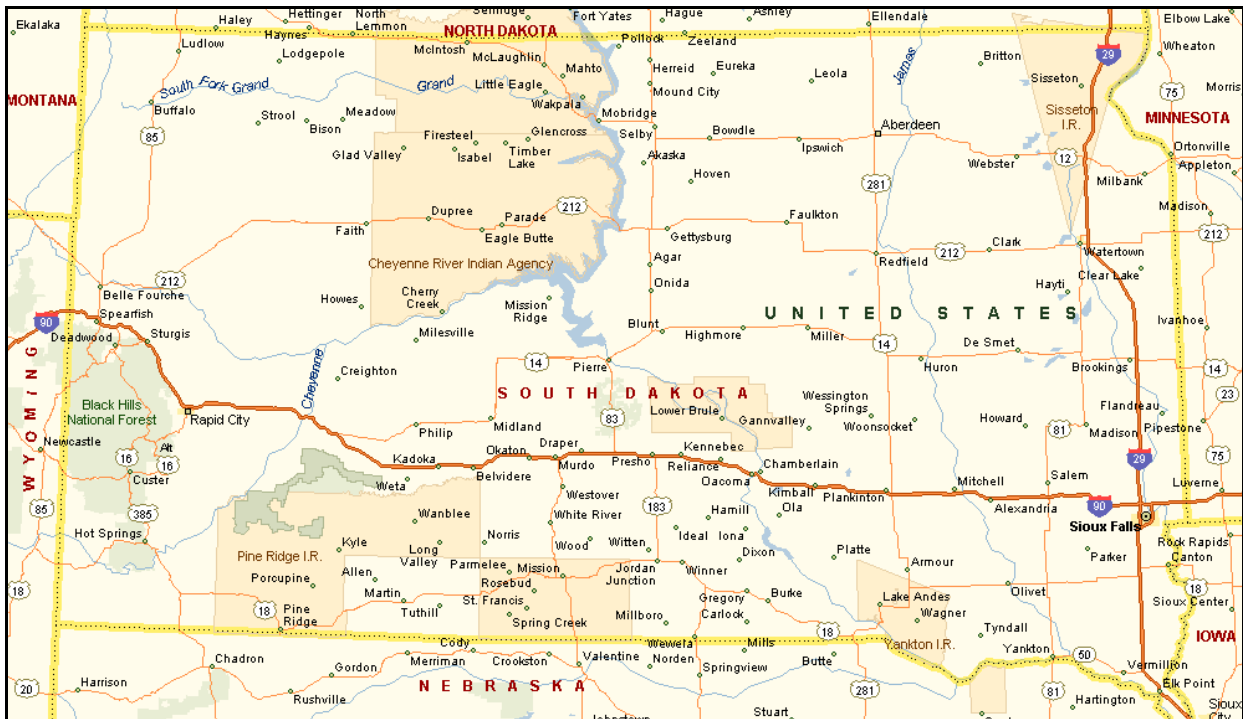


South Dakota
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Office of Research



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SD2005-14-F



Improving Motor Vehicle Crash Reporting on Nine South Dakota Indian Reservations

Study SD2005-14 Final Report

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DISCLAIMER

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

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

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.

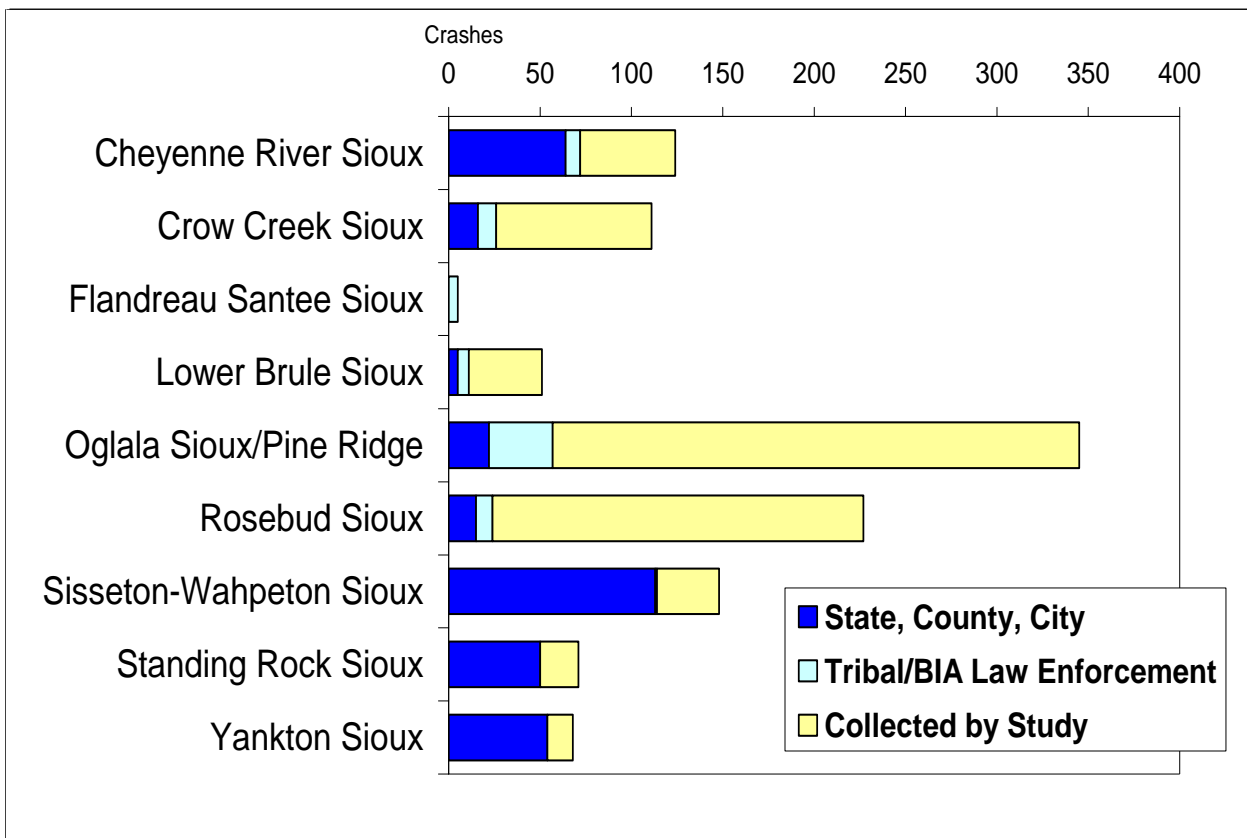


Figure 1: Motor Vehicle Crashes for 2005, Before and After Study, Within Reservation Boundaries as Defined by 2000 Census

Source: South Dakota Accident Reporting System (SDARS) data, summarized geographically by ICF, and Tribal/BIA Law Enforcement data collected during the study.

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)³. 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 funds⁴ (FHWA 2006).

⁴ FHWA 2006. Case study: “Thurston County, Washington: Partnership between Tribes and an MPO” accessed at: <http://www.fhwa.dot.gov/hep/tribaltrans/ttpcs/washington.htm>

PROBLEM DESCRIPTION

This problem description below comes from the request for proposals issued by the technical panel for the project. The problems found in the field in the course of the research were generally consistent with these suggested factors.

Tribal and state government agencies have an acute need to improve traffic crash reporting to the South Dakota Department of Public Safety (SDDPS) 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 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.

A 2005 study by Purdue University researchers, commissioned by the South Dakota Department of Transportation, had estimated actual crashes on tribal lands in South Dakota, and had shown that their estimates were much higher numbers total crashes reported to the SDDPS. For example, in Shannon County, 72 crashes were report for 2003; the Purdue study estimated the actual total number at somewhere between 152 and 314 for that year.⁵

Some possible factors in the under-reporting were identified before the study was conducted, and are listed below in three categories.

Factors in Crash Reporting

Tribal Law Enforcement Capacity for Reporting

- a shortage of experienced law enforcement staff, resources, and training
- lack of clarity or understanding of state reporting requirements
- limited availability of electronic databases and other information technology

Standardization of Reporting Methods

- varying crash reporting policies among tribal administrations
- conflicting requirements by the State of South Dakota and the Bureau of Indian Affairs
- differences in crash investigation and reporting protocols

⁵ Purdue University's Center for the Advancement of Transportation Safety (2005). "Factors Contributing to South Dakota Crash and Fatality Rates," Final Report SD2003-15, for the South Dakota Department of Transportation Office of Research. Pages 108-127.

Issues of Tribal-State Relations

- concerns about ultimate uses of crash data and potentially negative impacts to tribal members
- concerns about driver privacy
- poorly established networks of communication among agencies
- inadequate institutional arrangements between state and tribal agencies

The three categories described above illuminate the central barriers to improved reporting, each with potential solutions. The first category, *Tribal Law Enforcement Capacity*, is a barrier internal to tribes that the state may overcome through increased assistance to the tribes, in the form of staff time, funding, and technological assistance. The second category of barriers, *Standardization of Reporting Methods*, could be overcome through a review of reporting methods to establish a process for bringing reporting into a single standardized form. The third category of barriers, *Issues of Tribal-State Relations*, is possibly the most important because it forms a part of the barriers in the other two categories as well, in that a tribe must have a good working relationship with the state in order to bring its capacity and reporting methods into line with the needs of state crash reporting.

These barriers stand in the way of improved traffic crash reporting, but more importantly, they prevent the state and tribes from addressing roadway conditions that contribute to crashes, injuries, and fatalities on tribal lands.

OBJECTIVES

The project’s technical oversight panel defined five objectives for this study:

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

This objective was necessary to understand the current state of crash reporting on tribal lands, and to understand in what way the current practice can be improved.

The ICF Team visited each of the nine reservations in South Dakota, shown on the map below, and talked with tribal and BIA staff, who described the current practice at each tribe. The results of these visits have been reported to the technical panel, and are described below under Findings.

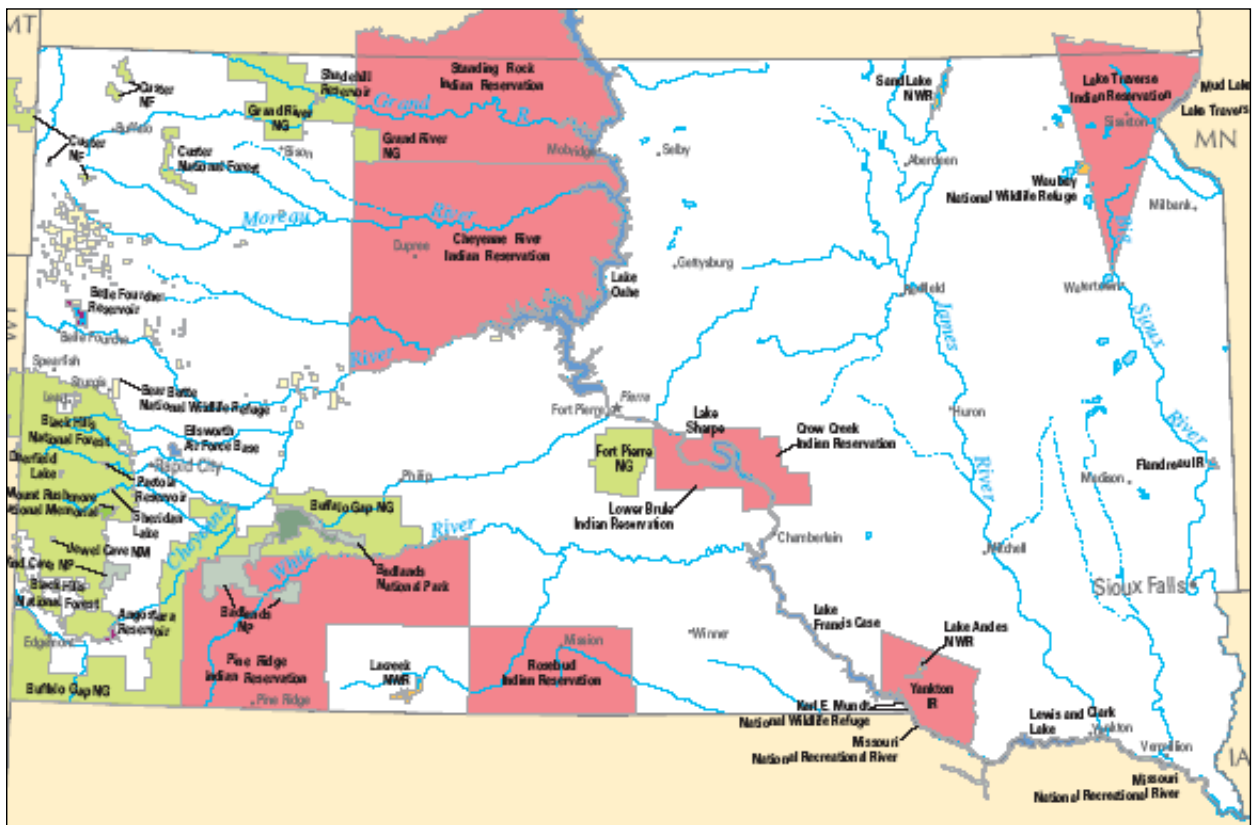


Figure 2: South Dakota Indian Reservations

Source: U.S. Department of the Interior. *National Atlas*. Accessed at: <http://nationalatlas.gov/printable/fedlands.html#list>.

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

Despite recent efforts to include tribes in the statewide crash reporting system, most tribes in South Dakota do not report crashes fully. A key part of the study was to identify the reasons for the under-reporting.

Barriers to better crash reporting were a major topic of discussion, both in site visits and in meetings of the technical panel⁶. In addition, a meeting was held in Aberdeen, SD in September 2006. The meeting, hosted by the Bureau of Indian Affairs Law Enforcement division, was attended by six chiefs of police and several other tribal staff.

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

The nine reservations in South Dakota are each unique in terms of governing structure, size, and internal coordination. An important aspect of the study was to find a fitting approach for each of the tribes to consider.

The current status of computer systems, general reporting systems, and staffing was assessed as part of the field visits. Participants also talked explicitly about what would be most helpful with law enforcement officials at the September meeting in Aberdeen.

Objective 4. To improve the completeness and quality of crash data reported to the South Dakota Department of Public Safety from the nine reservations in calendar year 2005.

Prior to the study, the data that had been reported to the South Dakota Department of Public Safety for 2005 were meager for some reservations. During the field visits, the ICF team attempted to retrieve full crash data on as many crashes as possible from tribal records. This was only possible on one reservation. On the other reservations, unless they had already been submitted, full crash reports were incomplete, missing, or held in confidentiality by law enforcement officials.

While full crash reports were not available, the team did collect incident reports, which contain a few facts about each motor vehicle crash. The incident reports allowed the team to assess the number of crash reports that should have been collected for each tribe in calendar year 2005. It is unclear whether the true number of reportable crashes is actually higher or lower than the number of crashes collected on incident reports. Some of the incident reports may have been for incidents under \$1,000 in damage, and with no injuries, that are not reportable under South Dakota statute. The dollar value of property damage was typically not available in incident reports. On the other hand, some crashes may have gone completely unreported, even on incident reports. Thus, the number of crashes collected on incident reports should serve as a rough baseline for future year crash data collection.

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

One of the potential barriers identified by the technical panel in its problem statement was political opposition to reporting crashes from tribal lands. This arises from various motivations, described in greater detail in Findings, below.

⁶ Panel members are listed in the Acknowledgements section on page ii.

In its interim report, the team recommended that a group be convened to draft a Memorandum of Agreement for the state and tribal governments. The draft was conceived as a starting point for negotiations between the state and each tribe.

TASK DESCRIPTIONS

Task 1: Review Scope and Work Plan

Meet with the project's technical panel to review the project scope and work plan.

The scope and work plan were reviewed as part of the project kickoff meeting, held in Pierre in March 2006 with members of the technical panel. Attendees at the meeting discussed some of the issues that would come up during visits to reservations, and made suggestions about visits and the material to be covered. Panel members pointed out that personal identifiers would be an issue with some tribes.

The kickoff meeting was attended by Linda Bailey and Polly Quick of ICF, and Dan Painter and Vernon Shelton from Interstate Engineering.

Task 2: Interviews and Site Visits

Conduct interviews and site visits with staff of tribal offices, the Bureau of Indian Affairs, the Indian Health Service, the South Dakota Office of Highway Safety, and the South Dakota Department of Transportation to identify crash data needs and to describe current crash reporting practices.

The ICF team, including Vern Shelton from Interstate Engineering, made visits to each of the nine reservations in South Dakota in May and June 2006. Dave Huft from South Dakota Department of Transportation (SDDOT) also attended most of the tribal visits. In most cases, interviews and data collection were conducted on the same visit, but some visits were broken up.

Table 2: Interviewees at Nine Reservations

Tribe	Interviewees
Cheyenne River Sioux Tribe	Zane Arpan, Tribal Transportation Planner Charles Festus Fischer, Chief of Police Rose Mandan, Law Enforcement Assistant
Crow Creek Sioux Tribe	Scott Shields, BIA Law Enforcement Officer (Chief of Police)
Flandreau Santee Sioux Tribe	Ken James, Chief of Police Ray Red Wing
Lower Brule Sioux Tribe	Toni Rouillard, Economic Development Travis Thompson, BIA Law Enforcement Officer
Oglala Sioux Tribe (OST)	Genevieve Ribitsch, OST Department of Transportation Connie Johnson, OST Department of Public Safety
Rosebud Sioux Tribe	Captain Marlin Enno, Rosebud Tribal Police Sgt. Sedlmajer, Highway Safety Officer
Sisseton-Wahpeton Sioux Tribe	Gary Gaikowski, BIA Law Enforcement Officer (Chief of Police)
Standing Rock Sioux Tribe	Pete Red Tomahawk, Transportation Planner Gerald White, BIA Law Enforcement, Criminal Investigator David Thompson, BIA Law Enforcement, Criminal Investigator
Yankton Sioux Tribe	Gerald Farmer, BIA Law Enforcement Officer (Chief of Police)

Tribal staff and BIA law enforcement officers spoke about issues surrounding traffic crash reporting with the research team. In each case, interviewees at law enforcement agencies, whether tribal or BIA, were asked about their experiences in collecting and using crash data. Internal agency procedures, problems with data collection, and problems with sending data to the state were discussed. The research team brought up issues surrounding staff time, training needs, and political issues with traffic crash reporting. Interviewees were also asked to comment on the usefulness of improved reporting. Often, existing software at the law enforcement offices was discussed in terms of how easily officers could use it and access reports on crash hot spots. At one tribe, a highway safety officer funded through the Indian Highway Safety office was also interviewed (Rosebud Sioux Tribe).

The team was also able to meet with some tribal government officials, and with other tribal staff. Dave Huft, of the Office of Research, participated in most of the site visits.

In addition to the visits to Tribal and BIA Law Enforcement offices, the research team met with Pat Winters of SDDPS, and John Weaver and Myrna Buckles of the Indian Health Services. These meetings provided background, history, and perspective to the crash data collection efforts in South Dakota. Together with Dave Huft of SDDOT, the research team also met with the BIA Special Law Enforcement Agents in Aberdeen, Elmer Four Dance and John Long.

The results from the site visits were summarized for the technical panel in a technical memorandum in June 2006.

Task 3: Preliminary Assessment of Crash Data from Reservations

From results of the interviews and site visits, make a preliminary assessment of the availability, quality, and usability of crash data from the nine Indian reservations with lands in South Dakota.

The ICF team entered into computer files all of the data collected by hand from tribal and BIA law enforcement files during the site visits. A preliminary assessment of the crash data was completed and submitted to the Department of Public Safety for review and comment. The crash data collected on site were generally found to have too few details to be included in the South Dakota Accident Reporting System, with the exception of crash forms from Cheyenne River Sioux Tribe reservation.

One of the most important things found in this initial assessment was that most data collection problems happened in the first phase of data collection, rather than data processing. Most details from crashes were not fully described on the reports that existed when the research team visited law enforcement agencies. For example, some of the incident reports found showed alcohol involvement or weather, but many did not. In addition, the crashes were often not described in enough detail to determine whether they were reportable crashes, that is, whether property damage only exceeded \$1,000.

Although this initial assessment gave a good first overview of the data collected, the research team was aware at the time that there would be some duplication between the data collected and

crashes already reported to the state. The final numbers reported in this report, therefore, are the definitive crash data figures and should be used to describe the actual number of crashes on tribal lands in South Dakota for 2005.

Task 4: Identify Best Practices in Reporting and Barriers

From the results of the interviews and site visits, identify best crash reporting practices as well as barriers to complete and accurate crash reporting.

The research team conducted telephone research with other states, tribes, and organizations identified by the South Dakota Department of Transportation's Office of Research to identify best practices in crash reporting from tribal lands in other areas. In addition, the team identified best practices among tribes within South Dakota. The results of the best practices outreach were presented in the Interim Report on the project, and are presented below under Findings.

Overall, the research team found that crash reporting to the state from tribal lands is an issue in most states with significant tribal lands. The relationship between a given tribe and the state in question seemed to be the most important factor. Despite the difficulties, officials at tribes, state and federal agencies in other areas were able to provide good information on data reporting plans that seem to be effective.

Among the nine tribes with lands in South Dakota, several had exemplary practices in one or more areas of crash data collection and processing, and those results are also presented below under Findings.

Task 5: Prepare Technical Memorandum for Review

Prepare a technical memorandum and meet with the project's technical panel to review results of Tasks 2-4.

The team prepared an interim report that functioned also as a technical memorandum on the data collected to date, the interviews conducted, and the status of the study. The research team also recommended two pilot projects as part of this technical memorandum, one on training for law enforcement officers, and the other to draft a sample memorandum of understanding (MOU) that could be used to establish a reporting relationship between each tribe and the state. After the panel meeting to review this report, smaller groups were established to meet and implement the two projects.

June Hansen of the SDDOT Office of Civil Rights has the draft MOU currently. The training discussion resulted in a description of training to be offered that would be inserted directly into the MOU. Existing training opportunities with the South Dakota Highway Patrol were also discussed and are described in the Findings below.

Task 6: Estimate Current Crash Reporting Rates

From the examination of available crash reports and databases available on each of the nine reservations, develop estimates of current reporting rates and rates that might be achieved through improved procedures.

The team conducted an analysis of the crash data collected from reservations in South Dakota. The analysis was descriptive, not a statistical prediction. The research team consulted with the project manager and decided that a statistical prediction similar to those presented in the 2005 Purdue Study would not be significantly better, since the underlying data would not have improved through the study.

Despite the simple nature of the analysis, the research team was still able to establish that crashes were under-reported by approximately 64 percent overall for 2005. In some tribal areas, no crashes were left unreported by law enforcement; in others, crashes were under-reported by up to 89 percent.

These figures are based on the crashes reported to the state within the Census 2000 boundaries of tribal lands. It is important to note that some state roadways cross within these boundaries, and the crashes on those roadways would be counted here as within those boundaries. The Census 2000 boundaries were an improvement over the use of complete counties, which was the method used by the 2005 Purdue Study. While imperfect, they provided a good estimate of total crashes on tribal lands, especially those that are not contiguous with county boundaries.

Task 7: Identify and Submit Unreported Calendar Year 2005 Crashes on Reservations

From crash reports and databases available on each of the nine reservations, identify calendar year 2005 crash reports that could be, but which have not yet been, submitted to the South Dakota Office of Highway Safety. In cooperation with local authorities, prepare a supplemental submission of that data to the South Dakota Office of Highway Safety.

During data collection, the team found that several tribal law enforcement agencies did not have complete crash data on file. Generally, the law enforcement files contained incident reports, which have a brief narrative description of each crash, but not a full crash report. One exception was the Cheyenne River Sioux Tribe, where the tribal police department shared approximately 70 full crash reports with the study. Some of the crash reports were not reportable under the state definitions, but 52 were entered into the South Dakota Accident Reporting System (SDARS). No other crash reports could be filed in SDARS because the officers had not collected complete data on the scene.

Although collecting full data for each crash would have been preferable, the research team would not have been able to reconstruct most of the crashes, especially those with no injury and little property damage, from officers' memory. Reconstructing 685 crashes, those for which tribes did not have full data, would have been outside the scope of the project.

Two tribes, the Rosebud Sioux Tribe and the Yankton Sioux Tribe, told the research team that they had full data on crashes, but did not share the data. These data would presumably have been entered into SDARS if the tribes had been willing to share them.

Task 8: Develop Procedure Change Recommendations

Develop recommendations for practical changes in procedures, protocols, cooperative agreements between agencies, staff levels, training, information technology, and any other significant factors to improve the completeness and accuracy of future crash reporting on reservations. Estimate the resource requirements and cost of recommended changes.

The team held a special meeting in Aberdeen in September 2006 to gather input from tribal and BIA law enforcement officers on procedure changes to improve crash reporting. Tribal and BIA law enforcement officers and assistants from seven tribes in South Dakota attended, including four chiefs of police. The following tribal law enforcement agencies were represented by their chiefs of police: Rosebud Sioux Tribe; Oglala Sioux Tribe; and Cheyenne River Sioux Tribe. The following BIA law enforcement offices were represented: Sisseton-Wahpeton (chief of police); Yankton (officer); Lower Brule (officer); and Standing Rock (assistant). In addition, several tribal government staff were in attendance, from Lower Brule Sioux Tribe and Yankton Sioux Tribe. Staff from the Indian Health Service, South Dakota Department of Transportation, and South Dakota Department of Public Safety (SDDPS) also attended.

The two recurring themes from the meeting were training for law enforcement officers, and overcoming political resistance to sharing data. Training emerged as such a significant issue that the research team recommended a training-related pilot project in the interim report. Several chiefs of police described political resistance from tribal councils, and said that outside roadway safety experts, including staff from the state, might be able to help them in presenting a case for crash reporting to the councils. Roy Meyer, who attended from SDDPS, also described a grant program he hoped to implement. The program could set aside approximately \$20,000 per tribe to improve crash reporting.

There was also a long discussion of different software options available to tribes for collecting and storing crash data. The Chief of Police for the Rosebud Sioux Tribe discussed the Cisco software system that the tribe currently uses. A representative of Cisco was also present at the meeting.

Task 9: Prepare a Final Report

In accordance with the Guidelines for Performing Research for the South Dakota Department of Transportation, prepare a final report summarizing the research methodology, findings, conclusions, and recommendations.

The research team submitted a draft final report in February, 2007. Review comments received from the project's technical panel were addressed in this final report, submitted in April, 2007. Although the entire technical panel had an opportunity to comment, the only significant comments received on the report came from SDDOT and SDDPS.

Task 10: Present Findings

Make an executive presentation to the South Dakota Department of Transportation's Research Review Board and the Aberdeen Area Tribal Chairmen's Health Board at the conclusion of the project.

Presentations to the Research Review Board and the technical panel were held on February 13, 2007. The presentation was provided in a Microsoft Powerpoint format, and can be used for further presentations after the end of the research project.

The meeting for the Aberdeen Area Tribal Chairmen's Health Board will be attended by representatives of the project panel rather than the consultant, since the next meeting fell beyond the timeframe of the project. In addition, the research team has prepared a fact sheet for distribution to tribes and other interested parties at the state to spread awareness of the study and the issue.

FINDINGS AND CONCLUSIONS

LEGAL FRAMEWORK

Tribes, as sovereign nations, are not like other jurisdictions geographically contained in the State of South Dakota. They generally do not fall under the jurisdiction of state law, and cannot be compelled to submit crash reports as other jurisdictions would. As sovereign nations, the tribes in South Dakota have a formal relationship with the Federal government, not the state. Consequently, the motivation for tribes to work with other jurisdictions below the federal level must be mutual benefit.

On all nine reservations, all law enforcement services are supported by the Bureau of Indian Affairs (BIA). However, five tribes have contracted to provide law enforcement services under Public Law 96-638 (generally known as a “638 contract”). In these cases, the tribe administers its own law enforcement directly. On four reservations, the BIA provides law enforcement directly. This distinction has an effect on crash reporting. BIA law enforcement agencies are federal offices, and any crash reports they collect cannot be given to private citizens without a Freedom Of Information Act (FOIA) request. These agencies are also one step removed from tribal councils. In contrast, the tribal law enforcement offices are employed by the tribal council and can sell copies of crash reports directly to the public. Also, BIA law enforcement officers are required to go through training at the Indian Police Academy in Artesia, New Mexico. Although many tribal law enforcement officers also go through the Indian Police Academy, some are trained at the South Dakota Division of Criminal Investigation in the Office of the Attorney General.

The South Dakota Department of Public Safety (SDDPS) collects all crash reports for the state under state statute. Other jurisdictions within the state, such as counties and cities, are required to use the South Dakota crash report form (DPS-AR1 12/11/03), submit the report to the state within three days, and include identification of all drivers involved in each crash. Instructions for the South Dakota crash report form are available from the SDDPS Office of Accident Records.

South Dakota statutes limit the ability of SDDPS to make departures from standard procedures. Three major and interrelated issues for working with tribes are:

1. Can the SDDPS accept crash reports without names?
2. If the SDDPS does receive names in reports, could it keep crash records off drivers' license records, if tribes request this? Could it keep crash records otherwise confidential?
3. Is there a verifiable firewall between crash data at SDDPS and information (such as alcohol involvement) used for criminal prosecution by other state and local jurisdictions?

Under current South Dakota statute, anyone involved in a crash must submit personal identification and vehicle registration to an officer. The officer must provide a report of the crash

to the state, and the crash report cannot be held confidential. The relevant statute is quoted below:

SDCL §32-34-13: Accident reports not privileged--Fees for locating and furnishing reports. Reports pursuant to §§ 32-34-7 to 32-34-12, inclusive, and the information contained in such reports is not privileged and may not be held confidential.

As stated above, tribes are not obligated to abide by state statute in their crash report submissions. However, in order to realize some of the benefits of the crash reporting system, personal identifiers would be needed. For example, insurance reports can only be requested and received if personal identifiers are included in a crash report.

Tribal, BIA and state law enforcement agencies already cooperate on many issues in South Dakota. Law enforcement interests often cross tribal boundaries, and whether the issue is “hot pursuit” or drug smuggling and manufacture, law enforcement officers have benefited from a cooperative approach. The same can be said for motor vehicle crashes, which relate to many other enforcement issues in addition to engineering concerns.

Currently, the Standing Rock tribe has an agreement with Sioux County in North Dakota that allows for cross-deputization of BIA law enforcement officers. This allows them to enforce laws with non-tribal members on tribal lands, acting with the same authority as the County Sheriff.

Conflicts between tribal and state law are another major issue for crash reporting. Some tribes do not require driver licenses or vehicle registration, so a tribal member involved in a crash may not be able to provide this identification for a crash report. In this case, tribal law would have to change to allow for complete reporting. Law enforcement officers did not indicate that this was a frequent issue but, unless addressed, the standard procedures for crash reporting will have exceptions on those tribal lands with differing laws.

A major concern for tribal members is double jeopardy, whereby someone cited by tribal police could also be cited by the state, for example for reckless driving. South Dakota Highway Patrol officers who attended meetings said, however, that this is not a real concern. Citations for traffic violations must be issued “at the time,” and cannot be issued in retrospect based on a crash report. This fact was not widely known among project participants.

CRASH DATA: IMPORTANCE AND USE

Traffic crashes claim a disproportionate number of lives on reservations in South Dakota. An analysis of fatality data from 2001 through 2005, shown in Figure 3, shows that in South Dakota, Native Americans have a per capita motor vehicle fatality rate three times higher than whites and other groups in the state.⁷ Public health officials, safety officials, and transportation planners are

⁷ Fatality Analysis Reporting System, accessed at <http://www-fars.nhtsa.dot.gov/>. Census population estimates by race were accessed at <http://www.census.gov/popest/datasets.html>. Analysis by ICF.

all interested in lowering the crash rate on tribal lands in South Dakota for the sake of those killed and injured in crashes.

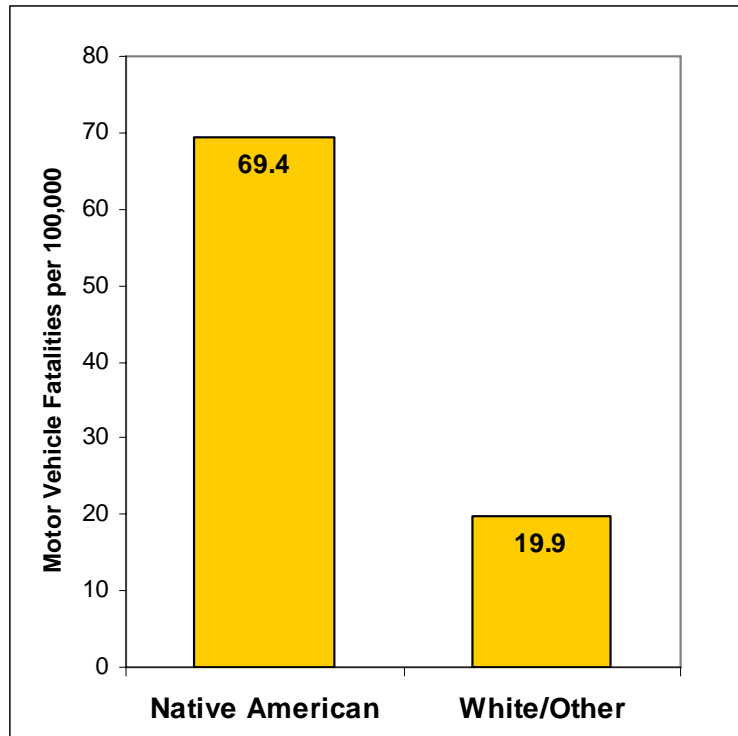


Figure 3: Motor Vehicle Fatality Rate in South Dakota, 2001 – 2005 Relative to Native American and White/Other Populations

Source: Census population estimates, Fatality Analysis Reporting System. ICF Analysis.

Native American fatalities accounted for over a quarter of all motor vehicle fatalities in South Dakota between 2001 and 2005, as shown in the table below.⁸ Improving traffic safety on roads on and near tribal lands would have a significant influence on overall traffic fatality rates for the state.

Table 3: Native Americans as a Percentage of all Motor Vehicle Fatalities in South Dakota

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

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

⁸ Fatality Analysis Reporting System, accessed at <http://www-fars.nhtsa.dot.gov/>. Census population estimates by race were accessed at <http://www.census.gov/popest/datasets.html>. Analysis by ICF.

SAFETY PLANNING

Most fatal crashes on tribal lands are currently tracked by the state. Even when they are not reported to the South Dakota Department of Public Safety (SDDPS) by law enforcement agencies, the department is able to use records from hospitals and other sources to record these crashes. However, information from all crashes (not just fatal crashes) would allow safety planners to better pinpoint hazards. An intersection with one fatal crash may have had 8 non-fatal crashes in the same year, but without full information, the location of one fatal crash could seem unremarkable.

Reduction in lives lost, injuries, and damages is the goal for everyone working in traffic safety today. However, NHTSA, FHWA, and other agencies that fund safety improvements and programs now require evidence that their funds are making a difference in traffic safety. Without past crash data, safety improvement needs are hard to prove and therefore hard to fund. Past years' data allows transportation planners to set a baseline and over time measure improvements that can be correlated to a corrected problem.

The BIA Office of Indian Highway Safety funds highway safety officers on several of the reservations in this study. These officers are trained in safety-related enforcement activities, and often have special training in crash reconstruction and reporting. In order to continue these grants, officers are required to report on their enforcement activities and on other safety measures, such as number and severity of crashes.

NHTSA also funds safety-related work, such as seatbelt campaigns, child restraint education, and anti-DUI campaigns. NHTSA funds this work mainly through what is known as the 402 safety program, with other funding available for specific tasks. Tribes can apply for these funds through the State of South Dakota.

Three main safety fund sources and the type of projects they can fund are outlined in Appendix A.

INJURY PREVENTION: SOLVING IDENTIFIED PROBLEMS

Public health workers in a community need data to guide their interventions on injury prevention. In the past, the Indian Health Service has provided most of the traffic crash data analysis on tribal reservations in South Dakota. Having several years of crash data provides an invaluable baseline for interventions on drinking and driving, seatbelt use, child restraint use, and other safety issues.

Once an intervention has been made, showing that the intervention made a difference is crucial for public health workers. A project begun in 1991 in the Navajo Nation was able to show a 52 percent reduction in the fatality rate from motor vehicle accidents over a five-year period, and a 50 percent reduction in motor vehicle-related hospital discharges. This highly successful

program received the 1996 NHTSA Administrator's Highway Safety Program of Excellence Award.⁹

TRANSPORTATION PLANNING

Crash data allow transportation planners to pinpoint crash hotspots that can be addressed, and also allow them to estimate and then measure the results of improvements. For example, a dangerous curve can be improved by clearing sight distance, posting signs that warn drivers of an upcoming curve, installing centerline and shoulder rumble strips, improving shoulders, or providing skid-resistant pavement surfaces, to cite a few possibilities. Planners use a Crash Reduction Factor (CRF) for each type of improvement to decide whether it meets a cost-benefit analysis, that is, whether it will reduce crashes enough to be worth the investment.¹⁰

To make the best decisions in safety improvements, planners need to know more than just location. Other contributing factors—such as the driver's age, whether the driver was sober, the weather, and the lighting—must be assessed. This drives the need for all of the details about the crash circumstances that are on a full crash report form. Once hazardous locations have been found, the state prioritizes improvements through its Roadside Safety Improvement Program each year. The South Dakota Department of Transportation has several sources of funds for safety improvements, one of which is the FHWA. In fiscal year 2007, the SDDOT set aside \$10.9 million for roadway safety improvements in the Statewide Transportation Improvement Program, including several small projects for signing and delineation, and a handful of larger projects involving reconstructed roadway.¹¹

FHWA funds several safety grant programs that are administered by the state. The largest is called the Highway Safety Improvement Program. This program was funded at just over \$1.2 billion nationally in Fiscal Year 2006. South Dakota received a \$10 million apportionment under this program for FY 2006. The majority of the Highway Safety Improvement Program fund is available for safety improvements on any public roadway selected in the State Transportation Improvement Plan (STIP). The Federal transportation act from 2005, the *Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU), also requires a strategic highway safety plan that builds on crash data to address roadway hazards.

Generally, FHWA funds are set aside for constructing roadway improvements. However, once the state has put a strategic highway safety plan in place, 10 percent of the funds available under the Highway Safety Improvement Program are eligible for education, enforcement, and emergency medical services.

⁹ Traffic Safety Digest, Fall 1998. Navajo Nation Seat Belt/Community Traffic Safety Program. Accessed at: <http://www.nhtsa.dot.gov/people/outreach/safedige/fall1998/n5-108.html>.

¹⁰ Bonneson, J. and D. Lord (2005). "Role and Application of Accident Modification Factors in the Highway Design Process." Texas Transportation Institute. Accessed at: <http://tti.tamu.edu/documents/0-4703-2.pdf>.

¹¹ Statewide Transportation Improvement Program 2007 – 2011, South Dakota Department of Transportation. Accessed at: <http://www.sddot.com/pe/projdev/docs/20072011FundingCatSTIPCompleteApproved.pdf>.

INSURED DRIVERS: HOW CRASH DATA ARE USED

The first time most people see a crash report is when they request a copy for insurance purposes. Insurance companies require this report from law enforcement to substantiate insurance claims. On reservations where the BIA provides law enforcement services directly, crash reports are considered confidential and cannot be issued from the police station directly to individuals. Individuals have to request a copy under the Freedom of Information Act (FOIA), as discussed above. This has caused some significant delays for people on reservations who need to make an insurance claim.

The State of South Dakota issues crash reports to individuals for a \$4 fee. Insurance companies also request crash reports directly from the state.

CRASH REPORTING ON TRIBAL LANDS

During the summer of 2006, the research team visited the nine reservations in South Dakota to collect information about current crash reporting procedures and to collect crash reports from 2005. Each tribe is unique in its operations and in how well its crash data collection is working, but the team found some commonalities in terms of the general process used to track crashes.

Following a description of the current status of crash reporting on tribal lands, possible improvements are discussed for each tribe. Because reservations range in size, the staff available at their law enforcement agencies, and their computer capabilities, specific improvement plans for the short and long term are described for each tribe.

Figure 4 gives an overview of the issues at each of the reservations in South Dakota, based on the results of this study. Each problem area is discussed in more detail below, followed by a discussion by tribe.

	Full Crash Report	Law Enforcement Office Capacity	Tribal Data System	Data Sharing - South Dakota DPS
Cheyenne River				
Crow Creek	(sometimes)			
Flandreau Santee				
Lower Brule	(sometimes)			
Oglala Sioux	(sometimes)			
Rosebud Sioux				
Sisseton-Wahpeton	(SDHP)			
Standing Rock	(old)			
Yankton	(N/A)			

Figure 4: Overview of Crash Reporting Problems by Tribe

CURRENT STATUS

There are two major phases in the crash reporting process (Figure 5). The first phase is primary collection. Through the dispatcher, an officer visits the scene of a crash and fills out one or more reports on the crash. In talking with law enforcement officers, and collecting reports from tribal and BIA law enforcement agencies, we found that many of the problems with tribal crash reporting originated in the primary collection stage.

In the second phase, the data processing phase, either the officer or a law enforcement assistant enters the information into the data storage system. Some tribal law enforcement offices have software systems, such as Cisco or the Criminal Records Information System (CRIS), to record crash data electronically. Others keep crash reports or copies of each crash report in a paper file. Some tribal law enforcement offices do not keep copies of full crash reports, and simply submit those that are collected to the Department of Public Safety. Each tribe maintains a dispatch log and incident reports, which have some of the information on the full crash report.

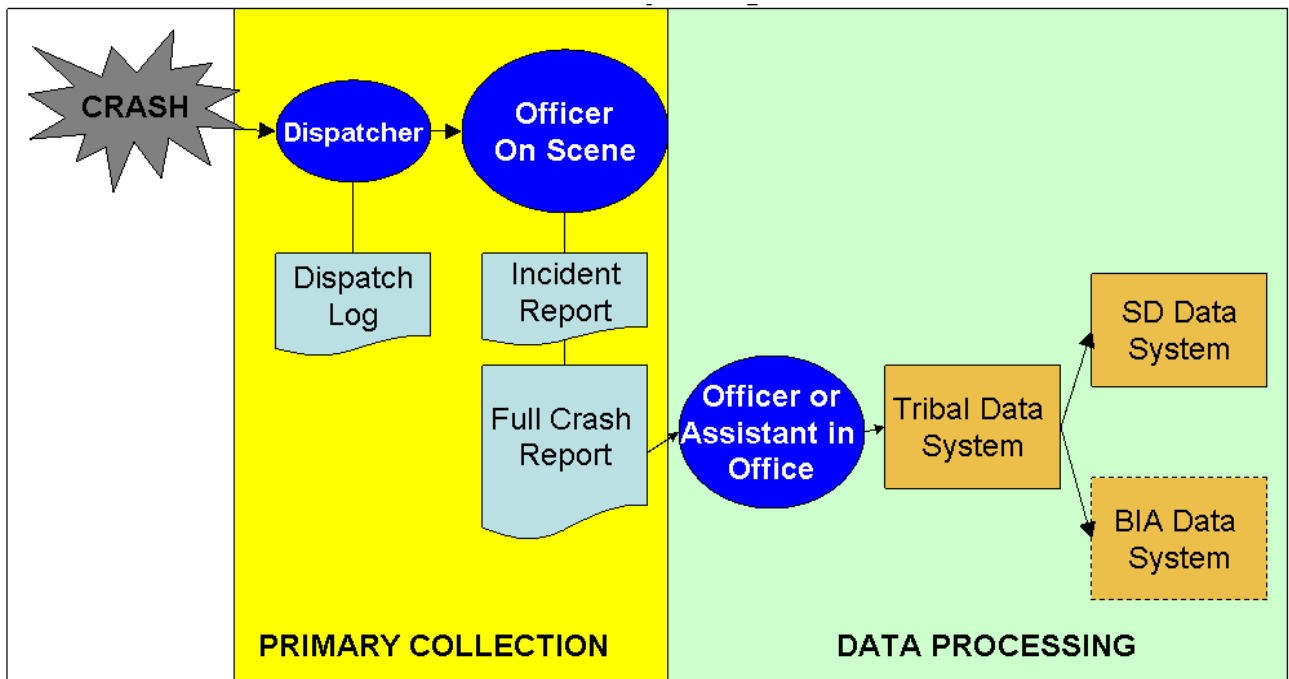


Figure 5: Tribal Crash Reporting Process with Complete Tribal Data System

There are problems in both phases at many tribes. Barriers to crash reporting associated with each phase are listed below.

PRIMARY COLLECTION: BARRIERS TO REPORTING

Training

A major source of barriers is the disconnect between law enforcement offices on tribal lands, state law enforcement, and SD Department of Public Safety (SDDPS) staff. This disconnect begins with separate training for officers who plan to work on reservations through the BIA, and

continues through the lack of communication about new forms and procedures in place at the SDDPS. This disconnect means that law enforcement officers on tribal lands are sometimes unfamiliar with the South Dakota crash forms. It also means that personal ties between tribal or BIA officers and state officials, which could otherwise improve crash reporting, may be missing. This can be remedied in part through training, and in part through extended outreach from the SDDPS and from tribal and BIA law enforcement.

Vehicles Moved

Removal of a vehicle from a crash scene in order to avoid documentation is a common problem for law enforcement across the U.S. While law enforcement officers cannot prevent this from happening, a general public awareness of the need to preserve a crash scene may help.

Law Enforcement Understaffed

Understaffing is a wide-reaching problem in law enforcement. Officers who are short of time may put off writing reports because of other pressing needs. Agencies without enough officers to staff shifts will find it difficult to train officers on new forms or provide supervisory assistance with reports. Some grant programs, for example from the Indian Highway Safety Program, are available specifically to fund staff positions to work on roadway safety with law enforcement agencies.

Crash Reports Not Standard Practice at BIA

The BIA does not currently require full crash reports, although it does require incident reports. Crash reconstruction and reporting are covered during Indian Police Academy training, but it is not specific to South Dakota forms. However, the BIA law enforcement division in Aberdeen has expressed support of full crash reporting. BIA law enforcement officials told the research team that they would support sharing data between reservation agencies and the SDDPS. While only four reservations in South Dakota have BIA law enforcement services, the other tribes are under contract to BIA for law enforcement services and could be required to provide crash reports to the state within that contract.

DATA PROCESSING: BARRIERS TO REPORTING

Feedback on Forms

Some reservations reported that when officers complete crash reports and send them to the SDDPS, they sometimes did not receive feedback on incomplete or incorrectly completed forms. Law enforcement assistants who work on crash reports could also benefit from additional feedback about how forms are filled out and the data used.

Electronic Data Systems Not Compatible

Software systems for crash records do not conform to a standard across the United States, although there are several efforts underway to create a more uniform data standard. Most notable

are the Model Minimum Uniform Crash Criteria, or MMUCC.¹² Software for crash systems is usually purchased together with other modules for tracking dispatch calls, citations, and other types of infractions. While SDDPS will soon be providing TraCS as alternative software for tracking crashes, compatibility with these other criminal justice databases will be key to creating data files that can be transferred directly. This is not a problem isolated to tribes or to South Dakota. Wisconsin DOT is currently working on a compatibility project with 49 types of software used by tribes, cities, and counties across Wisconsin.

Tribal Data Systems Inadequate

Most tribal and BIA law enforcement agencies reported dissatisfaction with their hardware and software systems. A frequently mentioned problem was a lack of technical support for the software that had been purchased. They also sometimes lacked trained personnel to work with the software, and many did not have a routine for data entry. Data reporting was reported to be working best at Rosebud Sioux Tribe, where a highway safety officer monitors the crash data entry and makes sure that officers have filed their reports. Having trained personnel and established procedures has helped the Rosebud law enforcement agency to maintain a good tribal data system for its own use. Other tribes often lacked both.

Political Concerns

Tribal sovereignty is a major concern in law enforcement. On one site visit, law enforcement officials said that the South Dakota Highway Patrol had been banned from the reservation by the tribal council because of a traffic stop. Historically in South Dakota, statistical data have sometimes been used to support criticism of tribal governments and members. Tribes may need assurance that the only use of crash data collected on tribal lands will be to improve traffic safety, not to criticize accident rates or to support criminal investigation or any other effort.

The political barriers are worsened because of an indistinct relationship between reporting crash data and improving traffic safety. While the South Dakota Department of Transportation (SDDOT) funds hazard elimination in cities and counties directly, some tribes have not received state funds to fix hazardous locations. Tribal and law enforcement staff at several tribes said that in some cases they had tried to establish the need for a signal or other improvement, but could not show crash data to indicate a problem.

Tribes are not under the same obligations as cities and counties to report crashes to the South Dakota Department of Public Safety (SDDPS). To stimulate better reporting from tribes, the SDDPS may need to explain how its crash data collection system can benefit tribes.

¹² 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/nca/MMUCC.html>) <http://www.mmucc.us/>.

On some issues, tribal governments differ significantly from one another. Several tribal representatives have stated that their tribal councils will not support submitting crash reports with personal identification of the people involved. On the other hand, representatives from the Lower Brule Sioux Tribe have said they would like to shorten the wait for crash reports for insurance purposes by having the reports go to the state. They understand that names and other personal identification would have to be included for this purpose.

DATA COLLECTED ON TRIBAL LANDS FOR 2005

OVERVIEW

It is important to note that data collection for this study could only address information accessible in the *data processing* part of the normal process shown in Figure 5. This section describes the data the team was able to collect, and discusses how the barriers described above in the section above affected the data collection effort.

Tribal law enforcement officers were asked to provide access to data on crashes from 2005 at each reservation. These data were input to a database for analysis in this study. Where crash data were available on South Dakota crash forms, the information was forwarded to the South Dakota Department of Public Safety with permission from the tribe.

Primary collection problems hindered crash data collection for this project. On many reservations, crashes were not reported on crash forms, even for internal tribal use. In many cases, officers filled out an incident report, but not a full crash report. Table 3 shows an overview of the data collected for 2005 as part of the study.

Table 4: Crash Data Collected for 2005 from Tribes in South Dakota

	Crash Reports	Incident Reports	Dispatcher Log	Other - Tribe Internal
Cheyenne River	YES			
Crow Creek			YES	
Flandreau Santee	(already submitted to DPS)			
Lower Brule		YES		
Oglala Sioux				YES
Rosebud Sioux				YES - INCOMPLETE
Sisseton-Wahpeton			YES	
Standing Rock	SOME	SOME		
Yankton				YES

The table shows clearly that full crash reports, the ideal form of crash reports for entry into the South Dakota Accident Reporting System (SDARS), were often not completed at the time of the crash and were not available for collection. The other types of reports collected generally did not have the same details about each crash as the South Dakota form, and so are not compatible with SDARS.

While the Rosebud Sioux Tribe has a tribal data system using Cisco software, it did not share its complete crash data with the study. The Rosebud crash files would be a good test case for sharing data electronically with SDDPS, since tribal law enforcement officers collect many of the same details on each crash but input them using their own software (without a paper form).

One reason for the lack of full crash data collection on many reservations is that the BIA has previously only required an incident form to be filled out for each crash. These incident forms are not tailored to crashes. The same form is used for burglaries, assaults, and other incidents. However, BIA staff interviewed by the study team say that the agency is not opposed to requiring the use of the South Dakota crash form.

One tribe, the Yankton Sioux Tribe, stated that while they had an internal file of full crash reports, they could not share those full reports with the study for political reasons.

Mapping the crash data is of special interest to this study because of the role that roadway engineering has in crashes. The study team has made a special effort to collect location information from each tribe, but this process is incomplete. The team collected location information about crashes from the Oglala Sioux Tribe, Lower Brule Sioux Tribe, Standing Rock Sioux Tribe, and Sisseton-Wahpeton Sioux Tribe.

Current Data Processing Systems at Tribes

The data processing phase is problematic for most tribes in South Dakota. In interviews, representatives of most tribal and BIA law enforcement agencies in South Dakota said they would like to improve their internal data processing and tracking effort. Each agency in South Dakota has some form of internal data processing for every call that officers go out to address, including crashes. Most of the data systems do not track all of the details about crashes that could be useful for crash analysis, although some are more effective than others.

In all of the tribal and BIA law enforcement offices visited, the most complete list of crashes was found in the log kept by the dispatcher. Dispatch logs typically recorded the type of crash, whether anyone was injured, and the location, time and date of the crash.

Incident reports on crashes are typically kept on file with other incident reports at the law enforcement offices, either by date or by officer. If a crash report is filled out, or if other investigations are made, those reports are filed with the incident report. The reports at most tribes are entered into an electronic record-keeping system, but most of these systems only record the information from the incident report. At some tribes, law enforcement assistants or other staff members also keep a separate spreadsheet to record all incidents by type or all crashes with more detail.

Several software packages—including CRIS, Global, Cisco, and New World—are in use at tribes for data tracking. Software support and hardware support are lacking or insufficient for some tribes. Internet access is also difficult for some or, for BIA law enforcement agencies, prohibited. While some tribes have a data system specialist to work with the software, several do

not. They rely on long-distance help from a software provider or from BIA information technology support.

None of the electronic data tracking systems at tribes in South Dakota are currently compatible with SDARS. Rosebud Sioux Tribe, where law enforcement officers expressed satisfaction with the Cisco software system, is currently working to create an interface with SDARS. This interface would allow the tribe to submit crash reports without filling out a South Dakota crash report in addition to putting the crash data into the Cisco system.

RESULTS OF ANALYSIS OF 2005 CRASH DATA

The State of South Dakota had not received complete crash data from reservations for 2005 prior to this study, with the exception of Flandreau Santee Sioux. In the course of the study, the team attempted to retrieve crash data in person from each of the nine reservations in South Dakota. At six reservations, the study team retrieved data from files under the supervision of law enforcement agents and assistants. In two cases, the Rosebud Sioux Tribe and the Yankton Sioux Tribe, a list of crashes was provided by the law enforcement agency. At Flandreau Santee Sioux, all data had been provided to the state previously, and was reviewed on site by the study team.

The data collected from each tribe was checked for duplication against the South Dakota state files. Crashes that were evidently non-reportable (for example, in parking lots and not in the public right-of-way) were also removed. The total number of crashes collected is shown in Figure 6 by tribe.

The number of crashes reported from “before” the study, shown in Figure 6, represent crashes occurring within reservation boundaries, as defined by the Census 2000 boundary files. These crashes represent both those that were reported by tribal and BIA law enforcement, as well as crashes reported by other agencies, such as the South Dakota Highway Patrol.

Prior to the actual data collection, another team of researchers from Purdue University had estimated the total crash numbers for South Dakota counties with Indian reservations¹³. The results of their calculations are shown in Figure 7, in comparison to the data collected as part of this study for 2005. Note that the Purdue study estimated county-wide crash numbers, and some reservations coincide more neatly with county boundaries than others. While the Purdue study focused on counties, the ICF team extracted only crash data from reservation lands.

¹³ Purdue study, pages 102-121.

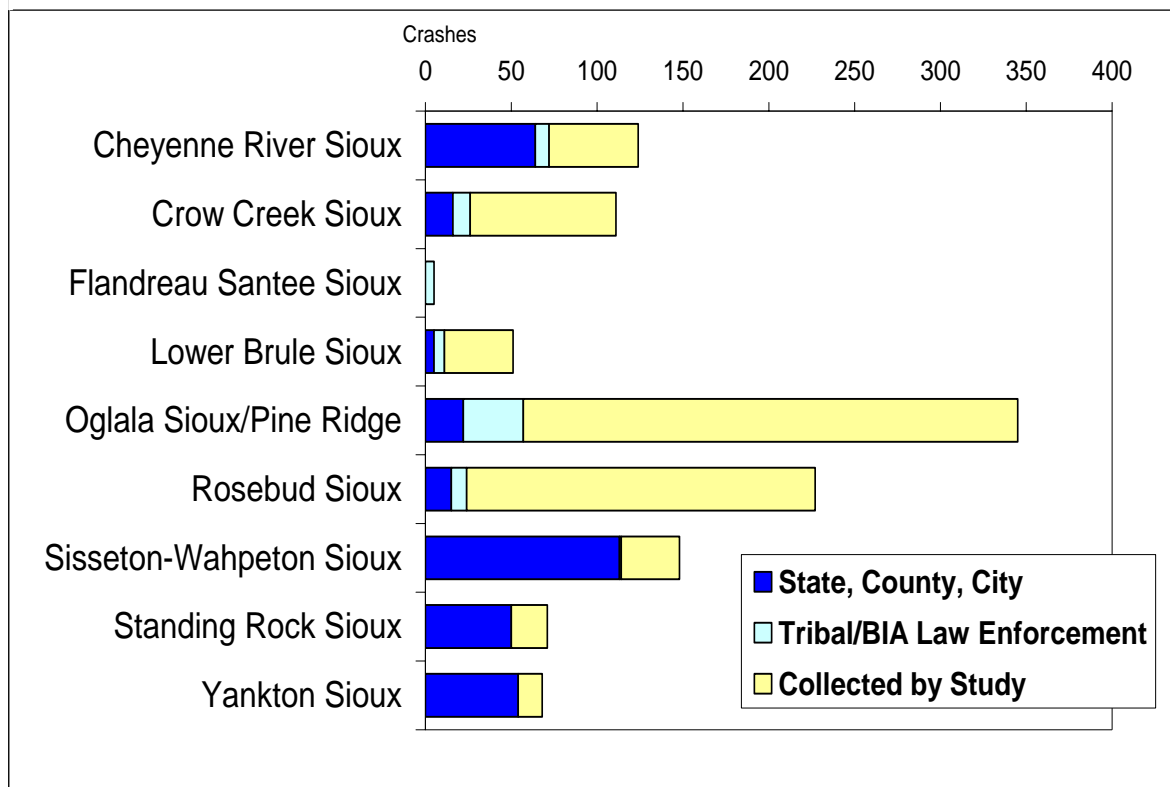


Figure 6: Motor Vehicle Crashes for 2005, Before and After Study, Within Reservation Boundaries as Defined by 2000 Census

Source: South Dakota Accident Reporting System (SDARS) data, summarized geographically by ICF, and Tribal/BIA Law Enforcement data collected during the study.

The results from this study are closer to those from the Purdue study in counties where the reservation lands dominate, such as Jackson, Shannon, and Todd Counties. In counties where the reservation jurisdiction is limited, such as Charles Mix County, the additional crashes added from Tribal and BIA law enforcement agencies does not change the total significantly.

One of the remarkable things resulting from the lack of complete crash data on tribal lands was the high percentage of fatality crashes included in the database. As shown in Figure 8, fatal crashes only represent 1 percent of all reported crashes in South Dakota. Including the crashes collected from tribes, which were all injury or property-damage-only crashes, reduces the dominance of fatality crashes significantly.

It is probable that even with improved data processing from tribes, as shown with the crashes collected by the study, all crashes are not captured. This is partially because not all crashes are reported by those involved. Still, with the additional data on crashes, the share of fatal crashes on Pine Ridge, for example, falls to approximately six percent, much closer to the statewide average.

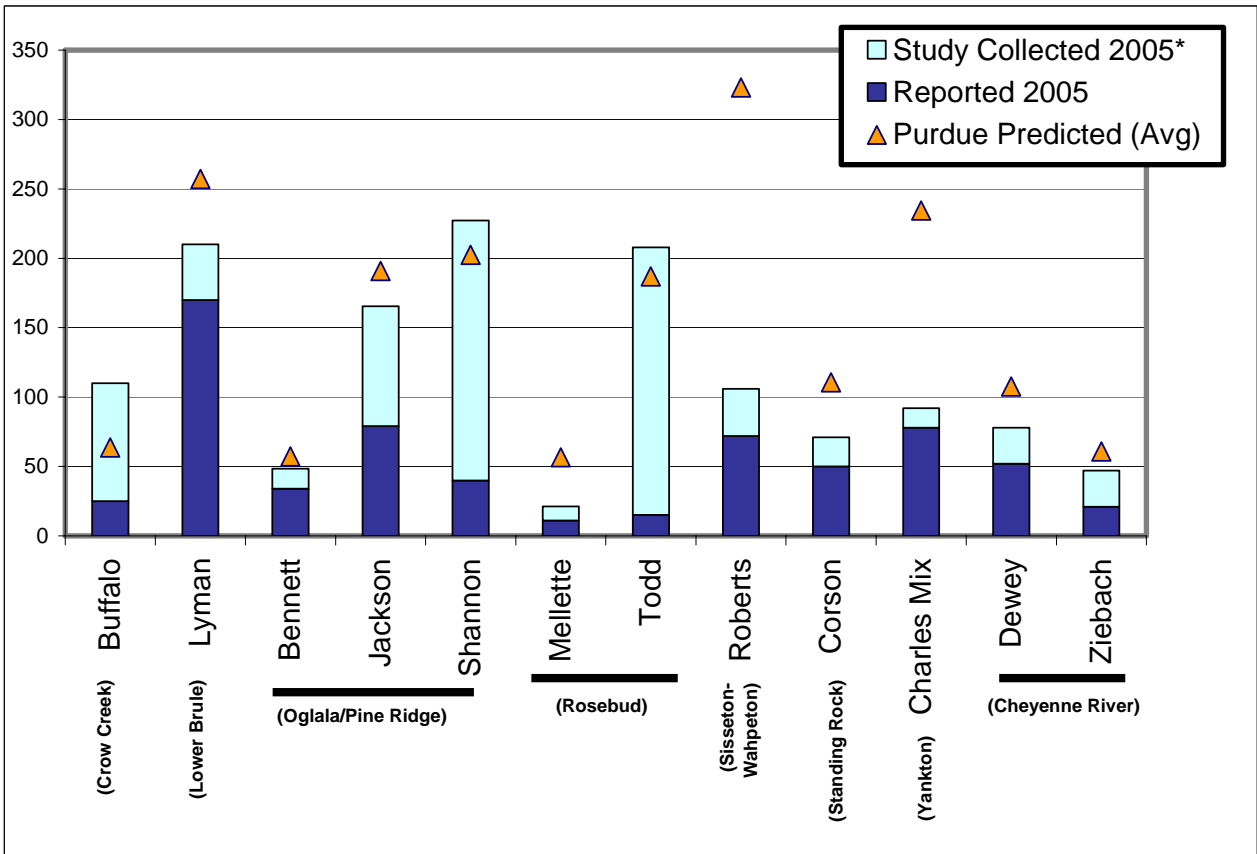


Figure 7: Comparison of Purdue Study Predictions and 2005 Data Reported and Collected for Selected Counties

Note: The Purdue study predictions cover six years for the counties they identified as having a high percentage of Native American population. ¹⁴

*Crashes collected for 2005 from reservation lands covering multiple counties are assigned to counties roughly by geographic area.

Table 5 shows a breakdown of the crash data reported to SDDPS prior to the study and those collected directly from Tribal and BIA Law Enforcement agencies as part of the study.

In addition to tabulating the crash data for tribal lands, the team mapped crashes on reservations where information was available about crash location. Maps are shown below by tribal reservation.

¹⁴ Purdue study, pages 115-120.

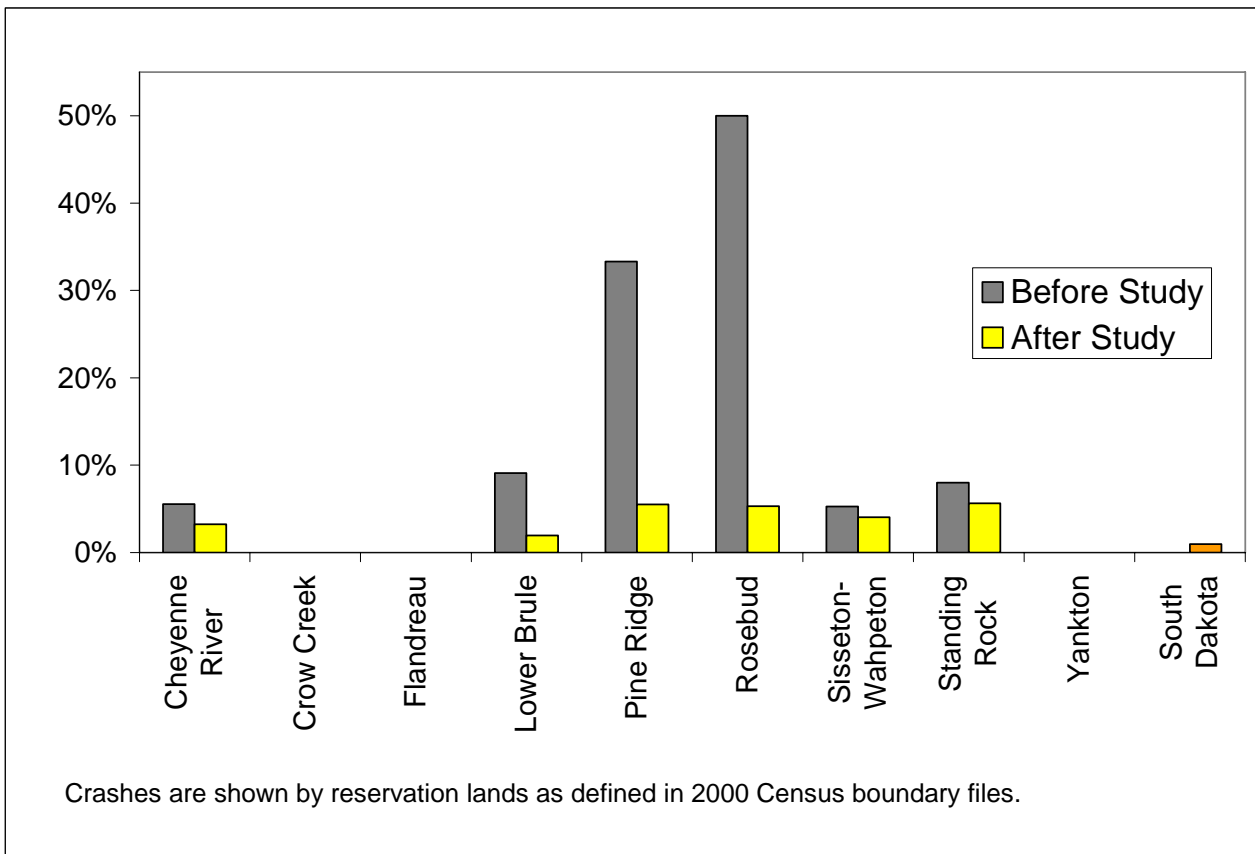


Figure 8: Fatal Injury Crashes as a Share of Total Crashes, Before and After Including Study Data Collection

Table 5: 2005 Crash Data Identified Prior To and During Study

Tribal Area	Reported to State	Collected by Study	Total
Cheyenne River Sioux	72	52	124
Crow Creek Sioux	26	85	111
Flandreau Santee Sioux	5	0	5
Lower Brule Sioux	11	40	51
Oglala Sioux/Pine Ridge	57	288	345
Rosebud Sioux	24	203	227
Sisseton-Wahpeton Sioux	114	34	148
Standing Rock Sioux	50	21	71
Yankton Sioux	54	14	68
Total	413	737	1,150

IMPROVING CRASH REPORTING: TRIBE BY TRIBE ANALYSIS

Lower Brule Sioux Tribe

Format	Paper – incident report Paper – some SD reports; Software - CRIS
Filing Procedure	Paper file, by date, with other incident reports
Data Summaries	None
Data Mapping	None
Law Enforcement	BIA

At Lower Brule Sioux Tribe, the BIA law enforcement agency worked with the research team to pull reports on traffic crashes from paper records. The search did not turn up any full crash report forms, but a total of 40 new crashes were found on incident reports. Adding those crashes to those that had been previously submitted to the state, a total of 51 traffic crashes were identified on the Lower Brule Reservation in 2005. All crashes are shown below, on a map in Figure 9. Most crashes occurred in the town of Lower Brule.

The Lower Brule Sioux Tribe law enforcement officers expressed an interest in improved software to track crashes on the reservation. The law enforcement office, which is a BIA agency, currently uses Criminal Records Information System (CRIS) software. Lack of technical support has been a major problem with CRIS for the agency, and officers are not always able to use it. The agency is also hampered by a lack of Internet access due to the status of the Cobell v. Kempthorne lawsuit, under which the BIA has been disallowed from using the Internet since 2001.

The law enforcement agency is also interested in training for the South Dakota crash reporting form. While officers are somewhat familiar with the form, not all officers are using it frequently enough to be at ease with it.

The paper filing system at Lower Brule’s law enforcement offices is very thorough, but it does not single out traffic crashes in a separate file. The agency had not kept a copy of the South Dakota crash forms that had been sent in to the SDDPS. There is no on-site tabulation of traffic crashes, although the CRIS software would theoretically be able to track them, if it were working properly.

Of the incident reports retrieved during the study, not all may be reportable under the South Dakota definition. For example, some may have had damages less than \$1,000. At the meeting in Aberdeen in September 2006, some law enforcement officials expressed interest in tracking all traffic crash records, not just reportable crashes. This would require the tribes to maintain their own databases in addition to SDARS.

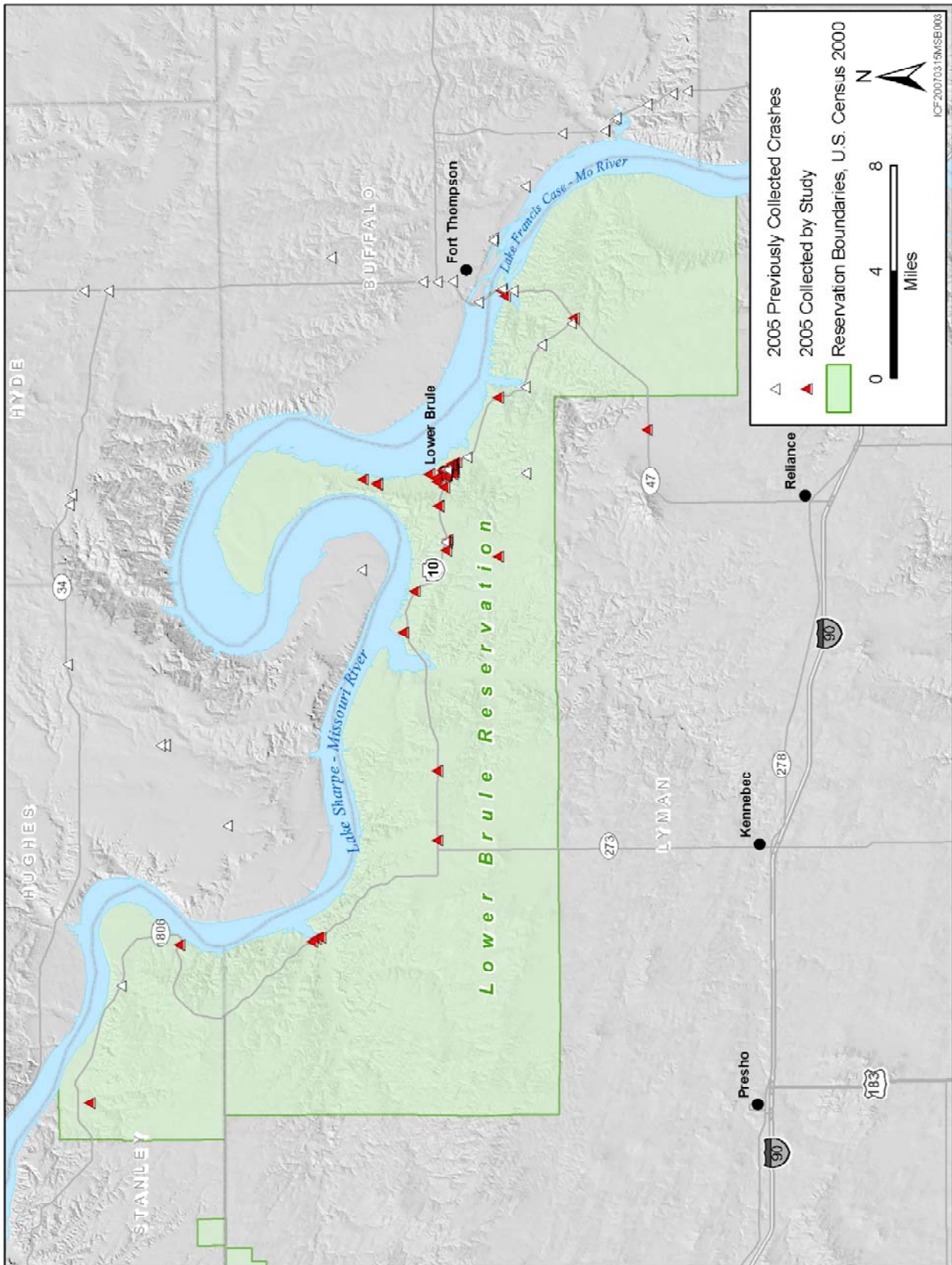


Figure 9: Map of Crashes on Lower Brule Reservation

Crow Creek Sioux Tribe

Format	Paper – Dispatcher Logs
Filing Procedure	Dispatcher logs kept on file by date
Data Summaries	None
Data Mapping	None
Law Enforcement	BIA

Crow Creek reservation has a BIA law enforcement agency. The officers are trained at the Indian Police Academy in Artesia, NM. The officers use the South Dakota state form to report some, but not all, crashes. The law enforcement agency works closely with the Buffalo County Sheriff, and with South Dakota Highway Patrol. The Highway Patrol typically does reconstruction if there is a serious motor vehicle crash, in which case they also file the crash report.

Staffing was a major concern for law enforcement officials at Crow Creek, where only three officers are currently working at the agency. The tribe is currently working on a law enforcement grant to fund more full-time positions.

Electronic data systems would be welcome at the law enforcement offices. The dispatch system is an older version, and the agency does not have any electronic data tracking systems. The law enforcement agency sends crash reports to the state to avoid the need for a FOIA request for insurance purposes.

Crashes were not mapped at Crow Creek because of a lack of information.

Cheyenne River Sioux Tribe

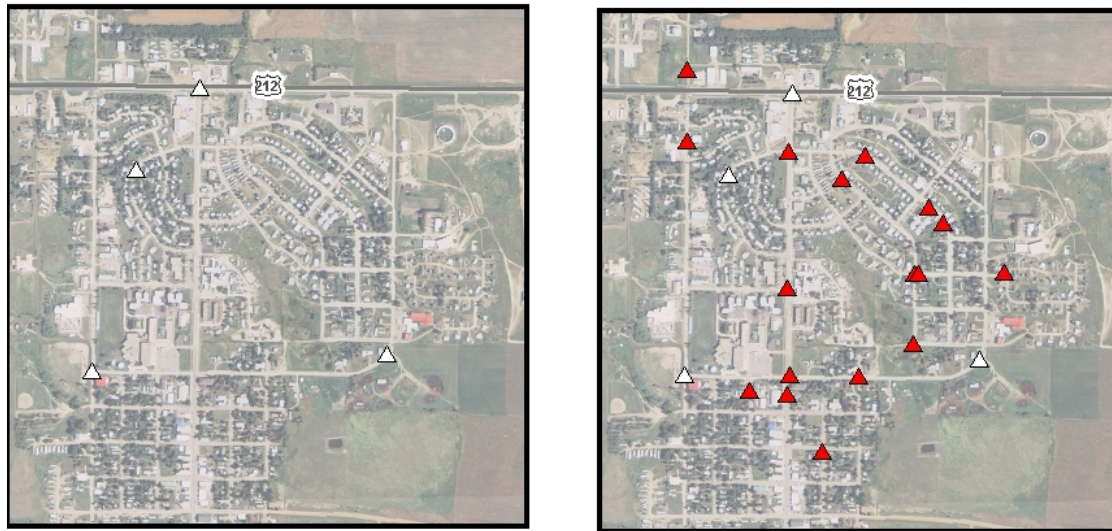
Format	Paper – SD crash report forms Paper – other report forms
Filing Procedure	Law enforcement assistant manages files and data entry Six officers are trained on the software system Tribal law enforcement agency currently moving to Cisco software for data tracking
Data Summaries	Built in reports from Cisco
Data Mapping	None
Law Enforcement	Tribal (Under PL 96-638)

Cheyenne River Sioux Tribe law enforcement worked with the research team and staff from the South Dakota DOT’s Office of Research to extract crash reports from their paper files. In the process, they were able to identify 52 crashes that could be included in the SDARS for 2005. The research team also submitted 18 other crash reports from Cheyenne River reservation, but those were not reportable under state definitions, or were incomplete. Some of the crash reports that had not been submitted were the result of a misunderstanding about the criteria for reportable

crashes. The law enforcement officers had thought that the state was only interested in crashes that happened on primary state roadways.

The maps in Figure 10 and Figure 11 show the difference for Eagle Butte when all crashes are included.

Traffic Crashes in Eagle Butte Cheyenne River Indian Reservation



2005 Previously Collected Crashes

2005 Collected by Study

Figure 10: Eagle Butte Crashes, Before and After Study Data Collection

The internal tribal crash reporting system is maintained by a law enforcement assistant who works directly with the crash reports and inputs them to the system. The agency recently switched from Global software to Cisco, and was in the process of getting the new system working at the time of the research team visit in summer 2006. The Global software system did not track property-damage-only crashes. The software is supported by the BIA Indian Highway Safety office, and the tribe is currently sending crash data extracted from the system to the BIA office in Albuquerque on CD-ROM each month.

At the time of the site visit, the Cheyenne River tribal police agency was 3 months into an Indian Highway Safety program, with funding for two dedicated highway safety officers in the police force. The safety officers are required to spend time doing radar, traffic stops, and prevention programs, and to report the total number of crashes to BIA every month. The grant also went toward the implementation of the Cisco crash reporting system.

Crash forms are generally filled out by the responding officer, unless the crash is serious. In those cases, one of the highway safety officers is called to the scene of the crash. The agency now has one officer trained in full crash reconstruction, made necessary in part because the tribal council does not currently allow South Dakota Highway Patrol officers onto the reservation for collaboration.

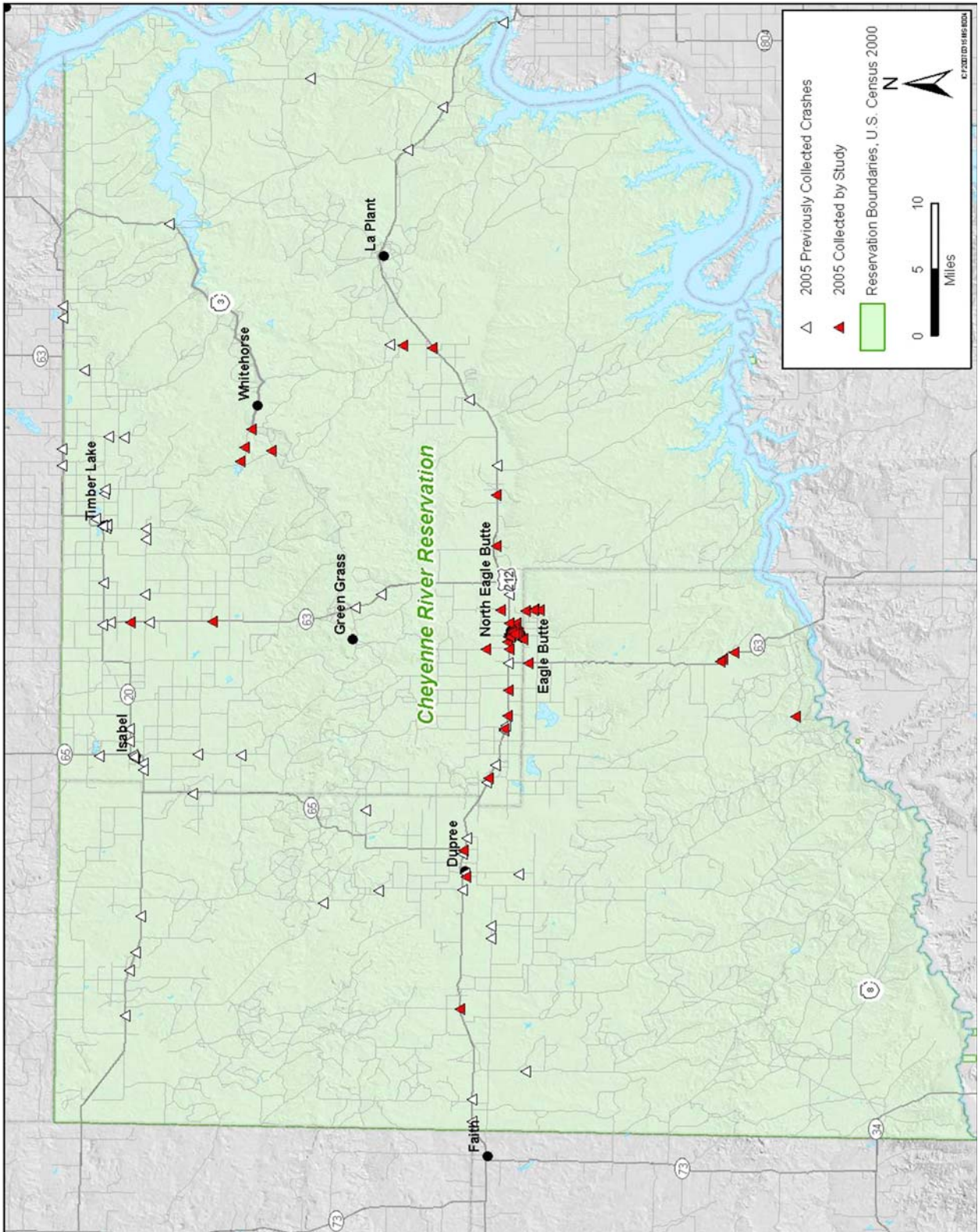


Figure 11: Map of Crashes on Cheyenne River Reservation

Flandreau Santee Sioux Tribe

Format	SD crash report forms
Filing Procedure	Copy on file at tribe; one copy to SDDPS
Data Summaries	Tally kept by law enforcement assistant in MS Excel
Data Mapping	None
Law Enforcement	Tribal (Under PL 96-638; shared with City of Flandreau)

The Flandreau Santee Sioux Tribe has a special circumstance, in that it currently works with the City of Flandreau to fund a single police force. The officers on this police force are cross-deputized and function as tribal police officers when they are on tribal lands, and as city police officers elsewhere. Law enforcement officers are generally trained at the South Dakota Department of Criminal Investigations and are trained on the state crash report form.

There was no indication on the visit that any crashes were going unreported on the Flandreau Santee Sioux reservation, but the research team did discover that the officers were not properly coding their agency type when they filled out forms for crashes on tribal lands. There is a checkbox on the back of the crash report form for “agency type,” and because officers function both as city and tribal police, they did not realize they should check off “tribal” for reports of crashes on tribal lands.

Oglala Sioux Tribe

Format	Electronic – Excel sheet Paper – SD crash report forms (some)
Filing Procedure	Crash reports submitted by district police offices to Oglala Sioux Tribe Department of Public Safety (OST DPS) in Pine Ridge OST DPS collects crash reports and passes reports to SDDPS, and feedback to tribal officers
Data Summaries	OST DPS keeps an Excel table listing crashes even if no full crash report was filed by the officer
Data Mapping	None
Law Enforcement	Tribal (Under PL 96-638)

The Oglala Sioux Tribe law enforcement agency has shrunk dramatically in the past several years, and the nine districts of the reservation have trouble covering all the law enforcement needs with the current size of the force. The Oglala Sioux Tribe Department of Public Safety (OST DPS) reported that officers often do not complete crash report forms, and the OST DPS pursues crash reports from sergeants and other officers at the district police stations. Crash reporting is generally driven by insurance claims, so if the people involved in the crash do not have insurance, officers do* not fill out a crash report.

The OST DPS currently maintains an internal record of traffic crashes in addition to those that are reported on SD crash report forms to the state. Staff at OST DPS have created a spreadsheet system for tracking crashes with several details on crashes. The Excel spreadsheet records do not match the South Dakota crash form categories or codes, but they allow the OST DPS to track its own crashes internally.

Crash reports can be filled out on paper, using Mobile software, or on a PDF file that can be emailed to OST DPS. Most crash reports are filled out on paper and hand-carried by the district sergeant to the Pine Ridge OST DPS office, who makes a delivery at least once a week. Only a portion of the OST districts have Mobile software capability.

OST DPS currently uses New World software, but the staff members do not use it for traffic crash reports. The dispatch does use the software regularly. The OST DPS had experienced difficulties with the software, and were considering options for improving the software when the research team visited in Summer 2006.

The crashes collected as part of the study were mapped with the assistance of OST DPS, as much as possible. Figure 12 shows the town of Pine Ridge, and Figure 13 shows the entire Pine Ridge Reservation area.

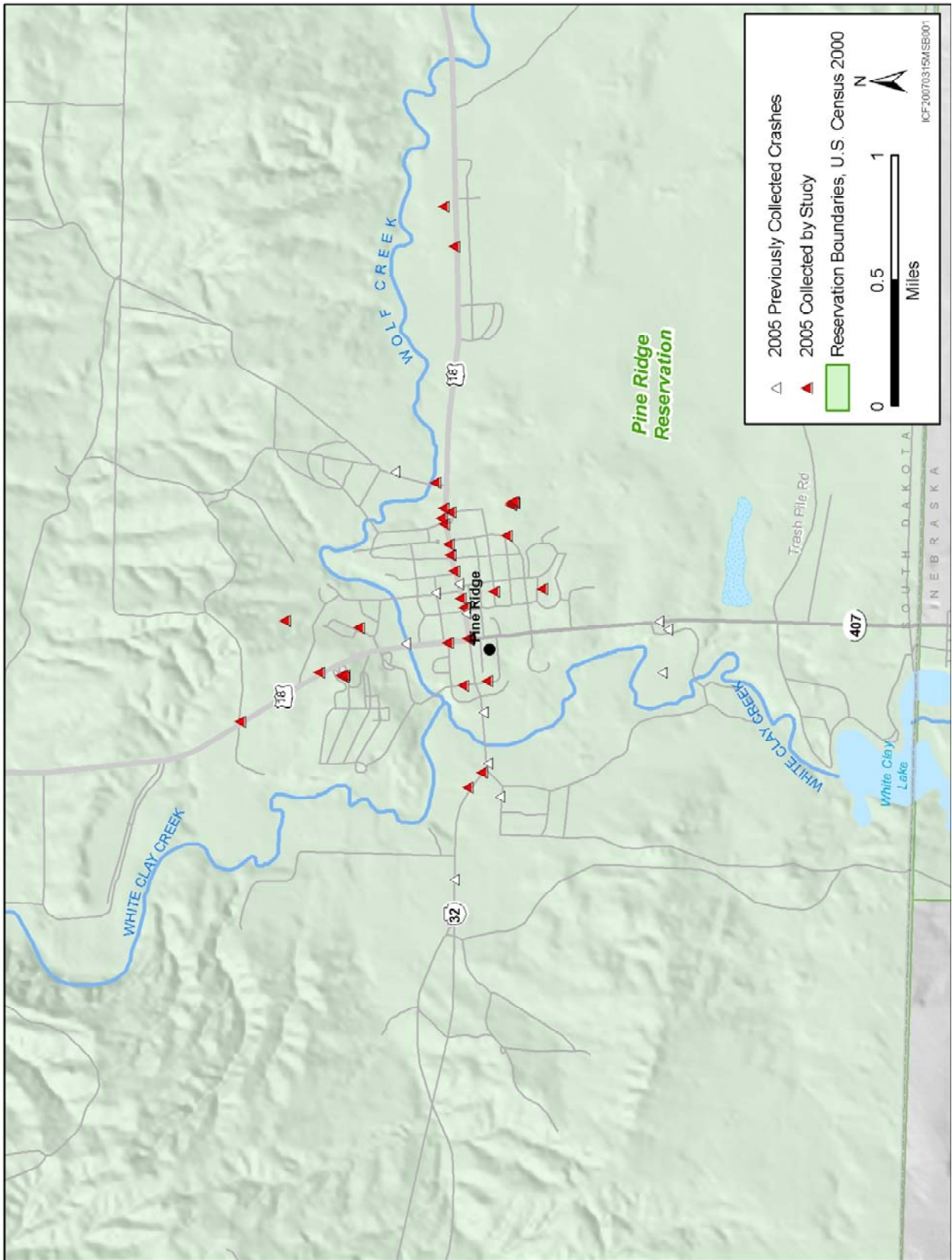


Figure 12: Crash Map, Town of Pine Ridge, Pine Ridge Reservation

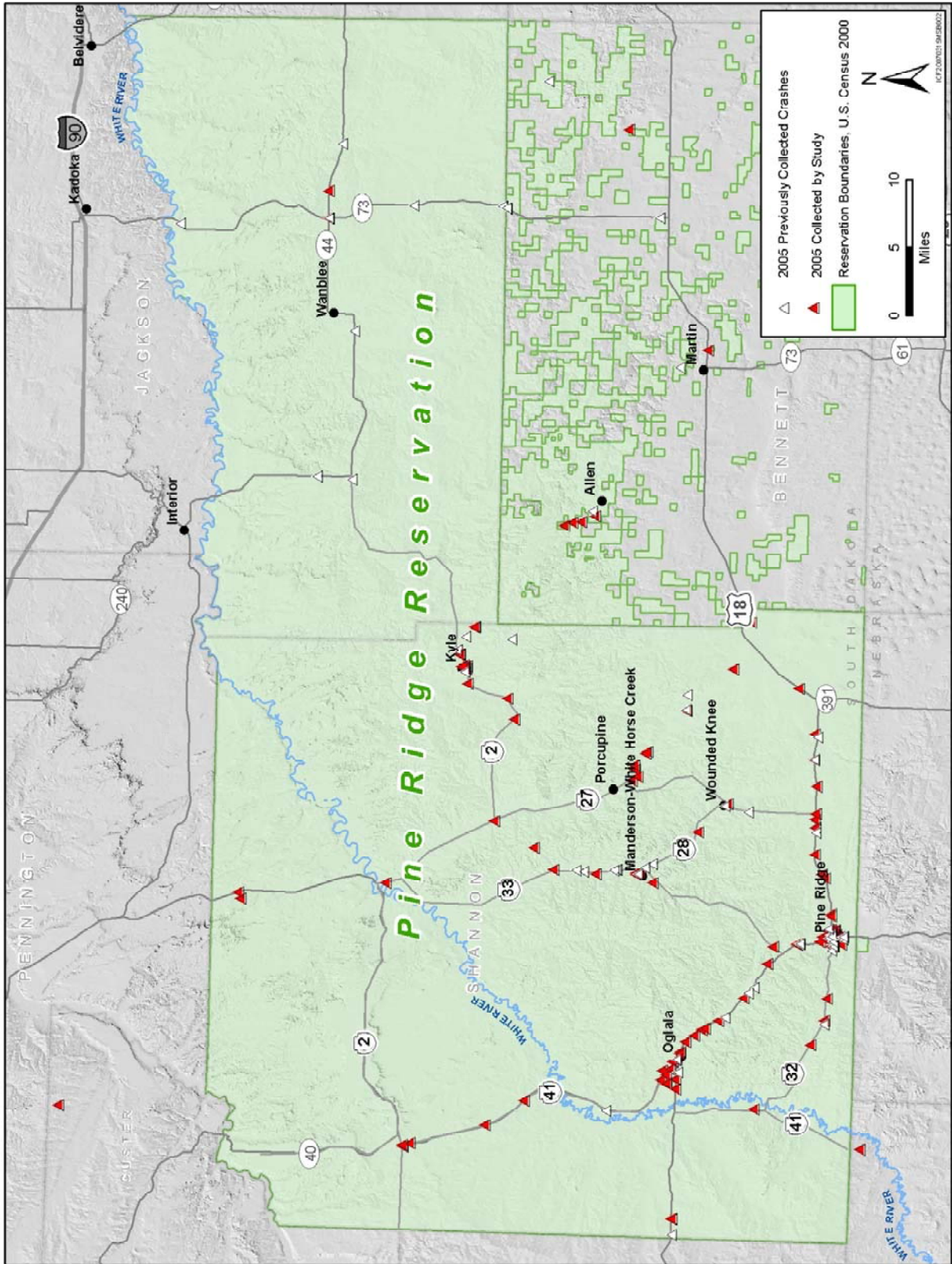


Figure 13: Crash Map, Oglala Sioux Tribe, Pine Ridge Reservation

Rosebud Sioux Tribe

Format	Electronic – Cisco software
Filing Procedure	Information entered by each officer at the end of shift into the Cisco system directly; Highway Safety officer checks data input periodically
Data Summaries	Built-in reports from Cisco software
Data Mapping	None
Law Enforcement	Tribal (Under PL 96-638)

Rosebud Sioux Tribe law enforcement is a tribal agency. The tribe has been working under a grant from the Indian Highway Safety office for several years, and has implemented the Cisco software system to track crash data, in addition to computer-aided dispatch and other modules. The law enforcement office has entered crashes into the Cisco system since 2002, and it reported general satisfaction with the software.

Quality control on crash reporting has been strengthened at Rosebud by the Indian Highway Safety specialists on staff, who check over crash reports that are submitted by other officers. Despite this, officers still often fill out crash reports incompletely, and this remains a minor issue.

The two major issues for crash data collection from Rosebud reservation are political resistance and data compatibility. The Rosebud Sioux tribal council has not approved data sharing with the SDDPS, although fatality crash data were reported in most cases. Rosebud law enforcement does not fill out paper crash report forms, and there is currently no transfer mechanism between the Cisco system and the SDARS. The crash details on both systems are close to the Minimum Model Uniform Crash Criteria (MMUCC), so transfer should be possible.

Rosebud law enforcement has had difficulties creating maps of crashes because of gaps in its 911 Rural Addressing system. The tribal agency is currently working on this issue. The SDDPS has plans to complete rural addressing throughout the state, which could provide support to improving crash reporting on Rosebud Sioux Reservation as well.

Standing Rock Sioux Tribe

Format	Paper – Incident reports Paper – old South Dakota crash report forms
Filing Procedure	Kept in a paper file on site Law enforcement assistant processes reports and sends them to the respective state (ND or SD) CRIS software tracks incident reports
Data Summaries	None
Data Mapping	None
Law Enforcement	BIA

The Standing Rock Sioux law enforcement agency is directly operated by the BIA. The officers are generally trained at the Indian Police Academy in Artesia, NM. Officers are required to fill out crash reports, which are sent to either North or South Dakota, depending on the location of the crash. A law enforcement assistant sends the reports into the appropriate state.

For North Dakota, the Standing Rock agency currently uses an electronic form that officers can fill in from their patrol cars. The South Dakota form that the agency had on file when the research team visited was outdated and several of the crash reports retrieved from its files were on that form. The Standing Rock BIA Law Enforcement office did not share crash reports with the research team on the original visit, but after a discussion at the September meeting with BIA regional law enforcement personnel, 21 crash reports were shared.

Crash reports are typically maintained by the BIA, unless there is a court case associated with the crash. In that case, the crash report is forwarded to the tribal court. Individuals seeking a crash report to collect insurance have to file a Freedom Of Information Act (FOIA) request for the report from the BIA, unless it was sent to the tribal court.

The Standing Rock law enforcement officers are cross-deputized to work in Sioux County, ND. This allows the BIA officers to act as county sheriffs as well as reservation law enforcement officers. Cross-deputization in the South Dakota portion of the reservation has been a topic of discussion, but has not come to be.

The crash data collected from the agency for the South Dakota portion of the reservation was not detailed enough for SDARS, but was tabulated as part of this study. The study team was not able to map the data because of limited information.

Sisseton-Wahpeton Sioux Tribe

Format	Paper – dispatcher logs Paper – SD crash reports for fatal and serious injury crashes
Filing Procedure	Paper files in storage room
Data Summaries	None
Data Mapping	None
Law Enforcement	Tribal (Under PL 96-638), with one BIA officer

The Sisseton-Wahpeton Sioux law enforcement agency is run under contract by the tribe, with the exception of one criminal investigator who works directly for the BIA. The agency completes full crash reports for fatal and serious injury crashes, but generally not for other crashes. The tribe reports that cooperation between the tribal law enforcement and other law enforcement agencies in the area is working well, and the agency often calls in Highway Patrol or other officers to deal with traffic crashes.

When the research team visited, the law enforcement agency was working on a grant to buy data tracking software through the Justice Department’s Community Oriented Policing Services (COPS) program. At that time, the agency was considering a similar system to the Cisco software in use at Rosebud Sioux Tribe.

Because the Sisseton-Wahpeton Sioux tribe operates its law enforcement agency, it is free to use the Internet and would prefer an electronic data submission system to submit crashes to the state.

The main barriers to crash reporting at Sisseton-Wahpeton law enforcement related to training on reportable crashes and the crash forms required. Officers had not been filling out crash forms for crashes with property damage only, or with minor injuries. Another problem was the lack of any centralized data review and summarization process. The crash reports and incident logs were not reviewed by supervisors, and there was no central file of crash reports.

Yankton Sioux Tribe

Format	Paper – SD crash report forms Paper – incident log
Filing Procedure	Some crashes entered into Excel file Others kept on paper file
Data Summaries	Excel file
Data Mapping	None
Law Enforcement	BIA, with some Tribal officers under PL 96-638

The Yankton Sioux tribe law enforcement agency is managed by BIA directly, but is partially staffed by officers paid directly by the tribe. Some officers are trained at the Indian Police Academy in New Mexico, while others attend the South Dakota Police Academy.

The chief of police at the Yankton law enforcement agency reported that the agency keeps crash records on the South Dakota crash report form, but the agency was unable to provide copies of the records. Two reasons contributed to the inability to share records. The first is that the tribal council was opposed to sharing data with the state, even in statistical form. The second is that the agency is governed by the BIA rules on data access and could not allow anyone from the research team into the records room. The agency was planning to send crash records to the Indian Highway Safety office as part of a grant beginning in Fall 2006.

A law enforcement assistant pulled crash records from the incident log for the use of the study. Unfortunately, the records pulled did not indicate many details about the crashes. The records did allow the research team to estimate the total number of crashes on the reservation for 2005.

BEST PRACTICES

This section first provides best practices for South Dakota, followed by practices reported for other states.

PRIMARY COLLECTION PHASE: SOUTH DAKOTA TRIBES

The first step to full crash reporting is high-quality data collection at the scene of the crash. Law enforcement officers must be trained in basic crash reconstruction; supervisors must prioritize and make time for forms to be filled out; and BIA must implement full crash reporting as part of its mission in reservation law enforcement.

In South Dakota, the Flandreau Santee Sioux Tribe fully reports its crashes to the state. The tribal police force operates under special circumstances, however. The tribe and the City of Flandreau have formed a combined police department that provides law enforcement services to both the city and the reservation. Because of these unique circumstances, the law enforcement officers are trained at the South Dakota Police Academy operated by the Division of Criminal Investigation in the Office of the Attorney General. By undergoing training that is specific to South Dakota law enforcement, the officers are more familiar with the state's crash report form.

Several tribes in South Dakota have received grants from the Indian Highway Safety office of the BIA. These grants generally provide funds for a highway safety officer who has special training in crash reconstruction and reporting. At the Cheyenne River Sioux Tribe, the highway safety officer is certified in full crash reconstruction. These officers have multiple duties but, at several tribes, they are responsible for crash reporting when they are on duty. At the Rosebud Sioux Tribe, the highway safety officer also reviews crash reports made by other police officers.

Some tribes in South Dakota have law enforcement assistants whose main assignment is to process data, including crash data. These dedicated staff persons sometimes assist in the data collection process by reminding police officers that reports must be filled out.

DATA PROCESSING PHASE: SOUTH DAKOTA TRIBES

The Rosebud Sioux Tribe expressed the most satisfaction with its internal crash processing software, Cisco. This system is user-friendly and has a number of built-in reports that have helped the tribe in applying for grants, making safety plans, and tracking progress on safety measures. The tribe has also received software support from Cisco, which has been helpful in the implementation of the system.

The Flandreau Santee Sioux Tribe has an internal tracking system that is less sophisticated, but still effective for some uses. A law enforcement assistant maintains a spreadsheet that lists all of the incidents, including crashes, by type.

The Oglala Sioux Tribe Department of Public Safety also maintains records through a spreadsheet format. Staff members who work regularly with crash reports enter information about crashes into the spreadsheet, which is typically more complete than the reports filed by officers. This allows the OST Department of Public Safety to keep full records of reported crashes even though problems with data collection remain.

Interviews did not reveal high satisfaction with most software products in use. The major complaints were difficulty of use, hardware problems (system breakdowns), and lack of support for software or hardware.

OTHER TRIBAL CRASH REPORTING IMPROVEMENT EFFORTS

Navajo Nation

The Navajo Nation has a successful crash reporting system with three states—New Mexico, Arizona, and Utah. According to contacts at the tribal offices, all crashes are reported fully to each state. The tribe also maintains its own database of crashes, after filling out a state form on paper to send in to the respective state. The database is accessible at each of the seven districts of the Navajo Nation lands. Officers enter data directly into the data storage system, with technical support from the Navajo Nation Department of Public Safety.

The Navajo Nation has been submitting personal identifiers on crash reports since the 1980s. However, the tribe and the states are working currently to resolve disagreements about reporting driving under the influence (DUI) cases. Details of DUIs, such as blood alcohol content levels, are omitted from the state crash report forms. The state of New Mexico is currently withholding funds for safety initiatives until the tribe releases the DUI-related information. The tribal council and the tribal courts oppose sharing the DUI information with the state.

State of Montana

The Montana Department of Transportation and the Montana Division of the Federal Highway Administration have been working to improve crash data collection and processing for eight years. The Montana Highway Patrol has conducted several training sessions on the Montana crash report form, and has a standing offer to come and work with tribal law enforcement

officers at their request. Originally, the Highway Patrol conducted centralized training, and then did follow-up training at tribal and BIA law enforcement offices.

The Montana efforts to improve crash reporting from tribal lands are now focused on enabling tribes to track their crash data internally. Of the seven tribes with land in Montana, four are currently using Cisco software to track their crash data internally. The state is working to set up a system for electronic data submission. The Cisco data format is currently not compatible with the state's internal data system. Montana is considering purchasing the Cisco software so it can manipulate the data it receives from the tribes' in-house systems.

The Montana experience to date has not been completely successful, because some tribes require more support for their hardware and software systems. Tribes have become interested in having more crash data available, however, and some have worked to input data from past years into the Cisco system.

The Cisco installation at the four tribes has been funded and supported by the Indian Highway Safety office in Albuquerque. The original plan was to have tribes submit data to Indian Highway Safety, who would then share it with Montana. This has not been successful to date. The state is now planning to retrieve data directly from the Cisco systems at each of the tribes.

Inter-Tribal Council of Arizona

The Inter-Tribal Council of Arizona (ITCA) has been working with tribes to improve crash reporting among several member tribes. The ITCA has had limited success to date. The focus of the efforts has been on crash data collection and tribal systems for tracking the crash data. Submitting data to the State of Arizona has not been a priority for the project.

Generally, the tribes involved in the efforts are more interested in human factors in crashes, such as seatbelt use, speeding, and driving under the influence. Identifying hazardous locations, which would be helpful for tribal transportation improvement plans, has not emerged as a primary focus.

Many of the problems identified in the crash data collection and data processing phases in Arizona are similar to those found in South Dakota. Law enforcement offices do not have the staff time to devote to data collection. Officers dislike filling in reports, and their supervisors do not necessarily require them to do so.

Sending data to the State of Arizona has continued to be problematic. Some tribes do not submit any data with personal identifiers attached, and Arizona has been willing to accept the crash records without personal identifiers. In spite of this acceptance, tribes have not been submitting data regularly to the state, in part because of the staff time demands it represents. Staff have to black out identifiers, fax the reports to the state, and re-file them. Some miscommunications have also been discovered. One tribe was faxing reports to the wrong fax number at the Arizona Department of Transportation, and those reports were not filed. The tribe never received word that the reports were not going through.

State of Wisconsin

In Wisconsin, tribes are required to report full crash data to the state because of Public Law 280¹⁵. The Menominee Indian Tribe is the only tribe that does not fall under Public Law 280, and it does not submit crash reports to the state because the state will not accept crash reports without personal identifiers. The tribe is concerned about double jeopardy, whereby offenses would be actionable both under tribal and state law.

Training on crash reporting processes has been an issue in Wisconsin. The state recently moved to offer dedicated training on crash report forms and process to tribal law enforcement officers. The training will be offered at a tribal technical college in northern Wisconsin.

Tribes in Wisconsin can either use TraCS to report to the state, or a standard paper form. Cisco was described as an incompatible software system. Officers can fill out forms on paper in their car, or with a laptop in their patrol car, if they have one. In order to maintain their software and hardware, the state is working to provide information technology support staff for multiple jurisdictions, including tribes, in each region.

Wisconsin is in the process of bringing all software used in all jurisdictions in the state into compatibility with the state's TraCS software. They currently have grants to create interfaces between TraCS and 49 different types of software, because the different software generally does not use a compatible data format.

PILOT PROJECTS: FIRST STEPS TO OVERCOMING BARRIERS TO CRASH REPORTING

Two central issues came out of discussions about improving crash reporting: training tribal law enforcement officers to report crashes so that it is easier, and creating a political agreement to share data between the state and the tribal authorities. These were each addressed through pilot projects after the interim report.

Training was addressed in the course of the project specifically because of its centrality to collecting high-quality data from the site of the crash. The result of the pilot project was a brief description of training from the South Dakota Division of Criminal Investigation, the law enforcement academy:

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

¹⁵ Public Law 280 (P.L. 280) transferred Federal criminal jurisdiction over tribes to six states, including Alaska, California, Minnesota, Nebraska, Oregon, and Wisconsin in 1953. Some other states also opted to take on jurisdiction over tribal lands for a few tribes. In P.L. 280 states, law enforcement on the affected reservations is under the jurisdiction of the state, meaning among other things that the state can require crash reporting. Because of tribal resistance and confusion over jurisdiction in many of the P.L. 280 states, 30 tribes have since returned to federal jurisdiction. Tribes have not generally supported P.L. 280, and no additional states may take over jurisdiction under this law.

approximately three hours in length. The Department of Public Safety will be responsible for the delivery of the report curriculum.¹⁶

Elements of this description are reflected in the draft Memorandum of Agreement (MOA), which came out of the second pilot project. While many tribal councils have not explicitly refused to share data with the state, at least two have done so, and on some other reservations, law enforcement personnel interviewed had the impression that the tribal council would prefer them not to share data with the state. 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 specifies that the crash data submitted will be used to address roadway hazards. The agreement is set for a five-year period, during which the tribal council commits to sharing crash reports with the state, while the state would agree to provide training and technical assistance to law enforcement agencies submitting the reports. Appendix B contains the full text of the draft MOA.

PATHWAYS TO FULL CRASH REPORTING

The research team presents several pathways to full crash reporting for tribes in this section, along with a discussion of the benefits of each path. Whatever the system, all crash reporting must go through the following steps to be complete and accurate:

Primary Collection Phase

1. Officer on scene: Fill out crash report.
2. Supervisor: Check over crash report.
3. Officer: Correct/fill in crash report.

Data Processing Phase

4. Assistant: File a copy in a crash file in the local law enforcement office.
5. Assistant: Send copy to SDDPS contact; send copy to BIA Indian Highway Safety.
6. Assistant: Record crash report in central table, either electronically or on paper.
7. Supervisor: Check monthly reports from law enforcement assistant against SDDPS monthly report.

The supervisor's role in the process is key. Checking reports after they are filled out will reinforce the training that officers receive and motivate them to complete reports quickly and accurately. Checking totals will ensure that the reporting is complete, and will also make supervisors aware of current traffic safety problems on the reservation.

¹⁶Approved 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.

Of the different format options for reporting, some are more focused on short-term completion, while others would likely take longer to implement. The three main pathways are:

1. paper-based system with paper or computer spreadsheet-based crash tracking at tribal/BIA law enforcement agency (short-term achievable);
2. specialized software for crash tracking, such as Global, New World, or Cisco, tailored for tribal needs (medium-/long-term achievable); and
3. TraCS software for crash reporting, integrated with other tribal data tracking needs (medium-/long-term achievable).

Because the paper-based system is easier to implement in the short term, it can be combined with a long-term plan to acquire software for a computerized crash data tracking system, whether through commercially available specialized software or with the South Dakota TraCS software.

PAPER-BASED SYSTEM

Format	Paper – SD report forms
Filing Procedure	Copies in separate crash file, by date
Data Summaries	[Options] Computer spreadsheet maintained by dispatcher Tally by crash factors on paper Reports from SDARS tailored for tribe
Crash Mapping	[Options] Paper map with markers Map from SDARS tailored for tribe
Requirements	Training on SD crash report form Training on crash file maintenance and analysis

In the short term, the law enforcement agency would improve data collection and processing internally with common desktop software and staff resources. The law enforcement agency would focus on training for law enforcement officers and assistants, both on the crash report form and on crash file maintenance and analysis.

With the support of the tribal council and BIA law enforcement, a copy of each full crash report collected by the agency would also be sent to the South Dakota Department of Public Safety. A SDDPS-generated report describing the crashes on the reservation based on the data sent to the state would help with grant applications, traffic safety planning, and transportation planning on the reservation. The standard reports from SDDPS summarize crashes by type of crash, contributing factors, vehicle type, and animal involvement. SDDPS can also generate maps showing crash locations for the use of tribal transportation planners.

In addition to the data maintained at SDDPS, each law enforcement agency should maintain its own records and tallies of crashes. This will enable the agency to target corrective actions, whether through education, signage, or other safety improvement measures.

SPECIALIZED SOFTWARE SYSTEM

	[Options]
Format	Electronic entry through in-car terminals Paper crash report at scene of crash
Filing Procedure	Electronic entry and checking by officer or assistant at station
Data Summaries	Automatic output from software
Crash Mapping	Automatic output from software
Requirements	Software for multiple computers, depending on agency size Hardware for patrol cars and office Training on crash file maintenance and analysis Technical support

A software system can be implemented at tribal law enforcement offices for tracking crashes. In some cases, this would require additional computers and other hardware. Some tribes already have such a system in place (see above, in tribe-by-tribe analysis). Using specialized software, the BIA or tribal law enforcement agency is able to manage its own data internally. These packages usually come with data summaries built into the software. The mapping function of the Cisco software does not currently work on the Rosebud Sioux reservation because of a lack of rural addressing data, and this issue should be examined when tribes consider different software options.

Software selection is one of the most difficult aspects of this pathway. No agency will want to commit funds, time, and training dollars to software that will soon be replaced. Cisco is currently working with the Indian Highway Safety program on a pilot of the software on Montana reservations, and using Cisco could allow tribes to benefit from this expertise. On the other hand, law enforcement agencies that are already using other software should consider compatibility issues with other functions, such as computer-aided dispatch and citations.

While talking with law enforcement agencies about their current software experiences, the research team learned that a lack of technical support is a major problem for several tribes already using specialized software. Consistent technical support should be built into financial plans for software system acquisition.

For reporting to the SDDPS when personal identifiers are an issue, tribes that use Cisco can benefit from the work that Cisco has already done with Indian Highway Safety. The software package has been tailored to provide crash reports without personal identifiers to the Albuquerque BIA office. This work is being done together with the FHWA Montana Division

office, and the Montana DOT plans to use the same crash data without personal identifiers as the software is fully implemented.

TRACS SOFTWARE SYSTEM

Format	Electronic entry through in-car terminals
Filing Procedure	Electronic entry and checking by officer or assistant at station
Data Summaries	SDARS reports
Crash Mapping	SDARS mapping output
Requirements	Software for multiple computers, depending on agency size Hardware for patrol cars and office Training on SDARS analysis options Technical support

This solution pathway is very similar to a general solution for specialized software. The main advantage for tribes interested in the Traffic and Criminal Software (TraCS) is the large body of free technical support provided for this software, both through the SDDPS and through other public agencies. TraCS software will be available for use in South Dakota free of charge, and it will be tailored for South Dakota Highway Patrol and for SDDPS use. The Highway Patrol will be trained in the software and will be able to pass on that training easily to tribal and BIA law enforcement officers. TraCS is expected to be ready for use across South Dakota in 2007.

The one limitation of this software is that it works mainly as a data input tool, although the SDDPS can also provide reports and analyses to tribes. Tribes considering this software should also consult with the state on the format that reports will be stored in, so that they can ask their software providers about compatibility with the other databases and information that tribes are tracking through their law enforcement agencies.

This software will be tailored for data submission to the SDARS system. Tribes that do not want to submit personal identifiers may need to establish special protocols to submit data without actual personal identifiers, and the state will have to work with the tribes on how that data is submitted and whether it will be accepted.

IMPLEMENTATION RECOMMENDATIONS

Five key recommendations for the state have emerged from this study. They address the role of the State of South Dakota as well as the nine tribes in South Dakota in improving crash reporting. A brief discussion of each recommendation describes its implementation.

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)¹⁷. 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 (MOAs) 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.

¹⁷ 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/nca/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 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 funds¹⁸ (FHWA 2006).

¹⁸ FHWA 2006. Case study: “Thurston County, Washington: Partnership between Tribes and an MPO” accessed at: <http://www.fhwa.dot.gov/hep/tribaltrans/ttpcs/washington.htm>

ANALYSIS OF RESEARCH BENEFITS

In this study, the research team was able to collect some information on an estimated 737 traffic crashes on tribal lands that had gone unreported for the year 2005. This collection shows that the previous totals for tribal lands in 2005 underestimated the number of crashes by 64 percent. This quantification of the under-reporting problem will allow states and tribes to also measure some of the benefits that improvements could bring.

Improving crash reporting would benefit everyone who uses roadways on tribal lands. Hazardous locations on the roadways could be identified and corrected, reducing the number of crashes, the number of injuries, and the property damage costs from motor vehicle crashes. Reducing traffic crashes has a significant effect on the local economy and on public health. Because of the urgency behind improving roadway safety, the study identified some quick fixes for crash reporting from tribal lands. Training opportunities for tribal and BIA law enforcement officers have been identified, and suggestions for providing the training are made in the recommendations. A model Memorandum of Agreement was developed (Appendix B), and ongoing meetings between SDDOT will provide a possible venue for discussing an MOA and other crash reporting issues.

A “how-to” outline was also provided for tribes who want to improve their crash reporting in the short term. The main components to this are timely reporting by officers, data review by supervisors, and a system for both recording the crash data at the tribe and sending a copy of the crash report to the SDDPS. Further discussion of potential software fixes showcases the potential and the pitfalls of relying on software solutions. Many of the problems with the crash reporting currently happen before reports would go into a system – when an officer fills out the report (or not) at the scene of the crash.

In addition to the crash reports retrieved, the research team made important contacts with tribal and BIA law enforcement officials who will be working with crash reports in the future. At the September 2006 meeting in Aberdeen, four police chiefs and two officers from tribal and BIA law enforcement agencies discussed the importance of training and of cooperative work between the South Dakota Department of Public Safety and tribes. Following on the September meeting, the South Dakota Highway Patrol and the Division of Criminal Investigation both offered training for crash reporting, including crash reconstruction at the Division training facilities.

Collaboration between the state and each tribe is an issue that extends beyond crash reporting, and agreements on improving crash reporting to improve safety could promote trust and collaboration in other areas. Native Americans in South Dakota have a mortality rate from motor vehicle crashes that is over four times the national average, 69.4 deaths per 100,000, as compared to 14.6 in the U.S. population. Traffic safety is a major concern for reservations in South Dakota, and could be significantly impacted by the improvements to crash reporting suggested in this report.

APPENDIX A—SAFETY GRANT SOURCES FROM NHTSA AND FHWA

Program	Funding Requirements	Funding
<p>Federal Highway Administration</p> <p>Highway Safety Improvement Program (HSIP)</p>	<p>Funds to be used for the following:</p> <p>Planning: collecting and maintaining data, establishing project priorities, conducting engineering studies, identification of hazardous locations and elements</p> <p>Implementation: scheduling and implementing projects</p> <p>Evaluation: determining the effect of safety improvements</p>	<p>The Federal share is 90 percent, subject to the sliding scale adjustment, except that the Federal share is 100% for certain safety improvements listed.</p>
<p>National Highway Traffic Safety Administration (NHTSA)</p> <p><i>State and Community Highway Safety Grants Program</i>(Section 402)</p>	<p>Funding must be used to support State highway safety programs designed to reduce traffic crashes and resulting deaths, injuries, and property damage.</p> <p>A State may use these grant funds only for highway safety purposes.</p>	<p>Ninety five percent of the funds apportioned to the Secretary of the Interior shall be expended by Indian tribes to carry out highway safety programs within their jurisdictions.</p> <p>In FY 2006, NHTSA's estimated Section 402 obligation to South Dakota was \$1,155,000.</p>
<p>National Highway Traffic Safety Administration (NHTSA)</p> <p><i>State Traffic Information System Improvements Grants</i>(Section 408)</p>	<p>Funding must be used to adopt and implement data improvement programs:</p> <ul style="list-style-type: none"> - to improve the timeliness, accuracy, completeness, uniformity, integration, and accessibility of State data; - to evaluate the effectiveness of these efforts; - to link these State data systems, including traffic records, with other data systems within the State; and - to improve the compatibility of the State data system with national data systems and data systems of other States to improve the ability to observe and analyze national trends in crash occurrences, rates, outcomes, and circumstances. 	<p>The Federal share of programs funded this section shall not exceed 80 percent.</p>

For more Information on Safety Grant Programs:

FHWA, Highway Safety Improvement Program (HSIP)

<http://www.fhwa.dot.gov/tfhrc/safety/pubs/81218/intro.htm> (Accessed 2/2/07)

FHWA, Fact Sheet on Highway Provisions

<http://www.fhwa.dot.gov/safetealu/factsheets/hsip.htm> (Accessed 2/2/07)

23 USC Sec. 402 (2006) http://nhtsa.gov/nhtsa/Cfc_title49/HighwaySafety.html (Accessed 2/2/07)

23 USC Sec. 402(i)(2) <http://frwebgate2.access.gpo.gov/cgi-bin/waisgate.cgi?WAISdocID=44713011396+0+0+0&WAIAction=retrieve> (Accessed 2/2/07)

NHTSA, 2006, Highway Traffic Safety Grants, Distribution of NHTSA Section 402

<http://www.nhtsa.dot.gov/nhtsa/whatis/BB/2006/pages/DistributionSec402.htm> (Accessed 2/2/07)

23 USC Sec.408 (2006) http://nhtsa.gov/nhtsa/Cfc_title49/HighwaySafety.html (Accessed 2/2/07)

DRAFT

APPENDIX B— DRAFT MEMORANDUM OF AGREEMENT FOR MOTOR VEHICLE CRASH REPORTING

This agreement is between the South Dakota Department of Transportation (the “DOT”), the South Dakota Department of Public Safety (the “DPS”) and the [*Tribe Name*] Tribe (the “Tribe”).

The DOT, DPS and the Tribe believe it is mutually beneficial to enter into this agreement for the safety of the traveling public and improvement of highway systems that lie within the exterior boundaries of the [*Reservation Name*] Reservation.

The parties agree as follows:

- 1) The success of this agreement is predicated upon all parties acting in accord with the following principles:
 - a) All parties state that they are interested in:
 - i) ensuring that the motor vehicle crash data will be used for data analysis and generating supporting documentation for highway improvements only,
 - ii) providing reports and data analysis,
 - iii) eliminating high hazard areas on the highway system within the reservation.
 - b) Compliance is a responsibility of all parties and all activities in this regard will be conducted with mutual respect for each other’s responsibilities. To this end, neither party will impose additional requirements or standards without giving advanced notice to the other parties and do encourage informal resolution of problems involving all interested parties.
 - c) The Tribe agrees to the following:
 - i) provide motor vehicle crash reporting data on the DPS report form or compatible reporting format with the DPS system,
 - ii) agree that no other motor vehicle crash reporting form other than the DPS format or compatible system will be used to report motor vehicle crash reporting data
 - iii) will provide motor vehicle crash reporting data on a monthly basis to DPS or more frequently if there is a high number of motor vehicle crashes in a time period,

- iv) provide complete motor vehicle crash reports and follow the standards and requirements for reporting established by DPS
- d) The DPS agrees to the following:
- i) collect all motor vehicle crash reporting data and will only use the information for analysis of motor vehicle crash analysis and reporting purposes.
 - ii) provide reports and data collected to Tribe on a quarterly basis and as requested,
 - iii) provide training to Tribal law enforcement and support personnel on motor vehicle crash reporting,
 - iv) provide technical support to Tribal law enforcement and support personnel on motor vehicle crash report,
 - v) maintain highest levels of confidentiality of motor vehicle crash reporting data received.
- e) The DOT agrees to the following:
- i) analyze motor vehicle crash reporting data and use information to support adding projects to the Five-Year STIP to improve highway safety within the reservation boundaries,
 - ii) conduct research projects and other technical analysis of motor vehicle crash data,
 - iii) provide reports and technical analysis to Tribe,
 - iv) provide technical assistance to Tribal planning and/or highway departments,
- 2) To provide for stability and predictability in the motor vehicle crash reporting analysis all parties agree to maintain this agreement through the term specified below. Modifications or changes in the agreement **[or any of the attachments]** therein can be made through mutual consent and will be effective after being reduced to writing and signed by officials for each party.
- 3) It is the intent of all parties that this agreement shall be implemented on a cooperative basis without regard to jurisdictional issues. It is further agreed that all parties will encourage informal resolution of problems prior to instituting litigation. It is also agreed that nothing herein shall prevent the Tribe, DOT or DPS from instituting any litigation pertaining to any jurisdictional issue with regard to motor vehicle crash reporting or any other matter.

By signature below, the [*Tribe Name*] Tribe, the State of South Dakota, Department of Transportation, and the State of South Dakota, Department of Public Safety agree to adhere to this agreement and **[the attached documents]**:

Attachment #1 –

The Tribe, DOT, BIA, and DPS further agree *[the above-referenced attachments and]* this agreement shall be applicable for the period of March 1, 2007 to December 31, 2012.

[Tribe Name] TRIBE

STATE OF SOUTH DAKOTA

[Tribal President/Chairman Name]
Tribal Chairman/President
*[Tribe Name]*Tribe

Tom Dravland
Secretary
Department of Public Safety

Date _____

Date _____

[BIA Representative]
[Title]
Bureau of Indian Affairs

[Name]
Secretary
Department of Transportation

Date _____

Date _____