

# **Kalispel Tribe of Indians Tribal Transportation Safety Plan**



*Prepared with Assistance from:*

*Gibson Traffic Consultants, Inc.*

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## ACRONYMS

BIA	Bureau of Indian Affairs
HCM	Highway Capacity Manual
LOS	Level of Service
LRTP	The Long Range Transportation Plan
MEV	Million Entering Vehicles
MVM	Million Vehicle Miles
V/C	Volume to Capacity ratio
WSDOT	Washington State Department of Transportation

## 1. INTRODUCTION

It is the goal of the Kalispel Tribe of Indians to develop a Tribal Transportation Safety Plan that provides a strategy for making the transportation system within and around the Kalispel reservation as safe as possible. The Kalispel Tribe of Indians wishes to place SAFTY FIRST.

## 2. PROCESS

The scope of the Safety Plan was developed in conjunction with Kalispel Tribe of Indians staff. The following stakeholders were contacted as part of the Safety Plan. These stakeholders were chosen to provide advice in acquiring and analyzing data, selecting emphasis areas, developing safety strategies and implementing the final plan.

- Kalispel Business Committee
- Kalispel Department of Planning & Public Works
- Kalispel Tribal Fire Department
- Kalispel Tribal Police Department
- Pend Oreille County Sheriff
- Pend Oreille County Public Works
- Washington State Patrol
- Washington State Department of Transportation

The Issues raised by the Stakeholders included:

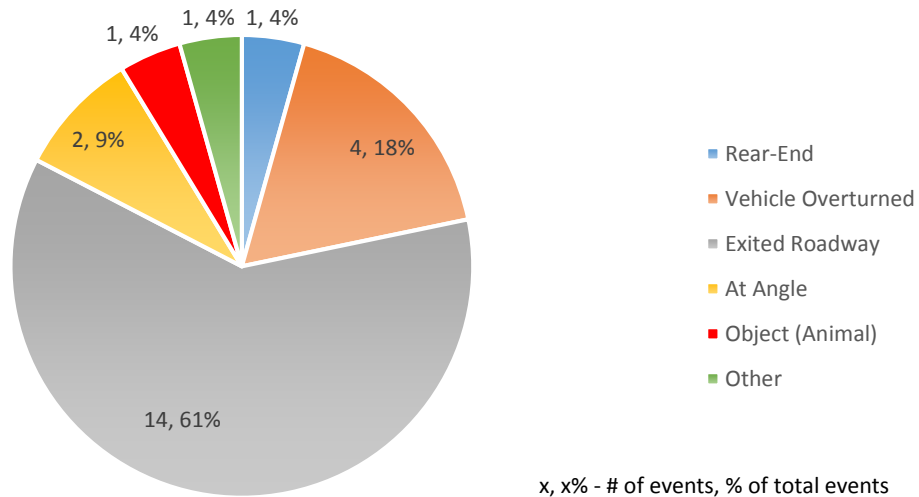
- Diminished response times due to lack of signage, cell phone coverage, and outdated emergency equipment
- Limited pedestrian and bicycle access and crossings
- Lack of access, including emergency egress, due to primitive roadways
- Lack of adequate roadway signage
- Limited roadway shoulders and barriers
- Limited reporting – due to the distance from help it was theorized that people deal with their own vehicle recovery without there being reporting to emergency services

### 3. DATA REVIEW

The data analyzed as part of the Safety Plan was obtained from WSDOT. Collision data within the Kalispel Reservation was obtained for the timeframe between January 1, 2010 and approximately December 31, 2014. The data did include one collision on January 1, 2015. The data represents the most recent complete 5-year period available from WSDOT. As the Kalispel Tribal Police Department reports accidents to the State, this data incorporated direct data from incidents on the Reservation and within the study area.

The collision data was analyzed for overall general trends per FHWA recommendation as an initial screening of trend compared to State or local county data. The collision data was then broken down for a more specified location evaluation to identify higher accident locations and types/pedestrian/bus/bike. The frequent collisions from the data were identified to determine which collision types were predominant and may require additional investigation to determine the cause. The collision types that constitute the majority of collisions are summarized in Figure 1.

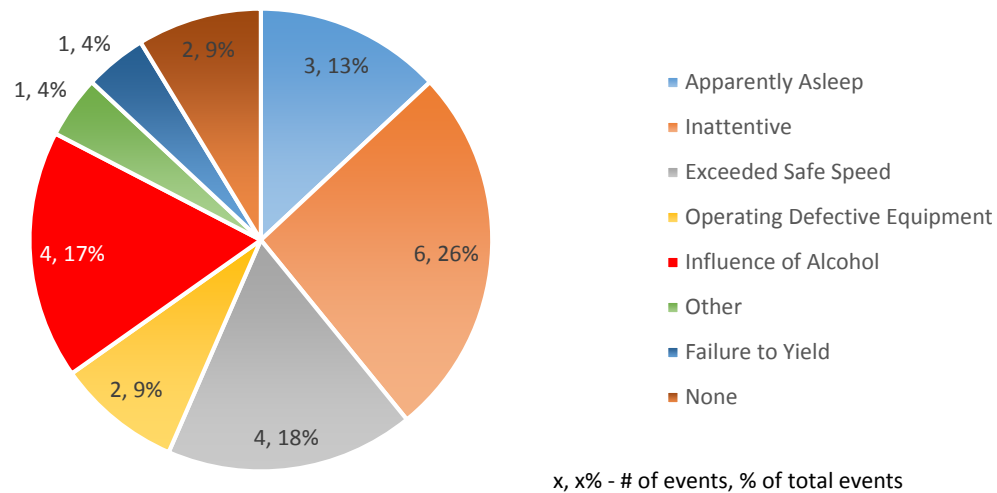
Figure 1: Frequent Collision Types



The summary of collision types shows that the majority of collisions are exiting roadway, accounting for 60% of the total reported collisions. There are several factors that could lead to these collisions, including engineering (limited shoulders, curvature of the road), education/enforcement (speeding, alcohol or inattention/falling asleep) and others.

The major contributing factors have also been identified in Figure 2.

Figure 2: Major Contributing Factors



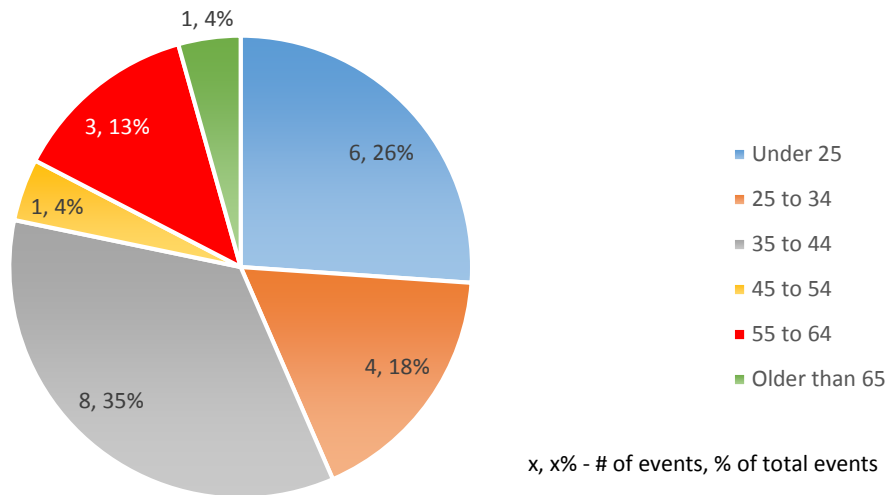
There are four contributing factors that account for nearly 75% of the collisions. These factors are:

- Inattentive – 26% of the collisions
- Exceeding Safe Speed – 18% of the collisions
- Influence of Alcohol – 17% of the collisions
- Apparently Asleep – 13% of the collisions

The rate of collisions with a contributing factor of alcohol is more than double the Washington State average. Washington State statistics show that collisions are more likely to result in injuries or fatalities when alcohol is a contributing factor. Therefore continued emphasis to reduce alcohol and driving needs to be emphasized. The “inattentive” contributing factor could include several factors, including cell phones, conversation with passengers and the radio.

During the stakeholder process it was theorized that driver age could be a factor in collisions and therefore driver age is identified in Figure 3.

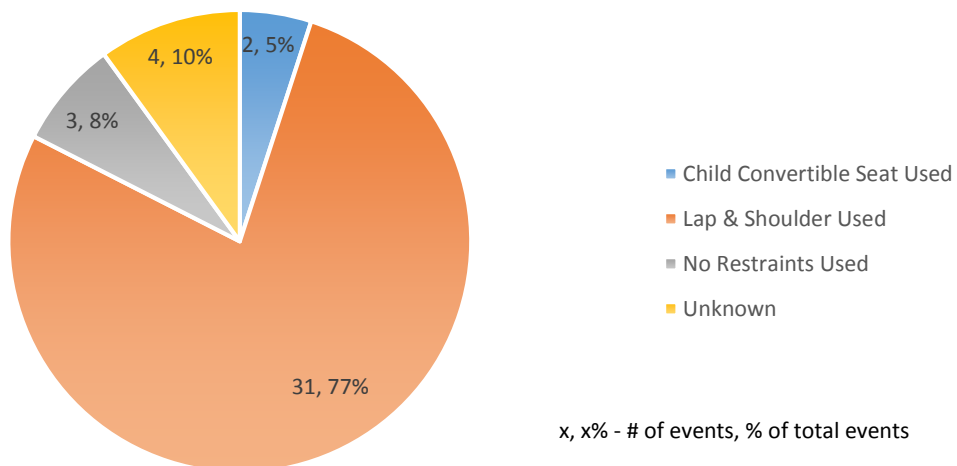
Figure 3: Age of Driver



The age ranges are expected based on national data to have relatively equal percentages of drivers in each age range. Each age range is equivalent to approximately 15% to 20% of the national population. The data shows that drivers between the ages of 35 and 54 account for over 55% of the total collisions. Many times there is a perception that younger drivers account for more collisions; however, the collision data shows that middle-age drivers account for a higher percentage of collisions than their percentage of the population.

The data was also evaluated to determine if restraints were utilized. The utilization of restraints is summarized in Figure 4.

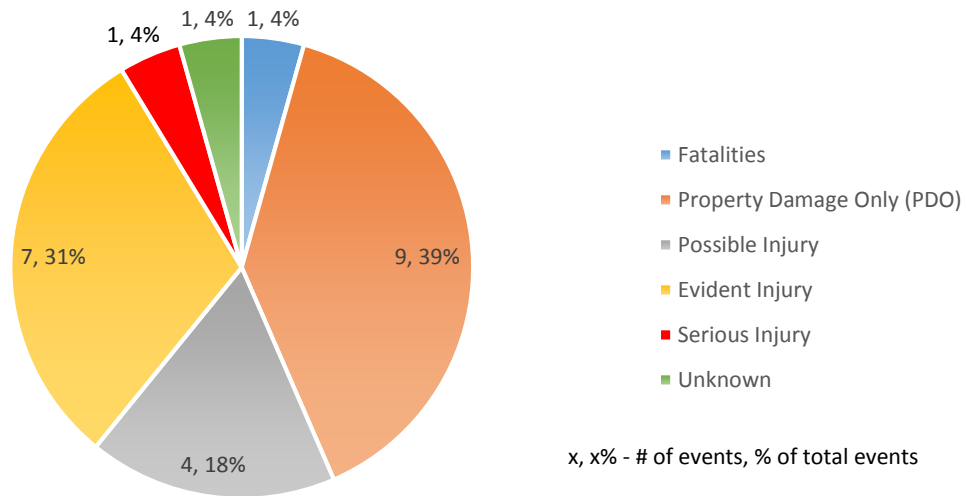
Figure 4: Restraint Usage



The data shows that the vast majority of drivers are using restraint systems. However, there is still between 8% and 18% of drivers not using restraints.

The data was also evaluated to determine the severity of the collisions. The most severe injury reported for each of the collisions is summarized in Figure 5.

Figure 5: Injury Severity



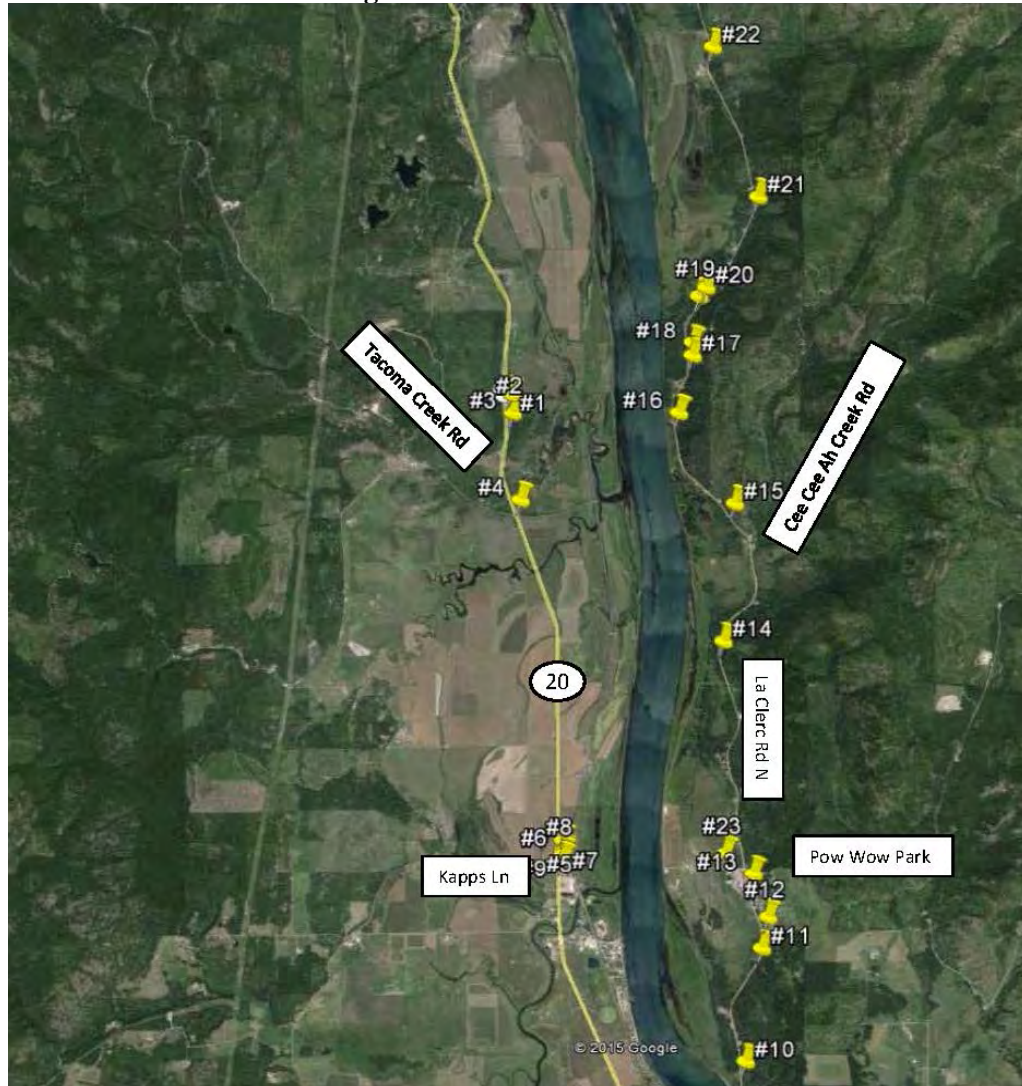
There was only one fatality reported in the data and that was a motorcycle rider who ran into the back of a van. However, over 50% of the collisions were injury collisions. This injury rate is similar to the most recent data published by WSDOT for county roadways in Pend Oreille County.



#### 4. COLLISION LOCATION

The locations of collisions were mapped to determine if collisions are clustered in specific locations. The locations of the collisions are shown in Figure 6.

**Figure 6: Collision Locations**



The figure shows that there is only one major cluster of collisions, which is on SR-20 in the vicinity of Kapps Lane. A detailed map of this location is shown in Figure 7.

**Figure 7: Detailed Collision Map**

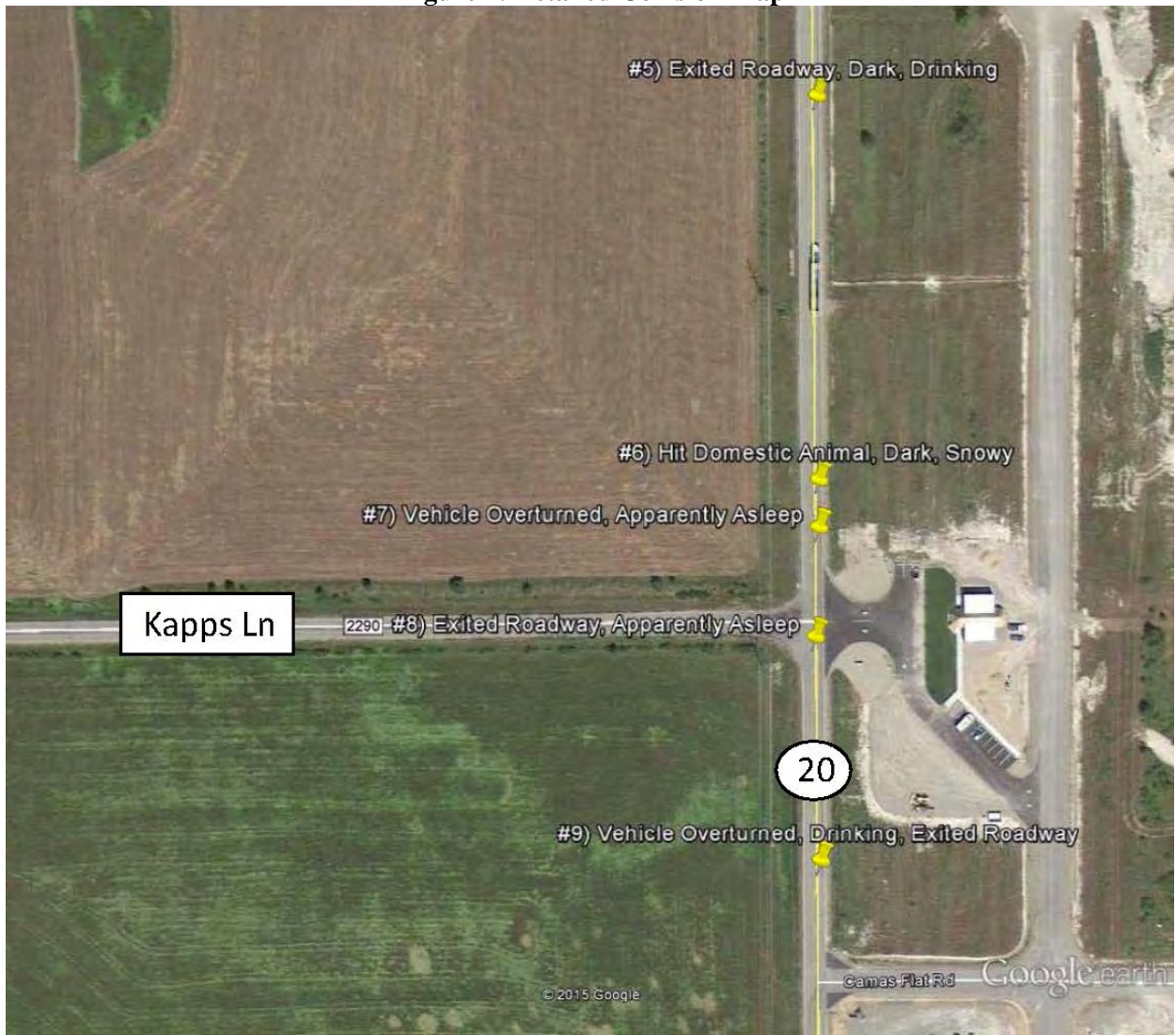


Figure 7 shows that there were two out of 5 drivers asleep and two drinking. There are also other minor clusters such as LaClerc Road at POW Wow Park and SR-20 at Tacoma Creek Road.

The collision data shows that the vast majority of collisions were single vehicles not at intersection with most occurring during day light hours. Sleep, alcohol, distracted driving and exceeding safe speed covered nearly all of the primary causes. The collision type and contributing circumstances are summarized in Table 1.

**Table 1: Collision Type and Contributing Circumstance**

	<b>Date</b>	<b>Weather</b>	<b>Collision Type</b>	<b>Contributing Circumstance</b>
1	9/24/2011	Dry	Rear-End	Follow Too Closely
2	11/25/2011	Ice	Vehicle Overturned	None
3	8/15/2010	Dry	Over Embankment	Apparently Asleep
4	10/11/2012	Dry	At Angle	Inattention
5	10/25/2010	Wet	Roadway Ditch	Alcohol
6	11/21/1011	Snow/Slush	Domestic Animal	None
7	7/17/2010	Dry	Vehicle Overturned	Apparently Asleep
8	8/11/2013	Dry	Earth Bank or Ledge	Apparently Asleep
9	3/24/2013	Dry	Vehicle Overturned	Alcohol
10	7/13/2011	Wet	Tree or Stump	Operating Defective Equipment
11	12/11/2012	Ice	Roadway Ditch	Exceeding Reasonable Safe Speed
12	6/9/2012	Dry	Guardrail – Face	Alcohol
13	1/21/2010	Dry	At Angle	Did No Grant Right of Way
14	11/22/2010	Snow/Slush	Other	Exceeding Reasonable Safe Speed
15	1/1/2015	Ice	Tree or Stump	Alcohol
16	7/13/2010	Dry	Fence	Over Center Line
17	3/21/2010	Dry	Guardrail – Face	Other
18	5/6/2014	Dry	Earth Bank or Ledge	Inattention
19	1/4/2011	Snow/Slush	Guardrail – Face	Exceeding Reasonable Safe Speed
20	7/16/2013	Dry	Earth Bank or Ledge	Exceeding Reasonable Safe Speed
21	12/21/2014	Wet	Vehicle Overturned	Driver Interacting with Passenger
22	3/1/2010	Dry	Guardrail – Face	Operating Defective Equipment
23	12/31/2014	Snow/Slush	Roadway Ditch	Unknown Drive Distraction

## 5. STAKEHOLDER INPUT

Through the stakeholder process the stakeholders provided information on numerous safety issues that were not identified during the collision data review. These issues ranged from providing adequate signage and access for emergency responses to improving roadway signage and providing improved pedestrian and bicycle connectivity. These stakeholder identified issues are categorized and summarized below.

### 5.1 EMERGENCY ACCESS

There are three main topics that fall under “Emergency Access” that were identified during the stakeholder process:

1. Roadway Signage and Access
2. Emergency Egress
3. Ambulance
4. Residential Driveway Design and Condition Issues

#### 5.1.1 Roadway Signage and Access

Emergency access within the Kalispel Reservation currently depends significantly on local knowledge of existing staff. Street name signage, especially discerning between private streets and driveways, is limited throughout the reservation. The Kalispel Tribe of Indians have worked to try and provide address numbers to identify residences, but the lack of street name signage can be detrimental if the institutional knowledge that currently exists among emergency response staff is lost. Additionally, there are several roadways within the reservation that are overgrown and have severely limited or no access at all. The Kalispel Fire Department undertook a survey of roads on the Reservation, concentrating on those that provide key fire and emergency response access. Approximately 5.4 miles of fire access roads on the reservation are inaccessible even to specialized fire response equipment. These factors can lead to diminished emergency response times.

#### 5.1.2 Emergency Egress

There are two key emergency egress routes that are currently not passable by standard vehicles. One emergency egress point provides a second emergency egress access southward from the Pow Wow area and provides an emergency egress from the area if the access along Pow Wow Park Drive to LeClerc Road is blocked. This access is especially important during large events when thousands of people can be in the Pow Wow area with only a single passable route for egress. The second emergency egress route leads eastward from the Tribal Headquarters and surrounding residences to Kings Lake Road. This emergency egress route provides an alternative access to LeClerc Road in the event of fire, flooding or other disaster. Neither of these routes could be traveled by a typical vehicle and therefore leave these areas without suitable secondary emergency access.

#### 5.1.3 Ambulance

The Kalispel Reservation is over 30 minutes by vehicle to the nearest hospital and does not have adequate resources on the reservation to provide sufficient trauma response. Several of the emergency response vehicles have high mileage and cannot adequately serve as an ambulance type vehicle. The Tribe’s current ambulance has exceeded its mileage-based useful life and a new ambulance is needed as soon as

possible. The Kalispel Tribe of Indians has been trying unsuccessfully for several years to apply for grants to obtain an ambulance to trauma response from an incident on the reservation to the hospital. This lack of an ambulance limits the emergency response capabilities of the Kalispel Tribe of Indians.

#### **5.1.4 Residential Driveway Design and Condition Issues**

Residential driveways within the Kalispel Tribal Reservation were identified as a concern and priority of the Kalispel Tribal Council and Community Stakeholders due to health and safety concerns. Many of the residences located on the reservation have design, access, and condition issues that pose increased safety risks to those living in the homes. Many of the reservation driveways enter and exit off of LeClerc Road, which is 2-lane rural roadway that has numerous horizontal and vertical curves that have limited lines of sight for oncoming traffic. Addressing the need to redesign and/or relocate some of these, would greatly reduce potential safety risks as well as improve access for emergency responders. Addressing and/or improving the surface conditions of many of the driveways would also provide significant benefits for residents, transit, and emergency responders. Tribal Council plans to investigate residential driveways as an additional way of decreasing health and safety risks for those living on the reservation.

### **5.2 ROADWAY SIGNAGE AND DESIGN**

The major access road within the Kalispel Reservation is LeClerc Road. This roadway is a 2-lane rural roadway that provides access to residences, the Tribal Headquarters and cultural areas. The roadway consists primarily of two 10-foot to 12-foot lanes and shoulders varying in width from approximately 6 feet to less than 1 foot. The roadway also includes numerous horizontal and vertical curves, with some curves potentially not meeting current design standards. There are ditches typically present along the shoulders. LeClerc Road is not only a major roadway for vehicles, but it also serves as the only contiguous link for pedestrians and bicycles to and through the reservation. The roadway sees increased bicycle usage during the summer since it is part of the United States Bicycle Route (USBR) 10 and also provides access to Canada. All of these competing uses and roadway features can lead to safety issues since there is inadequate signage to warn vehicles of other users and roadway features (curves, narrow shoulders, driveways, etc.).

Of significant concern is the major bridge leading to the Kalispel Reservation. The main route to the Kalispel Reservation is via SR-20 and the E 5<sup>th</sup> Street /Kings Lake Road Bridge over the Pend Oreille River. This bridge is old and still has sections supported by wood pilings. Additionally, the bridge is approximately 22-feet wide and does not include any pedestrian or bicycle facilities. The bridge also provides a route for necessary utilities to cross the river. The age of the bridge, shared use and utility corridor make the bridge a significant connection point that is in need of being replaced to ensure adequate pedestrian and bicycle facilities and ensure this key access to the Kalispel Reservation is maintained.

### **5.3 PEDESTRIAN AND BICYCLE FACILITIES**

The major roadway in the Kalispel Reservation, LeClerc Road, serves as the major routes for vehicles, pedestrians and bicycles. LeClerc Road also connects to the major crossing of the Pend Oreille River that connects the Kalispel Reservation with SR-20. Input from tribal members identified that they would like to walk within the reservation, but are limited due to a lack of pedestrian facilities. LeClerc Road is also identified as USBR 10 and sees increased bicycle activity during the summer months.

There is also a major pedestrian crossing of LeClerc Road at the Tribal Headquarters. Some type of pedestrian crossing is necessary since there is residential on the east side of LeClerc Road and the Tribal Headquarters, which includes education and medical services. Currently the pedestrian crossing is a striped and signed crosswalk. Any crosswalk design will need to account for the lack of pedestrian facilities currently along LeClerc Road and the grade differences on both sides of LeClerc Road.

The Kings Lake Road Bridge, which provides the only access to Usk, has no pedestrian facilities attached to it, forcing pedestrians and bicycles to use the traffic lane to cross the river to access the services and residences in Usk.



## 6. RESULTS

The general policy that the collision data shows are all consistent with Washington States Target Zero 2013:

- Education – Give drivers the information to make good choices, such as not driving while impaired, wearing a seatbelt, and not driving while too tired.
- Enforcement – Use data-driven analysis to help law-enforcement officers pinpoint locations with a high number of fatal and serious-injury collisions related to driver behaviors, such as speeding and impairment.
- Engineering – Design roads and roadsides using practical, near term solutions to reduce collisions, or severity of collisions such as rumble strips and wider edge striping

Based on the detailed collision data and information from the stakeholders, the following policies are proposed:

### 6.1 EDUCATION

#### *Data Results*

High number of vehicles leaving the road due to sleeping, alcohol and speeding

#### *Proposed Policy*

- Driver education and additional warning signs to increase understanding of dangers of driving while tired and work to change the culture of sleepy or under influence driving. Identify a single champion with council backing to continue to coordinate with the agencies for transportation safety education, such as emergency services chief.
- Develop a plan to work with local businesses such as the casino and gas station to have information on variable message signs to get out the message.
- Work with schools, local jurisdictions, rest area management and tribal employers to get out the message about tired, intoxicated and distracted driving.

#### *Data Results*

Higher speeds increased severity of collisions.

#### *Proposed Policy*

- Increased number of speed feedback signs to educate drivers that they are speeding.
- Develop a plan to work with local businesses such as the casino and gas station to have information on variable message signs to get out the message and sponsorship for cost of signs.

- Work with local schools, boys and girls club and local jurisdictions to get out the message about vehicle speed.
- Have a transportation safety stand at local events such as POW Wow, etc.

### ***Data Results***

Increased number of fatigue and alcohol related accidents.

### ***Proposed Policy***

- Increase coordination with agencies to understand what options for tired or inebriated drivers there may be, such as rest areas, free coffee, transit, drive home services (<http://www.drinkinganddriving.org/designated-driver-services/>), etc.

### ***Data Results***

Disproportionate high level of middle age driver collisions.

### ***Proposed Policy***

- Continue successful education for parents/guardians before their teens become drivers, but also include also importance for parents to set the example (i.e. kids teach parents and older siblings).
- Work with clubs and other institutions (such as churches) to get the word out to middle aged people.

## **6.2 ENGINEERING**

### ***Data Results***

High number of leaving the road collisions.

### ***Proposed Policy***

- Conduct a roadway sign inventory and replace signs as needed to meet new MUTCD requirements.
- Complete road safety audit near the three cluster locations:
  - SR-20 for several miles north and south from Kapps Lane.
  - LeClerc Road north and south of Pow Wow Park Road
  - SR-20 in the local vicinity of Tacoma Creek Road



- Complete speed survey along the areas thought to have speeding and provide real time speed feedback message signs at key locations where the 85<sup>th</sup> percentile speed is 10% or more over the advisory or posted speed limit
- Provide variable message signing to cover alcohol, tired driving, distracted driving, speeding, etc.
- Provide appropriate curve signage (curve warning signs, chevrons, etc.)
- Increase the amount of shoulder along LeClerc Road to a minimum of 4 feet
- Implement a policy to require rumble strips, pavement markers, safety edge or similar on all new roads under the tribal influence area
- Provide rumble strips, ground-in pavement markers or similar along SR-20 and LeClerc Road to warn drivers when they deviate from their lane

#### ***Data Result***

Lack of pedestrian and bicycle facilities

#### ***Proposed Policy***

- Improve LeClerc Road and the E 5<sup>th</sup> Street/Kings Lake Road bridge to include pedestrian/bicycle facilities
- Provide separated pedestrian/bicycle facilities adjacent to LeClerc Road and E 5<sup>th</sup> Street/Kings Lake Road bridge
- Enhance pedestrian crossing of LeClerc Road.

### **6.3 ENFORCEMENT**

#### ***Data Result***

Concern by stakeholders that as roads are improved to standards (greater sight distance, shoulders clear zones, etc.), speeds will increase.

#### ***Proposed Policy***

- Coordinate with local law enforcement and engineering staff for the monitoring of speeds at newly improved roadways.
- Provide additional resources for collision data collection and for follow-up of potential injury or fatality collisions.
- Prioritize and develop a policy for traffic calming implementation either at design stage or post construction.

## **6.4 EMERGENCY RESPONSE**

### ***Data Result***

Lack of signage reduces response times

### ***Proposed Policy***

- Post street signs and house numbers to be visible to emergency responders.
- Educate tribal members on how these signs increase the safety on the Kalispel Reservation.

### ***Data Result***

Decreased trauma response

### ***Proposed Policy***

- Acquire an ambulance.
- Share an ambulance with a surrounding jurisdiction or other entity.
- Provide space for trauma helicopter landing.



Kalispel Tribe of Indians  
P.O. Box 39  
Usk, WA 99180

(509) 445-1147  
(509) 445-1705 fax  
www.kalispeltribe.com

## RESOLUTION

- WHEREAS, the Kalispel Business Committee is the duly Constituted governing body of the Kalispel Tribe by the authority of the Constitution and By-Laws for the Kalispel Tribe; and
- WHEREAS, under the Constitution and By-Laws of the Tribe, the Kalispel Business Committee is charged with the duty of protecting the health, security and general welfare of the Kalispel Tribe and all reservation residents; and
- WHEREAS, the Kalispel Tribe is actively addressing transportation safety issues on the Reservation, and the Tribal Council supports continuing efforts to work closely with the Transportation Department of the Bureau of Indian Affairs to provide products and to ensure sustained funding for the Tribe's transportation planning process; and
- WHEREAS, a Tribal Transportation Safety Plan (TTSP) is an integral part of securing safety funds and establishing the Tribe's Transportation Project Prioritization; and
- WHEREAS, the Tribe certifies the accuracy of the Tribal Transportation Safety Plan (TTSP) and other documents submitted to the Bureau of Indian Affairs; and
- WHEREAS, Tribal approval of the Tribal Transportation Safety Plan (TTSP) for inclusion into the Bureau of Indian Affairs, Portland Area Office Plans as required to secure funding for and apply to Tribal Transportation Safety Program funds.
- NOW THEREFORE, BE IT RESOLVED that the Kalispel Tribe hereby approves the attached Kalispel Tribe of Indians FY2016 Tribal Transportation Safety Plan (TTSP) and instructs the Tribal Staff to forward the approved documentation to the Bureau of Indian Affairs as soon as practical.

KALISPEL RESOLUTION NO. 2016-55



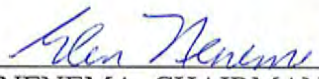
Kalispel Tribe of Indians  
P.O. Box 39  
Usk, WA 99180


BE IT ~~FURTHER~~ RESOLVED that the Kalispel Tribe requests that the Bureau of Indian Affairs includes the projects described in Attachment A in the Bureau of Indian Affairs Tribal Transportation Safety Plan (TTSP) and /or update said Program to reflect any necessary changes.

(509) 445-1007  
(509) 445-1705 fax  
www.kalispeltribe.com

**CERTIFICATION**

The Kalispel Business Committee adopted the foregoing RESOLUTION at a meeting held on the 7 day of June, 2016, at the Tribal office on the Kalispel Indian Reservation near Usk, Washington, with the required quorum present by a vote of 4 FOR and 0 AGAINST.

  
\_\_\_\_\_  
GLEN NENEMA, CHAIRMAN  
KALISPEL BUSINESS COMMITTEE  
(TERM EXPIRES JUNE 2017)

  
\_\_\_\_\_  
DARREN HOLMES, SECRETARY  
KALISPEL BUSINESS COMMITTEE  
(TERM EXPIRES JUNE 2019)