



Road Safety Peer Exchange for Tribal Governments

An RSPCB Peer Exchange

Introduction and Background

This report provides a summary of the proceedings of the Road Safety Peer Exchange for Tribal Governments held in Albuquerque, New Mexico on December 9th and 10th, 2014. The peer exchange brought together safety practitioners from across the United States to facilitate the exchange of information on road safety and to explore opportunities for collaboration between tribes, the Federal Highway Administration (FHWA), Bureau of Indian Affairs (BIA), State Departments of Transportation (DOT), Tribal Technical Assistance Program (TTAP) Centers and other government entities on tribal road safety and safety plans by tribes (see [Appendix A](#) for a complete list of attendees).

The peer exchange covered the following key topics:

- Strategies, challenges, and opportunities for reducing fatal and several injury crashes on tribal roads;
- Developing and implementing safety plans by tribes;
- Improving safety data and applying the systemic approach to safety;
- Conducting road safety evaluations and road safety audits;
- Addressing behavioral safety issues; and
- Exploring new safety partnerships for tribes.

Peer Exchange Proceedings

The format of the Peer Exchange consisted of a series of presentations, roundtable discussions, and breakout groups (see [Appendix B](#) for the complete agenda). At the end of the workshop, participants from each organization were charged with developing a list of key takeaways and action plans for their respective tribes or agencies to address the key topics noted above. Key actions included:

- Assessing the safety needs of tribal governments through stakeholder engagement;
- Exploring new partnerships between tribes and counties, resource agencies, TTAP Centers, and other government entities;
- Using safety plans to compete for safety grant funding;
- Emphasizing the importance of safety plans;
- Providing tribes with technical assistance to support strong safety plans;
- Helping tribes overcome staff limitations;
- Expanding tribal participation in statewide plans;
- Organizing regional peer exchanges focused on road safety for tribal governments;
- Developing a glossary of key concepts in road safety for tribal governments; and
- Creating a clearinghouse for tribal governments of safety resource documents and best practice examples.

A brief description of the peer exchange proceedings is provided below.

ABOUT THE PEER EXCHANGE

FHWA's RSPCB Technical Assistance Program supports and sponsors peer exchanges and workshops hosted by agencies.

Date

December 9 – 10, 2014

Host

FHWA Office of Safety

Participants

Representatives from:

15 tribal entities

6 TTAP/LTAP Centers

2 State transportation agencies

Bureau of Indian Affairs

FHWA Federal Lands Highway Division

FHWA New Mexico Division Office

FHWA Office of Safety

FHWA Resource Center

FHWA Technology Partnership Programs

U.S. DOT Volpe Center

FHWA's Office of Safety sponsors P2P events.

[Learn more.](#)





Introductory Presentations

Welcoming Remarks

New Mexico DOT (NMDOT) Tribal Liaison Ron Shutiva opened the peer exchange with a brief prayer and remarks. FHWA New Mexico Division Administrator John Don Martinez and NMDOT District Engineer Larry Maynard then welcomed participants to the peer exchange. The presenters addressed the importance of collaboration and the value of formal agreements between tribes and State, Federal, and local transportation agencies. They also emphasized New Mexico's strong history of successful partnerships to promote tribal road safety. They introduced the exchange as a valuable opportunity to share nationwide perspectives on tribal road safety and to develop ideas for effective tribal investment strategies.

The FHWA Office of Safety Local and Rural Road Safety (LRRS) Program Manager provided an overview of the workshop event and asked participants to introduce themselves and share their expectations. Expectations included:

- To develop a list of innovative ideas for improving roadway safety for tribal members;
- To meet and network with practitioners from the field of roadway safety;
- To learn about successful examples of tribal safety plans;
- To brainstorm creative ways for tribal governments to fund road safety improvements and overcome resource limitations, including inexpensive solutions to roadway safety issues;
- To share innovative strategies for gathering and analyzing crash, traffic, and roadway data;
- To focus on safety issues of special concern, including roadway departures, bicycle and pedestrian safety, and distracted/impaired driving;
- To discuss the role of stakeholders from each of the "4 Es" of safety: Engineering, Enforcement, Education, and Emergency Medical Services (EMS);
- To develop a list of training and education needs for TTAP and LTAP Center customers; and
- To discuss Federal programs with the potential to benefit tribal safety.



Figure 1: FHWA's LRRS Manager provided an overview of the event (Photo courtesy of Eastern TTAP at Michigan Tech)

Tribal Transportation Program Overview

The FHWA Tribal Transportation Program (TTP) Tribal Coordinator gave an overview of the TTP to inform the conversation of the event.

In accordance with the Moving Ahead for Progress in the 21st Century Act (MAP-21), FHWA allocated over \$400 million to tribes annually through the TTP. Approximately two percent of this fund, or roughly \$8.5 million, is dedicated to the Tribal Transportation Program Safety Fund (TTPSF). The TTPSF allocates funding according to four categories that correspond to the "4 Es" of safety. All modes of transportation are eligible for funding through the TTPSF.

In 2013, FHWA received 126 TTPSF applications totaling \$27.2 million. FHWA funded 94 of these applications for a total of \$8.6 million. Approximately half of this funding supported safety planning efforts. FHWA determines which applications to fund according to the following selection criteria: use of safety data, connection to a safety plan, use of a comprehensive approach to safety, availability of matching funds (not required), road ownership (for engineering funds only), and connection to an engineering safety study (for engineering funds only). FHWA will announce the 2014 TTPSF funding decisions by early 2015. The call for 2015 TTPSF applications is also expected in early 2015.

National Tribal Transportation Facility Inventory (NTTFI) and the Road Inventory Field Data Systems (RIFDS)

A representative of the BIA Division of Transportation presented an overview of the National Tribal Transportation Facility Inventory (NTTFI) and the Road Inventory Field Data Systems (RIFDS).



The NTTFI is an inventory of roads and other transportation facilities that serve tribal communities. The inventory includes approximately 157,000 miles of roads and several thousand bridges, as well as docks, ferry terminals, transit buildings, maintenance buildings, trails, and other facilities. Facilities included in the inventory are eligible for funding through the TTP. The TTP, which evolved from the former Indian Reservation Roads program, provides funding for all facility types, not just roads and bridges.

The BIA manages the NTTFI through the RIFDS. The agency is currently making changes to the RIFDS to improve program oversight and management, and to make the inventory more easily compatible with geographic information systems (GIS) software.

Ownership of the NTTFI is complex. Within the inventory, the BIA owns 31,200 miles of roadways, tribes own 26,400 miles, State DOTs own 22,900 miles, city governments own 2,900 miles, county governments own 65,900 miles, and other Federal agencies own 5,200 miles. Although the criteria for inclusion in the inventory are broad, NTTFI facilities must allow public access and should be included in the relevant safety plan and long-range transportation plan.

TTAP Center Safety Performance

A representative from the FHWA Office of Technical Services' Technology Partnership Program (TPP) provided an overview of the national Local and Tribal Technical Assistance Program (LTAP/TTAP), which includes seven regional TTAP Centers across the United States. The mission of the TTAP program is to improve the quality of surface transportation through interactive relationships with tribes. TTAP Centers focus their efforts on four focus areas: infrastructure management, workforce development, organizational development, and safety.

The TTAP Centers provide technical assistance on a range of topics including road safety audits (RSAs), tribal safety plans, crash data analysis, safety tools, safety plans, and safety summits. The seven TTAP Centers offered a total of 87 training sessions in 2013. In addition to training, the TTAP Centers work to build a culture of safety in Indian country through communication activities such as newsletter articles, blogs, and best practices documents. The TTAP Centers also coordinate activities among tribes and help connect them to Federal, State, and local safety experts. One goal of this exchange was for the participating TTAP Centers to receive feedback from tribal entities to help them enhance the technical assistance that they provide to their customers.

Systemic Approach to Safety

A representative from the FHWA Resource Center provided an overview of the systemic approach to safety. Although the systemic approach to safety offers advantages to any and all transportation agencies, it is particularly effective for rural and tribal roads. While 57 percent of fatal crashes in the U.S. occur on rural roads, they do not generally occur at the same location repeatedly. The low density and randomness of crashes on tribal and rural roadways is a challenge to effective safety planning. However, the systemic approach to safety can help overcome this challenge.

The systemic approach to safety emphasizes the importance of crash type and infrastructure. Often, the analysis of crash type, such as head-on crashes or roadway departure crashes, reveals patterns that can be used to make effective safety improvements. In light of this fact, the systemic approach to safety prioritizes safety improvements based on high-risk roadway features that are correlated with particular crash types. While effective, systemic safety planning should complement site-specific analysis, which identifies opportunities for safety improvements at high-crash locations, or "hot spots."

The key benefit of systemic safety planning is that it increases the potential to reduce severe crashes utilizing low cost safety countermeasures. This is because systemic safety planning can help tribal entities prioritize limited safety funding and implement products with the highest benefit-cost ratio. Another advantage of the systemic approach is that it can help compensate for limited data, because it acknowledges that crash locations alone are not always sufficient to prioritize projects effectively. The systemic approach also demonstrates that proactive safety improvements are being made, which can help manage risk for tort liability.

There are several resources to support the implementation of the systemic approach to safety. FHWA's [Systemic Safety Project Selection Tool](#), for example, helps agencies apply this approach. The National Cooperative Highway Research Program Report 500 Series and the Highway Safety Manual offer excellent insight into this approach. Case studies on the use of systemic approach, such as the [TR News article](#) that highlights the Wind River Indian Reservation's work with the Wyoming LTAP Center, provide additional examples of the systemic approach in action. The [Manual on Uniform Traffic Control Devices](#) (MUTCD) and FHWA's [Crash](#)



[Modification Factors \(CMF\) Clearinghouse](#) also provide suggestions for effective safety countermeasures that can be applied systemically.

Road Safety Audits

A representative from the FHWA Resource Center presented an introduction to road safety audits (RSAs). An RSA is a formal safety performance examination of an existing or future road or intersection by an independent, multi-disciplinary RSA team. RSAs follow an 8-step process. To begin, the design team or project owner identifies projects and selects the independent RSA team. Together the project owner and RSA team hold a start-up meeting to set expectations for the RSA. Then, the RSA team performs field reviews, conducts analysis of key safety elements, and considers solutions that may help resolve safety issues. Next, the RSA team prepares a summary report and presents findings to the project owner. After the RSA team presents the report, the project owner then prepares a formal response. The project owner typically accepts or agrees to consider the suggestions from the RSA team and then incorporates the findings into safety actions.

Three common concerns with RSAs are time, cost, and liability. However, the RSA process is not necessarily lengthy, and tribes may be able to minimize the costs of RSA by working with partners. Furthermore, RSAs can actually reduce a tribe's liability by demonstrating that the tribe has proactively identified safety needs and made a plan to improve safety. Even if a tribe does not have the available funding to incorporate the recommendations from an RSA, developing a prioritized list of safety projects can be a useful defense in tort liability cases. Additional information on RSAs is available on the [FHWA Road Safety Audit Webpage](#).

Developing Safety Plans by Tribes

The FHWA TTP Tribal Coordinator presented an introduction to Strategic Highway Safety Plans (SHSP) and safety plans by tribes. Since SHSPs became a requirement for State DOTs there has been a significant reduction in crashes nationwide. Although SHSPs are not the only cause of this trend, safety plans can make major contributions to the reduction of fatalities and serious injuries on roadways. The two purposes of safety plans are to direct safety programs and to help agencies obtain funding for strategic safety improvements.

A safety plan is a document that communicates the story of transportation safety needs in a community and how a tribe will address these safety needs. Tribes can use TTPSF funding to support safety planning efforts, among other activities. In order to use TTPSF funding, tribal safety plans must meet several minimum requirements: they must be data-driven, they must involve coordination with stakeholders, they must be coordinated with the State SHSP, they must prioritize a list of strategies, and they must address multi-disciplinary safety issues.

FHWA's [Strategic Transportation Safety Plan Toolkit for Tribal Governments](#) offers several resources for tribes as they complete safety plans. The toolkit includes: a safety plan template; [a list of State DOT contacts](#) and potential data sources; a draft request for proposals (RFP) for consultant services to help complete a plan; a recorded webinar on tribal safety planning; and many other resources. The toolkit also presents the six-step strategic process for tribal safety planning: establish leadership; analyze safety data; determine emphasis areas; identify strategies; prioritize and incorporate strategies; and evaluate and update the plan. The safety plan template available on the toolkit website provides additional information on each step of this process, as well as tips for collecting data, conducting community surveys, selecting safety emphasis areas, identifying safety strategies, and implementing safety plans. In early 2015, FHWA will release a new [Tribal Transportation Planning Module](#) that will offer additional information on the process of developing safety plans for tribes.



Noteworthy Practices from Tribal Presentations

Representatives from several of the participating tribal entities offered brief overviews of their safety efforts, emphasizing challenges and best practices associated with road safety evaluations, safety plans by tribes, and behavioral safety. Examples of noteworthy practices highlighted by participants included:

- **The Cheyenne & Arapaho Tribes of Oklahoma** are two separate tribes in Oklahoma with a combined population of 12,000 residents. In recent years, the number of tribal members with valid drivers' licenses has decreased, as revealed by the small pool of eligible applicants for employment for roads and transit programs. In response to this issue, the tribes conducted research with the goal of determining why, how, and when tribal members lost their licenses. The tribes determined that high school-age drivers often lost their licenses due to impaired driving charges or other legal issues, and that some young drivers never obtained driver's licenses due to financial limitations. In recognition of this problem, the tribes set about identifying a solution that would expand the availability of licenses and help unlicensed drivers regain their ability to drive legally. To kick off this effort, the tribes organized the new "Safe Driver Program" in partnership with adult education programs, employment opportunity and training services programs, tribal youth programs, and other partners. The Safe Driver Program set a goal of increasing the number of legal drivers through strategies such as providing transportation to the Department of Motor Vehicles and hiring a driver's education instructor. Overall, the tribes aim to create a program that will help drivers safely regain their independence and expand access to employment opportunities for tribal members.
- **The Karuk Tribe**, located in Northern California, received a 2013 TTPSF planning grant for \$12,500. With this funding, and with the assistance of FHWA, the Karuk Tribe drafted an RFP to identify a consultant to help develop the Karuk Tribe Transportation Safety Study. The mission of the Karuk Tribal Transportation Safety Study was to provide safer conditions for motorists, bicyclists, and pedestrians traveling in the vicinity of Tribal lands. The safety study sought to address key safety issues on the reservation, including speeding, landslides, flooding, and unsafe conditions for motorists, bicyclists, and pedestrians. As part of the safety study, the Tribe conducted a survey of tribal members' safety concerns, which included potholes, road conditions, reckless driving, bicycle and pedestrian facilities, speeding, and warning signs. To resolve the safety issues identified through the surveys and through data analysis, the Karuk Tribe selected emphasis areas and prioritized specific safety projects. Finally, the Tribe developed a detailed matrix for each emphasis area and priority project. The matrix identifies strategies, outputs, responsible parties, completion dates, performance measures, and a monitoring/evaluation plan for each emphasis area. Using information from the safety study, the Karuk Tribe was able to apply for additional funding from the TTPSF to help implement the safety projects identified in the plan.
- **The La Jolla Band of Luiseño Indians** in Southern California is a small tribe that has developed a number of transportation plans, including: a Reservation Community Master Plan, a Tribal Transportation Safety Plan, and an Active Transportation Plan. As part of these various plans, the La Jolla Tribe has conducted several roadway assessments, including an active transportation assessment and a [Healthy Communities](#) assessment. For the active transportation assessment, the Tribe partnered with the San Diego Association of Governments (SANDAG) to distribute community surveys and interview first responders regarding active transportation and pedestrian concerns. To support these planning efforts, the La Jolla Tribe conducted an RSA in conjunction with a number of partner agencies. The Tribe incorporated the findings of the RSA into the La Jolla Strategic Transportation Safety Plan 2014. The safety plan allowed the Tribe to compete successfully for funding from a variety of sources, including: the State of California State Transportation Agency (CalSTA) Active Transportation Program, through which the Tribe was awarded \$4.1 million for the installation of bike corrals, new signage, bus stops, and walking paths. As a result of these planning and assessment efforts, the Tribe has learned that strong, quantitative assessments can help tribes vie for competitive grant funding, and that communicating with tribal law enforcement and community members is an effective way to gather information to prepare assessments.
- **The Muscogee (Creek) Nation**, like many tribal entities in Oklahoma, has unique safety needs and a distinctive tribal safety plan. Prior to completing the plan, the Muscogee Creek Nation's primary safety concerns were school zone safety for pedestrians and natural disaster response routes. Cross Timbers Consulting assisted with safety planning efforts for the Muscogee Nation, as well as five other tribal entities in Oklahoma: the Citizen Potawatomi Nation, the Otoe-Missouria Tribe,



the Osage Nation, the Eastern Shawnee Tribe of Oklahoma, and the Miami Tribe of Oklahoma. Each of these six safety plans ([available on the Southern Plains TTAP website](#)) reflects the unique values and resources of each individual tribe, even as they work toward a common goal of eliminating deaths on tribal roads.

- **The Navajo Nation** Division of Transportation's Department of Highway Safety is preparing a safety plan with a strong emphasis on communications and outreach. The safety plan will draw upon data and information from the Navajo TTIP, the Indian Health Service (IHS), the [Web-based Injury Statistics Query and Reporting System \(WISQARS\)](#), State TIPs, previous RSAs, and FARS. Through analysis of these data, the Division of Transportation was able to identify corridors with high levels of animal-vehicle collisions and develop strategies for preventing animals from entering the roadway. The Navajo Nation is also undertaking a GIS safety data integration pilot project in which the Arizona Department of Transportation and the Navajo Nation are working together to integrate GIS layers and crash data for use in future RSAs on the Navajo Nation. After the GIS safety data pilot is complete, the Navajo Division of Transportation is planning to apply the systemic approach to safety throughout the Navajo Nation Roadway System.



Figure 1: Meeting participants heard a series of presentations from tribal entities and identified a number of best practices. (Photo courtesy of Eastern TTAP at Michigan Tech)

- **The Pawnee Nation of Oklahoma** Department of Transportation and Safety (PNDOTS) strives to maintain the safety and integrity of roadways and bridges, while continuing to plan and progress the growth of the Pawnee Nation. One of the Tribe's most significant safety issues in recent years was the need to provide safe pedestrian access from a large housing authority to the tribal complex. In order to improve conditions for pedestrians, the Tribe constructed a pedestrian bridge and began the construction of a safer pedestrian walkway into the tribal complex. In addition to these pedestrian safety concerns, the PNDOTS recently conducted an RSA with the help of the Southern Plains TTAP Center. In 2013, the Pawnee Nation also applied for and received a TTPSF grant to develop the [Pawnee Nation Transportation Safety Management Plan](#). With support from the Southern Plains TTAP Center, the PNDOTS held a community safety workshop in February 2014 that identified three key safety issues for the Tribe. Specifically, the workshop identified sight distance issues within a school zone, the need for new emergency response communications equipment, and the need for a safer railroad crossing.



Noteworthy Practices from Roundtable Discussions and Breakout Groups

The presentations from the tribal entities were followed by a series of facilitated roundtable discussions on topics such as safety data, bicycle and pedestrian safety, project selection and implementation, and funding safety projects. A brief summary of noteworthy practices and resources identified during these discussions is provided below.

Safety Data

- **The Guide for Effective Tribal Crash Reporting:** This [recently-released resource](#) from the Transportation Research Board (TRB) can help tribes conduct self-assessments for improving data. The goal of this resource is to present the state of the practice for tribal crash reporting, suggest next steps for improvements, and offer information on available resources from the Federal government.
- **Partnering with EMS:** The Karuk Tribe offered a best practice example of partnering with EMS providers to fill in gaps in data. Specifically, the Karuk Tribe worked with local medical and fire departments to collect data on crashes and crash response. These EMS services shared incident reports that revealed information on crashes, which the Karuk Tribe was able to use to map and categorize by crash type. This data facilitated the development of the Tribe's safety plan.
- **Working with Tribal Police:** The Navajo Nation provided an example of partnership with tribal law enforcement agencies. Specifically, the Navajo Division of Transportation worked with the police to extract data from crash reports that revealed crash characteristics such as cause, severity, driving direction, age, and roadway ownership. The Navajo Division of Transportation was able to pull this information into a spreadsheet and integrate the data into GIS to create a map of crash locations. The Navajo Nation is also working to integrate geospatial crash data from EMS providers, State DOTs, and local governments in order to implement the systemic approach to safety on tribal roads.
- **Partnering with State DOTs:** The Inter Tribal Council of Arizona is working with the Arizona Department of Transportation to obtain information that tribal law enforcement agencies can use to supplement existing data. The Inter Tribal Council is also helping small- and medium-sized tribes to develop crash data monitoring systems.
- **Collecting Information through Community Meetings:** The Alaska TTAP Center explained that safety plans in Alaska often rely on information collected through community meetings. While there may be data available on State-owned roads in tribal areas, tribes sometimes use stakeholder meetings to gather supplemental information on tribally-owned roads. These stakeholders include local and regional transportation officials, medical officials, public safety staff, and the general public. One way to collect information from these stakeholders is to provide them with a map of tribal roads and ask them to place stickers on locations where there have been crashes or close calls.
- **Traffic Records Coordinating Committees:** The Inter Tribal Council of Arizona is active in Arizona's Traffic Records Coordinating Committee (TRCC). Through its involvement in the TRCC, the Inter Tribal Council is aware that funding is available from the National Highway Traffic Safety Administration (NHTSA) for data improvement activities. Although many tribal and local governments may not have the servers and other technology necessary to make crash data improvements, software may be available through a State's TRCC that can support these improvements.
- **Data on Fatal Crashes:** All State DOTs are required to submit data on fatal crashes to NHTSA's Fatal Accident Reporting System (FARS). However, this database may not include data for all fatalities on tribal lands, particularly in cases where BIA or tribal law enforcement agencies do not report fatalities to the State DOTs. One way for tribes to use FARS data is through the website "SafetyRoadMaps.org," which allows users to sort through five years of FARS data. The Centers for Disease Control and Prevention (CDC) also provides another useful tool – WISQARS – that allows users to analyze death certificate data according to characteristics such as cause, age, and ethnicity.



- **BIA Indian Highway Safety Program (IHSP):** As a focal point for highway safety issues in Indian country, the IHSP provides services to all Federally-recognized tribes. The IHSP provides leadership by developing, promoting, and coordinating programs that influence tribal and public awareness of all highway safety issues. Tribes can submit applications for IHSP funding to support safety efforts. Tribes are encouraged to use crash data, citation data, and other data sources to help identify the problems they would like to address. This program also offers grant funding to support data collection improvement efforts.
- **California Statewide Integrated Traffic Records System:** Several tribes noted the possibility of using the California Statewide Integrated Traffic Records System (SWITRS) to access crash data and other valuable information. However, some tribes expressed concern that tribal law enforcement agencies are unable to input crash data into SWITRS, and that the system may not be accessible to all tribes.

Bicycle and Pedestrian Safety

- **Wild Animals:** Some tribes in rural areas face unique pedestrian safety issues related to wild dogs, reptiles, and other animals. To prevent animal attacks on pedestrians, tribes such as the La Jolla Tribe undertake trail grooming activities. While off-road trails are not traditionally considered the responsibility of transportation officials, many tribes now consider trails to be part of their multimodal transportation networks.
- **Effective Safety Countermeasures:** Several tribes offered information on the successful safety countermeasures they have applied. The Pueblo of Laguna, for example, recommended the use of “road diets” to narrow or eliminate driving lanes in order to accommodate bike lanes or areas for pedestrians to walk. Other tribes, such as the Karuk Tribe, have improved safety by installing temporary speed bumps in areas where frequent speeding endangered pedestrians or installing bright LED lamps on roads with nighttime foot traffic. Some tribes have improved safety conditions by installing low-cost signage, including signs made and installed by tribal members themselves. Other successful countermeasures include roundabouts, traffic-calming chicanes, and speed bumps. FHWA’s [Proven Safety Countermeasures](#) provides additional information on several of these countermeasures. The FHWA brochure [Roundabouts and Tribal Governments](#) offers additional information on the use of roundabouts to improve safety on tribally-owned roads.
- **Rectangular Rapid Flash Beacons (RRFBs):** In areas where there are pedestrian crossing safety issues, RRFBs can be a good option for improving safety conditions without necessarily adjusting the speed limit of a road. Unlike regular traffic signals, which require cars to come to full stop and require constant lighting, RRFBs alert drivers to pedestrians without the need for a lighted intersection. RRFBs are supported by highway safety research and are MUTCD-approved.
- **Low-Cost Solutions for Bicycle and Pedestrian Safety:** Several tribes described low-cost options for making roads safer for cyclists, pedestrians, and ATVs. One tribe, for example, had considered hosting “bike rodeos” to educate children about the importance of wearing helmets and safely sharing the road with cars. Another tribe purchased and distributed high-visibility safety vests for pedestrians.
- **Gathering Information on Bicycle and Pedestrian Safety:** The La Jolla Tribe conducted an assessment of community members’ impressions of pedestrian safety along tribal roads. The Tribe generated strong involvement in the assessment by hosting a community meeting on the topic. The Tribe also applies social media and other outreach campaigns to generate additional interest in bicycle and pedestrian safety.

Project Selection and Implementation

- **Timeframe for Project Implementation:** When selecting projects, tribes should consider what improvements can be accomplished quickly and expeditiously. Paying close attention to timeframes (including timeframes for the environmental review process) can maximize a DOT’s efficiency by maintaining a constant work flow and keeping construction staff busy.



- **Low-Cost Safety Improvements:** Prioritizing low-cost, shovel-ready projects helps produce short-term success stories that can garner support for future undertakings. In the context of limited funding, attainable low-cost safety projects, such as striping and signage improvements, can offer tribes the best “bang for their buck.”
- **Financial Management:** One tribe asked whether the use of force accounts leads to payment disputes with contractors. Some meeting participants responded that tribal DOTs should avoid force accounts and carefully forecast contractor costs instead. Another meeting participant suggested that tribes consider long-term needs for materials and labor when making purchases or releasing RFPs. Purchasing a rock crushing machine, for example, may be more cost effective in the long term than buying small loads of gravel.
- **Implementing RSA Recommendations:** Several participants noted that RSAs can help tribes identify and compete for available safety funding by documenting the need for specific safety improvements.
- **Project Selection Criteria:** Meeting participants discussed which criteria to use for project selection and how to determine appropriate weights for each criteria. Participants agreed that fatalities are one way to rank candidate projects, but also indicated that choosing between sites with similar fatality rates or numbers is a challenging decision. The use of benefit-cost analysis or traffic volume as selection criteria can help overcome this challenge.

Developing Safety Partnerships

- **Role of Interagency Partnerships in Implementing Successful Projects:** Coordination between tribal, city, county, and state governments is essential for implementing successful projects. In one example from the Creek Nation of Oklahoma, individuals from the Tribe, the city, and the Oklahoma Department of Transportation worked together through a memorandum of understanding to rehabilitate a bridge and create a safer pedestrian crossing.
- **Reducing Project Costs through Partnerships:** Partnering with other government agencies can help tribes reduce the costs of safety projects. In one example, the Navajo Nation was able to partner with BIA and the Arizona Department of Transportation to conduct a very inexpensive striping project using paint from BIA, painting equipment from the Arizona Department of Transportation, and labor from the Navajo Division of Transportation. The Navajo Nation identified this striping project as a low-cost opportunity for safety improvements through an RSA that involved these partner agencies.
- **Working with the State Historic Preservation Office (SHPO):** In addition to State DOTs, tribes often need to coordinate with the SHPO regarding cultural resources that may be affected by highway projects. The Laguna Pueblo in New Mexico, for example, was awarded safety funding to redesign an intersection on historic Route 66 as a roundabout with pedestrian walkways. Although the SHPO was initially concerned about alterations to the historic route, the Pueblo was able to negotiate with the SHPO and develop ideas for artwork and signage enhancements that will satisfy the SHPO’s preservation needs.
- **Complex Land and Roadway Ownership:** Identifying the owners of particular roadways can be challenging in Indian country, particularly in Alaska, where most tribes do not own land or facilities and where there is considerable amounts of conservation land. In Alaska, the Bristol Bay Native Association has developed a map to determine land ownership in preparation of its integrated regional safety plan. The Bristol Bay Native Association has also organized regional forums with participation from various stakeholders to coordinate transportation safety issues.
- **Valuable Partnerships:** In addition to State DOTs, MPOs, RPOs, and Federal agencies, several tribal participants noted the benefits of working with other agencies and groups, including youth programs, school groups, fish and game agencies, bicycle advocacy groups, child epidemiology programs, Indian Child Welfare, the Drug and Alcohol Resistance Education (DARE) program, domestic violence programs, local emergency planning committees, and university transportation centers (UTCs).



Funding Safety Projects

- **TTPSF Funding Criteria:** The funding criteria for TTPSF grant funding is modeled in part after HSIP funding requirements. Specifically, eligible projects must be data-driven, connect to safety plans, follow a comprehensive approach, apply to roads owned by the tribe (engineering funding only), and must involve engineering safety study (engineering only). Additionally, the availability of matching funds is also considered.
- **Competing for TTPSF Funding:** Each year FHWA receives more requests for TTPSF funding than it is able to disburse to tribes. In order to compete effectively for limited funding, FHWA recommends that tribes submit data-driven applications, as those are generally selected ahead of applications that are not supported by data. FHWA also recommends that unsuccessful TTPSF applicants request a debrief meeting to discuss strategies for making unfunded applications more competitive in future TTPSF funding cycles.
- **HSIP Funding:** HSIP is a core Federal-aid program with the goal of reducing fatalities and serious injuries on all public roads. HSIP is Federally-funded, but State-administered. HSIP-funded projects must connect to a data-driven SHSP. While HSIP funds usually support engineering projects, they can apply to activities from all of the “4 Es” of safety, as well as data improvement projects.
- **IHSP Funding:** This NHTSA-funded program offers grant funding to support behavioral safety improvements, including work with law enforcement agencies. IHSP funding may be less competitive than other sources of funding, as the program typically does not expend all of its available funding.
- **Other Available Funding Sources:** In addition to the funding sources listed above, tribes may also apply for [Transportation Investments Generating Economic Recovery \(TIGER\) Discretionary Grant Program](#). Each round of TIGER funding presents a large, but very competitive, pool of funding that tribes may be eligible to apply for. The criteria for TIGER grants vary from year to year. Tribes may also apply for state safety grant funds, although the availability of this funding varies from state to state. Additionally, an independent Federal agency known as the [Denali Commission](#) may also provide funding for transportation projects to tribal entities in Alaska.



Developing Safety Plans

The following table summarizes the result of facilitated breakout discussions on the challenges to effective tribal safety planning and strategies for overcoming these challenges.

Challenge	Strategy
Securing support from the tribal council can be challenging for many tribes.	Tribal council support and buy-in is essential to a successful safety plan. Engaging the tribal council early in the process of developing a safety plan can help secure this support.
Meetings with partner agencies can be difficult to arrange and coordinate.	Some tribes have hired third-party facilitators to help coordinate meetings with stakeholders and to establish strong government-to-government dialogues.
Including drug testing in a safety plan can result in resistance to the safety plan due to sensitivities about drug use.	If a tribe would like to begin requiring drug testing for transit operators or highway maintenance staff, one option is to require workers to obtain a Class A or B license, which requires drug testing in most states.
Many tribes would like to use safety plans to improve EMS response time in remote areas.	Some tribes have included emergency response times as an emphasis area in their safety plans, and have implemented strategies such as numbering homes, naming streets, and purchasing new communications equipment for EMS responders.
When developing safety plans, some tribes struggle to communicate information with tribal members living in remote areas.	While social media can help engage tribal members with access to technology, many tribes have found that door-to-door surveys produce the strongest response from the community. Other options for outreach include after-school programs, radio broadcasts, and posting information in a central location.
Some tribes simply do not know where to begin work on a new safety plan.	Many resources and templates exist to help tribes get started with safety planning. One way to make safety plan development less burdensome is to leverage existing safety plans by collaborating with State DOTs and other partner agencies. TTAP Centers also serve as a valuable resource for tribes getting started with safety plans.
In some areas, challenging relationships between tribal, local, and state governments can hinder progress on safety plans.	Safety planning often helps improve collaboration between agencies by making state and local governments more aware of tribal safety issues. If necessary, FHWA can help facilitate this cooperation by ensuring that states are meeting their tribal consultation requirements.
Changing safety conditions can make it challenging for safety plans to remain current.	Tribes should view the safety plan as a living document that tribes can update and adapt to meet the changing safety needs.



Action Plan Highlights

At the end of the event, peer exchange participants met in small groups to discuss strategies for improving road safety at all levels of government. The groups discussed potential action items based on lessons learned during the peer event. Key actions included:

- Tribes
 - Holding meetings to set goals for tribal transportation safety;
 - Assessing tribal safety needs through stakeholder engagement;
 - Replicating noteworthy practice examples highlighted at this peer exchange, such as the Safe Driver Program at the Cheyenne & Arapaho Tribes of Oklahoma;
 - Exploring new partnerships with MPOs, RPOs, counties, resource agencies, and other government entities;
 - Using safety plans to compete for safety grant funding; and
 - Conducting RSAs in order to identify candidate projects on tribal roads.
 - Referring to websites such as TribalSafety.org for tips and resources to support safety planning.
- State DOTs and State Tribal Liaisons
 - Emphasizing the importance of safety plans and convincing tribes to prioritize safety planning;
 - Providing tribes with technical assistance to support strong safety plans;
 - Encouraging tribes to apply for TTPSF, HSIP, and IHSP funding;
 - Connecting tribes to existing resources such as FHWA's Strategic Transportation Safety Plan Toolkit;
 - Helping tribes overcome staff limitations; and
 - Expanding tribal participation in the SHSP and other statewide plans.
- FHWA and BIA
 - Organizing regional peer exchanges focused on road safety for tribal governments;
 - Implementing train-the-trainer sessions for tribal safety planners;
 - Engaging FHWA tribal liaisons in tribal safety planning efforts;
 - Developing a glossary of key concepts in tribal road safety;
 - Reinitiating the Tribal Safety Program Steering Committee;
 - Strengthening the relationship between BIA Division of Transportation and the FHWA Federal Lands Highway Tribal Transportation Program;
 - Conduct a follow-up meeting in 1-2 years to monitor the outcomes of this peer event.
- LTAP/TTAP Centers
 - Expand coordination between tribes and LTAP Centers, particularly regarding training opportunities;
 - Distributing a survey to tribes to gather information about tribal training needs;
 - Creating a clearinghouse of tribal safety resource documents and best practice examples.

FHWA-SA-16-066



Appendix A: Event Registrants

Road Safety Peer Exchange for Tribal Governments			
Attendees	Employer	Phone Number	Email Address
Julianne Baltar	Bristol Bay Native Association	907-842-6219	jbaltar@bbna.com
Richard Bird	Standing Rock Sioux Tribe	701-854-8607	rbird@standingrock.org
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Pamela Journey	Cross Timbers Consulting, LLC	405-255-6999	pamela.journey@crosstimbersconsulting.com



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Appendix B: Agenda

REGION 2 - ROAD SAFETY PEER EXCHANGE FOR TRIBAL GOVERNMENTS AGENDA

Albuquerque, NM

December 9-10, 2014

DAY 1

8:00 – 8:30	Welcoming Remarks – <i>John Don Martinez, Division Administrator, Federal Highway Administration</i> <i>Tom Church, Cabinet Secretary, New Mexico Department of Transportation</i>
	Workshop Overview
8:30 – 9:00	Participant Introductions
9:00 – 10:00	Presentations Tribal Transportation Program Overview (MAP 21) – <i>Adam Larsen, FHWA</i> RIFDS Road Inventory Data – <i>Sheldon Kipp, Bureau of Indian Affairs</i> TTAP Center Safety Performance – <i>Fawn Thompson, FHWA</i>
10:00 – 10:15	BREAK
10:15 – 11:00	Safety Data Presentations Systemic Approach – <i>Jim Allen, FHWA Resource Center</i>
11:00 – 12:00PM	Roundtable Discussion – Safety Data Discussion of Safety Data Needs/Challenges
12:00 – 1:00	LUNCH
1:00 – 1:30	Roundtable Discussion – Pedestrian Safety Identifying and addressing pedestrian safety issues on tribal roadways
1:30 – 2:30	Road Safety Evaluations Road Safety Audit Overview – <i>Jim Allen, FHWA Resource Center</i> Costs and Benefits of Road Safety Audits, Pedestrian Road Safety Audits – <i>Adam Geisler, La Jolla Tribe</i> Developing Safety Projects from Road Safety Audits – <i>Garren Burbank, Navajo Nation</i>
2:30 – 2:45	BREAK
2:45 – 3:45	Safety Plans by Tribes Presentations - Development NTTC Safety Plan Development – <i>Adam Larsen, FHWA</i> Safety Plan Development – <i>Sandi Tripp, Karuk Tribe, Happy Camp, CA</i> Safety Plan Development – <i>Pamela Journey, Cross Timbers Consulting LLC</i>
3:45 – 4:45	Break Out Session – Tribal Safety Plans Groups will discuss challenges and successes in tribal road safety plans.
4:45 – 5:00	Report Back
5:00PM	Adjourn



DAY 2

8:00 – 8:30AM	Recap of DAY 1
8:30 – 9:30	Safety Plans by Tribes – Implementation Integration of Safety Plans by Tribes – <i>Kimberly Johnston Dodd, Caltrans</i> Safety Plan Implementation – <i>Chris McCray, Pawnee Nation of Oklahoma</i>
9:30 – 10:00	Roundtable Discussion – Project Selection & Implementation Discuss practices of project selection and the implementation of safety plans. How are safety plans/projects being aligned with State SHSPs?
10:00 – 10:15	BREAK
10:15 – 11:15	Breakout Groups – Developing Safety Partnerships Who needs to be engaged? Why? Strategies to get partners involved and maintain their interest
11:15 – 11:45	Report Back
11:45 – 12:45	LUNCH
12:45 – 1:15	Roundtable Discussion – Funding Safety Projects Raising Awareness and Addressing Barriers to Funding Challenges in allocating HSIP funds for Tribal Roads
1:15 – 2:15	Presentations – Addressing Behavioral Safety Indian Highway Safety Programs – <i>Lou Robertson, Bureau of Indian Affairs</i> Safe Driver Program – <i>Angela Blind, Cheyenne & Arapaho Tribes of Oklahoma</i>
2:15 – 2:30	BREAK
2:30 – 3:30	Break Out Groups – Key Takeaways/Action Items Groups will discuss key takeaways and action items based on lessons learned during the workshop
3:30 – 4:00	Report Back
4:00PM	Wrap Up (Next Steps), Adjourn