DISCLAIMER

The contents of this report reflect the views of the authors who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the South Dakota Department of Transportation, the State Transportation Commission, the South Dakota Highway Patrol, or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.

ACKNOWLEDGEMENTS

This work was performed under the direction of the SD2005-14 Technical Panel:

Zane Arpan............... Cheyenne River Sioux Tribe
Myrna Buckles .............. Indian Health Service
Roger Campbell.......... Tourism & State Development
Maj. J. C. Carpenter ......... SD Highway Patrol
Gina Espinosa... NHTSA Rocky Mountain Region
Gerry Foell ................ Bureau of Indian Affairs
Elmer Four Dance .......... Bureau of Indian Affairs
Gary Gaikowski............ Sisseton-Wahpeton Oyate
June Hansen..... SDDOT Office of Legal Counsel
Paula Hill............... Cheyenne River Sioux Tribe
David Huft................ SDDOT Office of Research
Dennis Johnson .......... SDDOT Office of Research
Sharon Johnson . Federal Highway Administration

Robert Long ................ Rosebud Sioux Tribe
Roy Meyer.................. SD Dept. of Public Safety
Col. Dan Mosteller .......... SD Highway Patrol
Ben Orsbon........ SDDOT Office of the Secretary
Pete Red Tomahawk.... Standing Rock Sioux Tribe
Ray Red Wing ....... Flandreau Santee Sioux Tribe
Genevieve Ribitsch ......... Oglala Sioux Tribe
Scott Shields ............... Crow Creek Sioux Tribe
Sam Sully ................... Yankton Sioux Tribe
Dennis Trusty ........... Northern Plains TTAP
John Weaver ............. Indian Health Service
Toni Wells .................. Lower Brule Sioux Tribe
Patsy Winters ............ SD Dept. of Public Safety
The work was performed in cooperation with the United States Department of Transportation Federal Highway Administration.
Crash report rates from tribal lands in South Dakota are generally low relative to the number of crashes estimated for those areas. This study sought to quantify the number of actual crashes on tribal lands in South Dakota for 2005, describe the barriers to better crash reporting from tribal lands, and suggest remedies. The research team visited all nine reservations and worked with law enforcement agencies to retrieve crash data for 2005 as available. A total of 737 crashes were documented in some fashion by tribal and BIA law enforcement agencies, though only 52 were reported with enough detail to be included in the South Dakota Accident Reporting System.

After visiting the law enforcement offices for each reservation, the research team held a meeting with tribal and BIA law enforcement officials to discuss possible solutions. Three major ideas emerged from these discussions. The first was training for law enforcement officers on the crash forms and crash reporting process for South Dakota. The second concerned software solutions for internal tribal data processing and making the crash report form easier to complete. Thirdly, the political issues involved in crash reporting represent a serious barrier to improvement, and are tied primarily to the overall relationship between tribes and the State of South Dakota.

Based on the information gathered as part of the study, the research team made five recommendations to the State of South Dakota that would improve crash reporting from tribal lands. Recommendations center on working with tribal councils to agree on how crash reporting will be done from tribal lands, and providing support and incentives for crash reporting improvements at tribal and BIA law enforcement agencies.
TABLE OF CONTENTS

DISCLAIMER ........................................................................................................ II
ACKNOWLEDGEMENTS ..................................................................................... II
TECHNICAL REPORT STANDARD TITLE PAGE .................................................. IV
TABLE OF CONTENTS ....................................................................................... VI
LIST OF FIGURES ............................................................................................. VI
LIST OF TABLES ............................................................................................... VI
ABBREVIATIONS USED ..................................................................................... VII
EXECUTIVE SUMMARY .................................................................................... 8
PROBLEM DESCRIPTION ................................................................................... 8
RESEARCH OBJECTIVES ................................................................................... 8
SIGNIFICANT FINDINGS ................................................................................... 9
RECOMMENDATIONS ....................................................................................... 12

LIST OF FIGURES

FIGURE 1: MOTOR VEHICLE CRASHES FOR 2005, BEFORE AND AFTER STUDY, WITHIN RESERVATION BOUNDARIES AS DEFINED BY 2000 CENSUS ....................................................... 10

LIST OF TABLES

TABLE 1: NATIVE AMERICANS AS A PERCENTAGE OF ALL MOTOR VEHICLE FATALITIES IN SOUTH DAKOTA ...................................................................................................................... 8
ABBREVIATIONS USED

BIA: Bureau of Indian Affairs
COPS: Community Oriented Policing Services
FHWA: Federal Highway Administration
MOA: Memorandum Of Agreement
NHTSA: National Highway Traffic Safety Administration
SDDOT: South Dakota Department of Transportation
SDDPS: South Dakota Department of Public Safety
TraCS: Traffic and Criminal Software
EXECUTIVE SUMMARY

PROBLEM DESCRIPTION

The motor vehicle fatality rate among Native Americans in South Dakota is more than three times the rate of others in South Dakota. Total fatalities among Native Americans account for over a quarter of all traffic crash fatalities in South Dakota from 2001-2005.¹ At the same time, full crash reports are often not collected on reservation lands, making it difficult to address roadway hazards, education and enforcement needs.

<table>
<thead>
<tr>
<th>Year</th>
<th>Native American</th>
<th>White</th>
<th>Other</th>
<th>Total</th>
<th>Percent Native American</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>38</td>
<td>129</td>
<td>4</td>
<td>171</td>
<td>22.2%</td>
</tr>
<tr>
<td>2002</td>
<td>43</td>
<td>133</td>
<td>4</td>
<td>180</td>
<td>23.9%</td>
</tr>
<tr>
<td>2003</td>
<td>58</td>
<td>138</td>
<td>7</td>
<td>203</td>
<td>28.6%</td>
</tr>
<tr>
<td>2004</td>
<td>63</td>
<td>134</td>
<td>0</td>
<td>197</td>
<td>32.0%</td>
</tr>
<tr>
<td>2005</td>
<td>45</td>
<td>138</td>
<td>3</td>
<td>186</td>
<td>24.2%</td>
</tr>
<tr>
<td>Total 5 Years</td>
<td>247</td>
<td>672</td>
<td>18</td>
<td>937</td>
<td>26.4%</td>
</tr>
</tbody>
</table>

Table 1: Native Americans as a Percentage of all Motor Vehicle Fatalities in South Dakota

Source: Fatality Analysis Reporting System, National Highway Transportation Safety Administration.

Tribal and state government agencies have a strong interest in improving traffic crash reporting from tribal lands in the state. Improved crash data would enable the state and the tribes to apply more successfully for funds from the Bureau of Indian Affairs (BIA), the Federal Highway Administration (FHWA), and the National Highway Traffic Safety Administration (NHTSA), and to make the appropriate investments in safety improvements. Some tribes are also concerned with the difficulty of making insurance claims when BIA records must be requested through the Freedom of Information Act, which is the case on four reservations in South Dakota.

Three areas of problems were identified: tribal law enforcement capacity for reporting; standardization of reporting methods; and issues of tribal-state relations.

RESEARCH OBJECTIVES

Five objectives were identified for this study:

Objective 1. To describe and evaluate crash reporting practices used on the nine Indian reservations with lands in South Dakota.

Objective 2. To identify barriers to complete and accurate reporting of crashes on reservations.

Objective 3. To recommend practical ways to improve the completeness and accuracy of future crash reporting on reservations.

¹ Fatality Analysis Reporting System (FARS), maintained by National Highway Transportation Safety Administration.
Objective 4. To improve the completeness and quality of crash data reported to the South Dakota Department of Public Safety (SDDPS) from the nine reservations in calendar year 2005.

Objective 5. To facilitate agreements between tribal governments and the South Dakota Department of Transportation (SDDOT) on crash reporting.

The study team visited all nine Indian reservations in South Dakota during the summer of 2006. The team conducted interviews with tribal and BIA law enforcement staff and others, to identify the central barriers to better crash reporting on each reservation. In addition, a meeting was held in Aberdeen in September 2006, in conjunction with BIA Law Enforcement, to have a full discussion of some of the issues involved in crash reporting.

While visiting reservations, the study team collected crash data from calendar year 2005 to fulfill objective 4. The crash data collected was not always complete, but in the end the study added 52 crashes to the South Dakota Accident Reporting System (SDARS) for the year.

In order to accomplish objective 5, the study team suggested a pilot project to draft a Memorandum of Agreement (MOA) that would form the basis for crash data sharing between the tribes and the state. The draft MOA is discussed in more detail below, under Recommendations.

**SIGNIFICANT FINDINGS**

The research team collected a total of 737 crash reports, though most were not in a form that could be input to the South Dakota Accident Record System (SDARS) for 2005. Nevertheless, as an estimate, this data collection showed that crashes on tribal lands had been underreported by approximately 64 percent (737 out of 1,150 had gone unreported). The results by tribe are shown below, in Figure 1.

In discussions with tribal law enforcement officers and others, it was clear that each tribe is in a unique situation in regards to crash reporting. However, some common themes emerged. Problems fell into two phases of the crash reporting process: the collection phase, and the data processing phase. In the collection phase, the team’s research found that full crash reports, with all the details about crash causation and circumstances, were often not filled out properly or in a timely manner.

In the data processing phase, the team found that most tribes were dissatisfied with their internal data processing. Software problems, hardware problems, and general lack of procedures for keeping accurate crash records were found. In the data processing phase, the final transfer of crash reports to the South Dakota Department of Public Safety is key to a complete data set at the state level. One or two tribal councils were reported to be explicitly opposed to data sharing with the state, but this was not the central barrier to reporting at most tribes.
The team discussed these issues and options for improving the crash reporting at a meeting of tribal law enforcement officials and others in Aberdeen in September 2006. Three major ideas emerged from this meeting. The first was training for law enforcement officers on the crash forms and crash reporting process for South Dakota. The second concerned software solutions for internal tribal data processing and making the crash report form easier to complete. Thirdly, the political issues involved in crash reporting represent a serious barrier to improvement, and are tied primarily to the overall relationship between tribes and the State of South Dakota.

In order to explore the ideas of the Aberdeen meeting, the interim report suggested two pilot projects, which took the form of subcommittees of the technical panel. The first pilot project focused on training for law enforcement officers on tribal lands, and resulted in a description of the appropriate training for tribal or BIA law enforcement officers on crash reporting:

Training in the proper completion of the accident report form will be provided by the State of South Dakota. This training will be provided in two formats, one being on-site and the other as a train the trainer program depending on the needs of the tribal authority. The training will be at no cost to the tribe and will be
approximately three hours in length. The Department of Public Safety will be responsible for the delivery of the report curriculum.²

The second pilot project created a draft memorandum of agreement (MOA) on crash reporting between a tribe and the State of South Dakota. The draft MOA, as developed by SDDOT, is an agreement to exchange crash data between the tribe and the state to improve highway safety. The goal of the agreement as currently drafted is to support engineering solutions to hazardous areas of the roadway, and the agreement specifies that the crash data submitted will be used to address roadway hazards. The draft MOA is a five-year document that would commit the tribal council to sharing data, while the state would agree to provide training and technical assistance to law enforcement agencies submitting data.

For tribes interested in improving their crash reporting, the general principles are:

- officers should fill out reports as soon as a crash has occurred;
- supervisors should check the forms for completeness; and
- the tribe should both maintain an internal file of all crash reports and send copies to both BIA and SDDPS.

Three different pathways to better reporting are described in detail in the report, based on best practices among tribes in South Dakota, tribes in other areas of the U.S., and other states’ experiences.

The first pathway is a short-term solution, using paper filing and basic data tracking methods. Law enforcement officers fill out a crash report on site, using a paper form. The tribal or BIA law enforcement office keeps a copy of the crash report form, keeps a tally or a list of all crashes in a central ledger, and sends a copy of the report form to the SDDPS and the BIA. Several tribes are already using some permutation of this process, sometimes listing crashes in a spreadsheet to keep count and to be able to perform basic analysis. SDDPS can also provide reports to tribes based on the crash reports sent in.

The second and third options involve computerized solutions. Tribes have the option of purchasing and using an off-the-shelf software package for tracking crashes, such as the Cisco, Global, New World, and CRIS software that tribes already use in South Dakota. A key to using this software is to budget for technical support, because several law enforcement agents said that although they had software, it was not always working properly. Alternatively, tribes can choose to use the Traffic and Criminal Software (TraCS) package, a software tool for motor vehicle crash reporting that will soon be available from the SDDPS. One of the main advantages to TraCS over other software is that staff at SDDPS, the Highway Patrol, and others will be trained on the software, and SDDPS will be able to provide technical assistance directly to tribes that use the software. Tribes may need to check the compatibility between TraCS and other software

---

² Approved text from discussions among three South Dakota agencies: Highway Patrol, Department of Public Safety, and Department of Criminal Investigation. Provided by Pat Winters of SDDPS on December 6, 2006.
systems they are using for computer-aided dispatch, citations, and other parts of the criminal justice system.

RECOMMENDATIONS

The study team made five recommendations to South Dakota agencies at the end of the research.

1. **The South Dakota Department of Public Safety should expand its training on crash reports for all tribal and BIA law enforcement officers, tailored to tribal law enforcement.**

   Individual training needs at each tribe should be assessed and the standard state curriculum should be tailored as much as possible to improve tribal and BIA law enforcement officers’ knowledge of the South Dakota crash report form. In addition, the state should focus on the details about each crash that are required under the Model Minimum Uniform Crash Criteria (MMUCC). This will help tribes to work with the internal data processes they develop, while producing the crash details that are needed for SDARS.

   The training may take the form of one-on-one training with South Dakota Highway Patrol officers, or a “train-the-trainer” model for each reservation. The Highway Patrol is currently working with some tribal police officers at Oglala Sioux Tribe, and future training programs should build on this experience. SDDPS could alternatively develop software that would guide law enforcement officers on tribal lands through the crash reporting form.

   Training needs, including incentives for law enforcement officers, should be discussed individually with each tribe. Training is already available to tribal and BIA law enforcement officers, free of charge, from the SDDPS Department of Criminal Investigation, and promoting awareness of this training for tribal and BIA police could be helpful in itself.

2. **The South Dakota Department of Transportation should work directly with tribal councils to establish crash reporting as a priority for law enforcement on tribal lands.**

   The state should meet with tribal councils to establish memoranda of agreement with tribes describing the crash data that should be submitted, and the limits on its use once it reaches the state. Staff at the SDDOT have already prepared a draft MOA that commits tribes to sharing crash reports with the state in a compatible format to be agreed on. In return, the state would commit to providing technical support and training for the use of the crash report forms, and to maintaining the confidentiality of the data insofar as possible. The MOA covers a five-year period as currently drafted.

---

3 MMUCC are a voluntary set of guidelines that help states collect consistent, reliable crash data that are more effective for identifying traffic safety problems, establishing goals and performance measures, and monitoring the progress of programs. (National Highway Traffic Safety Administration, Accessed at: http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/MMUCC.html)
The MOA should be signed with notification to the tribal or BIA law enforcement agency, with the awareness that tribal councils set policy for law enforcement on reservations. While only a few tribes have explicit policies against reporting crash data to the state, data collection on crashes tends to have a low priority, even for internal uses. Passing a tribal resolution that crash data should be collected at the tribe would improve the reporting process.

A major concern for tribes has been double jeopardy, whereby an offender could be cited both by tribal or BIA police, and by State police after a crash report is submitted. This concern should be addressed directly in the MOA to assure tribal members that they will not be cited both in tribal and in the state criminal system.

SDDOT should pursue MOAs with tribes within the larger context of transportation improvements, emphasizing the fact that crash data will bolster the case for making roadways safer. SDDOT is currently conducting consultation meetings with each tribe on transportation issues, and crash reporting could be woven into those meetings. Alternatively, SDDOT staff could visit tribal governments specifically to address crash data sharing agreements. However, putting the crash data agreements in a larger framework of transportation issues is still important in this context.

3. The South Dakota Department of Public Safety should encourage and facilitate grant applications from tribes to support tribal efforts to institute more effective internal processes to record and track crash data.

The state data system will benefit from a better internal data collection system at each tribe. Improvements should be explicitly encouraged under a grant program administered by the SDDPS. The grants could be provided for each tribe to institute or improve its own crash data processing system including procedures, staffing, and a tracking system, potentially using software. It could also be a thorough filing system for paper with records kept in a ledger or a well-maintained spreadsheet. Some reservations already use software for this purpose, as discussed above, and others may benefit from instituting software or improving their training on it. The SDDPS grant program would support the development of an action plan at each tribe that will achieve specific goals for its data processing system, starting from the current status of crash reporting on that reservation.

NHTSA provides funds through its 408 program specifically to improve traffic records. This is a possible funding source for this recommendation. A successful application for 408 funding would require a 20 percent match from the tribe or the Indian Highway Safety office, and buy-in from BIA and FHWA. This funding has been approved only for the purpose of improving state data systems, so tribal improvements would have to be tied to SDARS. SDDPS may be able to locate other funding sources for this recommendation as well.
4. The South Dakota Department of Public Safety should make reporting as easy as possible for tribes. The SDDPS can ease the transfer of data by implementing various technological and personnel measures. For example, if a tribe has a complete data processing system on site, such as the Cisco system, the SDDPS can work to accept electronic data exported from those files. In the course of the research, Cisco expressed an interest in developing a report that would essentially mirror the SD crash report form. The state may also benefit from devoting information technology staff time to working with law enforcement assistants and other staff at tribes who work with crash data systems.

For tribes with privacy concerns, accepting crash reports without personal identifiers will be vital to the data submission process. Crash reports would still contain all other details about the people involved in the crash (date of birth, sex, etc.), and could simply use a generic name (“Jane/John Doe”). Tribal concerns about privacy are a significant barrier for some tribes, and SDDPS can build trust with those tribes by focusing on the safety issues and relaxing personal identifier requirements.

5. The South Dakota Department of Transportation should motivate crash reporting by actively facilitating the identification of rural hazards on tribal lands and by funding improvements.

By focusing on rural roadway hazards on tribal lands, the South Dakota DOT can strengthen the motivation for tribes to improve their crash reporting systems. The Hazard Elimination Program, part of the federal Highway Safety Improvement Program, is a potential source of funding for this. A requirement for the application process for these funds would be a crash analysis of the location where the safety measure will be implemented. The DOT can clarify the process of applying for this set-aside by outlining clearly the type of information required in the application.

Road safety audits should be conducted to supplement crash data in identifying roadway hazards, since low traffic can mask serious safety problems on rural roads. As a model for this type of program, the Thurston Regional Planning Council (Washington) created a set-aside for rural areas from their federal Surface Transportation Program funds. In this program, smaller places were not matched up against large cities in competing for roadway improvement funds (FHWA 2006).

---