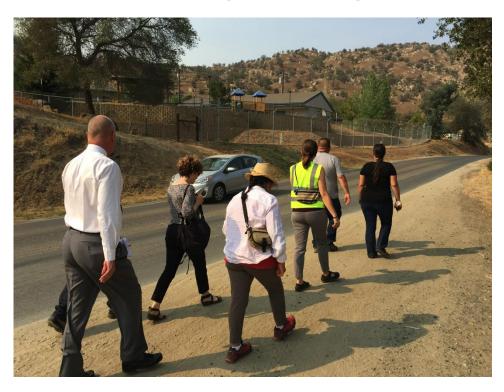
# RECOMMENDATIONS TO IMPROVE PEDESTRIAN SAFETY ON THE TULE RIVER INDIAN RESERVATION



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BY TONY DANG, JAIME FEARER, WENDY ALFSEN, CALIFORNIA WALKS; JILL COOPER, UC BERKELEY SAFETREC

#### INTRODUCTION

The Tule River Tribe was identified as a focus community for a Community Pedestrian Safety Training, in collaboration with Caltrans District 6, based on the tribe's interest in pedestrian safety and walkability, specifically as it relates to the recently Caltrans-funded planning effort to develop a Comprehensive Master Plan for the Tribal Lands. The Tribe's Master Plan will be evaluating and planning for both land use and transportation changes, including active transportation improvements on and immediately adjacent to the reservation.

Following additional conversations with the Tule River Director of Planning & Community Development and the Tule River Recreation Department, the Tribe invited the University of California at Berkeley's Safe Transportation Research Center (SafeTREC) and California Walks (Cal Walks) to Tule River to facilitate a pedestrian safety action-planning workshop to inform the Tribe's Sustainable Transportation Plan through a community-driven process. Cal Walks facilitated the workshop on August 19, 2015, which consisted of: 1) an overview of multidisciplinary approaches to improve pedestrian safety; 2) a walkability assessment of North Reservation Road and local paths; 3) an exercise to crowdsource previously undocumented traffic collisions; and 4) a community prioritization exercise to inform the tribe's Sustainable Transportation Plan and ongoing active transportation efforts. This report summarizes the workshop proceedings, as well as ideas identified during the process and recommendations for pedestrian safety projects.

#### **BACKGROUND**

#### **Community Pedestrian Safety Training Program**

The Community Pedestrian Safety Training (CPST) program is a joint project of UC Berkeley SafeTREC and Cal Walks. Funding for this program is provided by a grant from the California Office of Traffic Safety (OTS) through the National Highway Traffic Safety Administration (NHTSA). The purpose of the CPST is to train local neighborhood residents and safety advocates in pedestrian safety and to educate them about collaborating with local officials and agency staff to make communities safer and more pleasant to walk. The half-day training is designed to provide participants with pedestrian safety best practices and a range of proven strategies (the 6 E's: Empowerment & Equity, Evaluation, Engineering, Enforcement, Education, Encouragement) to address and improve pedestrian safety conditions and concerns. Participants are then guided on a walkability assessment of nearby roads before setting pedestrian safety priorities and actionable next steps for their community.

For a summary of outcomes from past CPST workshops, please visit: <a href="https://www.californiawalks.org/wp-content/uploads/2015/05/CPST\_Follow-Up\_2009-14.pdf">www.californiawalks.org/wp-content/uploads/2015/05/CPST\_Follow-Up\_2009-14.pdf</a>

#### Selected Pedestrian Safety Conditions in Tule River

#### Lack of Pedestrian Facilities Along Reservation Road & Throughout the Reservation



YOUTH WALKING HOME FROM EDUCATION CENTER ALONG RESERVATION ROAD

Although it is a primary transportation corridor for many residents to access community destinations on foot, there are currently no existing pedestrian facilities along Reservation Road. Despite the lack of separated pedestrian facilities and even roadway shoulders, many residents—particularly children—travel daily on foot along Reservation Road to access key community services and facilities, including, but not limited to, the Tribal Education Center,

Child Care Center, community clinic, Community Gymnasium, and the Tribal Council building. Community members of all ages walk "The Loop" daily, including adults and elders who walk for exercise and youth who walk to school bus stop areas. Additionally, 75-100 residents join monthly, evening health walks along The Loop.

#### Frequent Student Crossings between Education Center & Gymnasium

The Education Center functions as the Tribe's elementary school for grades K-3, as well as provides afterschool educational activities and tutoring sessions to students of all ages on the tribe. Just across Reservation Road is the Community Gymnasium, which hosts a wide range of community events at all times of day and during weekends. Due to the large number of activities between these two



YOUTH CROSSING RESERVATION ROAD TO ACCESS EDUCATION CENTER AFTER ALIGHTING FROM BUS ON THE GYM SIDE OF RESERVATION ROAD

destinations, it is not surprising that tribal youth cross between the two buildings frequently. While a crossing guard is posted from 3:00 pm-5:30 pm, the lack of a crossing guard during morning arrival and throughout the day results in drivers failing to yield to crossing youth, as well as youth crossing haphazardly across Reservation Road. Additionally, crosswalk markings and signage between the two buildings is extremely faded and not visible.

#### **Tule River's Pedestrian Collision History**

Due to a variety of factors, traffic collision data on tribal lands is lacking and likely to reflect substantial underreporting. Of the available data from the Statewide Integrated Traffic Records System (SWITRS), there have been no documented collisions between 2004 and 2014 on tribal land. As part of the workshop, community members were asked to identify both overall traffic collisions that have occurred on tribal lands that were not captured in the SWITRS data, as well as pedestrian collisions. Additionally, Cal Walks requested collision data directly from the Tribal Police Department. The initial results of the crowdsourcing exercise and the supplemental Tribal Police data are striking and confirm the underreporting of tribal collisions in SWITRS: In 2012, the Tribal Department of Public Safety recorded 11 traffic collisions on tribal roads, none of which appear in SWITRS. Furthermore, the road to Porterville—the nearby city where most of the children go to school—has significant clusters of crashes. Cal Walks and SafeTREC will continue to work with tribal staff and community to fill in the gaps in collision data to better inform planning efforts.



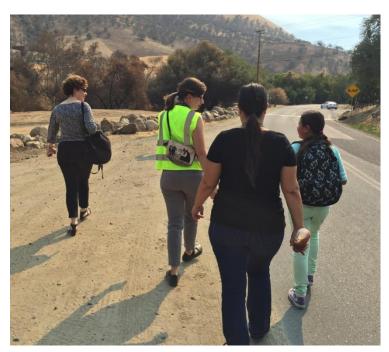
TRIBAL CHAIRMAN NEIL PEYRON, TRIBAL COUNCIL MEMBER WILLIE CARRILLO, AND PLANNING & COMMUNITY DEVELOPMENT DIRECTOR VERN VERA WELCOME WORKSHOP PARTICIPANTS & LEAD WELCOMING SONG

- Tule River Tribe
  - Chairman Neil Peyron
  - Tribal Council Member William "Willie" Carrillo
  - Tribal Planning & Community
     Development Department

#### **AUGUST 19 WORKSHOP**

The Tule River Tribe requested the workshop to help inform the development of the tribe's Sustainable Transportation Plan in alignment with community residents' identified and prioritized needs. The workshop was hosted from 3:00 pm-7:30 pm with dinner and childcare provided to encourage community resident participation; residents were encouraged to join at any point during the workshop. Eighteen (18) individuals attended, representing a wide range of organizations and the community-at-large, including:

- Tribal Recreation Department
- Tribal Members & Residents
- Tribal Youth
- C2 Consult
- California Department of Transportation (Caltrans), District 6



PARTICIPANTS ENCOUNTER & SPEAK TO YOUTH WALKING ON RESERVATION ROAD DURING WALKABILITY ASSESSMENT

## Reflections from Walkability Assessment

Walkability assessments were conducted with eight (8) participants, including Tribal Council Member Carrillo along portions of North Reservation Road, the only thoroughfare that runs through the community, as well as a footbridge and pedestrian/equestrian path across and along the Tule River. Participants were asked to 1) observe infrastructure conditions and the behavior of all road users and 2) apply strategies learned from the 6 E's presentation that could work in Tule River. Following the walkability assessment, the participants shared the following reflections:

### Need for Separated Pedestrian Facilities: Participants commented that they felt the need to be constantly vigilant while walking on Reservation Road because of the

lack of physical separation from cars. Moreover, the current road does not have shoulders, forcing pedestrians to walk on the side of an unimproved dirt roadway with frequent rocks and other debris creating obstructions and trip hazards. Participants also recounted witnessing several residents walking in the middle of the road during the walkability assessment. Workshop participants unanimously supported clearly delineating and defining a pedestrian space, which may require widening Reservation Road to accommodate the added facilities.

Speed of Traffic: Participants
remarked upon the speed of
traffic, especially in the central
portion of Tule River where the
Education Center, Tribal
Council, and Community
Gymnasium are located and
where students frequently
cross the road. Participants also
noted how drivers did not heed
the speed bumps even in the
presence of children walking
home from the Education
Center and Gym.



WORKSHOP PARTICIPANTS DURING WALKABILITY ASSESSMENT OF RESERVATION ROAD

#### Reimagining Central Tule River with Complete Streets:

Participants repeatedly underscored the congested nature of central Tule River and the lack of clear built environment indicators to all road users communicating the high child pedestrian

- activity in the area. For example, the parking located directly in front of the Tribal Council building creates a direct conflict with pedestrians when drivers are backing out. Participants agreed that incorporating Complete Streets design principles and treatments could help better define the space and intended uses to make it safer for all road users on the tribal lands.
- Reservation-wide Trail System: Participants identified the creation of a reservation-wide trail
  system as a key opportunity for improving pedestrian access and safety throughout the
  community, and that any trail system created will need to balance the needs of pedestrians and
  equestrians and potentially excluding all-terrain vehicles (ATVs or quads).



PARTICIPANTS EVALUATE FOOT BRIDGE DURING WALKABILIY ASSESSMENT



PREVIOUSLY STARTED TRAIL ALONG TULE RIVER CONNECTING TO FOOT BRIDGE



YOUTH SHARE EXPERIENCES WALKING THROUGHOUT THE RESERVATION

## Reflections from Tribal Youth

Nine (9) tribal youth (primarily middle-school aged) joined the workshop for the evening portion and were provided an opportunity to share their daily experiences walking, their concerns with pedestrian safety, and finally, what they felt should

move forward to improve pedestrian safety. The youth shared the following reflections:

- Need for Separated Pedestrian Facilities: While not all the youth felt this way, several
  expressed that it was scary to walk on Reservation Road. The youth were unanimous, however,
  in expressing a clear desire and need for a separated pedestrian facility, whether it is a sidewalk,
  side path, or trail. The youth did affirm that when walking on Reservation Road, they do walk
  facing traffic, except along portions where the curve or shoulder is so tight that they are forced
  to cross the road to continue.
- Need for Improved Crossing between Education Center & Community Gymnasium: The youth
  confirmed what workshop participants observed during the walkability assessment: a high volume
  of students cross between the Education Center and the Community Gymnasium due to
  programming located at both sites on opposite sides of the road. The youth expressed that they

would feel safer with more crossing guards, particularly outside of school hours, as well as with more training for existing crossing guards. Additionally, the youth identified installation of a traffic



STUDENTS CROSSING TO EDUCATION CENTER AFTER ALIGHTING FROM BUS ON GYM SIDE OF RESERVATION ROAD

control device (either a signal or beacon), additional high-visibility signage, and additional pedestrianscale lighting as treatments to help improve the safety of the crossing between the Education Center and the Gym.

• Reservation-wide Trail

System: The youth identified the wide variety of destinations to which they walk, including bus stops, the Education Center, visiting relatives, going/leaving home, and the Gym. Due to the

dispersed nature of origins and destinations, focusing pedestrian facilities only on Reservation Road would not meet the current needs of the youth. Several youth expressed they would feel safer on a trail without any cars. Accordingly, youth needs align with the development of a Reservation-wide trail system. The youth did note, however, that any trail that is developed would need to be restricted to pedestrians and prohibit quads.

- Dangerous Driver Behaviors: The youth recounted experiences with drivers behaving unsafely
  while they walked on Reservation Road, including traveling at high speeds, ignoring speed
  bumps, and unsafely driving around people walking on the road and into the oncoming traffic
  lane.
- Need for Shade:
  Lastly, the youth
  noted that the lack
  of shade makes
  walking in the
  reservation very
  uncomfortable, and
  they would like to
  see more shade
  trees or some sort
  of shade structures
  provided.



STUDENTS WALKING HOME ALONG RESERVATION ROAD WITHOUT ANY SHADE

#### **Community Resident Recommendations**

Following a recap of the afternoon portion of the workshop, Charley Clouse of C2 Consult provided an overview of the objectives and timeline of the Tribal Master Plan, including the Sustainable Transportation Plan. With the Tribal Master Plan as a guiding framework, Cal Walks then educated residents on engineering and education best practices for improving pedestrian safety. Residents were then asked to prioritize the strategies they would like to see the Tribe pursue to improve pedestrian safety and to incorporate into the Sustainable Transportation Plan.

Residents were provided with 3 voting dots and were asked to vote on the following categories:

- Sidewalks/Side paths
- Signage & Markings: treatments such as fluorescent pedestrian signs or advance yield lines
- Beacons/Signals: treatments such as rectangular rapid flashing beacons or pedestrian hybrid beacons
- Crossing Improvements: treatments such as curb extensions or pedestrian safety islands
- Road Reconfiguration: treatments such as road diets and roundabouts
- Education
- Enforcement
- Encouragement
- Evaluation/Data
- Other



**WORKSHOP PARTICIPANTS EXPRESSING PEDESTRIAN SAFETY PRIORITIES** 



Evaluation/Data	1
Encouragement	0
Enforcement	0
Other?	0



YOUTH PARTICIPATING IN PRIORITIZATION **EXERCISE** 

During the debriefing of this prioritization exercise, workshop participants were unanimous in the need to provide physically separated pedestrian facilities along Reservation Road and elsewhere on the reservation. The Tribal Council has already recognized this pedestrian safety strategy as a high community priority and will continue to prioritize physically separated pedestrian facilities in the Tribal Master Plan. Workshop participants also agreed that the crossing between the Education

Signage

Votes

12

7

5

3 2

2

Center and the Community Gym needs to be improved, as the existing markings are faded and not visible. The participants who voted for road reconfiguration noted that their support was for widening Reservation Road in order to establish enough right-of-way to provide a separated pedestrian facility.

Additionally, workshop participants and residents raised the need to improve pedestrian conditions throughout Tule River through the use of high-visibility/fluorescent signage, pedestrian-scale lighting—particularly at bus stops and crossings—and traffic calming techniques, such as a roundabout on long, straight sections of Reservation Road, a LED-flashing stop sign, and raised crosswalks. Lastly, participants identified the lack of pedestrian access on the bridge by the casino.

#### California Walks/SafeTREC Recommendations

California Walks and SafeTREC also submit the following recommendations for consideration by the Tribe:

- Provide Separated Pedestrian Facilities on Reservation Road: Echoing workshop participants' priorities and based on our assessment, Cal Walks and SafeTREC strongly recommend prioritizing the creation of separated pedestrian facilities on North Reservation Road, which may require widening the road to secure enough right-of-way. Ideally, we recommend an asphalt side path to provide full separation for pedestrians; however, a clearly delineated and marked shoulder may be a short-term alternative while seeking funding for a side path, especially if flexible and retroreflective bollards or soft-hit posts are installed at regular intervals to reinforce the shoulder as a pedestrian-only space except in rare emergency instances where a car must pull over off the road.
- Establish Tule River-wide Trail System: Cal Walks and SafeTREC strongly support workshop
  participants' priority to establish a Tule River-wide trail system as a strategy to provide fully
  separated pedestrian facilities, particularly because not all origins/destinations are on Reservation
  Road. Moreover, we agree with the youth recommendation to prohibit ATVs/quads from the trail
  system, while accommodations for equestrians should be explored with the community at-large.
  We recommend beginning with revitalizing the river walking path and pedestrian bridge as a shortterm measure.
- **Install Raised Crossing between Education Center & Community Gymnasium:** Because crossing guards are not present at all hours, California Walks and SafeTREC recommend installing one or more raised crossings between the Education Center and Community Gymnasium to improve driver compliance with yielding to the numerous youth who frequently cross between the two buildings. At a minimum, a raised crossing paired with highvisibility crosswalk markings and warning signage should be provided at the western crossing, while a supplemental raised



EXAMPLE OF RAISED CROSSING AT A SCHOOL IN EUREKA, CA PHOTO CREDIT: HUMBOLDT PARTNERSHIP FOR ACTIVE LIVING

crossing could be provided at the eastern crossing. We strongly recommend an at-grade raised crossing rather than a pedestrian overpass because an at-grade alternative is much more cost-effective and much more likely to be utilized than an overpass.



A CROSSING GUARD STATION COULD BE DECORATED BY YOUTH SUCH AS THESE EXISTING BUS STOPS THROUGHOUT THE RESERVATION

#### Create Crossing Guard Station:

During our site visit and walkability assessment, we noted the lack of shade along Reservation Road. This is especially problematic for crossing guards who experience the heat on a daily basis during warmer months to assist crossing students but who now may leave their post intermittently to seek shade. Cal Walks and SafeTREC recommend installing a roadside "crossing guard station" that will provide shade for crossing guards. Additionally, the station can be leveraged as a placemaking opportunity and could be decorated by youth with tribal art and images and function as a gateway treatment to the Central Tule River area.

Explore Back-In Angle Parking in front of Tribal Council Building: Cal Walks and SafeTREC
recommend converting the parking in front of the Tribal Council Building on Reservation Road to be
converted to back-in angle parking. During the workshop, we witnessed the conflicts that the
traditional parking layout created between drivers backing up and pedestrians walking along the
road. Back-in angle parking would increase the sight lines of drivers and pedestrians to help
pedestrians navigate this conflict zone.

#### **ACKNOWLEDGMENTS**

We would like to thank the Tule River Tribe for inviting us to their community and for hosting the Community Pedestrian Safety Training. Thank you to Vern Vera, Director of Tribal Planning & Community Development; Lisa Davis, Director of Tule River Recreation Department; and Charley Clouse Principal of C2 Consult for their full commitment to and leadership of community-driven transportation planning and meaningful engagement with community residents. We would also like to thank the Tule River Tribe for generously donating dinner and the meeting space for the workshop.

We would like to acknowledge Tule River Tribal Chairman Neil Peyron, Tribal Council Member William "Willie" Carrillo, community members, and the youth whose dedication to pedestrian safety meaningfully informed and strengthened the workshop's outcomes.

Funding for the Community Pedestrian Safety Training program was provided by a grant to University of California at Berkeley Safe Transportation Research & Education Center (SafeTREC) from the California Office of Traffic Safety through the National Highway Traffic Safety Administration.