RECOMMENDATIONS TO IMPROVE PEDESTRIAN SAFETY ON THE HOOPA VALLEY INDIAN RESERVATION



May By Tony Dang, Jaime Fearer, Wendy Alfsen, California Walks; 2015 Jill Cooper, UC Berkeley SafeTREC



Safe Transportation Research & Education Center

Recommendations to Improve Pedestrian Safety on the Hoopa Valley Indian Reservation

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

INTRODUCTION

Through the Pedestrian Safety Injury Prevention Action Team project of the California Department of Public Health—funded by the Safe States Alliance through the National Highway Traffic Safety Administration (NHTSA)—California Walks consulted key pedestrian safety practitioners in Humboldt County in the Fall 2014/Winter 2015 to identify high-need/high-risk pedestrian safety communities in the region, resulting in the identification of the Hoopa Valley Tribe and the unincorporated community of McKinleyville.

Following additional conversations with the Hoopa Valley Tribal Roads Department, the Tribe invited the University of California at Berkeley's Safe Transportation Research Center (SafeTREC) and California Walks (Cal Walks) to Hoopa Valley to facilitate a pedestrian safety action-planning workshop with an immediate focus on strengthening the tribe's grant application to the California Active Transportation Program (ATP) through a community-driven process. Cal Walks facilitated the workshop on April 28, 2015, which consisted of: 1) an overview of multidisciplinary approaches to improve pedestrian safety; 2) a walkability assessment of State Route 96 and local tribal neighborhood streets; 3) small group action planning discussions to facilitate the development of recommendations for the tribe's ongoing active transportation efforts, as well as to inform the tribe's ATP application; 4) a community prioritization exercise; and 5) an exercise to crowdsource undocumented traffic collisions. 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: Evaluation, Engineering, Enforcement, Education, Encouragement, Empowerment) to address and improve pedestrian safety conditions and concerns. Participants are then guided on a walkability assessment of nearby streets before setting pedestrian safety priorities and actionable next steps for their community.

For a summary of outcomes from past CPST workshops, please visit: www.californiawalks.org/wp-content/uploads/2015/05/CPST_Follow-Up_2009-14.pdf

Selected Pedestrian Safety Conditions in Hoopa Valley

Traffic Volumes & Speed Along State Route 96



State Route 96 (SR-96) is a 2-lane, high speed (45 MPH), "main street" highway that experiences relatively high traffic volumes and freight traffic. SR-96 is the only north-south thoroughfare through Hoopa Valley tribal lands. Many community residents utilize the highway as a primary transportation corridor on foot, as it is the only street that runs the full length of the community. Key community destinations are located along SR-96, including Hoopa Valley

45 MPH SPEED LIMIT ABRUPTLY TRANSITIONS INTO 25 MPH SCHOOL ZONE

Elementary School, Hoopa Valley High School, Hoopa Tribal Offices, a community cemetery, grocery store, Emergency Services Center, and the post office. Moreover, recent signage establishing a 25 MPH school zone exists concurrently with the posted 45 MPH speed limit and requires an abrupt change in speed in order to comply with the school zone.

Lack of Pedestrian Facilities Along State Route 96

Despite being a primary transportation corridor for many residents to access community destinations on foot, there are currently no existing pedestrian facilities along SR-96. Moreover, the constrained geography in certain sections posed by the Trinity River have created challenges to traveling on the roadways. Nearly 40% of the community lives south of the Blue Slide section and to access schools, health care, and other key services on foot, residents must traverse a narrow, eroding section of land off the main roadway via a well-worn goat trail (below, right) and at one point, the foot path deteriorates to less than a footprint wide. During the team assessment, a fairly able senior felt so unsafe in attempting to use the goat path that she chose to negotiate over the steel railing and walked in the lane of traffic at the blindest part of the curve.

In the central part of Hoopa where the schools are located, students utilize the unpaved, unimproved shoulder areas along SR-96 to get to/from the schools, and school athletic teams use SR-96 as part of their running training routes.



CLEARLY WORN PEDESTRIAN PATHS ALONG BOTH SIDES OF SR-96 NEAR THE ELEMENTARY AND HIGH SCHOOLS

Incomplete Sidewalk Network & Traffic Speeds Along Loop Road



CLEARLY WORN PEDESTRIAN PATHS ALONG THE SIDE OF SR-96 IN THE BLUE SLIDE SECTION; ERODING SECTIONS OF THE INFORMAL PATH EXPOSE PEDESTRIANS TO DANGEROUS CONDITIONS

Loop Road connects to SR-96 just south of Hoopa Valley High School and again to SR-96 just north of Hoopa Park where it is signed as Pine Creek Road. Many community destinations and tribal facilities are

located along Loop Road, including: the library; senior center; Tribal Health and Human Services building; Temporary Assistance for Needy Families (TANF) office; Tribal Environmental Protection Agency; Public Utilities District; Tribal Insurance building; College of the Redwoods satellite campus; and Pookey's Park. Recent improvements to Loop Road have provided sidewalks for much of the length of the road on its east side; however, several unimproved sections on the west side remain without sidewalks or paths. Because of the recent sidewalk installations, students in the area



STUDENT SKATEBOARDING IN MIDDLE OF ROAD DUE TO LACK OF SIDEWALKS ON WEST SIDE OF LOOP ROAD DURING WALKABILITY ASSESSMENT. PHOTO TAKEN DIRECTLY ACROSS FROM POOKEY'S PARK.

are encouraged to use Loop Road as an alternative to SR-96, and many students frequent Pookey's Park afterschool for outdoor activities and must cross Loop Road without any marked crosswalks or other pedestrian safety enhancements. Tribal members and residents, however, expressed concerns with traffic speeds along Loop Road, as well as with drivers disobeying the stop sign at Loop Road and Orchard Road.



School Arrival/Dismissal Issues at Orchard Road/SR-96 With only one access point to both the elementary and high schools for both school buses and parent drivers, the Orchard Road/SR-96 intersection presents a variety of pedestrian safety challenges during school arrival and dismissal times. Currently, Orchard Road only permits parent drivers to enter and exit through a one-way loop, while school buses may proceed further down Orchard Road to access a dedicated school bus unloading zone.

POORLY DEFINED DROP-OFF AREA AT ELEMENTARY SCHOOL; DRIVERS ENCROACH UPON SIDEWALK FREQUENTLY TO PARK

Drivers, however, frequently disobey the one-way loop, especially when exiting the elementary school staff parking lot where drivers make an illegal left turn to reach the Orchard Road/SR-96 intersection rather than use the loop. Signage and markings indicating the one-way loop are faded and/or missing. Moreover, no physical barrier or delineation prevents drivers from making the dangerous maneuver. While the elementary school does have a designated drop-off location for parents on Orchard Road, parent drivers may perceive this area to simply be a part of the roadway due to the lack of signage and markings and the poor pavement condition. Parent drivers have also used this area to park when the staff/visitor lot is full, and frequently encroach upon the sidewalk area.

Hoopa Valley'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 5 documented pedestrian collisions between 2003 and 2012, of which 1 resulted in death and another resulted in severe injuries. 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



CROWD SOURCED PEDESTRIAN COLLISIONS OVERLAID WITH SWITRS COLLISIONS; VICTIM NAMES REDACTED FOR PRIVACY.

collisions. The results of the crowdsourcing exercise are striking and confirm the underreporting of tribal pedestrian collisions in SWITRS: community members identified an additional 9 pedestrian collisions, of which 3 were fatalities and 1 bicyclist collision.

APRIL 28 WORKSHOP

The Hoopa Valley Tribe requested a workshop to address two goals: 1) to inform the development of the tribe's ATP grant application in alignment with a) community residents' identified and prioritized needs and b) input from the tribe's Active Transportation Program Technical Advisory Committee (TAC); and 2) to provide tribal staff, community organizations, and residents with a toolkit for promoting pedestrian safety and walkability to inform future comprehensive active transportation planning and improvement efforts. The workshop was hosted from 12-5:30 PM for the TAC with lunch provided and from 6-8 PM for community members with dinner provided to encourage community resident participation. The workshop was attended by 21 individuals representing a wide range of organizations and disciplines, as well as the community-at-large, including:

- Hoopa Valley Tribe
 - o Chairwoman
 - Tribal Roads Department
 - Tribal Members & Residents

- Active Transportation Program
 Technical Advisory Committee (TAC)
- Klamath-Trinity Joint Unified School District, School Resource Officer
- Bear River Band of Rohnerville Rancheria

- Humboldt County Public Works
 Department
- Humboldt County Department of Health & Human Services—Public Health Branch
- Redwood Community Action Agency

Reflections from Walkability Assessment

• California Department of Transportation (Caltrans), District 1

• California Department of Public Health

Walkability assessments were conducted with the Tribe's Active Transportation Program Technical Advisory Committee (TAC) along portions of SR-96, the only thoroughfare that runs through the community, as well as smaller side streets (Loop Road, Orchard Road) during dismissal time for the elementary school. Participants split up into two groups and 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 Hoopa Valley. Additionally, participants informally interviewed Missy Ammon, the transportation coordinator for Klamath-Trinity Joint Unified School District. Following the walkability assessment, the TAC shared the following reflections:

- **Speed of Traffic**: TAC members remarked upon the high speed of traffic, especially on SR-96 but also along Loop Road. The School Resource Officer for the high school and elementary school remarked that traffic was traveling roughly 15% slower than normal due to our large group presence and high-visibility safety vests.
- Orchard Road Improvements: TAC members expressed that the interview with Ms. Ammon was extremely helpful to contextualize the students' active transportation needs and current pedestrian safety concerns. Many of the issues identified could be addressed through small, relatively low-cost fixes, and TAC members expressed a desire to see such improvements included in the Tribe's ATP application.

Active Transportation Program (ATP) Technical Advisory Committee (TAC) Recommendations

Following a presentation by Michael Hostler of the Hoopa Valley Tribal Roads Department on the Tribe's potential Active Transportation Program (ATP) grant application, Cal Walks facilitated an action planning discussion with TAC members to develop concrete recommendations to strengthen the Tribe's ATP application. The ATP application proposal concept involves providing a multi-use asphalt sidepath along SR-96 between the Blue Slide area and Supply Creek Bridge. TAC members provided the following recommendations for the grant application and overall pedestrian safety improvements in Hoopa based on the 6 E's of Pedestrian Safety and the walkability assessment:

- The TAC endorsed the phased approach to active transportation improvements in Hoopa Valley, with the TIGER grant application to address downtown Hoopa needs, the ATP application to address needs between Supply Creek Bridge and Blue Slide, and the Tish Tang to Blue Slide section to be addressed through future funding opportunities;
- Request Caltrans to reevaluate speed limits and consider traffic calming measures along SR-96 between Supply Creek Bridge and Blue Slide in light of the relatively recent establishment of the 25 MPH school zone;
- 3) The ATP application should aim to provide a multi-use path on both sides of SR-96. The west side contains all the community destinations in this section and is frequently used by students,

including the high school athletic teams which use SR-96 and Loop Road as a training route. The east side has more right-of-way to work with and connects to the existing informal pedestrian path at Blue Slide, though it must cross emergency vehicle driveways at the Fire Station section. A path on both sides of SR-96 will help to convey a community-scale to drivers along SR-96;

- Pedestrian-scale lighting should be provided on the multi-use path as part of the ATP application, and all new marked crossings included in the project should include adequate lighting. Options exist for dark sky-friendly lighting that is also solar-powered;
- 5) Along Loop Road, TAC members suggested creating clear ingress/egress at the College of the Redwoods parking lot near Pookey's Park, as well as creating a curb-separated pedestrian path where no sidewalks currently exist to delineate a clear space for pedestrians to access the Park and other community destinations. TAC members also suggested exploring a raised crosswalk or even a raised intersection at Orchard Road and Loop Road and supported the addition of marked crosswalks at Pookey's Park enhanced with high-visibility markings and rectangular rapid flashing beacons.
- 6) For Orchard Road, TAC members strongly supported the addition of soft-hit posts extending from the median to the intersection with SR-96 to prevent drivers from making the illegal left turn from the elementary school. TAC members also suggested improving the existing drop-off area with new pavement markings and signage, as well as exploring a remote drop-off location to be paired with the new sidepath—this could be accomplished by relocating the staff parking to the Field of Dreams or by improving the Field of Dreams parking lot to function as a remote drop-off location that connects to the new sidepath;
- 7) The TAC also prioritized the following non-infrastructure activities to be considered by residents for inclusion in the ATP application:
 - a. Expand pedestrian safety education in the Bridge program to 2nd graders;
 - b. Work with youth (after school) to develop walking path signs, markings, and a gateway monument that incorporate Hupa cultural markings/designs;
 - c. Work with youth & junior college to design parent transportation handbook with art incorporating native characters & Hupa language in a comic book style; and
 - d. Rebrand Walk to School Days and other similar events as "Salmon 'Run'" events;
- 8) In downtown Hoopa, explore whether lanes could be narrowed and transverse rumble strips added as part of TIGER grant application for traffic calming purposes. Additionally, explore feasibility of establishing Safety Corridor similar to Eureka-Arcata Safety Corridor on US-101



Community Resident Recommendations

Several residents joined TAC members for an evening workshop. Following a recap of the afternoon's TAC workshop by Michael Hostler of the Hoopa Valley Tribal Roads Department—including the Tribe's initial concept for a potential Active Transportation

HOOPA VALLEY TRIBAL CHAIRWOMAN DANIELLE VIGIL-MASTEN WELCOMING RESIDENTS TO WORKSHOP

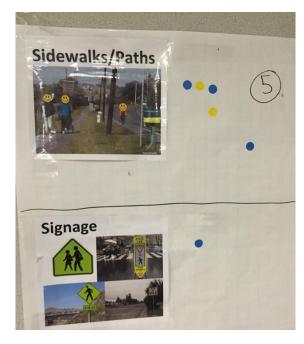
Program (ATP) grant application—Cal Walks educated residents on engineering and education best practices for improving pedestrian safety. Residents were then asked to prioritize the strategies they would like to see the Tribe pursue to improve pedestrian safety.

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

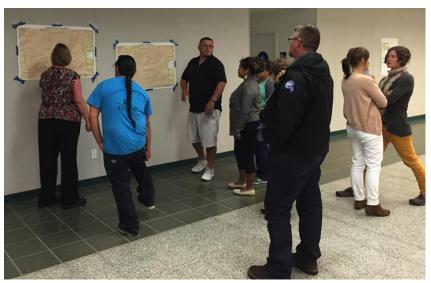
- Sidewalks/Sidepaths
- Signage & Markings: treatments such as fluorescent pedestrian signs, advanced yield lines, etc.
- Beacons/Signals: treatments such as rectangular rapid flashing beacons, pedestrian hybrid beacons, etc.
- Crossing Improvements: treatments such as curb extensions, pedestrian safety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

The top 3 strategies prioritized by residents were: 1) sidewalks/sidepaths; 2) crossing improvements; and a tie for 3) encouragement activities and 3) beacons/signals.

Strategy	Votes
Sidewalks/Sidepaths	5
Crossing	4
Improvements	
Encouragement	3
Beacons/Signals	3
Education	1
Signage	1
Enforcement	1
Evaluation/Data	0
Road	0
Reconfiguration	
Other?	0



During the debrief of this prioritization exercise, community members agreed with the TAC's recommendation for the ATP application to include a path on both sides of SR-96 and agreed that providing the multi-use path is the number one priority for the community. Additionally, residents raised the need to improve conditions along Loop Road, particularly for elders who walk to access the senior center and lunchtime senior nutrition program. One tribal elder participant expressed a desire for encouragement activities to incorporate an intergenerational component; for example, tribal elders could lead group walks on the proposed SR-96 multi-use paths with children and share traditional Hupa stories.



Community residents were also asked to participate in a collision data crowdsourcing exercise to help supplement the underreported statewide collision data. As discussed earlier, this exercise revealed over twice as many unreported pedestrian collisions as what is currently captured in official statewide collision data sources.

RESIDENTS & WORKSHOP PARTICIPANTS EXAMINE COLLISION MAPS & SHARE STORIES OF UNREPORTED COLLISIONS

California Walks/SafeTREC Recommendations

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

- Explore Implementation of Caltrans' Crosswalk Enhancements Policy in Downtown Hoopa: Caltrans Traffic Operations Policy Directive 12-03 outlines permitted safety enhancements for existing marked crosswalks on state routes, including the use of pedestrian safety islands, curb extensions, advanced yield markings and signs, rectangular rapid flashing beacons, and pedestrian hybrid beacons. We recommend the Tribe work with Caltrans to implement enhanced safety features at the two existing marked crosswalks on SR-96 in Downtown Hoopa through the state's share of Highway Safety Improvement Program (HSIP) funding.
- Explore whether Section of Hoopa Elementary Staff Parking Lot Can Be Repurposed for Path: The drainage ditch on the west side of SR-96 presents some challenges to providing a continuous multiuse sidepath. During the walkability assessment, the staff parking lot seemed large enough for a few parking stalls to be shifted a few feet to the west in order to provide enough space for a pedestrian path. This path could be delineated with soft-hit posts and would be a low-cost option to help provide a continuous west side path along SR-96. This option would need to be discussed

with Hoopa Elementary School and the School District. We recommend that the Tribe work with the School District to evaluate the feasibility of such an approach.

• Establish Community Active Transportation Advisory Committee: While the Technical Advisory Committee's (TAC) input during this process has been invaluable, we recommend establishing an ongoing Community Active Transportation Advisory Committee to maintain community engagement for all active transportation projects going forward. This Committee would work closely with the TAC and can help to cultivate community support/awareness and help champion active transportation improvements in the community. Moreover, the Committee can serve as the focal point for the development of all education and encouragement activities and can work with the Redwood Community Action Agency and other community partners to implement education and encouragement programs.

ACKNOWLEDGMENTS

We would like to thank the Hoopa Valley Tribe for inviting us into their community and for hosting the Community Pedestrian Safety Training. Thank you to Michael Hostler, Tribal Transportation Planner and Loren Norton, Director of the Hoopa Valley Tribal Roads Department for their full commitment to and leadership of community-driven transportation planning and meaningful engagement with community residents. Thank you to Tom Mattson, Director of Humboldt County Public Works and Jenny Weiss and Emily Sinkhorn of the Redwood Community Action Agency who provided leadership and organizational support in planning the workshop. We would also like to acknowledge Hoopa Valley Tribal Chairwoman Danielle Vigil-Masten, community members, and representatives from the Bear River Band of Rohnerville Rancheria 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.