



THE SECRETARY OF TRANSPORTATION  
WASHINGTON, DC 20590

January 22, 2018

The Honorable John Barrasso  
Chairman, Committee on Environment  
and Public Works  
United States Senate  
Washington, DC 20510

Dear Mr. Chairman:

Enclosed is the 2017 report on the Options for Improving Transportation Safety in Tribal Areas, in accordance with Section 1117(c) of the Fixing America's Surface Transportation (FAST) Act.

As Congress acknowledged in the FAST Act, the Native American population is disproportionately represented in transportation-related fatalities and crash statistics in many States. The report summarizes a list of transportation safety strategies that can be implemented to reduce transportation-related fatalities and injuries in Tribal areas. This report was developed by the Federal Highway Administration employees after conducting a study that involved analysis of existing safety data, extensive coordination with a committee of Federal agencies and Tribes, and development of a National Tribal Transportation Safety Plan. Increased implementation of transportation safety strategies would save lives and reduce injuries.

Similar letters have been sent to the Ranking Member of the Senate Committee on Environment and Public Works; the Chairman and Ranking Member of the Senate Committee on Indian Affairs; the Chairman and Ranking Member of the House Committee on Transportation and Infrastructure; and the Chairman and Ranking Member of the House Committee on Natural Resources.

Sincerely,

A handwritten signature in blue ink that reads "Elaine L. Chao".

Elaine L. Chao

Enclosure



THE SECRETARY OF TRANSPORTATION  
WASHINGTON, DC 20590

January 22, 2018

The Honorable Thomas R. Carper  
Ranking Member, Committee on Environment  
and Public Works  
United States Senate  
Washington, DC 20510

Dear Senator Carper:

Enclosed is the 2017 report on the Options for Improving Transportation Safety in Tribal Areas, in accordance with Section 1117(c) of the Fixing America's Surface Transportation (FAST) Act.

As Congress acknowledged in the FAST Act, the Native American population is disproportionately represented in transportation-related fatalities and crash statistics in many States. The report summarizes a list of transportation safety strategies that can be implemented to reduce transportation-related fatalities and injuries in Tribal areas. This report was developed by the Federal Highway Administration employees after conducting a study that involved analysis of existing safety data, extensive coordination with a committee of Federal agencies and Tribes, and development of a National Tribal Transportation Safety Plan. Increased implementation of transportation safety strategies would save lives and reduce injuries.

Similar letters have been sent to the Chairman of the Senate Committee on Environment and Public Works; the Chairman and Ranking Member of the Senate Committee on Indian Affairs; the Chairman and Ranking Member of the House Committee on Transportation and Infrastructure; and the Chairman and Ranking Member of the House Committee on Natural Resources.

Sincerely,

A handwritten signature in blue ink that reads "Elaine L. Chao".

Elaine L. Chao

Enclosure



THE SECRETARY OF TRANSPORTATION  
WASHINGTON, DC 20590

January 22, 2018

The Honorable John Hoeven  
Chairman, Committee on Indian Affairs  
United States Senate  
Washington, DC 20510

Dear Mr. Chairman:

Enclosed is the 2017 report on the Options for Improving Transportation Safety in Tribal Areas, in accordance with Section 1117(c) of the Fixing America's Surface Transportation (FAST) Act.

As Congress acknowledged in the FAST Act, the Native American population is disproportionately represented in transportation-related fatalities and crash statistics in many States. The report summarizes a list of transportation safety strategies that can be implemented to reduce transportation-related fatalities and injuries in Tribal areas. This report was developed by the Federal Highway Administration employees after conducting a study that involved analysis of existing safety data, extensive coordination with a committee of Federal agencies and Tribes, and development of a National Tribal Transportation Safety Plan. Increased implementation of transportation safety strategies would save lives and reduce injuries.

Similar letters have been sent to the Ranking Member of the Senate Committee on Indian Affairs; the Chairman and Ranking Member of the House Committee on Transportation and Infrastructure; the Chairman and Ranking Member of the House Committee on Natural Resources; and the Chairman and Ranking Member of the Senate Committee on Environment and Public Works.

Sincerely,

A handwritten signature in blue ink that reads "Elaine L. Chao".

Elaine L. Chao

Enclosure



THE SECRETARY OF TRANSPORTATION  
WASHINGTON, DC 20590

January 22, 2018

The Honorable Thomas S. Udall  
Ranking Member, Committee on Indian Affairs  
United States Senate  
Washington, DC 20510

Dear Senator Udall:

Enclosed is the 2017 report on the Options for Improving Transportation Safety in Tribal Areas, in accordance with Section 1117(c) of the Fixing America's Surface Transportation (FAST) Act.

As Congress acknowledged in the FAST Act, the Native American population is disproportionately represented in transportation-related fatalities and crash statistics in many States. The report summarizes a list of transportation safety strategies that can be implemented to reduce transportation-related fatalities and injuries in Tribal areas. This report was developed by the Federal Highway Administration employees after conducting a study that involved analysis of existing safety data, extensive coordination with a committee of Federal agencies and Tribes, and development of a National Tribal Transportation Safety Plan. Increased implementation of transportation safety strategies would save lives and reduce injuries.

Similar letters have been sent to the Chairman of the Senate Committee on Indian Affairs; the Chairman and Ranking Member of the House Committee on Transportation and Infrastructure; the Chairman and Ranking Member of the House Committee on Natural Resources; and the Chairman and Ranking Member of the Senate Committee on Environment and Public Works.

Sincerely,

A handwritten signature in blue ink, reading "Elaine L. Chao", is positioned below the word "Sincerely,".

Elaine L. Chao

Enclosure



THE SECRETARY OF TRANSPORTATION  
WASHINGTON, DC 20590

January 22, 2018

The Honorable Bill Shuster  
Chairman, Committee on Transportation  
and Infrastructure  
U.S. House of Representatives  
Washington, DC 20515

Dear Mr. Chairman:

Enclosed is the 2017 report on the Options for Improving Transportation Safety in Tribal Areas, in accordance with Section 1117(c) of the Fixing America's Surface Transportation (FAST) Act.

As Congress acknowledged in the FAST Act, the Native American population is disproportionately represented in transportation-related fatalities and crash statistics in many States. The report summarizes a list of transportation safety strategies that can be implemented to reduce transportation-related fatalities and injuries in Tribal areas. This report was developed by the Federal Highway Administration employees after conducting a study that involved analysis of existing safety data, extensive coordination with a committee of Federal agencies and Tribes, and development of a National Tribal Transportation Safety Plan. Increased implementation of transportation safety strategies would save lives and reduce injuries.

Similar letters have been sent to the Ranking Member of the House Committee on Transportation and Infrastructure; the Chairman and Ranking Member of the House Committee on Natural Resources; the Chairman and Ranking Member of the Senate Committee on Environment and Public Works; and the Chairman and Ranking Member of the Senate Committee on Indian Affairs.

Sincerely,

A handwritten signature in blue ink, reading "Elaine L. Chao", is positioned above the typed name.

Elaine L. Chao

Enclosure



THE SECRETARY OF TRANSPORTATION  
WASHINGTON, DC 20590

January 22, 2018

The Honorable Peter A. DeFazio  
Ranking Member, Committee on Transportation  
and Infrastructure  
U.S. House of Representatives  
Washington, DC 20515

Dear Congressman DeFazio:

Enclosed is the 2017 report on the Options for Improving Transportation Safety in Tribal Areas, in accordance with Section 1117(c) of the Fixing America's Surface Transportation (FAST) Act.

As Congress acknowledged in the FAST Act, the Native American population is disproportionately represented in transportation-related fatalities and crash statistics in many States. The report summarizes a list of transportation safety strategies that can be implemented to reduce transportation-related fatalities and injuries in Tribal areas. This report was developed by the Federal Highway Administration employees after conducting a study that involved analysis of existing safety data, extensive coordination with a committee of Federal agencies and Tribes, and development of a National Tribal Transportation Safety Plan. Increased implementation of transportation safety strategies would save lives and reduce injuries.

Similar letters have been sent to the Chairman of the House Committee on Transportation and Infrastructure; the Chairman and Ranking Member of the House Committee on Natural Resources; the Chairman and Ranking Member of the Senate Committee on Environment and Public Works; and the Chairman and Ranking Member of the Senate Committee on Indian Affairs.

Sincerely,

A handwritten signature in blue ink, reading "Elaine L. Chao", is positioned below the "Sincerely," text.

Elaine L. Chao

Enclosure



THE SECRETARY OF TRANSPORTATION  
WASHINGTON, DC 20590

January 22, 2018

The Honorable Rob Bishop  
Chairman, Committee on Natural Resources  
U.S. House of Representatives  
Washington, DC 20515

Dear Mr. Chairman:

Enclosed is the 2017 report on the Options for Improving Transportation Safety in Tribal Areas, in accordance with Section 1117(c) of the Fixing America's Surface Transportation (FAST) Act.

As Congress acknowledged in the FAST Act, the Native American population is disproportionately represented in transportation-related fatalities and crash statistics in many States. The report summarizes a list of transportation safety strategies that can be implemented to reduce transportation-related fatalities and injuries in Tribal areas. This report was developed by the Federal Highway Administration employees after conducting a study that involved analysis of existing safety data, extensive coordination with a committee of Federal agencies and Tribes, and development of a National Tribal Transportation Safety Plan. Increased implementation of transportation safety strategies would save lives and reduce injuries.

Similar letters have been sent to the Ranking Member of the House Committee on Natural Resources; the Chairman and Ranking Member of the Senate Committee on Environment and Public Works; the Chairman and Ranking Member of the Senate Committee on Indian Affairs; and the Chairman and Ranking Member of the House Committee on Transportation and Infrastructure.

Sincerely,

A handwritten signature in blue ink that reads "Elaine L. Chao".

Elaine L. Chao

Enclosure



THE SECRETARY OF TRANSPORTATION  
WASHINGTON, DC 20590

January 22, 2018

The Honorable Raúl Grijalva  
Ranking Member, Committee on Natural Resources  
U.S. House of Representatives  
Washington, DC 20515

Dear Congressman Grijalva:

Enclosed is the 2017 report on the Options for Improving Transportation Safety in Tribal Areas, in accordance with Section 1117(c) of the Fixing America's Surface Transportation (FAST) Act.

As Congress acknowledged in the FAST Act, the Native American population is disproportionately represented in transportation-related fatalities and crash statistics in many States. The report summarizes a list of transportation safety strategies that can be implemented to reduce transportation-related fatalities and injuries in Tribal areas. This report was developed by the Federal Highway Administration employees after conducting a study that involved analysis of existing safety data, extensive coordination with a committee of Federal agencies and Tribes, and development of a National Tribal Transportation Safety Plan. Increased implementation of transportation safety strategies would save lives and reduce injuries.

Similar letters have been sent to the Chairman of the House Committee on Natural Resources; the Chairman and Ranking Member of the Senate Committee on Environment and Public Works; the Chairman and Ranking Member of the Senate Committee on Indian Affairs; and the Chairman and Ranking Member of the House Committee on Transportation and Infrastructure.

Sincerely,

A handwritten signature in blue ink that reads "Elaine L. Chao".

Elaine L. Chao

Enclosure



**REPORT TO CONGRESS**  
**OPTIONS FOR IMPROVING TRANSPORTATION**  
**SAFETY IN TRIBAL AREAS**

U.S. Department of Transportation  
Federal Highway Administration

## EXECUTIVE SUMMARY

Transportation safety issues have long plagued Native American and Alaska Native populations. Motor vehicle crash statistics describe fatality rates that are higher among the Native American and Alaska Native populations than other ethnic groups in many States. Motor vehicle crashes are among the leading causes of death for Native Americans and Alaska Natives. An annual average of at least 535 Native American and Alaska Native fatalities are due to motor vehicle-related crashes. Additional transportation-related deaths are known to occur that are not captured in the available databases.

Data from the Fatality Analysis Reporting System (FARS) showed 3,278 available fatality reports in Tribal areas from 2010-2014. The Tribal Transportation Safety Management System Steering Committee used this and other data to develop a National Tribal Transportation Strategic Safety Plan. The plan describes national data trends and options for addressing each topic. Tribes are strongly encouraged to conduct a similar analysis and customize a transportation safety plan that describes safety topics most applicable to the Tribe.

This report summarizes the topics addressed in the safety plan and provides a list of options for improving transportation safety, as required by the United States Congress in Section 1117(c) of the Fixing America's Surface Transportation (FAST) Act. The topics covered in this report are separated into two categories, priority topics and additional topics. Priority topics are those which data indicates are national-level issues or which help establish data driven decision-making frameworks. Additional topics may be emerging issues or may be identified by a Tribe through analysis of incident history.

The priority topics are:

- Transportation Safety Decision Making Process;
- Crash Data Collection, Sharing, and Analysis;
- Occupant Protection, Child Passenger Seats, and Helmets;
- Roadway Departure;
- Impaired Driving;
- Pedestrians; and
- Availability of Public Safety Services.

The additional topics are: speeding, driver distraction, intersection safety, younger and older drivers, off-road transportation safety, animal-vehicle crashes, and other topics identified through analysis of a Tribe's incident history.

Finally, this report suggests general options for Federal agencies to improve transportation safety in Tribal areas.

# Table of Contents

1. Introduction	1
2. Methodology	1
3. Options for Improving Transportation Safety in Tribal Areas	3
3.1 Safety Leadership and Planning Strategies	3
3.2 Occupant Protection Strategies	4
3.3 Roadway Departure Strategies	4
3.4 Impaired Driving Strategies	5
3.5 Pedestrian Strategies	6
3.6 Availability of Public Safety Services	6
3.7 Additional Topics	7
4. Federal Agency Options for Improving Transportation Safety	8
5. Conclusions	8
Works Cited	i

## ACRONYMS

<b>BAC</b>	<b>Blood Alcohol Concentration</b>
<b>BIA</b>	<b>Bureau of Indian Affairs</b>
<b>CDC</b>	<b>Centers for Disease Control and Prevention</b>
<b>DOT</b>	<b>Department of Transportation</b>
<b>EMS</b>	<b>Emergency Medical Services</b>
<b>FAST Act</b>	<b>Fixing America's Surface Transportation Act</b>
<b>FARS</b>	<b>Fatality Analysis Reporting System</b>
<b>FHWA</b>	<b>Federal Highway Administration</b>
<b>IACP</b>	<b>International Association of Chiefs of Police</b>
<b>NCHRP</b>	<b>National Cooperative Highway Research Program</b>
<b>NHTSA</b>	<b>National Highway Traffic Safety Administration</b>
<b>WISQARS</b>	<b>Web-based Injury Statistics Query and Reporting System</b>

## 1. INTRODUCTION

Motor vehicle crashes are the leading cause of death from unintentional injury for Native Americans and Alaska Natives ages 1 to 44 (CDC, n.d.). In some States (i.e., Washington and New Mexico), Native Americans are overrepresented in fatal crash rates by as much as four times the general population. According to the data reported for 2010-2014, an average of 535 Native Americans and Alaska Natives are reported to have lost their lives in motor vehicle crashes each year. From 2010-2014, the FARS database includes at least 3,278 fatalities in Tribal areas (Tribal Transportation Safety Management System Steering Committee, 2017).

Section 1117(c) of the FAST Act, required a study of transportation safety in Tribal areas. The section directs “a study that identifies and evaluates options for improving safety on public roads on Indian reservations.” The Tribal Transportation Safety Management System Steering Committee (“Steering Committee”) completed this study, analyzing the available data, evaluating priority topics, and publishing findings in the National Tribal Transportation Strategic Safety Plan (“safety plan”) in August 2017. The safety plan offers an evaluation of priority transportation safety topics for Tribal areas, lists strategies for addressing these needs, and provides resources for those interested in more information. The safety plan can be found at [www.TribalSafety.org](http://www.TribalSafety.org).

Effective transportation safety programs aim to reduce fatalities and serious injuries by addressing priority safety topics using a variety of strategies in engineering, enforcement, emergency medical services, and education. The evaluation performed in development of the study identified seven priority topics that should be addressed to improve transportation safety in Tribal areas. Section 1117(c) further directs development of “a report describing the results of the study.” This document is the required report. This report provides a list of strategies that can be implemented to improve transportation safety for those priority topics.

## 2. METHODOLOGY

The Steering Committee is a coalition of Federal agencies and Tribal governments. The members of the Steering Committee represent programs that are designed to address transportation safety from multiple perspectives, including leadership, enforcement, emergency medical services, education, and infrastructure engineering. The following Federal programs and Tribal governments are currently participating on the Steering Committee:

- Northern Cheyenne Tribe Transportation Program;
- Pueblo of Zuni Roads Program;
- Karuk Tribe Roads Program;
- Central Council of the Tlingit and Haida Indian Tribes of Alaska;
- Cherokee Nation Transportation Program;
- Bureau of Indian Affairs (BIA) Division of Transportation;

- BIA Northwest Region Transportation;
- BIA Office of Justice Services Indian Highway Safety Program;
- Centers for Disease Control and Prevention (CDC);
- Federal Highway Administration (FHWA) Office of Safety;
- FHWA Resource Center;
- FHWA Tribal Transportation Program;
- Indian Health Service;
- National Highway Traffic Safety Administration (NHTSA) Region 6; and
- Tribal Technical Assistance Program Centers.

Since 2015, the Steering Committee has met several times each year to coordinate and collaborate on programs, projects, and reports. The data analysis, safety plan, and this report are a result of the committee's efforts. More information about the Steering Committee can be found at [www.TribalSafety.org](http://www.TribalSafety.org).

Other efforts were made to satisfy the consultation requirements of Section 1117(c) in addition to the Steering Committee meetings. The Department of Justice was consulted and provided comments on the safety plan. A listening session was held during the National Tribal Transportation Conference in September 2016 to gather input from Tribes on the safety plan and this report. In June 2017, a draft of the safety plan was made available to all 567 Federally recognized Tribes through distribution by committee members and the Tribal Technical Assistance Program Centers. Changes were made to the final safety plan based on comments received from this input.

The topics covered by the National Tribal Transportation Safety Plan were selected by the Steering Committee. This selection was informed by the review of multiple sources of data, including:

- safety plans developed by Tribes;
- the NHTSA Fatality Analysis Reporting System (FARS);
- the CDC Web-based Injury Statistics Query and Reporting System (WISQARS);
- State Strategic Highway Safety Plans with a Tribal emphasis;
- United States Geological Survey Protected Areas Database; and
- United States Census Bureau American Community Survey.

Fatalities are the focus of this report because FARS is the only nation-wide database containing detail on motor vehicle crashes, and it contains only fatality reports. Based on the evaluation conducted for this plan, seven priority topics were identified that can be addressed at a national level to improve transportation safety in Tribal areas. The safety plan includes a list of strategies and resources on each topic. These lists were assembled based on research by and input from the committee membership. The seven topics are:

- Safety Planning
- Data Improvement
- Occupant Protection;
- Roadway Departure;
- Impaired Driving;
- Pedestrian Safety; and
- Availability of Public Safety Services.

In addition to addressing these five emphasis topics, Tribes are encouraged to collect safety data, analyze the data, and develop a decision-making process for selecting safety improvements. The recommended decision making process is development of a data-driven, multidisciplinary transportation safety plan by each Tribe. Through the safety planning process a Tribe may identify additional topics that differ from the national priorities. Some of the topics which may be a priority to a Tribe but were not selected as national priorities include speeding, driver distraction, intersection safety, younger and older drivers, off-road transportation safety, animal-vehicle crashes, and other topics identified through analysis of a Tribe's incident history.

### 3. OPTIONS FOR IMPROVING TRANSPORTATION SAFETY IN TRIBAL AREAS

The Tribal Transportation Strategic Safety Plan includes strategies that address each of the identified priority topics. Based on an evaluation of national data, these strategies are the best options for improving transportation safety in Tribal areas. A Tribe is likely to identify different priority topics after review of the Tribe's incident history and local knowledge. As such, the following strategies are not an exhaustive list and should not preclude the consideration of other strategies by a Tribe.

#### 3.1 SAFETY LEADERSHIP AND PLANNING STRATEGIES

Successful transportation safety programs are data-driven and implement strategies from a variety of disciplines. Leadership is needed to establish data-driven goals, implement strategies by various parts of the organization, and communicate with resource agencies. The following strategies are steps that a Tribe can take to establish a safety program:

- assess and improve the collection and sharing of crash data such as is described in National Cooperative Highway Research Project (NCHRP) Report 788, *Guide to Effective Tribal Crash Reporting*;
- analyze incident history and other safety data using tools such as contributing factors analyses, network screening, road safety audits, and systemic safety studies; and
- develop and regularly update transportation safety plans.

### 3.2 OCCUPANT PROTECTION STRATEGIES

The proper use of seat belts, child safety seats, and helmets can greatly reduce the level of injury that vehicle occupants will experience during a crash. Tribes can implement the following strategies to improve the usage rates of occupant protection devices:

- educate drivers and youth on the benefits and proper use of seatbelts, child passenger seats, and helmets;
- establish and enforce primary enforcement seatbelt and helmet use laws;
- ensure strong restraint laws for child passengers;
- establish inspection stations for seatbelts and child safety seats;
- conduct short-term, high-visibility enforcement for child-passenger safety seats and seatbelts;
- combine seatbelt, impairment, and nighttime enforcement efforts;
- maintain strong enforcement efforts;
- coordinate enforcement efforts with education campaigns; and
- coordinate with Tribal Councils to ensure leadership support of enforcement campaigns.

### 3.3 ROADWAY DEPARTURE STRATEGIES

The strategies for roadway departure can generally be simplified in three categories: (1) Keep vehicles on the roadway, in their appropriate directional lane, (2) Reduce the potential for crashes when vehicles do leave the roadway or cross into opposing traffic lanes (provide for safe recovery), and (3) Minimize the severity of crashes that do occur. The following strategies were identified for these three categories:

Keep vehicles on the roadway:

- address behavioral factors, such as impaired and distracted driving, which often lead to road departure;
- install appropriate warning signs;
- install enhanced warning signs, especially in locations where crashes frequently occur, or apply systemically to address high-risk factors;
- apply road surface friction treatments in spot locations such as curves, ramps and intersections with limited sight distance at approaches;
- install edge and shoulder rumble strips or stripes;
- install and maintain pavement markings;
- install post-mounted delineators;
- maintain the roadway surface so that it can be safely traversed at the design speed;
- avoid hillcrests and horizontal curves (curve to left or right) at the same location; and
- ensure visibility of signs at night by implementing a sign management method recommended in the Manual on Uniform Traffic Control Devices.



Provide for safe recovery:

- provide clear zones free of hazardous roadside objects;
- flatten roadside slopes so they are traversable; and
- use Safety Edge on paving projects for safe re-entry of errant vehicles back on the travel way.

Minimize crash severity:

- install barriers, breakaway poles, crashworthy sign supports, or other crashworthy devices when hazards cannot be removed or relocated;
- update guardrail that does not meet a recent crashworthiness standard such as Manual Assessing Safety Hardware or NCHRP Report 350;
- delineate hazards that cannot be removed, replaced, or shielded with barrier; and
- conduct a systemic safety study of roadway departure crashes to prioritize low-cost strategies that mitigate the consequences of leaving the roadway.

### 3.4 IMPAIRED DRIVING STRATEGIES

Driver impairment from alcohol and drugs contributes to transportation incidents. Tribal governments may pursue the following strategies to reduce impaired driving:

- establish and fully enforce existing laws that address the prevention of impaired driving, such as:
  - blood alcohol concentration of .08 limit laws;
  - minimum legal drinking age laws;
  - zero tolerance laws for drivers younger than 21 years old;
  - drug impaired driving laws;
  - laws requiring ignition interlock use for people convicted of drinking and driving, starting with their first offense;
  - laws restricting nighttime driving for teens to no later than 10 p.m. for at least the first 6 months of licensed driving; and
  - laws restricting new drivers to no more than one passenger during the first 6 months of licensed driving;
- authorize, publicize, and implement sobriety checkpoints;
- ensure that alternatives to driving and walking are available for those leaving drinking establishments;
- implement CDC Community Guide-supported strategies that may lead to a reduction in binge drinking;
- health professionals can conduct screening and brief interventions for risky behaviors, such as using alcohol and drugs, and driving while impaired;
- educate about the dangers of drinking and driving;

- assess prescription drug controls using the guidelines provided in the National Safety Council publication “Prescription Nation: Addressing America's Drug Epidemic”;
- combine seatbelt, impairment, and nighttime enforcement efforts;
- maintain strong enforcement efforts;
- coordinate enforcement efforts with education campaigns;
- coordinate with Tribal Councils to ensure leadership support of enforcement campaigns; and
- ensure police officers are adequately trained to identify and test impaired drivers for alcohol and drugs..

### 3.5 PEDESTRIAN STRATEGIES

Pedestrian safety can be improved for walking along and across roadways. The following strategies can be used by Tribes to improve infrastructure, plan, and provide education for pedestrians:

- ensure that alternatives to driving and walking are available for those leaving bars and other locations where alcohol is being served;
- provide safe infrastructure for walking, including:
  - separated pathways or sidewalks in areas frequently used by pedestrians;
  - pathways between origins and destinations independent of the road network that decrease pedestrian activity along roadways;
  - roadway lighting when pedestrian activity occurs along that roadway; and
  - mitigate roadside obstacles such as bridges, culverts, steep embankments, snow storage, and utility apparatuses that may force pedestrians into the roadway;
- minimize exposure for pedestrians crossing roadways:
  - shorten crossing distance with bulb outs & refuge islands;
  - at signals, provide a leading pedestrian interval before conflicting green signals;
  - remove sight distance obstacles that can hide pedestrians from a driver’s view; and
  - road diets, or repurposing the existing road surface to allow for refuge islands and eliminate the need for pedestrians to cross multiple lanes; and
- educate pedestrians and drivers, as described in the Tribal Transportation Strategic Safety Plan.

### 3.6 AVAILABILITY OF PUBLIC SAFETY SERVICES

Many Tribes are located in remote areas far from trauma centers. When a serious crash occurs, the time elapsed until victims receive the proper medical treatment can greatly affect the severity of injuries. Tribal governments can utilize the following strategies to optimize the response of public safety services:

- provide basic medical training for volunteer community members who can respond to emergencies;
- train law enforcement in basic medical response;
- develop medical training and strategies in cooperation with professional law enforcement associations such as the International Association of Chiefs of Police (IACP) Police Physicians Section;
- provide first responders with basic incident management training to ensure safety and efficient crash scenes;
- assess emergency notification, dispatch, communication, and response procedures to identify optimization needs;
- collect incident management performance measurement data;
- address gaps in coverage for emergency communication systems;
- ensure that the Emergency Medical Services (EMS) providers are using appropriately structured patient evaluations to provide the needed level and speed of care;
- assess and identify the need for landing sites for medical transport helicopters;
- install and maintain emergency notification call boxes; and
- retain qualified staff at local health clinics.

### 3.7 ADDITIONAL TOPICS

The following topics were identified by the Tribal Transportation Safety Management Systems Steering Committee as topics that are either emerging issues or topics that are likely of interest to some Tribes, but are not as prominent at the national level. These selections were based on the analyzed data sources and committee members' knowledge. These are topics likely to be identified in safety plans developed by individual Tribes. Resources that Tribes are using to improve transportation should have maximum flexibility, allowing Tribes to address identified safety needs when supported by incident history.

The additional options for improving transportation safety in Tribal areas are strategies that address:

- speeding;
- distracted driving;
- intersections;
- younger drivers;
- older drivers;
- off-road transportation safety;
- strategies to address animal-vehicle crashes; and
- other topics and locations supported by an analysis of incident data.

## 4. FEDERAL AGENCY OPTIONS FOR IMPROVING TRANSPORTATION SAFETY

Federal agency actions can help to facilitate implementation of the strategies already presented in this report. Federal agencies can act on the options listed below to improve transportation safety in Tribal areas. Federal agencies can:

- ensure that Federal safety program reviews examine Tribal consultation and participation, especially when required by statute or regulation;
- ensure that Federal funds allow Tribal participation for the widest possible variety of projects and allow Tribes to demonstrate a need based on local incident history and other data;
- facilitate communication between Tribes and States to improve relations, safety data sharing, and resource sharing;
- provide continued training and technical assistance to Tribal governments that addresses the safety topics listed in the National Tribal Transportation Safety Plan;
- provide resources that allow Tribes to implement transportation safety strategies, especially those listed in this report; and
- collaborate with other Federal agencies and Tribes such as through participation in the Steering Committee.

## 5. CONCLUSIONS

Action can be taken to improve transportation safety in Tribal areas. Optimal effectiveness is obtained when transportation safety is addressed collaboratively by safety professionals in leadership, planning, enforcement, EMS, education, and engineering. These disciplines can implement a wide variety of strategies that address shared goals, such as the strategies presented in this plan.

Tribes can develop safety plans that examine incident history and establish communication across disciplines and among Tribes, Federal agencies, States, and local governments. This communication can help to ensure the efficient and best use of available resources. Through these efforts, it is possible to prevent and reduce fatalities and injuries associated with the use of Tribal transportation facilities.

## WORKS CITED

CDC. (n.d.). CDC Fact Sheet. Retrieved May 2017, from Centers for Disease Control and Prevention: <https://www.cdc.gov/motorvehiclesafety/native/factsheet.html>

FHWA. (2017). Report to Congress: Tribal Governments & Transportation Safety Data. Washington: U.S. Department of Transportation.

New Mexico DOT. (2016). 2016 Strategic Highway Safety Plan. Santa Fe.

Tribal Transportation Safety Management System Steering Committee. (2017, 08). National Tribal Transportation Safety Plan. Retrieved from TribalSafety.org: <http://www.TribalSafety.org/SMS/Reports>

Washington State. (2016). Washington State Strategic Highway Safety Plan 2016. Olympia.