AMERICAN INDIAN / ALASKAN NATIVE NEEDS ASSESSMENT FOR IMPLEMENTATION OF TEENS IN THE DRIVER SEAT® PROGRAMMING

Supported by a grant from General Motors

Submitted by

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Content

Summary

Through funding from General Motors, the Texas A&M Transportation Institute's Youth Transportation Safety (YTS) program explored delivering traffic safety education to American Indian/Alaskan Native (AI/AN) youth. The task focused on conducting a needs assessment to understand and explore implementation of the Teens in the Driver Seat (TDS) program to this underserved teen population. The team conducted data collection, focus groups, and analysis to review the problem, collected information from the community, then devised a plan of approach.

The AI/AN population and its communities face various barriers or complexities unmatched by other U.S. Citizens or states, which are derived from a variety of complexities, including less access to government funding and support. Additionally, culturally appropriate solutions and improved relations are sought after by this community. As of this report date, there is no widely available youth traffic safety programming. This gap provides an opportunity for programming focused on traffic safety, teen leadership, and healthy community growth developed with community input and structured for community deployment. YTS believes development and sustainment could be led by our team utilizing our expertise and subject matter experts from the health sector and Native American communities.

Development (year 2) would include programming with resources and activities and training workshops to deliver best-practices and foster partnerships with teens and local youth-serving adults within AI/AN communities. Deployment (year 3) would include a pilot program for selected communities and full deployment (year 4) would be offered to any community interested in the programming.

Introduction and Background

In YTS' over 20-year history, peer-to-peer programming has only briefly engaged with this historically underserved population, usually through existing programming that is overlayed upon teens who happen to be within an area that is grant funded. As the nation continued to see over-representation of injuries and crashes within this group, the YTS team began to question if the expertise we have built could be transferred to a culture we know regrettably little about. This funding allowed us to review this question and complete the following needs assessment with these guiding objectives:

1. Understand crash rates and causes among this population.
2. Categorize geographical areas of concentration for program consideration.
3. Scan existing teen resources and programs.
4. Examine potential community support and partners.
5. Develop an understanding of needs and barriers in these communities.
6. Determine needed program elements and resources to effectively promote peer-to-peer teen traffic safety messaging and outreach within these communities.
7. Provide any future deployment strategy for TDS within AI/AN teen communities.

Literature review

The following literature review covers traffic crash trends, safety needs, and transportation solution barriers or complexities for the AI/AN population.

In a recent 2022 report, *Evaluating Disparities in Traffic Fatalities by Race, Ethnicity, and Income,* findings suggest AI/AN people experience some of the most disparities under any measure, including being five times more likely to die walking than white people and three times as likely to die in passenger vehicles, per mile (Glassbrenner et al., 2022). AI/AN people have the highest traffic fatality rates per mile and per population, even when accounting for the amount of travel and mode of travel (Glassbrenner et al., 2022). Table 1 summarizes recent crash data and trends for the AI/AN population.

Crash data/trends	**Reference**
45% of AI/AN driver fatalities were alcohol-impaired (BACs of .08 grams per deciliter (g/dL) or above in 2018, the largest percentage across race-ethnicity groups studied.	2018 FARS data (Glassbrenner et al., 2022)
57% of AI/AN pedestrian fatalities were alcohol-impaired in 2018, the largest percentage across race-ethnicity groups studied.	2018 FARS data (Glassbrenner et al., 2022)
Almost 97% of the miles traveled by AI/AN people were in passenger vehicles.	2018 FARS data (Glassbrenner et al., 2022)
63% of AI/AN passenger car fatalities were unrestrained, the highest percentage across race-ethnicity groups studied.	2018 FARS data (Glassbrenner et al., 2022)
The highest death rates compared to other race-ethnicities were among AI/AN males ages 15–24, 25–34, 35–44, and 45–54 (range: 8.13–11.72).	(Naumann et al., 2013)
The highest death rates compared to other race-ethnicities were among AI/AN females ages 15–24, 25–34, 35–44, and 45–54 years (range: 2.29 to 4.17).	(Naumann et al., 2013)
During 1999– 2002, AI/AN children ages 1-9 and 10-19 had the highest rate of traffic death.	1992-2002 CDC's National Vital Statistics System (Bernard et al., 2007)
Native Americans are overrepresented in pedestrian fatalities: they made up 0.9% of the population but 2.3% of pedestrian fatalities.	1977-2016 FARS data (Schneider, 2020)

Table 1 Recent Crash Data and Trends for American Indian/Alaskan Native Population

Across various sources, it's been found that the highest priority for roadway safety in tribal lands is addressing reckless driving, specifically impaired driving, while also improving pedestrian

safety (Quick, 2019, Roll, 2021, Glassbrenner et al. 2022, Retting, 2021). Another high priority for reservation safety identified in the 2016 Tribal Transportation Safety Data Survey was seatbelt use (Quick, 2019).

Since alcohol-impaired driving is a major concern for this population, it was appropriate to understand drinking and alcohol use disorder among American Indians. Literature confirms AI/ANs generally drink more and are disproportionately affected by alcohol, having some of the highest rates of alcohol use disorders compared to other groups (Vaeth, 2017). There are also regional differences in drinking; for example the Northern Plains have higher rates of drinking (5+ drinks per day) compared to the Southwest (Vaeth, 2017). Family and peer influences, and emotional distress have been identified as perceived risk factors to substance use, abuse and dependence among the AI/AN population (Radin, 2015).

People walking in low-income communities are disproportionately represented in fatal motor vehicle crashes involving pedestrians (Smart Growth America, 2021). “Roadways without sidewalks are more than twice as likely to have pedestrian crashes as sites with sidewalks on both sides of the street,” (*Glassbrenner et al. 2022*). This points to why pedestrian safety infrastructure is so important for AI/AN communities who have more than 147,000 miles of roads in Indian Country that comprise the most underdeveloped roadway network (National Congress of American Indians, 2020).

The AI/AN population and its communities face various barriers or complexities unmatched by other U.S. Citizens or states. As reported by National Congress of American Indians in the 2020 report *Tribal Nations and the United States: An Introduction,* there are various complexities to be aware of that directly and indirectly affect transportation safety solutions. Those complexities include, but are not limited to:

1. Variance in tribal nation treaties with the U.S. Government, which means terms and provisions vary widely from nation to nation, including U.S. recognition and protection. 60% of tribal nations have organized under the U.S. Indian Reorganization Act of 1934, but this leaves 40% of tribes operating under no written constitution or their own detailed tribal code and unique government structure.

2. Tribal nations with Federal recognition come with federal benefits, like program funding. However, it's a complex process to become federally recognized, and it can take decades for applications to be reviewed.
3. Checkerboarding, a land-holding pattern, has left tribal nations' reservations scattered or fractioned, rendering the land less usable for economic development.

Due to these complexities, AI/AN tribal nations have less access to government funding and support. The National Congress of American Indians said the underfunding by the U.S. government is a "quiet crisis" (2020).

Across the board, the AI/AN community wants culturally appropriate solutions and improved relationships for effective interventions (Quick, 2019, Radin, 2015, Fan, 2019). Tribal nation treaties vary, which has created inter-jurisdictional coordination issues. About half of government employees reported having a standard method for state agency and tribal interactions, with the most common structure being a designated tribal liaison (Quick, 2019). However, there may be issues with governmental services and coordination without this structure. Another barrier that affects transportation safety is getting the full picture of crash data. Tribal law enforcement doesn't always share data with the state, nor do they want to, because they feel like this is "protected data sensitive to tribes," (Quick, 2019). Some of the best advice to overcome some of these barriers comes from Fan, Y. et al., who states, "the top two opportunities for advancing transportation equity include public engagement/relationship-building and coordination across all levels and sectors," (2019).

Culturally and linguistically appropriate solutions, such as teaching cultural values and beliefs, incorporating traditional healing methods through cultural activities, and education about the positive effects or outcomes of participation, may be best to promote healthier communities (Radin, 2015). One organization that is doing this well is the Boys and Girls Club of America Native Services, established in 225 sites and units nationwide and whose vision is "Strengthening Native youth's cultural identity through programming that explicitly promotes positive youth growth and development along critical cultural, social, emotional, intellectual, and physical dimensions through viable and sustainable organizations," (Boys & Girls Clubs of America, 2021). Another study focused on a substance use prevention intervention within urban AI/AN youth encountered the following challenges one may learn from; 1) transportation, (2)

increasing trust and interest, (3) adding research sites, (4) getting the word out about the project, and (5) getting youth to complete follow-up surveys (Dickerson, 2021).

Suffice it to say that there is much research and knowledge to support the planning and development of an AI/AN youth transportation safety intervention model. Still, it will take a specialized approach built on trust, adequate funding, and cultural appropriateness.

Needs Assessment

An important part of this process was conducting a needs assessment to identify this population's data, priorities, and baseline program information. Primarily, YTS staff aimed to understand what resources were currently available, what gaps may exist for programming needs, what barriers existed, and what recommendations could be identified to understand overall better needs for providing traffic safety initiatives to AI/AN youth.

The assessment process followed a Health Education model shown in Figure 1 (NCHEC, 2015). Each section of the model is outlined below in further detail.

Figure 1 Needs Assessment Process Outline

Step 1: Plan

During the first step of the analysis process, staff aimed to identify the primary purpose of the assessment and the information needed focusing on:

- What issues are impacting AI/AN populations related to traffic crashes?
- What resources are available to address this issue?
- Are there existing peer program partnerships?
- How are teens involved in the community?
- What is the structure of the tribal community for access to resources/learning/youth leadership?

In addition, the following considerations, Outlined in Table 2, were addressed in planning to understand and inform Step 2.

To Consider When Planning	Answers
What do you already know? What existing data do you have?	Over-represented in crashes (NHTSA)
Whose needs are being assessed? Who needs to participate so the results of the assessment are representative?	AI/AN youth on tribal lands Community partners who work with tribal youth
What do you have the ability to change?	Unsure
How will you use the information?	To inform program and resource kit revision and development
What resources are available to conduct a needs assessment (e.g., budget, people, and time)?	Lisa/Stacey/Gaby/Cesar/Christy/Student Workers $50,000 Time: 6-8 months
Are there long-term partnership opportunities to consider?	SADD partnership for peer organization. Other partnership opportunities with contacts (summit, focus groups, etc.) may be possible.

Table 2 Planning Considerations for Needs Assessment

Step 2 & 3: Data collection and question development

The data collection methods discussed included focus groups or surveys. While surveys offered a greater reach in terms of audience, the team felt a focus group to allow for the collection of responses to open-ended questions and group discussion would be more valuable to this project. Additionally, these focus groups would allow group dialogue that could delve deeper into specific topics. Once this was decided, the team worked to identify themes and categories to explore through the focus groups. Preliminary topics included:

- Knowledge
- Attitude
- Resource availability
- Resource needs
- Structure of P2P programs within these groups
  (schools vs communities/ parent/teen dynamic/ where does support come from?)
- Incentives for tribal youth
- Resource kit items for tribal youth
- Historical programs
- Program models

After review and discussion, the final topic needs were narrowed down to three core areas:

- Learn more about needs within the community.
- Learn of opportunities and challenges of teen traffic safety intervention.
- Identify the best ways to communicate with native teen populations.

The final focus group guide can be found in the Appendix. Step 4 analysis will be discussed in the findings section.

Crash Data for AI/AN Youth

According to the Centers for Disease Control and Prevention (CDC), car crashes are a leading cause of death among AI/AN youth (n.d.). Overall, crash rates among youth within this demographic are 2 to 5 times higher than other racial groups (CDC, n.d.). From 2016-2020, there were 180 American Indian youth, ages 14-18, killed in motor vehicle crashes (FARS, 2021). This

represents 18% of all fatal crashes involving youth under 25 killed in fatal crashes. Compared to younger teens, more older teens were killed in fatal car crashes, as demonstrated in Figure 2.

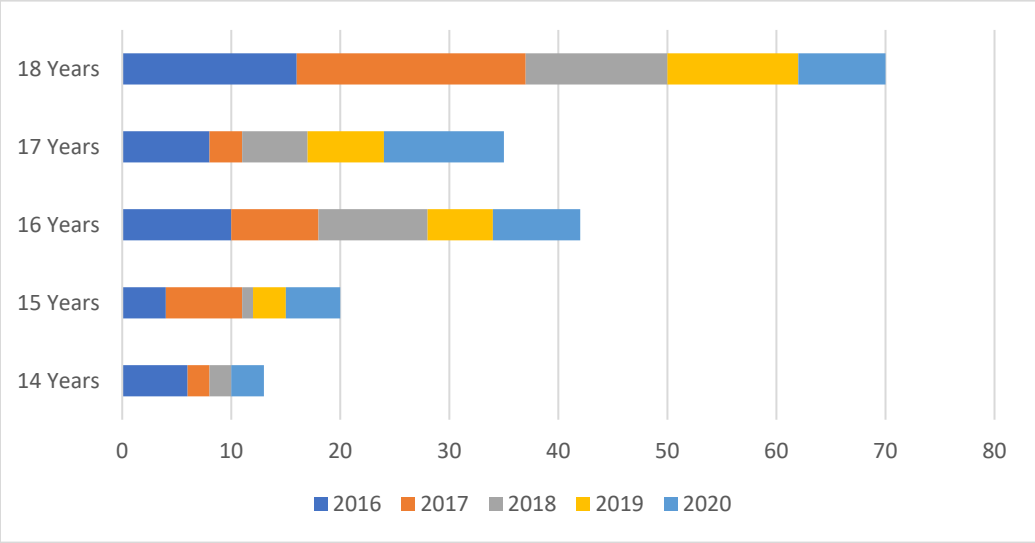


Figure 2 American Indian Youth (14-18) Killed in Fatal Car Crashes by Age from 2016-2020

Among this group, most fatal crashes involved males, accounting for 56% (115) of those killed in fatal crashes. Involvement in fatal crashes for males has gradually declined while the number of female teens killed in fatal crashes rose from 2019 to 2020, as demonstrated in Figure 3.

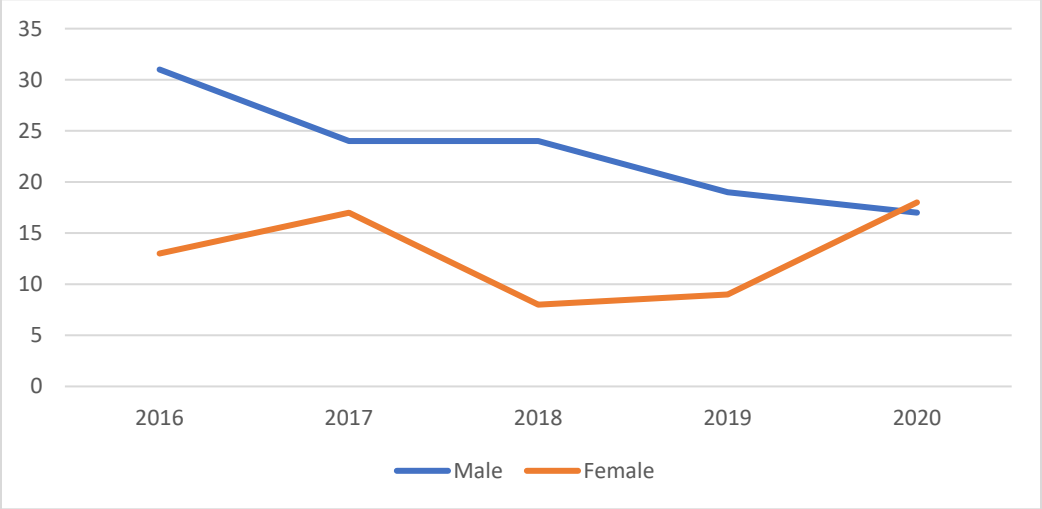


Figure 3 American Indian Youth (14-18) Killed in Fatal Car Crashes by Gender from 2016-2020

According to NHTSA, most fatal crashes involving AI/AN primarily were documented to occur off reservations, as demonstrated in Figure 4. According to research from the U.S. Government

of Accountability Office, reporting of criminal activity overall can be complex due to jurisdictional issues, thus capturing this data can be complicated and not represent the true scope of the problem (2021).

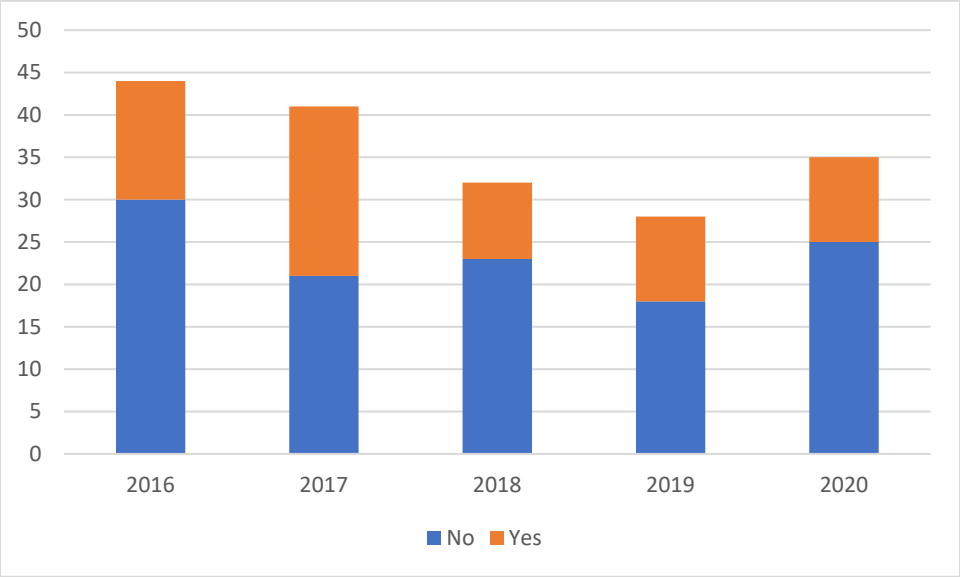


Figure 4 American Indian Youth (14-18) Killed in Fatal Car Crashes on Native American Reservations from 2016-2020

Teen drivers accounted for 49% (74) of all youth killed in fatal crashes. Over half of the fatal teen crashes involving teen crashes occurred at night, consistent with national data that indicates that teen drivers are at a higher risk of a fatal crash at night (source). Speeding was the second largest factor in fatal crashes involving AI/AN teen drivers (48%), followed by no seat belt use, alcohol-impaired crashes, and lastly distracted driving, as demonstrated in Table 3.

Contributing Factor	Drivers killed in Fatal Crashes (n=74)*
Nighttime	39
Speeding	36
Seat Belt Use (Unrestrained)	35
Alcohol-Impaired Crashes (BAC .08+)	27
Distractions	10

Table 3 Contributing factors for fatal crashes involving AI/AN drivers ages 14-18 from 2016-2020

*Crashes may have involved more than 1 contributing factor thus the number of fatal crashes will not equal 74.

Pedestrian and bicyclist fatalities among this demographic saw 23 fatal pedestrian and 4 fatal pedal cyclist deaths recorded from 2016-2020 for this age group and demographic.

Limitations

1. Alcohol – Does not include information on drugged driving which is unavailable in NTHSA.
2. Unrestrained – Information only includes drivers.
3. Speeding - (Coded as Yes for involving speeding but does not indicate if young driver was the speeding driver or not).
4. Distractions – (Coded as Yes for involving a distracted driver but does not indicate if young driver was the distracted driver or not).
5. Only includes fatal crashes, not serious injury.

Focus Groups

This portion of the project focused on identifying focus group participants, recruitment, and developing the focus group guide to contribute to understanding the needs of AI/AN youth. A preliminary assessment was completed in November of 2022 at the 2022 Tribal Motor Vehicle Safety Summit on November 1-3 in Denver, Colorado. Topic identification was assessed at this event through online polling software. Overall, 42 individuals participated in the event and provided the following information, summarized in Table 4. Thirteen percent of the individuals indicated that their work currently involves working with tribal groups.

Question	Results
Tribal groups, in my region, have enough resources to provide traffic safety programs within their schools.	Agree – 15.66% Disagree – 10.83% Neutral – 20.69%
What are some of the top issues AI/AN youth face on our roads?	Bombarding, Issues, Access to transport, Lack of traffic laws, Distraction, Phones, Inexperience, Rural roads, Speed, Ped pathways, No laws, No Drivers Ed, SB use, Speeding, DUI, Risky Driving, Bad driving habits, Unlicensed driving, Distractions, Speeding, Distraction, Inexperience, ATV use less safe, Distracted driving, Driver training, Lack of enforcement, Reckless driving, Dark roads
What are some barriers to implementing traffic safety among tribal groups?	Acceptance, comm & resources, community involvement, cultural reality, culture change, financial discrepancy, funding, lack of manpower, mindsets peers, money, need

	for peer leader, no outreach, no shoulders, not thinking, politics, reckless driving, Resources, sovereignty, support/education, teen pressure, trust issues
What are some best practices in working with tribal youth and schools?	Making relationships with school leaders, coaches, tribal health centers to create an environment of change, Involvement, more education. More parental, teaching, Face to face education, projects, scenarios for them to understand at their level. Videos of outcomes in driving, Keep topics short, sweet, and to the point, Involving local leadership and doing your research, Forming authentic relationships and regaining trust, Implement, Be a positive example, Communication with schools cultural and local relevant material, Physically engaging activities involving groups activities, Engaging presentations, Building relationships with youth, Developing trust and relationships with the youth to better get them willing to accept change and breaking them away from the learned unsafe habits from their families and friend, Listening, Understanding, allowing them to express their concerns, and outreach, Using elders and respected adults to get out messages. Using culture to help change be accepted, Education, helping students understand safe vehicle operations and proper use of safety equipment, Good community policing with open communication where we work together to address issues, Support, don't dictate, Peer to peer learning, Cultural understanding, Continued school presentation, freshman impact involvement, radio show, rollover simulator demonstrations, Gain trust of formal and informal leaders. Deliver. Early exposure to driving education, Implement drivers ed and impaired driving courses, Youth leaders, Community Involvement, principal/counselor buy in. (You need this!), The benefit of youth getting educated with safe driving, School/parent/ community involvement, Interactive Activities, Provide driver's ed and interactive learning with new technology

Table 4 Tribal Motor Vehicle Safety Summit Findings

Overall, findings pointed to multiple barriers and recommendations that could assist with developing and implementing outreach for AI/AN youth. Information from the summit was then utilized to help develop the focus group discussion guide.

Recruitment and participants

A total of two focus groups were completed during the period. The first group was conducted with a local school in Oklahoma with five attendees who were employees of Riverside Indian School or the Office of American Indian Education, Oklahoma State Department of Education. The second group was conducted virtually. A recruitment list of 56 individuals were identified as potential participants based on their work within the AI/AN community. A recruitment e-mail was sent out in April of 2023, and 11 individuals replied with their interest; of those, eight attended the virtual focus group.

Focus Group Findings

Many of the challenges identified within the focus groups are reflective of other cultures – economic constraints, lack of resources, and others. However, within the Native American community, these challenges are magnified due to lack of support from larger communities, emergency services, access to safer vehicles, roadway designs, speed harmonization, and clear zones. From our focus group, these issues were raised by participants. These points are from their unique perspectives and experiences, may not reflect all participants or other communities, and are in no order:

- Pueblos are not designed for vehicle traffic.
- Safety is a challenge due to limited space on roads. When parents drive students, it becomes a dangerous situation for all.
- There is no active programming on pedestrian safety and the roads are narrow.
- Community lands get impacted by construction/new roads. Villages get bisected by highways.
- There are only dirt roads and speed is an issue.
- Land was taken from the pueblo with no right-of-way established and built without consideration of use or homes.

- Tribal DOTs are small. Messaging needs to be culturally relevant and incorporate native language.
- Tribes can't be put in a box. Policies want to lump tribes together, but all are different.
- Laws are different on tribal land. One participant cited there is no seat belt law within their tribe, so they rely solely on education.
- Safety planning needs to be updated with people's concerns.
- Resources and funding needed for driver and traffic safety classes for students.

What was also found among this group is resilience and determination. Being ingrained in the community provided a clear vision of how education and programming can take place effectively. The approaches below are currently being employed:

- Work closely with high school positive influencers.
- We use simulators for traffic safety to show how drugs and distracted driving impacts safety for them, their families, and all those on the roadway.
- The community has been installing ped and bike paths away from the main roads.
- Community (unity) meetings are held, with food, to discuss safety. These are popular due to incentives such as food and raffles. Tribes gather around food.
- Policies and safety measures have been enacted, including traffic calming measures, speed limit transitions, radar feedback signs, gateway monument signs, etc.
- Youth influencers have been successful. Being where teens are and delivering messages. Paid media can be difficult – how to target and approvals.
- School visits and student presentations are utilized.
- Safety messaging through digital ads, social media, print, word of mouth, and community events.

And these items were communicated by participants as approaches thought to be a way forward:

- Invest in local entities and partnerships that can create messaging using local people and environments. Employ young people, interns to create content that works with peers.
- Implementation of system/community-wide communication, including parents and grandparents.

- Curriculum which builds from elementary, middle, and high schools and supports all areas of pedestrian and traffic safety.
- More technology driven resources for engagement, such as a YouTube channel.
- Mentorship programs and youth councils are needed.
- Need interaction and fun media.

The focus group members also described existing efforts and community partners they currently utilize to help spread the message of traffic safety. Some of these include:

- Department of Transportation tribal liaison responsible for collaborating with law enforcement on reservations
- Educational collaboratives with schools and districts to discuss challenges.
- Joint professional days and retreats, bringing together instructors and support staff.

Participants identified their top community teen issues as:

- Vaping
- Cell phones – driving, general distractions and need for immediate response/reaction
- Lack of social and emotional skills
- Safe walking areas (sidewalks and ped crossings)
- Safety around school buses
- Lack of opportunities for youth to be engaged and involved outside of school/weekends
- Substance abuse
- Employment opportunities/ability to be self-sufficient
- Lack of public transportation

Geographical Areas for Review

To evaluate existing teen resources and programs, the YTS team reviewed AI/AN populations across the United States and looked at six geographical areas chosen with the following parameters:

- AI/AN population should be above 3% of the population and have dense communities, i.e., a population high enough that resources would be present.
- Presence of recognized AI/AN tribes.

- Selection of areas where YTS programming has not been offered, as well as where YTS is currently offered. This approach would allow future planning for existing programming support, partnerships, and geographical knowledge.
- Crash data availability displaying problem within these areas.

With this criterion, the following states in Table 5 were evaluated:

Alaska – no current or significant past YTS programming.	27.9% AI/AN population (largest in country). 229 federal or state recognized tribes.
New Mexico – no current or significant past YTS programming.	14.5% AI/AN population. 24 federal or state recognized tribes.
South Dakota – no current or significant past YTS programming.	12% AI/AN population. 9 federal or state recognized tribes.
Oklahoma – current YTS sponsorship and programming.	17.4% AI/AN population. 38 federal or state recognized tribes.
Washington – current YTS sponsorship and programming.	4.1% AI/AN population. 29 federal or state recognized tribes.
Colorado – current YTS sponsorship and programming.	3.1% AI/AN population. 2 federal or state recognized tribes.

Table 5 States for Evaluation

Findings of past crashes (FARS, 2021) produced the information below in Figure 5. These numbers represent 1,659 AI/AN youth killed within the six states over a nine-year period, demonstrating the breadth of the problem, highlighted by New Mexico and Oklahoma, which are both rural states, but with a large AI/AN population.

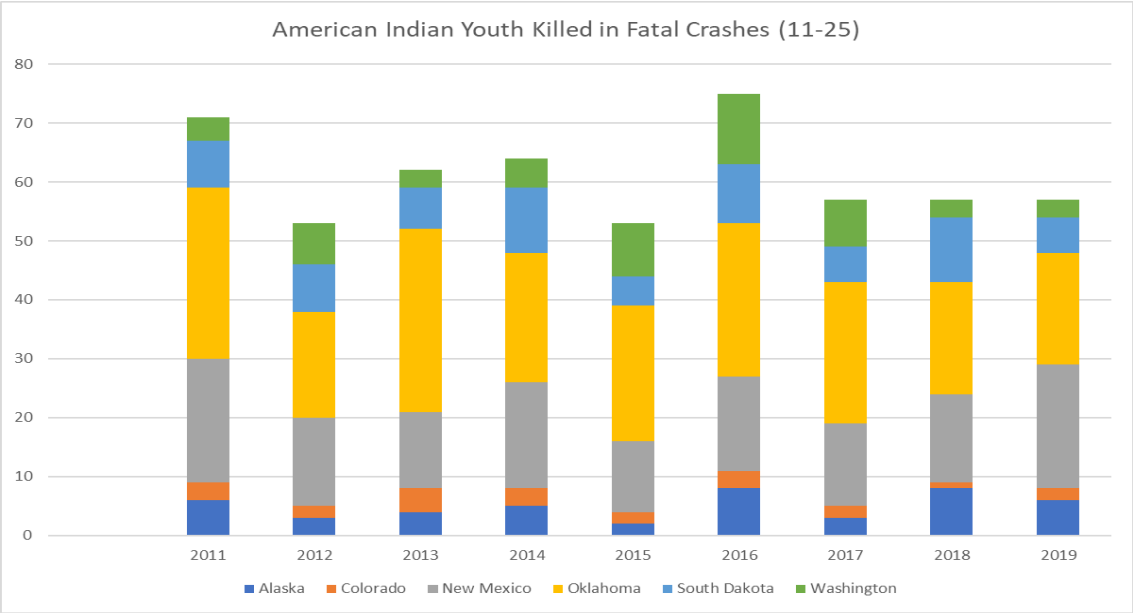


Figure 5 AI/AN Youth (ages 11-25) Killed in Car Crashes 2011-2019, by Evaluated States

Community Support and Partners

From the identified states, the YTS team examined potential community support and partners to develop an understanding of needed program elements and resources to address and effectively promote youth traffic safety messaging and outreach.

The findings within this examination found there are programs and resources within each state, but not all focus on traffic safety, not all traffic risks, and many are smaller, regional programs which are not accessible to all AI/AN populations.

A brief synopsis is below in Table 6, however due to the size of this document, it is included in its entirety as an additional attachment, titled 'Community Support and Partners Matrix.pdf'.

State	Number of AI/AN Youth Focused Organizations	Number of Youth Focused Organizations which cover all traffic safety risks	Current Availability of youth programming coverage
Alaska	9 youth focused	-	National – 3, State – 4,

			Tribal - 1
New Mexico	5 youth focused	-	State – 3, Tribal – 2
Colorado	6 youth focused	-	National – 1, State – 1, Tribal – 2, Local – 2
Oklahoma	3 youth focused	-	Tribal - 3
Washington*	-	-	-
National	3 youth focused	-	National – 1, Tribal - 2

Table 6 Community Support and Partner Evaluation Overview

* YTS is currently sponsored by and within the state of Washington but is not included within this matrix since the program does not focus on AI/AN populations.

Community Support Findings

While programming of this nature is cyclical due to state transportation strategic objectives, the rise of competing social issues, and funding, these geographic areas currently provide no widely available programming which focuses on all aspects of youth or all traffic safety risks. This gap provides an opportunity to fulfill a need within these communities that provides benefits of traffic safety, but also leadership development, and healthy community growth built for their culture. Specific objectives and forward-looking recommendations are below.

Step 4: Analyze and Prioritize Data

Recommendations for the Area of Traffic Safety

Through this assessment process, YTS recognizes that the current program model will not meet the existing needs within this culture but believes a program tailored to this population would be achievable over a period of two years through strategic planning. With over two decades of lessons learned, YTS proposes to utilize the foundation of the existing TDS program model and

community support, to create a customized program that could easily be deployed and sustained by any tribal community.

This section will explore potential measurements of this success and elements of future programming for consideration. For the sake of this report, Native American Teens in the Driver Seat (NATDS) will be used to describe the new proposed program, and Teens in the Driver Seat (TDS) will be used to describe existing programming. From the focus group and additional resources, the following information has been culled by the YTS team as important objectives as we advance:

- Focus on all aspects of healthy life to develop a healthy community (Risk and Protective Factors).
- Tribes should have a seat at the table and can diversity consult during development.
- Tribal sovereignty matters – find ways to allow each community to tailor resources, messaging, and programming to their needs.
- Offer ways to involve all teens (equity) in existing efforts, including community meetings, educational collaboratives, and policy discussions.
- Identify and provide partnerships to assist with other social economic challenges and building/maintaining traffic safety messaging and programming.
- Offer multi-generational resources.
- Communicate the need to obtain tribal leadership buy-in.
- Assist in identifying flexible funding.

Core potential steps for development are illustrated below:

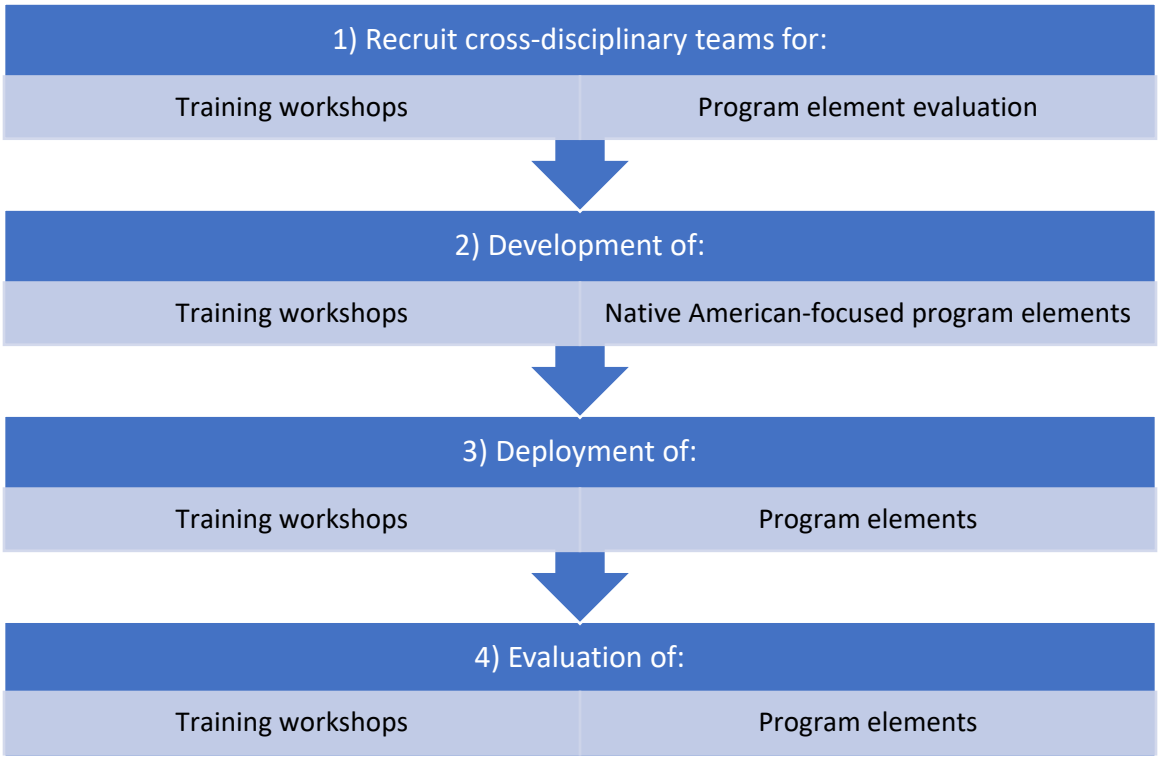


Figure 6 Program Development Steps

Approach

Utilizing a cross-disciplinary team experienced in transportation, health sector, and Native American communities, the YTS team proposes to follow a traffic safety intervention framework utilizing the Shared Risk and Protective Factors (SRPF) public health model. Efforts will also incorporate the theoretic framework known as Theory of Planned Behavior (TPB) (Ajzen, 1991, p. 179), which has been identified as an effective strategy to address distractions and speeding (Safe States, 2019) and previously utilized by YTS. This theory was selected based on its utilization in the traffic safety field and its application in exploring what is known as Traffic Safety Culture (TSC) which is defined as "the values, assumptions, and beliefs that influence road user behaviors and stakeholder actions" (Ward & Otto, 2018, p.1).

These theories will be utilized to 1) build training workshops for Native American community members, which will connect communities while educating participants on best-practices, and 2) develop and provide a program that can be customized within the community for teen traffic safety programming.

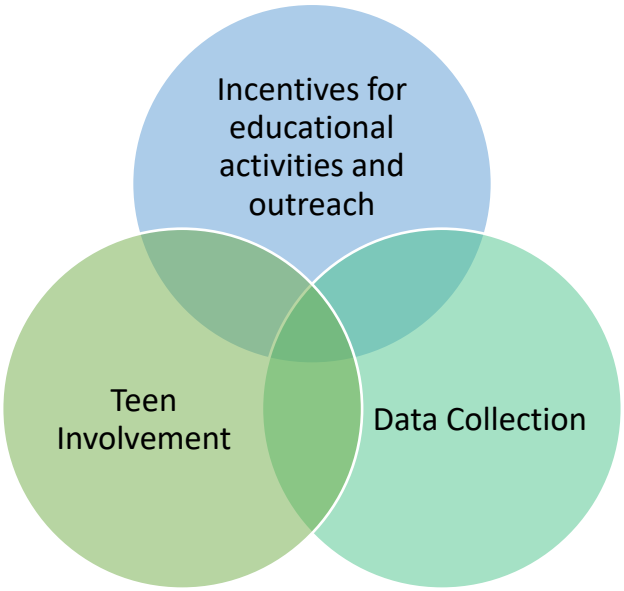
The overall benefit of this approach would be the opportunity to integrate the Public Health approach more fully to address traffic safety while also reach youth that traditional traffic safety outreach may overlook. We anticipate that after development of a NATDS program, we will use the information learned and developed to grow the program into any Native American population who would like to adopt and adapt it.

Training Workshops

Work over the two-year period would also include building training workshops for youth and youth-serving adults within Native American communities. These workshops will focus on theories defined above, including information on social norms, behavioral intentions, and perceived behavior control among youth as it relates to traffic safety. These knowledge transferring workshops will allow community stakeholders to gain understanding of the Theory of Planned Behavior and Positive Youth Development Framework utilized currently by YTS within the TDS program to utilize this approach within their community. Additionally, through these workshops, participants will gain a network of youth-serving partners for support and knowledge.

Program elements

There are multiple elements contained within TDS programming. Each element serves a particular purpose which builds upon over twenty years of experience, participant feedback, and providing easy-to-implement programming that focuses on creating a safety culture within a community. Each of these elements are shown below:



- Educational resource kits focusing on top risks teens face as passengers and new drivers or pedestrians, including:
  - Distracted driving
  - Nighttime/Drowsy driving
  - Speeding
  - Lack of seat belts
  - Impaired driving
  - Safety around large trucks
  - Rail safety
- Activity guidelines
- All-Star Rewards (rewards for completing educational activities and outreach)
- Driving the Message Poster and Video Contest
- Track-a-Thon Contest
- Extra Mile Senior Activity (earn a graduation cord)
- Teen Advisory Board and Scholarship
- You in the Driver Seat Phone App
- Annual program school surveys
- Zero Hero Distracted Walking
- Zero Hero Distracted Driving

Figure 7 Current TDS Elements for Evaluation

While many of these elements could transfer to NATDS, the team would utilize focus groups from this project and others within the community to build consensus and ensure that each element is designed with an equitable approach to cultural and economic differences. For this purpose, the following focus group questions have been identified:

1. Does the element take into consideration cultural needs and differences?
2. Does the element prescribe to community focus?
3. In what language should the element be displayed?
4. Should the element be a separate entity or event (i.e., Summit, Teen Advisory Board, Contests) or would collaboration with TDS be beneficial?
5. Does this element target needed education within this community?
6. What would interest teens to learn and conduct this outreach?
7. How does this element fit into the larger social scale of the community?
8. How could this element benefit the lives within this community?
9. Should this element be available to be edited for any tribe's use?

From feedback, it would be vital for the YTS team to not just overlay existing elements onto this population but provide opportunity for innovation and ideas that have worked previously

within tribal communities. This would mean developing resources available to communities so they may design their own programming based on a menu of options or customizable elements, including risks based on local data.

Community focus

As described within the focus groups, the Native community is built upon relationships – within the tribe, village, and multi-generational families. TDS programming historically targets teens within schools and organizations, with more recent growth within teen groups and homeschool environments. NATDS would need to focus on targeting and involving the broader community of the teen. This approach would allow YTS to continue involving the teens within a peer-to-peer approach and bridge programming to include trusted existing partners who not only live within the community but can also provide support to the teens, educational outreach to community members, and feedback to YTS staff. Involving adults provides a learning and collaboration opportunity and encourages program sustainability.

Reaching teens

Teen involvement will look much different for NATDS depending on the location and community. While some communities may lend themselves to school programming as an extracurricular activity, adapting to other scenarios is important. Creating programming and resource elements that can be adapted for multiple purposes, depending upon community needs, is ideal. This will allow the community to decide what elements to adapt and adopt.

Creating buy-in among teens is crucial. Along with involvement in development, involving teens in incentive development is warranted. Some of these incentives could be monetary, such as team awards and scholarships, but other incentives should also be explored, such as leadership opportunities, board positions, conference attendance, community service, and training. TDS is primarily enacted in schools, but NATDS could reach beyond schools into any youth group to accommodate community needs.

Evaluation

Beyond evaluations of workshops, success measurements would be evaluated through annual behavior and attitude surveys, completion of risk units, awarded funds, any collected data for

program elements, and tracking local crash data. All evaluations would be sent to participants and community partners to adapt the program as needed.

From evaluations, the cross-disciplinary team aims to learn best practices in addressing traffic safety from a risk and protective factors lens and discover additional risk and protective factors unique to Native American youth. The information learned while implementing the proposed strategy can be replicated in other locations, enhancing other organizations' capacity to address motor vehicle safety among youth in the future.

Funding

Continued funding from General Motors will be requested for programming development and future support described herein. Beyond this development, YTS operates on grant funding, therefore continuation of the program will require monetary support in order to evaluate, create new resources and programming, upkeep existing resources and programming, support communities, and perform all other administrative and program management duties. Additionally, incentives which play a large part in the programming support for teens and schools is important and will require funding. YTS currently offers cash (depending upon funds, up to $1,500) to schools who complete risk activities and app users upon milestones.

YTS consistently markets and applies for new and additional public and private funding, therefore all AI/AN funding opportunities will be monitored to help support and sustain program development and sustainment.

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Appendix

Youth Traffic Safety Programming for Native American/Alaskan Native Populations - Focus Groups Facilitator Guide

Logistics: facilitator & note-takers; only ask questions with no leading information; need a recorder; take notes small paper/computer type-up; brain dump; facilitator just listens; NO ADVISOR feedback; timekeeper to make sure moving on to next questions.

1. **Welcome**: Introduction of team members
2. **Purpose:** The purpose of the Focus Group is to gather information about how best to serve AI/AN youth in the area of traffic safety. Recent research from the Governors Highway Safety Administration (GHSA) demonstrated that this population is often over-represented in car crashes and face many challenges that can contribute to crashes. Ultimately, the goal of this focus group is to 1) learn more about needs within this community, 2) learn of opportunities and challenges of teen traffic safety intervention, and 3) identify the best ways to communicate with native teen populations.
3. **Explanation of the Process and Ground Rules**:
    a. Determine as a group but will include confidentiality, please allow everyone a turn to speak, talk one at a time so everyone can hear.
    b. The session will be recorded, and recordings will only be used to revisit for accurate note taking, then promptly deleted.

Focus Groups Discussion Questions

1. **(LISA) Road Traffic Safety Needs: Research has demonstrated that this population is overrepresented in car crashes. We also know that youth are at higher risk for car crashes due to inexperience. Our field has recognized culture's important role in road safety behaviors, often called traffic safety culture. (1:20 – 2)**
    a) *In your experience, what role does traffic safety have within the culture - particularly within families, schools, communities, and policies for AI/AN youth? For this question, we define traffic safety as efforts to prevent individuals from being harmed or killed while using the available road systems. Please provide your thoughts on each level.*
        1. *Families:*
        2. *Schools:*
        3. *Communities:*
        4. *Policies:*
    b) *What are the top 5 most important things (any – not just traffic safety) to your community teens today?*

2. **(STACEY) Successes, Gaps and Barriers in Youth Traffic Safety Programming: This topic will aim to understand elements of successful programming, barriers to programming and identify any gaps that current programming does not meet for youth.**
    a) *What assets does your community currently have that focus on traffic safety?*

1. *Would you consider this effort successful? Why or why not.*
2. *What are some areas missing from traffic safety?*

b) *What do you believe would be some of the greatest barriers to youth traffic safety programs for this population (or in this community)?* ***End by 2:30***

3. **(GABY) How to reach Native teen populations: This last section will seek to identify best practices for reaching and communicating with youth within this population.**
    a) *What types of programming/resources do you feel would be most effective for teen audiences in this demographic? What mediums would you recommend using for this group?*
    b) *Where do you feel it would be most effective to reach youth about traffic safety?*
    c) *What do you feel would motivate teen participation?*
    d) *What barriers prevent teens from participating in any type of program?*

If there is extra time:

e) *Who or what organizations within your community would be advocates or potential partners in traffic safety efforts?*