.



#### DISADVANTAGED COMMUNITIES

Proceeds from the State's cap-and-trade program are targeted for investment in disadvantaged communities (DAC), which are most burdened by impacts from pollution and climate change. Disadvantaged Communities (DAC) are designed to help target investment from the State's cap-and-trade program. Tribal lands automatically have DAC status according to ATP guidelines. Other metrics to indicate DAC status include:

- Area Median Household Income (MHI): The Tule River Tribe's MHI is approximately \$39,750 based on the U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates. This is considered a disadvantaged community since the MHI is less than \$60,188.
- Eligibility for the Free and Reduced Lunch Program (FRLP) among students in surrounding schools: All students that are residents of the Tule River Tribe attend school in the Porterville Unified School District. Approximately 85.6% of the public school students are eligible for the FRLP based on the California Department of Education's 2021-2022 data.
- Score on the California Communities Environmental Health
   Screening Tool (CalEnviroScreen)
- Score on the Healthy Places Index (HPI)





#### HEALTH AND WELLBEING

#### CalEnviroScreen

California Communities Environmental Health Screening Tool (CalEnviroScreen) scores are calculated based on pollution burden and population characteristics.

*Pollution Burden* represents the potential exposures to pollutants and the adverse environmental conditions caused by pollution. The score is made up of indicators from the Exposures and Environmental Effects components of the CalEnviroScreen model. Pollution burden factors include ozone, particulate matter less than 2.5 micrometers (PM2.5), traffic impacts, groundwater threats, etc. The Pollution Burden score for the Tule River Reservation is in the 34 percentile.

*Population characteristics* represent physiological traits, health status, or community characteristics that can result in increased vulnerability to pollution. Examples include asthma, education, housing burden, etc. Scores are made up of indicators from the Sensitive Populations and Socioeconomic Factors components of the CalEnviroScreen model. The Population Characteristics score for the Tule River Reservation is in the 52 percentile.

The Tule River Tribe's CalEnviroScreen is in the 46 percentile, which is considered a disadvantaged community since its score is above the 40.05 threshold.

#### Healthy Places Index (HPI)

Healthy Places Index (HPI) scores are based on census tract data that assesses 25 community characteristics. Including access to healthcare, housing, education, and more, into a single indexed HPI score. The healthier a community, the higher the HPI score. The Tule River Tribe's HPI is in the 18.8 percentile, which is considered a disadvantaged community since its score is below the 25 percentile.





#### EXPECTED OUTCOME OF STUDY

The Tule River Reservation is a disadvantaged community that currently does not have any pedestrian or ADA-compliant facilities within the project area or throughout the Reservation. The lack of facilities increases collision accidents with pedestrians and discourages pedestrian and bicycle activity in the community.

The Project is located in the Village Area, which is the community and civic center of the Tule River Reservation and comprises the Tribal Education Center, Gymnasium, Community Health Clinic, Tribal Council, Justice Center, Cow Mountain Daycare Center, and other public service buildings. Residents access the area from the surrounding residences by walking, biking, or car. The Project will develop safe pedestrian/bicycle connections to and from the Village Area, where residents access vital community services.

The project will address the lack of pedestrian and bicycle infrastructure by constructing various active transportation components including, but not limited to;

- Class I bike paths
- Pedestrian refuges
- ADA-compliant curb ramps
- Street lighting
- Pedestrian bridges
- Pedestrian-friendly facilities (shade trees, benches, pavilions, gateway sculptures, monument signage)



FIGURE 1.2 EXAMPLES OF ATP COMPONENTS

#### CASE STUDIES

East Boulevard - Charlotte, NC





FIGURE 1.4 EAST BOULEVARD BEFORE

**FIGURE 1.3 EAST BOULEVARD AFTER** 



FIGURE 1.5 PROTECTED ISLAND

East Boulevard in Charlotte, North Carolina was transformed from four auto lanes to two auto lanes with two bicycle lanes and a center turn lane. Additionally, the crosswalks on East Boulevard were marked with paving patterns and signage to increase drivers awareness of pedestrians.

With the decrease in vehicle lanes and increase of cyclists on the road, vehicles speed declines from 43 to 40 miles per hour. Daily traffic counts slightly increase in one section and slightly decrease in another section of East Boulevard.

Protected islands give pedestrians a comfortable way to cross East Boulevard, as well as connect various land uses on either sides of the Boulevard. This redesign was successful in slowing down traffic while improving pedestrian safety and quality of life. The East Boulevard transformation is an excellent example of possible redesign for the Tule River Reservation Village Area.

SOURCE: RETHINKING STREETS

Interurban Trail Bridges - Shoreline, WA



**FIGURE 1.6 AND 1.7 PEDESTRIAN CROSSINGS** 





The Interurban Trail is a 15 mile bike and pedestrian off-street trail that runs roughly parallel to Aurora Avenue N in the city of Shoreline, Washington. The shoreline Interurban Trail Bridges create important linkages allowing pedestrians and cyclists to safety cross major roads.

The two pedestrian bridges on the trail feature programmable LED lighting, "railto-shore" concrete patterning (celebrating Shoreline's civic identity through its history and its proximity to water), blue-glass and stainless steel-mesh screen wall, and a connecting park that includes native plants. Design elements in these bridges can serve as inspiration for pedestrian bridges implemented within the Tule River Reservation.

#### SOURCE: RETHINKING STREETS + CODAWORX

FIGURE 1.8 CONCRETE PATTERN CELEBRATING SHORELINE'S IDENTITY

#### **REGULATORY CONTEXT**

**Federal** 

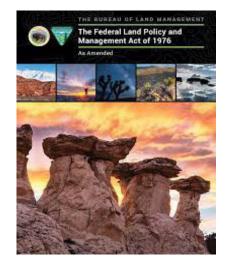


#### National Environmental Policy Act

Any project undertaken on the recommendation of this document may meet the definition of a "project" under the National Environmental Policy Act (NEPA), and will be subject to NEPA review if the project receives Federal funding. Tulare County is considered the Lead Agency under NEPA, and thus is obligated to honestly determine whether or not the project is subject to NEPA. If it is, Tulare County must commence with the appropriate level of environmental assessment as stated by NEPA and the various Federal Guidelines adopted to implement the act. The determinations under NEPA that the Tulare County can make as Lead Agency are as follows:

- The implementation project is not a "federal action" as defined by NEPA, 24 CFR 1508.18 and therefore is not subject to further review under NEPA;
- 2. The implementation is a Categorically Excluded project pursuant to Federal Guidelines;

- 3. The implementation project is subject to further environmental study requiring the preparation of an Environmental Assessment pursuant to applicable NEPA Guidelines.
- 4. Following the NEPA Environmental Assessment, a project will require either a Finding of No Significant Impact (FONSI) or a Environmental Impact Statement (EIS).



#### Federal Land Policy Management Act

Federal Land Policy Management Act (FLPMA) specifically directs the Beau of Land Management (BLM) to coordinate with state, local, and tribal governments to assist in resolving inconsistencies between BLM's land-use plans and local land-use plans, to the maximum extent consistent with federal law and the purposes of FLPMA.

#### State

#### California Transportation Plan

The California Transportation Plan 2050 (CTP)(2021) is a longrange plan to create "safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The CTP 2050 identifies transportation needs voiced by Tribal Communities including:

- Reliable access to Tribal lands
- Road safety
- Multi-jurisdictional communication
- Inadequate funding
- Transportation planning capacity
- Multimodal mobility
- Culture resources protection
- Emergency response
- Training and technical assistance
- Active partnerships

The CTP also identifies general challenges and opportunities for rural and Tribal communities.

Challenges include:

- 1. Development encroachment into open space, agriculture, and natural habitats;
- 2. Lack of travel options, for both people and freight;
- 3. Improve travel conditions for bicyclists and pedestrians; and
- 4. Projects often uncompetitive for grant funding.

Opportunities include:

- 1. Technology to reduce the need for long-distance travel;
- 2. Zero-emission vehicles (ZEV) to reduce emissions;
- 3. Mobility as a service (MaaS) and new mobility as an alternative to transit; and
- 4. Streamlined interregional transit fares and transfer.



#### Local

#### Sustainable Transportation/Circulation Element

In 2018, the Sustainable Transportation/Circulation Element Report (STCE) was prepared for the Tule River Comprehensive Master Plan. The planning principles established as part of the planning process include:

- The stewardship of natural resources
- The establishment of quality housing for tribal members
- The conservation of water resources
- Making decisions considering the impacts to three future generations

The STCE includes an assessment of existing conditions and projection of future conditions considering planned land uses and the supporting multi-modal transportation systems. The STCE vision is to increase mobility, access, and safety for Tribal members, while implementing a strategic maintenance program. The STCE recommendations for improving road safety include:

#### **Road Condition**

- Improve Reservation Road, upper section of Cow Mountain Road (when future housing plan is developed), and Rodeo Drive
- Add paved shoulders on Reservation Road and Rodeo Drive

- Install edge- and center- line markings
- Regrade or recondition gravel roads for proper drainage and smooth driving surface
- Install raised pavement markers

#### Pedestrian Safety

- Add pedestrian facilities, such as sidewalks, crossing islands, and cross walks on Reservation Road and Rodeo Drive
- Install curb extensions/ speed tables to improve pedestrian crossing on Reservation Road (between Cow Mountain and the River Bridge), on Rodeo Drive (between the Justice Center and the Fire Station)
- Improve river crossings at Cow Mountain, Gymnasium, Swinging Bridge, and Eagle Mountain Casino

#### Signing and Striping

- Provide additional signs and striping such as warning signs, curve warning signs, or chevron signs at horizontal and vertical curves
- Provide stop ahead and pedestrian crossing ahead pavement markings
- Add or restripe center line and edge lines on Reservation Road, Cow Mountain, and Rodeo Drive
- Install school zone signing and striping
- Install raised pavement markers

- Install bus stop signs at all transit and school bus stops
- Install edge- and center- line markings
- Install transverse rumple strips at approached to stop signs
   on Cow Mountain at Reservation Rd and on Rodeo Drive at
   Reservation Rd.
- Improve existing striping on speed bumps
- Install High Visibility Cross Walks at School
- Replace speed bumps with speed tables, as appropriate

#### **Dirt Shoulders**

- Addition of 4 foot paved shoulders on Reservation Road and Rodeo Drive
- Improve existing dirt shoulders by grading and/or adding base material (where possible)

#### Narrow Roadways and Tight Turns

- Regrade or recondition gravel lanes for proper drainage and smooth driving surface
- Install horizontal and vertical curves- warning signs
- Install turn- outs for passing as appropriate

#### Lack of Accident Database

 Provide funding to the Tule River Tribe for the purchase and implementation of traffic records software and hardware

- Creating a training program to educate tribe members on the development of a sufficient accident database
- Develop a multi-year Traffic Accident Management Plan
- Provide technical assistant and training in use of traffic records
   software

#### Lack of Safety and Traffic Education

- Hold public education and outreach sessions for raising motorists', pedestrians, and bicyclists awareness
- Seat belt education program
- Install seat belt reminder signage
  - Develop education programs about motorists' awareness and speeding and change driving culture
- Provide education and awareness programs for school children
- Car seat fitting stations for children

#### Speeding

- Install driver speed feedback radar signs on Reservation Road and Rodeo Drive
- Install speed tables on Reservation Road and Rodeo Drive (example drawing on the right)
- Establish speed zones on Reservation Road and Rodeo Drive

Bus Stop facilities

- Addition of standardized paved bus stops
- Provide shelters at all bus stops
- Provide school bus and transit bus stop signs at stops (as appropriate)

#### Tule River Tribal Transportation Safety Assessment

A Tribal Transportation Safety Assessment (T2SA) (2016) was prepared by the Technology Transfer Program of the institute of Transportation Studies at the University of California, Berkeley to identify strategies to improve pedestrian, bicycle, and vehicle traffic safety in and around the Tule River Tribe Reservation. The study identified general recommendations as well as location specific recommendations to improve overall transportation safety. General recommendations include:

- Have a transportation engineering consultant conduct speed limit studies on select roadways, implement limits and install signing.
- Develop policies and procedures for traffic law enforcement and implement these, possibly including periodic DUI checkpoints.
- Obtain a speed display radar trailer through a grant or other funding and develop a program to deploy it on various roadways.
- Install permanent radar speed displays at key locations such as the Tribal Administration/Health Center/School on N. Reservation Road.

- Develop a traffic safety education program primarily for school students including traffic, bicycling and walking safety.
- Include traffic safety as a part of the Tribe's web site, with tips and links to other safety websites.
- Check that all speed bumps have advance warning signs and BUMP signs at each location.
- In the long term, replace street name signs with larger signs.
- Consider implementing the August 2016 Road Safety Plan (by C2 Consult) strategies following the implementation program described in the Plan.

In addition to general recommendations, ten locations were identified as areas of concern by Tribal representatives. Location specific traffic engineering recommendations were developed for all ten locations and include:

1. Reservation Road and Water Tower Road Short Term (6 - 12 months)

- Install a STOP sign and mark a STOP legend and limit line to control traffic on Water Tower Road
- Install INTERSECTION AHEAD advance warning signs on both approaches of Reservation Road

Medium Term (12 - 24 months)

• Reconstruct the pavement on Water Tower Rd near the intersection to reduce soil collecting across the roadway at the intersection

 Widen the curved portion of the roadway near the intersection and restripe the centerline and add edge lines on Water Tower Road to form a more direct, perpendicular connection to Reservation Road

2. Silver Bridge on N. Reservation Road

Short Term (6 - 12 months)

- Redo the marked centerline across the bridge
- Install NARROW BRIDGE warning signs on each approach of N. Reservation Road
- On the S. Reservation Road approach at N. Reservation Road, install a CROSS TRAFFIC DOES NOT STOP sign below the STOP sign

Medium Term (12 - 24 months)

Conduct a study to determine the need to widen the bridge SI based on the width and the number of crossings by vehicles,
 pedestrians and bicyclists

## 3. Day Care facilities access on Cow Mountain Road

- Short Term (6 12 months)
- Install a Day Care directional sign on the right side of Cow Mountain Road facing northbound traffic traveling from the intersection with N. Reservation Road
- Mark the first Day Care driveway north of the intersection with an

IN arrow and install a sign stating IN ONLY and mark the second driveway with an OUT arrow and install a DO NOT ENTER sign

- At the intersection of Cow Mountain Road and N. Reservation Road, add a LEFT TURN ARROW in the left-turn lane on the eastbound N. Reservation Road approach and add a STOP legend and limit line on the southbound Cow Mountain Road approach
- Install INTERSECTION AHEAD advance warning signs on both N.
   Reservation Road approaches
- Redo worn or faded pavement markings at and near the intersection of Cow Mountain Road and N. Reservation Road

4. Tribal Administration/Health Center/School on N. Reservation Road

Short Term (6 - 12 months)

- Install advance warning SCHOOL signs on both approaches of N.
   Reservation Road
- Remove the marked school crosswalk on N. Reservation Road on the west side of the school
- At the marked school crosswalk on the east side of the school, realign the crosswalk to be perpendicular to the roadway, add "ladder" or "zebra stripe" marking, SCHOOL PEDESTRIANS
- CROSSING (with arrows) symbol signs with activated flashing lights at the crosswalk, SLOW SCHOOL XING on the pavement

both N. Reservation Road approaches

- Consider providing a crossing guard at the marked crosswalk during school start and end times
- Add a STOP FOR PEDS IN CROSSWALK "paddle" sign in the center of the roadway in the marked school crosswalk facing both directions of travel on N. Reservation Road

Long Term (12 – 24 months)

Consider implementing the proposed design for N. Reservation Road as shown in the Reservation Road Plan and the Reservation Road Walking Plan of the Master Planning Program for 2016

#### 5. North and south entrances of Million Dollar Bridge

Short Term (6 - 12 months)

- Consider one-way operations, in either direction, perhaps with buses only in the opposite direction.
- Have a transportation engineering consultant conduct an all-way stop warrant study of the intersections on both ends of the bridge
- Install INTERSECTION AHEAD advance warning signs on both N. Reservation Road approaches and both S. Reservation Road approaches
- Add STOP legends and limit lines on both approaches on the bridge
- Redo worn or faded pavement markings ٠

and SCHOOL CROSSING AHEAD warning signs in advance on • Extend the centerline pavement markings on N. Reservation Road to end near the intersection

Medium Term (12 - 24 months)

Widen the connections or approaches on both ends of the bridge

6. Public Works access road and S. Reservation Road Short Term (6 - 12 months)

- Install INTERSECTION AHEAD advance warning signs on both S. **Reservation Road approaches**
- Redo worn or faded pavement markings •
- Pave a short section of the access road and add STOP legend • and limit line on the northbound approach

7. Entrances to Eagle Mountain Casino Parking Lot #2 and Reservation Rd

Short Term (6 - 12 months)

- Install STOP signs on the exit driveways from the parking lot
- Install directional sign for Casino parking in advance of the • driveway on Reservation Road

8. Loop Road intersections with S. Reservation Road

Short Term (6 - 12 months)

Install INTERSECTION AHEAD symbol warning signs on both approaches of S. Reservation Road at Loop Road intersections

- Redo worn or faded pavement markings
- Add STOP legends and limit lines on both Loop Road approaches

9. Justice Center access intersection with S. Reservation Road Short Term (6 – 12 months)

- Add STOP legend on the pavement of the northbound approach/ exit from the Justice Center
- Install INTERSECTION AHEAD advance warning signs on both
   eastbound and westbound approaches of S. Reservation Road
- Install RIGHT LANE MUST TURN RIGHT sign facing eastbound traffic on S. Reservation Road
- Install reflectors and add yellow reflective paint on each end of the small raised median on the northbound approach/exit
- Install a KEEP RIGHT OF MEDIAN symbol sign at the end of the small median facing traffic turning from S. Reservation Road

10. Deer Creek (Road 296) and Reservation Road

Short Term (6 – 12 months)

- Install an INTERSECTION AHEAD symbol warning sign in advance of the intersection on both the eastbound and the westbound approaches of Reservation Road
- Add a STOP legend on the northbound Deer Creek approach
- Change the centerline on the northbound Deer Creek approach near the intersection to solid double yellow markings

• Extend the centerline on the eastbound approach of Reservation Road to be closer to the intersection

Some of the T2SA recommendations have been completed and other are still applicable.

## Recommendations to Improve Pedestrian Safety on the Tule River Reservation

The recommendations to improve pedestrian safety on the

Tule River Indian Reservation (2015) (RIPS) was prepared by the University of California at Berkeley's Safe Transportation Research Center (SafeTREC) and California Walks (Cal Walks). It summarizes the community-based workshop and walking audit conducted to identify areas of concern and recommendations for pedestrian safety projects on the Tule River Reservation. One issue encountered was the lack of pedestrian collision history available from the Statewide Integrated Traffic Records System (SWITRS), between 2004 and 2014 there were no documented collisions on tribal land. Therefore, collision data was collected from community members during a workshop and the Tribal Police Department, which confirm the underreporting of tribal collisions in SWITRS.

The RIPS identified the following issues related to pedestrian safety:

Lack of Pedestrian Facilities Along Reservation Road and
 Throughout the Reservation – There are no existing pedestrian

facilities along Reservation Road, the primary transportation • corridor for residents in the community. Since it is the primary corridor, residents and children walk along the unpaved shoulder • (some areas lack roadway shoulder) to access key community services and facilities including the Tribal Education Center, Child Care Center, Community Health Clinic, Community Gymnasium, and the Tribal Council Building, also referred to as the Loop.

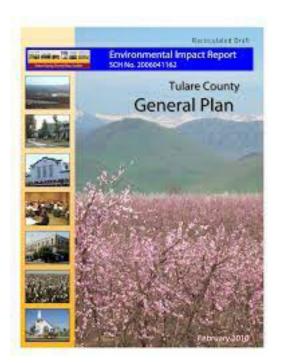
 Frequent Student Crossing Between Tribal Education Center and Gymnasium – Students frequently travel between the Tribal Education Center and Gymnasium, which are located on opposite sides of Reservation Road. Crossings happen at all times of the day and week because there are numerous community events and activities schedule between the two locations. There is a crossing guard posted in the afternoon from 3:00 p.m. – 5:30 p.m.; however, during the morning and other times of day, drivers often do not yield to youth. Also, youth cross at undesignated crossing locations. Crosswalk markings and signage is deteriorated and invisible

The RIPS identified the following recommendations:

 Provide separated pedestrian facilities on Reservation Road, especially North Reservation Road – At minimum, an asphalt side path should be installed to provide full separation for pedestrians. This may require widening the road.

- Establish a Tule River-wide Trail System to provide fully separated pedestrian facilities
- Install Raised Crossing Between Education Center and Gymnasium – Improve driver compliance with yielding to youth crossings by installing one or more raised crossings with high visibility crosswalk markings and warning signage.
- Create Cross Guard Station A cross guard station would provide shade during warmer months for crossing guards.
- Explore Back-In Angle Parking in Front of Tribal Council Building

   Back-in angle parking would reduce conflicts between drivers
   backing up and pedestrians walking along road because it
   increases the sight lines of drivers and pedestrians.



#### Tulare County General Plan

The Transportation and Circulation section of the Tulare County General Plan document outlines goals and policies to facilities a functional circulation system within Tulare County. In an effort to improve the circulation and mobility throughout Tulare County, multimodal and complete street goals and polices are incorporated into the Transportation and Circulation element of the Tulare County General Plan.

The goal of this element is to promote an efficient roadway and highway system for the movement of people and goods, which enhances the physical, economic, and social environment while being safe, environmentally friendly, and cost-effective. The following further explains the Tulare County General Plan's list of policies below. This feasibility study is consistent with the General Plan's policies.

#### TC-1.1 Provision of an Adequate Public Road Network

The County shall establish and maintain a public road network comprised of the major facilities illustrated on the Tulare County Road Systems to accommodate projected growth in traffic volume.

#### TC-1.2 County Improvement Standards

The County's public roadway system shall be built and maintained consistent with adopted County Improvement Standards, and the need and function of each roadway, within constraints of funding capacity.

#### TC-1.3 Regional Coordination

The County shall continue to work with State, regional, and local agencies to assess transportation needs and goals and support coordinated transportation planning and programming with the Tulare County Association of Governments (TCAG) and other local agencies.

#### TC-1.4 Funding Sources

The County shall work to enhance funding available for transportation projects. This includes:

- Working with TCAG, Federal and State agencies, and other available funding sources to maximize funding available to the County for transportation projects and programs, and
- 2. Enhance local funding sources, including assessment of transportation impact fees to pay for appropriate construction, enhancement, and maintenance of transportation facilities

#### TC-1.5 Public Road System Maintenance

The County shall give priority for maintenance to roadways identified by the Tulare County Pavement Management System (PMS) and other inputs relevant to maintaining the safety and integrity of the County roadway system.

#### TC-1.6 Intermodal Connectivity

The County shall ensure that, whenever possible, roadway, highway, and public transit systems will interconnect with other modes of transportation. Specifically, the County shall encourage the interaction of truck, rail, and air-freight/passenger movements.

#### TC-1.7 Intermodal Freight Villages

The County shall consider the appropriate placement of intermodal freight villages in locations within the Regional Growth Corridors.

#### TC-1.8 Promoting Operational Efficiency

The County shall give consideration to transportation programs that improve the operational efficiency of goods movement, especially those that enhance farm-to-market connectivity.

#### TC-1.11 Regionally Significant Intersections

To enhance safety and efficiency, the County shall work to limit the frequency of intersections along regionally-significant corridors.

#### TC-1.12 Scenic Highways and Roads

The County shall work with appropriate agencies to support the designation of scenic highways and roads in the County.

## TC-1.13 Land Dedication for Roadways and Other Travel Modes As required to meet the adopted County Improvement Standards, the County shall require, where warranted, an irrevocable offer of dedication to the right-of-way for roadways and other travel modes, as part of the development review process.

TC-1.14 Roadway Facilities

As part of the development review process, new development shall be conditioned to fund, through impact fees, tonnage fees, and/or other mechanism, the construction and maintenance of roadway facilities impacted by the project. As projects or locations warrant, construction or payment of prorated fees for planned road facilities may also be required as a condition of approval.

#### TC-1.16 County Level of Service (LOS) Standards

The County shall strive to develop and manage its roadway system (both segments and intersections) to meet a LOS of "D" or better in accordance with the LOS definitions established by the Highway Capacity Manual.

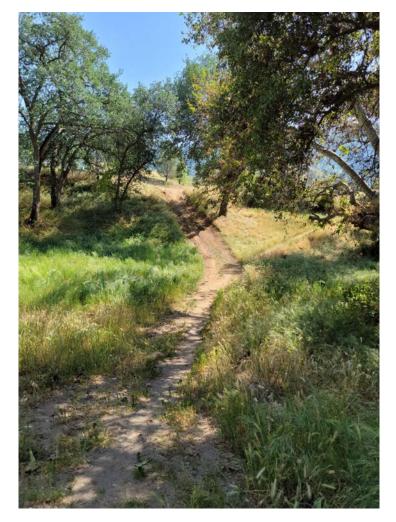
#### TCAG Regional Activ

TCAG Regional Active Transportation Plan (RATP) (adopted May 2016; amended November 2017, January 2020) identifies the pedestrian and bike related goals, strategies and priority projects that were incorporated into the Tulare County Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS). The RTAP identifies the one priority project (R-1) for the Tule River Reservation, which proposes implementing pedestrian safety features on North Reservation Road between Cow Mountain Road and the Million Dollar Bridge. The project includes sidewalk installations, safety signage, river walkways and bridge walkways, and speed bumps. However, Caltrans has requested that traffic-calming alternatives to speed bumps be considered due to the damage the bumps can cause to cars. The estimated costs was \$2,399,000. *Tulare County Regional Transportation Plan - Sustainable Communities Strategy* 

WALK ' BIKE

TULARE

As required by the Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375), the 2018 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) contains a Sustainable Communities Strategy that considers both land use and transportation together in a single, integrated planning process that accommodates regional housing needs and projected growth. The 2018 RTP/SCS updates the current RTP/SCS adopted by TCAG in June 2014 and continues the planning vision for the Tulare County region laid out by the 2014 plan. As have past Regional Transportation Plans, the 2018 RTP/SCS plans how the region will invest limited transportation funds to maintain, operate and improve an integrated, multi-modal transportation system that facilitates the efficient movement of people and goods. The updated plan identifies specific strategies, policies and actions, including a list of programmed and planned transportation projects affordable within the region's anticipated reasonably available transportation funding, to achieve regional goals and priorities and meet the current and future needs of the region.



**FIGURE 1.9 TULE RIVER RESERVATION** 

#### **KEY PLANNING ISSUES**

Key planning issues identified in the Tule River Reservation include:

## Vehicular Collisions with Children Crossing Between the Education Center and Gymnasium

 This area is a priority safety concern due to numerous vehicle collisions with youth is the crossing of North Reservation Road between the Education Center and Gymnasium. These two facilities have frequent crossings as there are numerous community events and activities scheduled between the two locations. There crosswalk markings are deteriorated and are located at an angle to the travel lanes. Additionally there are no sidewalks, bollards, RRFBs or other safety measures to slow vehicle speeds and facilitate safer crossings for children.



**FIGURE 1.10 SWINGING BRIDGE** 

#### **Unsafe River Crossings**

The Tule River runs from west to east through the Reservation and creates a barrier for pedestrian and bicycle connections to and from residences, public facilities, or community events that are located on both the north and south side of the Tule River. To cross the Tule River, residents have to walk along North and South Reservation Road and cross at the Silver Bridge or Million Dollar Bridge. However, these are not convenient crossing locations and also require residents to walk along unpaved shoulders or within the travel lanes as there are no pedestrian facilities. Currently, residents can cross using the existing Swinging Bridge, which is an informally constructed wire suspension bridge that is approximately 140 feet (ft) long and 3 ft wide with deteriorating planks of wood for the bridge deck. The bridge is a safety concern as it swings during crossings and has large gaps in the bridge deck. Additionally, the bridge is not ADA-compliant. The other crossing point is between the residences and Daycare Center along Cow Mountain Road to the Justice Center. The Justice Center provides residents with public facilities including showers. Residents will hike down the vegetated hillside and cross the stony river bed when water levels are low. However, during the summer months when it is hot, residents need to be careful of rattlesnakes. During the winter months, when river levels are high, residents cannot use the crossing point and have to walk long distances along Reservation Road.

#### Section 2 | Existing Conditions

#### EXISTING STREET SYSTEM

The Project is located within the Village Area (the community and civic center) of the Tule River Reservation, a rural area in Porterville, Tulare County. The Village Area has had longstanding issues with pedestrian and vehicle collision accidents along North Reservation Road, as it is the primary transportation corridor for vehicles and pedestrians.

However, there are no pedestrian facilities along North Reservation Road or throughout the Reservation. Since it is the primary transportation corridor, residents and children walk along unpaved shoulders (some areas lack roadway shoulders so residents walk within the travel lane) or informal river crossings to access key community services and facilities including the Tribal Education Center, Gymnasium, Community Health Clinic, Tribal Council, Justice Center, Cow Mountain Daycare Center, and other public service buildings. To address longstanding and immediate pedestrian safety concerns, the community identified the highest priority areas as the following:

- 1. Youth crossings between the Education Center and Gymnasium; and
- 2. Residents and youth informally crossing the Tule River to access residences, public services, or community events.

Most transportation modes in Tule River include horses, quads, bikes, walking, motorcycle. Additionally, Residents use an informal dirt trail along the southern edge of the Tule River to avoid the road. The trail used to be a cattle trail. Residents use the pedestrian-only Swinging Bridge to cross between North and South Reservation Rd. It is the only crossing point between Silver Bridge to Million Dollar Bridge. It is an informal suspension bridge with wooden planks.



FIGURE 2.1 EXISTING SPEED HUMP

#### TRANSIT

According to the TCAG 2022 Regional Transportation Plan (RTP) Tribal Outreach Strategy, The City of Porterville is the closest community to the reservation and many tribe members live, work and recreate in Porterville. Additionally, many of their children attend Porterville schools. The City of Porterville has a long-standing relationship with the tribe and contracts with them to provide needed services, including transit.

According to the City of Porterville, Transit Route 9 is not currently operating to the Tule River Reservation, but a modified Route 9 may be started up later in 2022. The Tribal Council would like to alter Porterville Transit's Route 9 to end at the Park & Ride lot located at the intersection of Highway 190 and Road 240. Tribal transportation would then pick up residents and bring them into the Tule River Reservation. A checkpoint would be installed west of Water Tower Road / BIA 240, where residents would provide identification. This would reduce the number of non-residents entering the Tule River Reservation and youths riding the bus into town and not returning.

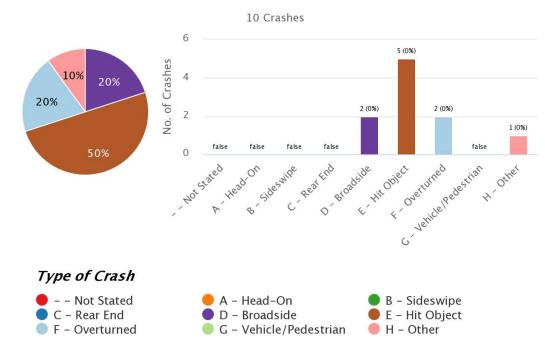


**FIGURE 2.2 PORTERVILLE TRANSIT BUS** 

#### **COLLISION DATA**

There is a lack of collision data available through the Statewide Integrated Traffic Records System (SWITRS) regarding the Tule River Reservation. SWITRS is a database of collisions and traffic-related accidents that are reported by the California Highway Patrol. The Transportation Injury Mapping System (TIMS) was used to map SWITRS data between January 1, 2012 to December 31, 2021, which indicated that 10 total crashes occurred with 12 total injured during this 10-year period within the Tule River Village Area. No pedestrians or bicyclists were involved in any of the 10 SWITRS-documented incidents.

#### FIGURE 2.3 SWITRS DATA ACCESSED THROUGH THE TIMS INTERFACE



#### Number of Crashes by Type of Crash

#### **EXISTING CONDITIONS**

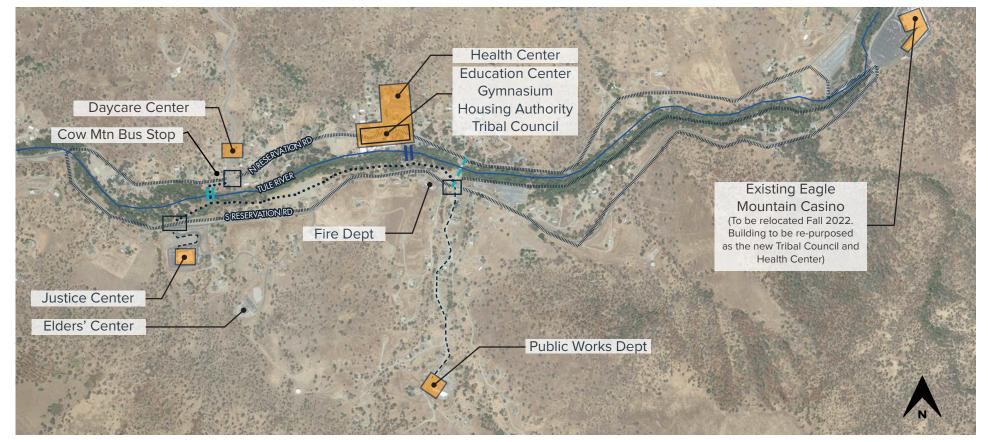


FIGURE 2.5 VEHICLE CROSSING

FIGURE 2.6 VEHICLE CROSSING

FIGURE 2.7 SWINGING BRIDGE

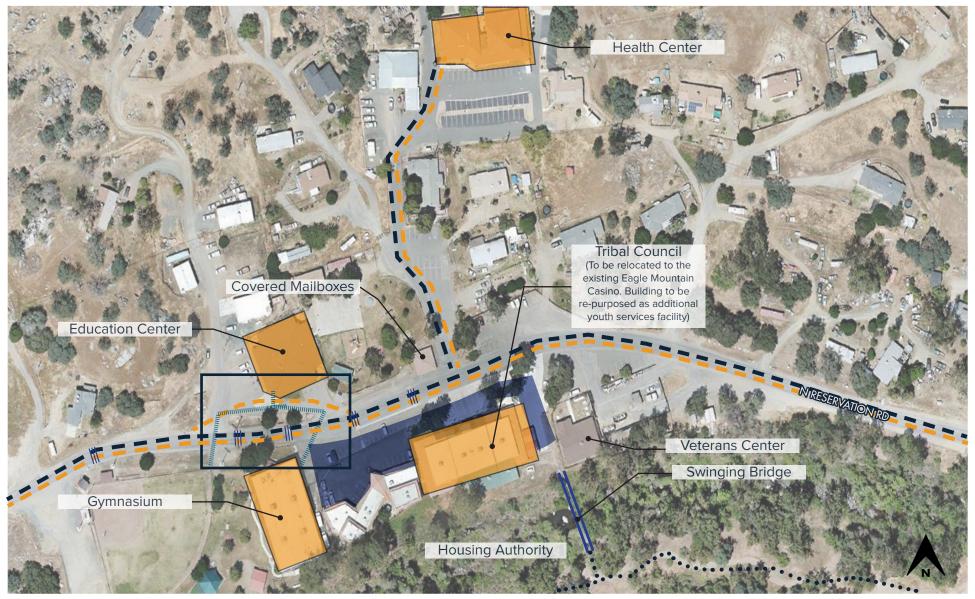
#### **EXISTING CONDITIONS MAP**



#### LEGEND

- Existing Sidewalk
- High Volume Vehicle + Pedestrian Route With No Pedestrian Facilities
- Roads with No Pedestrian Facilities / Trails
- ••••• Existing Informal Dirt Trail
  - Tule River

- Informal River CrossingExisting Pedestrian Bridge
  - Need to Improve Intersection / Streetscape to Reduce Pedestrian Accidents
  - High Use Area



Ш

#### LEGEND

- High Use Route With No Pedestrian Facilities or Street Lights
- High Speed Traffic
- High Volume Crossing by Youth
- Existing Informal Dirt Trail
  - Speed Bump

- Poor Visibility of Pedestrians When Backing Up / Confusing Parking Layout & Design High Use Destination
- Area of High Pedestrian Accidents
- Existing Pedestrian Bridge in Poor Condition

#### Section 3 | Public Participation

#### **OVERVIEW**

Various public participation events were held during the planning process for this ATP report including a walking audit, community survey, stakeholder discussions, and open house events. The goal was to provide residents with multiple ways to participate depending on their availability. The following is a summary of the various public participation events.

#### WALKING AUDIT

The walking audit was held on April 8, 2022. Participants included Chairman Neil Peyron, Honorable William Garfield and representatives from TCAG, City of Porterville, and 4-Creeks. The walking audit was focused on observing the physical environment, existing behaviors/uses, and comfortability. Pedestrians encountered during the walking audit were asked for their input regarding existing issues/needs. The walking audit included the Swinging Bridge, informal multi-use trail along Tule River, Million Dollar Bridge, Fire Department Station, South Reservation Road near the Justice Department, Cow Mountain Road bus stop, and the Public Works Road.



FIGURE 3.1 TULE RIVER RESERVATION

## WALKING AUDIT ROUTE

TULE RIVER ACTIVE TRANSPORTATION PLAN - WALKING AUDIT (4/8/22)

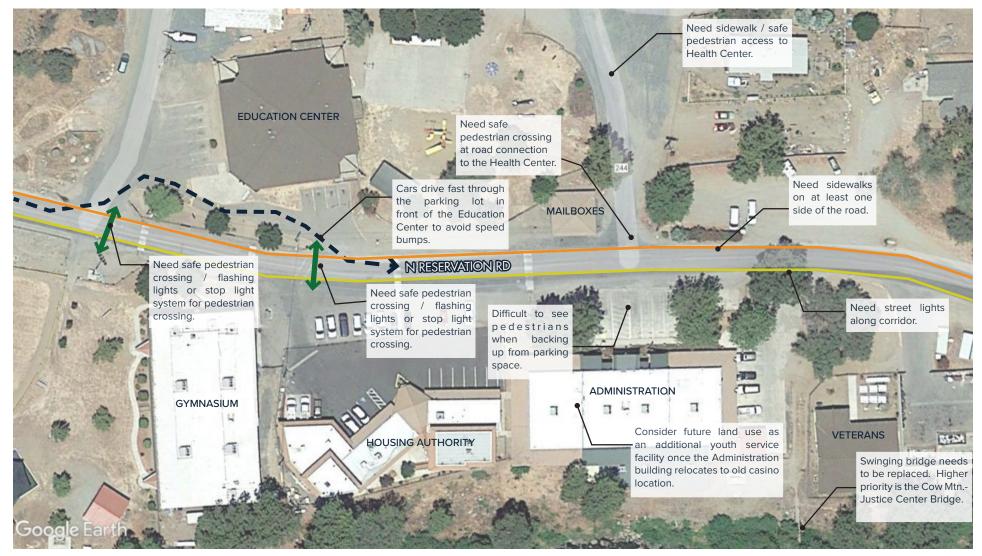


## **DURATION:** 1.5 hours **DISTANCE:** 2.5 miles

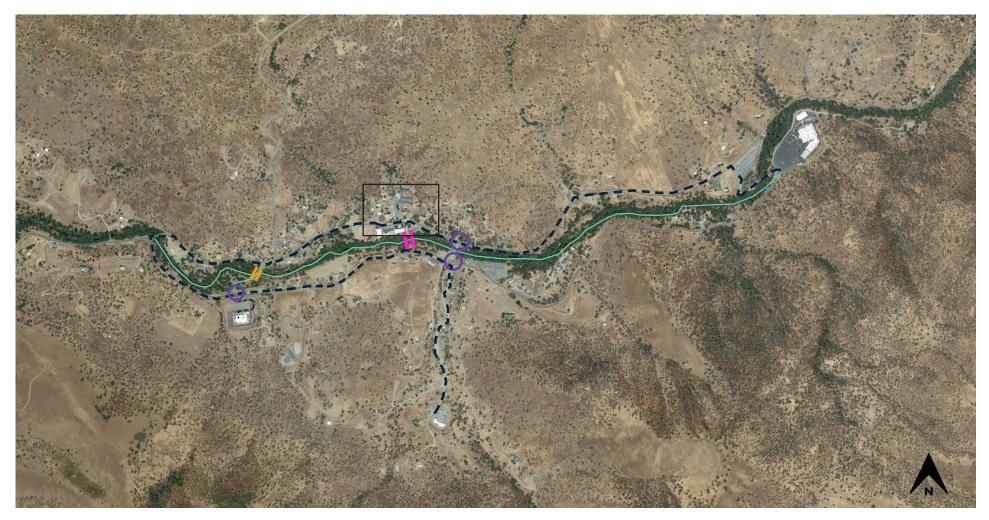
- 1. Swinging Bridge
- 2-4 Tribal Administration / Health Center / School on N. Reservation Rd.
- 5. Day Care Facility Access on Cow Mountain Rd.
- 6. Loop Road Intersection with S. Reservation Rd.

- 7. Justice Center Access Intersection with S. Reservation Rd.
- 8. Public Works Access Rd. and S. Reservation Rd.
- 9. Loop Road Intersection with S. Reservation Rd.
- <sup>1</sup> Areas of concern were identified in the Sustainable Transportation / Circulation Element (2018)

#### WALKING AUDIT SUMMARY



#### **POTENTIAL ATP PROJECTS**



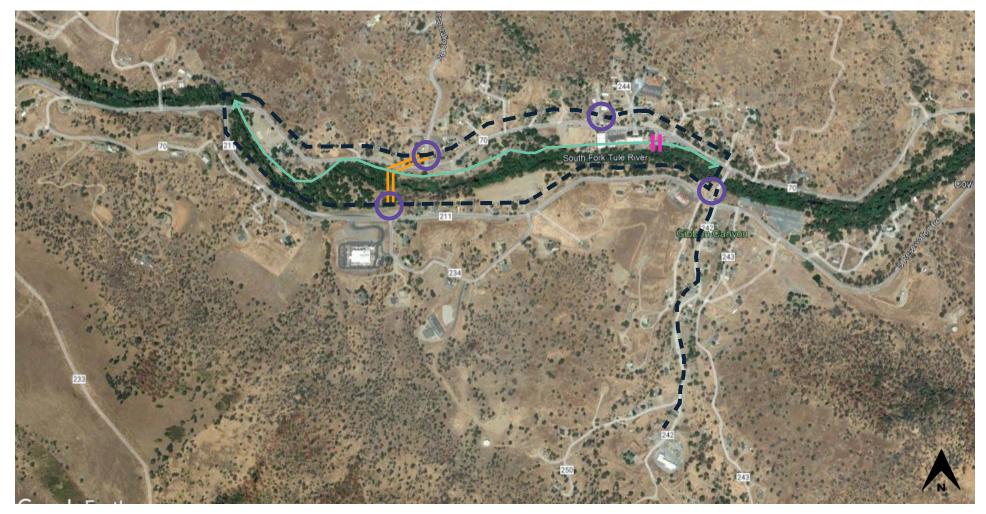
#### LEGEND

- Need for sidewalk/protected pedestrian access or roadway shoulder
  - Need for pedestrian bridge to cross Tule River
  - Need to be replaced; however, the Justice Center-Cow Mtn. Bridge is a higher priority
- Need for all-weather multi-use trail



- Need to improve intersection for safer pedestrian crossings
- Village Area

# **POTENTIAL ATP PROJECTS - VILLAGE AREA**



# LEGEND

- Need for sidewalk/protected pedestrian access or roadway shoulder
  - **\_** Need for pedestrian bridge to cross Tule River
  - Need to be replaced; however, the Justice Center-Cow Mtn. Bridge is a higher priority
- Need for all-weather, ADA-compliant multi-use trail

Need to improve intersection for safer pedestrian crossings

# STAKEHOLDER DISCUSSIONS

## **Tule River Tribal Council Discussion**

A meeting with the Tule River Tribal Council was held on April 8, 2022 to discuss the scope of the ATP and existing issues and needs regarding active transportation modes and infrastructure. Discussion topics include the following:

- Transit The Tribal Council would like to alter Porterville Transit's Route 9 to end at the Park & Ride lot located at the intersection of Highway 190 and Road 240. Tribal transportation would then pick up residents and bring them into the Tule River Reservation. A checkpoint would be installed west of Water Tower Road / BIA 240, where residents would provide identification. This would reduce the number of non-residents entering the Tule River Reservation and youths riding the bus into town and not returning.
- Pedestrian Crossings for Tule River The Tribal Council emphasized the need to rehabilitate the existing pedestrian bridge, the Swinging Bridge, and develop a new pedestrian bridge to connect the Cow Mountain Road bus stop and the Justice Department building.

## **Education Center Students and Staff Discussion**

A meeting with the students and staff at the Education Center was held on April 8, 2022 to discuss existing issues and needs regarding active transportation modes and infrastructure. Discussion topics

include the following:

- Pedestrian Facilities Students would like sidewalks or roadside railings to protect them from cars. Students would also like streetlights.
- Education Center Parking Lot Students have to be careful when walking through the Education Center parking lot because vehicles will drive quickly through the parking lot in order to avoid driving over speed bumps in North Reservation Road.
- Porterville Unified School Bus Service Students have issues getting home after school if they participate in extracurricular activities like choir. There is bus service for after school sports programs.
- Reservation Circulator There is a need for a Reservation circulator that provides transportation for students that live on the upper Reservation. Currently, students have to wait for a ride from family and friends to get home because it is too far to walk from the Education Center. The bus service picks students up from the Porterville schools and drops them off at the Education Center. Note: There was a Reservation circulator that was closed down when the Covid-19 pandemic began in 2020.
- Pedestrian Connection Across Tule River There is a need for a bridge between the Cow Mountain Road bus stop and Justice Center. Students currently walk down and across the Tule River

through tall grasses and shrubs. However, when the Tule River level is high, students have to walk along the main road and cross either on the Million Dollar Bridge or Silver Bridge. There are also issues crossing through the tall grasses during the spring and summer when the rattlesnakes are out.

 Landscape Maintenance – There needs to be more landscape maintenance around the bus stops. There can be rattlesnakes hiding when the grass is high.



#### **Tule River Fire Department Discussion**

A meeting with the Fire Department was held on April 8, 2022 to discuss existing issues and needs regarding active transportation modes and infrastructure. Discussion topics include the following:

- Roadside Shoulders There are segments of N. and S. Reservation Rd. where there is very minimal to no roadside shoulder, which makes it unsafe to walk along the street. At some points, there are steep drop offs from the road into the Tule River area.
- Public Education The Fire Department prioritizes attending public events to emphasize community awareness on strategies to improve safety including wearing light colors when it is foggy, use bike reflectors, etc.
- Education Center-Gymnasium Pedestrian Connection Priority should be on improving the pedestrian connection between the Education Center and Gymnasium. Parking in the area blocks visibility of pedestrians.

FIGURE 3.2 TULE RIVER FIRE DEPARTMENT

## COMMUNITY SURVEY

A community survey was conducted to provide all community • 1 respondent selected Medical members with the opportunity to share their views on existing issues and needs regarding active transportation modes and infrastructure. The survey included 12 multiple-choice and open-ended questions. There was a total of 12 survey respondents. The survey is included in Appendix XX. The survey results include the following:

Question 1 asked respondents to select their age.

- 5 respondents were between the ages of 40-49 ٠
- 5 respondents were between the ages of 20-29
- 1 respondent was between the ages of 30-39
- 1 respondent was age 70 and above

Question 2 asked respondents to identity their trip purposes completed in the past week. Respondents were instructed to select all that applied for this question.

- 9 respondents selected Shopping ٠
- 8 respondents selected Work
- 7 respondents selected School
- 7 respondents selected Social
- 7 respondents selected Recreation
- **1** respondent selected Financial

Question 3 asked respondents to select the type of transportation used for their trips taken in the past week and to mark all that apply.

- 12 respondents selected Car, Truck, or Van •
- 6 respondents selected Walking
- 4 respondents selected Driving Alone
- 2 respondents selected Carpool
- 1 respondent selected Transit (bus)
- 1 respondent selected Motorcycle

Question 4 asked respondents to identify the locations of area of concern for transportation related issues in the Tule River Reservation. Respondents selected all that applied. The most popular responses include Education Center and Gymnasium, Tribal Administration/ Health Center/Education Center on N. Reservation Road, Connection between Cow Mountain Rd. and the Justice Center, North and south entrances of Million Dollar Bridge, Silver Bridge on N. Reservation Road, and Entrances to Eagle Mountain Casino Parking Lot #2 and Reservation Road.

Question 5 asked respondents to write in other locations of concern not listed in the previous question. 4 respondents answered this question and the location so most concern included;

- Hunter road
- Gibbons Creek
- Canyon Road
- Loop Road
- Silver Bridge Stop Sign
- South Reservation Road Casino traffic

Question 6 asked respondents to identify what would encourage
 them to walk more. The majority of respondents stated that they would
 be more encouraged to walk if there were protected sidewalks and
 crosswalks and slower traffic on the road. Additionally, respondents
 noted that the physical conditions of the sidewalks including shade,
 would encourage them to walk more.

Question 7 asked respondents to identify what would encourage them to bike more. Many respondents wrote in that the implementation of protected bike lanes and trails would encourage biking more. Question 8 asked respondents if they would like to see a reservationwide multi-use trail and which location they would want the trail to connect. Most respondents agreed that a multi-use trail would be beneficial and suggested locations such as:

- River Trail
- Cow Mountain hiking trail
- Green Gate
- The Big Loop

Question 9 asked respondents to identify the best location for a Tribal Transportation Bus to provide service to. Responses included:

- Tribal Building
- Justice Center
- Clinic
  - Down smaller roads
  - Residential Areas
- Cow mountain
- Green Gate
- Apple Vally
- Upper Reservation

Question 10 asked respondents to identify what improvements are most important to them.

- 8 respondents selected Addition of Road Shoulder
- 7 respondents selected Sidewalks, Protected Crosswalks/ Intersection, and Multi Use Trails

 6 respondents selected Speed Bumps, Speed Signs, Warning Signs, and Shade/Trees

Additional popular responses included Bike Lanes, Bike Lanes with Barrier/Separation from Car Traffic, Road Striping, and Horse Trails Question 11 asked respondents to write in any other improvements they would like to see that were not listed in the previous question. Responses included:

- Road Paving on cow mountain road
- More gravel on dirt roads
- Dog control
- Stop sign by Loop Road and South Reservation Road
- Increased trash pickup and trash cans

Question 12 asked respondents to identify if they have a disability that limits their use of bus, bike, or pedestrian modes of travel. Out of 12 responses, one person selected Yes, and 11 persons selected No.

Question 13 asked responses to share any other comments or issues they have regarding transportation in the community. Some of the responses included.

- Transportation to smaller road throughout Reservation
- Implementation of bus system

# Section 4 | Proposed Design Concepts

# INTRODUCTION

The purpose of this chapter is to identify projects that will improve multi-modal mobility within the Tule River Reservation. The projects described in this chapter were informed by the Community Outreach process and selected based on their feasibility and ability to improve access and safety for all road users. Following a thorough review of local and regional background documents, regulatory context, existing conditions, community outreach results, and complete streets design strategies, the Planning team identified the following projects to facilitate complete streets within the Tule River Reservation:

# PHASE 1:

Address longstanding gaps in the existing infrastructure that have resulted in high pedestrian accidents and discourage pedestrian/bicycle mobility.

## PHASE 2:

Focus on "closing the loop" and creating a safe pedestrian and bicycle circulation network within the Village Center.

# PHASE 3:

Focus on connecting the Village Center with the future Tribal Council and Health Center Buildings once the Eagle Mountain Casino is relocated.



#### SPEED HUMPS

Speed humps are beneficial in slowing down traffic on busy roads. With an decrease in vehicles speed, there is also a decrease in the odds of automobile injury or death among children. Speed humps are parabolic vertical traffic calming devices intented to slow traffic on low volume, low speed roads. Speed humps reduce speeds to 15-20 mph and are often referred to as "bumps" on signage and by the general public. It is important for speed control elements to be accompanied by a sign warning drivers of the upcoming device. The spacing for speed controls is determined base don the target speed to the road. For a greater speed reduction, speed humps are spaced closer together.

## RECTANGULAR RAPID FLASHING BEACON (RRFB)

Rectangular rapid flashing beacons (RRFBs) are a type of active warning beacon that use an irregular flash pattern to alert drivers to yield for bicyclists that have the right-of-way crossing a road. RRFBs can be installed on either two-lane or multi-lane roadways. RRFBs offer a lower cost alternative to traffic signals and significantly increase driver awareness at crossing.



**FIGURE 4.1 SPEED HUMP** 



**FIGURE 4.2 RRFB** 

SOURCE: NAACTO

## GATEWAY SIGNAGE

A "gateway" can be designed using a set of striping or signage to indicate the entrance into a slow zone and alert drivers of reduced sped limit. For the Tule River Village Area, gateway signage such as a "SLOW" sign will be constructed between the Education Center and Gymnasium to alert drivers they are entering a slower zone.

## BACK-IN ANGLED PARKING

Back-in angled parking can be used as a way to create a chicane effect on streets. A chicane effect slows traffic speeds by offsetting curb extensions on low volume downtown streets and increasing the amount of public space, such as a plaza with seating. Backin angled parking is a safe alternative to parking from head-in or parallel parking. The driver has a better line of sight to see oncoming traffic when pulling out of a parking space into traffic.

## PEDESTRIAN REFUGE

A pedestrian refuge is placed on a median and allows pedestrian to feel safe while entering an intersection. Refuges reduce the exposure time of a pedestrian within an intersection. Most often, there is a crosswalk that "cuts-through" the median and plantings or street trees along the median.

SOURCE: NAACTO



**FIGURE 4.3 GATEWAY SIGNAGE** 



FIGURE 4.4 BACK-IN ANGLED PARKING



**FIGURE 4.5 PEDESTRIAN REFUGE** 

# **CONCRETE DESIGN**

# CONCEPT FOR BASKETWEAVE PATTERN

Traditional basketweave patterns will be used as a design motif and will be incorporated into various concrete elements (e.g., retaining walls, paths, sidewalks, pedestrian bridge deck, etc.) throughout the project area to create a cohesive, place-based design that represents the cultural heritage of the Tule River Tribe.

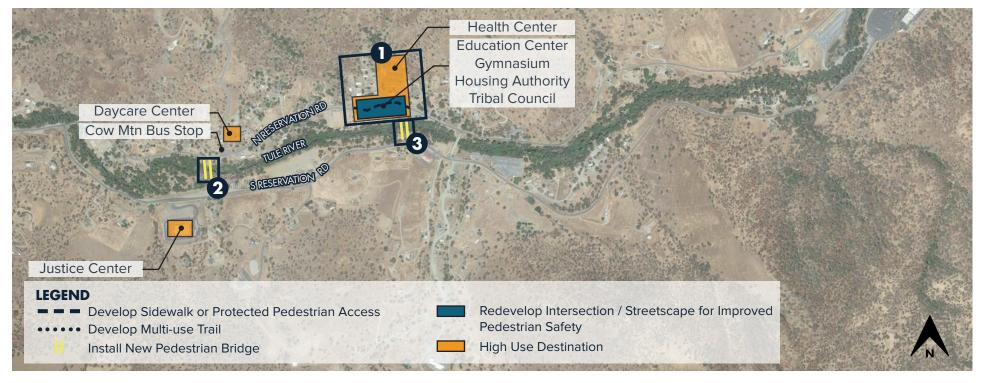
# BASKETWEAVE PATTERNS



## STAMPED CONCRETE / PANELS



# PHASE 1 PROJECTS



#### PHASE 1 PROJECTS

Address longstanding gaps in the existing infrastructure that have resulted in high pedestrian accidents and discourage pedestrian/bicycle mobility.

#### TULE RIVER VILLAGE CORRIDOR

#### \$5,790,000

1

Project 1 is located in the Village Center and focuses on reducing vehicle accidents with youth crossing the street between youth facilities, as well as creating a safer pedestrian and bicycle environment for youth and adults throughout the Village corridor.

- Improve safety for crossing between the Education Center and Gymnasium by:
  - 1. Gateway treatment to alert drivers they are entering a slower zone
  - 2. Reorient crosswalk to be perpendicular
  - 3. Install flashing beacon or signal
  - 4. Pedestrian refuge island / median
  - 5. Speed table or humps in the Education Center parking lot
  - 6. Shade for crossing guards
- Install sidewalks, bollards, street lights, and/or planters through Village corridor to create protected pedestrian areas
- Develop back-in angled parking for improved visibility and redesign parking layout with new striping

Projects 2 and 3 are focused on increasing pedestrian connectivity across the Tule River to high use destinations and residences. This will alleviate the need to walk for long stretches along North and South Reservation Road, both which do not have pedestrian facilities or sometimes even roadway shoulders.

COW MTN RD - JUSTICE CENTER PEDESTRIAN BRIDGE + CORRIDOR \$707,000

Develop new pedestrian bridge

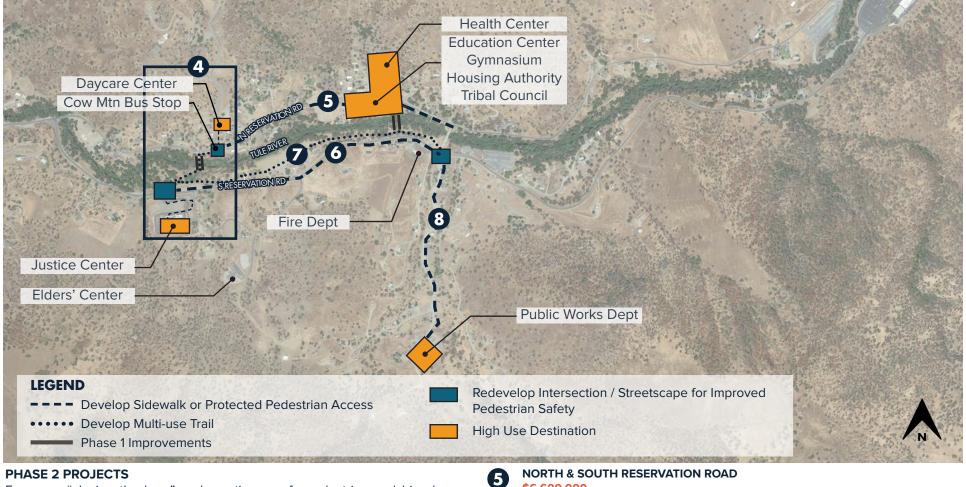
#### **3** SWINGING BRIDGE

#### \$707,000

2

• Replace the existing pedestrian bridge

# **PHASE 2 PROJECTS**



Focus on "closing the loop" and creating a safe pedestrian and bicycle circulation network within the Village Center.

#### **COW MTN RD - JUSTICE CENTER PEDESTRIAN CORRIDOR** \$900,000

- Install sidewalks and/or bollards to create protected pedestrian areas from 1. Daycare Center down to the Cow Mountain bus stop; and 2. Justice Center driveway
- Develop multi-use path to the new pedestrian bridge from 1. Cow Mountain bus stop; and 2. North of Justice Center
- Improve safety for crossing towards new pedestrian bridge between 1. Cow Mountain Rd; and 2. North of Justice Center

# \$6.600.000

Project 5 will connect the Village Center to Cow Mountain Road to the west and the Million Dollar Bridge to the east. Project 6 will connect the Justice Center to the Village Center via Million Dollar Bridge.

Install sidewalks and streetlights

#### **MULTI-USE PATH**

#### \$510.000

6

(7

Project 7 will provide an off-roadway, pedestrian and bicycle only route to connect the two pedestrian bridges.

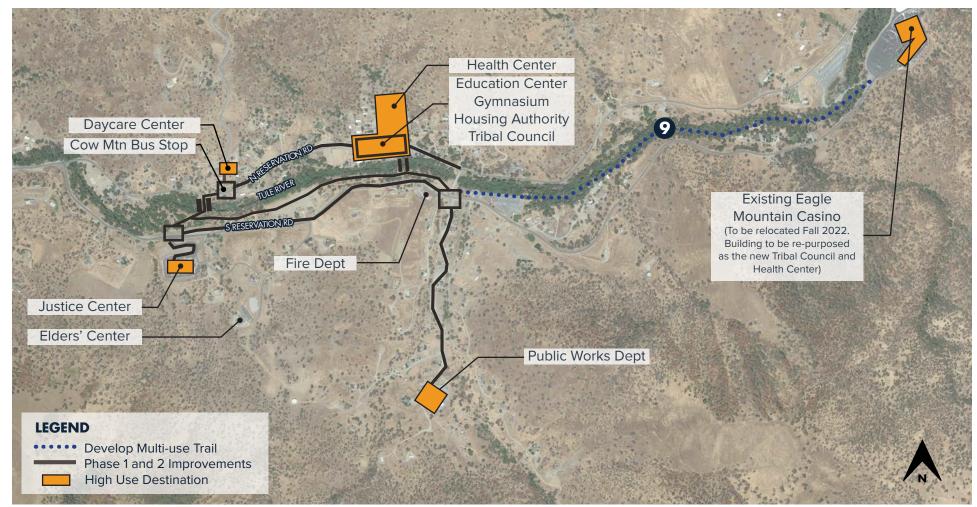
Install gravel or all-weather surface to replace the existing informal dirt trail

#### PUBLIC WORKS DEPARTMENT ACCESS ROAD 8 \$1,400,000

Project 8 will connect the Public Works Dept to the Village Center.

- · Install sidewalks on east side of access road
- Improve intersection crossing by adding crosswalk striping

# **PHASE 3 PROJECTS**



#### PHASE 3 PROJECTS

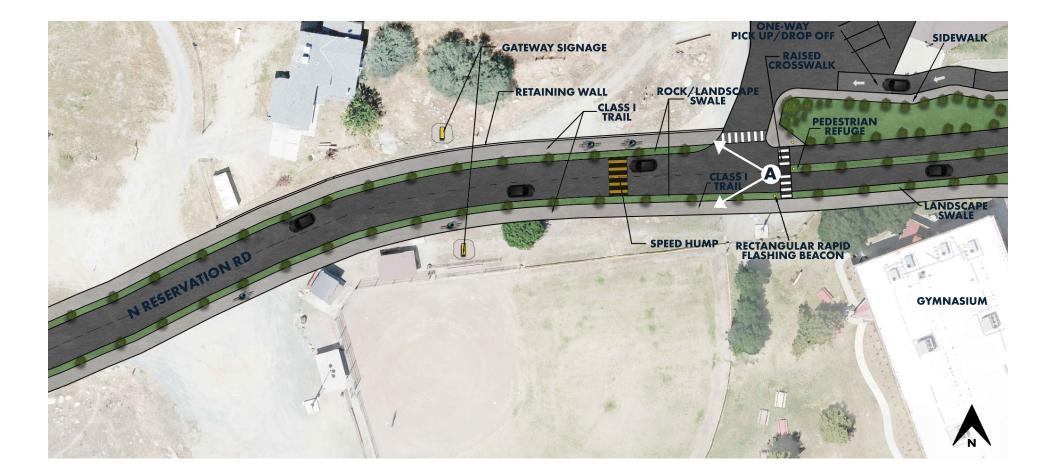
Focus on connecting the Village Center with the future Tribal Council and Health Center Buildings once the Eagle Mountain Casino is relocated.



Project 9 will provide an off-roadway, pedestrian and bicycle only route to connect the Village Center with the future Tribal Council and Health Center.

• Install gravel or all-weather surface

VILLAGE AREA WEST



# **RENDERING A** VILLAGE AREA CENTER - WEST ON N. RESERVATION RD





VILLAGE AREA CENTER



# **RENDERING B**

VILLAGE AREA CENTER - EAST ON N. RESERVATION RD



VILLAGE AREA NORTH



# **RENDERING C** VILLAGE AREA NORTH



# **RENDERING D**

VILLAGE AREA EAST



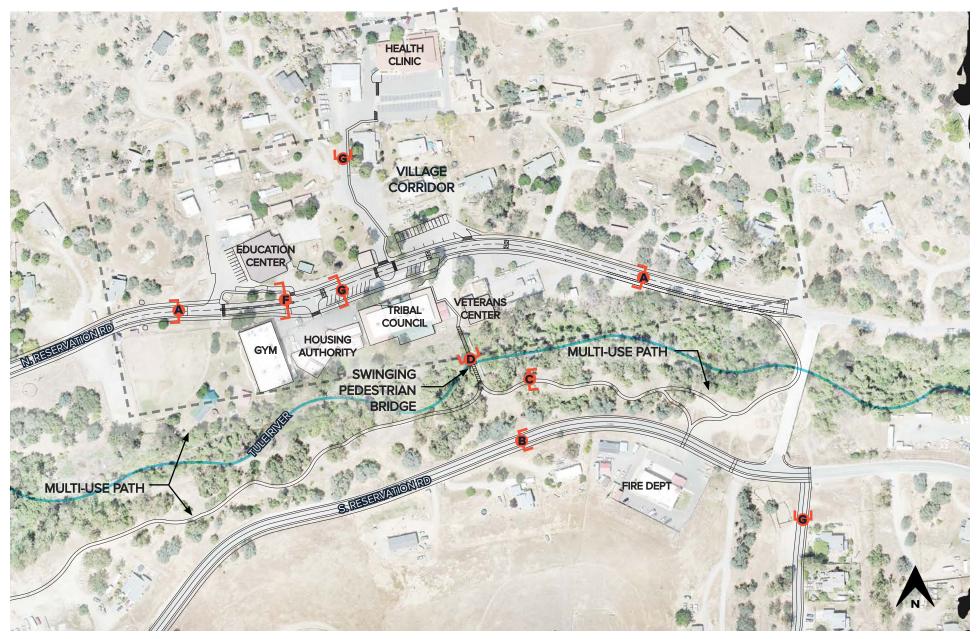
VILLAGE AREA EAST



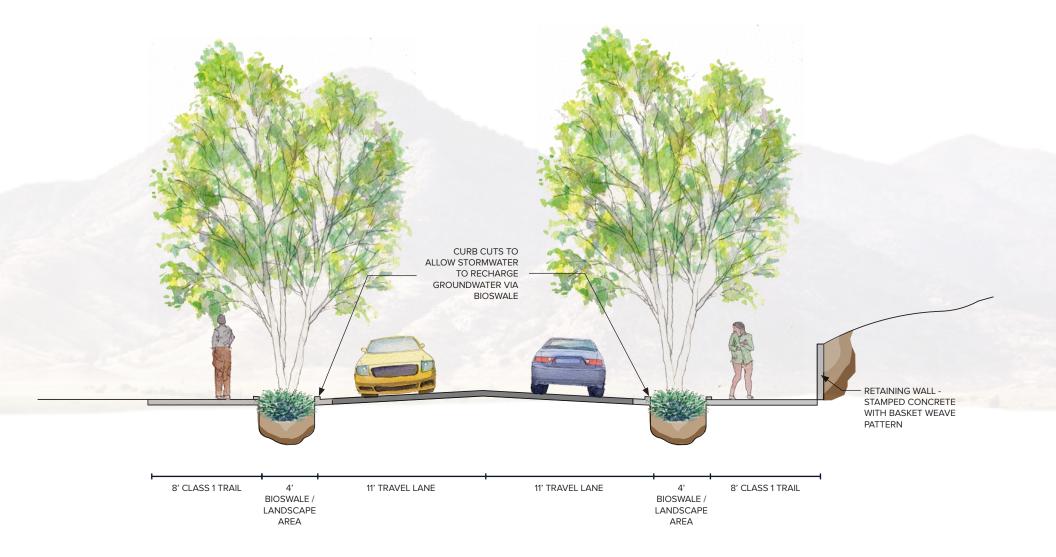
# **PROPOSED PROJECTS - WEST SECTIONS**



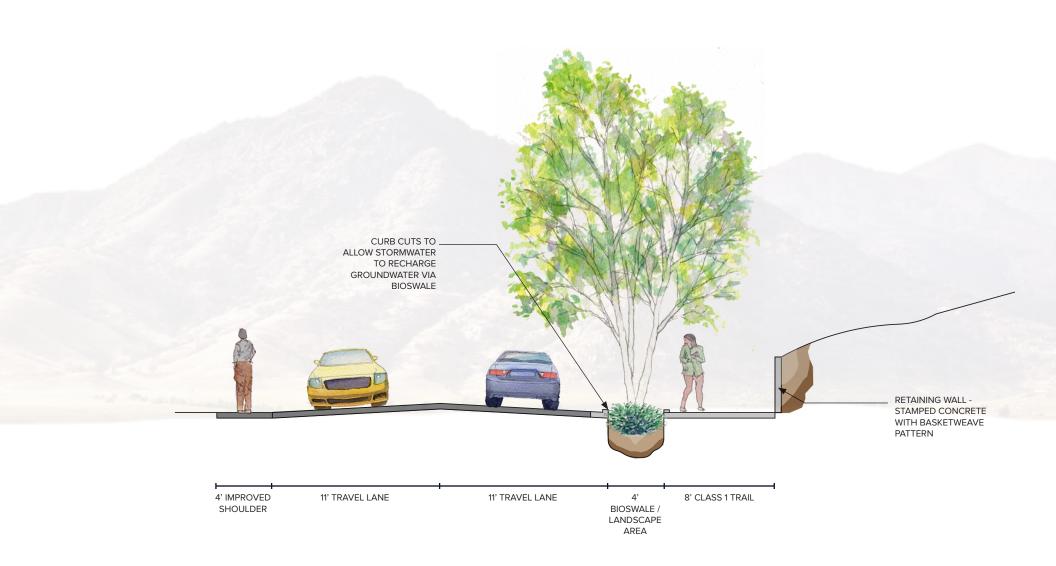
# **PROPOSED PROJECTS - EAST SECTIONS**



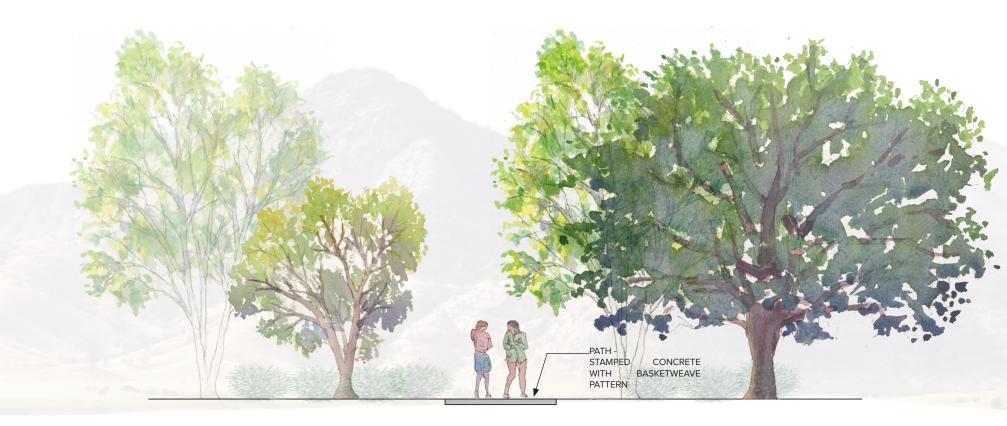
SECTION A North Reservation Rd.



SECTION B North and South Reservation Rd.

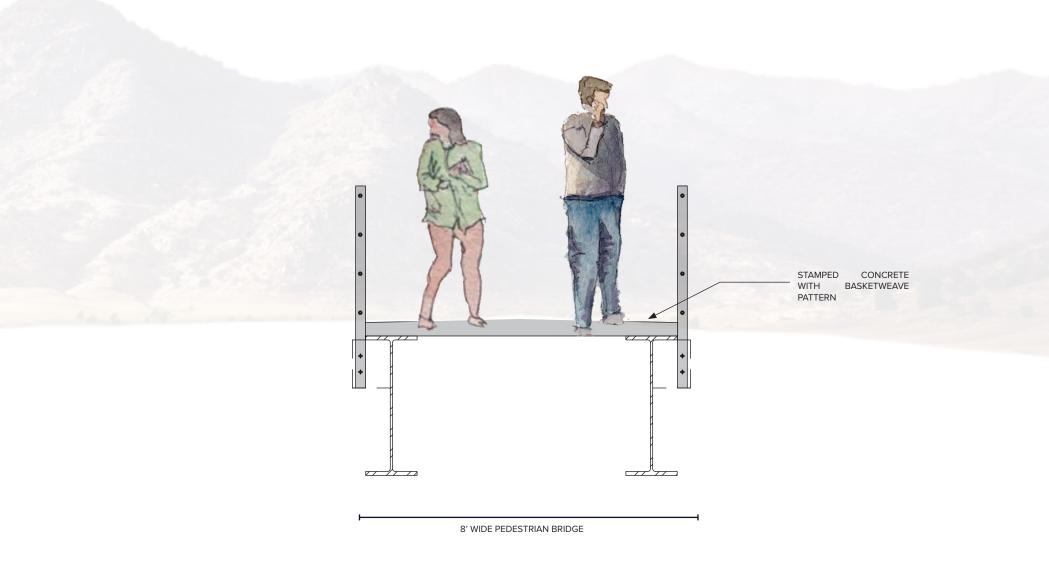


**PROPOSED PROJECTS** SECTION C Multi-Use Path



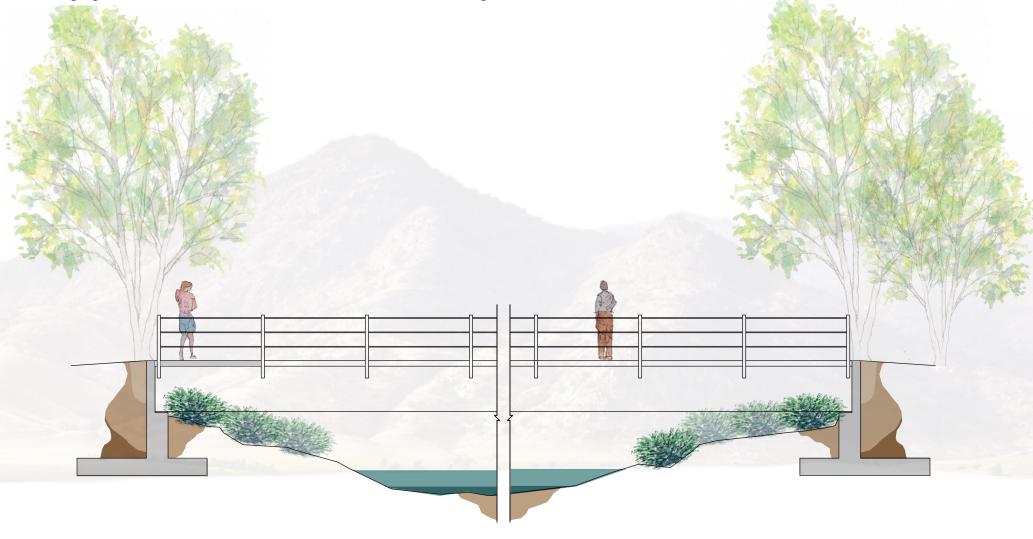
SECTION D

Swinging and Cow Mountain Rd.-Justice Center Pedestrian Bridges



## PEDESTRIAN BRIDGE

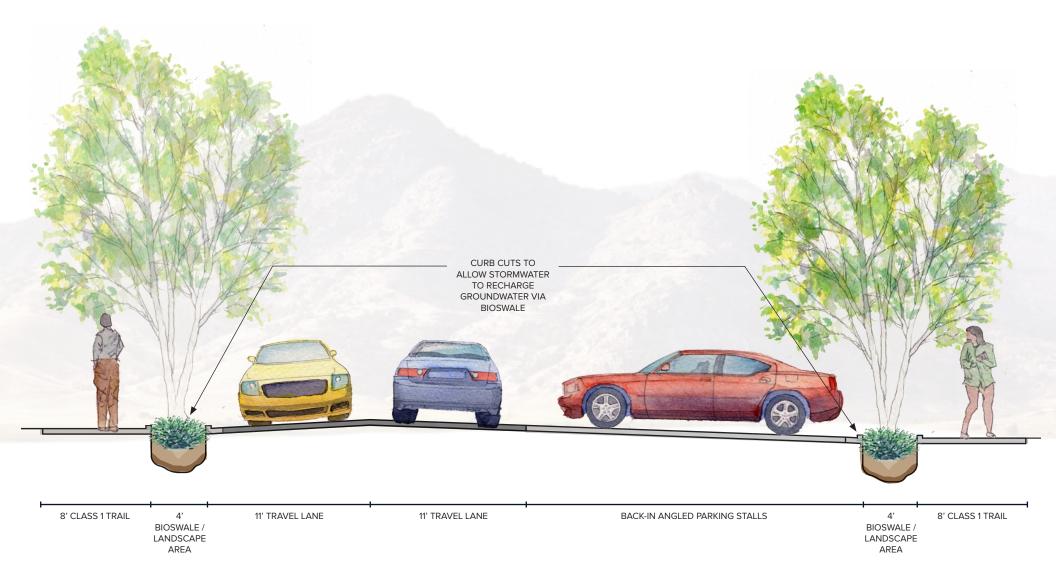
Swinging and Cow Mountain Rd.-Justice Center Pedestrian Bridges



140' LONG PEDESTRIAN BRIDGE

SECTION E

North Reservation Rd. by the Tribal Council Building



SECTION F Education Center to Gymnasium



SIDEWALK	11' ONE-WAY DRIVE THROUGH PICK-UP FOR EDUCATION	SIDEWALK	11' TRAVEL LANE	4' PEDESTRIAN	11' TRAVEL LANE	8' CLASS 1 TRAIL & PLAZA AREA
	CENTER			REFUGE /		
				MEDIAN		

# PHASE 1 PROJECTS

SECTION G Health Center to North Reservation Rd. & Public Works Access Rd.



	L	
11' TRAVEL LANE	11' TRAVEL LANE	5' SIDEWALK

# Section 5 | Action Plan and Implementation

## ENVIRONMENTAL REVIEW AND COMPLIANCE PROCESS

The proposed improvements will be reviewed by the City of Portersville prior to project implementation to ensure compliance with either CEQA or NEPA, depending on the source of project funding. CEQA compliance will be required for State funding, while NEPA compliance will be required for Federal funding.

# IMPLEMENTATION STRATEGIES

A combination of strategies will be utilized in the implementation of the proposed projects. The strategies will be completed in three separate phases, which are summarized in detail in Section 4.

## **FINANCIAL PLAN**

## FUNDING OPPORTUNITIES

The Active Transportation Program was created by Senate Bill 99 to encourage increased use of active modes of transportation, such as walking and biking. Since its inception, the Active Transportation Program has funded over 800 active transportation projects across the state benefiting both urban and rural areas. More than 400 of the funded projects are Safe Routes to Schools projects and programs that encourage a healthy and active lifestyle throughout students' lives. In addition, every cycle has seen more than 85% of funds going towards projects that will benefit disadvantaged communities throughout the state.

ATP Cycle 6 is expected to include about \$650M made up of Federal, State SB1, and State Highway Account (SHA) funding. The funding/programming years include the 23/24, 24/25, 25/26, and 26/27 fiscal years. Tulare County Association of Governments has applied for Cycle 6 funding and results are yet to be determined.

# STATE OF CALIFORNIA ACTIVE TRANSPORTATION PROGRAM

The Active Transportation Program (ATP) is a statewide program administered by Caltrans that provides funding for infrastructure that 1. Increases the proportion of trips accomplished by biking and walking; 2. Increase safety and mobility for non-motorized users; 3. Advances the active transportation effort of regional agencies to achieve greenhouse gas (GHG) reduction goals; 4. Enhances public health; 5. Ensures that disadvantaged communities fully share in the benefits of the program; and 6. Provides a broad spectrum of projects to benefit many types of active transportation users. ATP funding prioritizes projects that directly benefit DACs.

In 2016, the Tule River Tribe applied for ATP funds for the Reservation Road Improvement Project (Cow Mountain to the Bridge) that was identified in the STCE; however, the application was unsuccessful. The Tule River Tribe anticipates applying for a future ATP funding cycle.

# California Strategic Growth Council's Transformative Climate Communities Program

The California Strategic Growth Council's (CSGC) Transformative • Climate Communities (TCC) Program provides funding for • community-led development and infrastructure projects that achieve • major environmental, health, and economic benefits with a focus • on the reduction of GHG emissions. There are two grant types: • implementation and planning grants. Implementation grants fund • neighborhood-level proposals that include multiple, coordinated • projects that reduce GHG emissions and achieve other community • benefits. In 2022, there were three implementation grant awards for \$35 million each. The grant terms were for six years including a five year project completion period, followed by a one year performance period. Planning grants fund planning activities to prepare disadvantages communities for future funding opportunities in programs that align with the TCC Program's objectives. In 2022, • there were four two year planning grant awards for \$300,000 each.

The TCC provides technical assistance to help Applicants from tribal communities and disadvantaged unincorporated communities to prepare the application. The application must include at least three strategies from the list below and identify projects under these strategies. The strategies include:

- Equitable Housing and Neighborhood Development
- Land Acquisition for Affordable Housing
- Transit Access and Mobility
- Solar Installation, Energy Efficiency, and Appliance Electrification
- Water Efficiency
- Recycling and Waste Management
- Urban Greening and Green Infrastructure
- Health and Well-Being
- Indoor Air Quality
- Community Microgrids
- Brownfield Redevelopment

In addition to selecting three strategies and developing projects, the Applicant must include six Transformative Elements as part of a TCC Proposal. The six Transformative Elements include:

- Data Collection and Indicator Tracking
- Community Engagement
- Displacement Avoidance
- Workforce Development and Economic Opportunities
- Climate Adaptation and Resilience
- Leverage Funding

The Applicant then uses the components above to prepare a narrative description of the vision, projects with work plans/budgets, and how the project will address climate adaptation/resilience measures.

# COST ESTIMATES (DEC. 2022)

# PHASE 1

General Overhead-Related Construction Items         1         I <thi< th="">         I         I         I</thi<>	ITEM	DESCRIPTION OF WORK	QUANTITY	UNIT	UNIT PRICE	TOTAL
1         Mobilization, Demobilization, and Final Clean-Up         1         LS         200,600,00         200,600           2         Traffic Control System         1         LS         150,000,00         108,000           3         Clearing and Grubbing         1         LS         150,000,00         30,000           4         Stormwater Protection Plan         1         LS         30,000,00         30,000           5         Dust Control         1         LS         18,000,00         18,000           6         Job Site Management         1         LS         12,000,00         120,000           6         Job Site Management         1         LS         12,000,00         120,000           7         Sawcut & Remove Concrete (4-inch sidewalk)         336         SF         3.50         1,176           8         Sawcut & Remove Existing Asphalt Concrete         19,097         SY         5.00         98,485           9         Roadway Excavation & Subgrade Prep         12,731         SY         30.00         381,930           10         Concrete Curb Ramp         44         EA         5,000,00         220,000           11         Concrete Curb & Gutter         4,695         LF         30.00	<u>NO.</u>				(\$)	(\$)
1         Mobilization, Demobilization, and Final Clean-Up         1         LS         200,600,00         200,600           2         Traffic Control System         1         LS         150,000,00         108,000           3         Clearing and Grubbing         1         LS         150,000,00         30,000           4         Stormwater Protection Plan         1         LS         30,000,00         30,000           5         Dust Control         1         LS         18,000,00         18,000           6         Job Site Management         1         LS         12,000,00         120,000           6         Job Site Management         1         LS         12,000,00         120,000           7         Sawcut & Remove Concrete (4-inch sidewalk)         336         SF         3.50         1,176           8         Sawcut & Remove Existing Asphalt Concrete         19,097         SY         5.00         98,485           9         Roadway Excavation & Subgrade Prep         12,731         SY         30.00         381,930           10         Concrete Curb Ramp         44         EA         5,000,00         220,000           11         Concrete Curb & Gutter         4,695         LF         30.00						
2       Traffic Control System       1       LS       108,000.00       108,000         3       Clearing and Grubbing       1       LS       150,000.00       150,000         4       Stormwater Protection Plan       1       LS       18,000.00       30,000         5       Dust Control       1       LS       18,000.00       180,000         6       Job Site Management       1       LS       120,000.00       120,000         9       Sawcut & Remove Concrete (4-inch sidewalk)       336       SF       3.50       1,176         8       Sawcut & Remove Existing Asphalt Concrete       19,097       SY       5.00       95,485         9       Roadway Excavation & Subgrade Prep       12,731       SY       30.00       381,930         10       Concrete Curb Ramp       44       EA       5,000.00       220,000         11       Concrete Driveway Approach       17       EA       5,000       85,000         13       Concrete Curb & Gutter       4,695       LF       35.00       146,325         14       Concrete Sidewalk       12,731       SY       35.00       445,585         16       Aggregate Base (Class II, 15° Thickness)       12,731       S						
3       Clearing and Grubbing       1       LS       150,000.00       150,000.00         4       Stormwater Protection Plan       1       LS       30,000.00       30,000         5       Dust Control       1       LS       18,000.00       18,000.00         6       Job Site Management       1       LS       120,000.00       120,000         General Construction Items				-		•
4         Stormwater Protection Plan         1         LS         30,000         30,000           5         Dust Control         1         LS         18,000.00         18,000           6         Job Site Management         1         LS         120,000.00         120,000           6         Job Site Management         1         LS         120,000.00         120,000           7         Sawcut & Remove Concrete (4-Inch sidewalk)         336         SF         3.50         1.176           8         Sawcut & Remove Existing Asphalt Concrete         19,097         SY         5.00         95,485           9         Roadway Excavation & Subgrade Prep         12,731         SY         30.00         381,930           10         Concrete Curb Ramp         44         EA         5,000.00         220,000           11         Concrete Sidewalk         61,075         SF         8.00         488,600           12         Concrete Curb & Gutter         4,695         LF         35.00         164,325           14         Concrete Curb & Gutter         12,731         SY         35.00         445,585           16         Aggregate Base (Class II, 15" Thickness)         12,731         SY         35.00	2	Traffic Control System	1	LS	108,000.00	108,000
Dist Control         1         LS         18,000.00         18,000.00           6         Job Site Management         1         LS         120,000.00         120,000.00           General Construction Items		5			150,000.00	150,000
6       Job Site Management       1       LS       120,000       120,000         General Construction Items       336       SF       3.50       1.176         7       Sawcut & Remove Concrete (4-inch sidewalk)       336       SF       3.50       1.176         8       Sawcut & Remove Existing Asphalt Concrete       19,097       SY       5.00       95,485         9       Roadway Excavation & Subgrade Prep       12,731       SY       30.00       381,930         10       Concrete Curb Ramp       44       EA       5,000.00       220,000         11       Concrete Sidewalk       61,075       SF       8.00       488,600         12       Concrete Driveway Approach       17       EA       5,000.00       85,000         13       Concrete Curb & Gutter       4,695       LF       35.00       445,255         14       Concrete Median Curb       385       LF       30.00       11,550         15       Hot Mix Asphalt Concrete (5" Thickness)       12,731       SY       35.00       445,585         17       Install Streetlights       12       EA       3,000.00       240,000         18       Aggregate Base (Class II, 15" Thickness)       12,731 <td< td=""><td>4</td><td>Stormwater Protection Plan</td><td>1</td><td>LS</td><td>30,000.00</td><td>30,000</td></td<>	4	Stormwater Protection Plan	1	LS	30,000.00	30,000
General Construction Items         336         SF         3.50         1,176           7         Sawcut & Remove Existing Asphalt Concrete         19,097         SY         5.00         95,485           9         Roadway Excavation & Subgrade Prep         12,731         SY         30.00         381,930           10         Concrete Curb Ramp         44         EA         5,000.00         220,000           11         Concrete Sidewalk         61,075         SF         8.00         488,600           12         Concrete Driveway Approach         17         EA         5,000.00         85,000           13         Concrete Curb & Gutter         4,695         LF         35.00         445,585           14         Concrete Median Curb         385         LF         30.00         11,550           15         Hot Mix Asphalt Concrete (5" Thickness)         12,731         SY         35.00         445,585           16         Aggregate Base (Class II, 15" Thickness)         12,731         SY         35.00         445,585           16         Install Streetlights         12         EA         6,500.00         13,000           19         Covered Pavilion (10' x 10')         2         EA         6,500.00	5	Dust Control	1	LS	18,000.00	18,000
7       Sawcut & Remove Concrete (4-inch sidewalk)       336       SF       3.50       1.176         8       Sawcut & Remove Existing Asphalt Concrete       19,097       SY       5.00       95,485         9       Roadway Excavation & Subgrade Prep       12,731       SY       30.00       381,930         10       Concrete Curb Ramp       44       EA       5,000.00       220,000         11       Concrete Sidewalk       61,075       SF       8.00       488,600         12       Concrete Driveway Approach       17       EA       5,000.00       85,000         13       Concrete Gurb & Gutter       4,695       LF       35.00       146,325         14       Concrete Median Curb       385       LF       30.00       11,550         15       Hot Mix Asphalt Concrete (5" Thickness)       12,731       SY       35.00       445,585         16       Aggregate Base (Class II, 15" Thickness)       12,731       SY       35.00       445,585         17       Install Streetlights       12       EA       3,000.00       15,000         18       Raised Crossing (3" X 24" X 11' Speed Hump)       5       EA       3,000.00       30,000         20       Retaining Wall (	6	Job Site Management	1	LS	120,000.00	120,000
8         Sawcut & Remove Existing Asphalt Concrete         19,097         SY         5.00         95,485           9         Roadway Excavation & Subgrade Prep         12,731         SY         30.00         381,930           10         Concrete Curb Ramp         44         EA         5,000.00         220,000           11         Concrete Sidewalk         61,075         SF         8.00         488,600           12         Concrete Driveway Approach         17         EA         5,000.00         85,000           13         Concrete Gurb & Gutter         4,695         LF         35.00         1443,255           14         Concrete Median Curb         385         LF         30.00         11,550           15         Hot Mix Asphalt Concrete (5" Thickness)         12,731         SY         35.00         445,585           16         Aggregate Base (Class II, 15" Thickness)         12,731         SY         35.00         445,585           17         Install Streetlights         12         EA         2,0000.00         240,000           18         Raised Crossing (3" X 24' X 11' Speed Hump)         5         EA         3,000.00         30,000           20         Retaning Wall (4' Height)         494		General Construction Items				
9       Roadway Excavation & Subgrade Prep       12,731       SY       30.00       381,930         10       Concrete Curb Ramp       44       EA       5,000.00       220,000         11       Concrete Curb Ramp       44       EA       5,000.00       220,000         11       Concrete Driveway Approach       17       EA       5,000.00       85,000         12       Concrete Curb & Gutter       4,695       LF       35.00       164,325         14       Concrete Median Curb       385       LF       30.00       11,550         15       Hot Mix Asphalt Concrete (5" Thickness)       12,731       SY       35.00       445,585         16       Aggregate Base (Class II, 15" Thickness)       12,731       SY       35.00       445,585         17       Install Streetlights       12       EA       20,000.00       240,000         18       Raised Crossing (3" X 24' X 11' Speed Hump)       5       EA       3,000.00       13,000         20       Retaining Wall (4' Height)       494       LF       450.00       222,300         21       Signing, Pavement Striping, and Marking and Raised Pa       1       LS       30,000.00       30,000         22       RRFB (Sola	7	Sawcut & Remove Concrete (4-inch sidewalk)	336	SF	3.50	1,176
10         Concrete Curb Ramp         44         EA         5,000.00         220,000           11         Concrete Sidewalk         61,075         SF         8.00         488,600           12         Concrete Driveway Approach         17         EA         5,000.00         85,000           13         Concrete Curb & Gutter         4,695         LF         35.00         164,325           14         Concrete Median Curb         385         LF         30.00         11,550           15         Hot Mix Asphalt Concrete (5" Thickness)         12,731         SY         35.00         445,585           16         Aggregate Base (Class II, 15" Thickness)         12,731         SY         35.00         445,585           17         Install Streetlights         12         EA         20,000.00         240,000           18         Raised Crossing (3" X 24' X 11' Speed Hump)         5         EA         3,000.00         13,000           20         Retaining Wall (4' Height)         494         LF         450.00         222,300           21         Signing, Pavement Striping, and Marking and Raised Pav         1         LS         30,000.00         30,000           22         RRFB (Solar powered)         4 <t< td=""><td>8</td><td>Sawcut &amp; Remove Existing Asphalt Concrete</td><td>19,097</td><td>SY</td><td>5.00</td><td>95,485</td></t<>	8	Sawcut & Remove Existing Asphalt Concrete	19,097	SY	5.00	95,485
11       Concrete Sidewalk       61,075       SF       8.00       488,600         12       Concrete Driveway Approach       17       EA       5,000.00       85,000         13       Concrete Curb & Gutter       4,695       LF       35.00       1164,325         14       Concrete Median Curb       385       LF       30.00       11,550         15       Hot Mix Asphalt Concrete (5" Thickness)       12,731       SY       35.00       445,585         16       Aggregate Base (Class II, 15" Thickness)       12,731       SY       35.00       445,585         17       Install Streetlights       12       EA       20,000.00       240,000         18       Raised Crossing (3" X 24' X 11' Speed Hump)       5       EA       3,000.00       15,000         19       Covered Pavilion (10' x 10')       2       EA       6,500.00       13,000         20       Retaining Wall (4' Height)       494       LF       450.00       222,300         21       Signing, Pavement Striping, and Marking and Raised Pav       1       LS       30,000.00       30,000         22       RFB (Solar powered)       4       EA       13,500.00       54,000       20         23	9	Roadway Excavation & Subgrade Prep	12,731	SY	30.00	381,930
12       Concrete Driveway Approach       17       EA       5,000.00       85,000         13       Concrete Curb & Gutter       4,695       LF       35.00       164,325         14       Concrete Median Curb       385       LF       30.00       11,550         15       Hot Mix Asphalt Concrete (5" Thickness)       12,731       SY       35.00       445,585         16       Aggregate Base (Class II, 15" Thickness)       12,731       SY       35.00       240,000         18       Raised Crossing (3" X 24' X 11' Speed Hump)       5       EA       3,000.00       15,000         19       Covered Pavilion (10' x 10')       2       EA       6,500.00       13,000         20       Retaining Wall (4' Height)       494       LF       450.00       222,300         21       Signing, Pavement Striping, and Marking and Raised Pa       1       LS       30,000.00       30,000         22       RRFB (Solar powered)       4       EA       13,500.00       54,000         23       Benches       20       EA       6,500.00       13,000         24       Gateway Sculptures (Granite Boulders)       2       EA       4,500.00       9,000         25       Monument Signage	10	Concrete Curb Ramp	44	EA	5,000.00	220,000
13         Concrete Curb & Gutter         4,695         LF         35.00         164,325           14         Concrete Median Curb         385         LF         30.00         11,550           15         Hot Mix Asphalt Concrete (5" Thickness)         12,731         SY         35.00         445,585           16         Aggregate Base (Class II, 15" Thickness)         12,731         SY         35.00         445,585           17         Install Streetlights         12         EA         20,000.00         240,000           18         Raised Crossing (3" X 24' X 11' Speed Hump)         5         EA         3,000.00         15,000           19         Covered Pavilion (10' x 10')         2         EA         6,500.00         13,000           20         Retaining Wall (4' Height)         494         LF         450.00         222,300           21         Signing, Pavement Striping, and Marking and Raised Pa         1         LS         30,000.00         30,000           22         RRFB (Solar powered)         4         EA         13,500.00         50,000           23         Benches         20         EA         4,500.00         9,000           24         Gateway Sculptures (Granite Boulders)         2	11	Concrete Sidewalk	61,075	SF	8.00	488,600
14         Concrete Median Curb         385         LF         30.00         11,550           15         Hot Mix Asphalt Concrete (5" Thickness)         12,731         SY         35.00         445,585           16         Aggregate Base (Class II, 15" Thickness)         12,731         SY         35.00         240,000           18         Raised Crossing (3" X 24' X 11' Speed Hump)         5         EA         3,000.00         15,000           19         Covered Pavilion (10' x 10')         2         EA         6,500.00         13,000           20         Retaining Wall (4' Height)         494         LF         450.00         222,300           21         Signing, Pavement Striping, and Marking and Raised Pa         1         LS         30,000.00         30,000           22         RRFB (Solar powered)         4         EA         13,500.00         54,000           23         Benches         20         EA         6,500.00         13,000           24         Gateway Sculptures (Granite Boulders)         2         EA         6,500.00         13,000           25         Monument Signage         2         EA         4,500.00         9,000           26         Landscape and Irrigation         20,100	12	Concrete Driveway Approach	17	EA	5,000.00	85,000
15       Hot Mix Asphalt Concrete (5" Thickness)       12,731       SY       35.00       445,585         16       Aggregate Base (Class II, 15" Thickness)       12,731       SY       35.00       445,585         17       Install Streetlights       12       EA       20,000.00       240,000         18       Raised Crossing (3" X 24' X 11' Speed Hump)       5       EA       3,000.00       15,000         19       Covered Pavilion (10' x 10')       2       EA       6,500.00       13,000         20       Retaining Wall (4' Height)       494       LF       450.00       222,300         21       Signing, Pavement Striping, and Marking and Raised Pa       1       LS       30,000.00       30,000         22       RRFB (Solar powered)       4       EA       13,500.00       54,000         23       Benches       20       EA       6,500.00       13,000         24       Gateway Sculptures (Granite Boulders)       2       EA       6,500.00       13,000         25       Monument Signage       2       EA       4,500.00       9,000         26       Landscape and Irrigation       20,110       SF       12.00       241,320         27       Bridge Beams (2 Brid	13	Concrete Curb & Gutter	4,695	LF	35.00	164,325
16         Aggregate Base (Class II, 15" Thickness)         12,731         SY         35.00         445,585           17         Install Streetlights         12         EA         20,000.00         240,000           18         Raised Crossing (3" X 24' X 11' Speed Hump)         5         EA         3,000.00         15,000           19         Covered Pavilion (10' x 10')         2         EA         6,500.00         13,000           20         Retaining Wall (4' Height)         494         LF         450.00         222,300           21         Signing, Pavement Striping, and Marking and Raised Pa         1         LS         30,000.00         30,000           22         RRF (Solar powered)         4         EA         13,500.00         54,000           23         Benches         20         EA         6,500.00         13,000           24         Gateway Sculptures (Granite Boulders)         2         EA         6,500.00         13,000           25         Monument Signage         2         EA         4,500.00         9,000           26         Landscape and Irrigation         20,110         SF         12.00         241,320           27         Bridge Beams (2 Bridges - 140 FT)         125,760	14	Concrete Median Curb	385	LF	30.00	11,550
17       Install Streetlights       12       EA       20,000.00       240,000         18       Raised Crossing (3" X 24' X 11' Speed Hump)       5       EA       3,000.00       15,000         19       Covered Pavilion (10' x 10')       2       EA       6,500.00       13,000         20       Retaining Wall (4' Height)       494       LF       450.00       222,300         21       Signing, Pavement Striping, and Marking and Raised Pav       1       LS       30,000.00       30,000         22       RRFB (Solar powered)       4       EA       13,500.00       54,000         23       Benches       20       EA       6,500.00       13,000         24       Gateway Sculptures (Granite Boulders)       2       EA       6,500.00       13,000         25       Monument Signage       2       EA       4,500.00       9,000         26       Landscape and Irrigation       20,110       SF       12.00       241,320         27       Bridge Beams (2 Bridges 140 FT)       125,760       LB       5.50       691,680         28       Steel Pan Decking (8t Width)       2,240       SF       11.50       25,760         29       Concrete at Deck (3.5" thick)	15	Hot Mix Asphalt Concrete (5" Thickness)	12,731	SY	35.00	445,585
18         Raised Crossing (3" X 24' X 11' Speed Hump)         5         EA         3,000.00         15,000           19         Covered Pavilion (10' x 10')         2         EA         6,500.00         13,000           20         Retaining Wall (4' Height)         494         LF         450.00         222,300           21         Signing, Pavement Striping, and Marking and Raised Pav         1         LS         30,000.00         30,000           22         RRFB (Solar powered)         4         EA         13,500.00         54,000           23         Benches         20         EA         2,500.00         50,000           24         Gateway Sculptures (Granite Boulders)         2         EA         6,500.00         13,000           25         Monument Signage         2         EA         4,500.00         9,000           26         Landscape and Irrigation         20,110         SF         12.00         241,320           27         Bridge Beams (2 Bridges - 140 FT)         125,760         LB         5.50         691,680           28         Steel Pan Decking (8ft Width)         2,240         SF         11.50         25,760           29         Concrete at Deck (3.5" thick)         654         CF	16	Aggregate Base (Class II, 15" Thickness)	12,731	SY	35.00	445,585
19       Covered Pavilion (10' x 10')       2       EA       6,500.00       13,000         20       Retaining Wall (4' Height)       494       LF       450.00       222,300         21       Signing, Pavement Striping, and Marking and Raised Pav       1       LS       30,000.00       30,000         22       RRFB (Solar powered)       4       EA       13,500.00       54,000         23       Benches       20       EA       2,500.00       50,000         24       Gateway Sculptures (Granite Boulders)       2       EA       6,500.00       13,000         25       Monument Signage       2       EA       4,500.00       9,000         26       Landscape and Irrigation       20,110       SF       12.00       241,320         27       Bridge Beams (2 Bridges - 140 FT)       125,760       LB       5.50       691,680         28       Steel Pan Decking (8t Width)       2,240       SF       11.50       25,760         29       Concrete at Deck (3.5" thick)       654       CF       31.00       20,274         30       Guardrail Posts       2,557       LB       3.50       7,840         32       Concrete Abutments       36       CY	17	Install Streetlights	12	EA	20,000.00	240,000
20         Retaining Wall (4' Height)         494         LF         450.00         222,300           21         Signing, Pavement Striping, and Marking and Raised Pav         1         LS         30,000.00         30,000           22         RRFB (Solar powered)         4         EA         13,500.00         54,000           23         Benches         20         EA         2,500.00         50,000           24         Gateway Sculptures (Granite Boulders)         2         EA         6,500.00         13,000           25         Monument Signage         2         EA         4,500.00         9,000           26         Landscape and Irrigation         20,110         SF         12.00         241,320           27         Bridge Beams (2 Bridges - 140 FT)         125,760         LB         5.50         691,680           28         Steel Pan Decking (8ft Width)         2,240         SF         11.50         25,760           29         Concrete at Deck (3.5" thick)         654         CF         31.00         20,274           30         Guardrail Posts         2,557         LB         3.50         8,950           31         Guardrail Posts         2,240         LF         3.50         7	18	Raised Crossing (3" X 24' X 11' Speed Hump)	5	EA	3,000.00	15,000
21       Signing, Pavement Striping, and Marking and Raised Pa       1       LS       30,000.00       30,000         22       RRFB (Solar powered)       4       EA       13,500.00       54,000         23       Benches       20       EA       2,500.00       50,000         24       Gateway Sculptures (Granite Boulders)       2       EA       6,500.00       13,000         25       Monument Signage       2       EA       4,500.00       9,000         26       Landscape and Irrigation       20,110       SF       12.00       241,320         27       Bridge Beams (2 Bridges - 140 FT)       125,760       LB       5.50       691,680         28       Steel Pan Decking (8ft Width)       2,240       SF       11.50       25,760         29       Concrete at Deck (3.5" thick)       654       CF       31.00       20,274         30       Guardrail Posts       2,557       LB       3.50       8,950         31       Guardrail Cable Rails       2,240       LF       3.50       7,840         32       Concrete Abutments       36       CY       850.00       30,600         Construction Subtotal          4,638,	19	Covered Pavilion (10' x 10')	2	EA	6,500.00	13,000
22         RFFB (Solar powered)         4         EA         13,500.00         54,000           23         Benches         20         EA         2,500.00         50,000           24         Gateway Sculptures (Granite Boulders)         2         EA         6,500.00         13,000           25         Monument Signage         2         EA         4,500.00         9,000           26         Landscape and Irrigation         20,110         SF         12.00         241,320           27         Bridge Beams (2 Bridges - 140 FT)         125,760         LB         5.50         691,680           28         Steel Pan Decking (8ft Width)         2,240         SF         11.50         25,760           29         Concrete at Deck (3.5" thick)         654         CF         31.00         20,274           30         Guardrail Posts         2,557         LB         3.50         8,950           31         Guardrail Cable Rails         2,240         LF         3.50         7,840           32         Concrete Abutments         36         CY         850.00         30,600           Construction Subtotal         4,633,560	20	Retaining Wall (4' Height)	494	LF	450.00	222,300
23         Benches         20         EA         2,500.00         50,000           24         Gateway Sculptures (Granite Boulders)         2         EA         6,500.00         13,000           25         Monument Signage         2         EA         4,500.00         9,000           26         Landscape and Irrigation         20,110         SF         12.00         241,320           27         Bridge Beams (2 Bridges - 140 FT)         125,760         LB         5.50         691,680           28         Steel Pan Decking (8ft Width)         2,240         SF         11.50         25,760           29         Concrete at Deck (3.5" thick)         654         CF         31.00         20,274           30         Guardrail Posts         2,557         LB         3.50         8,950           31         Guardrail Cable Rails         2,240         LF         3.50         7,840           32         Concrete Abutments         36         CY         850.00         30,600	21	Signing, Pavement Striping, and Marking and Raised Pav	1	LS	30,000.00	30,000
24         Gateway Sculptures (Granite Boulders)         2         EA         6,500.00         13,000           25         Monument Signage         2         EA         4,500.00         9,000           26         Landscape and Irrigation         20,110         SF         12.00         241,320           27         Bridge Beams (2 Bridges - 140 FT)         125,760         LB         5.50         691,680           28         Steel Pan Decking (8ft Width)         2,240         SF         11.50         25,760           29         Concrete at Deck (3.5" thick)         654         CF         31.00         20,274           30         Guardrail Posts         2,557         LB         3.50         8,950           31         Guardrail Cable Rails         2,240         LF         3.50         7,840           32         Concrete Abutments         36         CY         850.00         30,600	22	RRFB (Solar powered)	4	EA	13,500.00	54,000
25         Monument Signage         2         EA         4,500.00         9,000           26         Landscape and Irrigation         20,110         SF         12.00         241,320           27         Bridge Beams (2 Bridges - 140 FT)         125,760         LB         5.50         691,680           28         Steel Pan Decking (8ft Width)         2,240         SF         11.50         25,760           29         Concrete at Deck (3.5" thick)         654         CF         31.00         20,274           30         Guardrail Posts         2,557         LB         3.50         8,950           31         Guardrail Cable Rails         2,240         LF         3.50         7,840           32         Concrete Abutments         36         CY         850.00         30,600           Construction Subtotal           Contingency (15%)	23	Benches	20	EA	2,500.00	50,000
26         Landscape and Irrigation         20,110         SF         12.00         241,320           27         Bridge Beams (2 Bridges - 140 FT)         125,760         LB         5.50         691,680           28         Steel Pan Decking (8t Width)         2,240         SF         11.50         25,760           29         Concrete at Deck (3.5" thick)         654         CF         31.00         20,274           30         Guardrail Posts         2,557         LB         3.50         8,950           31         Guardrail Cable Rails         2,240         LF         3.50         7,840           32         Concrete Abutments         36         CY         850.00         30,600           Construction Subtotal           Construction Subtotal	24	Gateway Sculptures (Granite Boulders)	2	EA	6,500.00	13,000
27         Bridge Beams (2 Bridges - 140 FT)         125,760         LB         5.50         691,680           28         Steel Pan Decking (8ft Width)         2,240         SF         11.50         25,760           29         Concrete at Deck (3.5" thick)         654         CF         31.00         20,274           30         Guardrail Posts         2,557         LB         3.50         8,950           31         Guardrail Cable Rails         2,240         LF         3.50         7,840           32         Concrete Abutments         36         CY         850.00         30,600           Construction Subtotal           Construction Subtotal	25	Monument Signage	2	EA	4,500.00	9,000
27         Bridge Beams (2 Bridges - 140 FT)         125,760         LB         5.50         691,680           28         Steel Pan Decking (8ft Width)         2,240         SF         11.50         25,760           29         Concrete at Deck (3.5" thick)         654         CF         31.00         20,274           30         Guardrail Posts         2,557         LB         3.50         8,950           31         Guardrail Cable Rails         2,240         LF         3.50         7,840           32         Concrete Abutments         36         CY         850.00         30,600           Construction Subtotal           Contingency (15%)	26	Landscape and Irrigation	20,110	SF	12.00	241,320
29         Concrete at Deck (3.5" thick)         654         CF         31.00         20,274           30         Guardrail Posts         2,557         LB         3.50         8,950           31         Guardrail Cable Rails         2,240         LF         3.50         7,840           32         Concrete Abutments         36         CY         850.00         30,600           Construction Subtotal           Construction Subtotal           Contingency (15%)	27	Bridge Beams (2 Bridges - 140 FT)		LB	5.50	
30         Guardrail Posts         2,557         LB         3.50         8,950           31         Guardrail Cable Rails         2,240         LF         3.50         7,840           32         Concrete Abutments         36         CY         850.00         30,600           Construction Subtotal           4,638,560           Contingency (15%)	28	Steel Pan Decking (8ft Width)	2,240	SF	11.50	25,760
30         Guardrail Posts         2,557         LB         3.50         8,950           31         Guardrail Cable Rails         2,240         LF         3.50         7,840           32         Concrete Abutments         36         CY         850.00         30,600           Construction Subtotal           4,638,560           Contingency (15%)	29	Concrete at Deck (3.5" thick)	654	CF	31.00	20,274
31         Guardrail Cable Rails         2,240         LF         3.50         7,840           32         Concrete Abutments         36         CY         850.00         30,600           Construction Subtotal           Construction Subtotal           Contingency (15%)	30	· · ·	2,557	LB	3.50	
32         Concrete Abutments         36         CY         850.00         30,600           Construction Subtotal         4,638,560           Contingency (15%)         695,784	31	Guardrail Cable Rails		LF	3.50	
Construction Subtotal         4,638,560           Contingency (15%)         695,784	32	Concrete Abutments		CY		
Contingency (15%) 695,784				Constru	ction Subtotal	
			BA			\$ 5,334,343

#### Project Delivery Costs

33	Preliminary Engineering (PE)	25%	1	,333,586
34	Construction Engineering (CE)	15%		800,152
35	Right-of-Way (Tribal Land)	0%		0
	T	DTAL CONSTRUCTION COSTS =	\$	2,133,737
		PROJECT TOTAL =	\$	7,468,081

Phase	2
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ITEM	DESCRIPTION OF WORK	QUANTITY	UNIT	UNIT PRICE	TOTAL
NO.				(\$)	(\$)
	General Overhead-Related Construction Items				
1	Mobilization, Demobilization, and Final Clean-Up	1	LS	200,600.00	200,600
2	Traffic Control System	1	LS	108,000.00	108,000
3	Clearing and Grubbing	1	LS	150,000.00	150,000
4	Stormwater Protection Plan	1	LS	30,000.00	30,000
5	Dust Control	1	LS	18,000.00	18,000
6	Job Site Management	1	LS	120,000.00	120,000
	General Construction Items				
7	Sawcut & Remove Existing Asphalt Concrete	31,000	SY	5.00	155,000
8	Roadway Excavation & Subgrade Prep	27,157	SY	30.00	814,710
9	Concrete Curb Ramp	15	EA	5,000.00	75,000
10	Concrete Sidewalk	88,600	SF	8.00	708,800
11	Concrete Driveway Approach	30	EA	5,000.00	150,000
12	Concrete Curb & Gutter	14,550	LF	35.00	509,250
13	Hot Mix Asphalt Concrete (5" Thickness)	27,157	SY	35.00	950,495
14	Aggregate Base (Class II, 15" Thickness)	27,157	SY	35.00	950,495
15	Install Streetlights	30	EA	35.00	1,050
16	Install Bollards	10	EA	20,000.00	200,000
17	Gravel Path	4,452	SF	10.00	44,520
18	Signing, Pavement Striping, and Marking and Raised Pavement Markers	1	LS	30,000.00	30,000
19	Benches	7	EA	2,500.00	17,500
20	Landscape and Irrigation	37,989	SF	12.00	455,868
	•	·	Constru	ction Subtotal	5,689,288
Contingency (15%)				tingency (15%)	853,393
		BA	SE BID	TOTAL (\$) =	\$ 6,542,681

#### Project Delivery Costs

33	Preliminary Engineering (PE)	25%	1	1,635,670
34	Construction Engineering (CE)	15%		981,402
35	Right-of-Way (Tribal Land)	0%		0
	T	DTAL CONSTRUCTION COSTS =	\$	2,617,072
		PROJECT TOTAL =	\$	9,159,754

# Phase 3

ITEM	DESCRIPTION OF WORK	QUANTITY	UNIT	UNIT PRICE	TOTAL
<u>NO.</u>				(\$)	(\$)
				•	
	General Overhead-Related Construction Items				
1	Mobilization, Demobilization, and Final Clean-Up	1	LS	20,000.00	20,000
2	Clearing and Grubbing	1	LS	15,000.00	15,000
3	Stormwater Protection Plan	1	LS	3,000.00	3,000
4	Dust Control	1	LS	3,000.00	3,000
5	Job Site Management	1	LS	15,000.00	15,000
	General Construction Items				
6	Gravel Path	45,192	SF	10.00	451,920
7	Benches	5	CY	2,500.00	12,500
			Constru	ction Subtotal	520,420
			Con	tingency (15%)	78,063
		BA	SE BID	TOTAL (\$) =	\$ 598,483

#### Project Delivery Costs

33	Preliminary Engineering (PE)	25%	149,621
34	Construction Engineering (CE)	15%	89,772
35	Right-of-Way (Tribal Land)	0%	0
	Т	DTAL CONSTRUCTION COSTS =	\$ 239,39
		PROJECT TOTAL =	\$ 837,8

# References

- C2 Consult Corp, 2018. Final Report: Sustainable Transportation / Circulation Element for the Tule River Comprehensive Master Plan, 2018. Available online at: https://drive.google.com/file/d/1eHI1QA21\_cb2Bgs\_WoDP9VeHoVVUX11w/view. Accessed March 8, 2022.
- Schlossberg, M. et al, 2013. Rethinking Streets: An Evidence-Based Guide to 25 Complete Street Transformations. Available online at: https://pages.uoregon.edu/schlossb/ftp/RS/RethinkingStreets\_All\_V2\_high\_wCover.pdf. Accessed August 29, 2022.