Standing Rock Sioux Tribe

2015 Tribal Transportation Safety Plan

Developed through the Standing Rock Tribal Transportation Program

Prepared by KLJ

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KLJ

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EXECUTIVE SUMMARY

From 2005 to 2013 there were 396 total crashes on the Standing Rock Sioux Reservation based upon an analysis done by the Wyoming Technology Transfer Center (WYT2/ LTAP). The traffic crashes in Corson County, SD and Sioux County, ND resulted in more than 40 fatalities and 170 injuries.

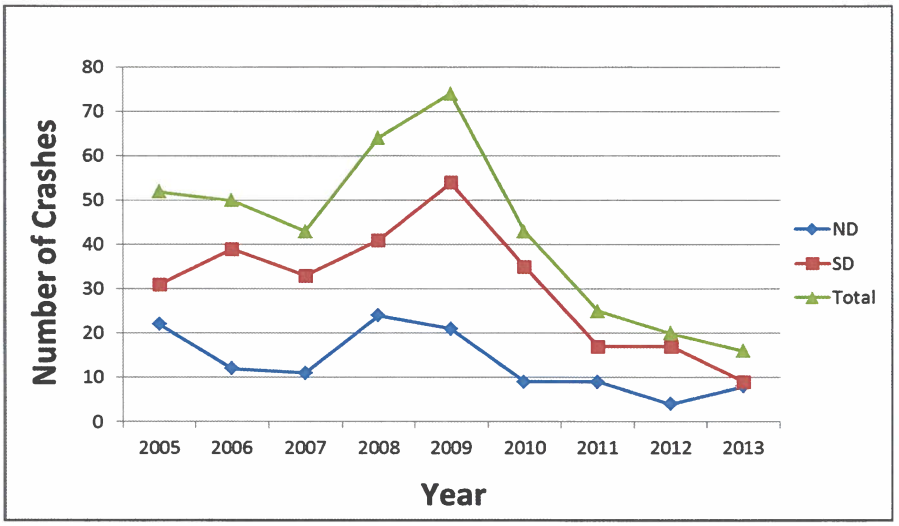


Figure 1 - Total Crashes on the Standing Rock Indian Reservation

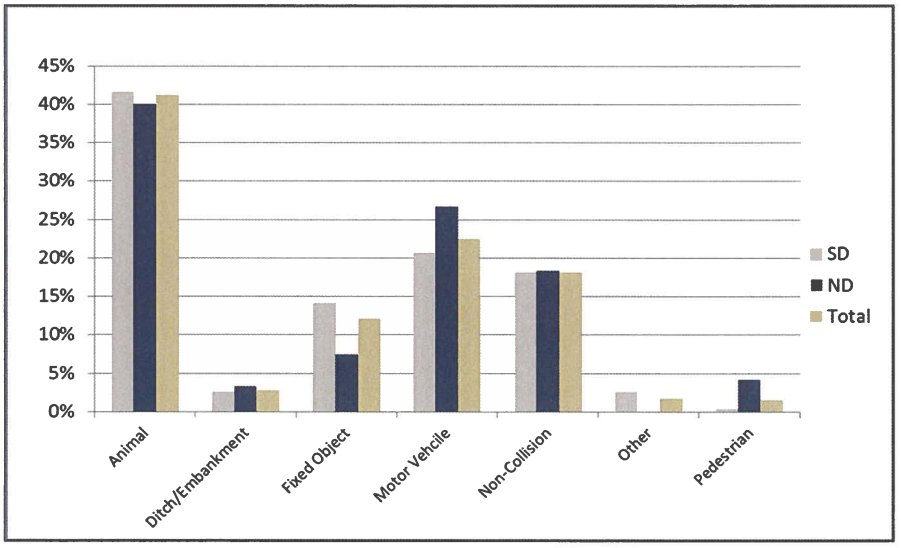


Figure 2 - First Harmful Event for Traffic Crashes on the Standing Rock Reservation

While there are many causes for these crashes, more than 40 percent are due to collisions with wildlife and other animals. In an effort to reduce fatalities and injuries and improve the overall safety of the transportation system on the Standing Rock Sioux Reservation, the Standing Rock Sioux Tribe developed a Transportation Safety Management Plan in 2009. The plan identified a number of strategies to reduce injuries and deaths including establishing a Safety Committee, developing education and training programs, reviewing unsafe roadways and addressing driver behavior issues. Progress has been shown as overall crashes, injuries and fatalities reported to the state have declined, but there is uncertainty on the actual extent of the problem as Bureau of Indian Affairs (BIA) crash data is not included.

In 2014 the Standing Rock Sioux Tribe undertook efforts to update the 2009 Safety Plan. This update culminated with a meeting where Tribal, county, state, federal and interested parties came together to review the available crash data, identify ongoing safety efforts and develop new or continuing strategies to improve transportation safety in the Standing Rock Tribal communities. These strategies were prioritized around the 4Es (Education, Enforcement, Engineering and Emergency Response) of safety. The strategies are outlined below, with another category added to address an issue that covered all 4Es.

Education

- **Develop a Reservation-Wide Transportation Safety Education Program** (ongoing)

Enforcement

- **Develop a Stronger Partnership with BIA/Tribal Law Enforcement** (ongoing)
- **Implement Electronic Crash Record System and Data Sharing** (currently in process)
- **Provide a Tribal Highway Safety Officer** (BIA IHSP grant)
- **Initiate Discussions on Use of Cross Jurisdictional Agreements**

Engineering

- **Implement the North Dakota Department of Transportation (NDDOT) Highway Safety Improvement Program (HSIP)** (currently waiting on funding outcome)
- **Develop Multi-Use Separated Paths** (?) - Cannonball, Ft. Yates?
- **Develop Turning Lanes for Family Dollar Store** - work w/ NDDOT on this one*
- **Participate in the Tribal Technical Assistance Program (TTAP)/WY LTAP Low-Cost Safety Improvement Project** (received final report)

Emergency Management Systems

- **Improve 911 Addressing System** (?)

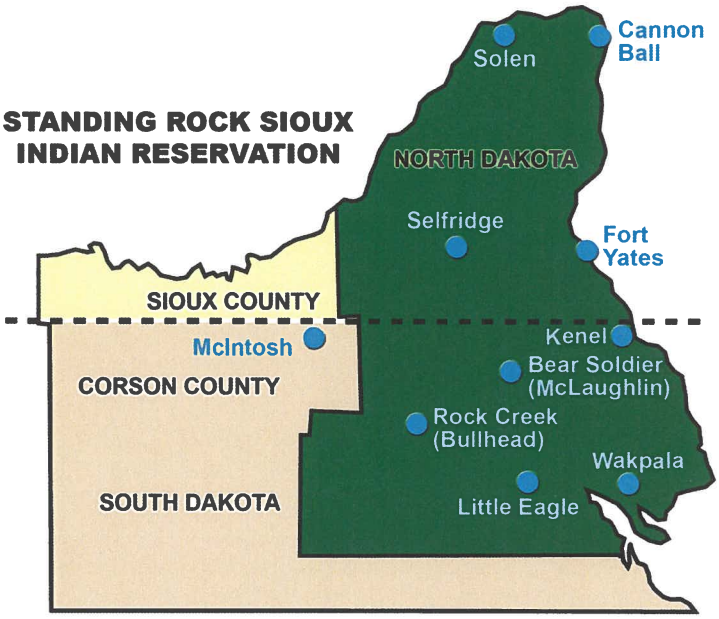
Other

- **Establish a Standing Rock Safety Committee**

BACKGROUND

The Standing Rock Sioux Reservation was established by a Congressional Act on March 2, 1889. It is the sixth largest reservation in the United States and straddles the North Dakota/South Dakota border. The Standing Rock Sioux Reservation encompasses more than 850,000 acres and includes all of Sioux County, ND, Corson County, SD and portions of northern Dewey County and Ziebach County in South Dakota. With a population of nearly 9,000 enrolled members, the largest communities are Cannon Ball, McLaughlin and Fort Yates, but there is also the smaller communities of Bullhead, Kenel, Little Eagle, McIntosh, Morristown, Porcupine, Selfridge, Solen and Wakpala.

The main uses of the land in the area are for agriculture and ranching, with the Missouri River being a major recreational and tourist attraction in the summer months. The Standing Rock Sioux Reservation contains more than 200 miles of BIA and Tribal roads and 1,100 miles of county and state roads.



Available data has indicated that injury and fatality crash rates on reservations are higher than the rest of the United States. Federal programs are available to help resolve traffic-related crashes and provide safer reservation transportation routes for Tribal members and the traveling public. The Federal Highway Administration (FHWA) created the Tribal Transportation Program Safety Funds (TTPSF) aimed at addressing safety issues and needs of Tribal governments for transportation and access on reservations. Each year, two percent of the total available Tribal Transportation Program (TTP) funds of $450,000,000 are awarded for safety improvements through a competitive application program. The funds are awarded in four categories to complete improvements that prevent and reduce injuries and fatalities resulting from traffic-related crashes. The four categories and their respective funding goals are as follows:

Strategy	Funding %
Safety Planning	40%
Engineering	30%
Enforcement/EMS	20%
Education	10%

FHWA has emphasized the development of a Tribal Transportation Safety Management Plan (TSMP) as a first step in implementing a comprehensive safety program. This is clearly seen in the funding emphasis on safety planning and the ranking criteria that requires any safety project application be linked to a transportation safety plan.

A TSMP is a community-based, multi-disciplinary approach to identify transportation safety issues and potential implementation strategies with the goal of improving transportation safety on Tribal lands. FHWA describes them as:

> *"Tribal Transportation Safety Plans are a tool used to identify and address transportation risk factors that have a potential of leading to serious injury or death. Safety Plans also organize the efforts of a variety of entities to more effectively reduce risk and can cover multiple transportation modes (roads, maritime, trails, air travel, and others). Safety plans may lead to implementation of a project or program, renewed efforts in an existing program, or further study of a roadway section (using an engineering study or Road Safety Audit).*
>
> *A Tribal Safety Plan should not be developed with a focus on any one funding source. Instead, a Tribal Safety Plan should demonstrate the safety concerns in a community and the strategies that will be explored to implement the plan. To the greatest extent possible, the concerns demonstrated by a safety plan should be selected based on incident history (data). Data allows funding entities to understand the needs and may even compel the funding of the community's needs. Safety Plans can provide a forum for utilizing data sets that are not otherwise considered by funding agencies such as public testimony when formal crash data does not exist."*

Benefits of developing safety plans have been well documented and include the opportunity to leverage resources, work toward a common goal and consider all road users, resulting in reduced deaths and injuries in Tribal and other communities.

In 2009 the Standing Rock Sioux Tribe initiated the development of a Safety Management Plan to coordinate and focus the transportation safety efforts that were occurring on the Reservation and to identify additional strategies that if implemented, could reduce fatal and injury crashes. The plan was developed by a group of Tribal, state and federal safety professionals, along with other interested parties from the Tribal community and identified a number of existing programs including:

- **The Tribe has been working with KAT Communications on safety grants**
- **Safety enforcement is taking place in all Tribal Districts**
- **The Tribe has secured funding for additional Tribal Police Officers**

back in 2009

In addition to these ongoing activities, the group also identified strategies that it believed, if implemented, could assist in further reducing crashes. The strategies included:

- **Establish a Safety Committee** (who?)
- **Perform more DUI checkpoints** (yes.)
- **Increase seat belt use** (seat belt use survey, Saturation patrols)
- **Establish education programs** (working on it)
- * **Identify hazardous roads** * Qualitative Study → RSAS → traffic counter purchase
- **Review school bus stop advance warning signs** (?)
- **Work with Northern Plains TTAP** (Arden Boxer) - what can she do?

While the 2009 TSMP was a good start for the Standing Rock Sioux Tribe and current data shows that injuries and fatalities have been dropping since implementation, the plan was not heavily data driven and is in need of an update to reflect present-day conditions. To assist with this update, the Standing Rock TTP applied to and received funding from the FHWA TTP Safety Funding.

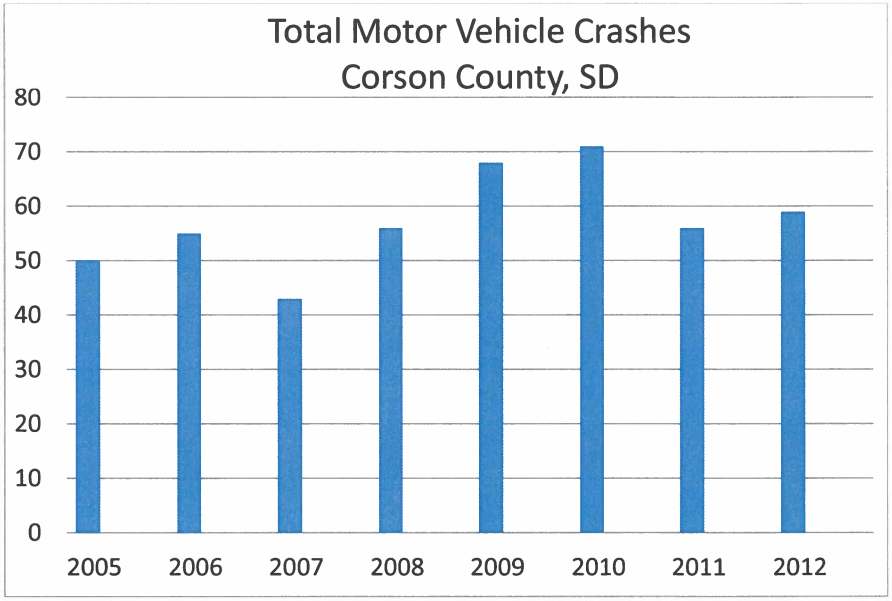
STANDING ROCK SIOUX RESERVATION DATA ANALYSIS

One of the important factors in the development of a Tribal Safety Plan is for the available crash data to be analyzed and utilized in the identification of issues and development of strategies. This data is also an important resource as Tribes apply for federal and state safety funding; as many, if not all, request data to support the grant application. For the development of the 2015 Plan, data was gathered from the states of North Dakota and South Dakota. Data was not able to be gathered from BIA law enforcement, so the data presented may not be a complete picture of crashes that are occurring.

SOUTH DAKOTA DEPARTMENT OF PUBLIC SAFETY CRASH DATA

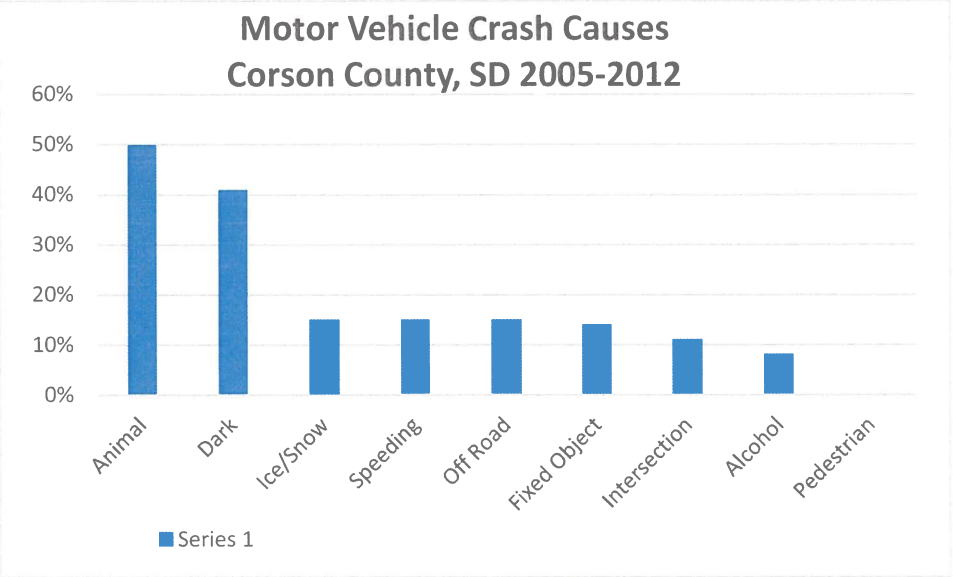
SOUTH DAKOTA OVERALL CRASHES

South Dakota data that was acquired from the South Dakota Department of Public Safety (SDDPS) does not allow for any differentiation between Tribal and non-Tribal crash involvement. The data is also grouped by county, so all data for Corson County was collected and analyzed.



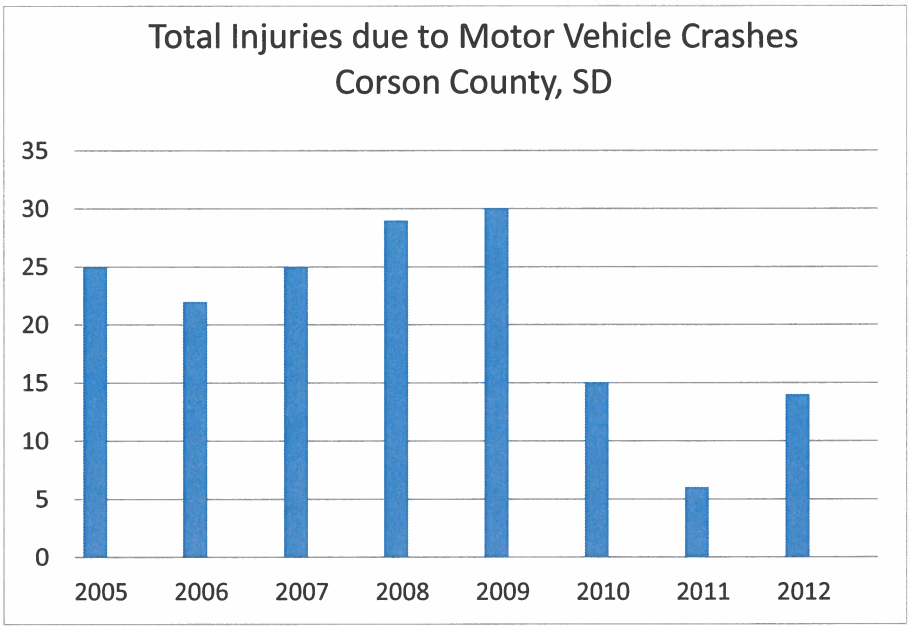
During the period from 2005 to 2012, there were a total of 458 crashes with some slight reductions shown in 2011 and 2012. Overall crashes remained relatively consistent with slightly more than 50 crashes per year. This does not include crashes investigated by BIA Law Enforcement so a large number of the reported crashes are on US 12, SD 63 and SD 65.

"SRST Tribal Member" in Tracs



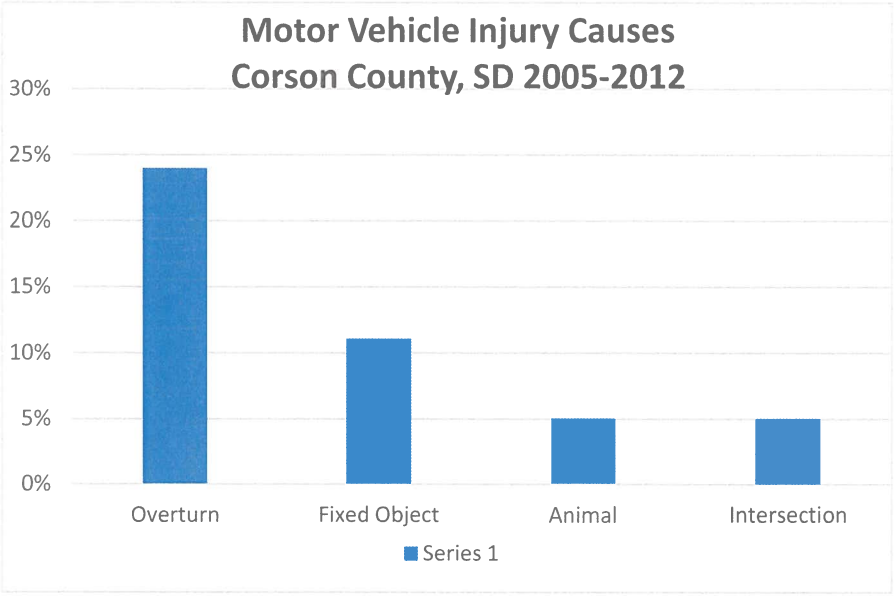
As with many of the crashes occurring on rural roads in South Dakota, a large number of them are with animals during dark or poor lighting conditions. For Corson County during the analysis period, other factors that had some statistical relevance included ice or snow covered roads, speeding, off road crashes, fixed objects and crashes at intersections, with all of these causes being cited in 10 to 15 percent of all crashes. Alcohol involvement was slightly less at under 10 percent of crashes. Pedestrian crashes were included due to the higher number of people who walk on the reservation. As can be seen from the data in the chart, pedestrian crashes are not currently showing up in the data in South Dakota.

SOUTH DAKOTA INJURY CRASHES



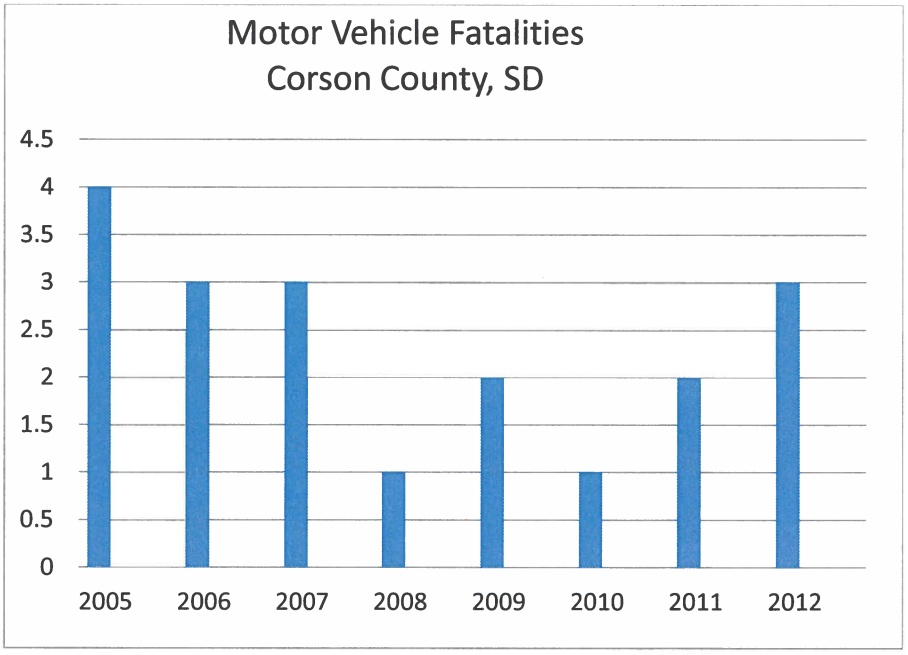
For this same period from 2005 to 2012, there were 166 reported injuries in Corson County, SD. Again, this data is primarily crashes reported by either the South Dakota Highway Patrol or Corson County Sheriff's Office and includes limited or no data from BIA Law Enforcement. The data shows a downward trend with injuries being much lower in 2010 thru 2012 than in previous years. Discussions at the safety planning meeting confirmed that injury crashes have been going down, in part due to increased emphasis on local education by local enforcement.

While animal crashes were the primary cause of overall crashes, when looking at injury crashes during this same time period, animal crashes account for only five percent of injuries. Injury crashes are primarily being caused by vehicles running off the roadway and then either overturning or striking some type of fixed object such as a tree, post, rock or other object adjacent to the roadway. These crash causes do not include those that overturned on the roadway surface or struck an object in the road.

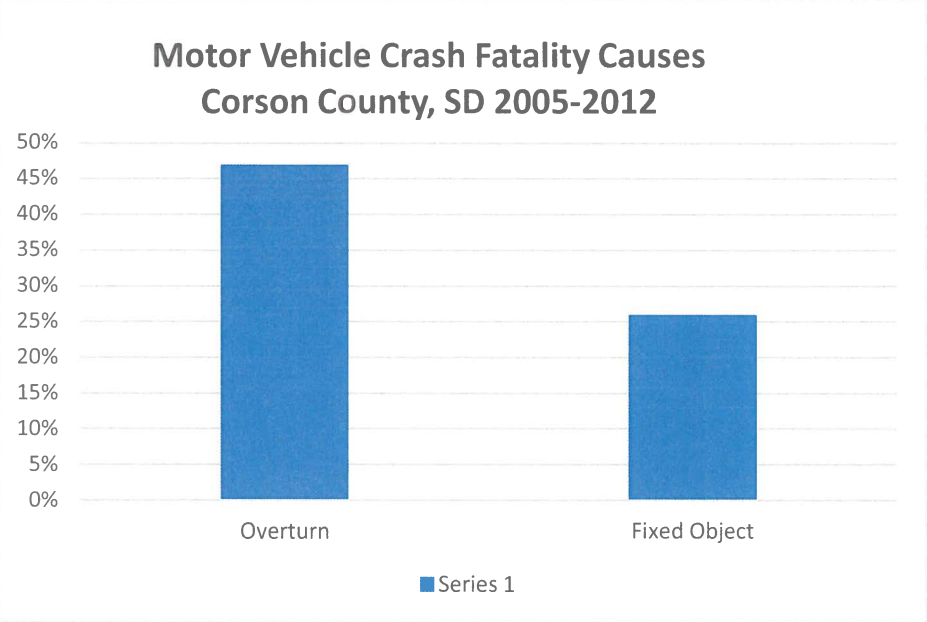


SOUTH DAKOTA FATAL CRASHES

From 2005 to 2012, there were 19 reported fatalities in Corson County. Unlike the other crash types, this data should include all the fatalities that are occurring as the South Dakota Highway Patrol is normally called in to assist in the investigation of a fatal traffic crash. While the sample size is small with an average of less than three fatalities per year, the data is showing an overall downward trend even though it has been increasing the last two years.

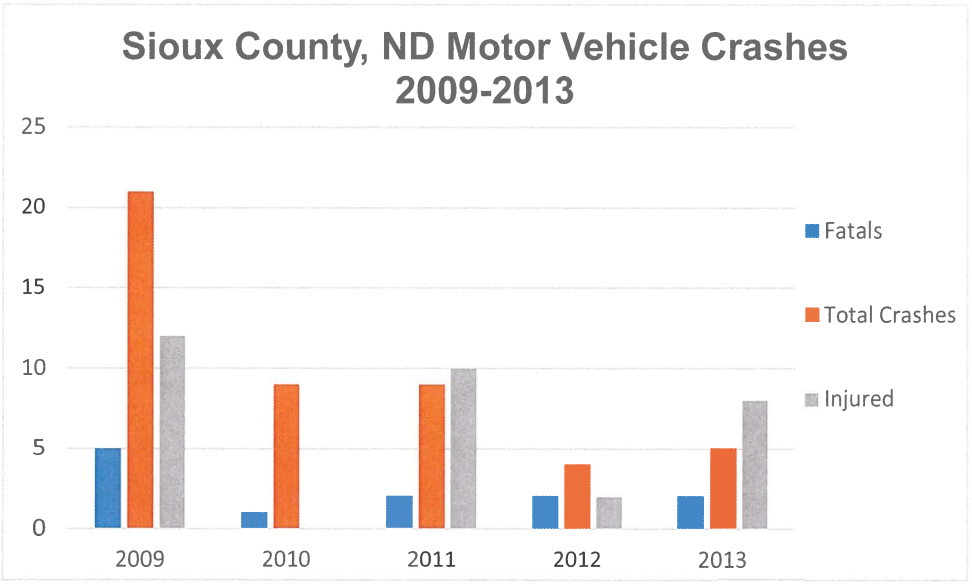


As with the injury crashes, fatal crashes are overwhelmingly caused by vehicles leaving the roadway and either overturning or striking a fixed object. This is consistent with other rural fatal crashes in both South Dakota and North Dakota. This would also indicate that many of the occupants were not properly restrained by a seat belt and may have been ejected from the vehicle during the crash.



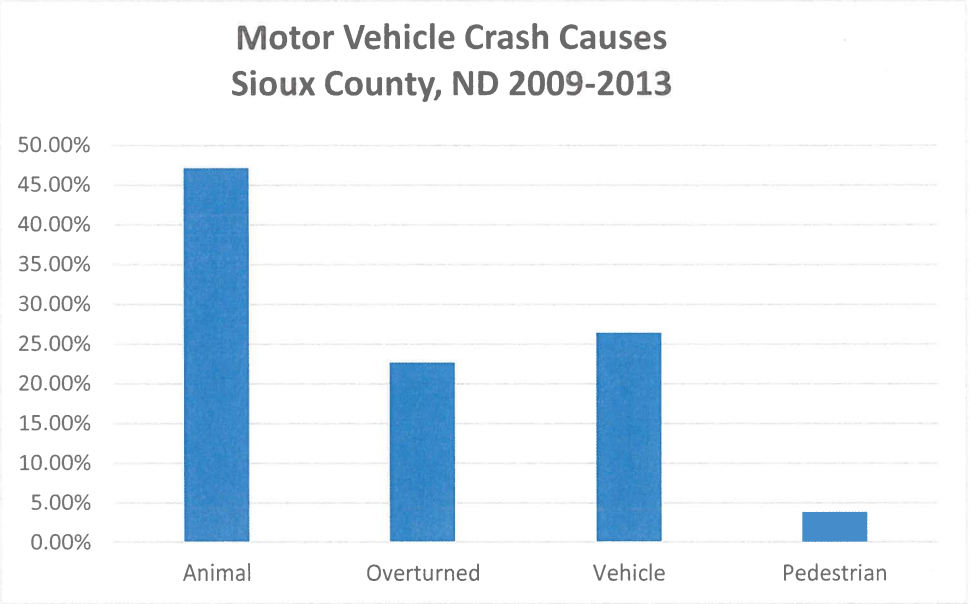
NORTH DAKOTA DEPARTMENT OF TRANSPORTATION CRASH DATA

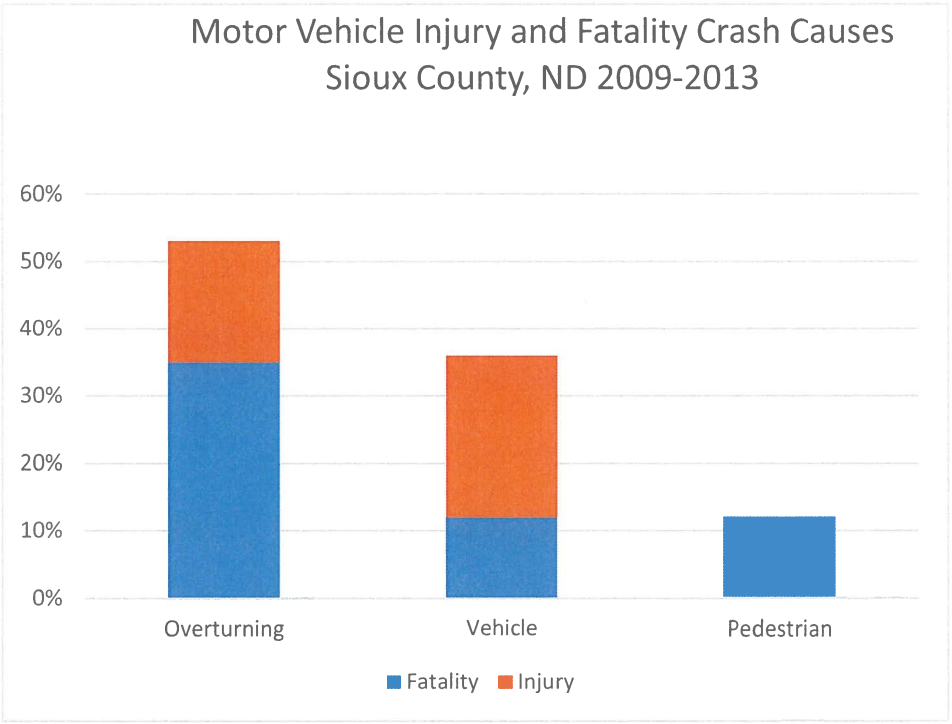
Data that was obtained from NDDOT was grouped together and not broken down by all crashes, fatalities and injuries due to the relatively small data set. Over the last five years there were a total of 48 reported crashes in Sioux County, resulting in 12 fatalities and 32 injuries. While the number of crashes is not large, the severity of the crashes is rather alarming. The data also includes numerous crashes that resulted in multiple fatalities and injuries.



Ask Sheriff's Office to bring me reports to enter too.

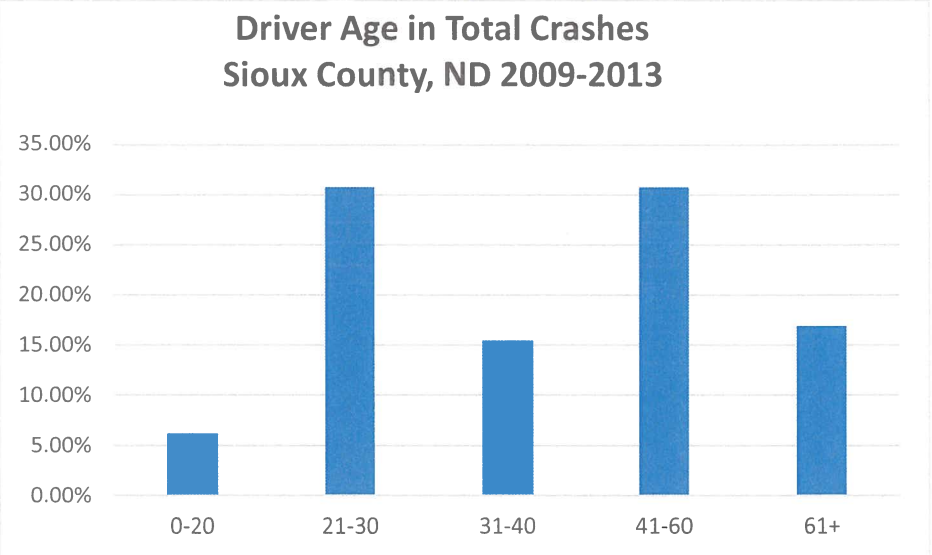
Similar to the data from South Dakota, the predominant cause of crashes in Sioux County, ND involve wildlife and other animals, which were the cause of nearly half of the total crashes. Overturning and crashes with other vehicles were also identified as a significant cause of overall crashes. This is much higher than what was shown in Corson County, SD, but is not unexpected due to the large number of injuries and fatalities as compared to the number of overall crashes. Pedestrians were also identified for the first time and both of these crashes resulted in a fatality.



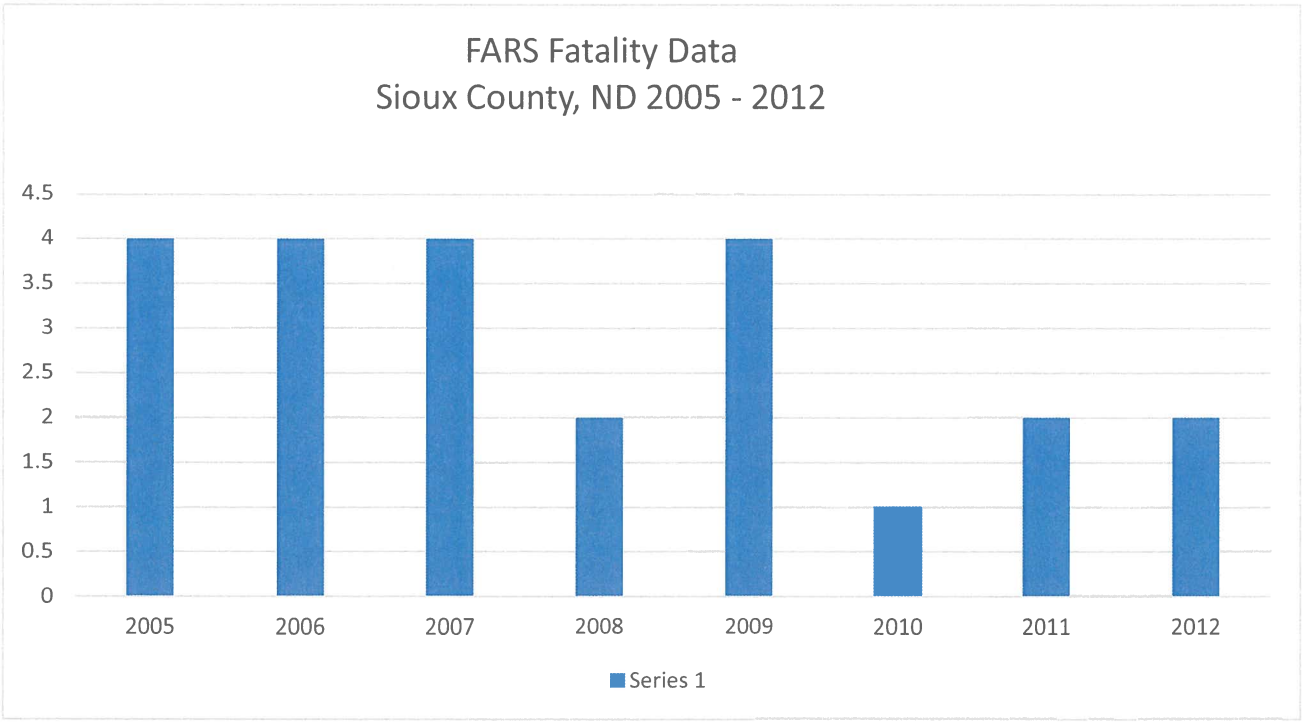


When examining just the causes for injuries and fatalities, overturning accounted for more than half of the crashes, followed by other vehicles with 35 percent and pedestrians at just more than 10 percent. While still a relatively small number, for the rural nature of the area, having two pedestrian fatalities may be significant and support the need for additional facilities.

The age of the drivers involved in the crashes was analyzed and two distinct age groups were involved in more than 60 percent of all crashes. The age groups included drivers from 21 to 30 years of age and those 41 to 60 years of age. The younger age grouping is common and consistent with other data in the region, but normally the rest of the age groups are more uniformly distributed in a bell shaped curve. In this case this would see higher crashes in the 31 to 40 year old age group and less in the 41 to 60 and more than 61 age groups. This may be due to the small sample set or the distribution of driver age in the area.



For the data analysis for Sioux County, ND additional data was gathered from the Fatal Analysis Reporting System (FARS) that is operated by the National Highway Traffic Safety Administration (NHTSA). With the high severity rate of crashes in Sioux County, ND, a longer timeframe was examined to get a broader picture of the number of deaths that are occurring due to traffic crashes. Similar to data for South Dakota,



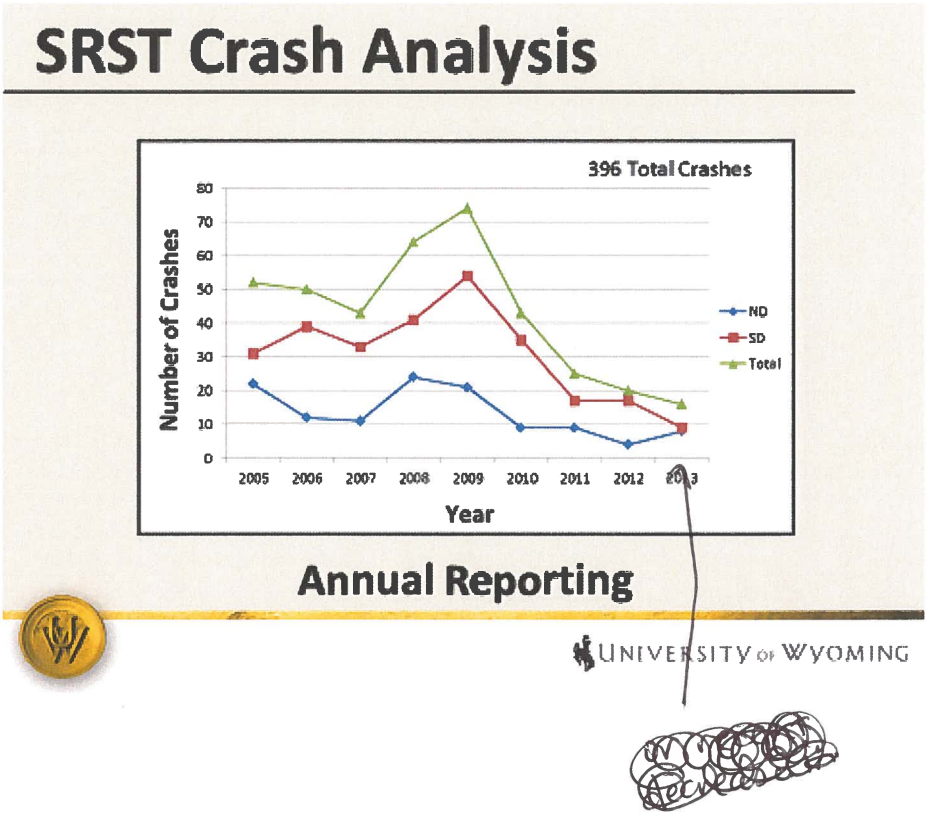
there is a downward trend indicating fatal crashes are becoming less frequent; however, total fatalities still are 23 over the eight year period. The fatal crash map that is included in Attachment C, obtained from NDDOT identifies that most of the fatalities are occurring on the state highway system, predominantly on ND 24.

While specific data was not gathered for Sioux County on fatal crash causes from FARS, statewide crash data for North Dakota as reported in the ND Strategic Highway Safety Plan, identifies lane departure, unbelted occupants and alcohol-related as the top three causes of severe crashes within the state.

WYOMING TECHNOLOGY TRANSFER CENTER DATA

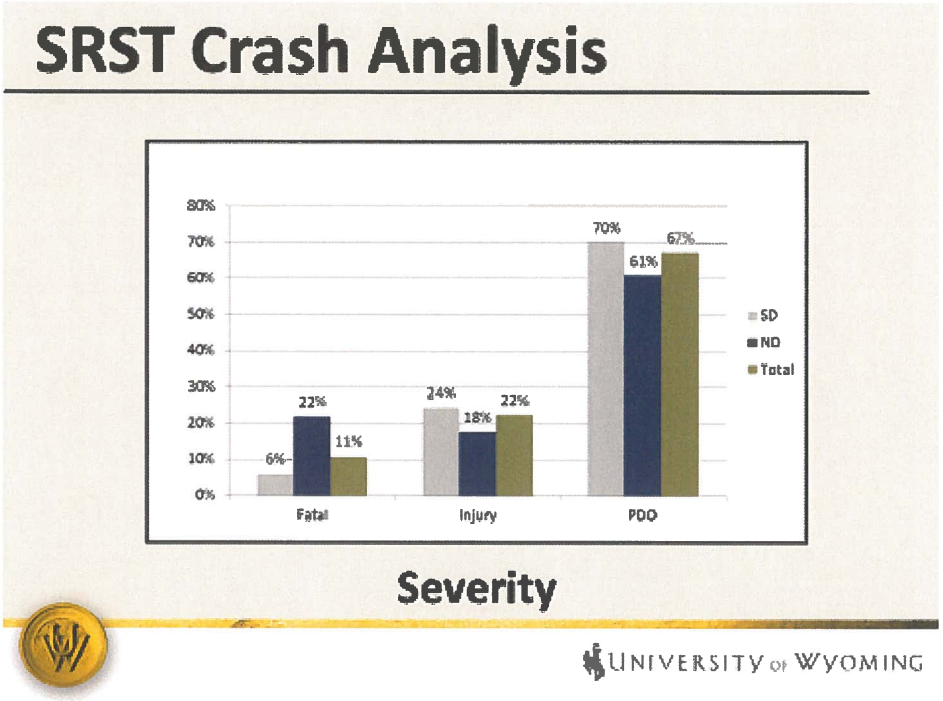
As part of a pilot project thru the WYT2/LTAP, data for the Standing Rock Sioux Tribe was analyzed to determine locations for low-cost safety improvements. While much of the data relies on the same data sources used for the previous data analysis, it has been included here due to some of the data being presented in a different fashion and combines the North Dakota and South Dakota data for a more complete picture of traffic crashes on the Reservation.

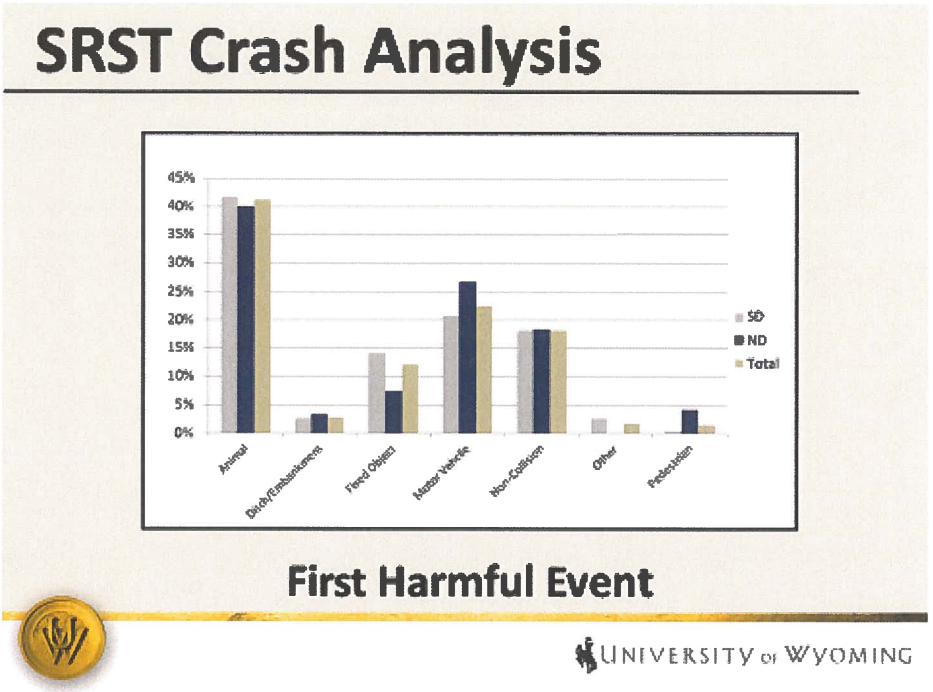
This data shows that recent drop in overall crashes on the Standing Rock Sioux Reservation. They identified a total of 396 crashes having occurred from 2005 to 2013 in both North Dakota and South Dakota.



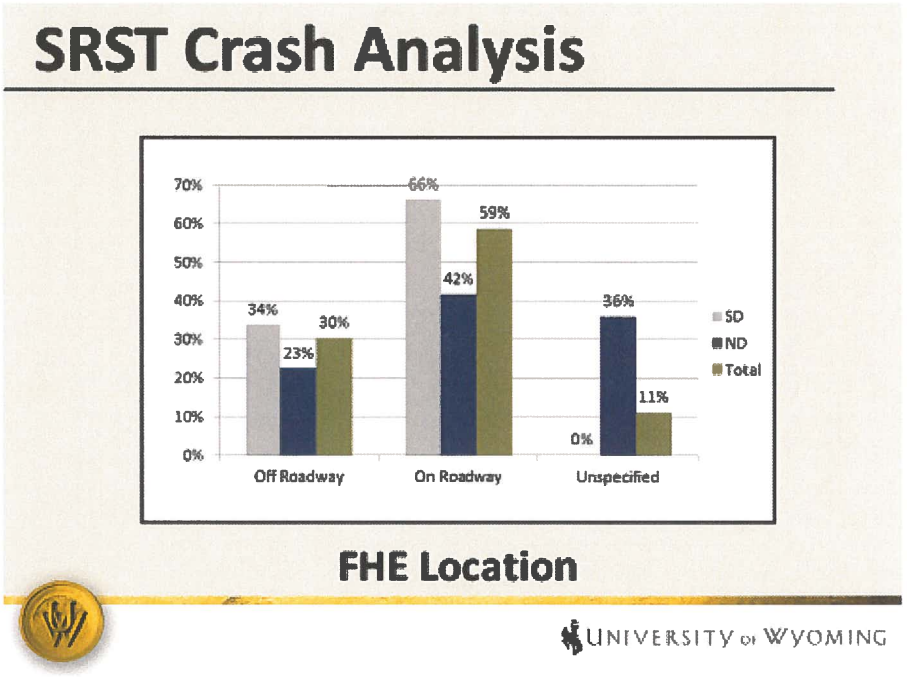
Similar to what was presented for the North Dakota crash data analysis, the severity of crashes in Sioux County contains a large skew in the data of fatal crashes. This is believed to be largely attributed to the State Highway Patrol assisting in the investigation of fatal and other severe crashes and BIA police investigating minor crashes. This has resulted in the large percentage (22 percent) of crashes in North Dakota being fatalities.

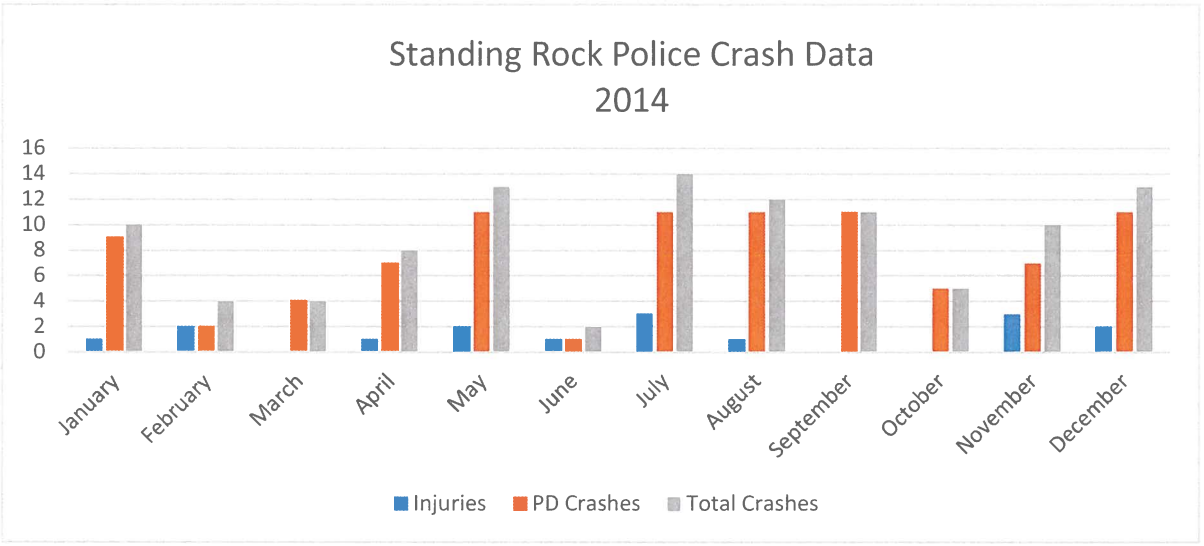
This data also identified crashes with wildlife and other animals as the predominant cause of crashes on the Standing Rock Sioux Reservation. Fixed objects and other motor vehicles were also significant. While few pedestrian crashes are currently occurring, they did account for nearly five percent of crashes in North Dakota.





While most crashes (59 percent overall) are occurring on the roadway, a fairly significant proportion are off-road crashes. This is common in rural areas with single vehicles running off road and striking an object or overturning due to driver overcorrection, impairment or falling asleep. The data does show a significant disparity in how this data is being recorded between the states of North Dakota and South Dakota. In North Dakota 36 percent of crashes were unspecified as to location versus none unspecified in South Dakota.





STANDING ROCK POLICE CRASH DATA

The Standing Rock Police Department provided the crash data they had available for calendar year 2014. The data is summarized below. While this data has been provided, it and previous crash data has not been provided by North Dakota and South Dakota so a complete data package is not available. Additionally, the data is not broken down by state, but by all traffic crashes investigated by BIA on the Standing Rock Sioux Reservation.

*must breakdown by State

Data provided shows that in 2014 a total of 106 crashes were investigated by BIA that resulted in 16 injuries.

The data did not provide any detail on crash cause, road condition or other parameters, but did breakdown crashes by month. This monthly breakdown shows spikes in May, July, August, September and December. While the trends are fairly common for this region, due to higher traffic volumes and speeds during the summer months and road conditions in the winter, the extremely low rates in June are not consistent with other data.

2015 TRIBAL TRANSPORTATION SAFETY MANAGEMENT PLAN

The 2015 Standing Rock Sioux Safety Plan was developed using available data and personal knowledge and expertise of the participants that attended the planning meeting. The group included state, federal and Tribal safety representatives from engineering, enforcement, education, emergency medical services and the school system. A complete list of participants is included in Attachment B.

The planning group reviewed the 2008 plan and crash data that was available and utilized it as a basis to develop a list of issues that are currently affecting transportation safety on the Reservation. The group then identified the programs that currently exist on the reservation and identified additional strategies that need to be implemented to address safety issues. The next sections document the discussions and outcomes.

ISSUES CAUSING CRASHES ON THE STANDING ROCK SIOUX INDIAN RESERVATION

The crash data that was analyzed clearly shows a number of issues, many of which were identified in 2012 as well. These include:

- **Animal crashes**
- **Nighttime crashes**
- **Lack of seatbelt use**
- **Alcohol involvement**
- **Overturning/rollover crashes**
- **Fixed objects**
- **Departure from roadway**
- **Lack of data sharing** } this doesn't cause crashes...?

In addition to these issues, the group identified a number of other issues based upon personal experience in dealing with transportation safety issues in the local communities. The issues included:

- Communication/coordination among law enforcement agencies
- Enforcement of traffic safety laws
- Road maintenance
- Texting and driving
- Large trucks and commercial vehicles
- Narrow road widths
- Low fines and sentencing in Tribal court
- Access to ND 24 for Emergency Medical Services (EMS)
- Lack of multi-use pathways
- Lack of crosswalks
- Speeding
- Lack of car seat technicians
- ~~Speeding~~
- Weight limits on bridges
- Access into Fort Yates
- Car seat use
- Need for better delineation and markings

EXISTING SAFETY PROGRAMS

The Standing Rock Sioux Tribe has implemented or is working on a number of safety projects and programs to address transportation safety issues on the Reservation. The list is not all inclusive, but documents the programs that the group participating in the development of the safety plan were aware of.

- The TTP has received funding for hardware necessary to implement an electronic crash record system.

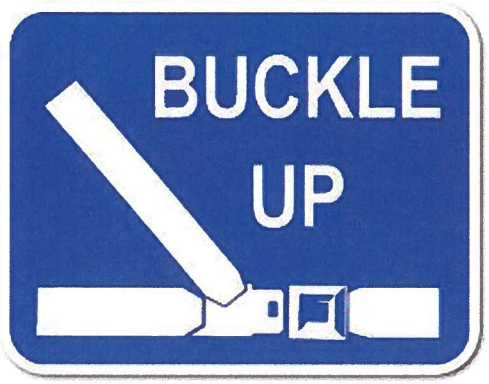
- The school district has installed strobe lights on the school buses to increase visibility. School bus stop locations have also been reviewed to identify any locations where advance warning signs would be appropriate.

outcomes?

- The SRST Transportation Program has had Road Safety Audits (RSAs) conducted in the past to identify safety deficiencies on roadways within the reservation.

- The Tribe has funded and filled a position to serve as a ~~Transportation~~ Traffic Safety Coordinator.

- The Tribe has provided free car seats and bike helmets. (helmets not being used)
- Indian Health Service is developing a trauma registry that will be able to provide additional data on car crash victims.
- The Tribe has worked with Banik Communications to develop educational materials.



- Separated pathways have been constructed in Fort Yates across the causeway and along ND 24 to provide safe pedestrian access.
- Corson County has worked with the Tribes to ticket non-Tribal members for traffic violations when pulled over by Tribal police.
- The Tribe has certified car seat technicians associated with the ~~WIC Program.~~ Transportation Program
- The Tribe has implemented a Primary Seat Belt Law on the Reservation.

The main goal of the Standing Rock Tribal Safety Plan is to use a multi-disciplinary approach to identify safety strategies for implementation that can address the safety issues that were identified. The strategies are intended to be implemented over the next several years and when appropriate, possible safety funding sources have been identified. The strategies were developed as a comprehensive approach to safety, including engineering, enforcement, education and emergency management opportunities.

Education Strategies

Develop a Reservation-Wide Transportation Safety Education Program

The Standing Rock Sioux Tribe have a Transportation Safety Coordinator position on their staff in the Transportation Department. A key role this person performs is working with law enforcement, schools and other interested parties on the reservation to provide education on transportation safety, particularly to younger drivers on behavioral issues such as seat belt use, texting and driving, impaired driving and child restraint. ongoing

This project would build on national safety campaign themes on impaired driving, seat belt use, texting and driving and other transportation safety issues, by using local leaders, or other easily recognizable individuals from the Standing Rock Community to promote these safety themes. An example from the Rosebud Sioux Tribe of such material is shown in the image. Many safety campaigns across the country have shown a greater rate of success when they are made culturally relevant to the Tribal audience and utilize local talent to deliver the safety message. Standing Rock has completed some small billboards, but due to lack of funding has not been able to develop a more comprehensive program that could address many of the issues and allow for distribution at large community gatherings. Materials produced would include two large billboards to be developed using local artistry and installed on the Reservation and Tribal safety posters similar to the one shown and modification of transportation safety brochures from NHTSA and FHWA on various safety themes to better suit the Standing Rock Community. A display booth is also needed for use at Pow Wows, fairs and other community events. done

Strategy Champion: SRST Transportation Program.

Funding Opportunity: 2014 TTP Safety Funding, BIA Indian Highway Safety Program (IHSP).

Enforcement Strategies

Develop a Stronger Partnership with Tribal Law Enforcement

Enforcement activities can have a significant impact on transportation safety. Unfortunately, the Standing Rock Sioux Tribal Police Department were unable to attend the safety planning session that was held to develop this plan. An active, robust relationship is essential to a comprehensive safety program. Studies have shown that without follow up enforcement actions, education activities have a much lower impact on driver behavior. There was considerable discussion on the lack of enforcement presence and issues that exist in the community where a strong traffic enforcement presence could reduce fatalities and injuries. It was acknowledged by all that the Tribal police have a difficult job and are in need of additional staffing, but that their participation is critical in the implementation of a safety plan and strategies for the reservation. The Tribal Transportation Department will take the lead in working with the Tribal Police Department staff to further explore how both transportation and enforcement activities could be better aligned to benefit the Tribal community.

Strategy Champion: SRST Tribal Transportation Department and SRST Police Department.

Funding Opportunity: None needed.

Implement Electronic Crash Record Systems and Data Sharing among Agencies

The Standing Rock Sioux Tribe received a safety grant from FHWA in 2012 to purchase the necessary hardware required for implementation of the Traffic and Criminal Software (TraCS) electronic crash records system with the assistance of the North Dakota and South Dakota DOTs. Also, a draft Memorandum of Understanding (MOU) was developed identifying roles of each agency involved at that time. While funding was provided, there has been a change in staffing at both the Tribal police and Tribal transportation departments and the TraCS project has not yet been implemented. This project needs to be completed with the SRST Transportation Program acquiring laptops, servers and other hardware, the state DOTs providing the software, training

Transportation Dept.

and IT support and the SRST ~~Police Department, fire or ambulance~~ using the system to enter crash records as was identified in the draft MOU. This crash data could then be shared to develop a complete set of crash data for the reservation. To improve the investigative ability of the SRST Police Department, additional training and equipment for crash scene reconstruction will also be provided.

Strategy Champion: SRST Police Department, NDDOT, South Dakota Department of Public Service and SRST Transportation Program.

Funding Opportunity: TTPSF, BIA IHSP and State Safety Funds.

Provide a Tribal Highway Safety Officer

Currently the Tribe does not have any officers dedicated to highway safety enforcement. With the limited staffing and the demands on time that criminal activities require, highway safety enforcement, by necessity, becomes a lower priority. In the past, the Tribe had Highway Safety Officers whose positions were funded thru the BIA IHSP. To elevate the level of highway safety enforcement, Tribal Law Enforcement should pursue obtaining at least one and possibly two highway safety enforcement officers.

Strategy Champion: SRST Police Department.

Funding Opportunity: BIA IHSP.

Initiate Discussions on Use of Cross Jurisdictional Agreements

With the staffing challenges faced by all enforcement agencies, many Tribes, states and local jurisdictions have entered into cross jurisdictional agreements to expand their enforcement abilities. The positive benefits of such an agreement should be presented to the Tribal Council and determine whether they are open to such an opportunity. It may be desirable to invite Tribal council and/or Tribal law enforcement from other reservations such as Crow Creek, where cross jurisdictional agreements are in place, to discuss benefits and some challenges that they have experienced.

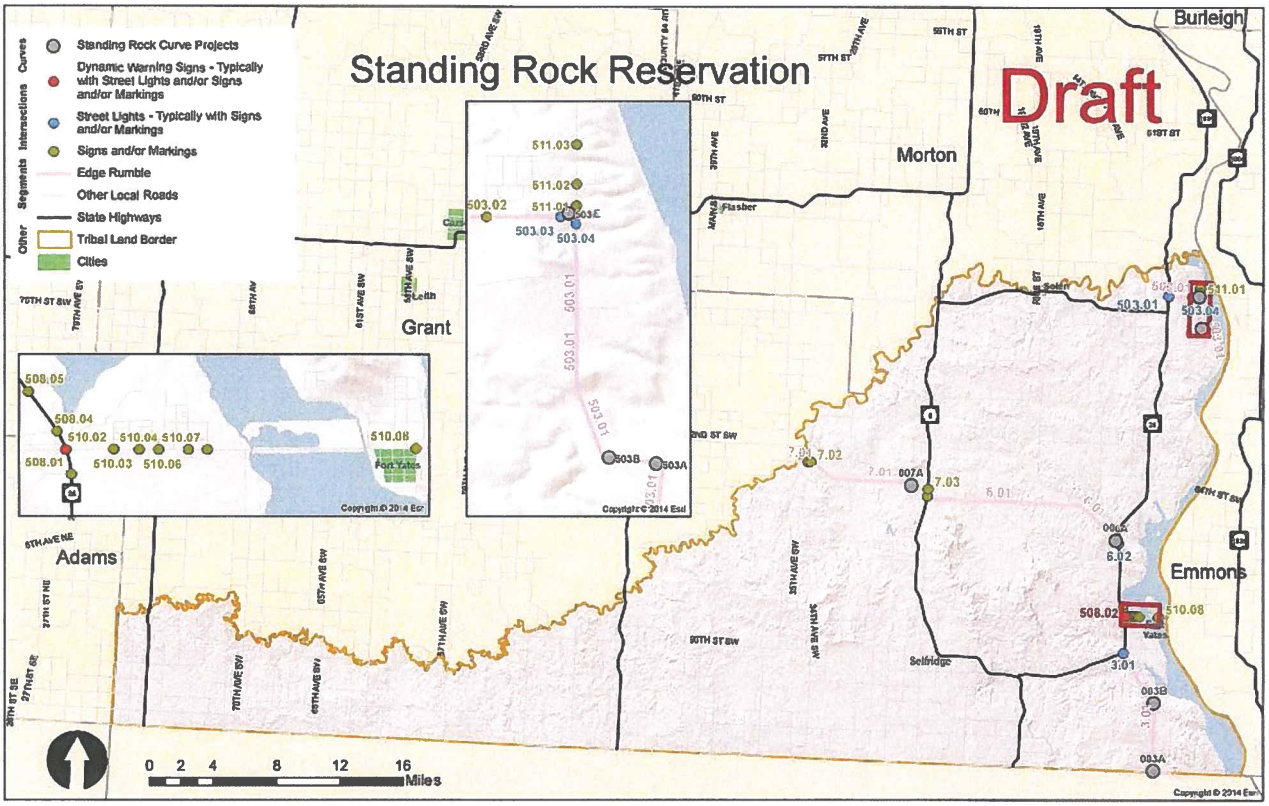
Strategy Champion: SRST Transportation Department and Standing Rock Sioux Tribal Council.

Funding Opportunity: None required.

Engineering Strategies

NDDOT Highway Safety Improvement Project

The NDDOT has initiated a program to work with local and Tribal governments across the state to implement improvements as part of the Local Road Safety Program. NDDOT has used statewide crash data to complete a systemic safety analysis, focused on the implementation of low-cost measures such as rumble strips, signing and pavement markings. These were evaluated for the North Dakota portion of the Standing Rock Sioux Reservation and improvements were recommended to install nearly 36 miles of rumble strips and one mile of six-inch edge line, enhance delineation and/or add rumble strips at seven curves and upgrade 23 intersections. The total cost of the improvements is estimated to be $416,000, of which the Standing Rock Sioux Tribe will be required to provide a 10 percent match. Locations are shown on the map below.



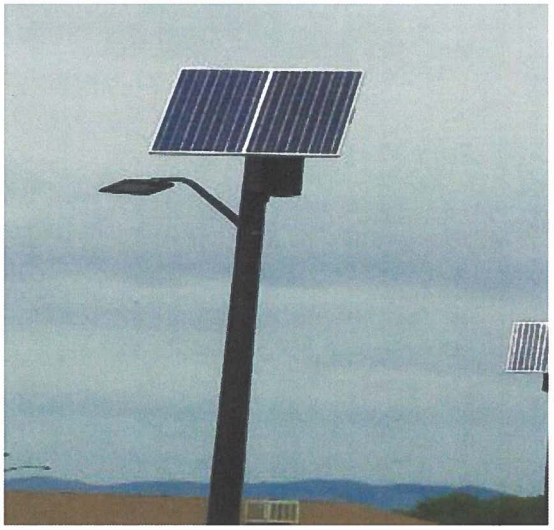
Strategy Champion: SRST Transportation Department and NDDOT.

Funding Opportunity: NDDOT HSIP and TTP Construction Funding.

Applied for grant!

Develop Multi-Use Separated Paths

There are locations within the Standing Rock Sioux Reservation where there is pedestrian/bike traffic, and the Tribe has identified specific need for pathways. These locations include Bullhead, Cannonball and the Fort Yates pathway extension. Currently, the state crash data does not identify pedestrian or bike as a major crash cause, but multi-use pathways need to be considered to separate pedestrians from vehicle traffic. The need for these pathways has been present for some time and has increased as new Tribal housing has been developed and the need for access to Tribal communities, facilities, schools, cultural sites, Pow Wow grounds and commercial businesses has continued to expand.



Lighting should be considered along urban or other pathways as appropriate to increase pedestrian visibility, provide for traffic calming and potentially increase security. Solar powered and/or LED lighting could be used to reduce the cost for providing power and the need for continual power usage. An example of a solar powered lighting system is shown and several companies produce such systems.

Solar too expensive to maintain according to NDDOT, LED a better choice, MOA w/ district to receive path.

Three locations were prioritized where separated pathways would be beneficial to creating safer pedestrian and bicycling opportunities. These include:

- **Bullhead Community Pathway**

BIA Route 20 in South Dakota provides access to the Tribal Community of Bullhead and then continues on to connect to US 12 at Walker. While providing access to the community, BIA 20 also provides a barrier between housing on the south side of the road and the community store and Pow Wow grounds to the north. While there are sidewalks within the Tribal housing, currently BIA 20 has no shoulders, marked crosswalks or other pedestrian facilities. This requires pedestrians to either walk on the roadway or in the ditch and crossings of BIA 20 are made at numerous locations. A pathway should be constructed beginning at First Avenue and extend east thru the community. The pathway would also need to have two crosswalks across BIA 20, one at the Pow Wow grounds and one at the store. These crosswalks should be marked, signed and have pedestrian activated flashers. Installation of lighting along the pathway while improving visibility and increasing safety may have an additional benefit of slowing traffic as it enters into the community. The pathway would have a total length of approximately .35 miles and has a planning level cost estimate for design and construction of $160,000.

Strategy Champion: SRST Transportation Program.

Funding Opportunity: TTP Safety Funding, TTP Construction Funding or SDDOT Transportation Alternatives Funding.

- **Cannon Ball Community Pathway**

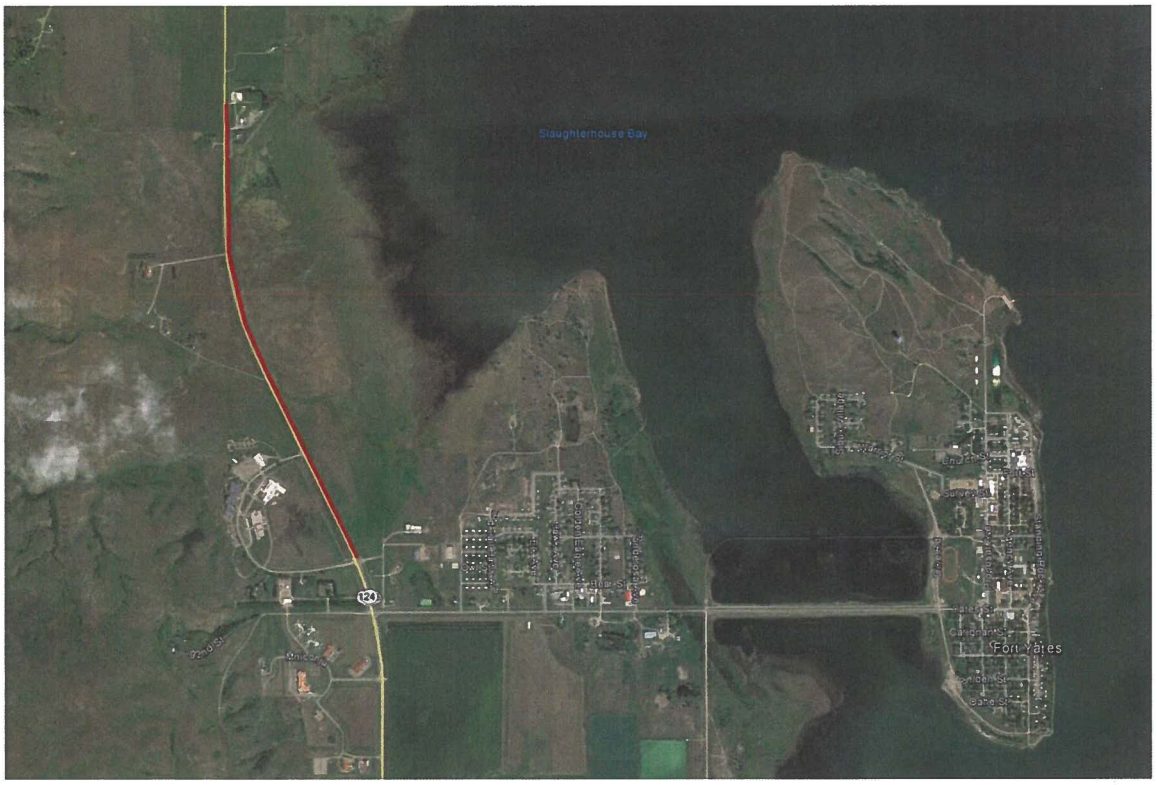
  The community of Cannon Ball at the northern end of the Standing Rock Reservation in North Dakota is located east of ND 24/1806. This community is approximately 1.5 miles off the main highway and served by BIA 36. While the community and Pow Wow grounds are east of the state highway, there is a community store on ND 24 that creates pedestrian traffic along the BIA roadway. A pathway should be constructed that provides for pedestrian access from the highway into the community and then onto the Pow Wow grounds. These pathways would be approximately 2.4 miles in total length and would have a planning level design and construction estimate of $1,000,000 which also includes lighting of the pathway.

Strategy Champion: SRST Transportation Program.

Funding Opportunity: TTP Safety Funding, TTP Construction Funding or SDDOT/NDDOT Transportation Alternatives Funding.

- **Fort Yates Pathway Extension**

  There is currently a pathway in Fort Yates, ND that starts in town, crosses the causeway and proceeds west out to ND 24, where it crosses the highway and provides access to the Tribal school and facilities in the area. The pathway also extends south of town along ND 24 to access businesses and facilities, but currently does not extend to the north. North of Fort Yates is a local grocery store and laundromat that members of the community access, many of them by walking. A pathway extension in this area would provide for much better and safer pedestrian access. This pathway would be approximately 1.5 miles in total length and would have a planning level design and construction estimate of $675,000 including design, lighting and construction.



Strategy Champion: SRST Transportation Program.

Funding Opportunity: TTP Safety Funding, TTP Construction Funding or NDDOT Transportation Alternatives Funding.

Develop Turning Lanes for Family Dollar Store

Approximately 1.5 miles north of Fort Yates, the Family Dollar Store, a local laundromat and a commercial construction business which includes a concrete batch plant are located just east of ND 24. These businesses are currently accessed by the two approaches that are within a 55 mph speed limit and can be seen in the map below. Currently the roadway has two thru lanes with no turn lanes in the area. Tribal staff and residents have expressed concerns with vehicles slowing or stopping to turn into the approach conflicting with higher speed traffic that is continuing through the area. To determine if construction of turning lanes is feasible, the Standing Rock Sioux Tribe should examine consolidating the approaches in the area to concentrate turning movements. Once completed, a traffic study from NDDOT will be needed to determine if traffic and turning vehicle thresholds that have been established for North Dakota are met for installation of turning lanes.

Strategy Champion: NDDOT and SRST Transportation Program.

Funding Opportunity: TTP Safety Funding, TTP Construction Funding or NDDOT Transportation Funding.

Participate in TTAP/WY LTAP Low Cost Safety Improvement Project

The Standing Rock Sioux Tribe have recently been selected by the Northern Plains TTAP and Wyoming LTAP to participate in a safety project to identify high-risk locations and low-cost safety improvements. This project was piloted on the Wind River Indian Reservation in Wyoming and will build on that effort and utilize the lessons learned to enhance safety at Standing Rock. The project will gather data available to identify and rank high-risk locations and then develop safety countermeasures and calculate a benefit cost ratio for each location. Using the benefit cost information funding sources can be identified and priorities established and incorporated into a strategic plan.

Strategy Champion: SRST Transportation Program.

Funding Opportunity: None Required

Emergency Service Strategies

Improve 911 Addressing System

Currently the Tribe does not have an enhanced 911 system, which means that when a call is received by a 911 operator, location information is unavailable within the system. This requires the operator to get more detailed location information prior to being able to dispatch an emergency vehicle. This is also further complicated in that many roads may be known by a local or nickname that is not easily identifiable by either the dispatcher or responder. To remedy this situation, the system within the reservation should be upgraded to include location information for quicker response times. The BIA Inventory includes strip maps that may be utilized as part of this effort.

Strategy Champion: SRST Transportation Department and SRST EMS.

Funding Opportunity: BIA IHSP, TTP Safety Funds.

Other Strategies

Establish a Standing Rock Safety Committee

Building on the efforts that have been initiated in the development of the 2015 Tribal Transportation Safety Plan, the Tribe would like to establish a committee that includes transportation safety stakeholders to work together to address Tribal transportation safety issues. This group could meet on a quarterly basis to develop a stronger relationship among Tribal safety agencies, promote safety ordinances, identify training opportunities for transportation and law enforcement personnel, collect baseline data in seatbelt use, impaired drivers and crash statistics and apply for safety grants to address transportation safety needs. This group would become the leaders on the reservation in tracking issues and developing implementation strategies to address them.

Strategy Champions: SRST Transportation Program, SRST EMS, SRST Police Department, Indian Health Service, NDDOT and SDDOT.

Funding Opportunity: None Required.

* Not sure if this is necessary - I work with all these groups & bring them together when it makes sense. I guess this isn't a "traffic safety committee, but still seems vague and time consuming (not a meeting for meeting's sake person)

Standing Rock Sioux Tribe
2015 Tribal Transportation Safety Plan

ATTACHMENT A

Meeting Agendas

ATTACHMENT A

Standing Rock Tribal Safety Plan 2014
Agenda

10:00 a.m. Welcome and Introductions

10:15 a.m. Background and Overview

- Discussion of Tribal Safety Plans, including need for Review of 2009 Standing Rock Safety Plan
- Presentation of Crash and Safety Data
- Questions and Discussion of Data

11:00 a.m. Standing Rock Tribe existing safety approaches (this is any practice the Tribe is utilizing to address transportation safety i.e. education to public, crash reporting/processes, EMS or engineering projects)

11:30 a.m. Development of Activities for updated Standing Rock Tribal Transportation Safety Plan:

- Identification/Discussion of Safety issues and concerns
- Safety approaches to include
- Safety approaches to develop
- Integration with other safety plans

12:00 Lunch

1:00 p.m. Finalize Development of Safety Activities to include in Plan

- Sort by 4E's
- Identification of Implementation Steps
- Identification of Champions for Specific Elements
- Identification of Potential Funding Sources

2:15 p.m. Break

2:30 p.m. Questions/Discussion of Process or other Items

3:00 p.m. Wrap up and/or Site Visit to any Locations

Standing Rock Sioux Tribe
2015 Tribal Transportation Safety Plan

ATTACHMENT B

PARTICIPANTS

KLJ

ATTACHMENT B

STANDING ROCK SIOUX TRIBAL TRANSPORTATION SAFETY PLAN
PARTICIPANTS
May 14, 2014

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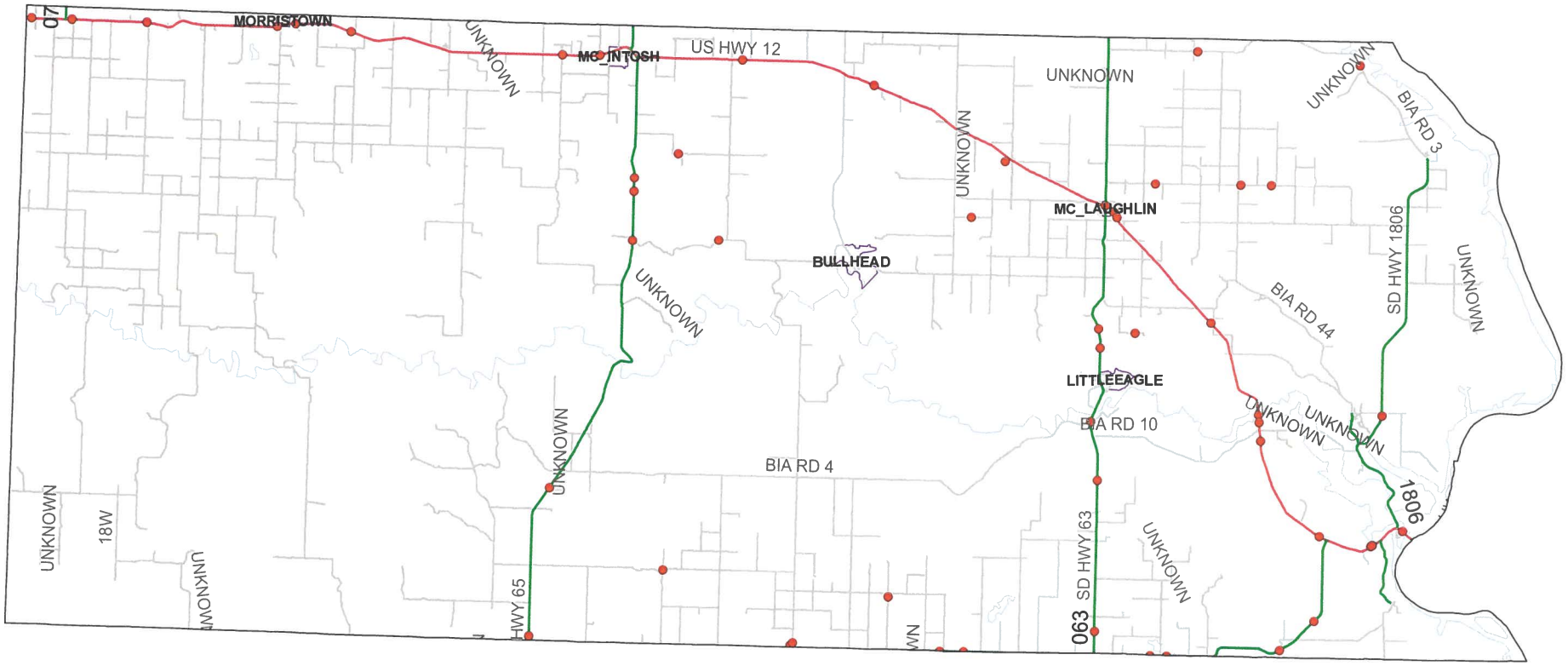
STANDING ROCK SIOUX TRIBE
2015 TRIBAL TRANSPORTATION SAFETY PLAN

ATTACHMENT C

MAPS OF 2005 TO 2012 CORSON COUNTY CRASHES
MAPS OF 2008 TO 2012 ND COUNTY CRASHES

KLJ

CORSON CO - 2005 REPORTABLE MOTOR VEHICLE CRASHES



2005 MV CRASHES
FOR CORSON CO

50 TOTAL CRASHES
4 FATAL CRASHES
12 INJURY CRASHES
34 DAMAGE ONLY CRASHES

4 KILLED
25 INJURED

Legend

- Corson Boundary
- 2005_accidents

DOT.pl.segment_d Events

- <all other values>

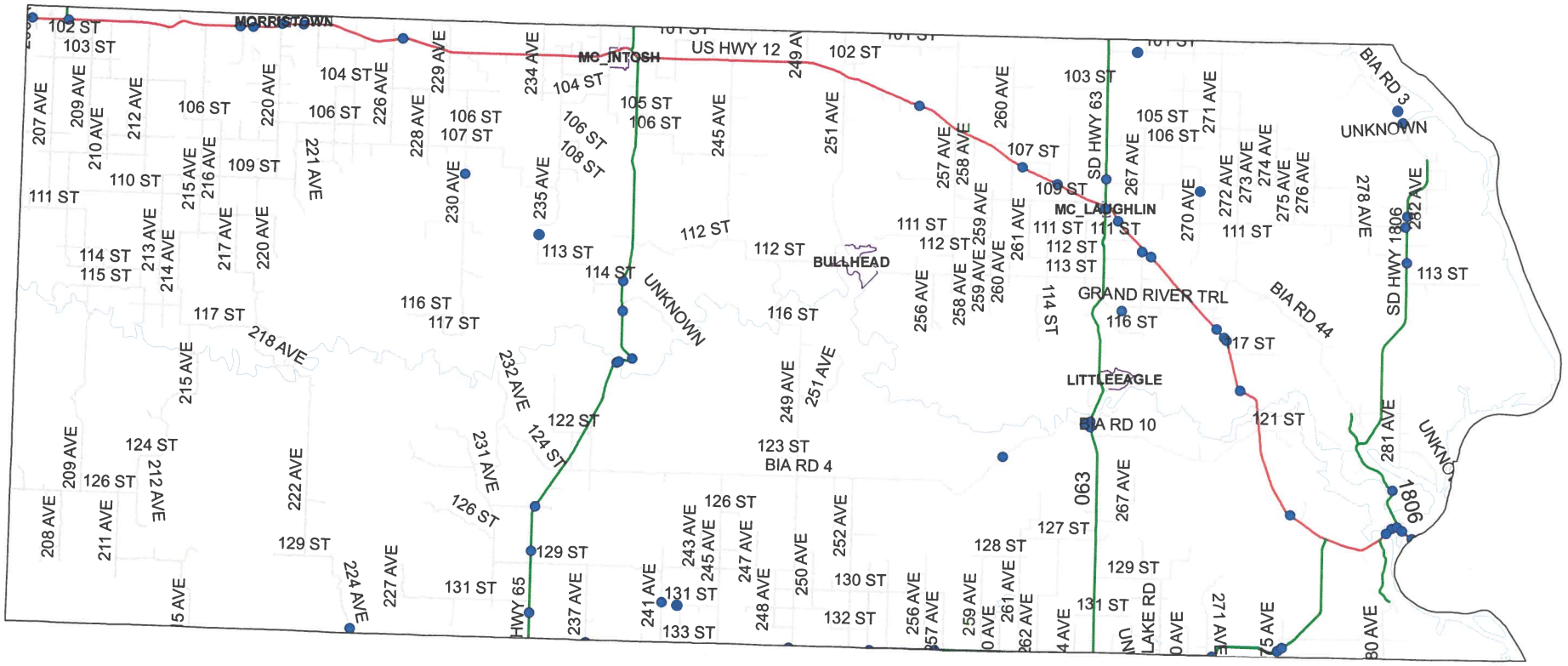
HWY_CATEGORY

- Interstate
- SD
- US
- NSTRI

- Counties - CENSUS
- city_limits
- Water

Prepared by:
Dept of Public Safety
Highway Safety / Accident Records
July 20, 2006

CORSON CO - 2006 REPORTABLE MOTOR VEHICLE CRASHES



2006 MV CRASHES
FOR CORSON CO

55 TOTAL CRASHES
3 FATAL CRASHES
15 INJURY CRASHES
37 DAMAGE ONLY CRASHES

3 KILLED
22 INJURED

Legend

- 2006_accidents
- Corson Boundary

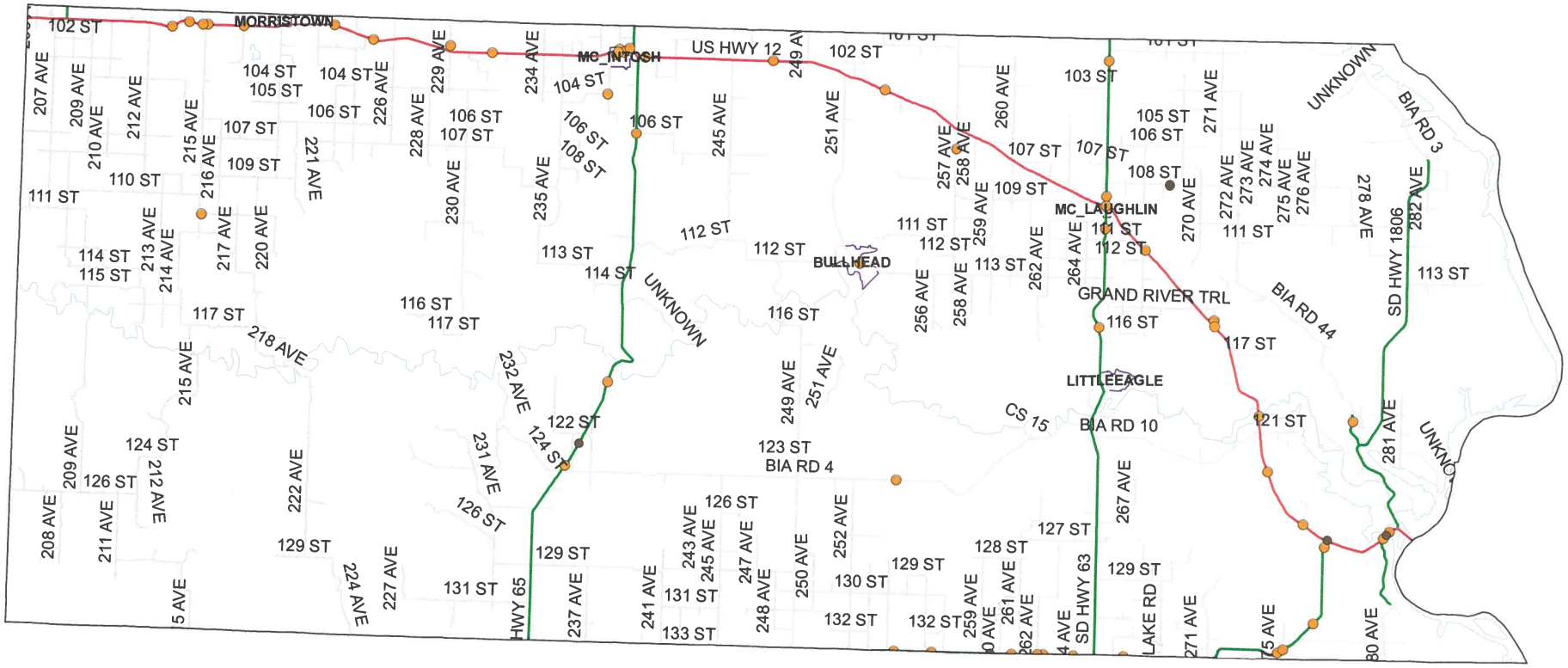
HIGHWAYS

HWY_CATEGORY

- Interstate
- SD
- US
- NSTRI
- city_limits
- Water

Prepared by:
Dept of Public Safety
Highway Safety / Accident Records
March 20, 2007

CORSON CO - 2007 REPORTABLE MOTOR VEHICLE CRASHES



2007 MV CRASHES
FOR CORSON CO

43 TOTAL CRASHES
3 FATAL CRASHES
10 INJURY CRASHES
30 DAMAGE ONLY CRASHES

3 KILLED
25 INJURED

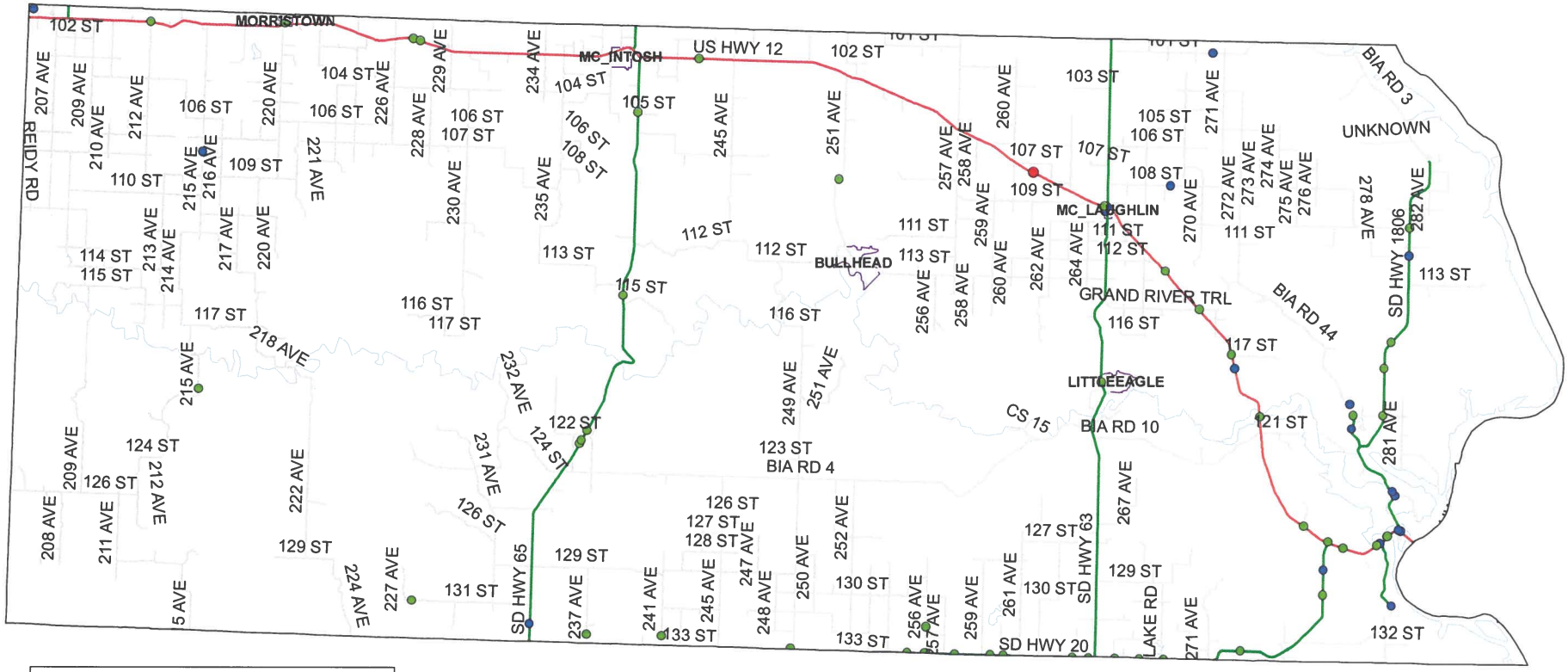
Legend
- 2007_accidents
- Corson Boundary

HIGHWAYS

HWY_CATEGORY
- Interstate
- SD
- US
- NSTRI
- city_limits
- Water

Prepared by:
SD Dept of Public Safety
Highway Safety / Accident Records
April 3, 2008

CORSON CO - 2008 REPORTABLE MOTOR VEHICLE CRASHES



Legend

2008_MV_CRASHES BY AccidentSeverity	HIGHWAYS BY HWY_CATEGORY
FATAL CRASHES	Interstate
INJURY CRASHES	SD
PDO CRASHES	US
Corson Boundary	NSTRI
	city_limits
	Water

N

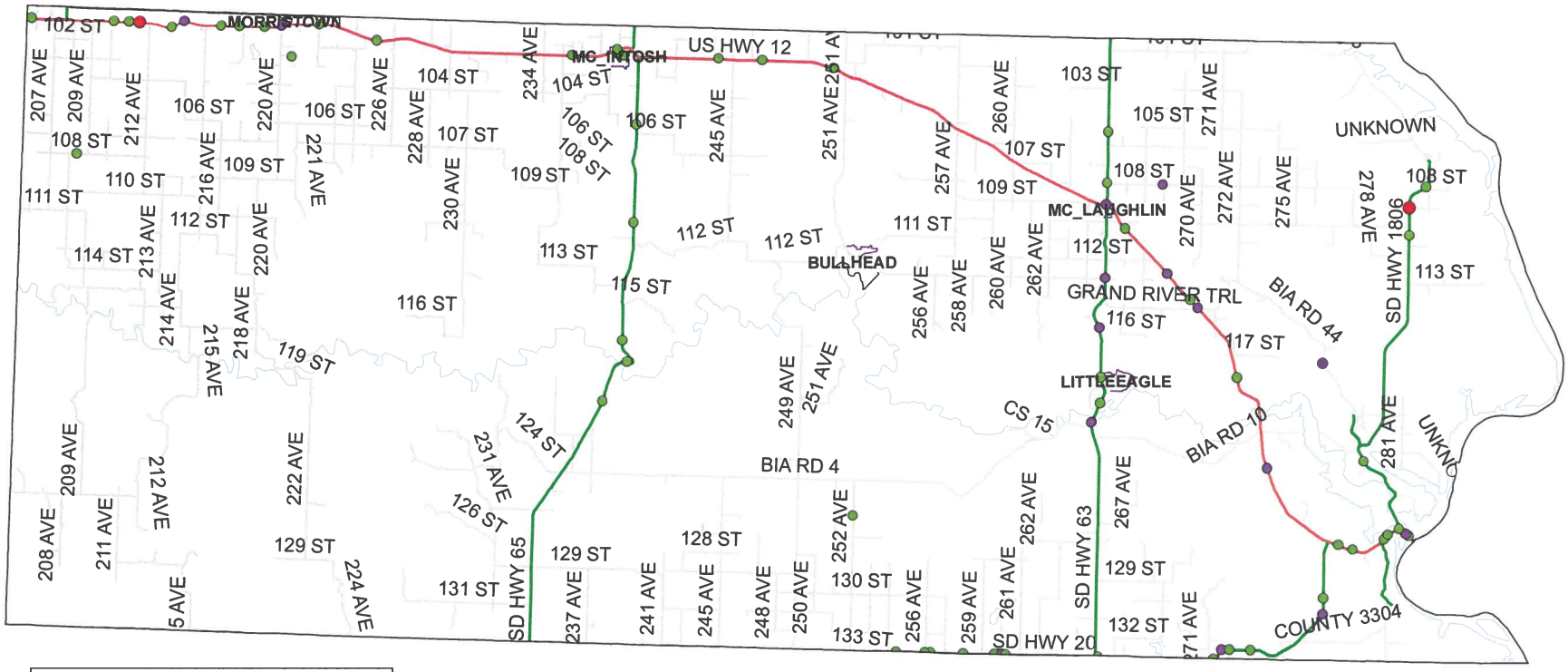
2008 MV CRASHES FOR CORSON CO

56 TOTAL CRASHES
1 FATAL CRASH
18 INJURY CRASHES
37 DAMAGE ONLY CRASHES

1 KILLED
29 INJURED

Prepared by:
SD Dept of Public Safety
Highway Safety / Accident Records
March 24, 2009

CORSON CO - 2009 REPORTABLE MOTOR VEHICLE CRASHES



Legend

2009_MV_CRASHES BY CRASH SEVERITY	HIGHWAYS BY HWY_CATEGORY
FATAL CRASHES	Interstate
INJURY CRASHES	SD
PDO CRASHES	US
Corson Boundary	NSTRI
	city_limits
	Water

SOUTH DAKOTA
ACCIDENT RECORDS

2009 MV CRASHES FOR CORSON CO

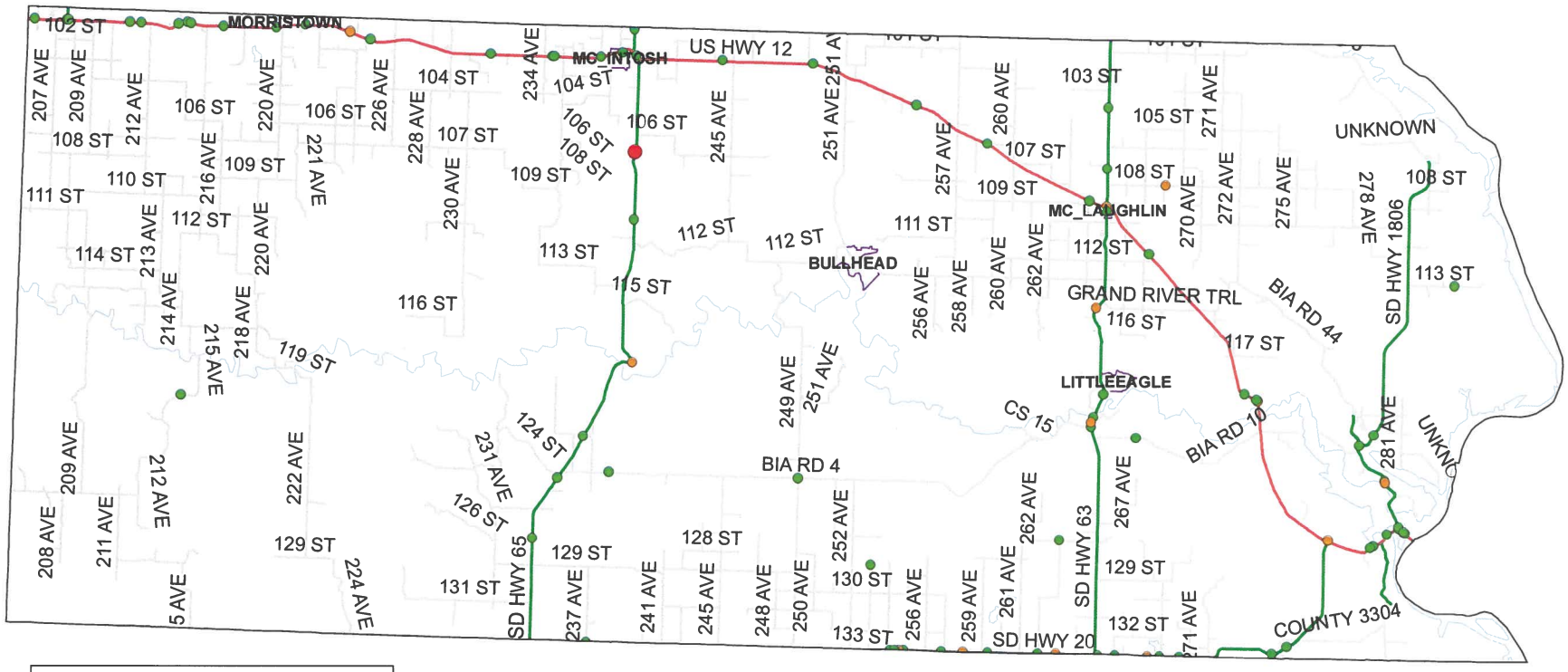
68 TOTAL CRASHES
2 FATAL CRASHES
15 INJURY CRASHES
51 DAMAGE ONLY CRASHES

2 KILLED
30 INJURED

N

Prepared by:
SD Dept of Public Safety
Highway Safety / Accident Records
April 28, 2010

CORSON CO - 2010 REPORTABLE MOTOR VEHICLE CRASHES



Legend

- Corson Boundary
- **2010_MV_CRASHES** BY **CRASH SEVERITY**
  - FATAL CRASHES
  - INJURY CRASHES
  - PDO CRASHES
- **HIGHWAYS** BY **HWY_CATEGORY**
  - Interstate
  - SD
  - US
  - NSTRI
  - city_limits
  - Water

SOUTH DAKOTA
ACCIDENT RECORDS

2010 MV CRASHES FOR CORSON CO

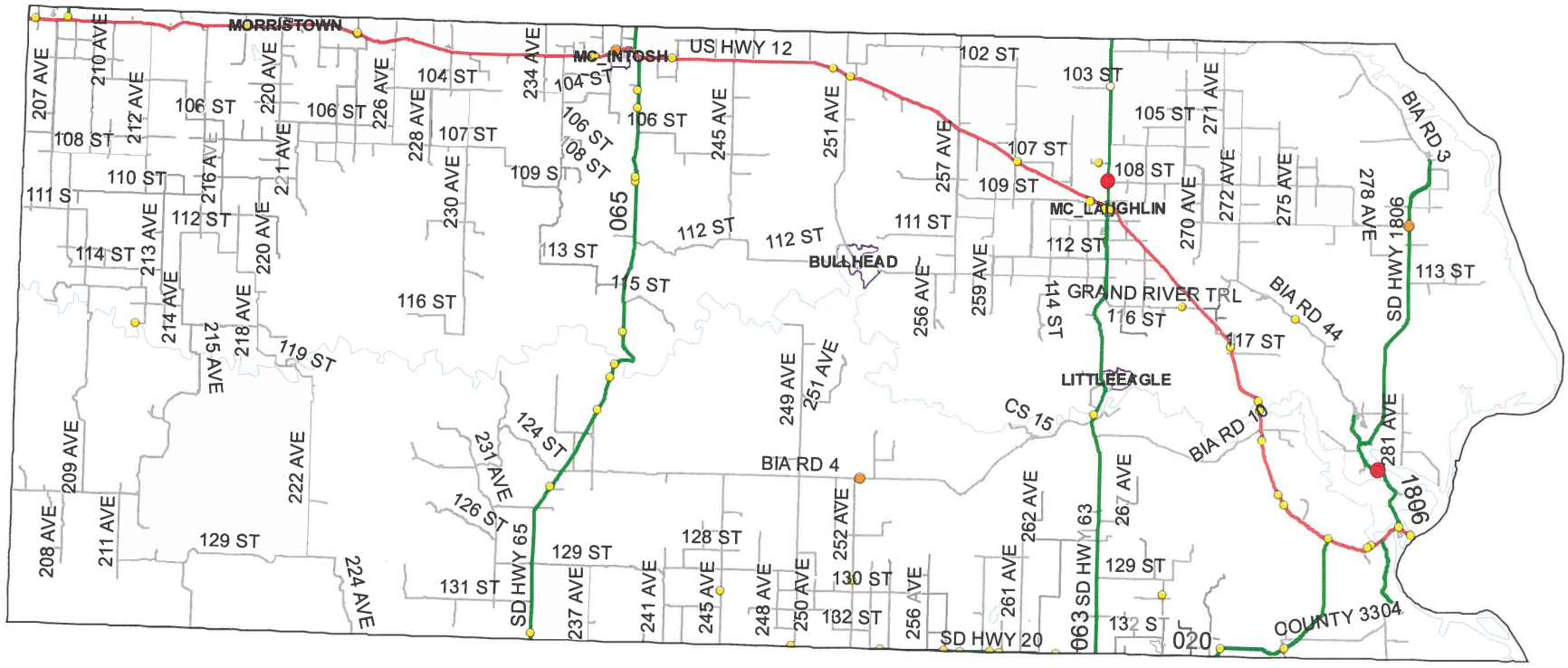
71 TOTAL CRASHES
1 FATAL CRASHES
10 INJURY CRASHES
60 DAMAGE ONLY CRASHES

1 KILLED
15 INJURED

N

Prepared by:
SD Dept of Public Safety
Highway Safety / Accident Records
March 28, 2011

CORSON CO - 2011 REPORTABLE MOTOR VEHICLE CRASHES



Legend

2011_MV_CRASHES BY CRASH SEVERITY	HIGHWAYS BY HWY_CATEGORY
FATAL CRASHES	Interstate
INJURY CRASHES	SD
PDO* CRASHES	US
Corson Boundary	NSTRI
	city_limits
	Water

SOUTH DAKOTA
ACCIDENT RECORDS

2011 MV CRASHES
FOR CORSON CO

56 TOTAL CRASHES
2 FATAL CRASHES
3 INJURY CRASHES
51 PDO* CRASHES

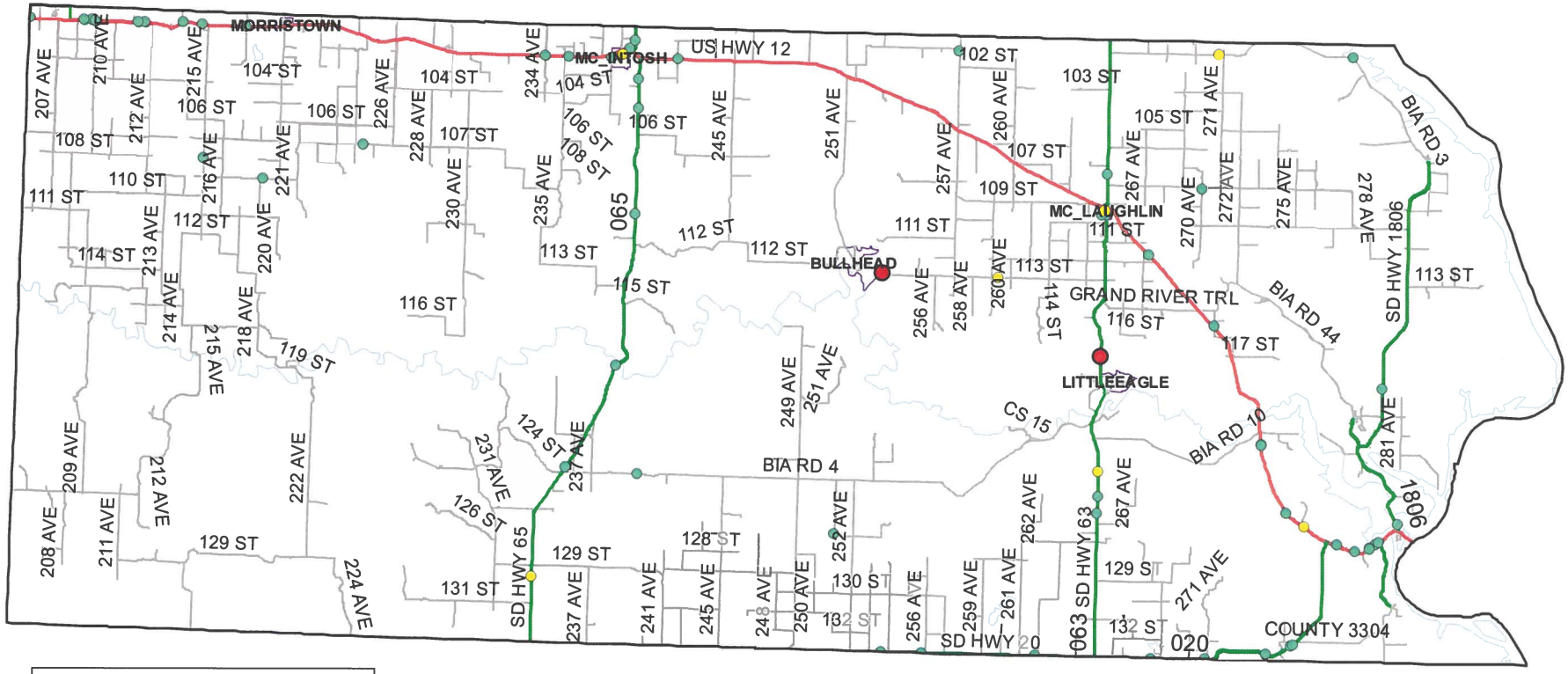
1 KILLED
6 INJURED

PDO* = PROPERTY DAMAGE ONLY

N

Prepared by:
SD Dept of Public Safety
Highway Safety / Accident Records
April 23, 2012

CORSON CO - 2012 REPORTABLE MOTOR VEHICLE CRASHES



Legend

2012_CRASHES BY CRASH SEVERITY	HIGHWAYS BY HWY_CATEGORY
FATAL CRASHES	Interstate
INJURY CRASHES	SD
PDO* CRASES	US
	NSTRI
	city_limits
	Water
	Corson Boundary

SOUTH DAKOTA
ACCIDENT RECORDS

2012 MV CRASHES
FOR CORSON CO

59 TOTAL CRASHES
2 FATAL CRASHES
8 INJURY CRASHES
49 PDO* CRASHES

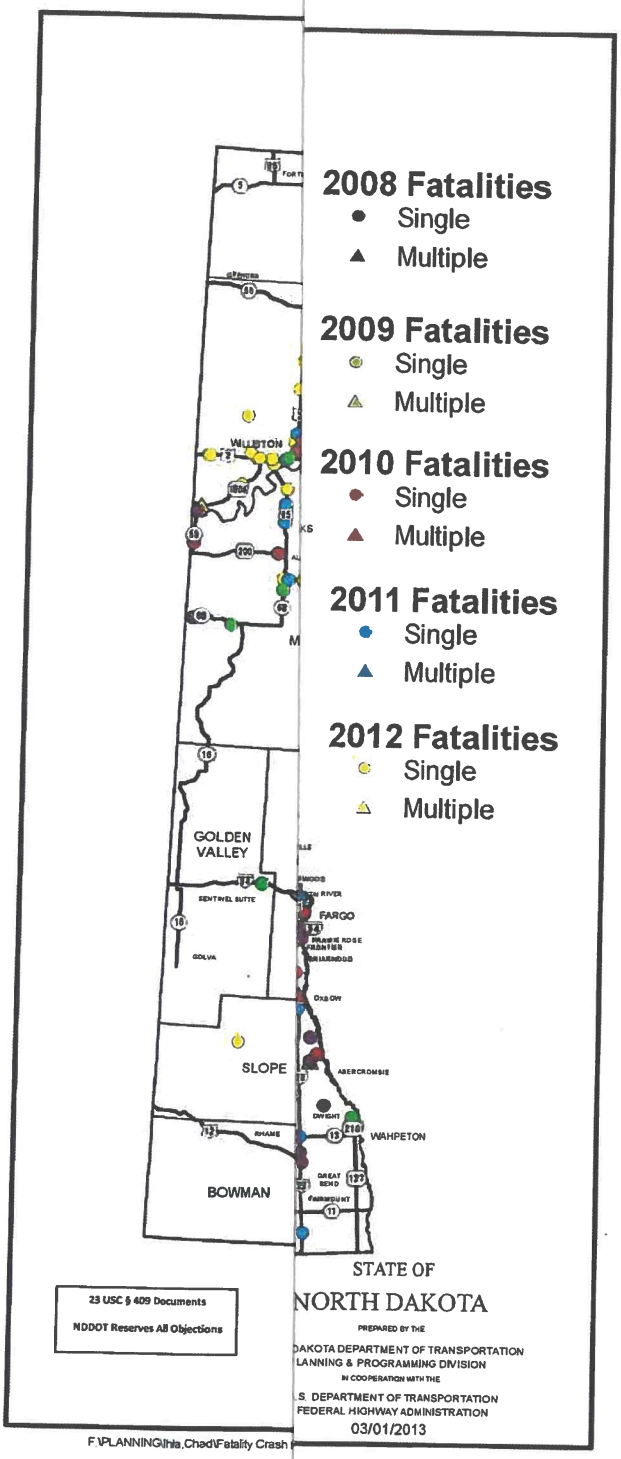
3 KILLED
14 INJURED

PDO* = PROPERTY DAMAGE ONLY

N

Prepared by:
SD Dept of Public Safety
Highway Safety / Accident Records
April 4, 2013

ND 2012 FAST FACTS



2012 Crashes by County

County	PDO Crashes	Injury Crashes	Total Injuries	Fatal Crashes	Total Fatalaties	Total Crashes	Total Rate per MVMT	VMT by County
Adams	49	11	14	0	0	60	1.77	33,878,000
Barnes	219	46	74	3	3	268	1.04	258,295,000
Benson	114	17	29	6	6	137	1.27	108,019,000
Billings	41	16	23	1	1	58	0.54	107,133,000
Stutsman	464	110	151	6	15	580	1.73	335,039,000
Towner	23	3	6	1	1	27	0.67	40,537,000
Traill	121	29	39	2	2	152	0.73	207,328,000
Walsh	208	51	63	4	4	263	1.56	168,680,000
Ward	1,538	353	519	10	11	1,901	2.61	729,468,000
Wells	124	20	27	2	2	146	1.78	81,808,000
Williams	1,349	323	490	24	27	1,696	2.10	807,561,000
Statewide	14,482	3,729	5,319	147	170	18,358	1.82	10,092,942,000

Burleigh County had the highest crash rate per million