

# OGLALA SIOUX TRIBE

## 2016 TRIBAL TRANSPORTATION SAFETY PLAN



Developed through  
the Oglala Sioux Tribe  
Department of  
Transportation

Prepared by KLJ

October 2016  
Amended June 2018





## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY</b> .....	<b>1</b>
Education .....	2
Enforcement/EMS .....	2
Engineering .....	2
Safety Planning/Other .....	2
<b>BACKGROUND</b> .....	<b>3</b>
<b>DATA ANALYSIS</b> .....	<b>5</b>
Total Crashes .....	5
Injury Crashes .....	8
Fatal Crashes .....	9
Oglala Sioux Tribe Department of Public Safety Data .....	10
Seat Belt Data .....	12
<b>2016 TRIBAL TRANSPORTATION SAFETY PLAN</b> .....	<b>13</b>
<b>ISSUES CAUSING CRASHES ON THE PINE RIDGE INDIAN RESERVATION</b> .....	<b>13</b>
<b>EXISTING SAFETY PROGRAMS ON THE PINE RIDGE INDIAN RESERVATION</b> .....	<b>14</b>
<b>IMPLEMENTATION STRATEGIES</b> .....	<b>15</b>
Education Strategies .....	15
Enforcement/EMS Strategies .....	16
Engineering Strategies .....	18
Safety Planning and Other Strategies .....	29

Attachment A Meeting Agenda

Attachment B Participants

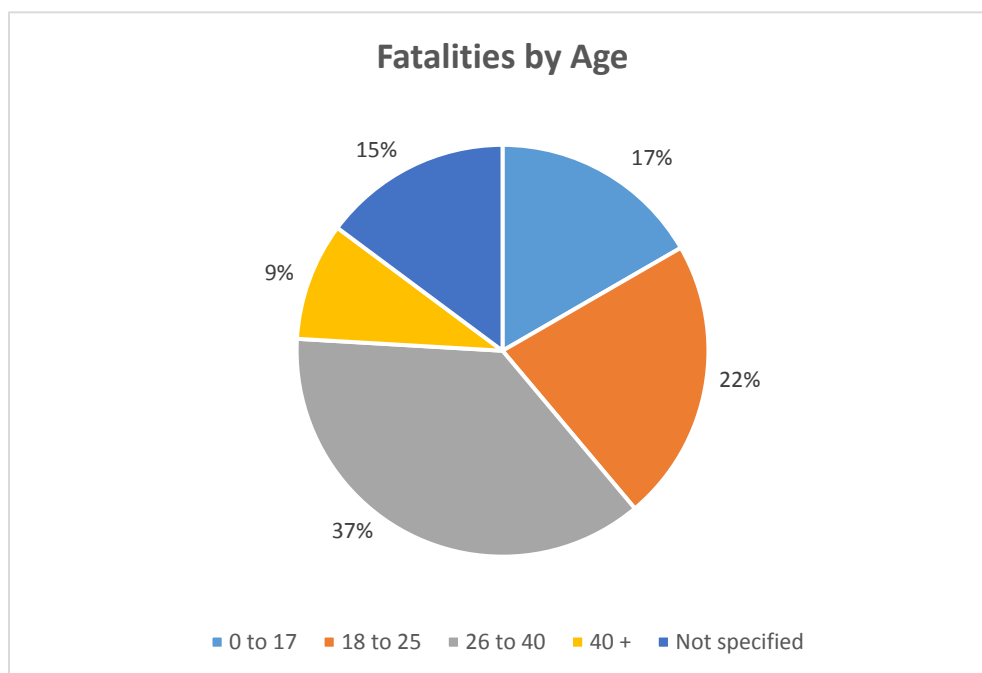
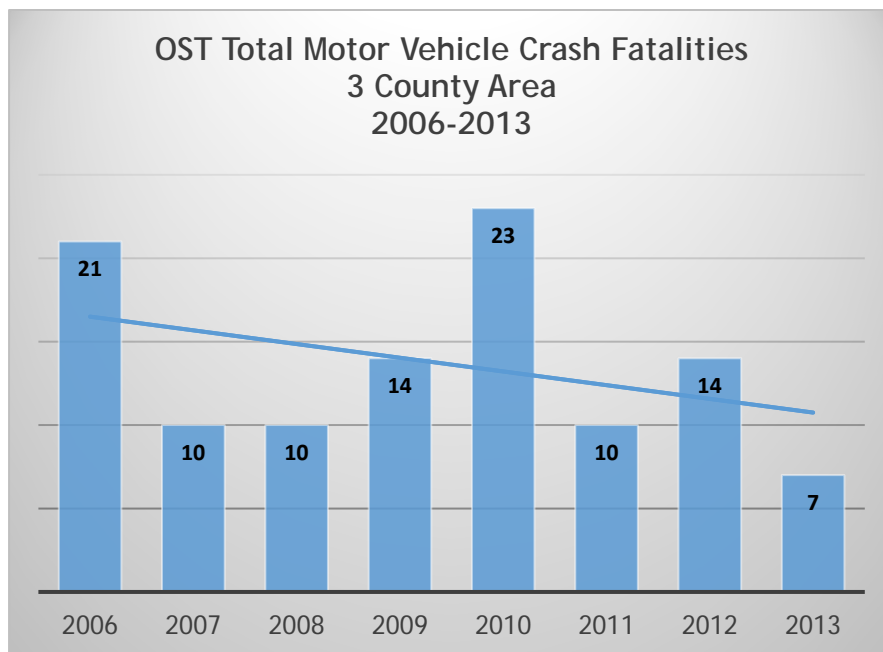
Attachment C Crash Maps



## EXECUTIVE SUMMARY

From 2006 to 2013, there were nearly 1,300 traffic crashes recorded on the Pine Ridge Indian Reservation that resulted in 109 fatalities and nearly 700 injuries. While the data includes Bennett, Jackson and Oglala Lakota Counties, the vast majority of the severest crashes are occurring in Oglala Lakota County where many of the tribal community is centered. Of these totals, 77 of

the fatalities and 294 of the injuries occurred in Oglala Lakota County. This means that of the nearly 1300 traffic crashes recorded in the South Dakota Department of Public Safety (SDDPS) data, 371 resulted in injuries or fatalities in Oglala Lakota County.



The causes of these severe crashes are varied, but can be tied to a number of significant factors, including a high rate of impairment, low seat belt use and a significant number of younger drivers. The chart shows

that according to Oglala Sioux Tribe Department of Public Safety (OSTDPS), nearly 40% of fatalities are under 25 years of age, with nearly 20% being under 17.



In 2016 the Oglala Sioux Tribe (OST) undertook efforts to develop a Tribal Transportation Safety Plan that would identify existing safety efforts, transportation safety issues and then identify strategies for implementation that would address these issues. As part of the safety plan development, Tribal, state, federal and interested parties came together to review existing data, ongoing safety efforts and to identify new or continuing strategies to improve transportation safety in tribal communities. The strategies were prioritized around the 4E's (Education, Enforcement, Emergency response and Engineering) of safety. The 4E's are outlined below. Note that enforcement and emergency response have been combined and safety planning/other strategy has been included.

### **Education**

- Develop a Reservation-Wide Transportation Education Program

### **Enforcement/EMS**

- Provide Safety Enforcement or Tribal Highway Safety Officers
- Develop a Livestock Ordinance and Enforcement Team for Livestock Roundup
- Develop an Advanced 911 System
- Provide for Improved Communications Equipment
- Establish a Motor Carrier Safety Program

### **Engineering**

- Install School Zone Signing with Flashing Beacons
- Participate in Safety Projects for Signing, Striping, and Rumble Strips
- Conduct Road Safety Audits on BIA, Tribal and County Roadways
- Develop Multi-Use Paths and Pathway Lighting Projects
- Reconstruct BIA Route 41 - 2.4 miles north of BIA Route 2 and 2.4 miles south of BIA Route 2.
- Reconstruct BIA Route 2 - Kyle to South Dakota Highway 44
- Construct Remote Weather Monitoring Stations

### **Safety Planning/Other**

- Develop a Social Media Page for Transportation Safety Reporting



## BACKGROUND

The Pine Ridge Indian Reservation encompasses over 2 million acres (3,469 square miles) in the entirety of Oglala Lakota County, the southern half of Jackson County, and the northwest portion of Bennett County in southwest South Dakota, and is home to the Oglala Sioux Tribe (OST). The northern and western boundary is along the Oglala Lakota county border. The northern border is also defined by the White River in Jackson County. The southern boundary is the South Dakota/Nebraska state border. While most of the eastern border is not defined by natural land features, a portion of it follows the Jackson/Mellette county boundary.



Agriculture is the predominant industry on the reservation. Revenue from tourism and the Prairie Wind Casino generate funds for the Tribe. The major employers include the tribe itself, Oglala Lakota College, Indian Health Services, Bureau of Indian Affairs, and the Prairie Wind Casino. The Oglala Sioux Tribe Department of Transportation is responsible for maintaining nearly 520 miles of BIA roadways and over 1450 miles of Tribal roadways within the Pine Ridge Indian Reservation.

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. Annually, through its Tribal Transportation Program (TTP), the Federal Highway Administration (FHWA) has made approximately \$9 million available through the Tribal Transportation Program Safety Funds (TTPSF),



which are intended to be used for transportation related safety issues and needs on reservations throughout the country. Each year, tribes throughout the country are awarded funds to address these issues and needs through a competitive application process. In previous years, funds were awarded for safety planning, engineering, enforcement and education improvements that prevent and reduce injuries and fatalities resulting from traffic related crashes. Starting with the 2016 Notice of Funding Availability, only safety planning and engineering projects will be funded. The categories and their respective funding goals are as follows:

Strategy	Funding %
Safety Planning	40%
Engineering	60%

FHWA has emphasized the development of a Tribal Transportation Safety Plan (TSP) as a first step in implementing a comprehensive transportation safety program. This is shown by the funding level for safety planning and the ranking criteria that requires any safety project application be linked to a transportation safety plan.

A Tribal TSP 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. The 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 transportation safety plans have been well documented and include the opportunity to leverage resources, work toward a common goal and



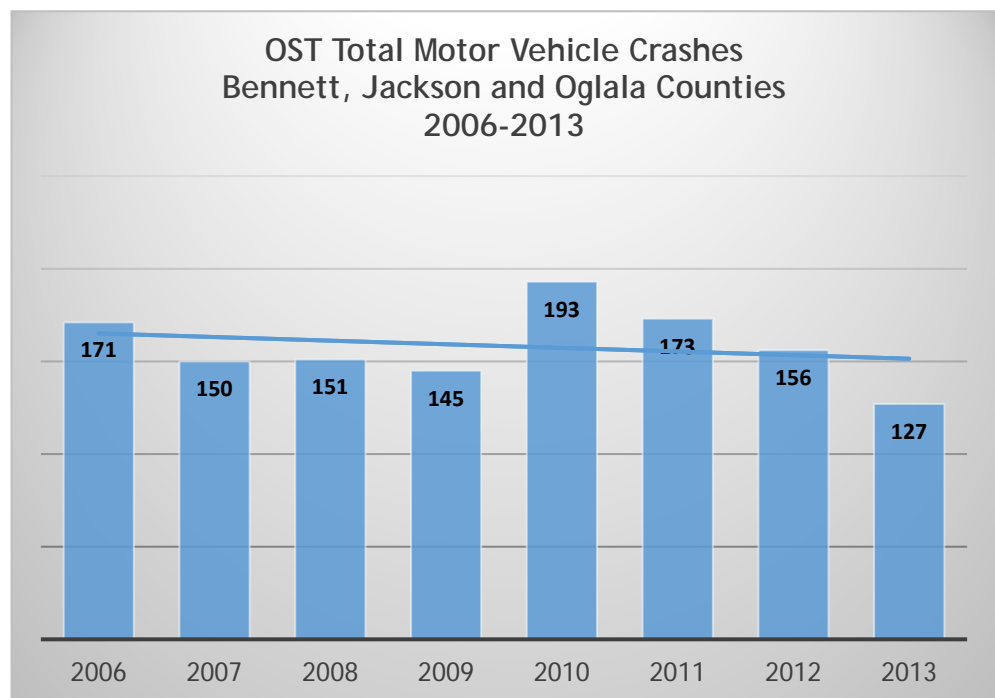
consider all road users resulting in reduced deaths and injuries in Tribal and other communities.

## DATA ANALYSIS

One of the important factors in the development of a Tribal TSP is the analysis and utilization of available crash data in the identification of safety issues and development of corrective strategies. Data is also an important resource as Tribes apply for federal and state safety funding, as many require data to support the grant application. Available crash data shown in this plan was obtained from the SDDPS and was analyzed to reflect contributing factors to traffic-related deaths and injuries on the reservation. Data was also provided by the OSTDPS and was used to develop a more complete picture of traffic crashes and trends on the reservation.

### Total Crashes

From 2006 until 2013 there were nearly 1,300 crashes on the Pine Ridge Indian Reservation according to SDDPS data. This area included all of Bennett, Jackson and Oglala Lakota Counties. Of these, 209 occurred in Bennett County, 783 in Jackson County and the remaining 274 were

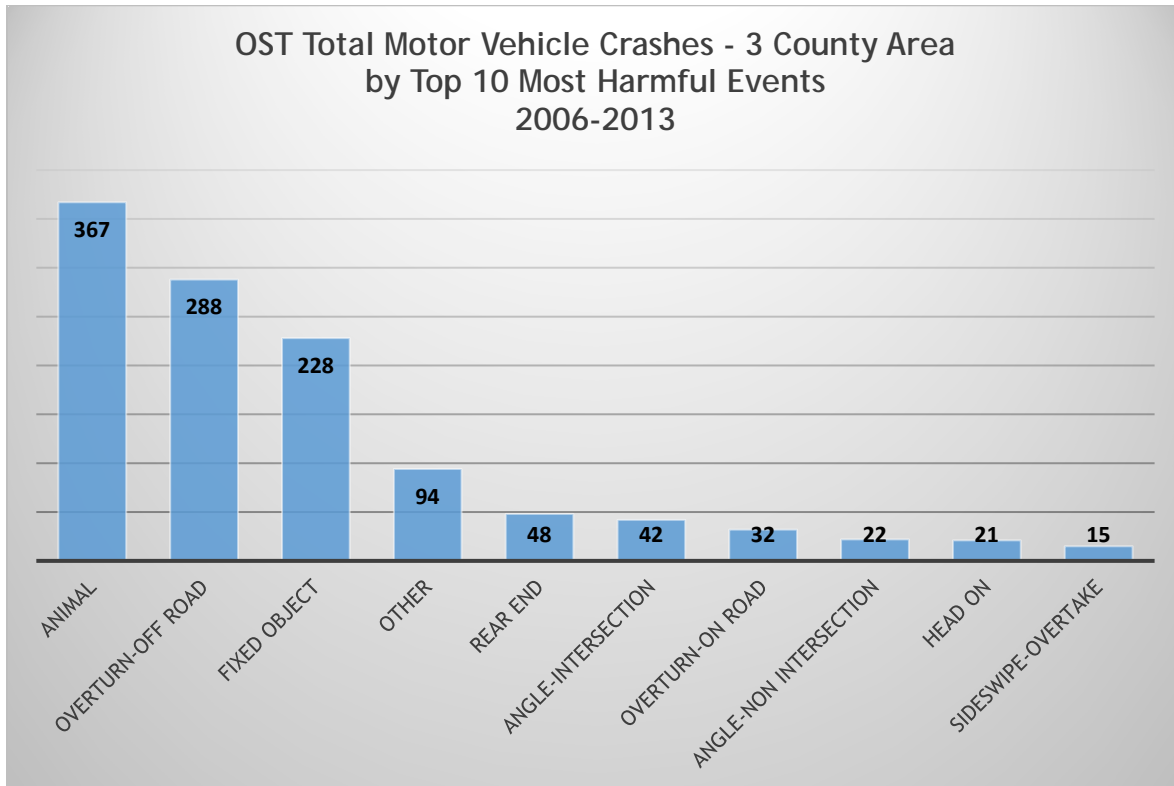


in Oglala Lakota County. The chart shows the overall trend is in a slight downward direction, with 2013 having the fewest total crashes. The data that was provided by the OST DPS that is presented later in this report also shows the fewest crashes in 2013. Of these crashes they were nearly evenly split between daytime and nighttime.

The total crashes for the time period from 2006 to 2013 were also analyzed and separated into the ten most common causes. Of these reoccurring events shown in the table, more than 60 percent occur in three categories; collisions with other animals, overturning off road and collisions with fixed objects. If the rear end and angle



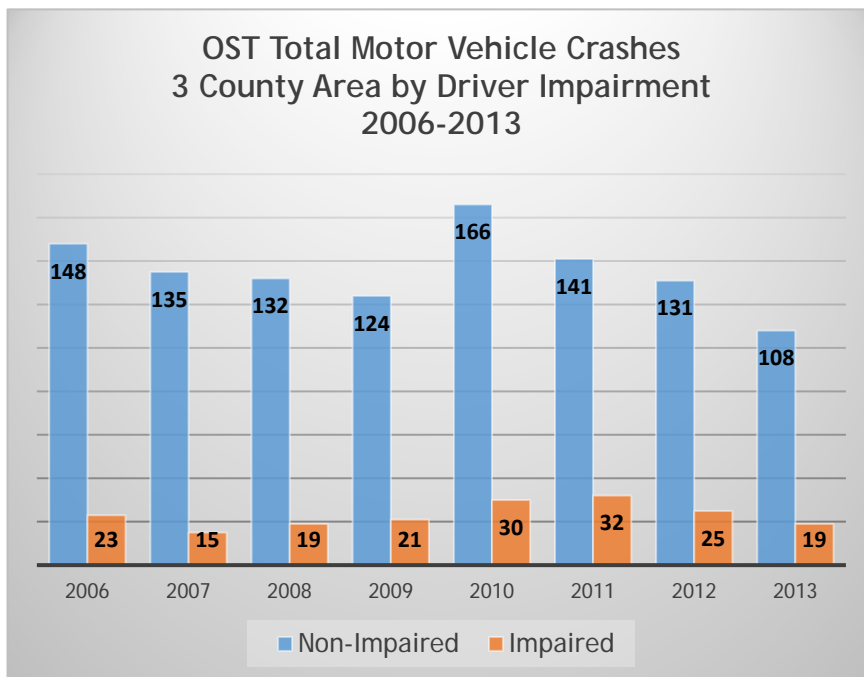
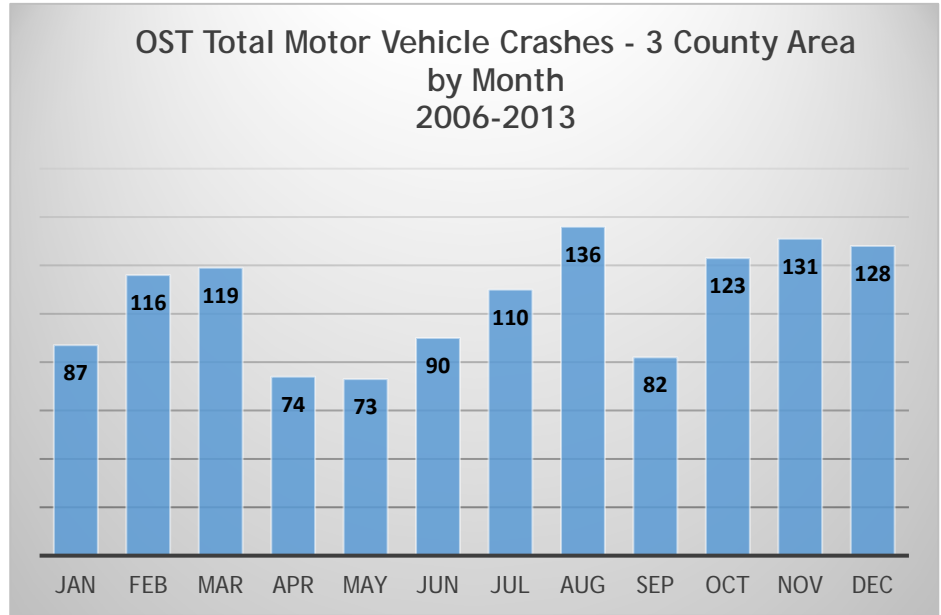
intersection crashes are combined, this would result in 90 total crashes, making intersection crashes significant as well.



While pedestrian crashes do not show up in the top ten causes for overall crashes, it does show up as a significant cause in the Tribal Crash data.



Available data for crashes by month shows a spike in crashes during the late summer months when traffic is highest in the area due to increased tourist traffic. It then drops off during September and then spikes again during the winter months when driving conditions may be impaired by ice and snow.

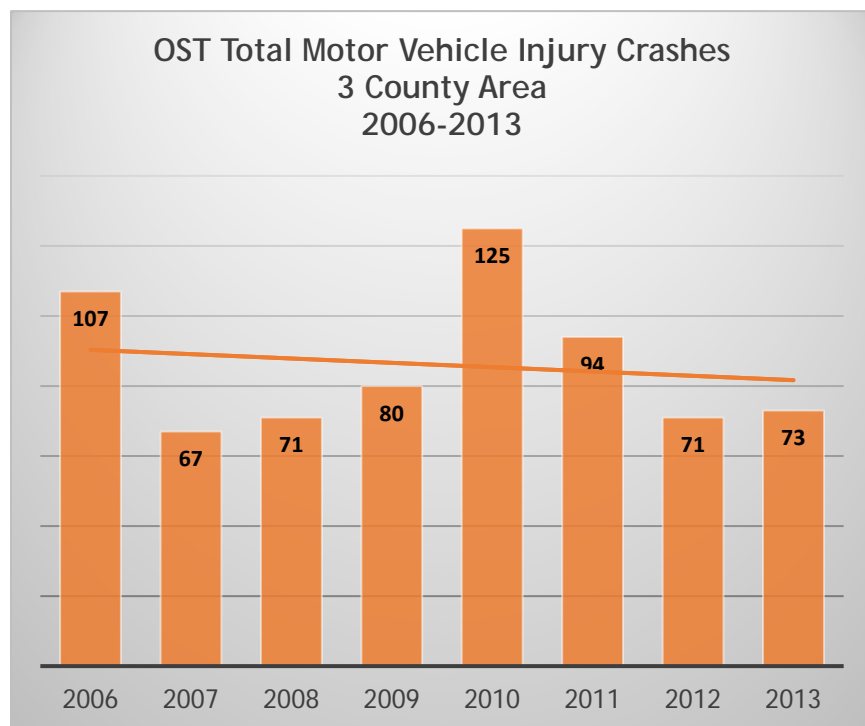


The data also shows that for total crashes, driver impairment is nearly as significant of an issue as it is for fatal crashes. However, it still ranges from a low of 11% to a high of nearly 23%. Within this data, Oglala Lakota County accounts for over 40% of the overall crashes involving a driver who is impaired by either drugs or alcohol.



## Injury Crashes

Mirroring the downward trend of total crashes, injury crashes on the Pine Ridge Indian Reservation have shown a slight downward trend since 2006. As seen in the chart, injury crashes have ranged from a low of 67 injuries in 2007 up to a high of 125 injuries in 2010. Overall, over the analysis period there were nearly 700 injuries from

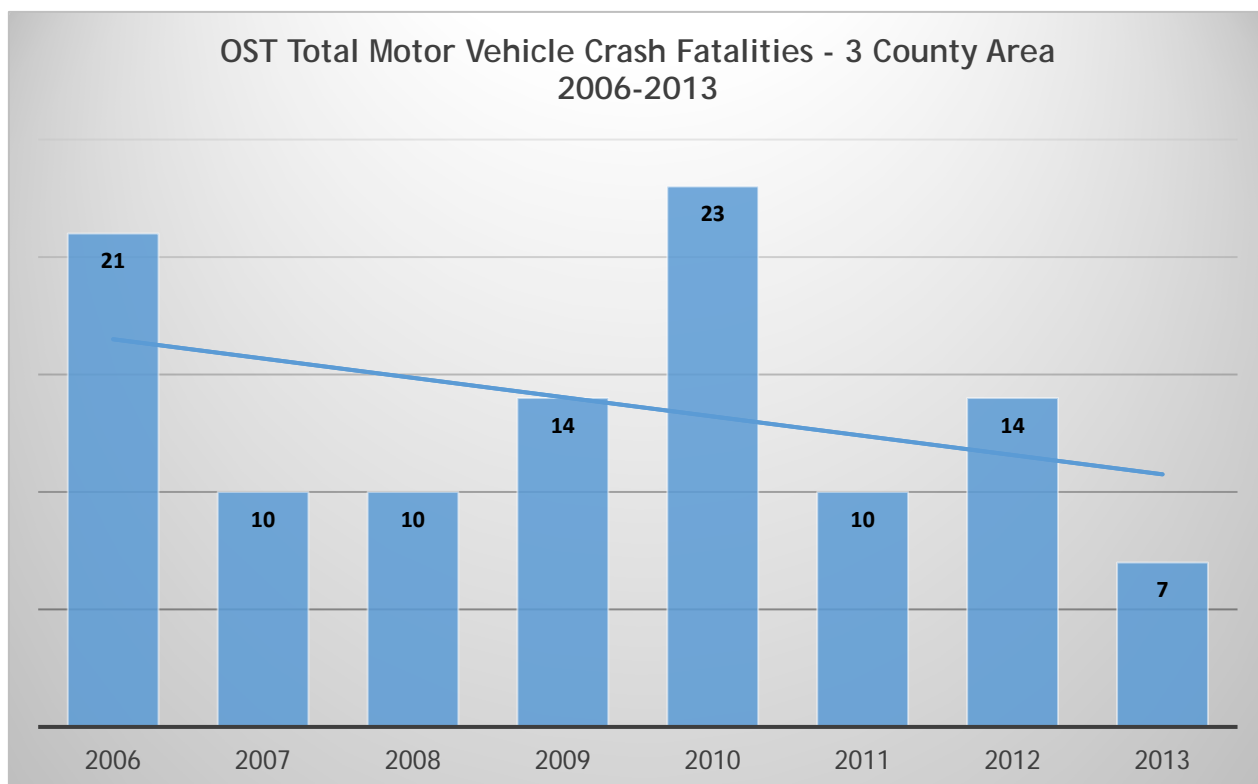


2006 through 2013. Unlike total crashes, where the majority were in Jackson County, for injuries Oglala Lakota County has the highest number of injuries with 294, followed by Jackson County with 242. The remaining 152 occurred in Bennett County. This suggests that while Oglala Lakota County is not having the highest number of crashes, it is having much more severe crashes.

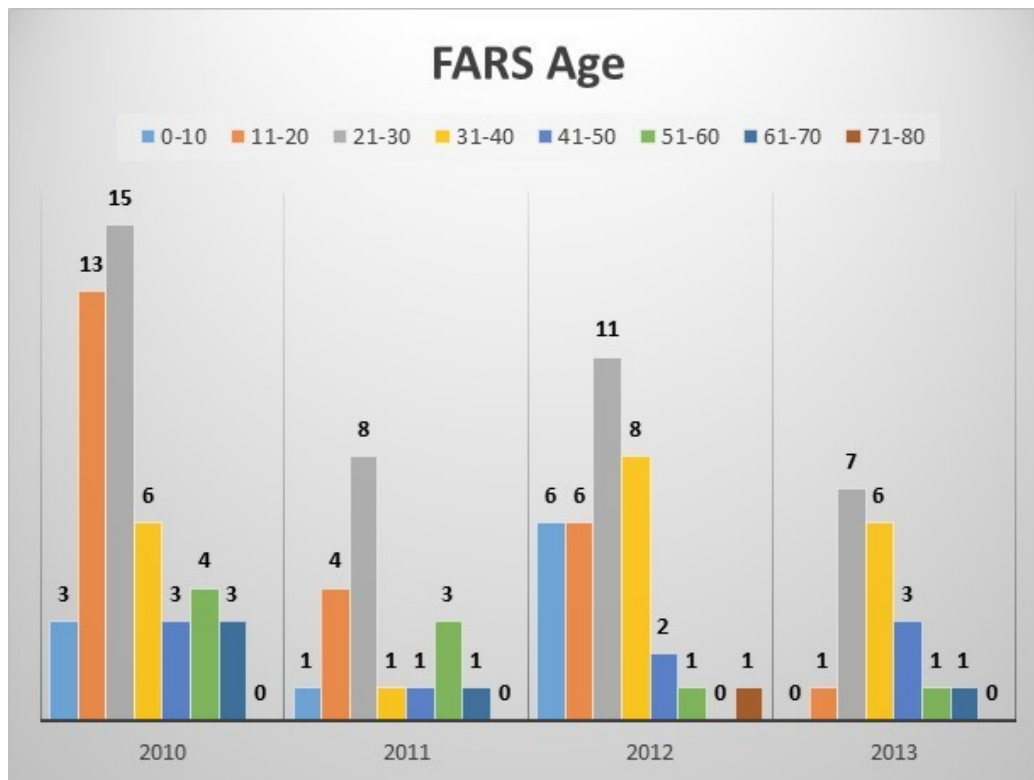


## Fatal Crashes

From 2006 to 2013 there were 109 traffic fatalities resulting from automobile crashes within the three county area that encompasses the Pine Ridge Indian Reservation. Of these 109, a staggering 77, or 67% occurred within Oglala Lakota County. Jackson County, which had the highest number of overall crashes, accounted for 22, while Bennett County had 10 fatalities. While the graph shows that the annual number of fatalities exhibits a downward trend, the high number of fatalities in Oglala Lakota County identify a particular geographic area to target for safety countermeasures.



The Fatal Analysis and Reporting System (FARS) data that is available from the National Highway Traffic Safety Administration (NHTSA) was also analyzed and it showed 54 fatalities from 2010 to 2014. This data matches the SDDPS information and shows a significant rate of fatal crashes in the Oglala Sioux community. The FARS system also allows for additional analysis and crash causes and other pertinent information. The data shows that the main cause of fatal crashes was single vehicle, run off the road crashes. This is consistent with the trends for fatal crashes in rural areas of South Dakota, as shown in the South Dakota Motor Vehicle Traffic Crash Summary.



Younger drivers are consistently over represented in fatal crashes in all the states and tribal communities in the region. This is also true for the Pine Ridge Indian Reservation, with over 60% being under the age of 30. What is significant is

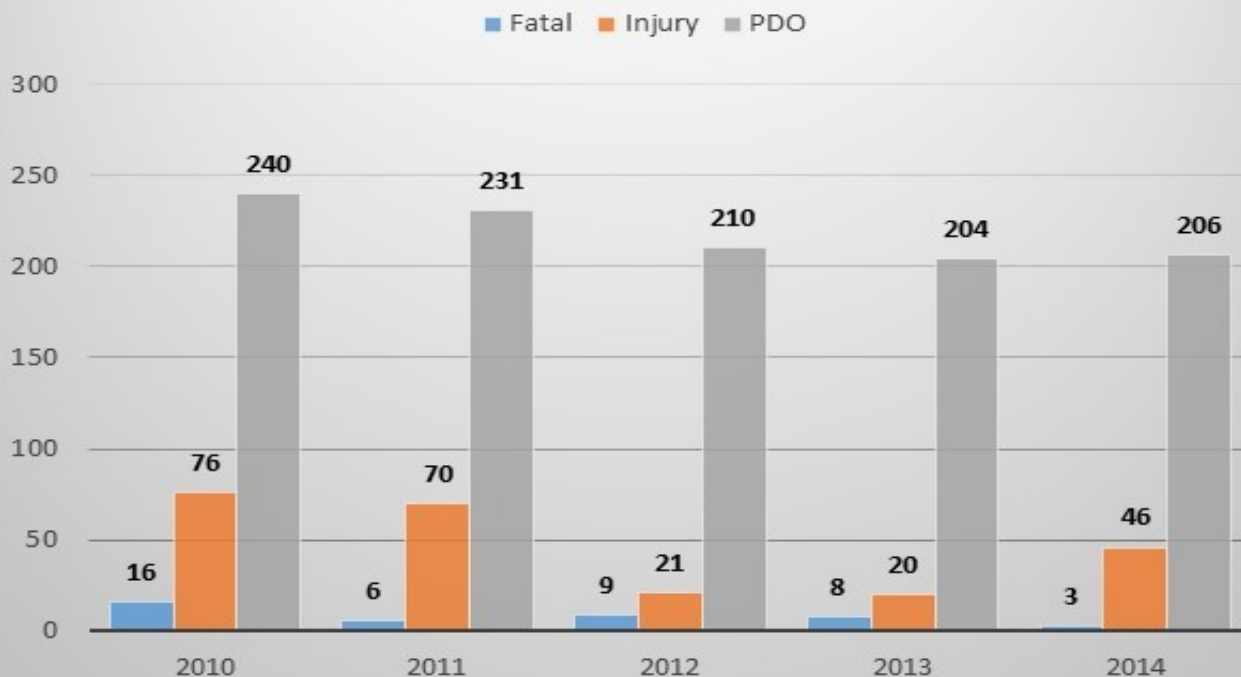
that the data for Pine Ridge Indian Reservation shows that nearly 30% are for the youngest age brackets that include those under 20. With this high rate of young, inexperienced drivers, education, enforcement and outreach programs may be needed. Additionally, many tribal communities have identified the lack of drivers education programs as an issue.

### Oglala Sioux Tribe Department of Public Safety Data

The OSTDPS has been using the TRaCS system for crash data and criminal records. This allows for the collection and analysis of data to determine crash causes at the Tribal level. The Oglala Police provided data from 2010 through 2014 for inclusion in the development of this 2016 Transportation Safety Plan. The data shows that during this period there were over 1,350 total crashes, which is an average of 275 per year. The data from the SDDPS was only showing approximately 160 crashes per year. Although the OSTDPS is collecting electronic crash data, some of their data is not making it into the SDDPS databases. As with the SDDPS information, the total crashes are showing a slight downward trend. This can be seen in the chart on the next page. It is unclear at this point how many of the 233 injury crashes or 42 fatalities are included in the data provided by the state, but the high number injuries and fatalities recorded by both agencies exemplifies the need for better data sharing to ensure the true extent and nature of the traffic crash issues are identified.



## OST Crash Data, FY 2010 to FY 2014 (SDDPS 150-175 Crashes)



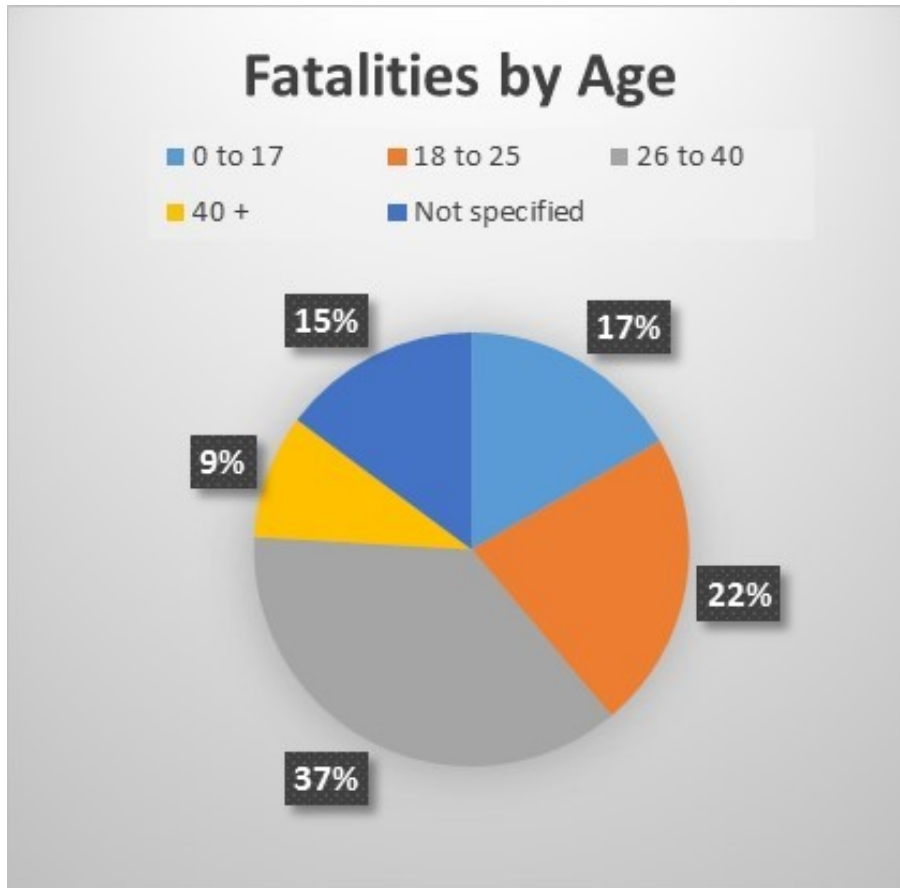
### OST Crash Data Fatalities by Cause



The OSTDPS Crash data, was consistent with other sources in crash causes. The vast majority of fatal crashes are caused by a single vehicle running off the road and, normally, overturning. The data shows that over 60% of the fatalities were this type of crash. One area that did show up in the OSTDPS data was that 7% of the fatalities were pedestrians.

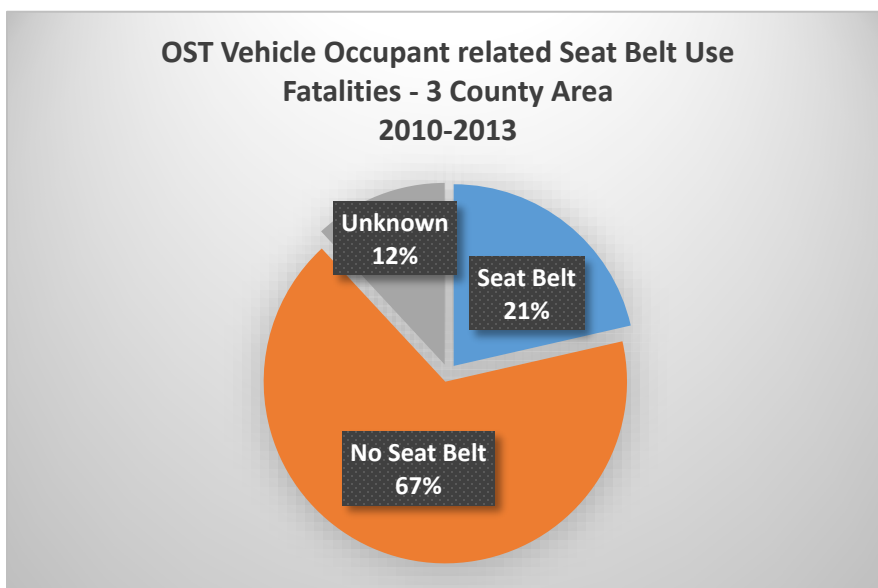


This data could be used to support the need for improved or separated pedestrian facilities.

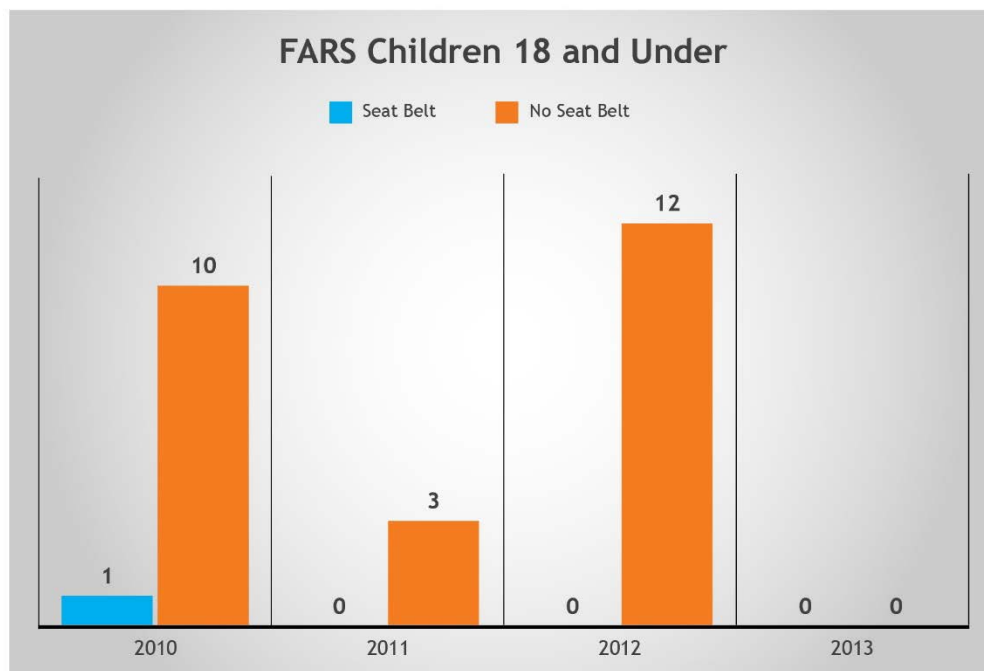


The age breakdowns are slightly different than what was provided for in the FARs data, but again shows that younger drivers are over represented in fatalities. This data shows that nearly 40% were under the age of 25 and that 76% were 40 and under. This data again would identify the need for targeted education and/or enforcement programs to address this need.

### Seat Belt Data



While overall seat belt use data is not available, data for the most severe crashes from the OST DPS shows that from 2010 to 2013 only 21% of those killed in car crashes were using a seat belt or child seat. As with driver age, this data could be used to support increased education and seat belt initiatives.



Data from the FARS system also shows this issue of seat belt use as it relates to the younger drivers. From 2010 to 2013, of the 26 recorded fatalities, only one of them was using a seat belt or was restrained in a car set. This data points to the strong need

for seat belt education and enforcement programs that can work jointly to increase seat belt use.

## 2016 TRIBAL TRANSPORTATION SAFETY PLAN

This 2016 plan was developed using available data and the personal knowledge and expertise of the participants who attended the transportation safety planning meeting. The participants included state, federal and Tribal safety representatives from engineering, education, public safety, motor fuels and the OST Tribal Council. A list of participants is included in Attachment B.

The planning group reviewed the available crash data to develop a list of issues that are currently affecting transportation safety on the reservation. The group then identified the existing programs on the reservation and identified additional strategies that need to be implemented to address safety issues. The next three sections document these discussions and the outcomes.

## ISSUES CAUSING CRASHES ON THE PINE RIDGE INDIAN RESERVATION

The crash data analysis, combined with the OSTDPS crash data and planning meeting participant observations, identify a number of transportation safety issues that are causing crashes, increasing crash severity or restricting complete data analysis. Those that are supported by the data included:

- Wild and domestic animal crashes
- Crashes with fixed objects
- Overturning crashes



- Alcohol impaired driving
- Lack of seat belt use
- Young drivers
- Pedestrian fatalities
- Intersection crashes

The planning meeting participants identified a number of other transportation safety issues based upon personal experience which they identified as causing crashes, increasing crash severity or are otherwise creating transportation safety concerns in the local communities. These include:

- Snow and ice removal
- Distracted driving
- Need for intersection improvements (sight distance, lighting, adv warnings)
- Speeding
- Over weight trucks
- Transportation of hazardous materials
- ATV use
- Lack of penalties by the court system

## EXISTING SAFETY PROGRAMS ON THE PINE RIDGE INDIAN RESERVATION

The planning meeting participants identified a number of safety projects and programs that the OST implemented to address transportation safety issues on the reservation. The following is a list of those projects or programs:

- The Tribe has constructed separated pathways to decrease vehicle/pedestrian interaction.
- The Tribe has received safety grants.
- Highway signing on the reservation has been updated.
- The Tribal police are using TraCS (Traffic and Criminal Software)
- Recently completed rumble strip projects on BIA 27 and 41.
- Reconstruction of Highway 18.
- The Tribe has performed seat belt education and provided child seats.
- Safety announcements and information have been featured on the local radio.
- Speed monitoring trailers are being used.
- The Tribe currently has traffic safety officers.
- Stricter penalties have been implemented for DUI's.
- The Tribe has a primary seat belt law.



## IMPLEMENTATION STRATEGIES

The plan's main goal is to use a multi-disciplinary approach to identify safety strategies for implementation that can address the transportation safety issues on the Pine Ridge Indian Reservation. The strategies are intended to be implemented over the next several years and each have a Strategy Champion and Funding Opportunities 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 Oglala Sioux Tribe does not currently have a Safety Coordinator, however, various Tribal Programs, law enforcement and other interested parties on the reservation provide education on transportation safety. One area that was particularly identified in the data analysis was education for younger drivers on behavioral issues such as seat belt use and impaired driving. With the high rate of crashes involving young drivers on the reservation, this will be a critical program in helping to reduce crashes.

This effort would use and 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 notable Tribal Community members/leaders to promote safety themes. 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. The Safety Program has received past funding but it was not sufficient for larger cost-items such as Public Service Announcements, Arrive Alive Programs, billboards using local artistry, banners, videos, Tribal safety posters and other safety education materials that would be used in education programs, during Pow Wows and at other community events.

**Strategy Champion:** OST DOT.

**Funding Opportunity:** BIA Indian Highway Safety Program Funding.



## Enforcement/EMS Strategies

- **Provide Increased Safety Enforcement or Tribal Highway Safety Officers**

Currently the Tribe does have dedicated highway safety officers providing traffic enforcement services. While regular officers assist with traffic enforcement, there continues to be a large number of fatalities and severe crashes on the reservation. To assist in education and enforcement within the reservation, it was felt that additional offices were needed, particularly during events. With inadequate staffing during events, and the demands on time that criminal activities require, highway safety enforcement becomes a lower priority by necessity. To elevate the level of highway safety enforcement during events and to elevate normal traffic enforcement, the Tribe should pursue obtaining at least one or possibly two additional highway safety enforcement officers. If it is determined by law enforcement that the highest need is only during the summer months and if part time assistance is available, these could be seasonal positions.



Currently the Tribe does have dedicated highway safety officers providing traffic enforcement services. While regular officers assist with traffic enforcement, there continues to be a large number of fatalities and severe crashes on the reservation. To assist in education and enforcement within the reservation, it was felt that additional offices were needed, particularly during events. With inadequate staffing during events, and the demands on time that criminal activities require, highway safety enforcement becomes a lower priority by necessity. To elevate the level of highway safety enforcement during events and to elevate normal traffic enforcement, the Tribe should pursue obtaining at least one or possibly two additional highway safety enforcement officers. If it is determined by law enforcement that the highest need is only during the summer months and if part time assistance is available, these could be seasonal positions.

**Strategy Champion:** OSTDPS.

**Funding Opportunity:** BIA Indian Highway Safety Program Funding.

- **Develop a Livestock Ordinance and Enforcement Team for Livestock Roundup**

With the large number of domestic animal crashes on the Pine Ridge Reservation, there is a need for a livestock ordinance that allows for stray animals to be removed from highway rights of way. Other Tribes, such as the Blackfeet in Montana have passed aggressive ordinances that allow for the seizure and eventual sale of habitually loose animals. This could be implemented jointly with increased fencing programs that could assist in keeping livestock off of roadways.



**Strategy Champion:** OST DOT, OST DPS.

**Funding Opportunity:** TTPSF and BIA Indian Highway Safety Program.



- **Develop an Enhanced 911 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 systems. 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 able to be utilized as part of this effort.

**Strategy Champion:** OST DPS, OST DOT and EMS Agencies.

**Funding Opportunity:** TTPS Safety Funding and BIA Indian Highway Safety Program Funding.

- **Provide for Improved Communications Equipment**

The Pine Ridge Indian Reservation encompasses over two million acres with various types of terrain, including rugged areas along the Bad Lands National Park. With the large land area, variety of enforcement and EMS agencies and terrain challenges, effective communication is critical during emergencies and daily activities. Currently, there is limited communication coverage on portions of the reservation and a need exists to upgrade repeaters, radios and other hardware to ensure adequate communications during crashes, emergencies or weather related events. Initially, this task may include development of a communications plan that specifically identifies all the needs.

**Strategy Champion:** OST DOT, OST DPS and EMS Agencies.

**Funding Opportunity:** BIA Indian Highway Safety Program.



- **Establish a Motor Carrier Safety (MCS) Program**



With the presence of US Highway 18 running through the Pine Ridge Indian Reservation, there is a substantial presence of large commercial vehicles. Currently there are no weigh stations within the reservation and concern exists with overweight and/or unsafe vehicles operating on the roadways. Other tribes in the region have established motor

carrier enforcement programs that have the ability to regulate trucking activities and use portable scales to check vehicle weights, most notably the Three Affiliated Tribes in the North Dakota Oil Fields. The Oglala Sioux Tribe does not currently have a need for as extensive of a program, but it should start taking steps to develop a MCS program. This program could start fairly modestly with implementing ordinances that can be used to regulate truck weights, and obtain funding for an MCS Officer and acquisition of portable scales that could be used on the reservation. If portable scales are purchased, consideration should be given to getting similar equipment to what the State of South Dakota uses to assist with training and calibration. Other tribes have received grants to assist in developing programs such as this.

**Strategy Champion:** OST DOT, OST DPS and SDDOT.

**Funding Opportunity:** TTPSF and BIA Indian Highway Safety Program.

### **Engineering Strategies**

- **Install School Zone Signing with Flashing Beacons**

One area identified as a need was for the installation or upgrading of school zone signing and adding flashing beacons, crosswalks and other traffic control. The OSTDPS does utilize the speed monitoring trailers at times in school zones, but they are only used there for short durations. With the large number of young driver crashes on the reservation and with 7% of the fatal crashes that have been reported by the Tribe being pedestrian crashes, the upgrading of these systems could help to reduce serious crashes.



**Strategy Champion:** OST DOT.

**Funding Opportunity:** TTPSF, TTP Funding or SDDOT Funds.



- **Participate in Safety Projects for Signing, Striping, and Rumble Strips**

The South Dakota Department of Transportation has initiated a statewide program to replace and upgrade signing on county, tribal and other rural roadways within the state. They are currently working on paved roadways and will be working on a county by county bases to improve and replace signing on gravel roadways. To ensure that BIA and Tribal Routes are included in the upgrades, the Tribe should coordinate with Bennett, Jackson and Oglala Lakota Counties. The SDDOT also has a statewide effort to assist in the installation of rumble strips where sufficient width and structure exist for their installation. While no state funding is available for striping of BIA or Tribal roadways, TTP funds are available for this use. With the large percentage of run off the road crashes, all of these counter measures would be important tools in reducing crashes.



**Strategy Champion:** OST DOT, Counties and SDDOT.

**Funding Opportunity:** SDDOT, TTPSF and TTP Funding.

- **Conduct Road Safety Audits (RSA) on BIA, Tribal and County Roadways**

RSA's have been an important tool for many Tribes and one that the OST DOT could utilize. RSA's provide an opportunity to bring traffic and safety expertise to assess safety concerns of routes where there are high numbers of crashes or where they have specific concerns. The goal of these RSA's is to identify safety issues and then develop specific transportation safety improvements that may include signing, lighting, striping, pathways, intersection improvement and other activities to address issues.

To continue to build on the safety improvement and the use of RSA's, the Tribe should pursue funding to accomplish RSA's on the BIA, Tribal and county roadways within the Reservation.

**Strategy Champion:** OST DOT.

**Funding Opportunity:** TTPSF.



- Develop Multi-Use Paths and Pathway Lighting Projects



There are locations within the Pine Ridge Indian Reservation where there is pedestrian/bike traffic and the Tribe has identified specific need for pathways. The locations included Kyle, Manderson, SD407 to Pine Ridge, and Allen. While the

SDDPS crash data does not identify pedestrian or bike as a major crash cause, the data provided by the OSTDPS shows that pedestrian crashes are a top 10 crash cause and have accounted for seven percent of all fatalities from 2010 to 2014. 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 there is a need for access to Tribal communities and schools.

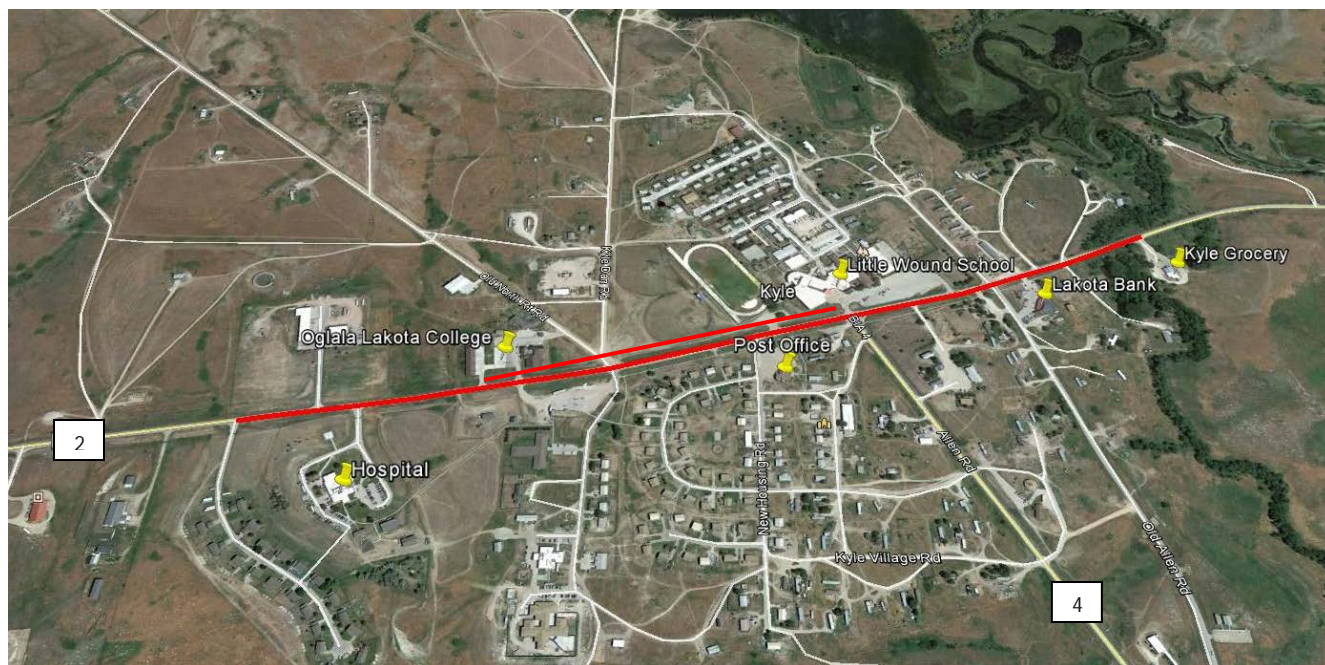


Lighting should be considered along urban or other pathways as appropriate to increase pedestrian visibility, provide for traffic calming and potentially increase security. Solar powered and/or LED lighting could be used to reduce the cost for providing power and the need for continual power usage. An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



- Kyle Pathway and BIA Route 2 Reconstruction

The town of Kyle is the third largest community within Oglala Lakota County and is centrally located within the Pine Ridge Indian Reservation. Tribal members travel to Kyle, in lieu of the City of Pine Ridge for goods and services due to its central location. BIA Route 2 divides the community of Kyle into north and south and BIA Route 4 divides Kyle into east and west. While there are some pedestrian facilities, they are not continuous, in poor shape and not ADA compliant. This project would develop a separated 10' wide pathway along the south edge of BIA Route 2's right-of-way from hospital



housing to the Kyle grocery and sidewalk along the north side of BIA Route 2 from the Oglala Lakota College Center to the Little Wound School. The project will incorporate cross walks, pedestrian lighting and pedestrian flashing beacons and/or stopping intersections. The pathways through town will connect pedestrians to tribal housing, schools, daycares, healthcare, banking and the local stores.



Due to the high number of vehicular and pedestrian traffic in Kyle, it is recommended to upgrade BIA Route 2 in Kyle to include 3 lanes with a center turn lane and curb and gutter to calm traffic and allow opportunities for pedestrian refuge areas. The intersection of BIA Route 2 and BIA Route 4 should be evaluated to determine if it should become a 4-way stop or if pedestrian flashing beacons should be installed so students can safely cross. The project would be approximately .90 miles long and would cost an estimated \$2,000,000 including signing, markings, lighting, design and construction.

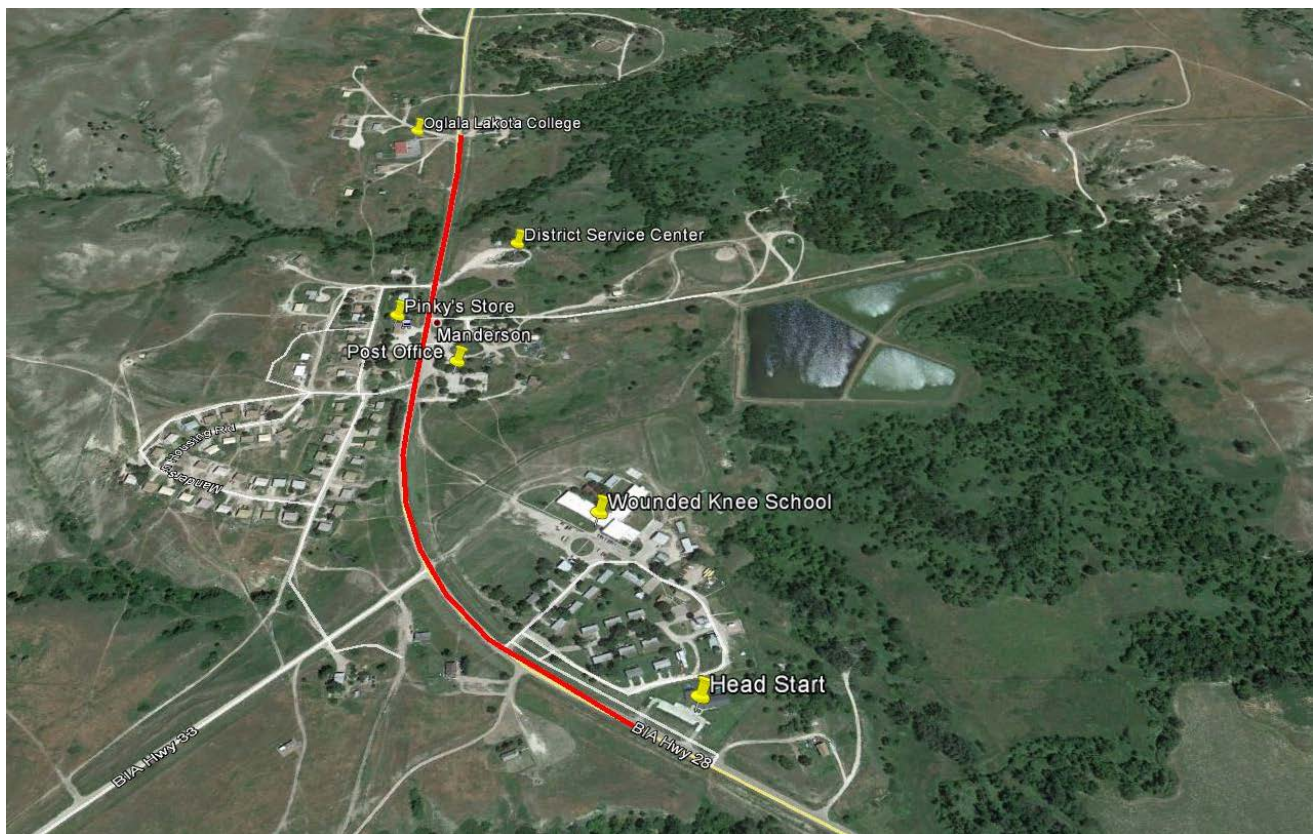
**Strategy Champion:** OST DOT.

**Funding Opportunity:** TTPSF, TTP Funding or SDDOT Transportation Alternatives Funding, BUILD Funding.



- **Manderson Pathway**

The community of Manderson is located along BIA 28 just to the north of Wounded Knee on the Pine Ridge Indian Reservation. As with many other tribal communities there is a lot of pedestrian traffic in the area and little or no facilities for them to use. This project would develop a separated pathway with cross walks and pedestrian lighting that would run through town to connect tribal housing with the school, Oglala Lakota College, Head Start Program and commercial facilities in town. As there is housing and facilities located on both sides of BIA 28, crosswalks and associated signage would also be needed. The project would be approximately .75 miles long and would cost an estimated \$540,000 including signing, markings, lighting, design and construction.



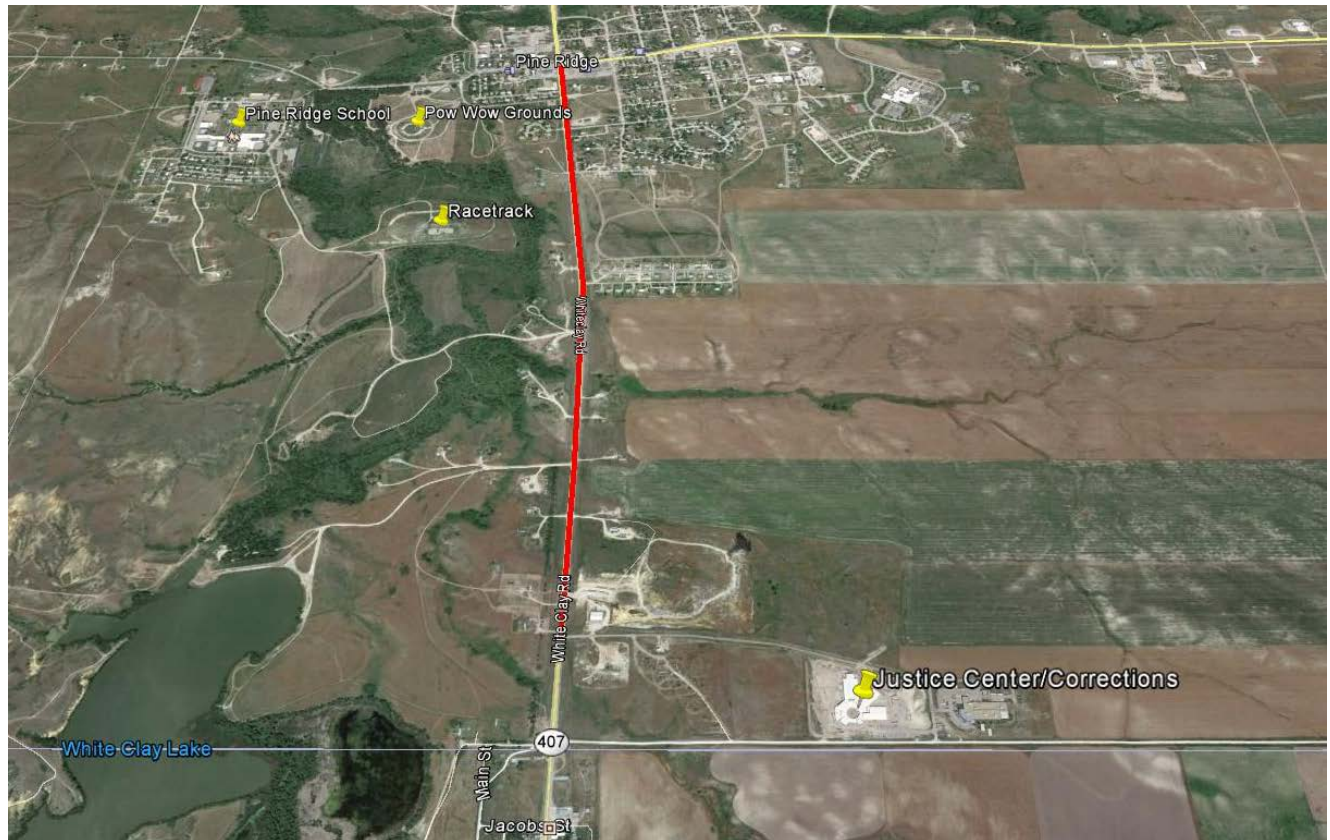
**Strategy Champion:** OST DOT.

**Funding Opportunity:** TTPSF, TTP Funding or SDDOT Transportation Alternatives Funding.



- **SD407 Pathway**

A number of pedestrian facilities have been improved in recent years in the town of Pine Ridge, particularly along US 18. However, there are no facilities extending south of town along route 407. This has been identified as a need to connect housing and tribal facilities south of town with the services in the downtown area, and also allow for connection to the pedestrian facilities in that area. Additionally, the Justice Center is located south of town and includes the corrections facility. When individuals are released, many of them walk back to town, adding to pedestrian use of the roadway. The project would construct a separated pathway and be approximately 1.69 miles long and would cost an estimated \$815,000, including signing, markings, design and construction.



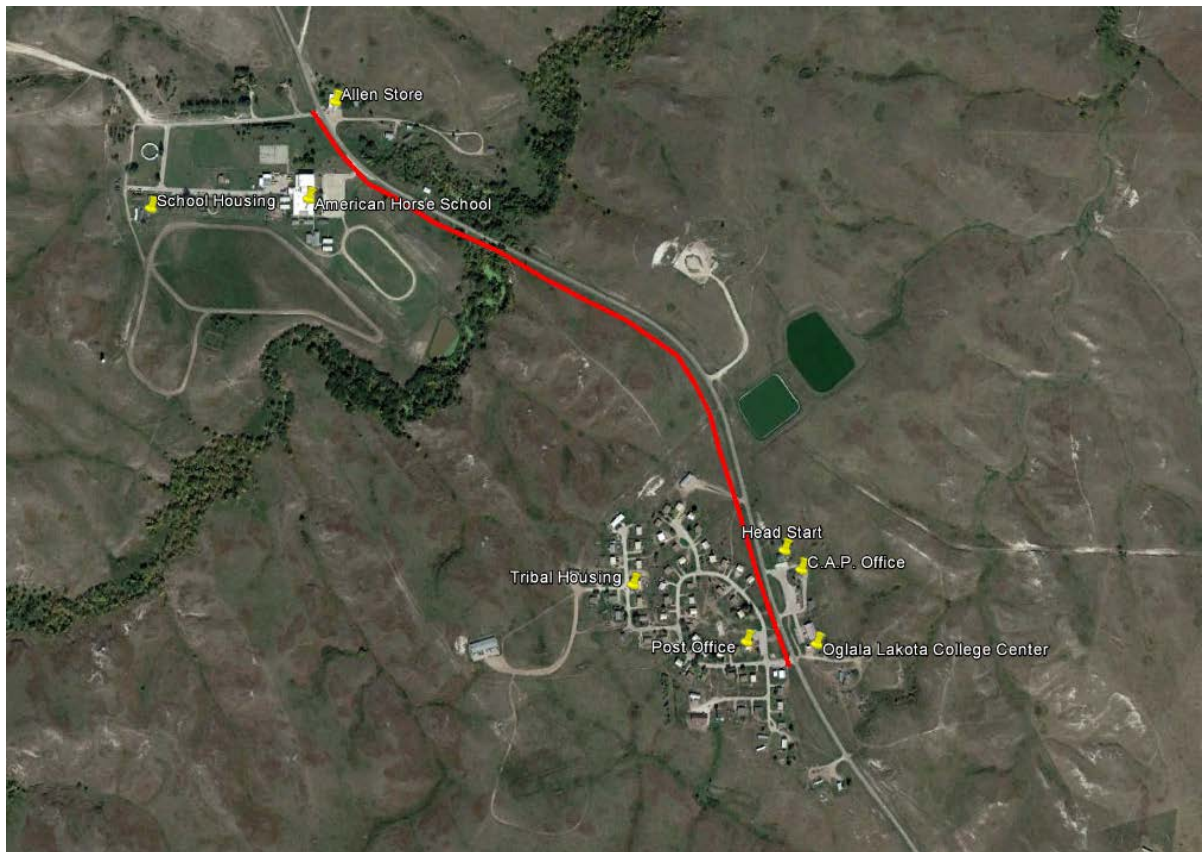
**Strategy Champion:** OST DOT.

**Funding Opportunity:** TTPSF, TTP Funding or SDDOT Transportation Alternatives Funding.



- **Allen Pathway**

The town of Allen is along BIA 4 in Bennett County, located in the southeast portion of the Pine Ridge Indian Reservation. The roadway was recently reconstructed from 2 miles north of Allen to 1 mile south of Allen. Parallel to the new roadway, a pedestrian shared use pathway was constructed. Even though the pathway was constructed, there was not enough funding available to install pathway lighting. This project would provide the critical lighting along the pathway and at crosswalks in the community of Allen as well as at the American Horse School and crosswalk to the Allen Store. The pathway connects tribal and school housing to the Oglala Lakota College center, Head Start, CAP office, Post office, American Horse School and Allen Store. The project would be approximately .90 miles long and would cost an estimated \$300,000 for design and construction of lighting for the existing pathway and crosswalks.



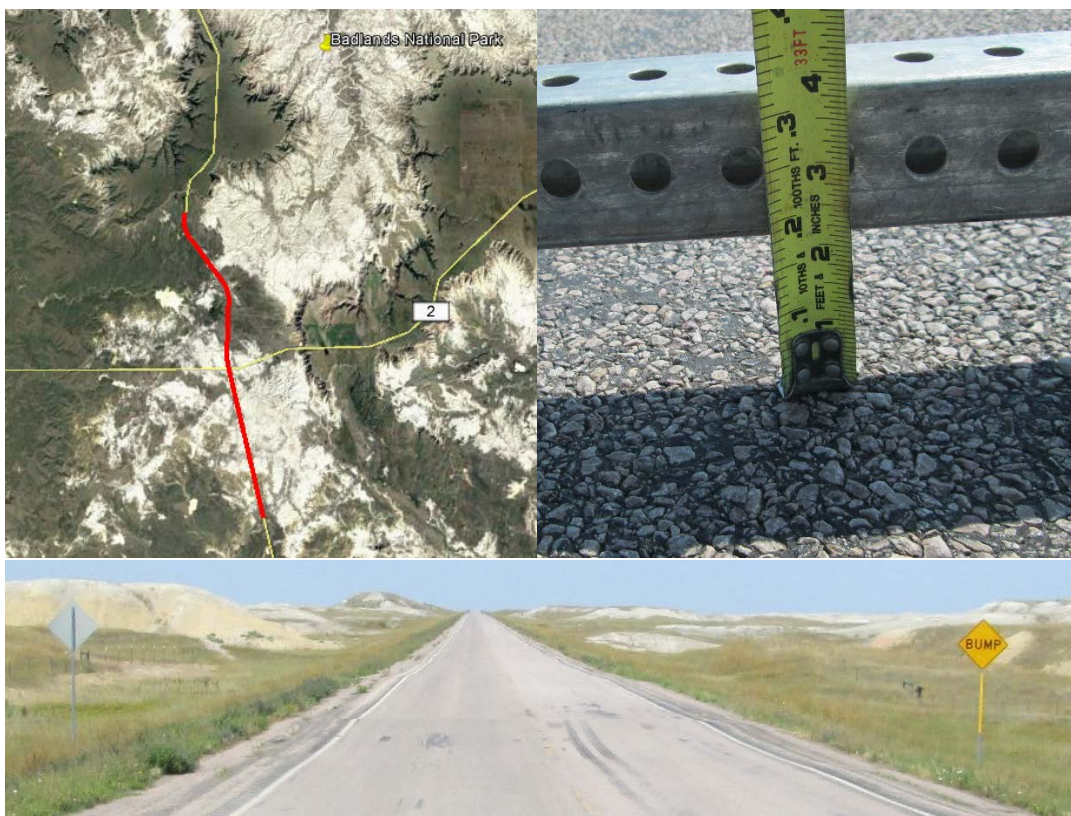
**Strategy Champion:** OSTDOT.

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



- **BIA Route 41 Reconstruction**

BIA Route 41, Section 60 was reconstructed approximately 15 years ago. Unfortunately, the construction of the road has not held up due to fat clay subgrade soils. In the Spring of 2016, the OSTDOT decided to spot repair the road. After engineering investigation, it was determined that the entire 5.3-mile section would need to be reconstructed with a deeper pavement section that includes separation fabric, subbase, geogrid, base course and asphalt. In the past year, the road's heaving and rutting areas have become so severe that traffic must slow down significantly from the current posted speed limit of 65mph. The OSTDOT has placed warning signs along the 5.3-mile section to warn and slow traffic of the severe road condition. If left unattended the road will continue to worsen and crashes are inevitable. This project would reconstruct this critical arterial route in the Pine Ridge Indian Reservation and prevent serious run-off road crashes. The project would be approximately 5.3 miles long and would cost an estimated \$5,300,000 to reconstruct.



**Strategy Champion:** OSTDOT.

**Funding Opportunity:** TTP Safety Funding or TTP Funding.



- **BIA Route 2 Reconstruction**

The Oglala Sioux Tribe has identified BIA Route 2, from Kyle to SD Highway 44 as an arterial route needing improvements. The existing narrow paved roadway without shoulders has steep side slopes, tight horizontal curves, excessive vertical curves, and many trees inside the clear zone. Additionally, due the vertical curves and trees in the clear zone, most of the roadway intersections have insufficient sight distance. The posted speed limit is 55 mph and many of the curves are too sharp for the current speed limit.

As a result, there have been numerous crashes and reports by residents, tribal agency personnel, and emergency management of avoiding the route, especially at night due the potential for crashes. The roadway was last constructed approximately 40 years ago and does not meet the current safety standards for width, shoulders, recoverable side slopes and clear zone.



The roadway asphalt is nearing the end of its design life and will need to be milled and overlaid within the next 5-10 years. An asphalt overlay would build



up from a thin asphalt layer and the edges would be tapered causing the road to be further narrowed. Many paved routes on the Pine Ridge Indian Reservation have shoulder rumble strips installed. Installing rumble strips to prevent run off road crashes is a high positive impact per dollar spent for the improvement. Unfortunately, BIA Route 2 at its current width is too narrow for rumble strips.

Several engineering design options, such as shoulder widening and clear zone regrading, spot reconstruction at curves and intersections, installation of guardrail, and full roadway geometry reconstruction have been reviewed to determine the best option to mitigate safety issues. Due to the lack of straight section of the roadway profile, shoulder widening and clear zone regrading would not be very effective. Due to the numerous vertical curves, spot reconstruction to flatten crest curves and raise sag curves would turn into continuous reconstruction. Due to the high percentage of clear zone that is too steep and/or contains trees, installation of guardrail is not technically or financially feasible and would require extensive maintenance.

The best option to improve BIA Route 2 from Kyle to SD Highway 44 from its current unsafe condition to meet minimum highway safety standards would be to reconstruct the route. Since this route is 19.7 miles, the engineering design should address completing construction in phased projects. The project would cost an estimated \$33,500,000 to reconstruct.



**Strategy Champion:** OSTDOT.

**Funding Opportunity:** TTP Safety Funding, TTP Funding or BUILD Grant Funding.



- **Provide Remote Weather Monitoring Stations**

Many transportation agencies utilize remote weather information systems (RWIS) sites to provide information to both the roadway user and to the department of transportation. These sites can monitor weather conditions, roadway conditions, site specific forecasts and provide video imagery at the location. With the large land area, rural nature and at times hazardous driving conditions, RWIS sites could be utilized at strategic locations to improve roadway safety by providing images and current data to roadway users and data to improve services by the OST DOT.



**Strategy Champion:** OST DOT.

**Funding Opportunity:** TTPSF, TTP Funding.

### **Safety Planning and Other Strategies**

- **Develop a Social Media Page for Safety Reporting**

Social Media is an area that has been underutilized in the Oglala Sioux community in the transportation area. The Tribe would like to develop a platform that would allow for the sharing of important information such as road closures, road construction, emergency notifications, RWIS, maps and other data to users in the area. It is intended that they social media page would also be set up to allow users to send in safety concerns such as crashes, missing or damaged signs, roadway concerns and other desired feed back to the transportation and safety programs. While the platforms for outreach exist, assistance with development of a professional, user friendly and reliable system is needed.



**Strategy Champion:** OST DOT and OST DPS.

**Funding Opportunity:** BIA Indian Highway Safety Program and SD DPS.

# OGLALA SIOUX TRIBE

## 2016 TRIBAL TRANSPORTATION SAFETY PLAN



ATTACHMENT A  
MEETING AGENDAS





## ATTACHMENT A

### OGLALA SIOUX TRIBAL TRANSPORTATION SAFETY PLAN 2016

#### Meeting Agenda, February 3, 2016

- 10:00 a.m. Welcome and Introductions
- 10:15 a.m. Background and Overview  
Discussion of Tribal Safety Plans, including need for  
Presentation of Crash and Safety Data  
Questions and Discussion of Data
- 11:00 a.m. Oglala Sioux 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 the Oglala Sioux 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 (provided)
- 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

# OGLALA SIOUX TRIBE

## 2016 TRIBAL TRANSPORTATION SAFETY PLAN



ATTACHMENT B

PARTICIPANTS





## ATTACHMENT B

### OGLALA SIOUX TRIBAL TRANSPORTATION SAFETY PLAN

#### Meeting Participants

Name	Representing	Phone Number	Email Address
Craig Genzlinger	KLJ	406-461-2222	craig.genzlinger@kljeng.com
Dave Kelly	OST DOT	605-867-5376	ostroads@hotmail.com
Ron Williams	KLJ	605-721-5553	Ron.williams@kljeng.com
Dustin Witt	SDDOT	605-773-5361	Dustin.will@state.sd.us
Tim Wicks	SDDOT	605-673-4948	Tim.wicks@state.sd.us
Troy Ferguson	OSTDPS	605-867-8130	tferguson@ostdps.org
Justin Porter	OST Motor Fuels	605-867-2288	Motorfuels@oglala.org
Mark Hoines	FHWA	605-776-1010	mark.hoines@dot.gov
June Hansen	SDDOT	605-773-3540	june.hansen@state.sd.us
James Cross	OST Council	605-454-4693	Jamescross0810@hotmail.com

# OGLALA SIOUX TRIBE

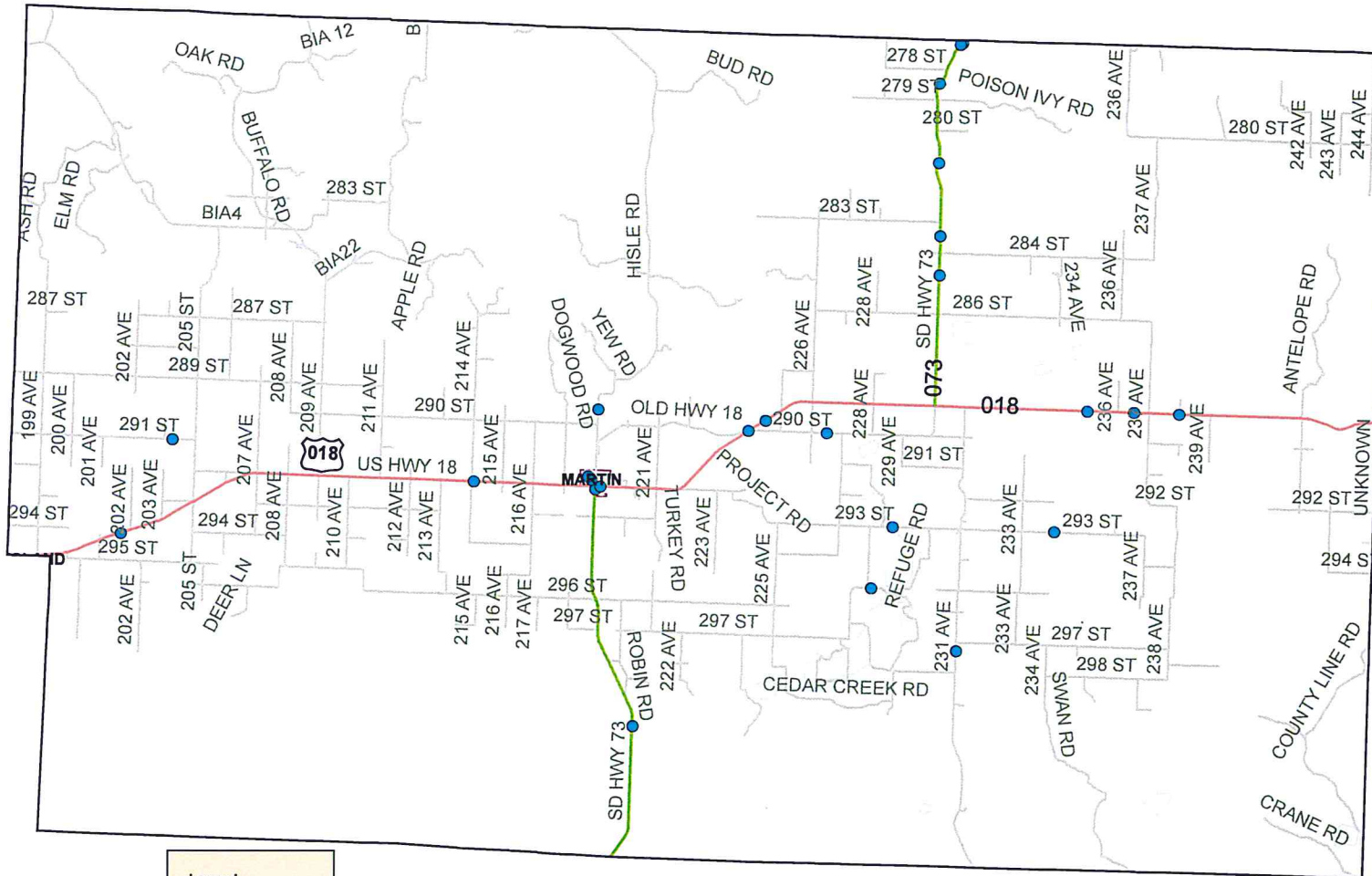
## 2016 TRIBAL TRANSPORTATION SAFETY PLAN



ATTACHMENT C  
CRASH MAPS



# BENNETT CO - 2006 REPORTABLE MOTOR VEHICLE CRASHES



**Legend**

- 2006\_accidents
- Bennett Boundary

**HIGHWAYS**

**HWY\_CATEGORY**

- Interstate
- SD
- US
- NSTR1
- Counties - CENSUS
- city\_limits
- Water

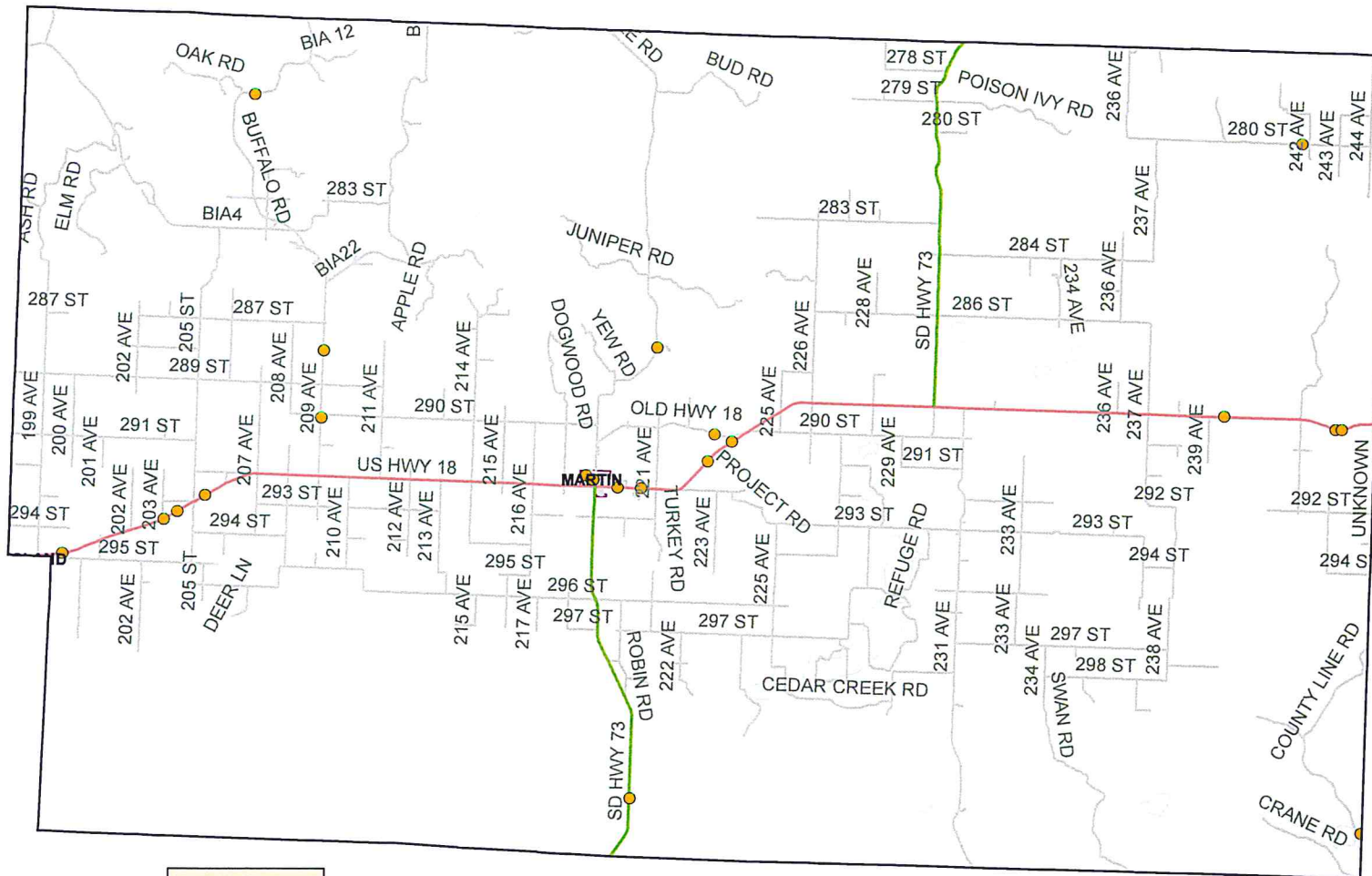
**2006 MV CRASHES FOR BENNETT CO**

27 TOTAL CRASHES  
 0 FATAL CRASHES  
 14 INJURY CRASHES  
 13 DAMAGE ONLY CRASHES

0 KILLED  
 21 INJURED

Prepared by:  
 Dept of Public Safety  
 Highway Safety / Accident Records  
 March 15, 2007

# BENNETT CO - 2007 REPORTABLE MOTOR VEHICLE CRASHES



**Legend**

- 2007 accidents
- Bennett Boundary

**HIGHWAYS**

**HWY\_CATEGORY**

- Interstate
- SD
- US
- NSTRI
- city\_limits
- Water

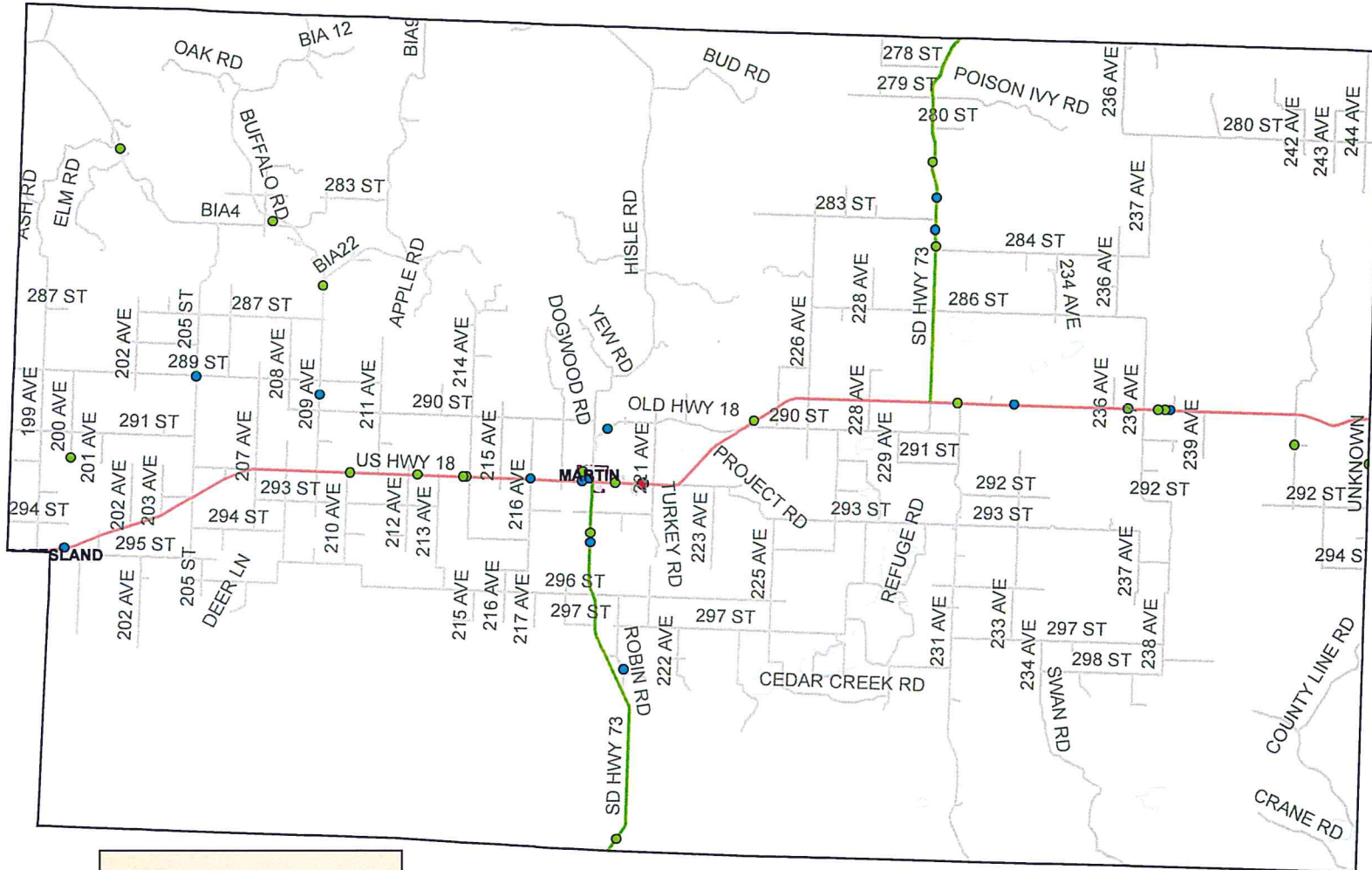
**2007 MV CRASHES FOR BENNETT CO**

25 TOTAL CRASHES  
 2 FATAL CRASHES  
 6 INJURY CRASHES  
 17 DAMAGE ONLY CRASHES

2 KILLED  
 12 INJURED

Prepared by:  
 SD Dept of Public Safety  
 Highway Safety / Accident Records  
 April 9, 2008

# BENNETT CO - 2008 REPORTABLE MOTOR VEHICLE CRASHES



**Legend**

<b>2008_MV_Crashes</b>	<b>HIGHWAYS</b>
BY	BY
<b>AccidentSeverity</b>	<b>HWY_CATEGORY</b>
● FATAL CRASHES	Interstate
● INJURY CRASHES	SD
● PDO CRASHES	US
□ Bennett Boundary	NSTRI
	city_limits
	Water

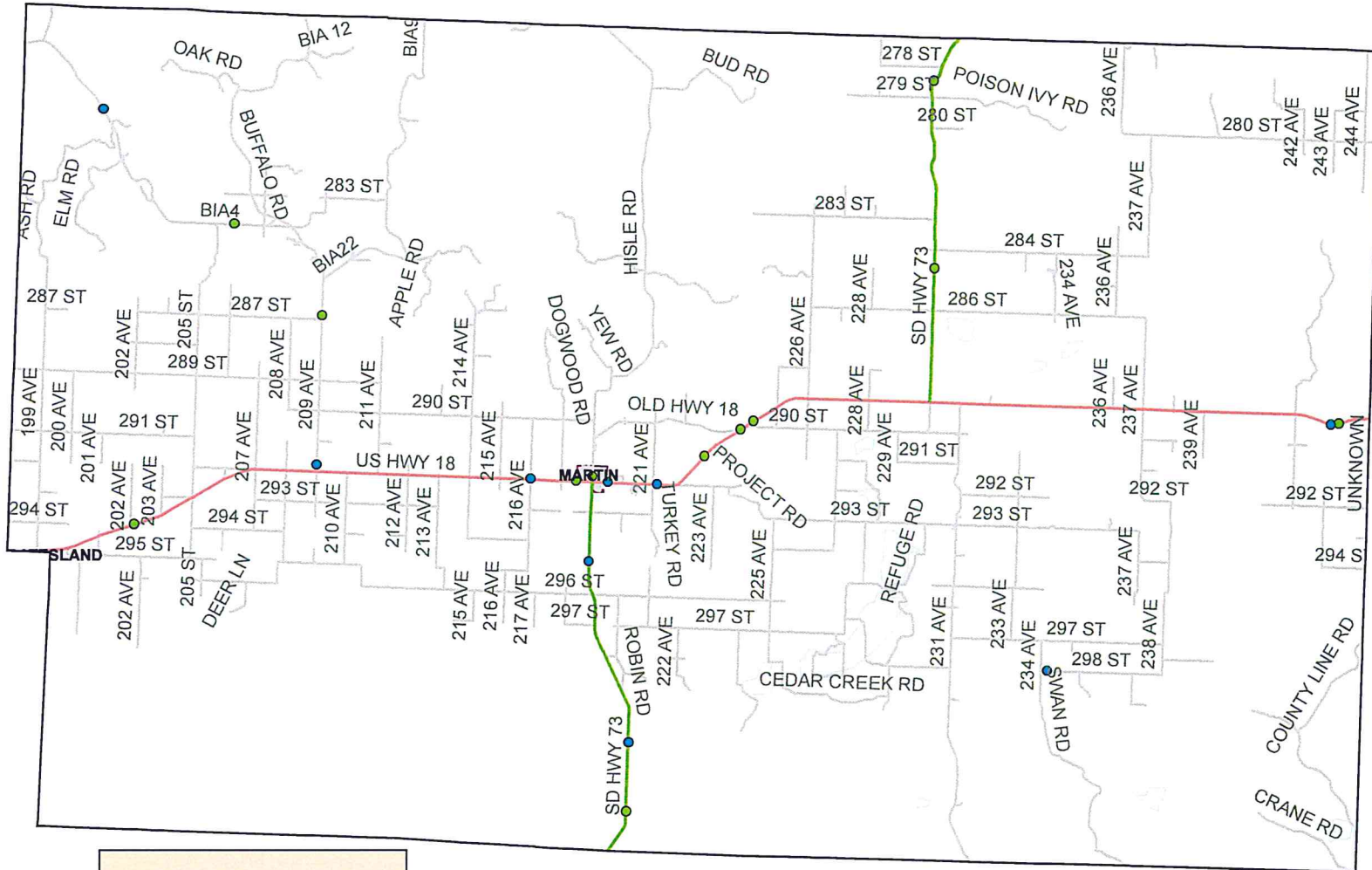
**2008 MV CRASHES FOR BENNETT CO**

35 TOTAL CRASHES  
 1 FATAL CRASHES  
 13 INJURY CRASHES  
 21 PROPERTY DAMAGE ONLY CRASHES

1 KILLED  
 16 INJURED

Prepared by:  
 SD Dept of Public Safety  
 Highway Safety / Accident Records  
 March 23, 2009

# BENNETT CO - 2009 REPORTABLE MOTOR VEHICLE CRASHES



**Legend**

**2009\_MV\_CRASHES HIGHWAYS**

BY	
<b>CRASH SEVERITY</b>	<b>HWY_CATEGORY</b>
● FATAL CRASHES	— Interstate
● INJURY CRASHES	— SD
● PDO CRASHES	— US
□ Bennett Boundary	— NSTRI
□ city_limits	— Water



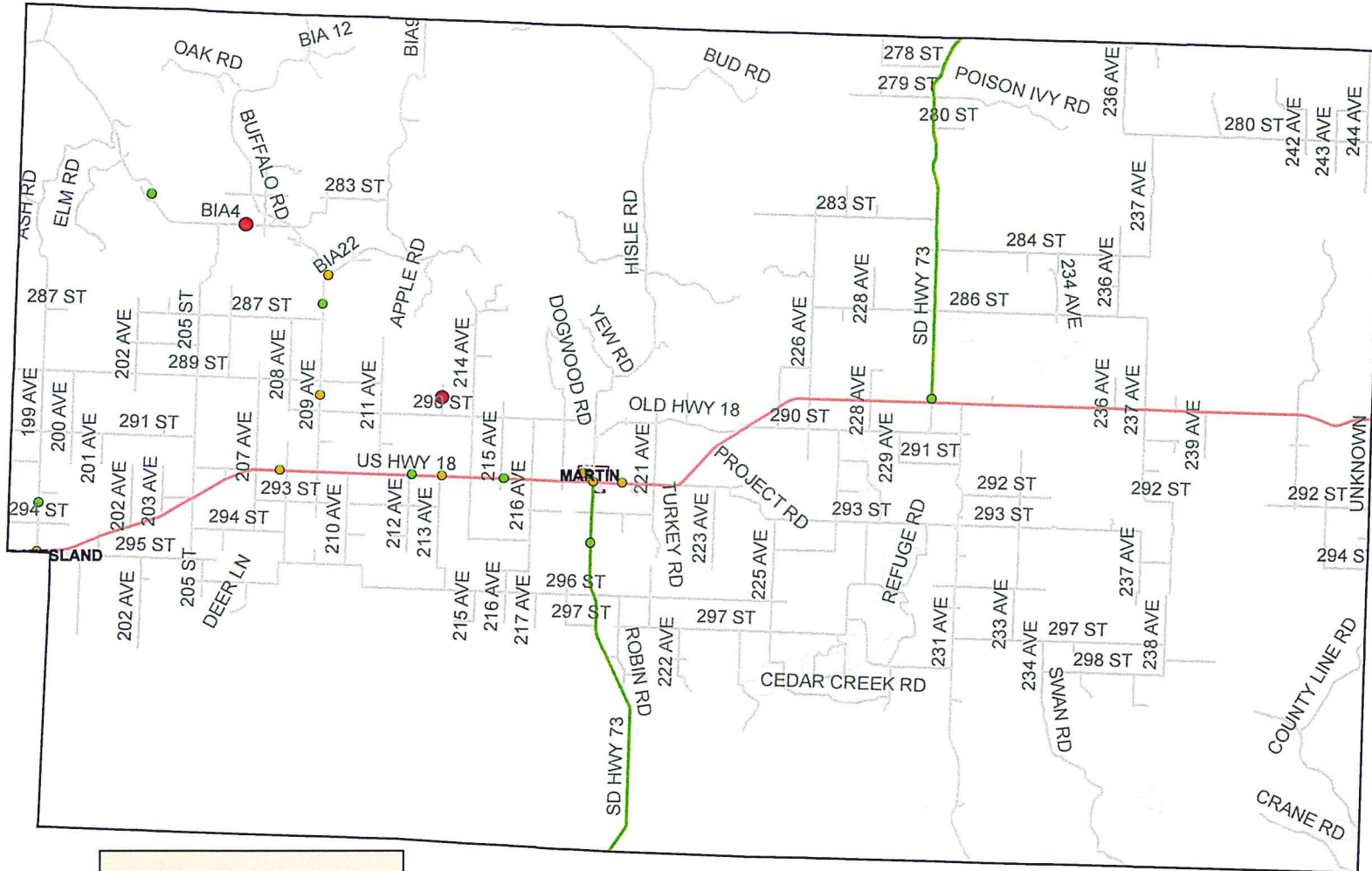
**2009 MV CRASHES FOR BENNETT CO**

21 TOTAL CRASHES  
 0 FATAL CRASHES  
 9 INJURY CRASHES  
 12 PROPERTY DAMAGE ONLY CRASHES

0 KILLED  
 11 INJURED

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

# BENNETT CO - 2010 REPORTABLE MOTOR VEHICLE CRASHES



**Legend**

Bennett Boundary	<b>HIGHWAYS</b>
2010_MV_Crashes	BY
CRASH SEVERITY	HWY_CATEGORY
FATAL CRASHES	Interstate
INJURY CRASHES	SD
PDO CRASHES	US
city_limits	NSTR1
Water	



**2010 MV CRASHES FOR BENNETT CO**

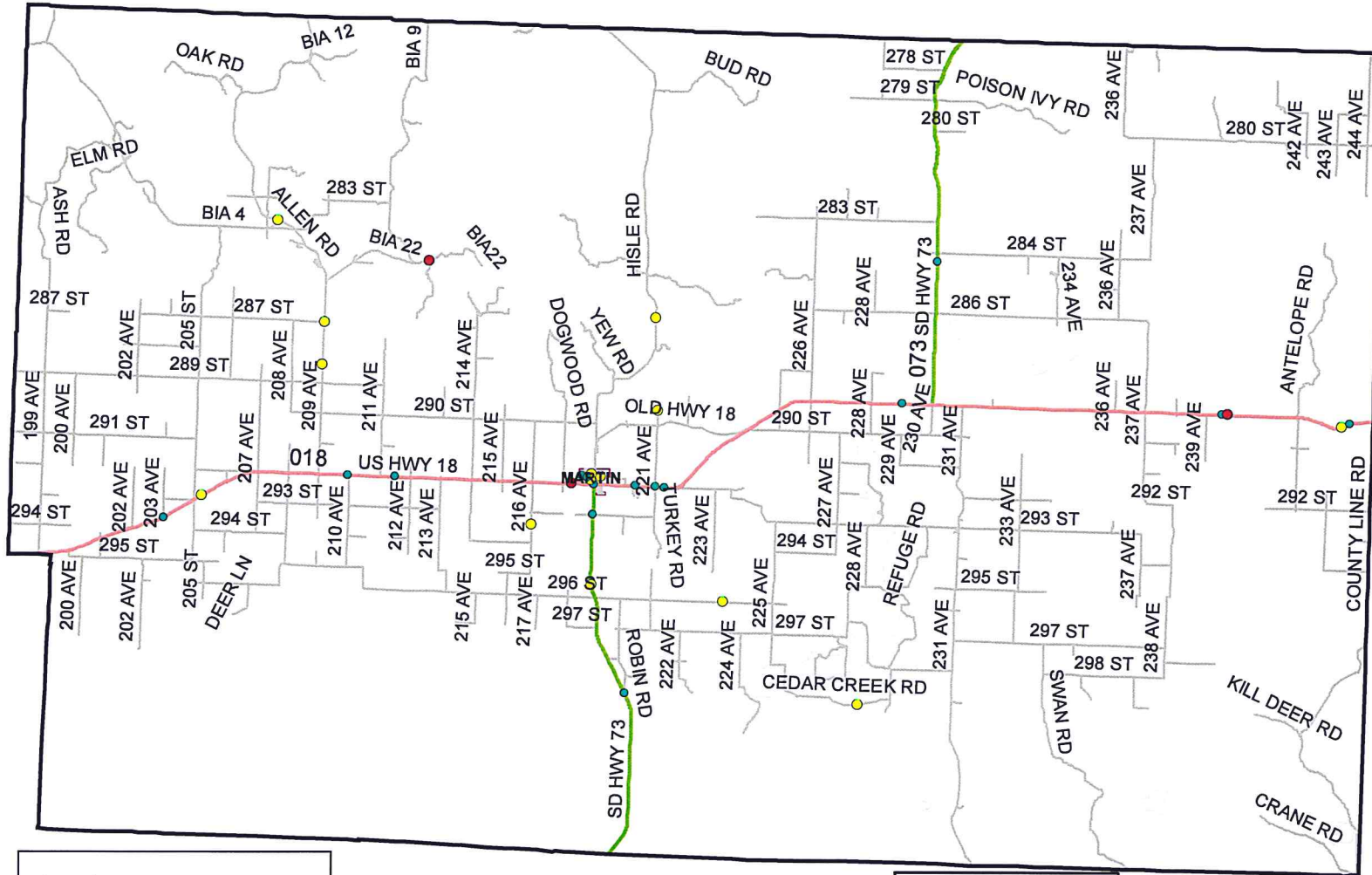
18 TOTAL CRASHES  
 2 FATAL CRASHES  
 8 INJURY CRASHES  
 8 PROPERTY DAMAGE ONLY CRASHES

2 KILLED  
 29 INJURED

Prepared by:  
 SD Dept of Public Safety  
 Highway Safety / Accident Records  
 March 24, 2011



# BENNETT CO - 2012 REPORTABLE MOTOR VEHICLE CRASHES



**Legend**

<b>2012_CRASHES</b>	<b>HIGHWAYS</b>
BY	BY
<b>CRASH SEVERITY</b>	<b>HWY_CATEGORY</b>
● FATAL CRASHES	— Interstate
● INJURY CRASHES	— SD
● PDO* CRASHES	— US
	— NSTR1
	□ city_limits
	□ Water
	□ Bennett Boundary



**2012 MV CRASHES FOR BENNETT CO**

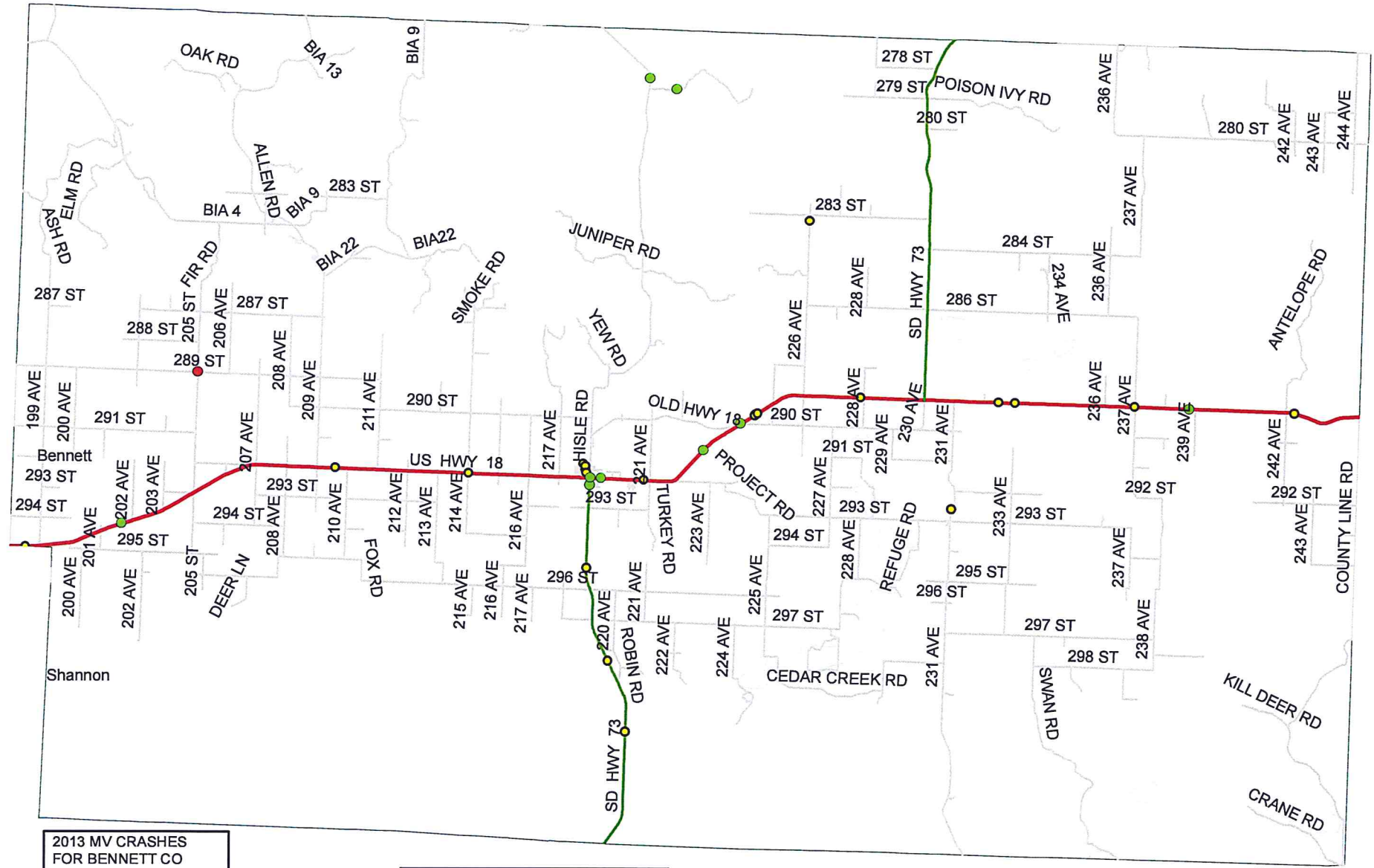
35 TOTAL CRASHES  
 3 FATAL CRASHES  
 14 INJURY CRASHES  
 18 PDO\* CRASHES

4 KILLED  
 31 INJURED

PDO\* - PROPERTY DAMAGE ONLY

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

# BENNETT CO - 2013 STATE REPORTABLE MOTOR VEHICLE CRASHES



**2013 MV CRASHES FOR BENNETT CO**

32 TOTAL CRASHES  
 1 FATAL CRASH  
 9 INJURY CRASHES  
 22 PDO\* CRASHES

1 KILLED  
 16 INJURED

PDO\* - PROPERTY DAMAGE ONLY

**Legend**

<b>2013_CRASHES BY CRASH SEVERITY</b>	<b>Highway Classification</b>
● FATAL CRASHES	— Interstate
● INJURY CRASHES	— US Highways
● PDO* CRASHES	— State Highways
	— Local Roads
	□ Counties
	— Water

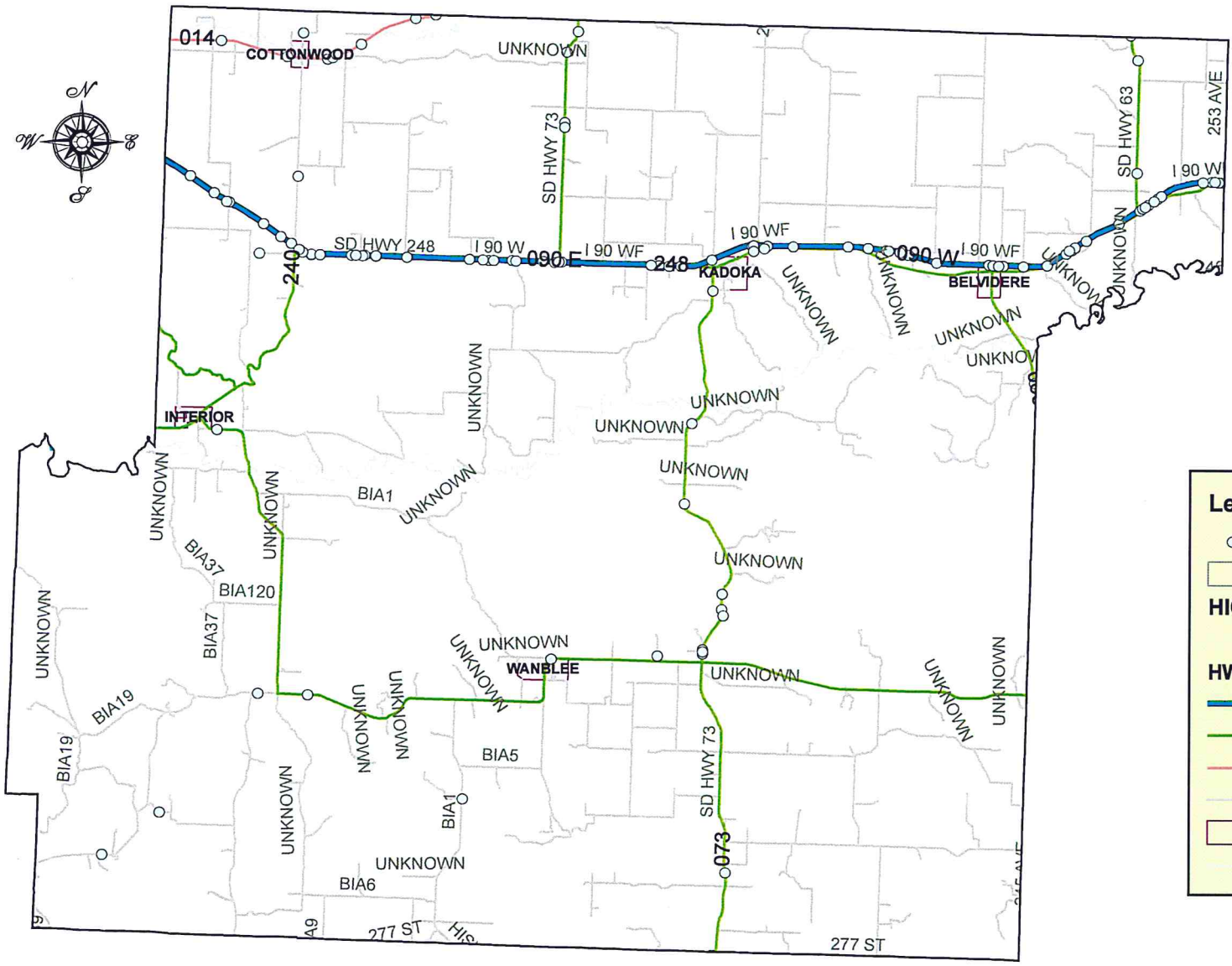
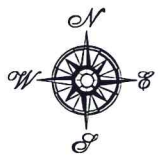


SOUTH DAKOTA  
 ACCIDENT RECORDS

The number of crashes are subject to change as data is retrieved from a live database.

Prepared by:  
 SD Dept of Public Safety  
 Highway Safety / Accident Records  
 April 16, 2014

# JACKSON CO - 2006 REPORTABLE MOTOR VEHICLE CRASHES



**2006 MV CRASHES FOR JACKSON CO**

111 TOTAL CRASHES  
 2 FATAL CRASHES  
 26 INJURY CRASHES  
 83 DAMAGE ONLY CRASHES

2 KILLED  
 45 INJURED

**Legend**

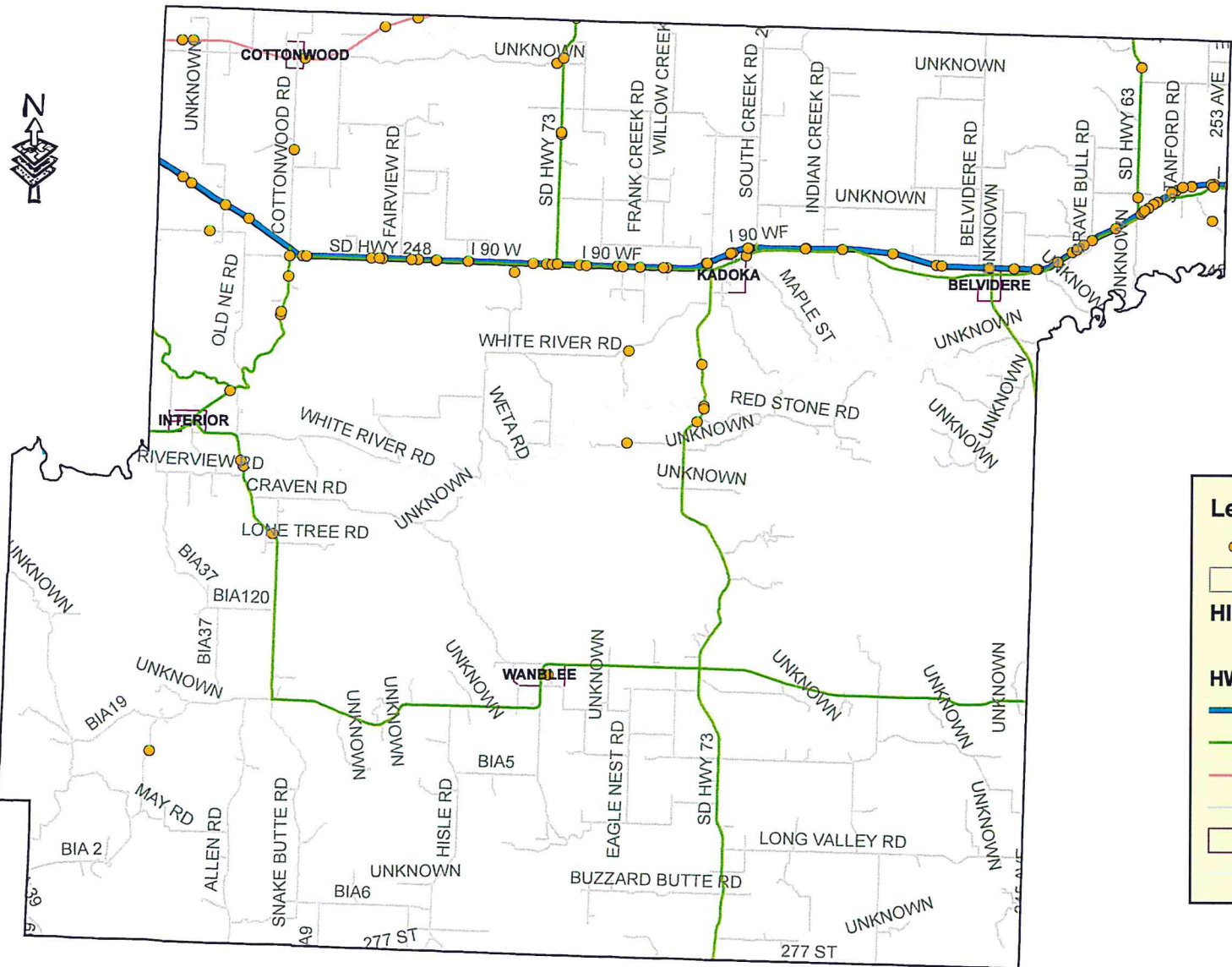
- 2006\_accidents
- Jackson Boundary

**HIGHWAYS**

**HWY\_CATEGORY**

- Interstate
- SD
- US
- NSTR
- city\_limits
- Water

# JACKSON CO - 2007 REPORTABLE MOTOR VEHICLE CRASHES



**2007 MV CRASHES FOR JACKSON CO**

103 TOTAL CRASHES  
 4 FATAL CRASHES  
 19 INJURY CRASHES  
 80 DAMAGE ONLY CRASHES

4 KILLED  
 36 INJURED

**Legend**

- 2007\_accidents
- Jackson Boundary

**HIGHWAYS**

**HWY\_CATEGORY**

- Interstate
- SD
- US
- NSTR1
- city\_limits
- Water

# JACKSON CO - 2008 REPORTABLE MOTOR VEHICLE CRASHES

**2008 MV CRASHES FOR JACKSON CO**

93 TOTAL CRASHES  
 3 FATAL CRASHES  
 16 INJURY CRASHES  
 74 DAMAGE ONLY CRASHES

3 KILLED  
 25 INJURED

**Legend**

**2008\_MV\_CRASHES**

By

**AccidentSeverity**

- FATAL CRASHES
- INJURY CRASHES
- PDO CRASHES

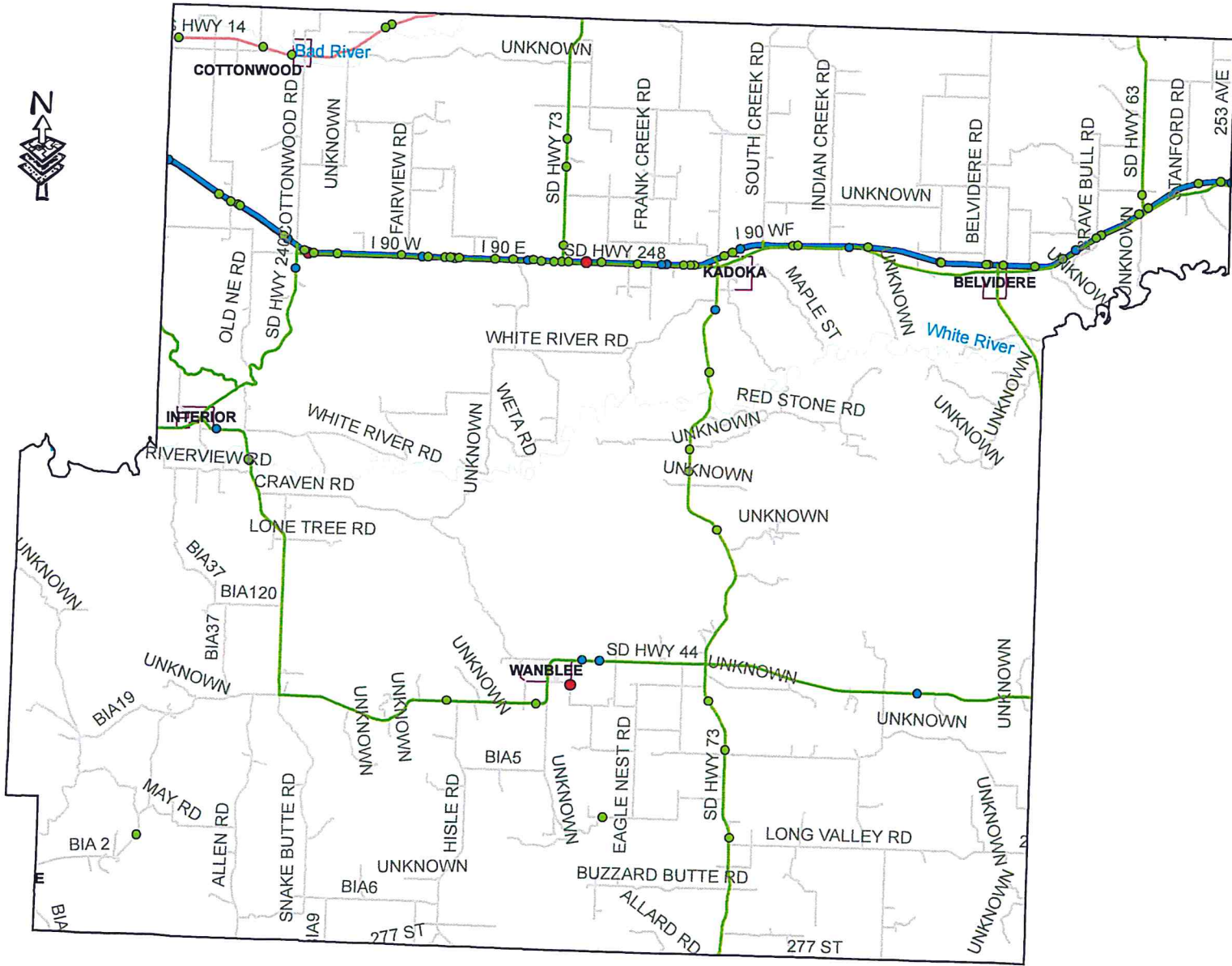
□ Jackson Boundary

**HIGHWAYS**

By

**HWY\_CATEGORY**

- Interstate
- SD
- US
- NSTRI
- city\_limits
- Water



# JACKSON CO - 2009 REPORTABLE MOTOR VEHICLE CRASHES

2009 MV CRASHES FOR JACKSON CO

96 TOTAL CRASHES  
 2 FATAL CRASHES  
 18 INJURY CRASHES  
 76 DAMAGE ONLY CRASHES

2 KILLED  
 30 INJURED

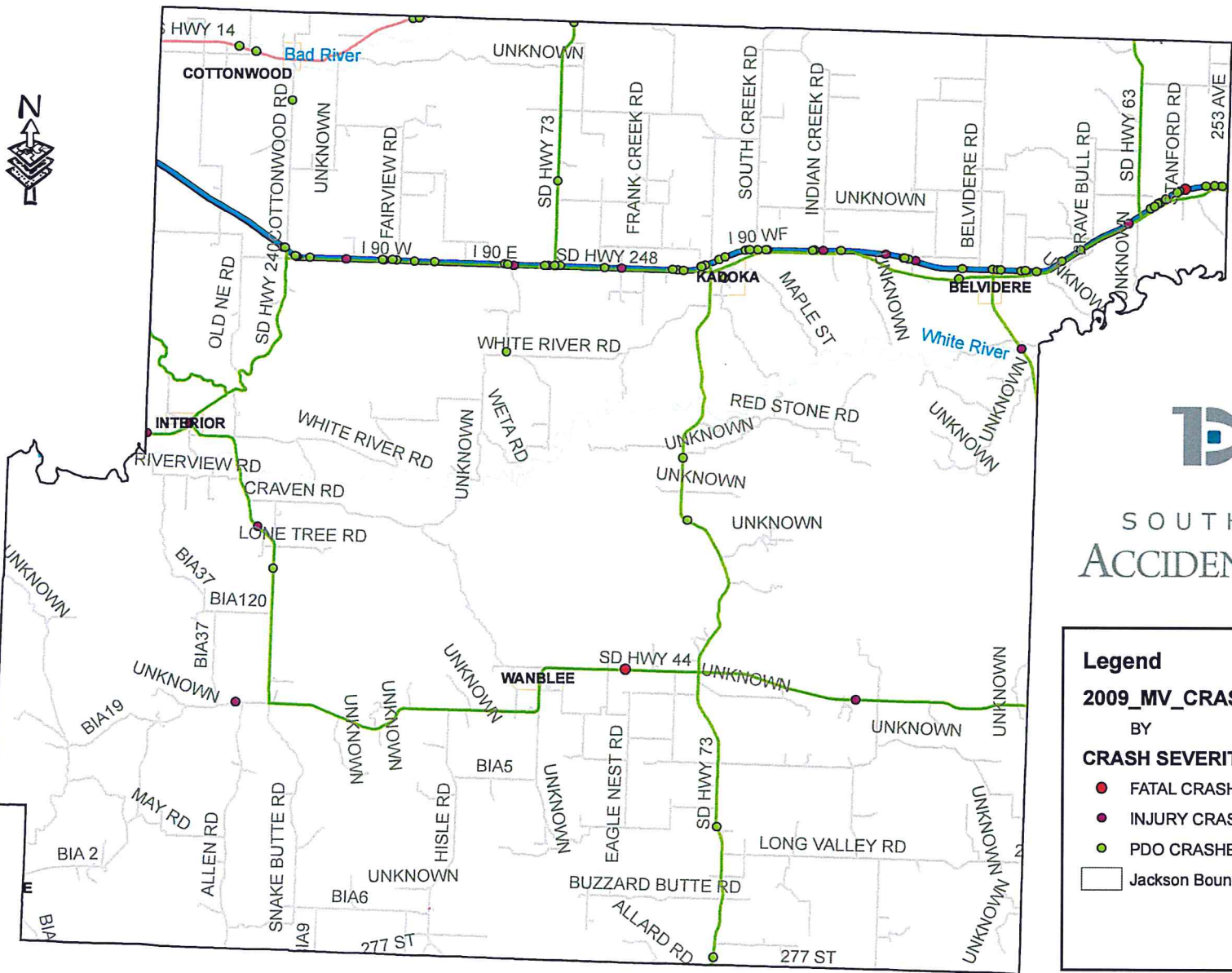


## SOUTH DAKOTA ACCIDENT RECORDS

### Legend

#### 2009\_MV\_CRASHES HIGHWAYS

BY CRASH SEVERITY	BY HWY_CATEGORY
<span style="color: red;">●</span> FATAL CRASHES	<span style="color: blue;">—</span> Interstate
<span style="color: purple;">●</span> INJURY CRASHES	<span style="color: green;">—</span> SD
<span style="color: green;">●</span> PDO CRASHES	<span style="color: red;">—</span> US
<span style="border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Jackson Boundary	<span style="border-bottom: 1px solid gray;">   </span> NSTR1
	<span style="border: 1px solid orange; display: inline-block; width: 10px; height: 10px;"></span> city_limits
	<span style="color: blue;">—</span> Water



# JACKSON CO - 2010 REPORTABLE MOTOR VEHICLE CRASHES

**2010 MV CRASHES FOR JACKSON CO**

119 TOTAL CRASHES  
 3 FATAL CRASHES  
 23 INJURY CRASHES  
 93 DAMAGE ONLY CRASHES

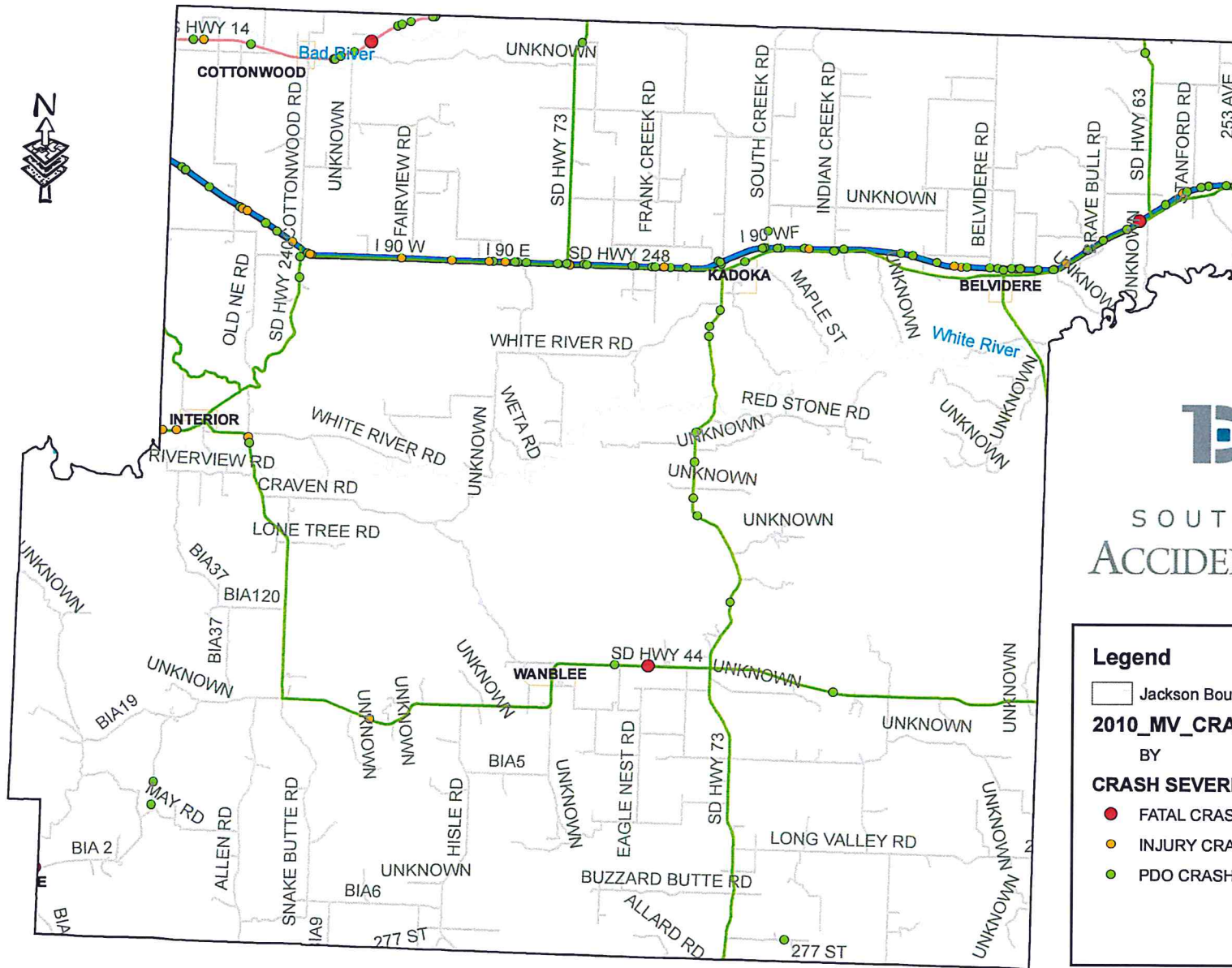
3 KILLED  
 31 INJURED



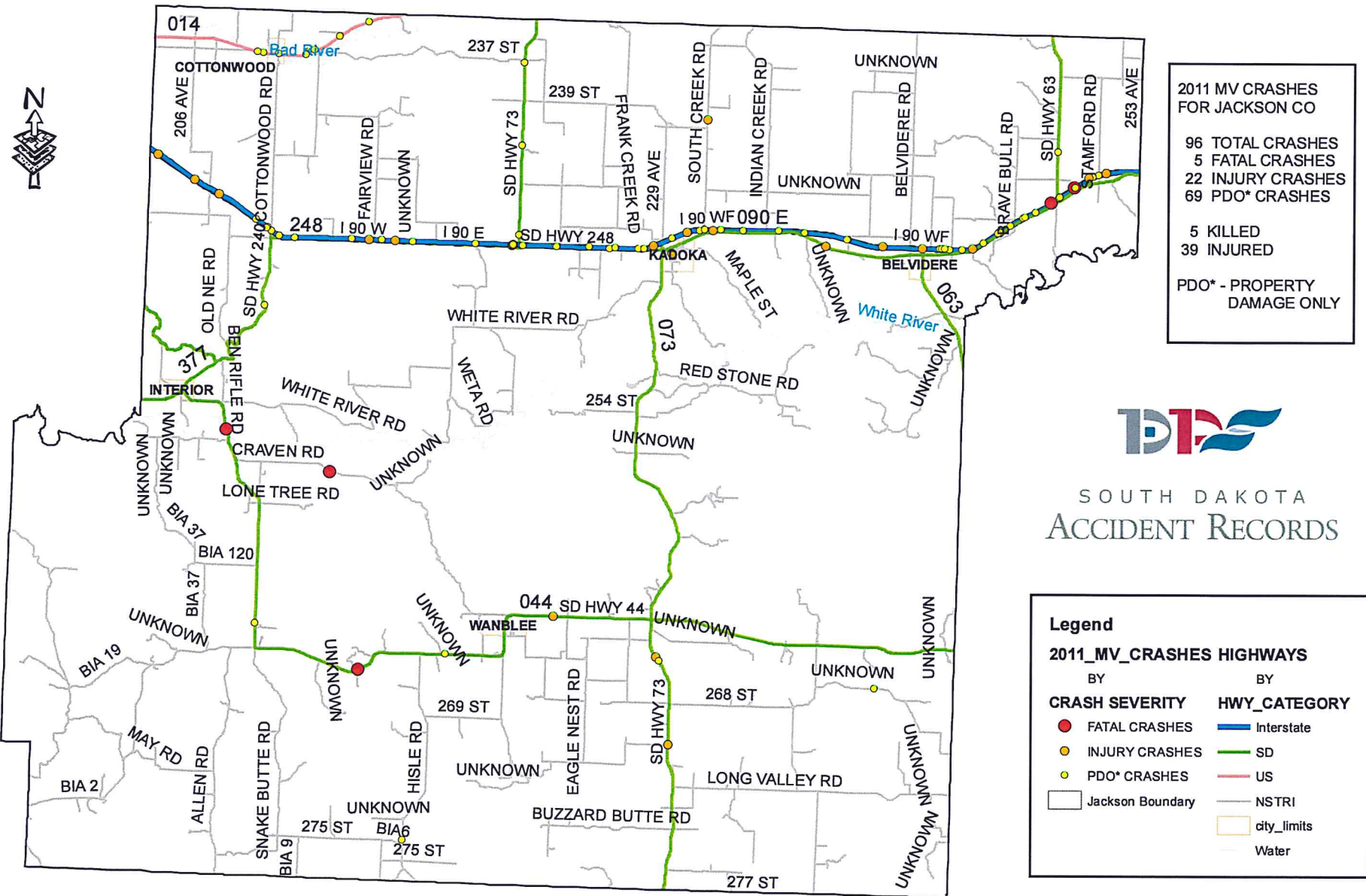
## SOUTH DAKOTA ACCIDENT RECORDS

**Legend**

	Jackson Boundary	<b>HIGHWAYS</b>
	2010_MV_CRASHES BY	<b>By HWY_CATEGORY</b>
	FATAL CRASHES	Interstate
	INJURY CRASHES	SD
	PDO CRASHES	US
		NSTR
		city_limits
		Water



# JACKSON CO - 2011 REPORTABLE MOTOR VEHICLE CRASHES



SOUTH DAKOTA  
ACCIDENT RECORDS

# JACKSON CO - 2012 REPORTABLE MOTOR VEHICLE CRASHES



2012 MV CRASHES FOR JACKSON CO

96 TOTAL CRASHES  
 3 FATAL CRASHES  
 7 INJURY CRASHES  
 86 PDO\* CRASHES

3 KILLED  
 11 INJURED

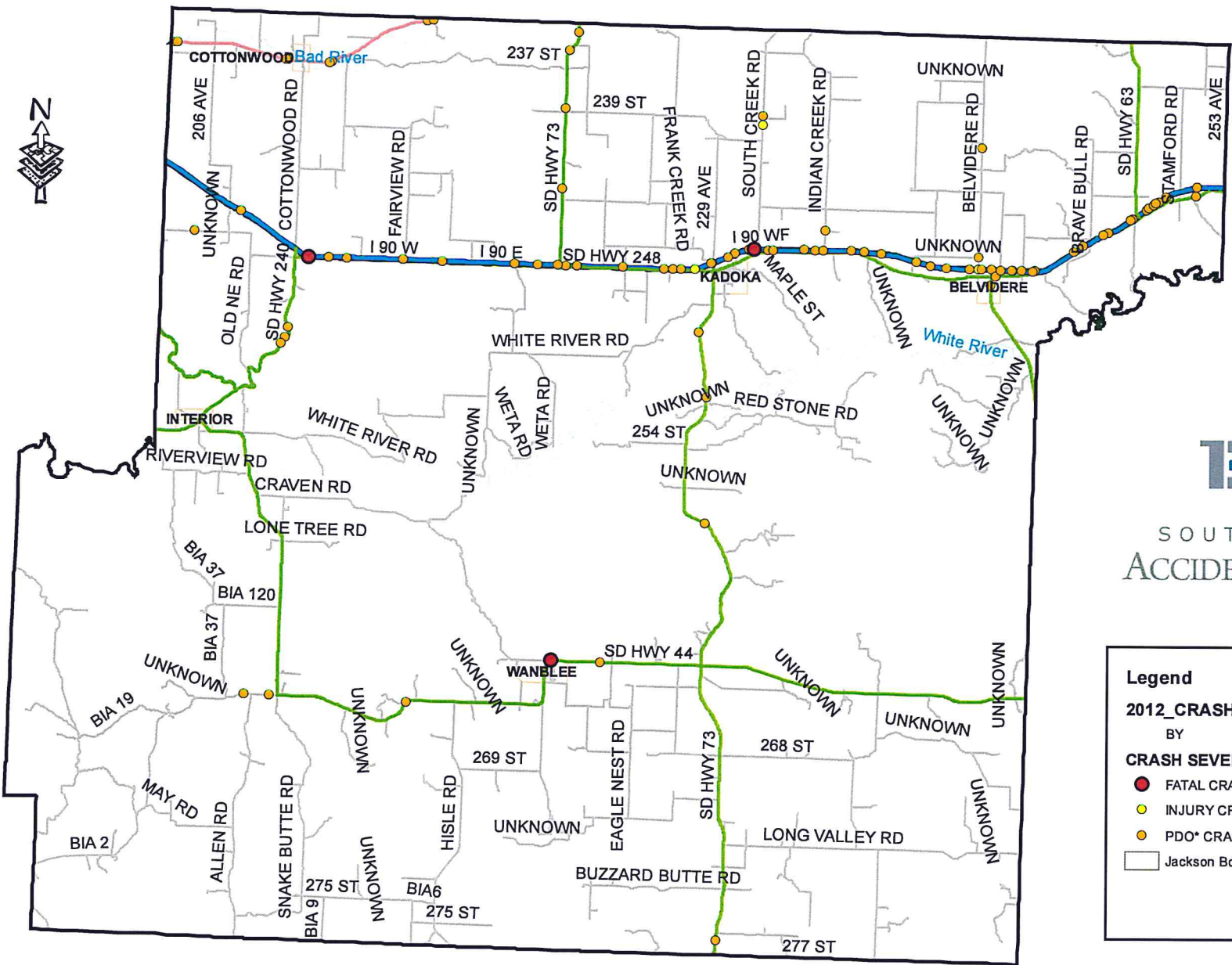
PDO\* - PROPERTY DAMAGE ONLY



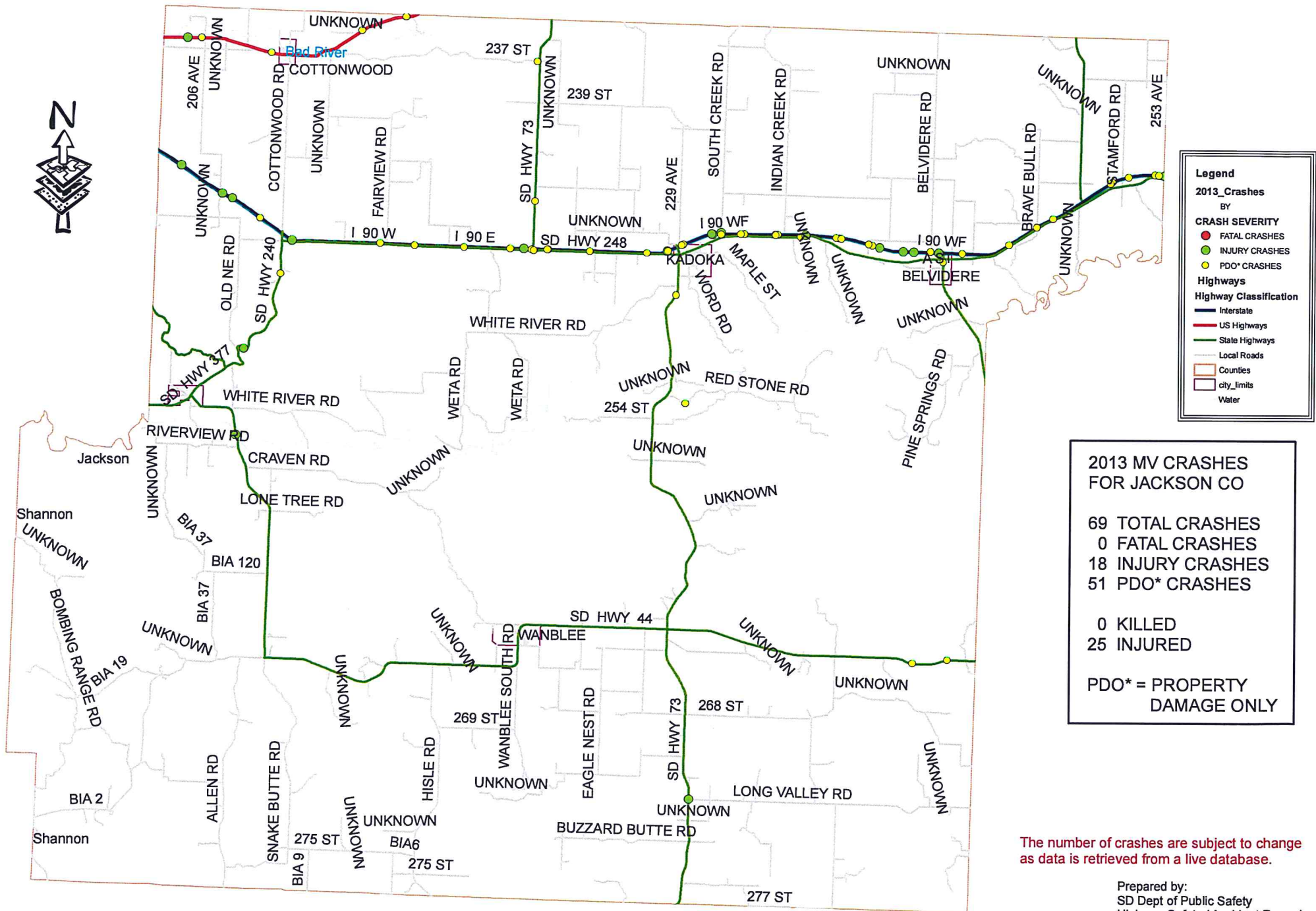
SOUTH DAKOTA  
 ACCIDENT RECORDS

**Legend**

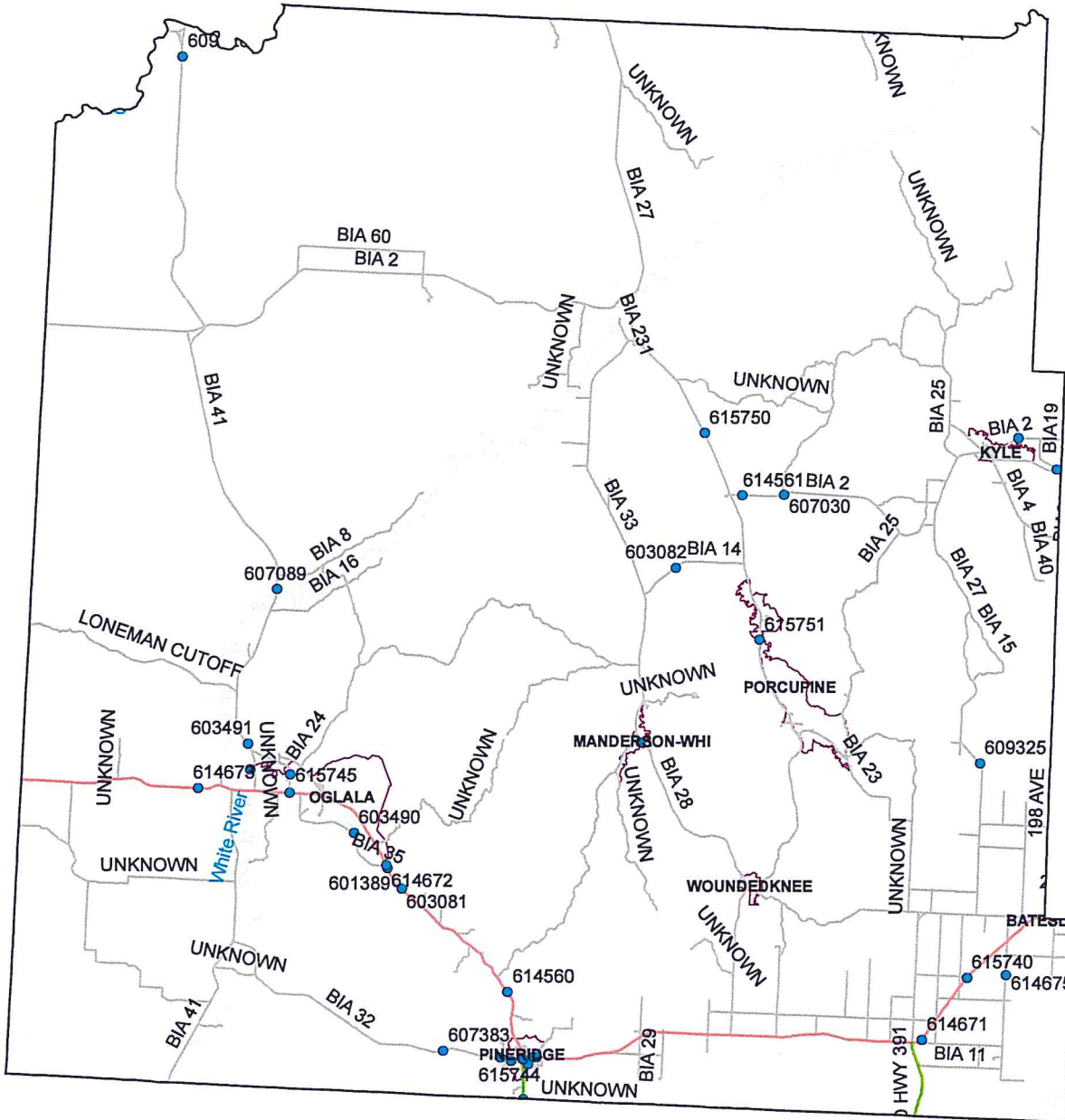
<b>2012_CRASHES</b>	<b>HIGHWAYS</b>
BY	BY
<b>CRASH SEVERITY</b>	<b>HWY_CATEGORY</b>
<span style="color: red;">●</span> FATAL CRASHES	<span style="color: blue;">—</span> Interstate
<span style="color: yellow;">●</span> INJURY CRASHES	<span style="color: green;">—</span> SD
<span style="color: orange;">●</span> PDO* CRASHES	<span style="color: red;">—</span> US
<span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Jackson Boundary	<span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> NSTR1
	<span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> city_limits
	<span style="color: blue;">—</span> Water



# JACKSON CO - 2013 STATE REPORTABLE MOTOR VEHICLE CRASHES



# SHANNON CO - 2006 REPORTABLE MOTOR VEHICLE CRASHES



**Legend**

- 2006\_accidents
- Shannon Boundary

**HIGHWAYS**

**HWY\_CATEGORY**

- Interstate
- SD
- US
- NSTR
- city\_limits
- Water

2006 MV CRASHES FOR SHANNON CO

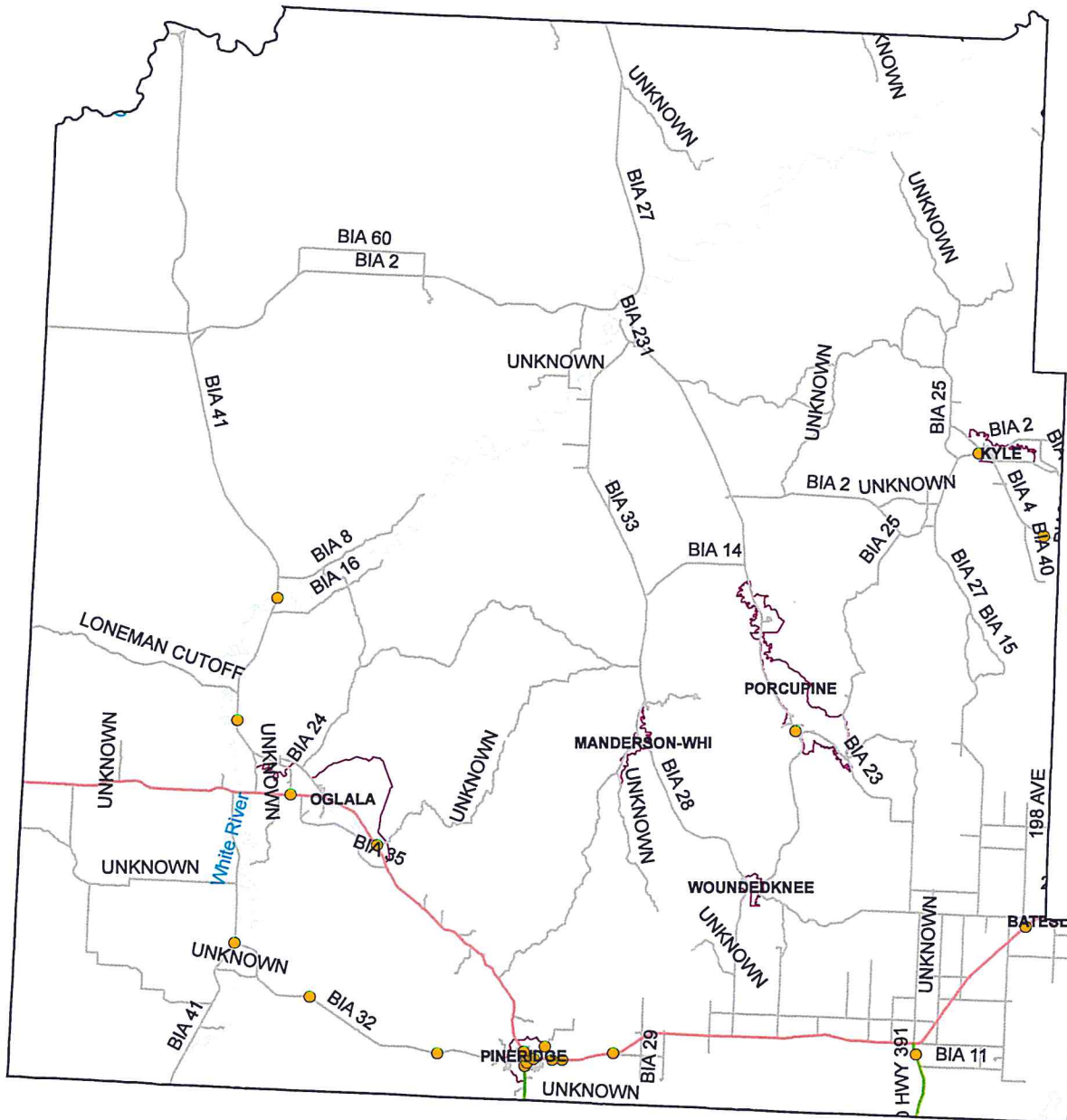
33 TOTAL CRASHES  
 14 FATAL CRASHES  
 12 INJURY CRASHES  
 7 DAMAGE ONLY CRASHES

19 KILLED  
 41 INJURED



Prepared by:  
 Dept of Public Safety  
 Highway Safety / Accident Records  
 April 24, 2007

# SHANNON CO - 2007 REPORTABLE MOTOR VEHICLE CRASHES



**Legend**

- 2007\_accidents
- Shannon Boundary

**HIGHWAYS**

**HWY\_CATEGORY**

- Interstate
- SD
- US
- NSTR
- city\_limits
- Water

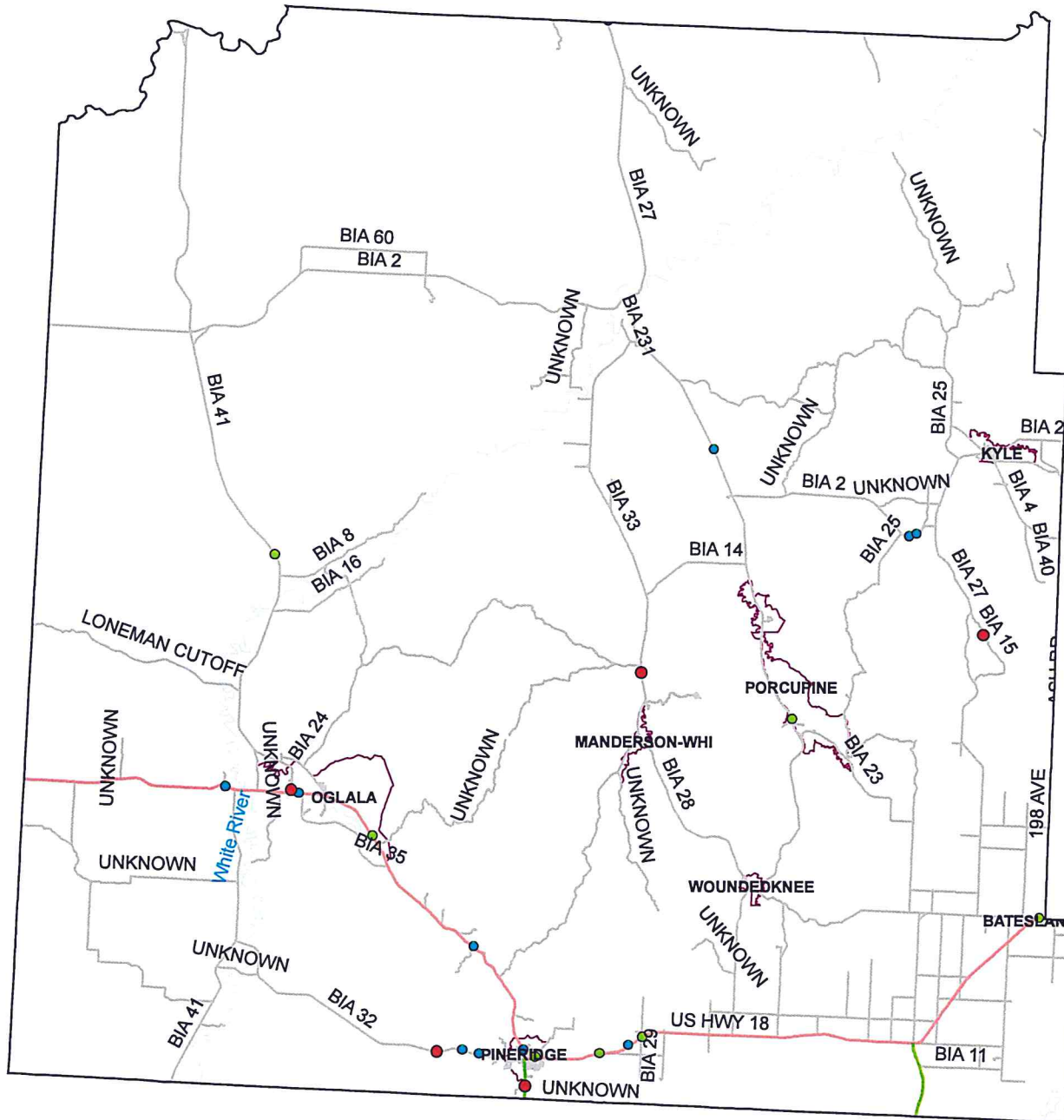
**2007 MV CRASHES FOR SHANNON CO**

- 22 TOTAL CRASHES
- 3 FATAL CRASHES
- 7 INJURY CRASHES
- 12 DAMAGE ONLY CRASHES

- 4 KILLED
- 19 INJURED



# SHANNON CO - 2008 REPORTABLE MOTOR VEHICLE CRASHES



## Legend

### 2008\_MV\_CRASHES

- By
- #### AccidentSeverity
- FATAL CRASHES
  - INJURY CRASHES
  - PDO CRASHES

□ Shannon Boundary

### HIGHWAYS

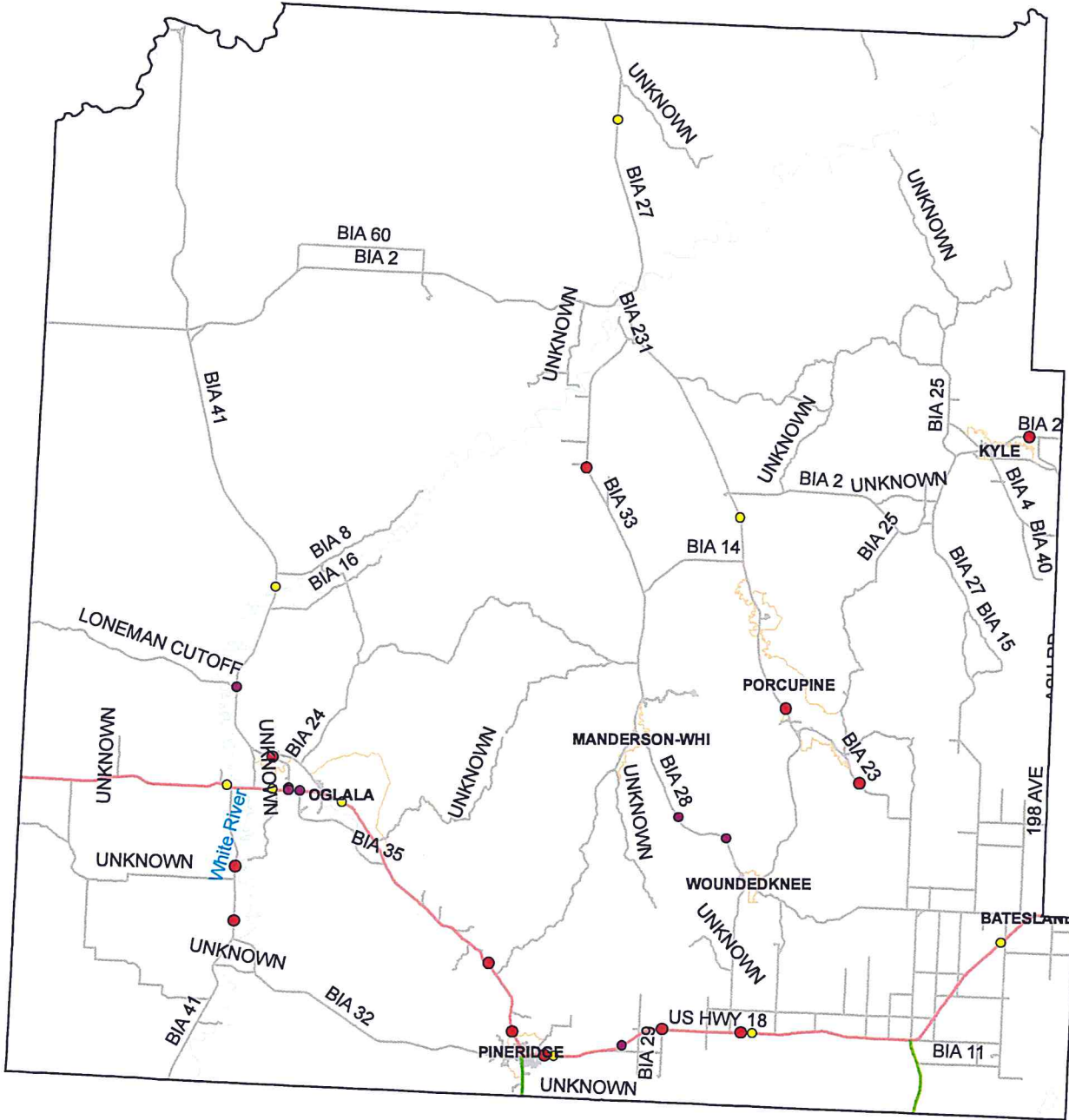
- By
- #### HWY\_CATEGORY
- Interstate
  - SD
  - US
  - NSTRI
  - city\_limits
  - Water

2008 MV CRASHES  
FOR SHANNON CO

23 TOTAL CRASHES  
5 FATAL CRASHES  
11 INJURY CRASHES  
7 DAMAGE ONLY  
CRASHES

6 KILLED  
30 INJURED

# SHANNON CO - 2009 REPORTABLE MOTOR VEHICLE CRASHES



## Legend

### 2009\_MV\_CRASHES HIGHWAYS

BY	By
CRASH SEVERITY	HWY_CATEGORY
● FATAL CRASHES	Interstate
● INJURY CRASHES	SD
● PDO CRASHES	US
□ Shannon Boundary	NSTRI
	city_limits
	Water



## SOUTH DAKOTA ACCIDENT RECORDS

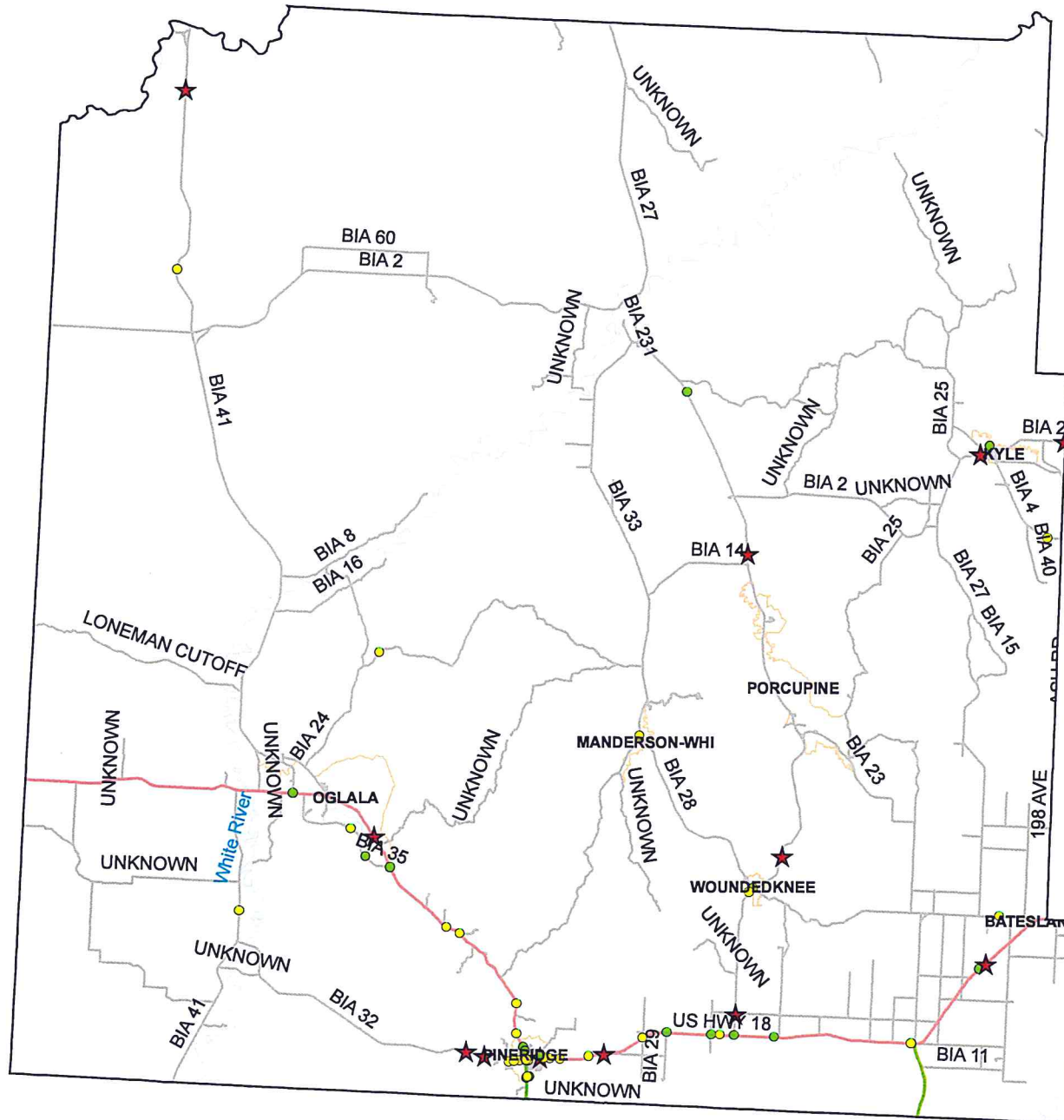
### 2009 MV CRASHES FOR SHANNON CO

28 TOTAL CRASHES  
 12 FATAL CRASHES  
 7 INJURY CRASHES  
 9 DAMAGE ONLY CRASHES

12 KILLED  
 39 INJURED



# SHANNON CO - 2010 REPORTABLE MOTOR VEHICLE CRASHES



**Legend**

	Shannon Boundary	<b>HIGHWAYS</b>
	2010_MV_CRASHES	By
	BY	<b>HWY_CATEGORY</b>
	CRASH SEVERITY	Interstate
	FATAL CRASHES	SD
	INJURY CRASHES	US
	PDO CRASHES	NSTR
		city_limits
		Water



## SOUTH DAKOTA ACCIDENT RECORDS

**2010 MV CRASHES FOR SHANNON CO**

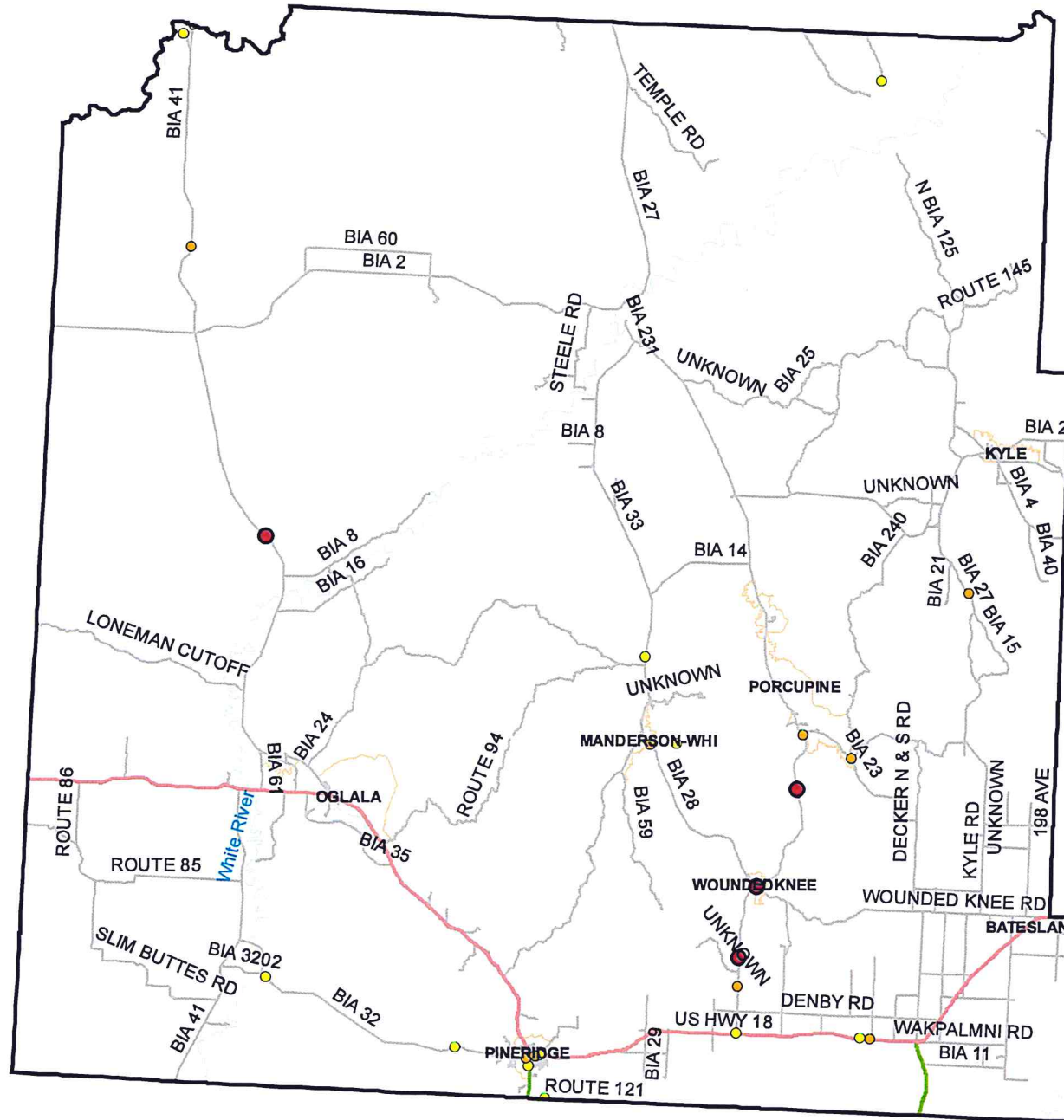
56 TOTAL CRASHES  
 12 FATAL CRASHES  
 26 INJURY CRASHES  
 18 DAMAGE ONLY CRASHES

18 KILLED  
 65 INJURED





# SHANNON CO - 2012 REPORTABLE MOTOR VEHICLE CRASHES



**Legend**

<b>2012_CRASHES</b>	<b>HIGHWAYS</b>
BY	BY
<b>CRASH SEVERITY</b>	<b>HWY_CATEGORY</b>
● FATAL CRASHES	— Interstate
● INJURY CRASHES	— SD
● PDO* CRASHES	— US
□ Shannon Boundary	— NSTRI
	□ city_limits
	— Water



## SOUTH DAKOTA ACCIDENT RECORDS

2012 MV CRASHES  
FOR SHANNON CO

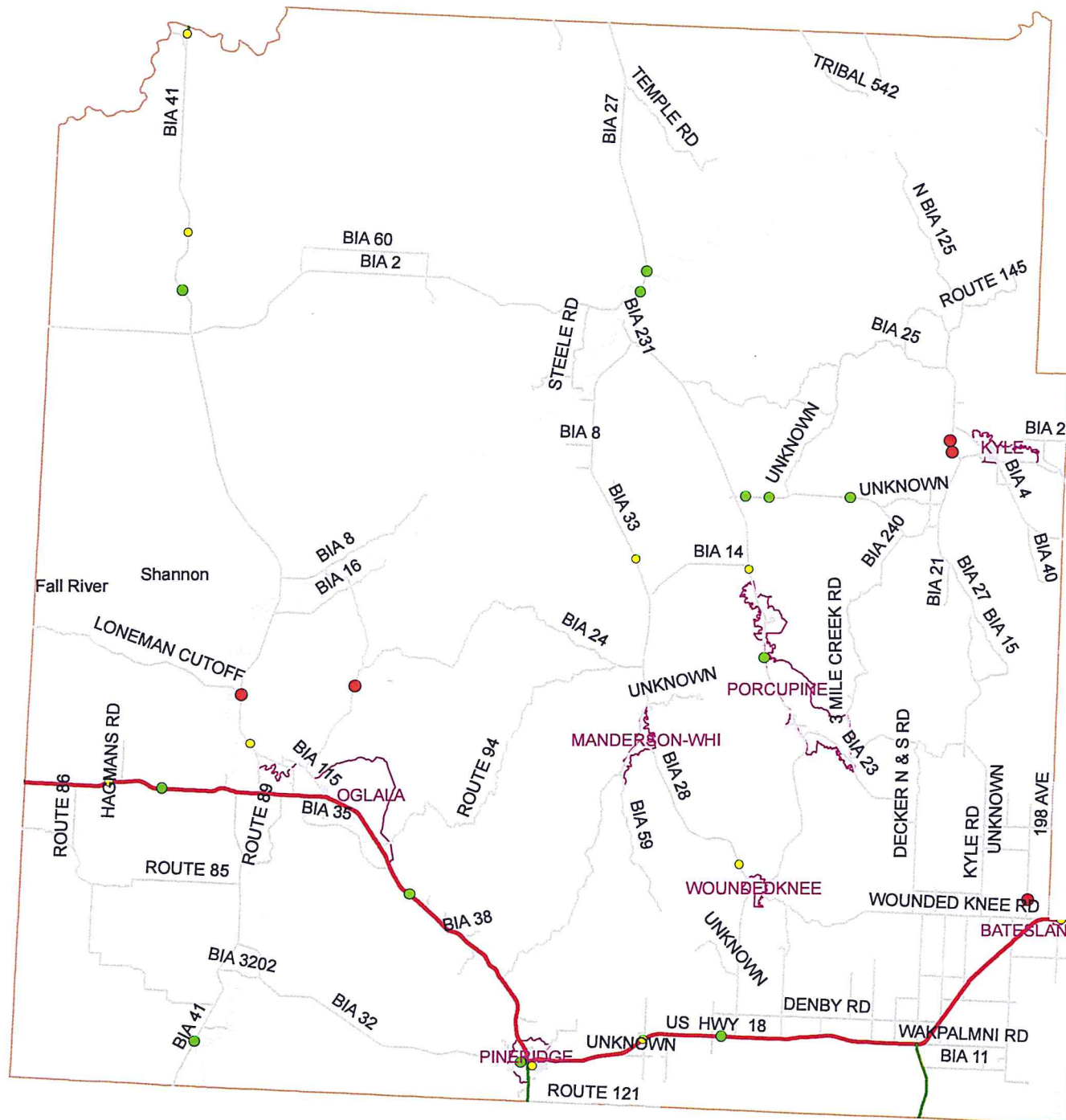
25 TOTAL CRASHES  
4 FATAL CRASHES  
11 INJURY CRASHES  
10 PDO\* CRASHES

7 KILLED  
29 INJURED

PDO\* = PROPERTY  
DAMAGE ONLY



# SHANNON CO - 2013 STATE REPORTABLE MOTOR VEHICLE CRASHES



**Legend**

<b>Highways</b>	Water
<b>Highway Classification 2013_Crashes</b>	BY
— Interstate	
— US Highways	<b>CRASH SEVERITY</b>
— State Highways	● FATAL CRASHES
— Local Roads	● INJURY CRASHES
□ Counties	● PDO* CRASHES
□ city_limits	



## SOUTH DAKOTA ACCIDENT RECORDS

### 2013 MV CRASHES FOR SHANNON CO

26 TOTAL CRASHES  
5 FATAL CRASHES  
12 INJURY CRASHES  
9 PDO\* CRASHES

6 KILLED  
32 INJURED

PDO\* = PROPERTY  
DAMAGE ONLY



The number of crashes are subject to change  
as data is retrieved from a live database.

Prepared by:  
SD Dept of Public Safety  
Highway Safety / Accident Records  
May 30, 2014

## NATIONAL PERSPECTIVE.

KLJ has the size and scope of engineering-based services you need, with the local expertise to drive your project forward to a successful result.

## REGIONAL EXPERTISE.

KLJ is dedicated to improving the health, safety and welfare of our communities.

## TRUSTED ADVISOR.

KLJ delivers quality and accuracy you expect from a trusted advisor and dedicated partner.



[kljeng.com](http://kljeng.com)