

# TRANSPORTATION SAFETY PLAN

*Bay Mills Indian Community*

Brimley, Michigan



July 2022

Tom Fronk BIA Midwest Region

The Bay Mills Indian Community is committed to improving the overall safety of its transportation system. This Transportation Safety Plan has been developed with input from a variety of agencies and from individuals within the Community in cooperation with the Bureau of Indian Affairs.

Bay Mills Indian Community will prioritize our needs and seek funding opportunities to improve roadway safety issues as our community profile aligns with the National Roadway Safety Strategy. The NRSS is to advance equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality.<sup>1</sup>

The Eastern Upper Peninsula of Michigan, a tri-county area of Chippewa, Luce, and Mackinac counties, population region is primarily white, with a significant Native American minority, 14% compared to less than 1% of the total U.S. population.<sup>2</sup>

Accordingly, per U.S. EDA criteria, our plan falls within an economically distressed community. Chippewa, Luce, and Mackinac Counties service areas of the Bay Mills Indian Community have higher unemployment rates than the national rate and lower per capita income than the nation.<sup>3</sup>

People who are American Indian and Alaska Native have roadway fatality rates more than double the national rate on a per population basis.<sup>4</sup>

This verifiable and measurable data further support our Tribe's need to make safety improvements as outlined within this Transportation Safety Plan.

Our strategy is to conduct a safety analysis with a timeline to address safety concerns. BMIC has a goal of zero roadway fatalities and reducing serious injuries. This goal applies to our roadways for all modes of roadway traffic, including all motorized vehicles, bicycles, and pedestrian traffic.

Our task is to meet annually to analyze crash data reports, incident reports, measured outcomes, and any other information to determine whether we are meeting our target goal of reducing injuries and zero roadway fatalities. BMIC will also identify new safety concerns that impact our community roadways.

The direct participants in the transportation safety planning effort are listed in Attachment B. The plan outlines existing safety programs and policies and identifies issues and projects that can be implemented to further improve transportation safety for the Bay Mills Indian Community, its people, and visitors to the tribal lands and facilities.

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<sup>1</sup> <https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government>

<sup>2</sup> <http://www.eup-planning.org/2020-2025-ceds-general-regional-data>

<sup>3</sup> <https://www.statsamerica.org/distress/dist.aspx>

<sup>4</sup> <https://www.transportation.gov/nrss/usdot-national-roadway-safety-strategy>

The Bay Mills Indian Community has a number of safety programs and has developed relationships with other government entities to help assist in safety improvements:

- There is a car seat program put on yearly by the Tribal Health Clinic.
- The Tribal College provides classes for CPR.
- The speed limit for the Bay Mills residential areas is set at 15 MPH.
- Bay Mills leadership got the speed limit for Lakeshore Drive set to 35 MPH where it goes through tribal areas.
- Police compile injury crash info and submit online to the state.
- A Road Safety Audit for Lakeshore Drive was completed in 2017.
- In 2016 the Tribe applied for and received a safety grant from the FHWA Tribal Transportation Program to build a trail along part of Lakeshore Drive.

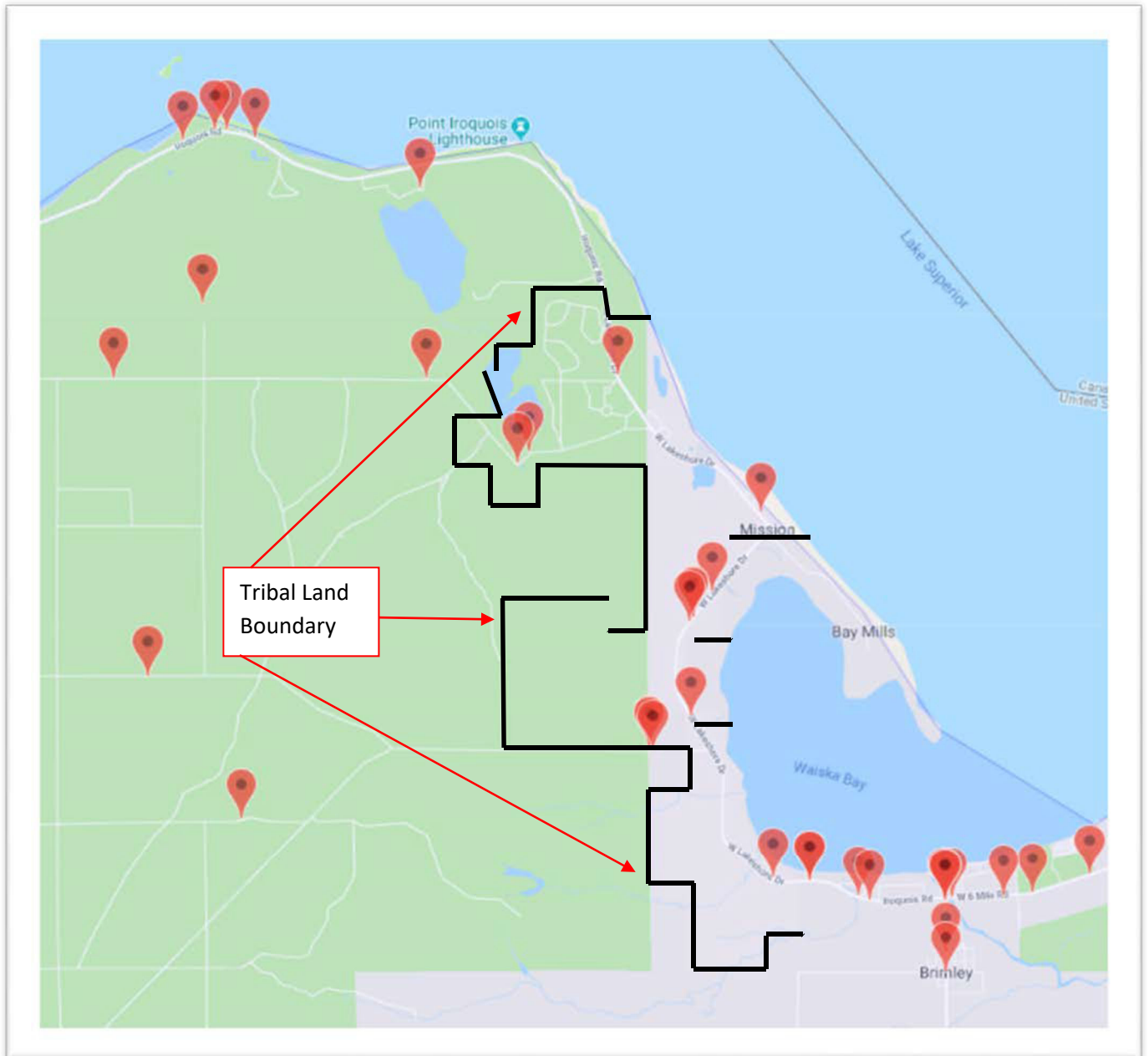
In an effort to further enhance safety efforts and save lives, the following opportunity areas have been identified as a priority for the Bay Mills Indian Community over the next three to ten years. Prioritization is based on most immediate safety needs.

# BAY MILLS INDIAN COMMUNITY

## Layout of Housing, Community, and Transportation Features



## Injury Crashes 2008-2018



**Description and Strategic Linkage:** Lakeshore Drive is the thoroughfare that provides the primary access to the Bay Mills Community tribal lands. Numerous and frequent driveways and intersections cause conflicts especially in the northern half of the Community. A sharper than normal curve increases driving hazards, as does a busy tourist area at the Veterans' Memorial and the Old Indian Burial Grounds.

**Strategy:** The following strategies are expected to reduce vehicle conflicts and crashes in the future by altering the roadway, roadway access, and surrounding elements.



Enlarge 90-degree curve just north of the intersection of Lakeshore Drive and Bay Mills Point Rd.

- **Issue Champion:** Justin Carrick
- **Implementation:** Within six months, coordinate with Chippewa County Road Commission and Tribe purchasing right of way and obtaining funding for design and construction of a re-aligned roadway curve. In the short-term coordinate clearing brush to increase curve visibility and placing rocks.
- **Timeframe to Achieve:** 5-10 years

Defining pedestrian circulation and parking near Veterans' Memorial and Old Indian Burial Grounds

- **Issue Champion:** Justin Carrick
- **Implementation:** Within three months, coordinate with Chippewa County Road Commission and Tribe ways to designate parking for visitors to the area and pedestrian connections to Veterans' Memorial and Burial Grounds.
- **Timeframe to Achieve:** 3-5 years

Consolidating the current two-part access of eastbound Tower Road to Lakeshore Drive

- **Issue Champion:** Justin Carrick
- **Implementation:** Within three months, coordinate with Chippewa County Road Commission and Tribe the process of closing off the southern access and finding funds for design and construction of a consolidated roadway intersection.
- **Timeframe to Achieve:** 3-5 years

Defining and staggering vehicular access points to Lakeshore Drive

- **Issue Champion:** Justin Carrick
- **Implementation:** Within six months, coordinate with Chippewa County Road Commission and Tribe concerning the number and proximity of driveways and access points in the Mission area of Lakeshore Drive.
- **Timeframe to Achieve:** 5-10 years

Location of safety issues on Lakeshore Drive



## Enlarge sharp curve on Lakeshore Drive to 350 ft radius



Currently the curve on Lakeshore Drive has a curve radius of about 300 ft. Design standards recommend a 350 ft radius for a 35 MPH speed limit.

**Description and Strategic Linkage:** Pedestrians should have a separate path of travel from motor vehicles.

**Strategy:** The following strategies are expected to reduce pedestrian/vehicle conflicts.

Construct sidewalks in residential areas.

- **Issue Champion:** Justin Carrick
- **Implementation:** Within nine months, inventory residential locations without sidewalks and budget for their construction.
- **Timeframe to Achieve:** 5-10 years

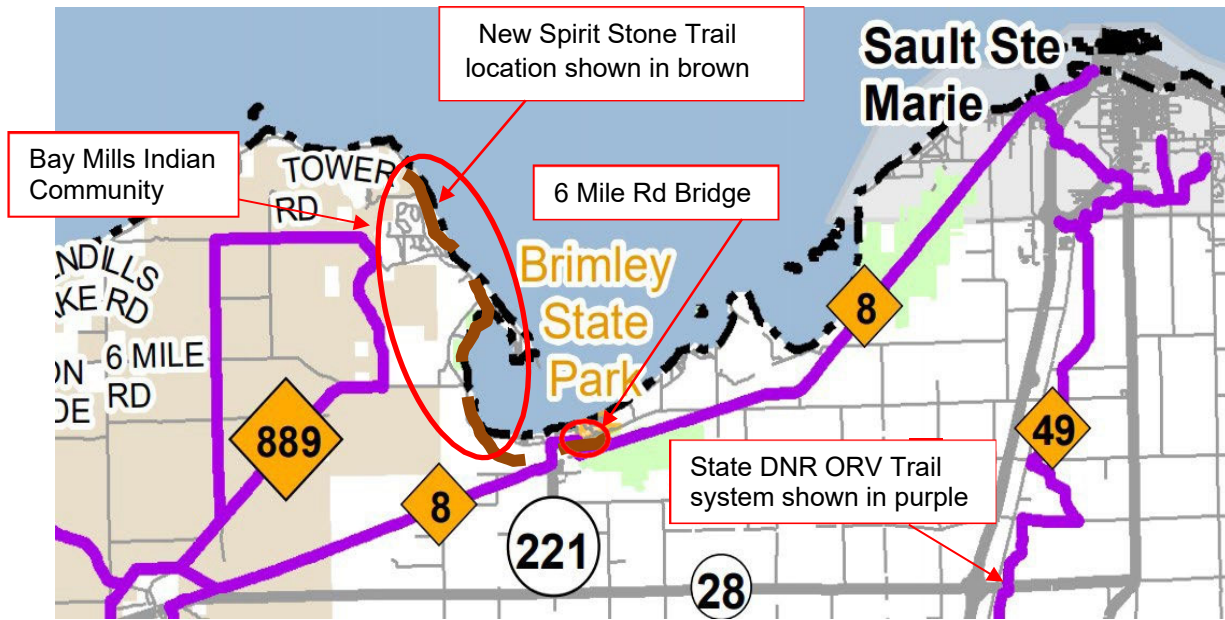


# Off-Road Vehicle (ORV) Connections over Waishkey River in Brimley



ORV/snowmobile trail at 6 Mile Rd over river.





**Description and Strategic Linkage:** The current trail crossing over the Waishkey River is 6 Mile Rd bridge and is a raised concrete walk on each side of the bridge, about 4 ft wide. The narrow width forces pedestrians off the raised walk in order to let ORVs pass, and often means that ORV riders must walk in the roadway while holding their vehicles up on the concrete walk.

**Strategy:** The following strategies are expected to reduce vehicle conflicts and crashes in the future by providing a new facility for ORVs to cross the river that is separate from the flow of traffic and pedestrians.

Pursue trail crossing at a new bridge facility designated just for trail users

- **Issue Champion:** Justin Carrick
- **Implementation:** Within six months, coordinate with local snowmobile club and state DNR to pursue trail right-of- way and funding for a new bridge for the trail crossing.
- **Timeframe to Achieve:** 3-7 years

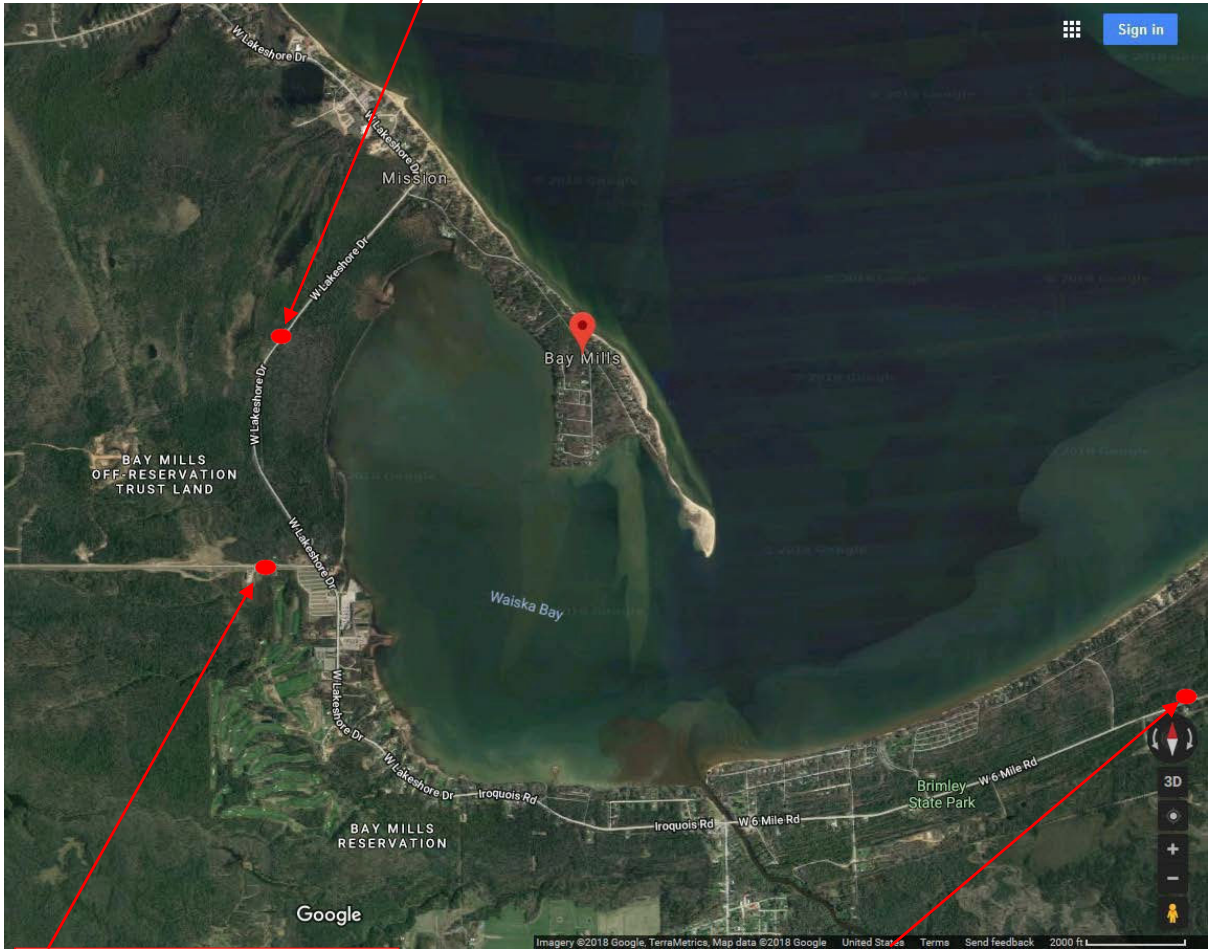
Pursue a redesigned 6 Mile Rd bridge trail crossing, using either the existing bridge or a replacement bridge

- **Issue Champion:** Justin Carrick
- **Implementation:** Within six months, coordinate with Chippewa County Road Commission and State DOT.
- **Timeframe to Achieve:** 3-7 years



# Fatal Snowmobile Crashes near main Tribal Community 2008-2018

Snowmobile struck by car crossing Lakeshore Drive at trail crossing, February 2010



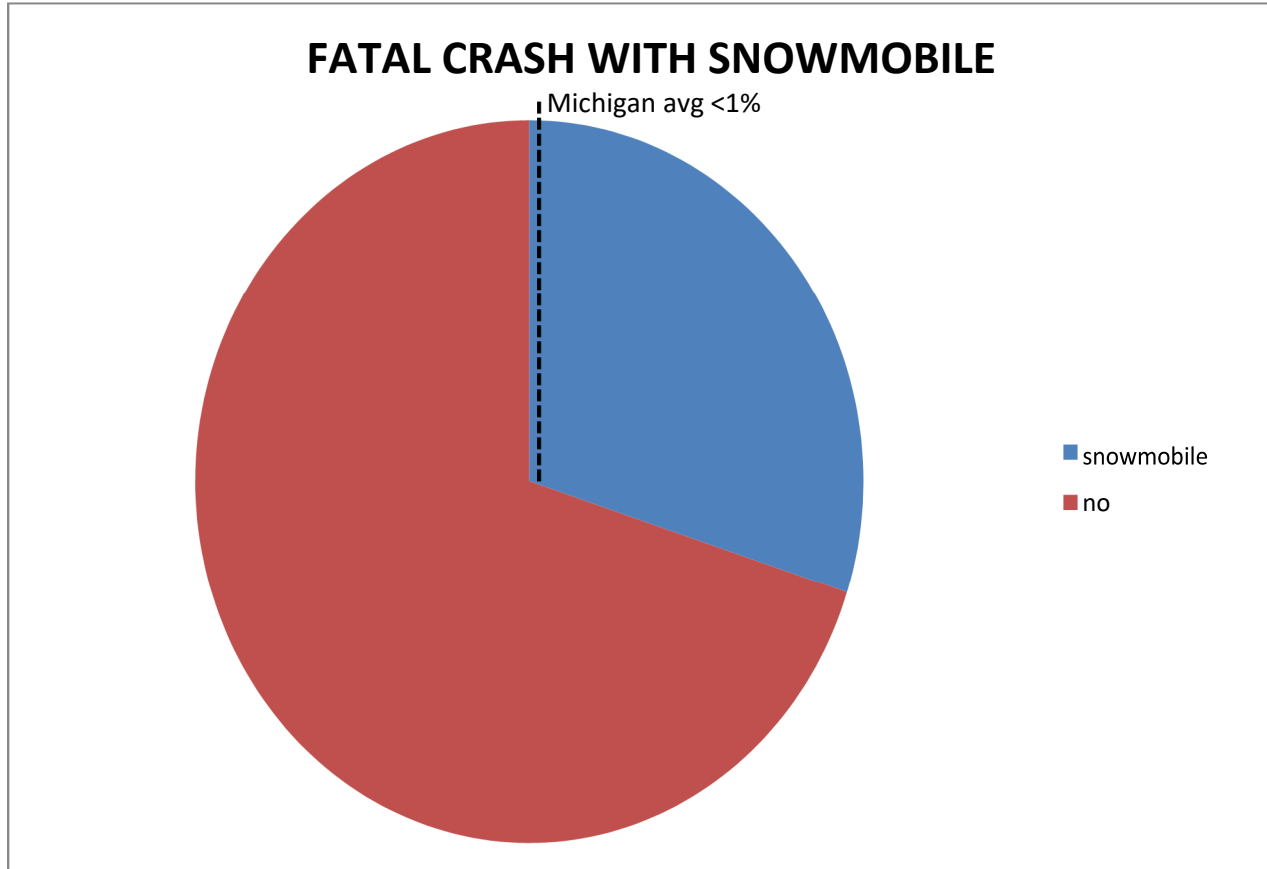
Snowmobile and car hit traveling in opposite directions on Plantation Rd. February 2016

Snowmobile leaving driveway hits car traveling on 6 Mile Rd. February 2008

**APPENDIX:**

**KEY STATISTICS FOR FATAL CRASHES, FROM 2008 TO 2018**

Here is a series of critical crash statistics for the Bay Mills Indian Community. Statistics include drivers who are both tribal members and non-tribal people.

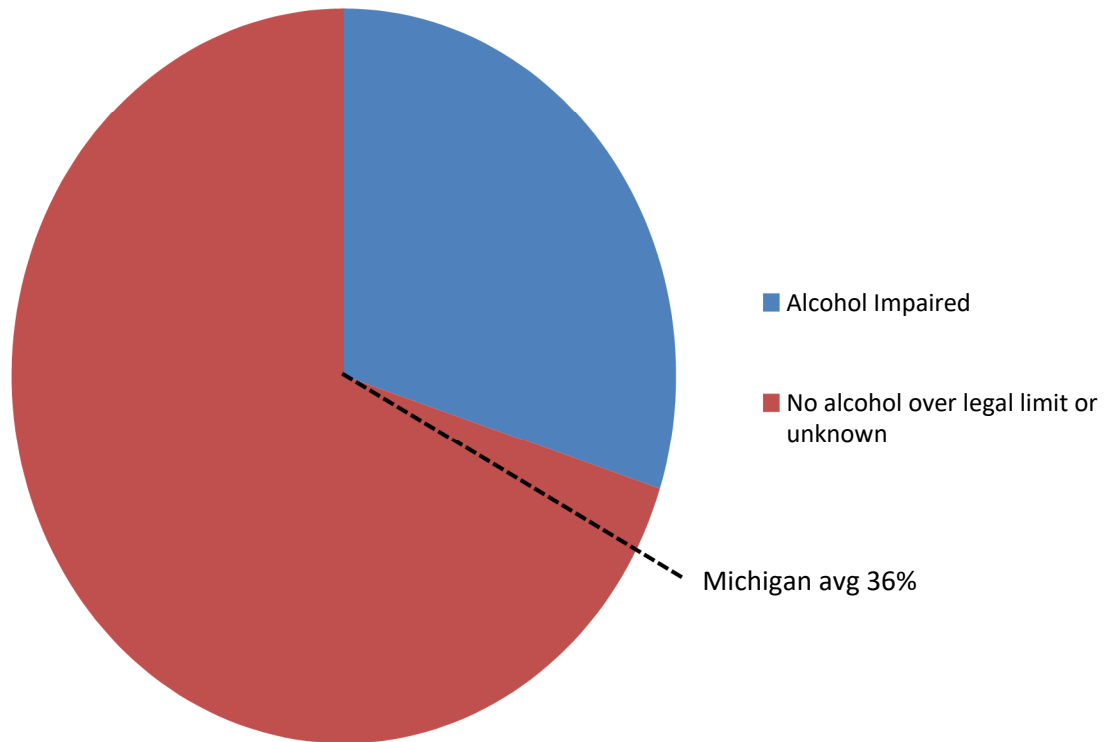


30% of the fatality crashes in the Bay Mills Indian Community involved snowmobiles. Statewide less than 1% of crash fatalities are from crashes involving snowmobiles<sup>5</sup>

<sup>5</sup> Michigan Traffic Crash Decade-At-A-Glance 2009-2018, Criminal Justice Information Center, Michigan State Police, Lansing MI, August 27, 2019



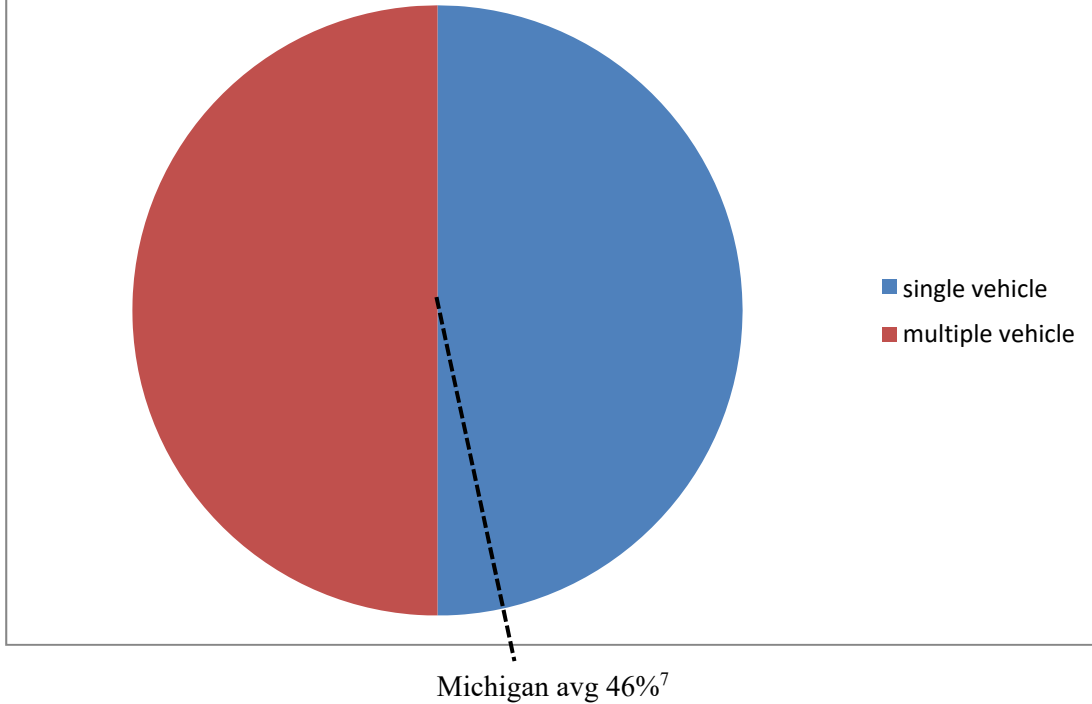
## IMPAIRED BY DRUGS OR ALCOHOL OVER LEGAL LIMIT



For Michigan as a whole in 2017, 36% of fatalities<sup>6</sup> were related to drivers impaired by alcohol. 30% of fatalities in the Bay Mills Indian Community from 2008-2018 were related to drivers impaired by alcohol, a slightly lower rate.

<sup>6</sup> *Traffic Safety Crash Facts 2019: Traffic Safety Facts*, National Highway Traffic Safety Administration, Washington, DC, 2015.

## FATALITY CRASHES BY NUMBER OF VEHICLES



Half of the fatalities on the Bay Mills Indian Community were single car or “run off the road” crashes. There are four main causes of run off the road crashes:

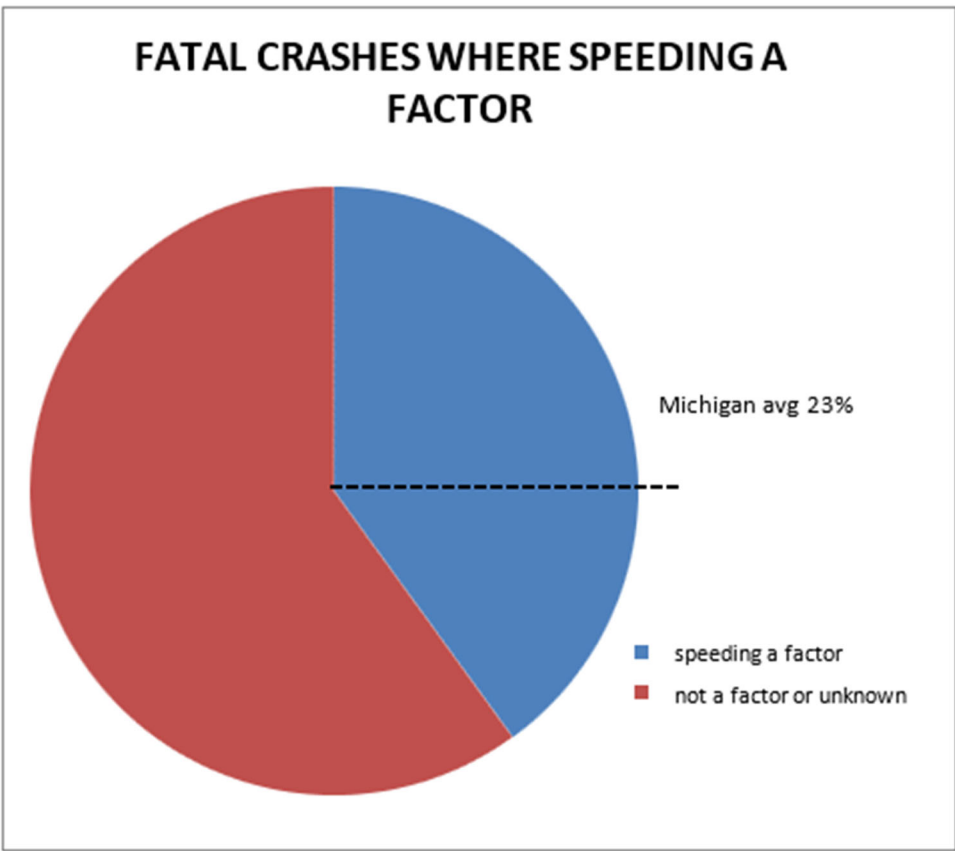
1. Distracted driving
2. Alcohol or drug impairment
3. Speeding, driving too fast for a curve, or overcompensating
4. Falling asleep or a sudden medical condition

Corrective roadway improvements to reduce run off the road impairment include:

- A. Edge or centerline rumble strips
- B. Chevrons or other signage for curves
- C. Reflectorized pavement markings
- D. Widen shoulders

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<sup>7</sup> 2018 Year End Traffic Crash Statistics, Michigan Department of State Police, Lansing MI, March 28, 2019

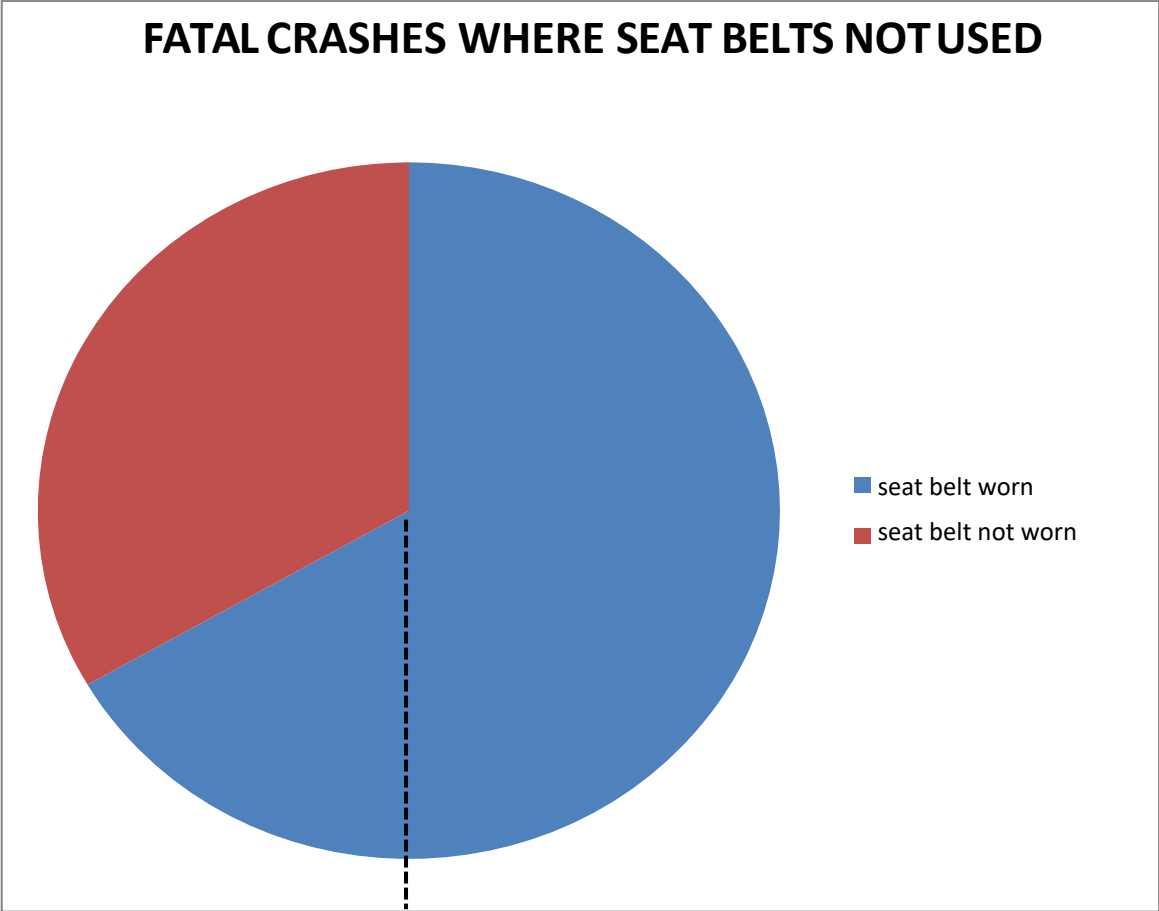


Michigan Avg 23%

Speeding was a factor in 40% of fatalities on the Bay Mills Indian Community between 2008 and 2018. Statewide for Michigan, 23% of fatalities<sup>8</sup> were in speeding related crashes.

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<sup>8</sup> *Traffic Safety Crash Facts 2019: Traffic Safety Facts*, National Highway Traffic Safety Administration, Washington, DC, 2015.

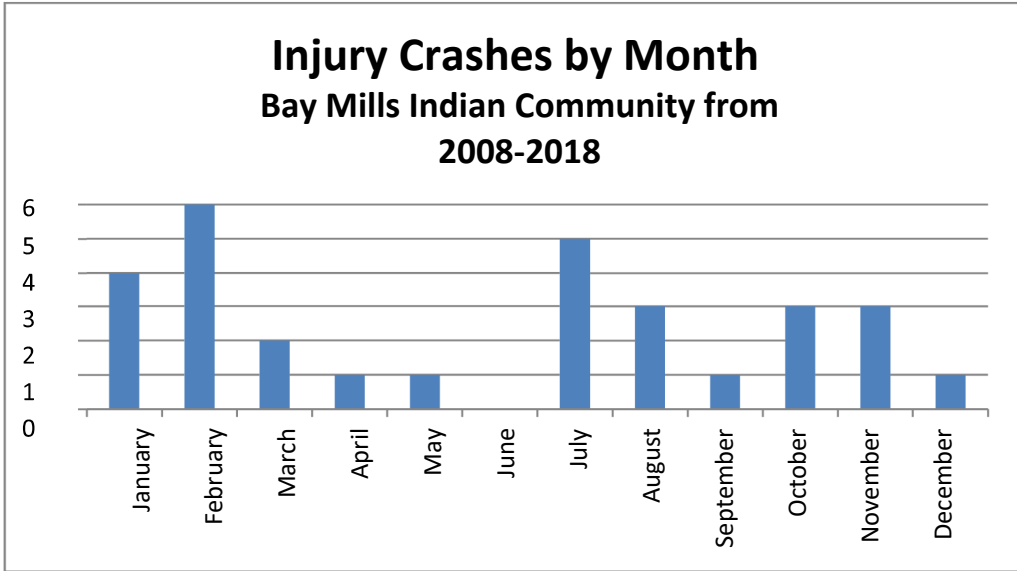


Michigan avg 54%

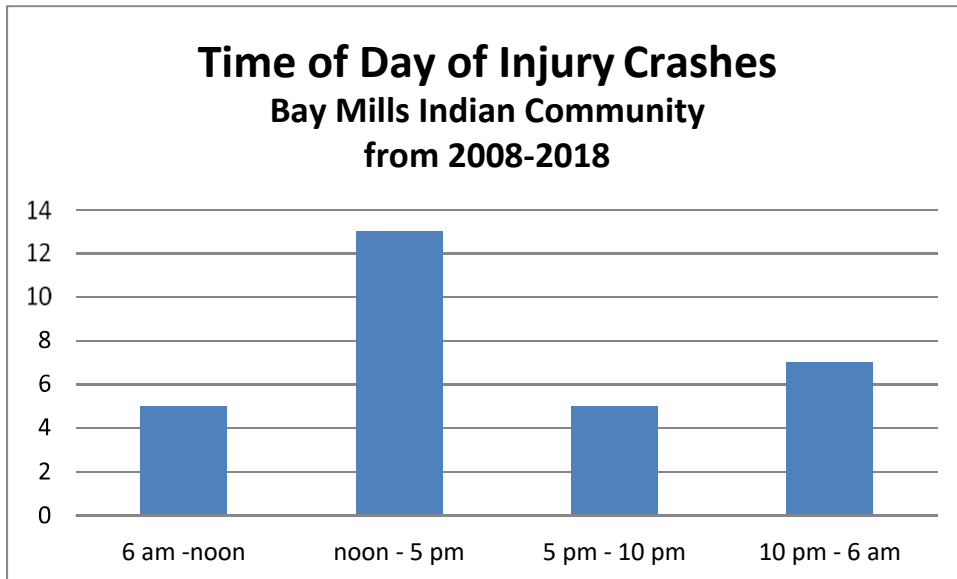
33% of fatalities in crashes on the Bay Mills Indian Community were people who were not using seat belts. Statewide for Michigan 54% of fatalities are people who were not wearing seat belts.<sup>9</sup> A study of seat belt wearing rates for the Indian Community could be conducted to verify the seat belt utilization rates on the Indian Community. Public Service Announcements could be used to increase seat belt use even more.

<sup>9</sup> *Traffic Safety Crash Facts 2019: Traffic Safety Facts*, National Highway Traffic Safety Administration, Washington, DC, 2015.



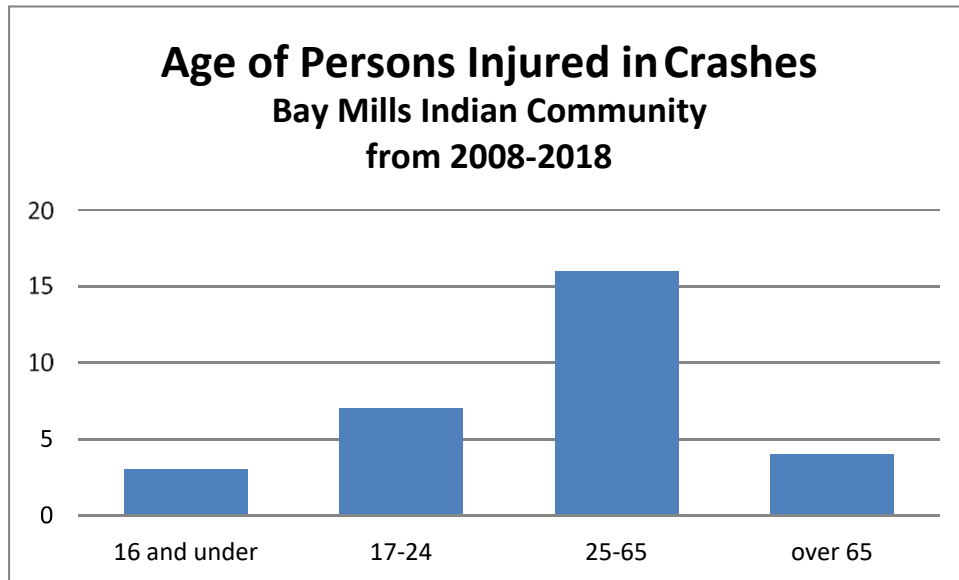


Fatal crashes on the Bay Mills Indian Community peak in the winter and July/August. Public Service announcements aimed at reducing crashes could be timed to begin in the spring and fall for maximum effectiveness.



The peak time for crashes for the Bay Mills Indian Community between 2008 and 2018 was in the afternoon.

## INJURY CRASHES AT THE BAY MILLS INDIAN COMMUNITY BY AGE



### PEDESTRIANS

There was one pedestrian fatality on the Bay Mills Indian Community between 2008 and 2018. For Michigan, 15% of fatalities are pedestrians<sup>10</sup>. This fatality occurred on Lakeshore Drive just south of the intersection with Bay Mills Point Rd.

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<sup>10</sup> *Traffic Safety Crash Facts 2019: Traffic Safety Facts*, National Highway Traffic Safety Administration, Washington, DC, 2015.

## ATTACHMENT A

### **Bay Mills Safety Plan Kick Off Meeting Agenda** *December 13, 2018*

9:00 a.m.	Introductions
9:10 a.m.	Defining a Safety Management System SMS Background and Overview FHWA SMS Implementation Plan Discussion of Tribal Safety Plans Q&A
10:00 a.m.	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) Documentation of existing programs and approaches
10:45 a.m.	Development of a Tribal Safety Plan Identification and Discussion of Safety issues and concerns Safety approaches to include Safety approaches to develop Integration with other safety plans
11:00 a.m.	Identification of implementation steps Identification of responsible parties/champions for specific elements Questions/Discussion of process and continued efforts
11:45 a.m.	Wrap Up

**Bay Mills Safety Plan  
Follow Up Meeting Agenda**  
*April 23, 2019*

- 9:00 a.m.                    Introductions
- 9:05 a.m.                    Review of items from previous meeting.
- 9:30 a.m.                    Review of safety fund project topics from kickoff meeting
1.        Intersection Improvements
    - Lakeshore Dr & Bay Mills Point Rd
    - Lakeshore Dr & Tower Rd
  2.        Roadway access & definition for Lakeshore Dr near Vet Memorial, Old Indian Burial Grounds, and College drives
  3.        ORV crossing of Waishkey River @ 6 Mile Rd
  4.        Any topics from the SMS tribal safety plan to expand into tribal project (see summary page 2)
  5.        Any other potential projects to consider
- 11:30 a.m.                    Wrap Up



**ATTACHMENT B**

December 13, 2018

**Bay Mills Indian Community  
Transportation Safety Plan  
Follow Up Meeting attendees**

<b>Name</b>	<b>Association</b>	<b>Position</b>
Derek Waldorf	MDOT	Transportation Engineer
Randy Touchtone	Bay Mills Public Works	Director
Sharon L Teeple	Bay Mills Indian Community	Policy Analysis
Wade Teeple	Bay Mills Community College	Off-Campus Coordinator
Brandon Kerfoot	Ojibwe Charter School	Transportation Supervisor
Justin C Carrick	Bay Mills Indian Community	Transportation Planner
Ron Carrick	Bay Mills Police Department	Lieutenant
Wanda Perron	Bay Mills Indian Community	Elder Member
Tom Fronk	BIA Civil Engineer	BIA

Main contact for the Band for safety planning:

Justin C Carrick  
906-248-8118  
jccarrick@baymills.org

April 23, 2019

**Bay Mills Indian Community  
Transportation Safety Plan Kickoff attendees**

<b>Name</b>	<b>Association</b>	<b>Position</b>
Andrew Perketttte	MDOT	Permits
Randy Touchtone	Bay Mills Public Works	Director
Sharon L Teeple	Bay Mills Indian Community	Policy Analysis
Wade Teeple	Bay Mills Community College	Off-Campus Coordinator
Tom Van Dorn	Chip. County Road Commission	Highway Engineer
Justin C Carrick	Bay Mills Indian Community	Transportation Planner
Ron Carrick	Bay Mills Police Department	Chief
Wanda Perron	Bay Mills Member	Elder
Tom Fronk	BIA Civil Engineer	BIA