

NONDALTON VILLAGE
2020-2025 FINAL-ADOPTED
TRIBAL TRANSPORTATION SAFETY PLAN

January 2020

Prepared for:

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ACRONYMS AND ABBREVIATIONS

°F	Degrees Fahrenheit
%	Percent
AADT	Average Annual Daily Traffic
AHSO	Alaska Highway Safety Office
ARRA	American Recovery and Reinvestment Act of 2009
ATV	All-terrain vehicle
BBAHC	Bristol Bay Area Health Corporation
BBNA	Bristol Bay Native Association
BIA	Bureau of Indian Affairs
Bristol	Bristol Engineering Services Company, LLC
BUILD	Better Utilizing Investments to Leverage Development
CDC	Centers for Disease Control and Prevention
Community	Nondalton
Council	Nondalton Village
DCCED	Department of Commerce, Community, & Economic Development
DHSS	Department of Health and Social Services
DOT&PF	Department of Transportation & Public Facilities
EMS	Emergency Medical Services
FARS	Fatality Analysis Reporting System
FAST	Fixing America's Surface Transportation
FHWA	Federal Highway Administration
FLTP	Federal lands transportation program
HBRRP	Highway Bridge Replacement and Rehabilitation Program
HES	Hazard Elimination Program
HPR	Highway Planning and Research
HSIP	Highway Safety Improvement Program
HSO	Highway Safety Office
HSP	Highway Safety Plan
IM	Interstate Maintenance
in	Inches
ITS	Intelligent Transportation System
LTAP	Local Technical Assistance Program
NHI	National Highway Institute

NHTSA	National Highway Traffic Safety Administration
NTTFI	National Tribal Transportation Facilities Inventory
RSA	Road Safety Audits
RTAP	Rural Transportation Assistance Program
SHSP	Strategic Highway Safety Plan
SMS	Safety Management Systems
STIP	Statewide Transportation Improvements Program
STP	Surface Transportation Program
THSIP	Tribal Highway Safety Improvement Program
TTAP	Tribal Technical Assistance Program
TTP	Tribal Transportation Program
TTPSF	Tribal Transportation Program Safety Funds
TTSP	Tribal Transportation Safety Plan
WRCC	Western Regional Climate Center

1.0 INTRODUCTION

On behalf of the Nondalton Village (Council), Bristol Bay Native Association (BBNA), by means of a professional service agreement with Bristol Engineering Services Company, LLC (Bristol), developed this Strategic Tribal Transportation Safety Plan (TTSP) for Nondalton, Alaska (Community). This TTSP was developed through the Federal Lands Transportation Program (FLTP) using Tribal Transportation Program Safety Funds (TTPSF). Together, our team is building on information from the Federal Office of Highway Safety, the Alaska Highway Safety Office (AHSO), and our partner communities to develop a strong message of Highway Safety for our Tribes within the Bristol Bay Region.

BBNA is an Alaska Native Regional Non-profit Corporation and a tribal consortium. Incorporated under state law, corporation bylaws are structured as a pure tribal consortium. The 31 federally recognized tribes in the Bristol Bay region make up the members of the non-profit corporation. The 31 tribes are represented on the BBNA Board of Directors by their elected tribal presidents, or the president's designee (who must be a tribal member). Therefore, BBNA is directly controlled by the tribal governments it represents. BBNA is a federally recognized tribal consortium for contracting purposes and is a "Tribal Organization" as defined in the Indian Self-Determination and Education Assistance Act. BBNA operates dozens of grants and contracts under various types of eligibility. Eligibility of each grant is controlled by the regulations and authorizing legislation of each particular funding source. BBNA operates both Indian and non-Indian programs.

This TTSP has been coordinated with the Alaska Strategic Highway Safety Plan (SHSP), developed in accordance with Federal Highway Administration (FHWA) standards, and was outlined in reference to the FHWA manual titled "Developing Safety Plans: A Manual for Local Rural Road Owners." The Council plans to apply for funding through this plan for transportation safety projects in subsequent years.

The purpose of this plan is to use existing data to identify transportation safety issues, prioritize activities to address these issues, and identify potential funding sources to implement the activities. The TTSP evaluates all modes of transportation including, but not limited to aviation systems, ferry and water systems, local roads, seasonal trails, pedestrian transportation, and bus and transit systems. This project helps develop a model process for a wide variety of tribal and state level circumstances to provide Tribes with a plan for the development of successful future transportation projects. Resources and strategies identified in this plan will improve the Tribe's ability to identify hazardous roadway locations and features, and to develop and prioritize transportation safety projects.

1.1 MISSION

The mission of this TTSP is to save lives and prevent injuries on the local transportation system by implementing strategies using the 4E's of Safety: Education, Enforcement, Engineering, and Emergency services. The TTSP prioritizes these strategies through evaluation of crash data, public involvement, and the condition of existing transportation facilities. Development of this plan enables the Council to identify risk, evaluate corrective measures, and seek funding for safety projects that maximize safety to prevent deaths and major injuries.

1.2 PROCESS

This TTSP was developed through guidance from the Council, following the process outlined below:

1. Collect community background information from available resources such as existing community planning documents
2. Conduct an initial meeting with the Council and/or interview Council members to collect preliminary information about safety issues and local safety resources
3. Research available transportation safety data such as traffic counts, crash data, and hospital records
4. Develop and distribute a community survey to collect additional data regarding transportation safety issues and community priorities
5. Use data and survey results to identify safety emphasis areas for the TTSP
6. Develop a Draft TTSP and an implementation plan for the Council to review
7. Hold a public meeting to present the Draft TTSP and emphasis areas to the Community and collect public comment
 - a. A public meeting was held in the community on January 31, 2019. Public involvement documentation is provided in Appendix A.
8. Develop a Final Draft TTSP for the Council to review, incorporating Council and Community comments from the public meeting
9. Develop and adopt a Final TTSP

1.3 BACKGROUND

This section provides background information about the Community including location, history and culture, transportation and access, and climate data.

1.3.1 Location

Nondalton is located on the west shore of Six Mile Lake, between Lake Clark and Iliamna Lake, 190 miles southwest of Anchorage (Exhibit 1). Within the Lake and Peninsula Borough and the Iliamna Recording District, the Community is located at approximately 59.9668 degrees north latitude and -154.8570 degrees west longitude within Section 31, Township 002S, Range 032W of the Seward Meridian. The Community consists of 8.4 square miles of land and 0.4 square miles of water (Department of Commerce, Community, and Economic Development [DCCED], 2018).

Exhibit 1: Community Location Map

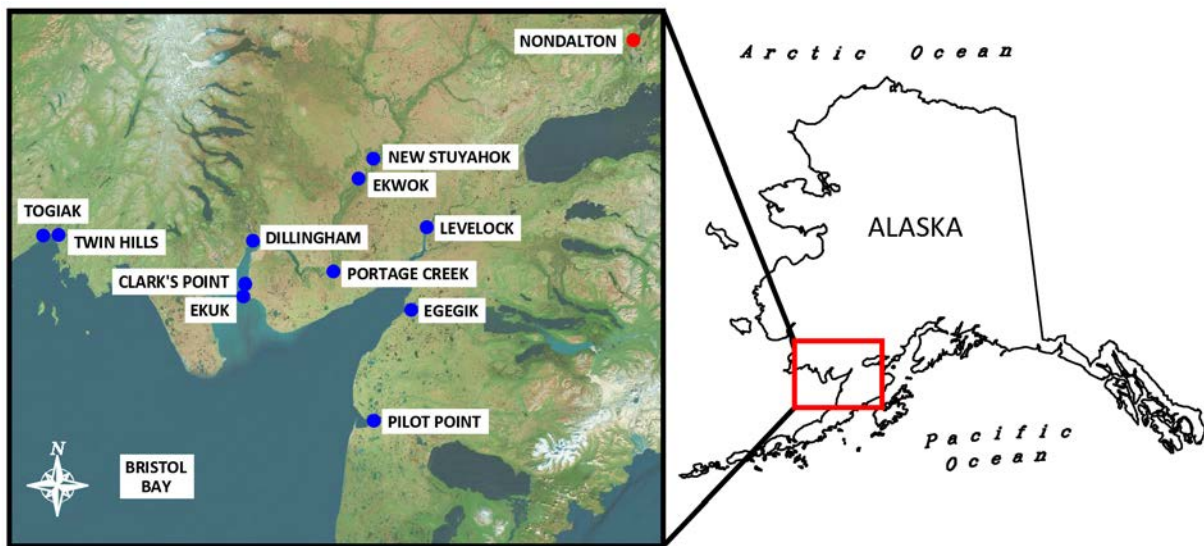


Image source: Bing Geomap, AutoCAD Civil 3D, 2018

1.3.2 History & Culture

Nondalton is a Tanaina Indian name first recorded in 1909 by the U.S. Geological Survey. The village was originally located on the north shore of Six Mile Lake, but in 1940, growing mudflats and wood depletion in the surrounding area caused the village to move to its present location on the west shore. The post office, established in 1938, relocated with the villagers. Nondalton formed an incorporated city government in 1971 (DCCED, 2018).

Today, the Community a Second Class City home to approximately 144 people. It is a Tanaina Indian (Athabascan and Iliamna) village with a fishing and subsistence lifestyle (DCCED, 2018).

1.3.3 Transportation & Access

The community of Nondalton is primarily accessible by air and water. During the winter, a road is passable between Nondalton and Newhalen, 22 miles to the south on the shore of Iliamna Lake. The road is only paved half way. Air taxi, skiff, snow machine and four-wheelers are the main modes of transport for residents and visitors. A state-owned gravel runway is present in Nondalton. There are no docking facilities in Nondalton. Bulk goods are received in Iliamna then taken by a cat-trail to Fish Camp, located across from Nondalton on the east side of the Six Mile Lake. From there, they are ferried by skiff or barge to the west side of the lake (DCCED, 2018).

1.3.4 Climate

Nondalton falls within the transitional climate zone, characterized by tundra interspersed with boreal forests, and weather patterns of long, cold winters and shorter, warm summers (DCCED, 2018).

Average monthly climate data from the nearest weather station is provided in Table 1.

Table 1: Local Monthly Climate Summary

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (°F)	23.0	25.3	30.0	39.2	50.5	59.2	62.7	61.1	54.0	40.6	30.2	22.9	41.6
Average Min. Temperature (°F)	10.4	11.6	15.1	25.0	35.3	43.3	48.4	48.1	41.6	29.1	18.8	10.2	28.1
Average Total Precipitation (in.)	1.34	1.18	1.15	1.08	1.21	1.50	2.63	4.62	4.32	3.09	2.03	1.61	25.77
Average Total Snowfall (in.)	10.8	9.5	9.8	5.3	1.0	0.0	0.0	0.0	0.0	2.5	8.5	11.8	59.2
Average Total Snow Depth (in.)	8	9	10	7	1	0	0	0	0	0	2	4	3

Source: Western Regional Climate Center (WRCC), 2018 Alaska Summaries for Iliamna FAA Airport, Alaska Station 503905 for Period of Record 11/10/1939 to 12/31/2005.

2.0 EXISTING RESOURCES

This section discusses existing safety resources that are valuable to improving transportation safety within the Community.

2.1 SAFETY TEAM

Within the Council, both the Tribal Administrator and Transportation Coordinator act as the “Safety Champion,” directing safety projects and managing safety resources. They work with other Council members for planning decisions and transportation improvement projects. They are also responsible for reviewing and updating this Safety Plan, as needed.

2.2 SAFETY PARTNERS

Safety partners are essential to a successful safety plan. The following safety partners work together to improve transportation safety within the community and ensure the public has access to safety resources:

- Nondalton Village
 - The local Tribal Government is responsible for developing and updating this Plan, as well as coordinating with other Safety Partners to manage safety and transportation improvement projects within the community. The Tribe also assist the City with road maintenance efforts, as needed.
- City of Nondalton
 - The City works with the Tribe and other local agencies to plan and organize safety improvement projects, as needed. The City is also responsible for the majority of road maintenance activities, and keeping the volunteer Fire Department up to date.
- Kijik Corporation
 - The local Native Corporation works with the City and Tribe for safety and community development projects.
- Nondalton Clinic – Southcentral Foundation
 - The local clinic provides emergency response and medical services for transportation accidents. The clinic has health aides with a third undergoing training.

- State Troopers, Iliamna Post
 - The nearest State Trooper post is located in Iliamna, which can provide law enforcement and police services if needed.
- Bristol Bay Native Association
 - BBNA is the regional Native Non-Profit that helps fund and coordinate community development projects, including this Plan, and is a great resource for safety projects.
- Bristol Engineering Services Company, LLC
 - Bristol is the primary author of this Plan, and is a subsidiary company of Bristol Bay Native Corporation (Regional Corporation) and Choggiung Limited (Bristol Bay Village Corporation).
- Alaska Department of Transportation & Public Facilities (DOT&PF)
 - The State's DOT&PF provides numerous resources for transportation safety including safety programs and grants. They are also responsible for maintaining the local airstrip.

Many of these safety partners helped provide background information for this Plan. They also helped identify existing safety resources, safety needs within the community, and potential strategies to improve transportation safety.

2.3 OVERVIEW OF EXISTING EFFORTS

Community safety partners have implemented several safety efforts in the past, as described below:

- Road Maintenance
 - Both the City and Tribe perform road maintenance to ensure local roads are safe for public use. Regular maintenance activities include grading, snow plowing, sanding in the winter, and brush cutting.
- First Responders
 - The City has a crew of approximately six trained first responders. Whenever there is an emergency, there is a community effort to assist.

- Kids Don't Float
 - Nondalton participates in the Kids Don't Float program, restocking their life jacket loaner board every year to improve boating safety.
- Streetlights
 - The Council is funding a project to install new LED streetlights within the community in the summer of 2019. The streetlights will help illuminate the transportation system to improve visibility and safety for drivers and pedestrians.
- Ice Road Markers
 - Every year, the Council is diligent about marking areas of thin ice with safety cones along ice roads that cross lakes and streams to help caution travelers.

2.4 PLANNING DOCUMENTS

The Community has access to various local, regional, and state planning documents for transportation, safety and community development. These include:

- Nondalton Long-Range Transportation Plan, 2019
- Bristol Bay Comprehensive Economic Development Strategy: 2017-2020
- Alaska's Strategic Highway Safety Plan (SHSP)
- Alaska's Highway Safety Improvement Program (HSIP)
- Alaska Statewide Transportation Improvement Program (STIP)

These plans were referenced to ensure this TTSP is consistent with other local planning efforts.

2.5 EMERGENCY RESPONSE RESOURCES

Access to emergency response resources are essential for transportation safety. This section discusses existing local, regional, and state safety resources.

If a transportation accident or emergency occurs, locals typically call the Nondalton Clinic for assistance. The clinic has an ambulance to transport injured people. If the injury is severe, a medevac may be required to a nearby hospital.

The Clinic contact information is provided in Table 2, among other local and regional emergency contacts. This list may not contain all available emergency resources for the community, and should be updated often.

Table 2: Emergency Response Contacts

Local	Regional / State
<p>Car Crash / Emergency Nondalton Clinic 907-294-2238 (On-call 24-7)</p> <p>Fire City of Nondalton Volunteer Fire Department 907-294-2235</p> <p>Search and Rescue / Safety Resources Nondalton Village 907-294-2257</p>	<p>Car Crash / Emergency State Troopers, Iliamna Post 907-571-1871</p> <p>Natural Disaster & Search and Rescue State Emergency Operations Center 1-800-478-2337 (toll free) 907-428-7100 (local Anchorage area)</p> <p>Wildland Fire Southwest Area Forestry Office 907-524-3010 Or Alaska Interagency Coordination Center 1-800-237-3633</p> <p>Spill Alaska Department of Environmental Conservation 907-269-3063 (Anchorage)</p> <p>Recovery-Needs Support American Red Cross of Alaska 1-888-345-4376</p>

Note: Local resources were provided by the Council. Regional and State resources were obtained from the "Alaska Emergency Response Guide for Small Communities."

More information regarding emergency response can be found in the "Alaska Emergency Response Guide for Small Communities" prepared in March 2013 by the State of Alaska Military and Veterans Affairs, Homeland Security and Emergency Management.

3.0 DATA SUMMARY

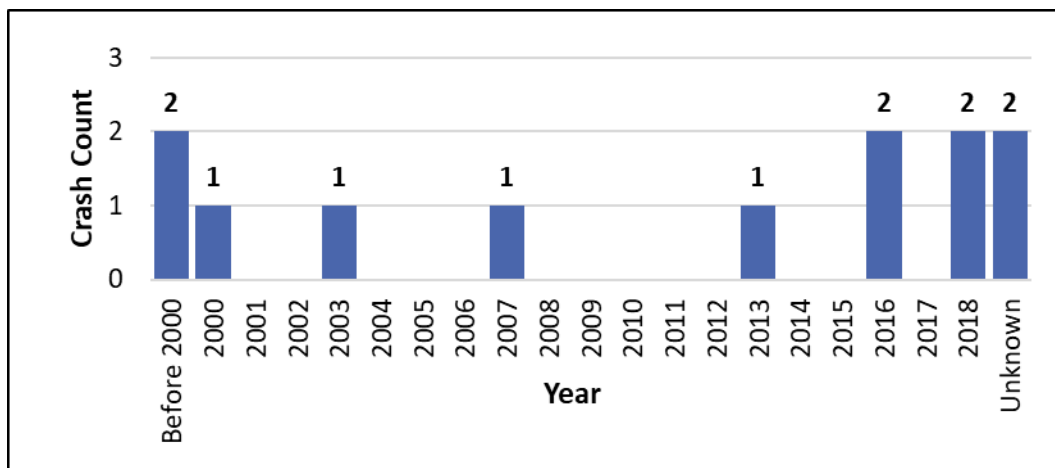
Crash data and other safety data are valuable to any transportation safety plan. The data is used to identify safety issues, select appropriate countermeasures, and evaluate performance. Other data sources may include traffic citations, hospital records, insurance claims, traffic counts, and anecdotal evidence from safety partners. At least three years of data is recommended to evaluate the overall traffic patterns. Since no official crash data was available for Nondalton, this plan was based on anecdotal crash data from community members, traffic counts, and results from a community survey.

3.1 CRASH DATA

Safety emphasis areas are chosen based on evaluation of crash data. Since there are no police in Nondalton, no official crash records are available for Nondalton. However, Council members described several crashes at the Planning Team meetings during the development of this plan. To better understand the nature of these incidents, Bristol asked the Council to complete an *Incident Data Collection Form* for each crash they could remember. The blank form and a tabular summary of the data is provided in Appendix B. Note that this information is based on memory, not fact, and some of the data may be estimated.

A total of 11 vehicle accidents were described, one search and rescue incident, and one plane crash. The data summarized in graphs below includes all vehicle incidents, not including the plane crash. Plane crash details are provided in Appendix B. Exhibit 2 shows the number of vehicle accidents per year since 2000.

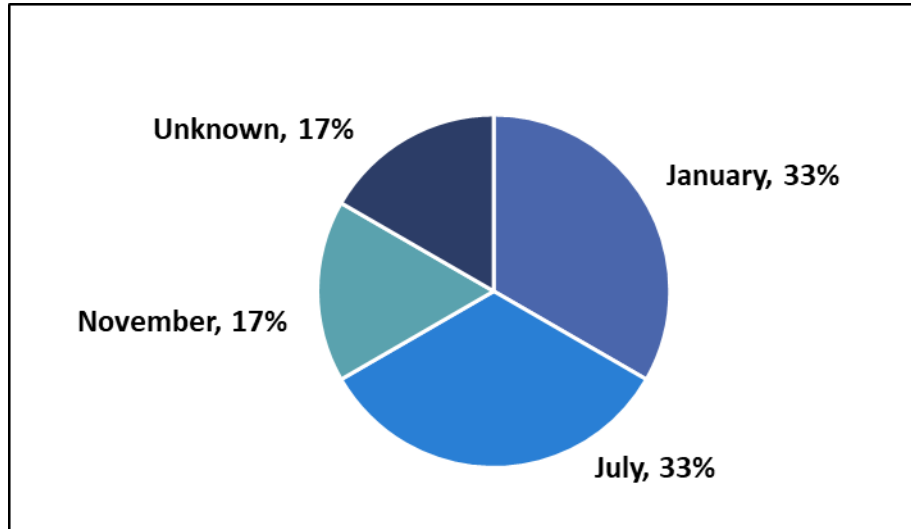
Exhibit 2: Crash Data – Number of Crashes per Year



The crash data results show at least five accidents have occurred within the last five years.

It is also important to consider what time of year the accidents have occurred. According to the results, accidents occurred in January, July, or November.

Exhibit 3: Crash Data – Percent of Crashes per Month



The cause of the accident was also evaluated. Since many accidents involved a combination of multiple potential causes, this data is displayed in bar graph format in Exhibit 4. The results show that alcohol use, speeding, and bad weather are the most common contributors to historic accidents in Nondalton.

Exhibit 4: Crash Data – Accident Causes

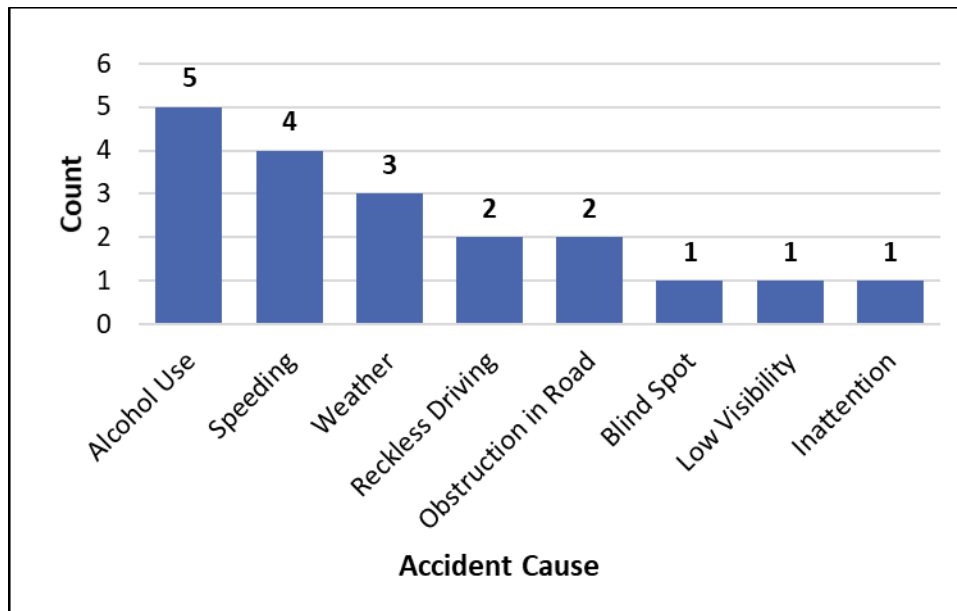
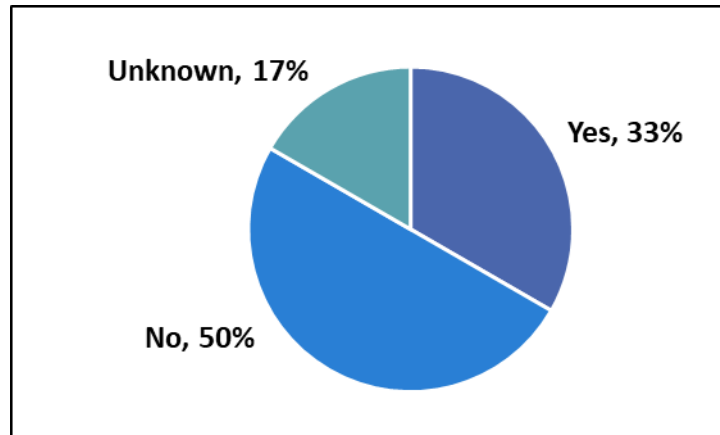


Exhibit 5 shows the approximately 33% of reported crashes that involved alcohol use by the driver of the causal unit. Alcohol use was unknown for 17% of the crashes.

Exhibit 5: Crash Data – Alcohol Use



Evaluating driver age can help determine which age groups to focus driver’s education and safety outreach. Exhibit 6 shows that half of the reported accidents involved drivers below the age of 20, indicating that young drivers may be a priority for the community.

Exhibit 6: Crash Data – Driver Ages

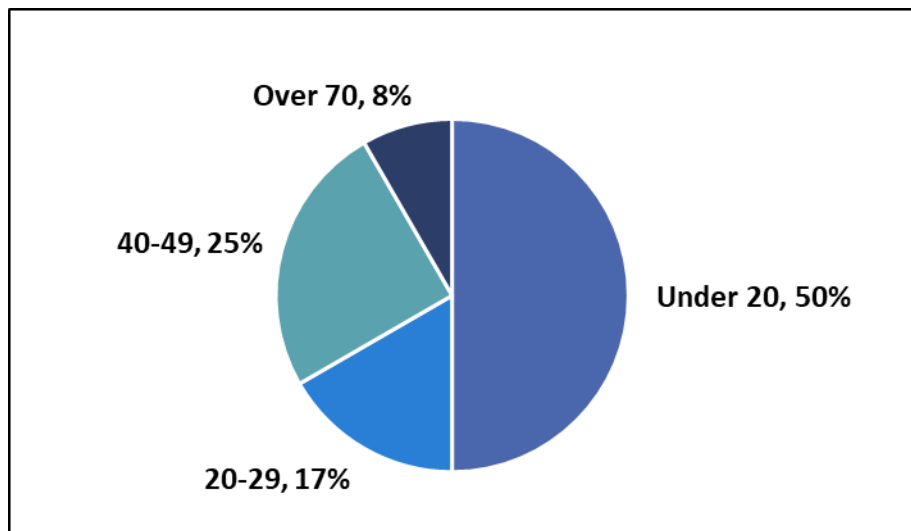
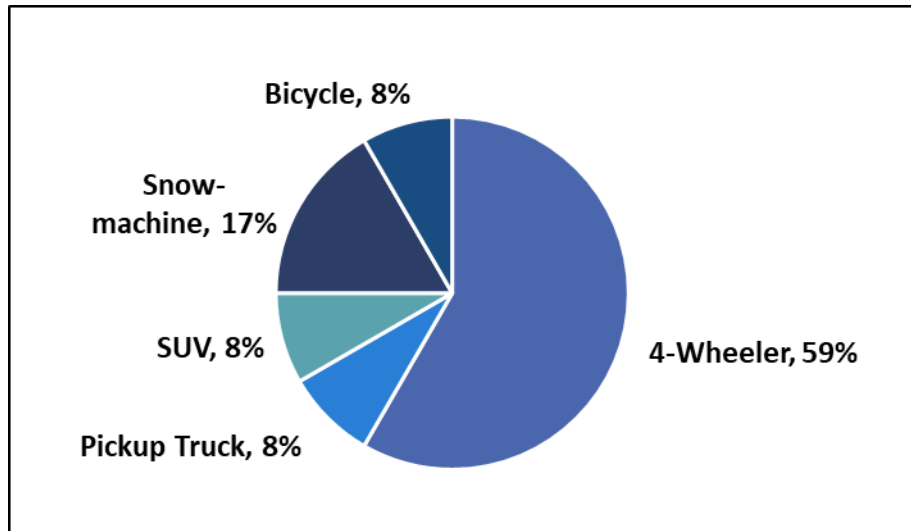


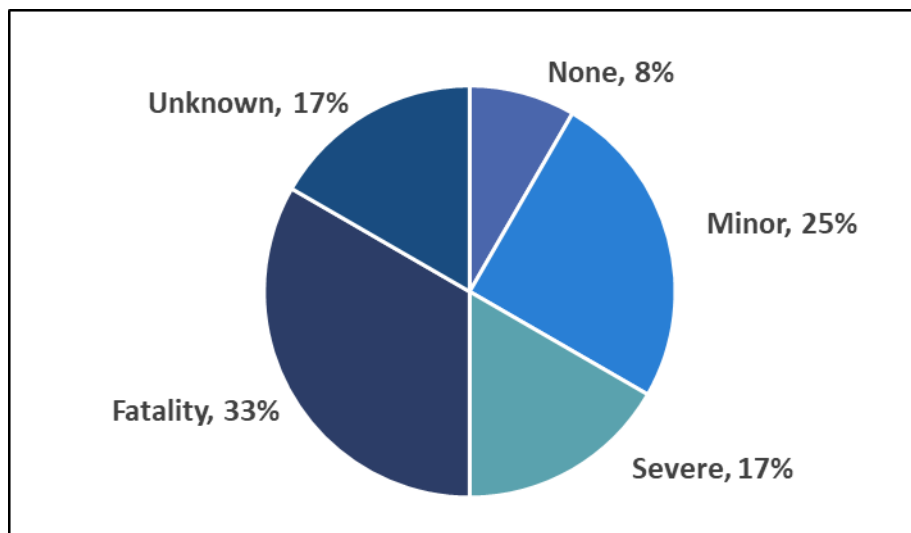
Exhibit 7 shows the types of vehicles (causal unit) that were involved in the crashes. The majority of crashes (59%) involved a 4-wheeler. One of the accidents was a bicycle crash.

Exhibit 7: Crash Data – Causal Unit Vehicle Type



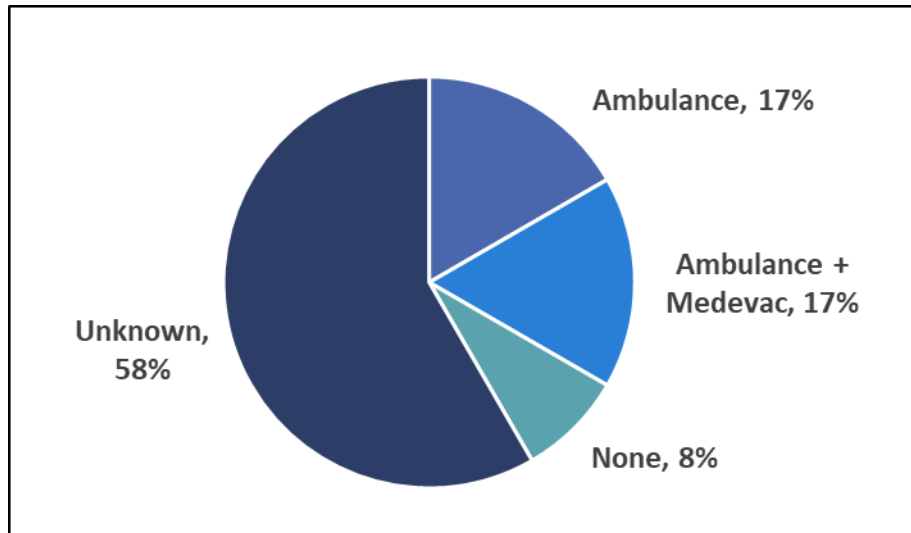
Evaluating the resulting injuries from each crash can indicate the severity of the crashes. According to descriptions provided by Council members, about 25% of accidents resulted in minor injuries such as scrapes and bruises, 17% resulted in severe injuries such as deep abrasions requiring stitches, and 33% resulted in fatalities. In some cases, multiple fatalities occurred. Out of the 12 incident reports, four crashes resulted in fatalities, totaling seven fatalities in memorable history.

Exhibit 8: Crash Data – Injuries



The final piece of data evaluated was ambulance and medevac response, as shown in Exhibit 9. Approximately 17% required an ambulance and a medevac. However, EMS response was not reported for 58% of the accidents.

Exhibit 9: Crash Data – EMS Requirement



Additional data collected is shown on the table in Appendix B, including a description of each incident, crash location, number of people involved, and additional vehicles involved in the crash. Approximate crash locations are shown on Figure 1. Overall, none of the reported accidents involved animals or wildlife, or drug use. One crash involved a pedestrian, and one involved a bicyclist.

3.2 TRAFFIC COUNTS

Traffic counts were evaluated in the Community, where available. Traffic count data helps identify correlations between traffic volume and number of crashes. Historical Average Annual Daily Traffic (AADT) counts are available for five roads in the Community: A Street, Airport Road, Main Street, Nondalton/Newhalen River Road, and Old Newhalen River Road. Traffic counts for these roads are displayed in Exhibit 10 for years 2015 to 2017. Earlier traffic count data was not available, and some AADT years were not recorded, as shown. Portage Road is also known as the “Nondalton/Newhalen River Road.” Additional data was available for three roads: Boundary Street, I Street, and Hill Street, all of which had an AADT of 50 in 2017.

Exhibit 10: Community AADT Counts, 2012-2017

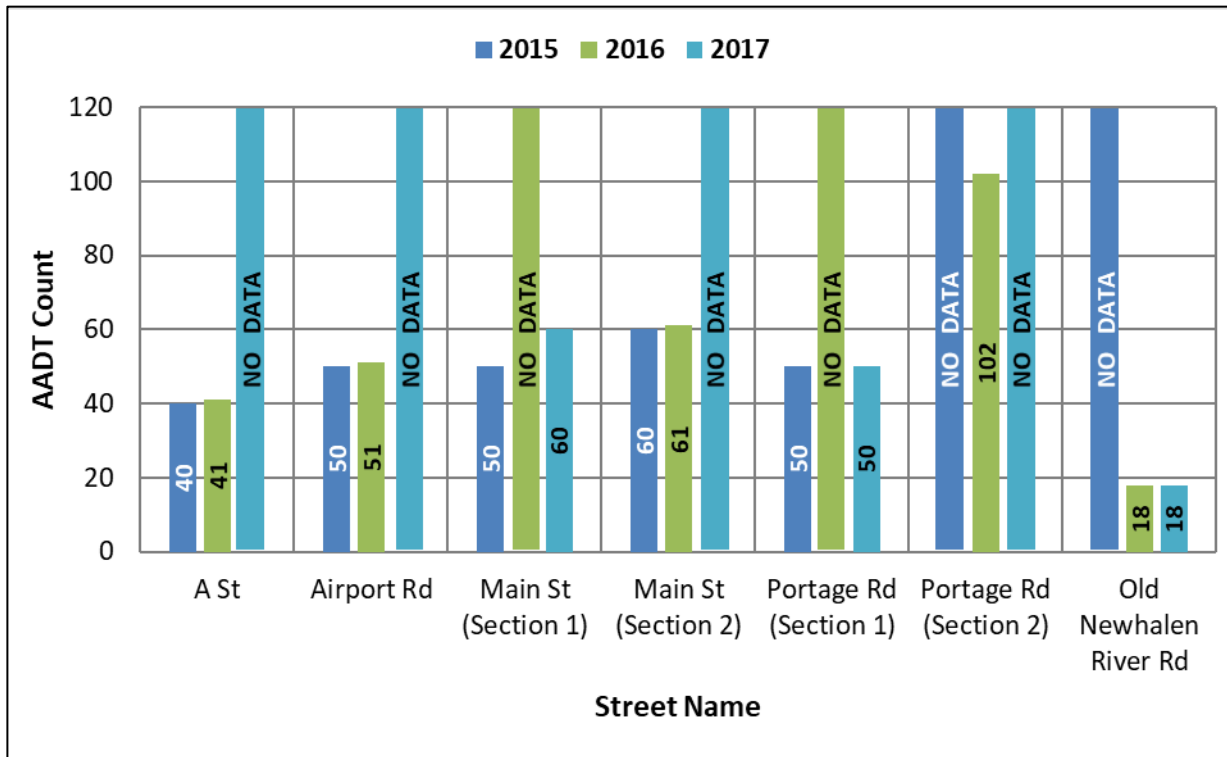


Exhibit 11 and Exhibit 12 are maps of the AADT routes in the Community. Both Main Street and Portage Road were divided into two sections, as shown on the maps.

According to the available AADT counts, the roads that experience the highest traffic volume within the Community include Main Street and the Nondalton/Newhalen River Road. Main Street provides access to homes and essential services within the Community such as the Water Plant, Village Community Center, the Grocery Store/Post Office Building, the Nondalton School & Library, and Teacher Housing. The Nondalton/Newhalen River Road is approximately 14-miles long. It leads south out of Nondalton to the community of Iliamna/Newhalen. Due to the higher traffic volume on these roads, they should be given a high priority for safety and maintenance activities. Additionally, Exhibit 10 shows a slight increasing trend in traffic volume for some of the community streets by about 1 count per year. As more people use the transportation system, more safety features may be needed to control traffic and mitigate hazards in the future.

Exhibit 11: Community AADT Count Map (Community Streets)



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Exhibit 12: Community AADT Count Map (Newhalen Connector Streets)



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3.3 COMMUNITY SURVEY

A public survey was conducted within the Community throughout the month of October 2018. Additional surveys were collected during the public meeting held in January, 2019. Raw survey results are provided in Appendix C. A total of 14 surveys were submitted to Bristol. A summary and analysis of the survey results is discussed below.

3.3.1 Question #1: Safety Concerns & Priorities

Question #1 helps portray what the community regards as high priorities in terms of transportation safety issues. The results are shown in Exhibit 13, which are sorted by priority from highest priority to lowest priority. These rankings were used to select and prioritize emphasis areas for this Plan.

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that “**safety issues**” are problems that cause death, injury or illness, and “**transportation system**” means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

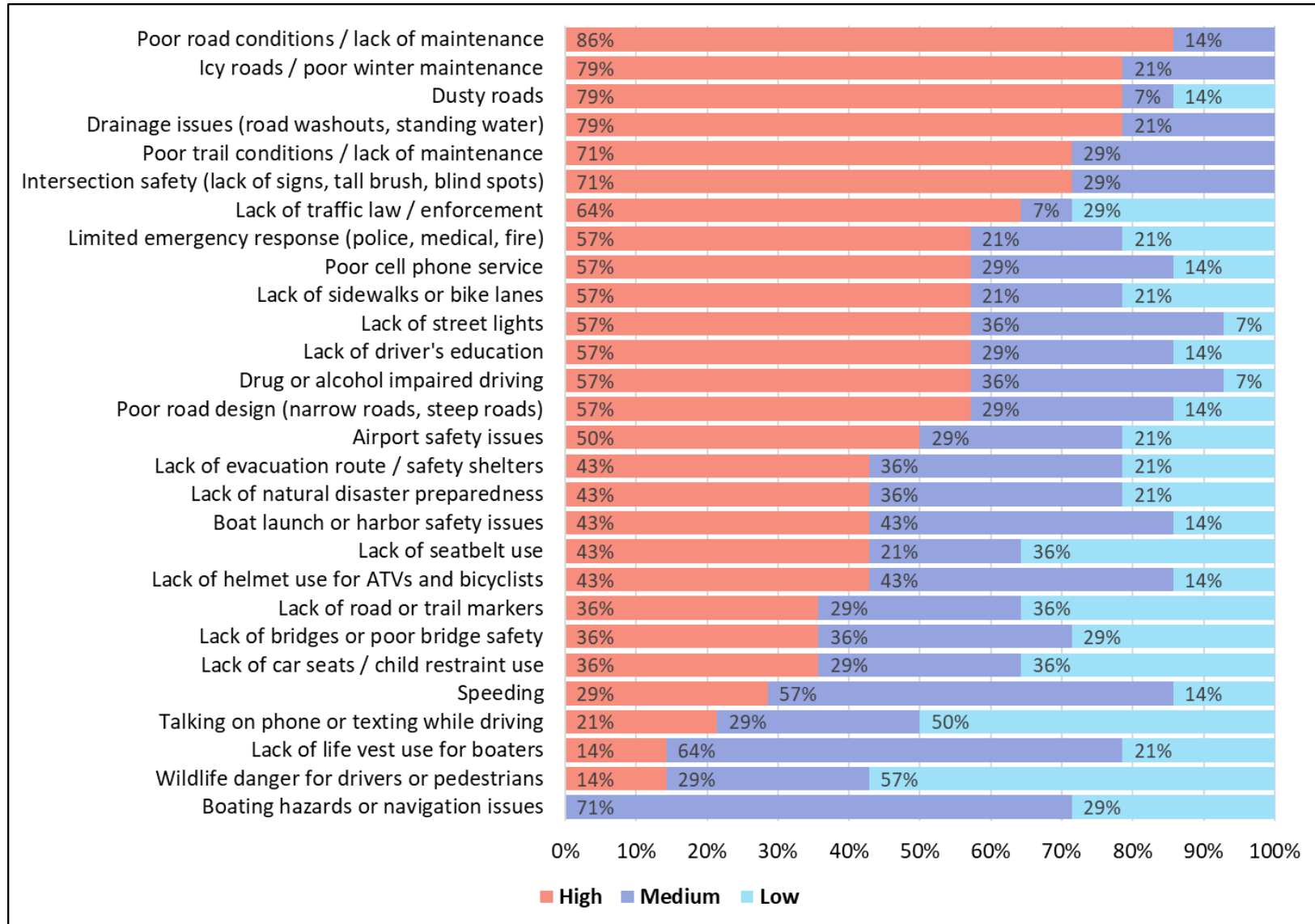
For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either “H” “M” or “L”

According to Exhibit 10, poor road conditions / lack of maintenance was voted a high priority by 86% of survey participants, making it the community’s top transportation safety priority. Other notable priorities from the survey include icy roads / poor winter maintenance, dusty roads, drainage issues, poor trail conditions / lack of maintenance, and intersection safety.

Note: If a line was left blank on the survey, it was assumed a low priority.

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Exhibit 13: Community Safety Priorities



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Survey Question #1 also provided a few blank lines for people to share additional safety issues that were not listed in the question. Answers provided in this section are listed below, most of which describe safety issues at the Nondalton Airport:

- Four-wheelers on runway and taxiways
- Driving around aircraft
- Need bathroom at airport
- Dogs
- Tall brush surrounding airport
- No terminal building
- No security
- Air traffic control

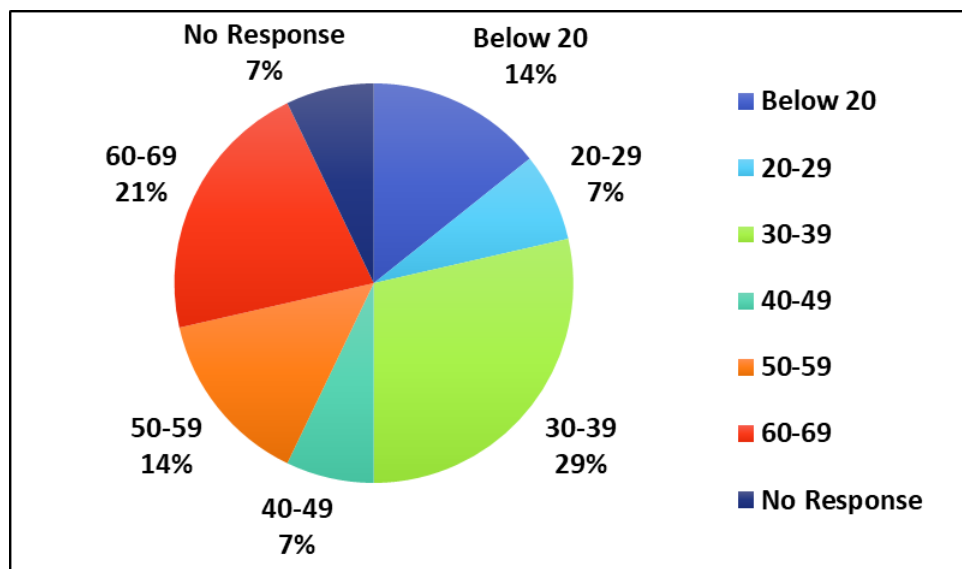
3.3.2 Question #2: Survey Respondent Age

Question #2 collects data about the age of survey respondents, providing demographic information for the survey. This data helps correlate age groups to the various modes of transportation used throughout the community (Question #3), which can help identify where to focus safety education and outreach.

2. How old are you? _____

The results of Question #2 are shown in Exhibit 14.

Exhibit 14: Survey Respondent Ages



The results of Question #2 show a fairly even distribution of ages participated in the survey. Most participants were between the ages of 30 and 39 or 60 and 69, and one person left the question blank.

3.3.3 Question #3: Transportation Modes

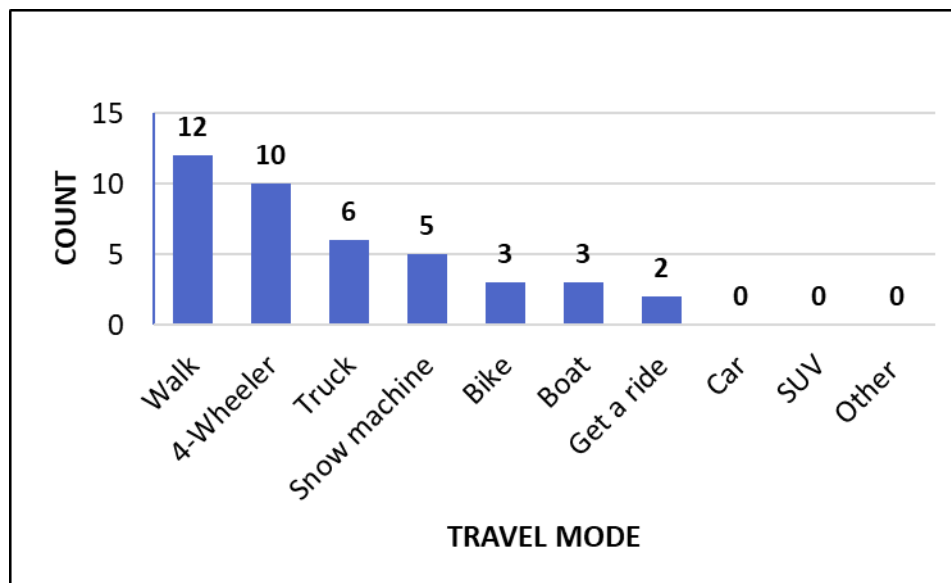
Question #3 demonstrates the most common transportation modes within the Community.

3. How do you get around within the community? Please circle (you may circle more than one):

4-wheeler	Snow machine	Truck	Car	SUV
Walk	Bike	Get a ride	Boat	
Other _____				

Exhibit 15 shows the results of Question #3. Since the option was given to select more than one answer, Exhibit 15 shows the number of times each mode of travel was selected at least once.

Exhibit 15: Modes of Transportation



3.3.4 Question #4: Anecdotal Crash Data

Question #4 of the survey helped gather data about recent transportation related accidents within the Community.

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident _____

What happened? _____

What caused the accident? _____

Where did the accident occur? _____

How old were the people involved? _____

What were the injuries or property damage? _____

What types of vehicles were involved? _____

Were pedestrians or bicyclists involved? **yes** **no** **don't know**

Were drugs or alcohol involved? **yes** **no** **don't know**

Did police arrive on scene? **yes** **no** **don't know**

Did an ambulance arrive on scene? **yes** **no** **don't know**

Three people provided answers for Question #4, all of which seemed to be describing the same incident. One respondent claims to have been involved in the accident, which occurred in the summer of 2016. They wrote, "I was driving my truck on the road going up on the hill next to the airport and was turning left and bumped another car due to my blind spot and a patch of brush." The causal vehicle was a Dodge Ram 1500, and the second vehicle was an SUV. The SUV reportedly had minor damage to the hood, but there were no injuries. Alcohol was not a factor.

3.3.5 Question #5: Safety Measures

Question #5 is an open-ended question aimed at collecting community ideas on how to improve local transportation safety. This style of question allows people to express their own ideas to address issues that may or may not have been listed in Question #1.

5. What do you think could be done to improve transportation safety in your community?

Eleven people provided suggestions to Question #5, as listed below:

- Rebuild, resurface all roads
- Proper road maintenance, have Tribal program purchase equipment specific to road maintenance to train drivers, also well drilling equipment and provide well water
- Cut grass and brush at corners, streetlights, road maintenance
- Start with high priority first by finding the funding for number one on list, and start looking for good road gravel to start building the road up for fixing, right culverts for each creek on road.
- Cut brush near all corners, and all tall brush where certain homes incline with runway approach. Cut all tall brush and trees down. And in winter, sand all hills, roads. And tie up all dogs because they chase Hondas.
- Enforce curfew. Enforce speed limit. Repair blind spots. Report DUIs. Restrict children from [playing] at U's unless supervised by adult. Use reflectors. Have wider roads. Have street signs-yield.
- Remove all alcohol beverages from the community and have a safety meeting every week. Stop letting kids drive Hondas. Report all kids that are out late at night. Wear bright colored clothing.
- Cut all brush and tall grass around corners and fix all roads (fill in potholes and smooth out roads).
- Streetlights, better roads, maybe paved.
- Fix potholes and keep blind corners clear. Clear waterways of debris.
- Fixing the sharp turn on the road. Teaching all drivers the right-of-way for stop signs and trails.

Strategies mentioned most often include brush cutting at blind corners and resurfacing the roads to remove potholes.

4.0 EMPHASIS AREAS

Bristol used data collected from the site visit, public survey, Council correspondence, and personal interviews to identify key safety emphasis areas for this Safety Plan. An “emphasis area” is an area of opportunity to improve safety through a comprehensive 4E approach (engineering, enforcement, education, and emergency services), as appropriate.

The Council is focusing on seven emphasis areas for this Plan:

1. Road and Drainage Conditions
2. Speeding and Dust
3. Pedestrians
4. Impaired Driving
5. Trails
6. Boating
7. All-Terrain Vehicle (ATV) Safety

These emphasis areas were selected based on factors such as public meeting discussions, survey results, community priorities, and highest potential to prevent injury and death on the transportation system.

This section discusses the background and objectives of each emphasis area and identifies strategies or actions to address the emphasis area. The implementation plan discussed in Section 5 develops each strategy further by specifying instructions for target outputs, responsible parties, completion dates, performance measures, success indicators, and monitoring techniques.

4.1 ROAD AND DRAINAGE CONDITIONS

4.1.1 Background

According to results from the public survey, “Poor road conditions / lack of maintenance” was voted a high priority by 86% of survey participants, indicating it is the community’s #1 safety concern. Additionally, 79% of participants marked “Drainage issues (road washouts, standing water)” as a high priority on the survey. During a site visit in January 2019, Bristol engineers were able to observe the drainage issues first hand and photograph some of the problem areas. Since Nondalton is situated on a downhill slope, roads perpendicular to the natural drainage path act as a dam and collect water including First Road, Second Road, and Third Road (see Figure 1). Council members explained that existing culverts and drainage ditches are not large enough to convey the amount of rainwater and snowmelt runoff, which causes flooding across roads and along road shoulders, washes out entire sections of

roadway, and even floods homes on occasion. The standing water perpetuates potholes on the gravel roads. Residents indicated flooding issues near the school, where a frequently backed up culvert creates a large pond that kids play in, and as the water drains through the culvert, it creates a spinning vortex in the pond.



Photo 1 – Pool of standing water/snowmelt on road shoulder, January 2019

Another issue is lack of maintenance of roads and existing drainage facilities. Council members explained that snow removal is performed consistently, but sanding was not performed because the equipment was down. Both the City grader and roller break down often as well. Road grading and pothole mitigation is performed rarely, and training is required to teach operators how to grade the roads properly with a crown. Drainage maintenance is a related issue. Existing culverts become clogged with ice in the winter and spring, and ditches become overgrown with vegetation. Without proper clearing of these facilities, they cannot function properly. Many of the natural drainage channels are located on private property and cannot be accessed by maintenance crews. Additionally, some locals expressed their preference of half culverts with a natural bottom because they tend to have less severe ice buildup. Overall, the community is in support of a road rehabilitation and combined drainage improvement project that evaluates drainage conditions closely through a hydrology study.

4.1.2 Objectives

Rehabilitate roads to mitigate potholes and drainage issues, and improve resources for future road maintenance.

4.1.3 Strategies

Education

- Provide road maintenance operator training to educate operators how to properly crown the roads and drive the equipment

Enforcement

- Require operators to perform daily maintenance checks, and include this on the daily equipment fuel/hours logs

Engineering

- Rehabilitate existing roads by resurfacing, widening, and building up, as needed
- Include drainage improvements and a hydrology study in the road rehabilitation project including installing larger culverts, widening drainage ditches, and evaluating methods to reduce ice build-up in culverts
- Install guardrails in high priority locations
- Coordinate with BBNC to open a new gravel pit in Nondalton, develop a Memorandum of Agreement with appropriate agencies, and obtain required permits through the Lake and Peninsula Borough

Emergency Services

- Apply sand on roads more frequently in the winter to improve traction over ice

4.2 SPEEDING AND DUST

4.2.1 Background

During a Planning Team Meeting held in January 2019, speeding was identified as a safety issue performed by all age groups within the community. Driving at an excessive rate of speed can put drivers and pedestrians at risk because it reduces reaction times and can cause the driver to lose control especially at turns or on narrow or icy roads. In Nondalton, speeding is a concern in the school zone where children are walking to and from school, and in the winter when road surfaces are icy. Nondalton is situated on a hillside sloping downwards towards the lake, so many roads have a relatively steep incline. In addition, the community expressed that the roads are not wide enough for two-way traffic, especially on

the road to Iliamna. Since there are no Police stationed in Nondalton, enforcing the speed limit is challenging.

About 79% of survey respondents also marked “dusty roads” as a high priority, indicating dusty roads are within the community’s top four highest priorities. Road dust is often associated with speeding because excessive speeds can increase airborne dust on gravel roads. Dust clouds are also common on the gravel airport runway. Besides being a nuisance, dust can settle on subsistence foods such as natural berry patches or salmon hanging out to dry. Inhaling airborne dust is also a health risk, particularly for children, elders, and people with respiratory issues. Dust contains particulate matter that can irritate a person’s eyes and throat, aggravate existing heart and lung disease, and damage lung tissue. The community desires addressing the dust and speeding issues in a combined effort. The Council is interested in researching dust suppression alternatives that would not involve chemicals that could impact water quality of the lake, which is their drinking water source and a crucial habitat for subsistence fishing.

4.2.2 Objectives

Reduce incidences of speeding on local roads and reduce airborne dust.

4.2.3 Strategies

Education

- Presentations at school and or Culture Camp every spring to educate younger kids about speeding and health effects of dust

Enforcement

- Install more speed limit signs, as needed, especially near the school
- Continue to enforce speeding via word-of-mouth and coordination with parents

Engineering

- Research dust suppression alternatives and develop an application plan
- Utilize existing water tank in the summers, and develop a road watering plan

Emergency Services

- Continue to supply dust masks at the clinic

4.3 PEDESTRIANS

4.3.1 Background

Pedestrian transportation is one of the most common modes of travel in Nondalton. According to survey results, people marked walking as their mode of travel more often than any other mode. Popular walking destinations in the community include the school, village and city offices, community center, and church. Despite the excess of pedestrians, there are no pedestrian safety features along the roads. Narrow roads provide minimal room for both vehicles and pedestrians. None of the roads have streetlights, but the Council is coordinating a project to install new LED streetlights along the roadways in the summer of 2019. Roadway illumination is essential for pedestrian safety, especially in Alaskan communities that experience extended hours of darkness in the winter. Lack of sidewalks and lack of streetlights were both marked high safety priorities by 57% of survey participants. In addition, out of 12 transportation crashes that were described at the Planning Team Meeting, one involved a pedestrian fatality. According to locals, an ATV driving in blizzard conditions hit a pedestrian who was wearing all black and walking without a flashlight or reflectors. Because of these factors, the community desires pedestrian safety improvements.

4.3.2 Objectives

Improve visibility of pedestrians, reduce slipping hazards due to ice, and enhance community awareness about pedestrian safety.

4.3.3 Strategies

Education

- Community outreach to encourage people to drive slower at night time
- Host a presentation at the school to teach kids how to safely cross the road

Enforcement

- Install more speed limit signs
- Install slow signs by the church and school and at blind corners

Engineering

- Widen the roads to provide more walking space for pedestrians
- Install streetlights around the community to illuminate drivers' view of pedestrians
- Enhance brush cutting and grass clearing efforts (at least once per year) to improve visibility at intersections and sharp turns

Emergency Services

- Provide buckets of sand to community members to apply on their own driveways and reduce the risk of slipping
- Provide flashlights, reflectors, and ice cleats to individuals that need them
- Construct a safety building at the airport with restrooms, to provide shelter out of the elements for people who are waiting to be picked up

4.4 IMPAIRED DRIVING

4.4.1 Background

Nondalton is considered a “damp” community because there are no restrictions on alcohol, but there are currently no bars or liquor stores in the village. Residents recognizes intoxicated driving as one of its primary transportation safety concerns. Approximately 57% of survey respondents marked “drug or alcohol impaired driving” as a high priority. Out of 12 reported crashes, three allegedly involved alcohol use. Additionally, the Council described two locals who drink and drive regularly, crashing at least once per year between the two of them. Although impaired driving is illegal and dangerous, the community has difficulty enforcing the laws without local police.

Impaired driving is a statewide issue as well. Between 2008 and 2015, an average of 21 lives were lost annually on Alaska’s roadways due to alcohol impairment, totaling over 200 fatalities in eight years. Roughly 30 percent of traffic fatalities were related to impaired driving. Because of this, “impaired driving” is listed as an emphasis area in the State’s 2018 Highway Safety Plan (DOT&PF, 2017).

Safe driving requires the ability to concentrate, make good judgements, and react quickly to situations. However, drugs and alcohol affect these skills, putting the driver and others in danger. These substances impair driving skills by slowing reaction time, reducing coordination and concentration, decreasing vision, and inhibiting judgement (Alcohol Rehab Guide, 2018). The community desires increased education and outreach efforts to help combat impaired driving in Nondalton.

4.4.2 Objectives

Reduce incidences of impaired driving in Nondalton, improve public awareness about State DUI laws and hazards of impaired driving, and enhance community effort to combat impaired driving.

4.4.3 Strategies

Education

- Community outreach such as installing permanent road signs declaring State DUI laws, and posting informational fliers about impaired driving hazards
- Coordinate with the Alaska DOT&PF and State Troopers to provide presentations at the School and Community Center

Enforcement

- Enforce impaired driving through the City Work Service, requiring people to perform community service if caught driving while impaired

Engineering

- Install guardrails at steep embankments to protect drivers who may veer off the road

Emergency Services

- Coordinate a combined meeting between the City, Tribe, and other safety partners to develop an Action Plan against drunk driving
- Appoint a Council member to keep a safety log about DUI offenses and other transportation accidents on local roads

4.5 TRAILS

4.5.1 Background

ATV trails leading out of the village are essential to the Native way of life, culture, and economy because they provide access to subsistence areas such as fishing streams, hunting grounds, and berry patches. According to locals, the existing trails surrounding Nondalton are in terrible shape. Survey results show that 71% of participants marked “poor trail conditions / lack of maintenance” as a high priority. For many of the trails, the driving path is covered in roots, bumpy enough to knock over a four-wheeler with a load of meat, even going slow. In other areas, the trails traverse swamp, causing mud and water to cover the traveled way. One popular trail is in such bad shape that people will bypass that section of trail by crossing the airport runway, causing a safety hazard for planes landing and departing. Although there are some existing bridges at creek crossings, residents say the bridges need repairs and more bridges are needed in other locations. Brown bears are another safety concern, especially in the summer and fall time.

Trail safety hazards differ in the winter. Ice roads crossing lakes and rivers are the largest safety concern, particularly regarding thin ice during warmer weather. The Council currently places safety cones near these areas as needed, and would like to continue this

effort in the future. Residents rely on the ice roads to transport goods and people between Nondalton and nearby villages including Iliamna, Newhalen, Pedro Bay, Port Alsworth, among others, and even Lime Village, which is located over 90 miles north of Nondalton. Residents say the trip to Lime Village is approximately 14 hours and agree that a safety cabin located along both the trail to Lime Village and the Ground Hog Mountain trail would help improve winter travel safety. Safety cabins are especially desired because of lack of cell service and bad weather in these areas. If travelers need to call for help in an emergency while on the trail system, they would need to have a satellite phone, which can be costly. Additionally, hunters explained that weather can turn quickly in the area. They described a recent incident that occurred in the winter of 2017 where two men went out hunting on a clear day, but got caught in a blizzard and got stuck on the mountain. They had to call the Coast Guard for help with a satellite phone they had on hand. According to the Council, incidences like this are not uncommon. They estimate one search and rescue mission is needed every couple of years.

4.5.2 Objectives

Improve trail conditions, enhance emergency communication, and increase community awareness about trail safety.

4.5.3 Strategies

Education

- Continue to announce thin ice conditions on rivers and lakes to the community several times per week, or as needed in the winter

Enforcement

- Coordinate with the Kijik Corporation and other safety partners to enforce trespassing on private or protected lands, and consider hiring a Trespass Officer

Engineering

- Map out existing bridges on traditional trails and indicate where more are needed
- Upgrade and repair existing trail bridges, as needed
- General trail rehabilitation including resurfacing the trails with gravel, or consider low-impact trail mats
- Improve trail around airport to reduce use of the short-cut across the runway

Emergency Services

- Continue to place safety cones near areas of thin ice or other trail / ice road hazards
- Upgrade cell phone towers to expand service for emergency communications

- Construct a safety cabin on the trails to Lime Village and Ground Hog Mountain because both trails are long and commonly used year-round

4.6 BOATING

4.6.1 Background

Similar to trail transportation, boating is an essential mode of transportation to the culture and economy of the Nondalton. There are currently no public boat launch or barge landing facilities in the community. People must launch off the beach to access waterways. The Council has barge landing, floating dock, and concrete boat launch ramp designed and ready for construction, but lack of construction funding has halted progress. Although boating is common, life jackets are not always worn. During a Safety Planning Team Meeting, Council members described at least three boating accidents within the last 20 years, one of which involved a fatality, and the others involving near drownings. For all three incidences, no life jackets were worn. Two of the incidences involved young men standing up while driving, and the third incident involved three men drinking in a canoe. Intoxicated boating, improper driving, and lack of life jackets are all factors contributing to these local accidents.

In addition, the community expressed the need for a ferry haul service across the lake to fish camp because the current option for barging materials is too costly. Locals believe service would improve the economy as well as safety. They described one incident of a man trying to haul his own truck across the lake in his skiff, and the excess weight caused his boat to flip.

4.6.2 Objectives

Reduce boating accidents and increase life jacket use, improve public education about safe boating practices, and improve emergency response.

4.6.3 Strategies

Education

- Continue boating safety lessons at yearly Culture Camp, and evaluate other educational strategies to teach boat maintenance, life jacket use, proper safety equipment to keep in boats, and hazards of boating under the influence
- Provide training to City and Tribal personnel for spill response and how to use the spill response kits

Enforcement

- Continue annual beach cleanup

- Continue to participate in Kids Don't Float program to restock life jackets every year
- Work with safety partners to enforce boat registration

Engineering

- Seek funding for proposed "shovel-ready" community floating dock, barge landing, and concrete boat launch facility

Emergency Services

- Construct a storage building near the beach to house emergency response equipment such as a small boat, ropes, lights, etc.
- Procure spill containment kits to have on hand in the event of an emergency
- Investigate and fund a Ferry / Haul service across the lake to improve safe movement of goods and people

4.7 ATV SAFETY

4.7.1 Background

In Nondalton, locals drive various types of ATVs including 4-wheelers, snowmachines, dirt bikes, motorcycles, and bicycles. According to the public survey, 4-wheelers are the second most common mode of transportation. Since ATVs are so common, general ATV safety is a high priority for the community. Through planning meetings and the survey, various ATV safety concerns were mentioned including incidences of kids overloading the front and back racks of 4-wheelers, loose dogs chasing ATVs, lack of helmet use, and unauthorized ATVs driving on the airport runway and around planes. Since there is no local police presence in the community, enforcement is non-existent. There is currently no enforcement of ATV age limits, passenger limits, curfews, helmet use, or airport access.

Although there is an existing City ordinance requiring people to tie up their dogs, the ordinance is not enforced. Loose dogs are a safety issue for multiple reasons. Dogs chase vehicles and pedestrians, can be hit by vehicles, and can bite or attack people. Although there are no recently reported dog bites in Nondalton, the issue is a local concern as well as a statewide concern for rural Alaskan communities. A study published in 2013 by The Journal of Pediatrics examined the incidence of dog bites between 2001 and 2008. The study demonstrates that Alaska Native Children suffer among the highest rate of serious dog bites in the nation, and are hospitalized for dog bites at double the rate of U.S. children overall (Anchorage Daily News, 2015).

4.7.2 Objectives

Reduce the number of loose dogs around the community, and improve safety / access for all types of ATVs including 4-wheelers, snowmachines, dirt bikes, motorcycles, and bicycles.

4.7.3 Strategies

Education

- Enhance community awareness about City loose dog ordinance
- More education through the school about ATV safety, passenger limits, age restrictions, speeding, and restricted access to the airport
- Evaluate providing a dog training service for community members

Enforcement

- Post ATV laws and local age restrictions around the community
- Improved enforcement about passenger limits on ATVs
- Evaluate ways to improve enforcement of City loose dog ordinance

Engineering

- Rehabilitate roads and trails (see Sections 4.2 and 4.5) to improve safety and access for ATVs

Emergency Services

- Participate in State ATV Helmet program and obtain sized-helmets for all kids below the age of 16
- Coordinate with the City, Tribe, and other safety partners to address the loose dog issue and evaluate alternatives in a combined safety meeting

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5.0 IMPLEMENTATION PLAN

The Council plans to begin implementation of this TTSP in the 2020 calendar year. The Council will schedule projects based on priorities recommended by the community and approved by the Council. More information regarding project scheduling may be added in the plan during yearly updates.

An Implementation Plan Matrix for each emphasis area is attached in Appendix D. The matrix is to be used by the Council to plan safety projects. The matrix identifies the following information:

- Objectives of the emphasis area
- The strategic linkage, or evidence that shows a need to prioritize the emphasis area
- Success indicators, or completed tasks that demonstrate successful implementation of the proposed projects
- For each of the 4E's of Safety:
 - Actions and proposed strategies to improve the safety emphasis area
 - Target output, or goal of each strategy listed
 - Responsible parties that are assigned to each task listed, subject to change with management positions
 - Date of completion, estimated for each strategy listed, which may be on-going
 - Performance measures that indicate the completion of a project
 - Monitoring and evaluation methods to analyze the effectiveness of a completed project or strategy, which can help improve future project planning

5.1 EVALUATION PROCESS

At least once per year, this plan will be evaluated by the Council's Safety Champion, or other staff members as directed by the Council. The plan will be updated as needed. For example, emphasis areas may be removed, added, or modified as safety measures are successfully implemented or as safety priorities change within the community. A Council meeting, open to the public, will be held to discuss major changes to the plan as well as strategies for future safety projects and decisions regarding potential funding sources.

5.2 NEXT STEPS

Several steps still need to be taken after this plan is finalized. The recommended actions for the Council are listed below in chronological order:

1. Develop an official resolution to adopt this plan
2. Use this plan and data provided in this plan to apply for funds for safety projects through the Tribal Transportation Safety Funds and other sources (see Section 5.3)
3. Apply for safety audits to evaluate the existing transportation facilities and receive recommended solutions to improve safety
4. Include the public in decision making processes via public meetings and announcements to ensure proposed projects are benefitting the community
5. Select strategies outlined in this plan to address safety concerns and begin planning projects, starting with the highest priority emphasis areas
6. Develop a detailed project schedule to keep projects on track and ensure success
7. Apply for funding for engineering, design, and construction services for high priority projects
8. Monitor and evaluate construction activities and performance measures outlined in the Implementation Plan
9. Record completed projects and maintain as-built documents for future use
10. Update this plan and repeat these steps when projects are completed, or every 5 years

5.3 FUNDING SOURCES

Funding is a major element to completing safety improvement projects. Various available funding sources are listed below. This list may not be comprehensive and is subject to change.

- Tribal Transportation Program Safety Funds
 - FHWA manages the Tribal Transportation Program (TTP). Each year under the Fixing America's Surface Transportation (FAST) Act, 2% of available TTP funds are set aside to address transportation safety issues in Native America.

- More information about this program can be found at:
<https://flh.fhwa.dot.gov/programs/ttp/safety/ttspf.htm>
- Alaska DOT&PF Highway Safety Grant
 - Every year, the Alaska DOT&PF through its Highway Safety Office (AHSO) funds grants which address specific traffic safety priority areas. The Highway Safety Grant is available for Federal Fiscal Year 2019 (October 1, 2018 to September 30, 2019).
 - Other funding resources are available on their website including grant application forms and instructions, tips and tactics for success, and traffic data sources.
 - More information can be found at:
<http://www.dot.state.ak.us/highwaysafety/forms.shtml>
- Alaska DOT&PF Highway Safety Improvement Program (HSIP)
 - The Alaska HSIP annually identifies high accident locations on Alaska roads, evaluates corrective measures, funds the most cost effective ones, and evaluates their effectiveness after projects are completed. The HSIP mission is to identify and fund highway safety projects that maximize lives saved and injuries eliminated per dollar spent.
 - More information can be found at:
<http://dot.alaska.gov/stwddes/dcstraffic/hsip.shtml>
- Alaska Transportation Alternatives Program (ATAP)
 - The ATAP provides funding for programs and projects defined as transportation alternatives meeting eligibility requirements. There are over \$2.6 Million in funds available for rural communities within the State for Fiscal Year 2018. Availability of funding in future years is to be determined.
 - More information can be found at:
<http://dot.alaska.gov/stwdplng/atap/index.shtml>
- Alaska DOT&PF Safe Routes to School Grant
 - Grants are available through the Safe Routes to School Program to help plan, design, or complete construction improvements that enable and encourage children to safety walk or bicycle to school.
 - More information can be found at:
<http://www.dot.state.ak.us/stwdplng/saferoutes/grants.shtml>

- Alaska DOT&PF Statewide Transportation Improvements Program (STIP)
 - The Alaska STIP helps fund air, land, and water transportation projects in Alaska that have been formally proposed by residents, elected officials, and transportation professionals every four years.
 - More information can be found at:
<http://dot.alaska.gov/stwdplng/cip/stip/index.shtml>
- Alaska DOT&PF Public Transit Funding
 - The State of Alaska maintains various public transit programs to aid in funding across the state. These include the Non-Urban Formula Grants, Rural Transportation Assistance Program (RTAP), American Recovery and Reinvestment Act of 2009 (ARRA) Funding Distribution, and the Tribal Transit Program Funds.
 - More information can be found at:
http://dot.alaska.gov/transit/pt_funding_overview.shtml
- Denali Commission Grants
 - The Denali Commission is an independent federal agency designed to provide critical utilities, infrastructure, and economic support throughout Alaska. Various funding opportunities are available through their Energy Program, Transportation Program, Health Facilities Program, and Training Program.
 - More information can be found at: <https://www.denali.gov/grants/>
- Grants.gov
 - [Www.grants.gov](http://www.grants.gov) is a public website where all federal agency discretionary funding opportunities are posted for grantees to find and apply to them. The search function can be used to sort out transportation related grants. Some grant postings close after only two weeks, so it is important to check for opportunities frequently.
- Better Utilizing Investments to Leverage Development (BUILD) Grants
 - The BUILD discretionary grant program awards funds on a competitive basis for road, bridge, transit, rail, port, or intermodal transportation projects that will have a significant local or regional impact.
 - More information can be found at:
<https://www.transportation.gov/BUILDgrants>

A general outline of additional national and state-level grant and safety programs is provided below. Some of the programs are dedicated specifically to safety, while others have broader application.

- FHWA funds, administered by the states for safety only, include:
 - Hazard Elimination Program (HES)
 - Highway-Rail Grade (public) Crossings
- FHWA funds, administered by the states for activities, including safety:
 - Surface Transportation Program (STP)
 - Interstate Maintenance (IM)
 - Highway Bridge Replacement and Rehabilitation Program (HBRRP)
 - Intelligent Transportation System (ITS)
 - Highway Planning and Research (HPR)
- US DOT sponsored training programs, including safety topics:
 - National Highway Institute (NHI)
 - Tribal Technical Assistance Program (TTAP)
 - US DOT transportation project grants
- National Highway Traffic Safety Administration (NHTSA) funds administered by the states through the Governor's representative (safety only):
 - State and Community Highway Safety Grant
 - Intoxicated Driver Prevention Program
 - Alcohol-impaired Driving Countermeasures Incentive Grants
 - Safety Incentive Grants for the Use of Seat Belts
 - Occupant Protection Incentive Grants
 - State Highway Safety Data Improvement Grants
 - Child Passenger Education Program
 - Research and Demonstration Grants
 - Training
- TTP Program jointly administered by the Bureau of Indian Affairs (BIA) DOT and the Federal Lands Highway Office and funded by FHWA:
 - 2% Planning Funds

- Construction Funds
- Safety Management Systems (SMS)
- Tribal Highway Safety Improvement Program (THSIP)
- Highway Safety Programs administered by BIA Highway Safety Office (HSO) program and funded by NHTSA (safety only):
 - State and Community Highway Safety Grant
 - State Highway Safety Data Improvement Grants
 - Child Passenger Education Program
- State funded and administered (not all states):
 - State Highway Funds
 - State Safety Funds
 - Transportation Loan Programs
 - Local Technical Assistance Program (LTAP)

5.4 ADDITIONAL SAFETY RESOURCES

Safety resources are continuously evolving. A short list of health and safety organizations useful for Alaskan communities is provided below. Many of these programs can provide educational resources such as posters, as well as safety gear for communities such as helmets and life jackets.

- The Alaska Department of Health and Social Services (DHSS) provides several significant Injury Prevention Programs including Helmet Safety, Bike-n-Walk Safely, Kid's Don't Float, and more. A few of these programs are described in further detail below. For more information on the other programs, visit:

<http://dhss.alaska.gov/dph/Chronic/Pages/InjuryPrevention/default.aspx>

- Alaska Helmet Safety Program – The Alaska DHSS provides various resources for youth ATV safety and helmet education. Grant opportunities may be available. Program and contact information can be found at:

<http://dhss.alaska.gov/dph/Chronic/Pages/InjuryPrevention/HelmetSafety/atv/default.aspx>

- Alaska Reflector Program – The Alaska DHSS reflector program works to increase the safety of children by using reflective, high-visibility products. Program and contact information can be found at: http://dhss.alaska.gov/dph/Chronic/Pages/InjuryPrevention/Reflector_Old/Default.aspx
- Center for Safe Alaskans – This program works to prevent injuries, promote wellbeing and improve safety for all Alaskans. They provide several services including FREE reflective tape, car seat assistance, and more. Find more information at: <https://safealaskans.org/>
- Bristol Bay Area Health Corporation – BBAHC provides health care services, as well as the Community Health Aide Program, Emergency Medical Services (EMS)/first responder training, and other health educational programs for communities within Bristol Bay. Find more information at: <https://www.bbahc.org/>
- Centers for Disease Control and Prevention (CDC) – The CDC has a multitude of motor vehicle safety resources including “Get the Facts” sheets, State Fact Sheets, and “What Works” strategy sheets for various safety topics including child passenger safety, seat belts, teen drivers, older adult drivers, impaired driving, distracted driving, pedestrian safety, Tribal road safety, bicycle safety, and more. Find more information at: <https://www.cdc.gov/motorvehiclesafety/>
- NHTSA – Fatality Analysis Reporting System (FARS) is a nationwide census providing NHTSA, Congress, and the American public yearly data regarding fatal injuries suffered in motor vehicle traffic crashes. The site offers a customizable fatality data query system. This site also provides road safety resources and tips for various safety topics.
FARS: <https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>
Road Safety Tips: <https://www.nhtsa.gov/road-safety>
- National Safety Council – This organization provides resources on developing a Safety Management System (SMS), which is a continuous improvement process that reduces hazards and prevents incidents. Find more information at: <https://www.nsc.org/work-safety/tools-resources/safety-for-business/ask-us>

- Road Safety Audits (RSAs) – The FHWA provides resources for conducting RSAs, which are an effective tool for proactively improving the future safety performance of a road project during the planning and design stages, and for identifying safety issues in existing transportation facilities. Find more information at:
<https://safety.fhwa.dot.gov/rsa/>
- FHWA Tribal Transportation – This website provides an overview of tribal transportation safety topics, programs, policies, crash data, and more.
https://www.fhwa.dot.gov/tribal/topics/safety/saf_ack/saf_guide.htm
- Countermeasures that Work – A Highway Safety Countermeasure Guide for State Highway Safety Offices, Eighth Edition, 2015, NHTSA. https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812478_countermeasures-that-work-a-highway-safety-countermeasures-guide-.pdf

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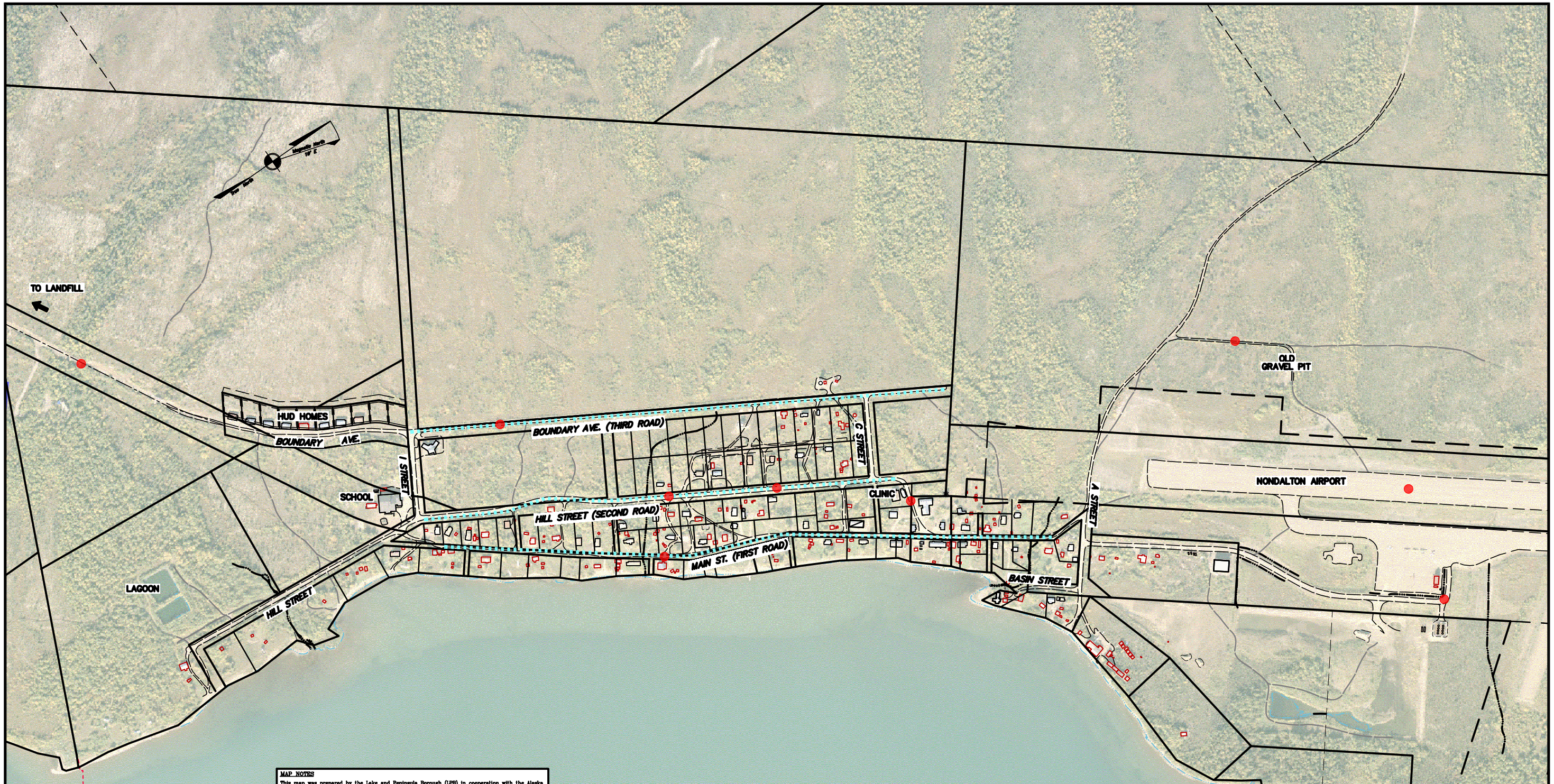
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FIGURES

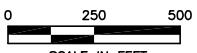


**FIGURE 1:
Community Map
NONDALTON**

59° 58' 15" N 154° 51' 01" W (NAD 83)
Approximate Elevation: 250'
Township 2 South, Range 32 West, S.M., AK
U.S.G.S. Quadrangle "ILIAMNA D-5," Alaska
ILIAMNA RECORDING DISTRICT

LEGEND

- APPROX. CRASH LOCATION
- DRAINAGE ISSUES



Date of Photography: August 17, 2002
Magnetic Declination computed by U.S.G.S. Geomag Program using AK-2000.COF model as of August 1, 2002. SHEET 1 of 1

MAP NOTES

This map was prepared by the Lake and Peninsula Borough (LPB) in cooperation with the Alaska Department of Community and Economic Development (DCHD) using funding from the Coastal Impact Assistance Program, Coastal Management Program, Bureau of Indian Affairs Transportation Planning and funding from the Initiative for Accelerated Infrastructure Development (IAID). The IAID is supported by grants from the Denali Commission, USDA Rural Development, Alaska Department of Transportation and Public Facilities and DCHD. The Alaska Native Tribal Health Consortium provided sanitation facility records. The LPB contracted with Global Positioning Services Incorporated in June of 2003 to prepare the map. This map should not be construed as a survey. On-site surveys should be conducted prior to engineering or construction.

This map was compiled to meet horizontal and vertical accuracy in accordance with national map accuracy standards.

Property and utility information has been generated from readily available sources with limited accuracy checks. Property information is not intended to represent a title search of the Recorder's Office record. Utility location is approximate and shows only the main lines as the service lines have been omitted for clarity. Generally, the information is current as of December 2003.

This map is based on photography acquired on August 17, 2002, at a nominal scale, of 1 in = 800 ft.

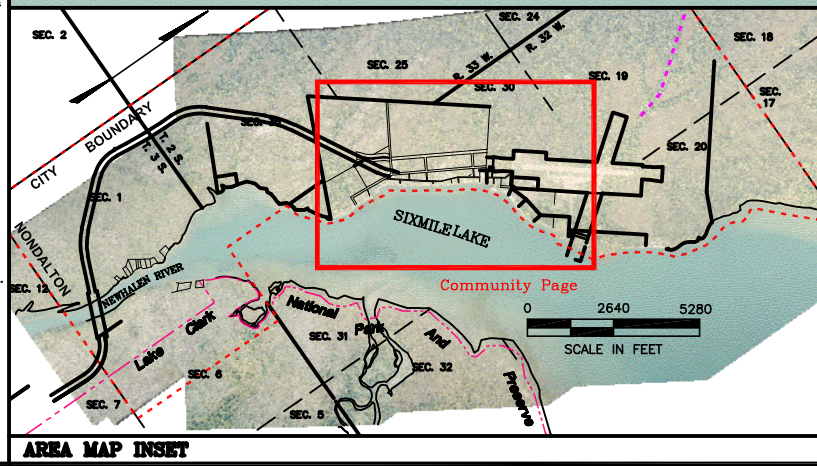
Aeromap U.S. prepared the orthophoto and topographic mapping.

The orthophoto is an aerial photo which has been corrected, by rectification to ground control stations, to remove distortions and warpage due to ground topography and aircraft tilt and trim.

HORIZONTAL AND VERTICAL CONTROL
The control monument for the digital orthophoto was ILIAMNA EAST BASE. Published horizontal datum NAD 1983 coordinates for this monument are North 59° 45' 47.81009" and West 154° 49' 14.52415". The vertical datum NGVD 1929 for this monument is 117 feet above mean high water (MHW).

The village of Nondalton has been adjusted to this control using high-precision GPS methods and the adjusted coordinates and elevation for NCM 1, US 4876 were calculated to establish a local control reference. The NAD 1983 coordinates for this monument are North 59° 57' 38.9621" and West 154° 51' 20.9692" and the NGVD 1929 elevation is 251.46 feet above mean high water.

The contours were prepared at two (2) foot contour intervals with index contours every ten (10) feet.



APPENDIX A: PUBLIC INVOLVEMENT

TRIP REPORT & MEETING MINUTES

Project: **BBNA THMP & TTSP Project**

Bristol Project No: 32190013

Reference: Nondalton Planning Team 2-Day Workshop and Public Meeting

Date of Meeting: January 31 – February 1, 2019

Location of Meeting: Nondalton Community Center

Participants:

Bristol: Danielle Dance, Jackie Wander

Planning Team: See attached sign in sheet, Fawn (Tribal Administrator) will be point of contact

Summary

Bristol engineers, Jackie and Danielle, arrived in Nondalton, Alaska at approximately 12:30 PM on Thursday, January 31, 2019. From 1:30-3:45 PM Bristol led a Planning Team meeting with the Nondalton Planning Team in the Nondalton Community Center. During this meeting, general transportation safety information was collected for the Tribal Transportation Safety Plan (TTSP), and later hazards were identified and analyzed for the Tribal Hazard Mitigation Plan (THMP). Then from 4:00-6:00 PM, Bristol hosted a public meeting in the same building to collect public comment about both plans.

Jackie and Danielle stayed overnight in Bob and June's B&B.

The next morning, they met with the Planning Team at 9:00 AM to discuss the remaining items for both projects including emphasis areas and strategies for the TTSP, and mitigation actions for the THMP. The meeting concluded at 1:45 PM. Jackie and Danielle departed Nondalton at 2:00 PM on February 1, 2019.

Notes taken during both Planning Team meetings and the public meeting are summarized below.

DAY 1

TTSP Planning Team Meeting Notes

- See attached TTSP Background Collection Questionnaire and Notes

THMP Planning Team Meeting Notes

Worksheet #1 – Hazard Identification

- Avalanche
 - Avalanches are up in the high mountains but no trails up that high. No risk, not applicable to the area
 - DO NOT PROFILE

- Drought
 - Not seeing as much snow as they have in the past
 - Impacts to subsistence activities (berries some years, when dry they have nothing), and stream levels are low. Affects fish, when water levels are low, the fish cannot go up the river to spawn. Noticeable change in number of duck and geese, bird hunting.
 - Becoming more frequent
 - Span of a couple of weeks without rain at the most.
 - PROFILE
- Earthquake
 - The 1964 earthquake – mostly ice breaking up, windows cracking, stuff falling off shelf, trees swaying.
 - Concern about impacts to underground sewer and water utilities and houses on higher foundations/piles.
 - Fault line runs in the middle of Sixmile Lake
 - A few years ago they could hear the ground moving and see it moving
 - Geologist said possible evidence of 7+ quake happening in the community
 - Some electric, and all phone lines, water and sewer utilities are underground, electric used to be all underground but are mostly overhead now
 - Clinic on stilts, could fall down
 - Clay soil and big ash layer – soil unstable
 - Noise and door slamming
 - Laying down and feel the house shake
 - PROFILE
- Erosion
 - Erosion along the river, private docks are impacted
 - Severe erosion on roads
 - Road washouts
 - Can cut off airport access but they do have an alternate route
 - Fix road washout might take a few days.
 - Yearly during spring break up
 - Wildfires can contribute to erosion by taking out roots along banks
 - PROFILE
- Extreme Cold
 - Winter 2018/2019: -20 degrees for about 6 weeks (2 week stretch for -15 to -20)
 - 3 weeks max
 - Some houses froze up
 - If continued the whole community would have been out of power
 - Yearly
 - PROFILE
- Extreme Heat
 - Getting around 90 degrees but doesn't stay long
 - No damage, a few heat stroke cases at the clinic
 - People go out in Carhart bibs to mow lawn in 70 degrees in the beginning of the summer when it starts to warm up
 - Last few years getting into the 80/90s

- Sunburns
- A few times a year, up to about a week roughly
- Not concerned about damages caused by heat, may consider in the future
- DO NOT PROFILE
- Flood
 - 1974 flood event (most severe in memorable history) caused water up to first road, all houses under about 4 feet of water
 - Some homes had about 2-3 feet of water in home
 - This was due to spring thaw
 - Water was up against the log cabin
 - Certain times of year in spring, creeks are full, water levels are so high people cannot access some subsistence areas.
 - Wait several weeks for water to reduce enough to get across
 - Yearly
 - PROFILE
- Landslide
 - No risk, not applicable to the area
 - DO NOT PROFILE
- Severe Wind
 - Last New Year's 2018, it was so windy that a resident roof flew off, which hit a power line and caused a power outage.
 - Power was out for 1.5 days to service and repair lines due to this
 - Planes cannot fly in over 50 MPH winds
 - Whole roof flew off about 20 years ago in fall
 - Lake water can hit window at the community center because of wind
 - Yearly (Spring and Fall – worse but year round)
 - Chill factor in the winter
 - PROFILE
- Severe Winter Weather
 - More freezing rain / hail, fall weather January-March winter
 - Snow causes trees to weigh down because of snow and ice build-up on limbs
 - Lost power due to snow and ice on overhead lines, but freeze-thaw also snapped the underground electric lines in the past, which is why they have moved to overhead lines
 - School has been closed before, not often
 - Icy roads, cannot walk, many pedestrians. People have chains on tires (trucks, cars, and ATVs) and need ice cleats
 - Airplanes cannot come in
 - Plowing pretty good, plow airport runway whenever they receive over 2-inches of snow
 - People have been lost on trails because of blizzard (see transportation safety notes)
 - PROFILE
- Subsidence
 - Large layer of ash and lots of clay
 - Foundation shifts. The whole community seems to be “sliding towards lake.”

- Lots of houses are on posts and all leaning towards lake
- Sewer manholes also sliding
 - Had to fix one this spring because it settled at an angle, disconnected from the main line, and was leaking sewage into the ground.
- Concerned about earthquakes
- Moving yearly
- PROFILE
- Tsunami
 - No known occurrences
 - DO NOT PROFILE
- Volcanos
 - Closest is 80 miles away
 - 4 inches of ash (could see it come at them) about 10 years ago and one in the 80's
 - Redoubt and Augustine, among others
 - Ash deposits seemed to improved berry production
 - Concerns about impacts to drinking water, increase load on water plant filters, draw water directly from lake
 - Breathing problems
 - Machine impacts, no way to cover machinery, want to consider a tarp that is heat resistant so it would not melt when in contact with hot engine/exhaust pipes
 - Shuts everything down and airplane service is stopped
 - 4 volcanos nearby
 - PROFILE
- Wildfire
 - They have a crew and equipment but likely it needs to be updated
 - Fire behind fish camp (Iliamna responded to it – lightning strike) 2 years ago
 - Lightning strikes near Port Alsworth about 5 years ago
 - 3-4 near Kulvina mine
 - Another in late 60's
 - Near airport was manmade (*kids lighting grass)
 - PROFILE

TTSP Public Meeting Notes

- Emphasis Area Discussion:
 - Dogs snap at people
 - Drainage. Natural drainage channels are all grown over. When people got their plots of lands, all of the natural creeks are now on private property and are not maintained. This is inhibiting the natural drainage. When maintenance crew fixes roads, it causes backed up creeks because the roads create a dam in the natural drainage basins/channels.
 - Need a drainage study done
 - Culverts back up and freeze
 - When drainage is fixed and roads are crowned properly, there will not be as many potholes and will help lessen the impact on the roads.
 - Resident used to be on a swamp but is now draining all over

- When culverts start to thaw it creates a “vortex” in the large pond around it and kids play in it. Residents try and tell them to stay out.
- Unauthorized Access
 - People driving across the runway to access trails on other side
 - People/kids racing around parked planes
- When it thaws, there is a lot of overflow on the roads, the culverts freeze, flooding near the school, the roads need to be resurfaced because they cannot scrape off any more, the roads are already lower than originally built
- Natural vegetation grows on the road sides and makes the roads narrower and narrower
- Many of the roads are not wide enough for two vehicles, especially on Iliamna road, there are no turnouts

THMP Public Meeting Notes

- Last Redoubt eruption caused a rotten egg odor throughout entire village
- Is spring break-up considered a hazard? Or when the first winter hits and people can fall through the thin ice?
- Pilings of homes tilt over as ground moves due to subsidence, at least two people said this happened to their homes, back piles / foundations are buckling
- Big flooding in HUD houses (top of hill on Third Road), entire basements flood in the spring time
- Had to put a 16x16 treated foundation in the water and sewer plant
- Water system is overdesigned and very costly, was built in the 1980s
- Sewer system is not up to date because of the population growth, if they built anymore homes the lagoon would overflow
- If there was a fire, there are no fire hydrants up by HUD homes, there is always low pressure, need better pumps
- Fire hydrants are all over town except by new HUD homes
- Need to remove sludge at lagoon, lagoon is seriously outdated
- The church foundation and flooring needs to be redone, the candle wax gets on the carpets and they are dirty and outdated, want wood flooring
- Need a new map for cemetery, crosses fell down at old cemetery, they do a memorial cleanup to remove dead grass and brush
- There never used to be this much brush, concerns about strong winds and wildfires
- Visible overflows on first road, they are a hazard because of standing water, drainage improvements are needed
- It will take collaboration between City and Tribe for funding and road improvement projects
- Concerns about funding for a comprehensive road/drainage improvement project
- Want to include pictures of overflows and other hazards into the plans
- Mitigation strategies
 - Water and sewer upgrades
 - Fire breaks around buildings
 - People don't have earthquake kits or emergency kits or know how to put them together
 - Could always use better equipment

- Safety gear, putting something like a boat, or a rope, or surfboard to respond to accidents on the beach / thin ice
- If someone does go through the ice, how do they get to them to help
- They have a throw ring but don't know where it is, there was a flat foam boat-like vehicle on a Facebook video that you put on your snow machine, teach the community how to use them, through a class
- The creek has a curve near the mouth that never freezes, a safety hazard
- A safety building on the beach to house the boat and safety gear, right on the point by the existing light, it is a well-known hazard
- Main culvert by airport fills up and turns into a huge lake by the school, safety concern for students, and it freezes up
- Better coordination with engineering design to make sure the design meets community needs, consult with locals who are familiar with rural conditions
- There are no streetlights
- If there is no fuel here, and the airplane can't land (high winds, low visibility, or mechanical problems), planes can't come in during bad weather for weeks at a time, can't de-ice planes, fuel is flown in and is very expensive, some people can't afford fuel for their homes, people drive to Iliamna to get propane, oil, etc. when they run out here because it is much cheaper there, that could create hazards
- Facebook is the best way to receive information, flyers and newsletters in the mail, information for emergency services on the regular
- Lost a couple guys on the river, they used handheld radios for communication, could use more handheld VHF radios for people to reach out for help

DAY 2

TTSP Planning Team Meeting Notes

- In the past they put used cooking oil on the roads for dust, but it attracted the bears, they do not want to use calcium chloride because it would wash off into the lake and affect their drinking water source
- Educate the young kids on the dust, and teach them to slow down, could work into culture camp once per year
- It takes a lot of time to wet the roads with the fire truck, but they have tried that
- Tribe could help fund but City owns the roads and does the maintenance
- Need a new gravel pit, need approval from BBNC, the subsurface is owned by BBNC, need an MOA and permit with the Borough
- Somebody touched the thaw wires in the culvert and killed themselves
- They prefer the half culverts with natural bottoms because they do not freeze, another idea is to put a second culvert above the first so when the bottom culvert freezes, the water can go up and through the top one, concerns about funding to purchase new culverts and hire people
- City logs for equipment, they do keep track of hours and fuel, but not maintenance checks

- BBAHC one year gave 54 buckets of sand for everyone to mitigate ice on driveways, and also gave out creepers (ice cleats) another year
- Smaller kids will run across the road when they hear cars coming
- Need to put slow signs by church and down by school, at the blind spots
- The tribe used to cut brush annually, but they had to stop to save money to install the streetlights
- Just got the sander fixed, need to use more often
- More workers are needed for City Work Service (community service), the City could enforce – if someone is seen drinking and driving they could be required to do community service, the City and Tribe should work to enforce this, could even take the ATV from them for a month on the second offense, need to specify penalties
- Tribe can enforce their own laws, the Troopers will come out if you get evidence, such as a videos, character witnesses, breathalyzers, etc. They were giving out free single-use breathalyzers at AFN. Clinic, City, Tribe, Corporation should have a combined meeting about this
- Have DOT and State Troopers do a presentation about DUIs, big signs by airport or on every road about laws and drinking and driving violations, and flyers, send out information to the ones they know who are repeat offenders
- Would be good to have a safety log of the crashes, DUIs, fatalities, etc.
- Handmade wooden bridges over creeks, tribe hires volunteers and need to purchase materials, there are good bridges on the main trails but many other trails still need bridges at creek crossings
- No service over the mountain, need to upgrade existing tower or put a new one between the two villages (Iliamna and Nondalton)
- INNEC is the Iliamna Newhalen Nondalton Electric Co-Op
- Improve the trail that goes around the airport because it is so bad that people just cut through the airport
- Kids doing donuts at airport kicking rocks up at the planes
- There are cameras at the airport
- Need a barge landing
- Safety shed with a small lightweight boat, life ring, rope, and other safety gear
- Had an elder loading Honda into his 18 foot Lund, overweight, so a ferry system is not just a desired service, but a safety issue
- They have boating safety during cultural week
- Boats should have a flashing light, fire extinguisher, horn, float coat, and registration updated every two years
- “ATV” for Nondalton includes Hondas, snow machines, dirt bikes, motorcycles, side by sides, and bicycles
- More enforcement about state and federal helmet laws
- The City does have an ordinance for dogs, but even city employees have their dogs loose, needs to be enforced, need to have collars, dog training was also suggested

THMP Planning Team Meeting Notes

Worksheet #3 – Risk Analysis (see table for complete list)

- Buildings / Infrastructure – Occupants

- Doll Factory – used for storage now, but nobody lives there
- B&B – only B&B in town, always 2 occupants, up to 9 visitors
- School triplex fuel tanks – 1 operator
- Teacher housing – 8 max, including 2 interns and 6 full-time teachers, 3 buildings located in the same general area
- Backup generator / shed for school – 1 maintenance guy
- Clinic – 2 health aides, 1 in training, 1 janitor
- Church – 24 people on Sunday, packed on Holidays
- Village community center – 1 employee, 1 janitor, can be packed with whole community including other places (Newhalen, Iliamna) 100+
- Grocery store, post office – 4 employees
- Water plant and backup generator – 2 operators
- City office building – 5 including janitor
- Nondalton school (there is a library there and another at the village office) – 40-50 teachers and students
- School fuel storage tanks – 1 operator
- Tribal office/library – 9 employees
- Airport w/ 2 hangers/maintenance buildings – 2 operators
- Old Russian orthodox church – no occupants, historical site, not used
- Newhalen River lodge – 22 max from May to October
- Sixmile Lake, also drinking source
- Sewage treatment plant, little brown building near WTP – 2 operators
- Shop / equipment storage yard, by the city office
- Tank farm fuel is behind City hall – 1 person at once (4 workers)
- New tank farm by city, fenced in
- Wells on the beach, two wells – 1 worker that cleans
- Fish plant launch (on private property) but people use, especially in emergency
- Valhala Lodge – nobody lives but it is for sale, could use in emergencies if needed, for float planes, etc.
- Sewage Lagoon – 2 operators, but not down there every day
- Landfill – once per week there are 2 operators, scheduled
- Water storage tank – 2 operators
- Contact Tank – 2 operators
- Overhead Electric lines, majority are surface wire/above ground, except for crossing the lake, they used to be underground but had power breaks every winter – 4 operators
- Fiber optic lines, 1 guy resets generator every year
- Underground utilities – phone lines, water, sewer, and electric below lake
- ACS phone building – 1
- GCI antenna by water storage tank – 1
- ATT building – 1
 - All three of those are in the same area
- Cemetery, two locations
 - Cemetery on hill – currently used
 - Old village cemetery – not used anymore
- Fish camp – 100 (80% of the community)

- There are two different spots, North side (Nondalton)/South side (Iliamna)
 - Jim Stevens Lodge (not on the map)
 - Gravel pit – 2 operators, only used if needed
 - Old clinic – Clinic garage for ambulance, also has a 30 kW diesel generator that still works but does not have a shed, was supposed to be a backup for clinic
- Equipment
 - Tribe has vehicles/trucks, parked at tribal office
 - City owned equipment kept in the storage yard
- Natural
 - Swimming pond behind fish camp, Parks Service land (not on map) and another near Igiugig
 - Tazimna River
 - Newhalen River
 - Alexie Creek, spawning tributary of Newhalen River
 - Chulitna River, main hunting river for mammals and water fowl
 - Entire area for berry picking, hunting, trapping, wood cutting, etc.
 - Picker Creek, whitefish, pike, salt fish, etc.
 - Nondalton (Boys and Girls) Mountain – subsistence

Worksheet #4 – Vulnerability (Problem) Statements

- These statements explain why the specified hazards should be profiled
- Bristol will generate these and include them in the Draft Plan, to be reviewed by Council
- For example, “buildings are vulnerable to subsidence because of a clay layer/soft soil and freeze/thaw, which causes foundation settlement and leaning towards the lake”

Worksheet #5 – Mitigation Goals

- Broad statements of what the community wants to see happen for each of the hazards
- The planning team agrees with including a general statement to “reduce the possibility of damages due to” for each profiled hazard
- They also like the idea of including “increase tribe’s capacity to prepare and respond to natural disasters” as a broad goal

Worksheet #6 – Mitigation Strategies

- What can be done about the specified hazards and goals?
- See attached Worksheet #6 for more information, and for priority strategies
- Drought
 - Education for people camping and fire safety when there is dry ground, work with FireWise (Park Service) to get a fire danger sign
 - Education about how drought can affect subsistence areas (fish and berries)
 - The biggest concern with drought is fires
 - Use culture camp how to save food/preserve to have stores of berries for the future in case of drought the next year
- Earthquake
 - Education to lessen the panic, earthquake drills at the school and work/public, get under a table or door frame

- CERT Training, very intense, teaches how to identify if structures are safe to enter and what to do in an earthquake
- Community interested in knowing how to inspect homes after earthquake, education, and how to secure bookshelves, etc. to walls
- Training and response equipment/kits for fuel spills caused by earthquakes, how to inspect tank farms after a quake, HAZWOPER/HAZMAT courses
- Erosion
 - Hydrology study and drainage improvements, road crowning, and culverts
 - Hydro-seeding or vegetation on road sides to stabilize embankments with roots, they originally used a biodegradable mesh with seed but it never took
 - Use sand bags to help direct water and protect certain areas, creeks, etc.
 - Clear brush and grass (and debris) in ditches and natural drainage channels
- Extreme Cold
 - On the river it will look like it is iced over really well, but then the next day if it warms up a bit, the river will be wide open, more of a transportation concern
 - People measure the ice thickness regularly and spread that info through word of mouth and the radio
 - Educate homeowners to check their exhaust pipes because condensation can build up, same for chimney pipes, causing exhaust to go back inside house and creates a poison/fire hazard, check water lines outside – it impacts the entire community because it causes water leaks in the system, a winterization checklist would be good – does BBNA have an example?
 - Transportation – what to bring while traveling in the cold, the weather changes fast, people will end up camping out and getting lost in the whiteout – they put this information in the newsletters often
 - Education of what frost bite and cold blisters look like
- Flooding
 - If you are in the flood level, build your house up higher, build future buildings out of the flood level
 - When water level rose a few years ago, they had to go pull all the boats out because they were swamped
 - Drainage improvements
 - Muster point to higher ground
 - Education for kids at the school to keep away from water
 - Clean out driftwood/debris (including nets) on the beach and in water, and explain these hazards to boaters, it can be dangerous
- Severe wind
 - Checking roofs to make sure they are buttoned down good, homeowner education, should be a housing code, secure windows and everything
 - Lots of debris flying around, trash management, someone's trampoline blew up on power line in Iliamna
 - Can create an emergency transportation issue, they rely on air transportation for everything (including medevacs)
 - Slowly filling up the tank farm to have a backup fuel source, but not enough
 - Need 1 week of emergency supplies
 - Educate community to have own backup food supplies, etc.

- Wind has blown over power lines in the past, most people have wood stoves as a backup heat but not everybody, otherwise they have generators (need fuel), backup heat source
- The village needs a backup generator
- They have a backup generator for clinic, but it was never hooked up
- Homes should get their own small generators
- Consider wind turbines and solar, off the grid power? Streetlights are supposed to be a solar panel/wind turbine, so will be interesting to see if it works
- Severe Winter Weather
 - Transportation sanding, snow plowing, cleats
 - Education for how to travel and dress appropriately
 - Winter survival kits, especially for traveling – matches, ax, lighter, food, etc.
 - Check weather and prepare in advance, get sand a couple of days ahead of time
 - Snow loads on roofs and power lines, fortify the roofs, many old sheds are flimsy, educate homeowners on this
 - Concern about frozen trees snapping off and falling on the power lines, clear out brush in the power line easements, electric co-op responsibility
- Subsidence
 - Majority of houses are post and pad foundations, some houses are tilting forward and so is the church
 - Might have to redo the foundations in the future, inspect homes every so often
 - Educate community why settling is happening and how to keep an eye on it
 - Sewer and underground utilities, repair/inspection, fix leaks, the lines eventually break away with the house, some of the lines even pushed up towards the surface
 - When putting in a water line, found a thick grey clay layer, could hear groundwater running underneath
 - Power poles are starting to lean, inspect and brace, and sewer manholes, etc.
- Volcanos
 - Education about the hazards, what to do when ash falls, teach people to cover their cars, protect equipment, how to clean vehicles, and effects of subsistence foods and water source – need to wash berries, etc.
 - Use masks at clinic, a lot of people have asthma
 - Concerns about tarps melting, but do need a cover or a material that could handle some heat from the engine/exhaust
 - Extra filters for trucks, etc. (they have more filters at water treatment)
 - Airplanes can't fly
- Wildfire
 - Having updated fire equipment and training
 - Fire breaks around buildings and community – clear brush, educate homeowners, part of the FireWise program
 - Campfire education, precautions about wind and dry brush
 - Masks, keep people inside if you are sensitive
 - There was a building fire in the late 80s, the City/Tribal/Community combined facility burned down in 27 minutes, they lost years of files and resources, can building fires be included in the plan?

- When the school burned down, they sent women and kids down to fish camp or to the airport while men were fighting the fire
- GOAL: Build capacity of Tribe and City to prepare and respond to natural hazards (the City should be included because they work closely together)
 - Stationed VHF radios, not just handheld
 - Identify a muster point for a head count (for example airport because there are no electric lines)
 - Community training, every three years to an overall review to continue education
 - Developing the Small Community Emergency Response Plan (SCERP), includes contacts for different emergencies
 - Emergency response kits for homes
 - Teach community how to make yurts or community shelters
 - Solar panel cell phone chargers
- Concerns about nuclear threats

*See mitigation action worksheet for goal details

Attachments:

1. Planning Team Meeting Sign-in Sheets
2. Planning Team Workshop Agenda
3. TTSP Background Collection Notes
4. TTSP Candidate Emphasis Areas
5. TTSP Implementation Plan
6. Past Nondalton Hazard Planning Notes
7. Worksheet #1: Hazard Identification
8. Worksheet #3: Risk Analysis
9. Worksheet #6: Mitigation Strategies
10. Public Meeting Sign-in Sheet
11. Public Meeting Flyer
12. Public Meeting Handouts
13. Public Meeting Presentation Slides
14. Map Markups
15. Pictures

End Meeting Minutes
CC: File

HAZARD MITIGATION PLAN & TRANSPORTATION SAFETY PLAN

PLANNING TEAM WORKSHOP AGENDA (DAY 1)

Transportation Safety Plan

- 12:30 PM Introductions & Project Background
- 12:45 PM Transportation Background Collection

Hazard Mitigation Plan

- 2:00 PM Worksheets 1/2 – Hazard Identification & Analysis
- 3:00 PM Worksheet 3 – Risk Analysis
- 3:30 PM BREAK**

4:00 PM COMBINED PUBLIC MEETING (1.5 HOURS)

HAZARD MITIGATION PLAN & TRANSPORTATION SAFETY PLAN

PLANNING TEAM WORKSHOP AGENDA (DAY 2)

Transportation Safety Plan

9:00 AM Determine Emphasis Areas

9:45 AM Implementation Plan

10:15 AM BREAK

Hazard Mitigation Plan

10:30 AM Worksheet 4 – Vulnerability Statements
Worksheet 5 – Mitigation Goals

11:00 AM Worksheet 6 – Mitigation Action Plan

12:00 PM LUNCH BREAK

12:30 PM Remaining Data Collection (if needed)
Closing Statements & Action Items

Planning Team Meeting

DAY 2

Nondalton Tribal Transportation Safety Plan & Tribal Hazard Mitigation Plan (2019 - 2024)

Date / Location: February 1, 2019

Sign In Sheet

	Name	Phone	Email
council member	Billy Tresson Jr	907-294-4121	billytressonjr@yahoo.com
Enviro. Assist.	Briana Delkittie	907-294-4215	briana delkittie@yahoo.com
Transport. coord.	Sunflower Delkittie	907-444-9545	ntcttp@yahoo.com
Admin	Fawn Silas	907-294-2257	ntcfsilas@yahoo.com
mayor city	Chris Crookham	907-294-4122	hillbroos907@gmail.com
council member	Ronal KAKAK	907-294-4100	midiana ptg@gmail.com
council member	Natalia MarHila	907-294-2200	Nondalton Tribal
community Resident	Gust Evonoff		Nondalton AK 99642
community Resident	Charles Balluta		NONDALTON AK. 99640

Transportation Coordinator

Tribal Transportation Safety Plan

Preliminary Data Collection Meeting

Community: Nondalton

Date: January 31, 2019

1.0 GENERAL

1.1 RESOURCES

- What existing planning documents does the community have? i.e. Comprehensive Plan, Long-Range Transportation Plan, etc.
 - LRTP Update is getting finished now
- Who is the “Safety Champion” for the Tribe?
 - Tribal Administrator and transportation coordinator
- What existing safety efforts have been implemented in the past? For example: road maintenance, driver’s education, Kids Don’t Float, etc.
 - Do have the kids don’t float program
 - Hopefully this summer installing LED wind turbine streetlights
 - There was an accident that happened 15 years ago, it was dark, person in their mid-20s, winter blizzard, young guy walking wearing all black, no flashlight, was hit, fatality, ATV
 - City was working on a Water main break, 15+ years ago, 4-wheeler hit a ditch, elder, fatality, intoxication
 - Have been putting safety cones across winter/ice road on lake
 - Have a first responders crew (~6 people) with City of Nondalton, a volunteer fire department, whole village comes together to help on an accident

2.0 ROADS

2.1 TRANSPORTATION MODES

- What types of vehicles to people use? For example: trucks/cars, 4-wheelers, snow machines, bikes, motorcycles, etc.
 - All of the above

2.2 DESIGN

- What is the condition of the roads within the community? Are potholes, cracking, and other deteriorating conditions causing safety hazards? Where are the biggest problem areas?
 - All have bad potholes
 - Brush/trees grow on corners every year causing blind spots
 - Drainage runs are terrible, eats up the roads, small culverts

- Are there any road design issues that cause safety hazards? For example: steep or narrow roads, sharp turns, blind spots, steep side slopes, lack of guardrails,
 - No, just a maintenance thing, roads have been scraped so many times, the roads are much lower, need to be resurfaced and built up

2.3 DRAINAGE

- What is the condition of drainage facilities? Are culverts damaged or clogged? Are ditches overgrown or nonexistent? Where does flooding or standing water occur the worst?
 - Culverts freeze, no culvert cleaning, there is a thaw system on the Ice Creek by the school, little hot water pipes

2.4 TRAFFIC CONTROL

- Are there any problem intersections? If so, where and why? Is brush kept clear at intersections? Do intersections have appropriate signs?
 - New road up by the airport
 - Signs would be good for newcomers
- What types of existing street signs are within the community? Are there enough signs? Where are new signs desired? What types of signs are needed?
 - Two existing stop signs, two kids crossings by the school
 - Speed limit is 25 mph, but nobody goes by that, no signs
- Are there streetlights in the community? Where are they located? Are more streetlights desired for nighttime/winter driving and pedestrians? Where?
 - None, only on buildings, want on all the roads at main areas

2.5 BRIDGES

- Are there any bridges in the community? If so, are they in good condition? Are there any safety concerns regarding bridges?
 - None, just the ice road over lake
 - Small bridges over creeks on ATV trails, good condition

2.6 MAINTENANCE

- Who maintains the roads?
 - City, and MOA with Tribe to work the Grader and assist whenever there is funding available
- Are there any issues with road maintenance? For example: not enough funding, short staff, untrained staff, or lack of maintenance equipment, etc.
 - Grader keeps breaking down, roller/compactor is not working (battery shot?), lack of funding, nobody maintains or greases equipment
 - They have a lot of trained operators
- What maintenance equipment does the community have?
 - City: 2 excavators, 1 dozer, 2 dump trucks, 1 backhoe, 1 compactor, 1 grader, 1 bob cat, 2 loaders
- What maintenance is performed? For example: road grading, pothole repair, culvert replacement, sanding the roads in the winter, street sweeping, etc.
 - Guy scrapes roads in winter as needed 3-4 times this winter already, just got the sander going, brush cutting a few years ago, 1 volunteer fills in the potholes herself whenever she has time, there is no way to mitigate potholes, just need to resurface all roads

2.7 DRIVING BEHAVIOR

- Is speeding an issue? On which roads?
 - Yes, everywhere, all age groups

- Is distracted driving an issue? For example: talking on the phone or texting while driving.
 - Yeah, kind of, in trucks, but not in ATVs
- Is the community a dry, damp, or wet community? Is intoxicated driving an issue? Have there been drug or alcohol impaired driving accidents in the past?
 - Damp, yes, people driving off road, 95% is alcohol (less drugs), a VPSO might slow this down
- Kids riding ATVs
 - Yes, on the front racks
 - One crash when kids were younger, front and back rack loaded, going too fast, hit something, all flew off
 - 2 years ago, a kid flew off the back

2.8 USE OF SAFETY GEAR

- If ATVs or bikes are used within the community, do people wear helmets and safety gear?
 - Motorcycles and bicycles, no people do not wear helmets, maybe 2 people wear them on dirt bikes
- Do people wear seatbelts?
 - Nobody wears, not a concern, most people go 30 mph at the most, trucks don't go that fast
- Do parents use car seats for young children?
 - Some parents use, not really a concern, always going slow and careful

2.9 WEATHER CONDITIONS

- Is dust an issue? Why?
 - Very bad dust, no suppression right now, just hope for rain
- Are icy roads an issue in the winter? Which roads are the worst in the winter?
 - Yes very bad, extreme overflows, the roads actually slant, they are all bad
 - Third road near airport, first road is slanting

2.10 SCHOOL ZONE

- Is there a school zone in the community? Are there enough signs, warning lights, and crosswalks in the school zone? Are school zone improvements needed?
 - There are stop signs there, but only on one part, should be on both intersections, the stop sign is on the steep part so if it's icy people don't stop there
 - Could use a slow sign or school zone sign, the existing kids crossing sign is not enough
 - If you put signs up on the City roads, does that make the city liable?
 - One speed limit sign in the past but it got taken down

2.11 WILDLIFE

- Is wildlife an issue for drivers? For example: bears, moose, etc. Are loose dogs a concern? Have there ever been attacks or accidents caused by animals?
 - Dogs and brown bears, bears come twice per year following fish up and down the stream spring and fall, bears get into trash
 - Loose dogs run around, pets, dogs bite at ankles and chase ATVs, have an existing ordinance (lease law) no fine associated, but dog is free game to be shot if it is not tied up, nobody enforces

2.12 CRASHES

- Have there been any ATV or car accidents in the past 10 or 20 years? Why do most car crashes happen in the community? Collect details.
 - Winter (November before thanksgiving) of 2007, drunk male driver going fast, drove off the road, not icy but it was during a blizzard, Honda, had a 4-year old passenger, scraped up face
 - A couple of guys that have crashed several times, between the two of them they crash at least once per year, drinking and driving, one was mechanical – his ATV locked up, he also drives with hundreds of pounds of wood on front and back rack

2.13 OTHER

- What other safety hazards are a concern on the roads?
 - Could use railings in some places, especially when icy, potholes are bad but the biggest concern is ice, road washouts are a concern
 - City suburban drove off the ditch on Russian new year's, a couple years ago maybe five
 - Most accidents are alcohol related, some on improperly marked ice roads
- What other improvement projects are needed or upcoming?
 - Streetlights
 - Have a water distribution system, have a lot of leaks in old system, scored a 72 so they have a good chance to receive grant funding
 - Road resurfacing project on the list

3.0 TRAILS

3.1 TRAIL USE / ACCESS

- Are there any trails within or surrounding the community?
 - Miles and miles, subsistence and recreation, wood cutting, and to access the fish camps and other villages, there is a trail that goes all the way to Lime, subsist on river
 - Could use a bigger bridge on the river, and near fish camps, need one up the mountain for caribou and moose hunting, make the trail wider on the creek going up because it is right on the edge
- How are the trails primarily used? For example: subsistence, recreation/hiking, access to other communities, etc.
 - All of the above
- Are the trails accessible year-round?
 - Ice roads heavily used, needs to be cold enough to cross frozen lakes

3.2 EXISTING CONDITIONS

- Are the trails in good condition?
 - Very rough, roots are a big problem, a safety concern, have tipped over a load of meat, even going slow
 - Could use boardwalks in some of the swampy areas
- Are there any stream crossings on the trails? Are there bridges at these crossings?
 - Yes, need more bridges

3.3 MAINTENANCE

- Who maintains the trails? How are they maintained?
 - Not improved, most is on corporate land, have a ROW from Corporation, most trails are listed in the LRTP, have an MOA
 - Had a group of summer helpers that cleared the brush down near fish camp trails about 2 years ago, and kids did it this summer

3.4 CABINS / SHELTERS

- Are there any public safety cabins, shelters, or designated meeting places for emergencies?
 - Don't have it, but wouldn't hurt to have it, only people's fish camps and private cabins, corporation has had the discussion of this in the past, could be used on the trail to Lime because it is about 90 miles / 14 hours, would be nice to have one up by Ground Hog Mountain down in the valley

3.5 NAVIGATION

- Do the trails have trail markers and/or lights? Do people have issues navigating or accessing the trails?
 - Not really, some have flags, trails are pretty obvious, some people cut limbs off of trees which is a good indicator of where the trails are
 - Winter is not a problem, the summer and fall is more of a concern, could brush out the trails in the winter so the trees and snow doesn't hang into the trails

3.6 CELL SERVICE

- Is there good cell phone service on all the trails? Are more cell towers desired?
 - Need more cell towers, service even will drop inside your house, they just did an upgrade this summer, only about a 3-5 mile range out of the village, service reaches a ways to the east

3.7 WILDLIFE

- Is wildlife an issue on the trails? How can these dangers be mitigated? For example: more community awareness, signs, lights, trail markers, etc.
 - Have encountered some bears, population seems to be increasing in the last few years

3.8 OTHER

- What other safety hazards or concerns are experienced on the trail system?
 - None

4.0 WATER TRANSPORTATION

4.1 EXISTING CONDITIONS

- What boat launch or barge facilities are within the community? Where are they located?
 - None, people launch on beach or own private docks
- Are the boat launching/dock facilities in good condition? Are improvements or repairs needed?
 - None, there is a plan for a barge landing floating dock and a concrete ramp, just waiting for construction funding, shovel ready/designed
 - Lots of boating, all the way up to Lake Clark, cannot boat down Newhalen River because of rapids

- Could they get a grant to haul vehicles across the lake, a ferry/ride service to Iliamna and back for cheaper, like \$30? Because one guy has a barge and charges \$200, need a “water taxi” or a ferry, also for hauling lumber, a bridge would eliminate costs even more
- Had a bridge fully funded in STIP for years, but then sequestration happened and 7 years ago the money was removed
- Is there adequate signage, lights, safety gear, etc.?
 - None needed, there are two at the ice road markers
 - Have lost a few lives past near the light on the point because of thin ice, fell into river

4.2 FACILITY USE / ACCESS

- Who uses the facilities and when?
- What types of boats use the facilities?

4.3 MAINTENANCE

- Who maintains the facilities? What type of maintenance is required?
 - Tribe sponsored beach cleanup every year

4.4 ACCIDENTS

- Have there been any recent drowning incidents or boating accidents? What happened? Why did they happen and how could these hazards be mitigated?
 - Two 13-14 year old males took boat without asking, no life jackets, standing up and driving, both fell off and one drowned, 8pm at night in the fall time, 17 years ago, 2001? Driver drowned
 - Another guy fell overboard, someone else on the boat had to pick him up, also standing up and driving, could have drowned, summer of 1995-6
 - Near Newhalen River at fish camp, a few guys drinking in a canoe, 3 guys, 2008, no fatalities, no life jackets
 - Float plane on Iliamna river, two planes collided, fatalities 20 years ago
 - Crossing river, boat swamped, had to pull them out
 - Another guy flipped a boat with a truck in it
 - People just call on the radio and the whole village responds

4.5 SAFETY GEAR

- Do people wear life vests?
 - 2 kids don't float boards, people do not return, Fish and Game and Parks service give \$300 fine for not wearing life vest and patrol Sixmile Lake from Port Alsworth
 - Request every year and get them every year

4.6 NIGHTTIME BOATING

- How are nighttime boating conditions? Are lights needed?
 - Good

4.7 OTHER

- What other safety concerns are associated with boat travel within the community? For example: rough waters, navigation issues, fuel spills, etc.
 - Concerns about fuel spills, two lodges have to haul fuel around the point and bring with flat bottom boat
 - One year they were spilling oil
 - City has a spill kit, but doesn't include booms, just the absorbent pads and buckets, nobody is trained

5.0 AIR TRANSPORTATION

5.1 EXISTING CONDITIONS

- What types of airports are within the community? For example: gravel or paved runway, or seaplane base
 - Existing gravel runway owned by the state
- Is there a public airport building?
 - There is a hangar for the grader, no public building, a building is desired with restrooms
- Is the airport in good condition? Does the airport have lights? Is there adequate signage?
 - Yes, pilots say this is one of best maintained airports in the region

5.2 FACILITY USE / ACCESS

- Is the airport accessible and usable year-round?
- What airlines service the community?
- Is there good access to the airport? Are there any access concerns? Is there an issue with keeping unauthorized people off the runway?
 - Sometimes kids go drive on the runway, one guy was concerned about kids going around parked planes with ATVs
 - Have to cross the runway to get to one of the trails, would have to fix another trail to avoid this

5.3 MAINTENANCE

- Who owns and maintains the facility?
 - State

5.4 SAFETY CONCERNS

- Are there any other safety hazards or concerns about the airport or air transportation in general?
 - Dust
 - Sometimes takes a long time to get the lights fixed if they are broken, one time a 4-wheeler hit the lights and knocked most of the lights out, took almost a month to get fixed

6.0 PEDESTRIAN / BICYCLE FACILITIES

6.1 MODES

- Is walking a common mode of transportation in the community? Where do people walk?
 - Yes
- Do people bike within the community?
 - Yes, including dirt bikes and motorcycles

6.2 EXISTING FACILITIES

- What types of pedestrian facilities are within the community? For example: sidewalks, crosswalks, pedestrian signs, streetlights, etc. Where are these facilities located?
 - None
- Are there existing bike lanes? If so, where are they located? If not, are they desired? Where?

- Are any of these facilities desired / needed in other locations? Where?
 - Wider roads are desired, some guardrails would be nice

6.3 SAFETY GEAR

- Do bicyclists wear helmets and other safety gear like elbow pads and knee pads?
 - Nobody wears, except two people on dirt bikes
- Do pedestrians wear reflectors or bright colors at night?
 - No, a lot of kids jackets and boots come with them, but not adults

6.4 WILDLIFE

- Is wildlife a danger for pedestrians? For example: bears, moose, wolves, etc.
 - Dogs

6.5 ACCIDENTS

- Have there been any pedestrian or bicycle related accidents in recent years? What caused the incident? How could these issue be avoided or mitigated?
 - An accident a couple months ago, intoxicated going fast downhill, crashes, front wheel came off, deep abrasions on face, was medevacked out, needed stitches

6.6 OTHER

- Are there any other safety concerns regarding pedestrian or bike transportation?
 - None

7.0 TRANSIT / BUS / FERRY

7.1 EXISTING FACILITIES / SERVICES

- Is there a transit, bus, ride-share, or ferry system within the community? If not, is one desired or needed?
 - Ferry is desired for economic reasons, if they had this, would like to have a truck on other side to use for the barge service
 - City allows you to rent a car
 - Tribe gives rides to elders for free, otherwise charges a fee like a taxi
- If so, who operates the system? Where does it go? Who uses the system?

7.2 SAFETY CONCERNS

- Are there any safety concerns with existing transit vehicles, operations, routes, or facilities?

8.0 EMERGENCY RESOURCES

8.1 POLICE

- Is there a local VPSO? What is their name and contact information?
 - No
- Is there a State Trooper post in the community? If not, where is the nearest post?
 - King salmon

8.2 CAR ACCIDENTS / REPORTING SYSTEM

- Does 911 work in the community? Who is called during an emergency?
 - 911 does not work
 - People use radio VHF

- Clinic line 294-2238, 24-7 or forwarded to on-call health aide cell phone
- What is the procedure for a car accident? Who is called, who arrives on scene, where do injured people get taken, etc.?

8.3 CLINIC

- Is there a clinic in the community? What is their contact information? How many health aides are on staff?
 - 2 and a 3rd in training
- Is there an emergency ambulance or transport vehicle?
 - There is an ambulance, two health aides use their personal vehicles too, have been asking for a transport vehicle from South Central Foundation

8.4 FIRE DEPARTMENT

- Is there a local fire department? What is their contact information? Is there a local fire truck and fire equipment?
- Do ambulances and fire trucks have good access everywhere around the community? Where is access limited or a concern?
 - Have a fire truck, may need updated equipment, needs new hoses, etc., just got a bunch of new stuff, have some scuba gear
 - Use City number

8.5 SEARCH AND RESCUE

- Is there a search and rescue service within the community? Is there a dedicated ATV or skiff for search and rescue? If not, is one needed?
 - Have a VPSO boat that was BBNA funded, had a VPSO last in the 90s, the whole community responds
- Does the community have trained personnel / volunteers to perform search and rescue missions?
 - Parks Service will provide help if needed
 - Would be nice to have City pay for gas in emergencies so people don't have to use their own fuel
 - Very rarely needed, one every couple of years
 - Coast guard had to help a couple guys last year, it was clear then blizzard hit out of nowhere and they got stuck on a mountain, one guy had a satellite phone to contact coast guard

8.6 EVACUATION ROUTES / SHELTERS

- Is there an evacuation route to higher ground?
- Are there emergency shelters or cabins? If so, what is the condition of these facilities? If not, are any of these facilities needed?

8.7 UTILITIES

- Are there any hazards associated with utilities on the transportation system? For example, low hanging wires, shallow or exposed buried utilities, power poles or hydrants too close to the road, etc.
 - Need backup generator for village electricity, breaks happen on other side of the lake
 - Main line exposed going down to ice road, people drive over with ATVs
 - Some guy wires need more markings/bracings
 - Water and sewer utility issues
- Who owns the facilities? Who is contacted during an emergency?

8.8 OTHER

- Are there any other emergency response resources existing or needed within the community?

**Nondalton Tribal Transportation Safety Plan
Candidate Emphasis Areas**

Emphasis Area	Strategic Linkage	Potential Strategies
Road Conditions	<ul style="list-style-type: none"> • 86% of survey participants marked “poor road conditions / lack of maintenance” as a high priority • 79% of surveys said “drainage issues (road washouts, standing water)” is a high priority 	<ul style="list-style-type: none"> • Operator training • Maintenance equipment • Improve pothole mitigation • Gravel source • Drainage improvements
Intersection Safety	<ul style="list-style-type: none"> • 1 reported accident occurred at a blind corner in 2016, resulting in vehicle damage • 71% of survey participants marked “intersection safety (lack of signs, tall brush, blind spots)” as a high priority 	<ul style="list-style-type: none"> • Improve brush cutting • Street signs • Driver’s education
Winter Driving	<ul style="list-style-type: none"> • 79% of survey participants marked “icy roads / poor winter maintenance” as a high priority 	<ul style="list-style-type: none"> • Improve sanding and snow plowing efforts • Guardrails
Pedestrian Safety	<ul style="list-style-type: none"> • Most common mode of transportation, 86% of people marked “walk” on the survey 	<ul style="list-style-type: none"> • Wider roads • Streetlights • Reflectors • Loose dog enforcement
Dust	<ul style="list-style-type: none"> • 79% of participants marked “dusty roads” as a high priority • Gravel roads cause airborne dust; dust can cause lung and heart irritation 	<ul style="list-style-type: none"> • Speed enforcement • Dust suppression (water truck or chemical) • Education
Trail Safety	<ul style="list-style-type: none"> • 71% of survey participants marked “poor trail conditions / lack of maintenance” as a high priority 	<ul style="list-style-type: none"> • Search and rescue training • Trail markers
Airport Safety	<ul style="list-style-type: none"> • No airport building • Visibility issues • Unauthorized vehicles 	<ul style="list-style-type: none"> • Heated public building with phone and bathroom • Ride service • Cut brush • Security / vehicle access • Air traffic control

IMPLEMENTATION PLAN

EMPHASIS AREA #1			STRATEGIC LINKAGE			
Speeding and Dust						
OBJECTIVES						
SUCCESS INDICATORS						
4Es	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	educate younger kids on speeding and how it increases dust, presentations at school, work into culture camp, educate kids about proper airport access		Transportation Coordinator, school	1 x per year before spring		
ENFORCEMENT	Speed limit signs (especially at school), word of mouth and continue enforcing with parents		City, Tribe	Summer 2020		
ENGINEERING	research dust suppressions, water tank for dust suppression, develop road watering plan		City, Tribe	Ongoing		
EMERGENCY SERVICES	continue to have dust masks available at clinic		health aide	ongoing		

IMPLEMENTATION PLAN

EMPHASIS AREA #2			STRATEGIC LINKAGE			
Road Conditions / Drainage						
OBJECTIVES						
SUCCESS INDICATORS						
4Es	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Operator training for road crowning, Training for equipment maintenance		City, Tribe	Ongoing, 1x per year		
ENFORCEMENT	Daily equipment logs, Maintenance check		City, operators	Ongoing		
ENGINEERING	Build up and resurface roads, Coordinate with BBNC for gravel access, hydrology study, drainage improvements, install guardrails		City, Tribe, BBNC	5 - 10 years		
EMERGENCY SERVICES	replace culverts with half culverts with natural bottom to reduce/prevent culvert freezing, sanding		City, Tribe	5 - 10 years		

IMPLEMENTATION PLAN

EMPHASIS AREA #3			STRATEGIC LINKAGE			
Pedestrian Safety						
OBJECTIVES						
SUCCESS INDICATORS						
4Es	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	educate drivers on driving slower at night time, school presentation on crossing roads		Transportation Coordinator, school	2019, 2x per year (spring/fall)		
ENFORCEMENT	speed limit signs, slow sign by church and school for blind corners		City, Tribe	Jul-05		
ENGINEERING	street lights, widen roads, brush and grass clearing		City, Tribe	5-10 years for road widen, brush clearing 1x per year		
EMERGENCY SERVICES	Sanding, flashlights, reflectors, ice cleats, safety building with restrooms at airport		Tribe, City (sand)	2019, sanding every year, rest every 2 years		

IMPLEMENTATION PLAN

EMPHASIS AREA #4			STRATEGIC LINKAGE			
Impaired Driving						
OBJECTIVES						
SUCCESS INDICATORS						
4Es	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	awareness about state laws, DOT and Troopers to provide presentations, Sign on roads stating laws, Fliers reminding about laws					
ENFORCEMENT	enforce through City work service		City, Tribe			
ENGINEERING	Signs, Guardrails, safety log					
EMERGENCY SERVICES	Action Plan, and Combined meeting					

IMPLEMENTATION PLAN

EMPHASIS AREA #5			STRATEGIC LINKAGE			
Trails						
OBJECTIVES						
SUCCESS INDICATORS						
4Es	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	education about ice conditions		Tribe, City, Corporation, INNEC	Every Winter		
ENFORCEMENT	Trespass Officer		Corporation, Tribe	Ongoing		
ENGINEERING	upgrade bridges on traditional trails, Map out existing bridges and where more are needed, trail improvements (gravel, mat, improve trail around airport		Tribe, Corporation	Yearly, Bridges (5-10 years)		
EMERGENCY SERVICES	Safety Cones, upgrade cell towers, Safety cabin on trail to Lime Village and Ground Hog Mtn.		City, Tribe, Corporation, GCI	Tower, Cabin 5-10 year cones Ongoing		

IMPLEMENTATION PLAN

EMPHASIS AREA #6			STRATEGIC LINKAGE			
Boating Safety						
OBJECTIVES						
SUCCESS INDICATORS						
4Es	ACTIONS	TARGET OUTPUT	RESPONISBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	training for spill kits, continue boating safety during culture camp, teach boat maintenance, education for boating safety and needed safety equipment, education for dui		Tribe, City, AK Troopers, Fish and Game	1 x per year		
ENFORCEMENT	Continue annual beach cleanup, continue kids don't float, boat registration		Tribe, City, Individual (registration)	Annual		
ENGINEERING	Funding for new floating dock and concrete boat launch ramp, barge landing,		Tribe	5 - 10 years		
EMERGENCY SERVICES	Building to house emergency equipment (small light boat, ropes, etc), Ferry/Haul service across lake, spill kits		Tribe, City, Clinic (South Central)	Gear (2020)		

IMPLEMENTATION PLAN

EMPHASIS AREA #7			STRATEGIC LINKAGE			
ATV Safety (Recreational Vehicles, Bicycles)						
OBJECTIVES						
SUCCESS INDICATORS						
4Es	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	educate about city ordinance for loose dogs, dog training					
ENFORCEMENT	awareness about state laws (age restrictions), enforce city ordinance for dogs					
ENGINEERING						
EMERGENCY SERVICES	Helmet program, Combined meeting to develop a plan to deal with loose dogs		City, Tribe			

Nondalton Notes from Past Work

Identified Hazards

- Drought
 - Impacts subsistence activities and stream levels, change in number of ducks and geese
 - Previous occurrences
 - 2013, 2014, 2015
 - Future Probability
 - Likely
 - Extent
 - Critical
- Earthquake
 - Impacted ice and people ice fishing, some structural damage
 - Previous occurrences
 - 2012, 2015, 2016
 - Future Probability
 - Highly Likely
 - Extent
 - Catastrophic
- Extreme Heat
 - Risk of fire, scorched tundra, impacts berries
 - Previous occurrences
 - 2013, 2014, 2015
 - Future Probability
 - Highly Likely
 - Extent
 - Critical
- Flood
 - High water, washed out docks, roads, close to homes. Greater impact when associated with high winds.
 - Previous occurrences
 - 1980s, 2013
 - Future Probability
 - Possible
 - Extent
 - Limited
- Subsidence
 - Whole village is moving towards the lake. Very close to Lake Clarks fault line. Shifting in underground utilities. Shifting in homes and structures that are on foundations and pilings.
 - Previous occurrences
 - Ongoing
 - Future Probability
 - Highly Likely
 - Extent
 - Limited

- Erosion (River)
 - Negative impact to fish camps
 - Previous occurrences
 - Frequently
 - Future Probability
 - Highly Likely
 - Extent
 - Limited
- Volcano
 - Ash, clog exhaust, planes coming in, impact on sensitive electrical components. Health issues
 - Previous Occurrences
 - 2006
 - Future Probability
 - Likely
 - Extent
 - Unknown
- Wildfire
 - Great risk in droughts and hot summers. Burning bands to try to prevent fires. Fire at landfill go out of control due to wind.
 - Previous Occurrences
 - 2010
 - Future Probability
 - Likely
 - Extent
 - Catastrophic
- Windstorm
 - Loss of roofing, roof came off, flying debris, falling trees
 - Previous Occurrences
 - 2015
 - Future Probability
 - Highly Likely
 - Extent
 - Critical

Assets

- Nondalton Doll Factory
- Chedda & Cheds B&B
- School Triplx Fuel
- Teacher Housing
- Back-Up Generator
- Health Clinic
- New Russian Orthodox Church
- Village Community Center
- Nondalton Kvechaek Grocery Store & Coop / Post Office
- Water Plant
- City
- Tribal Offices & Library
- Nondalton School
- School Fuel Storage Tanks
- Airport structures, maintenance buildings
- Old Russian Orthodox Church
- Newhalen River Lodge
- Pump House
- School Generator
- Six Mile Lake
- Sewage Treatment Plant
- Generator Building
- Storage by City Hall
- Tank Farm (Fuel)
- New Tank Farm City
- Wells on Beach
- Newhalen Launch
- Boats and Skiffs along the beach and fish camps
- Valhalla Lodge
- Airstrip
- Roads
- Sewage Lagoon
- Landfill
- Water storage tank (Contact Tank)
- Electric Lines from INNEC
- Fiberoptic Cable (GCI)
- Underground Utilities (Electric, phone, waterline, sewer lines)
- Utility Poles

WORKSHEET #1: HAZARD IDENTIFICATION

Use this worksheet to identify which hazards are most significant to your community planning area. Follow the instructions provided on pages 9 and 10.

Write “Blue” “Green” “Yellow” or “Red” in Columns A-D based on definitions in Tables 1-4 on Pages 9-10.

Write “Yes” or “No” in Column E depending on the outcome of Column D.

Column A	Column B	Column C	Column D	Column E	
Hazard	Location (Geographic Area Affected) <i>(Table 1)</i>	Maximum Probable Extent (Magnitude / Strength) <i>(Table 2)</i>	Probability of Future Events <i>(Table 3)</i>	Overall Significance <i>(Table 4)</i>	Profile (Yes/No)
*Avalanche	Blue	Blue	Blue	Green	No
Drought	Red	Yellow	Yellow	Yellow	Yes
Earthquake	Red	Red	Yellow	Red	Yes
Erosion	Yellow	Green	Red	Green	Yes
*Extreme Cold	Red	Yellow	Red	Green	Yes
*Extreme Heat	Red	Blue	Red	Green	No
Flood	Yellow	Yellow	Yellow	Yellow	Yes
*Landslide	Blue	Blue	Blue	Green	No
Severe Wind	Red	Red	Red	Red	Yes
*Severe Winter Weather	Red	Yellow	Red	Yellow / Red	Yes
*Subsidence	Red	Yellow	Red	Red	Yes
Tsunami	Blue	Blue	Blue	Green	No
Volcano	Red	Yellow	Green	Yellow	Yes
Wildfire	Red	Red	Yellow	Red	Yes
Other					

* Definitions for selected hazards are located on the back for clarification.

SELECT HAZARD DEFINITIONS

Extreme Temperatures (i.e. Extreme Cold, Extreme Heat): Extreme temperatures constitute different conditions in different parts of the country. In regions that are accustomed to winter weather, extreme cold temperatures involve temperatures between 20° F to -50° F. These temperatures can occur after a winter storm or during long durations of storm inactivity. Similarly, extreme heat is usually recognized as the condition where temperatures consistently stay ten or more degrees above the average high temperature for extended periods of time. Fatalities can occur from extreme temperatures by causing hyperthermia or frostbite in cold regions and hypothermia in warmer regions.

Landslide / Avalanche: A landslide is the movement of a mass of debris, rock, or earth by force of gravity down a slope. An avalanche is the movement of snow and debris down a slope by force of gravity. Landslides and avalanches occur when the stability of the slope changes from stable to unstable. This can be caused by storms, earthquakes, volcanic eruptions, fire, erosion, rapid temperature changes in the case of avalanches, and other human-induced activities. Steep slopes and long slopes have a higher probability to slide. High soil water content and/or slopes with low vegetative coverage are also likely to slide. Landslides and avalanches cause infrastructure and property damage, environmental disturbance, and possible injuries and fatalities.

Severe Winter Weather: Severe winter storms can include snow, freezing rain, sleet, or a mix of the previous forms of precipitation. Heavy snowfall occurs when large quantities of snow is produced in a short period of time. Drifting snow creates an uneven distribution of snow caused by strong winds. This weather can cause power outages, downed trees, and property damage. It can also cause deaths and injuries.

Subsidence: Subsidence is the settling over time or sudden sinking of surface soils due to subsurface movements. Some causes of subsidence are thawing permafrost, declining ground water levels, compactions, mining, and drainage of organic soils. Subsidence can destroy or damage infrastructure or buildings near areas affected by a sudden or gradual collapse of surface area.

NOTE: If you have any questions about the hazard definitions, or about Worksheet #1 in general, contact Danielle with Bristol at (907) 743-9394.

INSTRUCTIONS FOR WORKSHEET #1

Worksheet #1 is a tool to determine which hazards to include in the Tribal Hazard Mitigation Plan (THMP). Use these classifications / definitions to help identify the most significant hazards that affect your community. Give each hazard on Worksheet #1 a color code based on the definitions provided in Tables 1 – 4.

1. Location (Geographic Area Affected) – [Column A]

This classification describes where the hazard occurs, how often it occurs, and how much of the community was impacted.

Table 1: Location (Geographic Area Affected)

Color Code	Area Affected	Definition
BLUE	Negligible	<ul style="list-style-type: none"> Only one small area or none Less than 10% of planning area Isolated single-point occurrences
GREEN	Limited	<ul style="list-style-type: none"> Only some of the community 10% to 25% of planning area Limited single-point occurrences
YELLOW	Significant	<ul style="list-style-type: none"> Most of the community 25% to 75% of planning area Frequent single-point occurrences
RED	Extensive	<ul style="list-style-type: none"> Almost all or All of the community 75% to 100% of planning area Consistent single-point occurrences

2. Maximum Probable Extent (Magnitude / Strength) – [Column B]

This classification describes how much damage was done, how fast and for how long the hazard impacted the community, and the strength or magnitude of the hazard on a scientific scale, if applicable.

Table 2: Maximum Probable Extent (Magnitude/Strength)

Color Code	Maximum Extent	Definition
BLUE	Weak	<ul style="list-style-type: none"> Little to no damage done Slow speed of onset or short duration of event Limited classification on scientific scale (if applicable)
GREEN	Moderate	<ul style="list-style-type: none"> Some damage and loss of services for days Moderate speed of onset or moderate duration of event Moderate classification on scientific scale (if applicable)
YELLOW	Severe	<ul style="list-style-type: none"> Devastating damage and loss of services for weeks or months Fast speed of onset or long duration of event Severe classification on scientific scale (if applicable)
RED	Extreme	<ul style="list-style-type: none"> Catastrophic damage and uninhabitable conditions Immediate onset or extended duration of event Extreme classification on scientific scale (if applicable)

3. Probability of Future Events – [Column C]

This classification describes the possibility of the hazard occurring in the next year, and how often the hazard will occur.

Table 3: Probability of Future Events

COLOR CODE	Probability of Future Event	Definition
BLUE	Unlikely	<ul style="list-style-type: none"> Less than 1% probability of occurrence in the next year Recurrence interval of greater than every 100 years
GREEN	Occasional	<ul style="list-style-type: none"> 1% to 10% probability of occurrence in the next year Recurrence interval of 11 to 100 years
YELLOW	Likely	<ul style="list-style-type: none"> 10% to 90% probability of occurrence in the next year Recurrence interval of 1 to 10 years
RED	Highly Likely	<ul style="list-style-type: none"> 90% to 100% probability of occurrence in the next year Recurrence interval of less than 1 year

4. Overall Significance – [Column D]

This classification provides a way to determine how much impact the hazard has on the community. This classification is based on the classifications from Tables 1 – 3 (Columns A – C).

Table 4: Overall Significance

COLOR CODE	Impact	Definition
GREEN	Low	<ul style="list-style-type: none"> Event has minimal impact on planning area Two or more criteria fall in lower classifications (2 or more BLUE) Profile – Likely doesn’t need to be profiled but can
YELLOW	Medium	<ul style="list-style-type: none"> Event’s impacts on the planning area are noticeable but not devastating Criteria fall mostly in the middle ranges of classifications (2 or more GREEN or YELLOW) Profile – Choice of the Planning Team
RED	High	<ul style="list-style-type: none"> Event is likely/highly likely to occur with severe strength over a significant or extensive portion of the planning area Criteria consistently fall in the high classifications (2 or more RED) Profile – Definitely profile

5. Profile (Yes OR No) – [Column E]

For the purposes of the THMP, “profile” means to include the hazard in the plan and analyze in more detail. Not all hazards need to be profiled for your community. Only hazards with a moderate to high overall significance should be included in the plan, but the Planning Team can choose to profile any hazard as they see fit. Use Table 4 (Column D) to determine if the hazard should be profiled.

Risk Analysis Worksheet *(Profiled Hazards Only)*

Building Key	Column A Facility Name	Column B Number of Occupants	Column C Location	Column D Estimated Value	Column E: Hazard Impacts <i>(Fill in Hazards in Blank Columns Below)</i>															
					Drought	Earthquake	Erosion	Extreme Cold	Flood	Severe Wind	Severe Winter Weather	Subsidence	Volcano	Wildfire						
1	Nondalton Doll Factory / storage	N/A																		
2	Chedda & Cheds B&B	2 (seasonally 9)																		
3	School Triplex Fuel Tanks	1																		
4	Teacher Housing (3 blgs)	8																		
5	Back up Generator / Shed for School	1																		
6	Health Clinic	4																		
7	New Russian Orthodox Church	24 on Sunday																		
8	Village Community Center	2 (event wise 150+)																		
9	Nondalton Kvechaek Grocery Store & Coop / Post Office	4																		
10	Water Plant / Generator Building	2																		
11	City Office	5																		
14	Tribal Offices & Library	9																		
12	Nondalton School	50																		
13	School Fuel Storage Tanks	1																		
15	Airport Structures, Maintenance Buildings (2 hangars)	2																		
16	Old Russian Orthodox Church (registered a historical site)	N/A																		

Risk Analysis Worksheet *(Profiled Hazards Only)*

Building Key	Column A Facility Name	Column B Number of Occupants	Column C Location	Column D Estimated Value	Column E: Hazard Impacts <i>(Fill in Hazards in Blank Columns Below)</i>													
					Drought	Earthquake	Erosion	Extreme Cold	Flood	Severe Wind	Severe Winter Weather	Subsidence	Volcano	Wildfire				
17	Newhalen River Lodge	22 seasonally																
18	Six Mile Lake	N/A																
19	Sewage Treatment Plant	2																
20	Equipment Storage Yard & Equipment	N/A																
21	Tank Farm (Fuel)	1																
22	New Tank Farm City	1																
23	Wells on Beach (2 wells)	1																
24	Fish Camp Launch	N/A																
25	Boats and Skiffs along the beach and fish camps / Beach	N/A																
26	Valhalla Lodge	N/A																
27	Roads	N/A																
28	Sewage Lagoon	2																

Risk Analysis Worksheet *(Profiled Hazards Only)*

Building Key	Column A Facility Name	Column B Number of Occupants	Column C Location	Column D Estimated Value	Column E: Hazard Impacts <i>(Fill in Hazards in Blank Columns Below)</i>														
					Drought	Earthquake	Erosion	Extreme Cold	Flood	Severe Wind	Severe Winter Weather	Subsidence	Volcano	Wildfire					
29	Landfill	2																	
30	Water Storage Tank	2																	
31	Contact Tank	2																	
32	Overhead Electric Lines from INNEC	4																	
33	Fiberoptice Cable (GCI)	N/A																	
34	Underground Utilities (Electric, Phone, Waterline, Sewer Line)	N/A																	
35	ACS Building	1																	
36	GCI Anntena	1																	
37	AT&T building	1																	
38	Cemetery (hill)	N/A																	
39	Cemetery (old village)	N/A																	
40	Fish camp Nondalton Side	~100 seasonally																	
41	Fish Camp (Iliamna Side)	~100 seasonally																	
42	Jim Steven's Lodge																		
43	Tribally Owned Vehicles	N/A																	
44	Swimming Ponds (Near Igiugig, near Iliamna Fish Camp)	N/A																	
45	Gravel Pit	2																	

Risk Analysis Worksheet *(Profiled Hazards Only)*

Building Key	Column A Facility Name	Column B Number of Occupants	Column C Location	Column D Estimated Value	Column E: Hazard Impacts <i>(Fill in Hazards in Blank Columns Below)</i>												
					Drought	Earthquake	Erosion	Extreme Cold	Flood	Severe Wind	Severe Winter Weather	Subsidence	Volcano	Wildfire			
46	Tazimna River	N/A															
47	Newhalen River	N/A															
48	Aleksy Creek	N/A															
49	Chulitna River (main hunting river)	N/A															
50	Picker Creek	N/A															
51	Boys and Girls Mountain	N/A															
52	Old Clinic / Garage / Storage / Back up Generator	N/A															

Worksheet #6 Mitigation Actions

GOALS		ACTIONS	
No.	Goal	ID	Description
1	Drought	x	Fire safety when out camping, understand impacts of dry ground with fires
		x	Harvesting more for future and preservation techniques (Education)
2	Earthquake	x	Earthquake drills / earthquake safety (school and public)
		x	CERT Training (identify people in community and alternates)
		x	Educate community about how to inspect homes after earthquakes
			educate about properly securing bookshelves and tvs
3	Erosion		Spill response training (tank farm inspection) / Spill response kits
		x	Hydrology study / drainage improvements
		x	Build up roads / other road and drainage improvements / road crowning
		x	Sandbags to help direct water (Temporary Solution)
		x	Hydro-seeding along banks
4	Extreme Cold		creek clearing / brush clearing
			Investigate best system for keeping culverts thawed, temporary solution
			*education about winters are getting warmer and ice road conditions in spring across the lake. Or Ice safety, safety gear in boats or safety building on lake (area to house safety gear for rescue effort on ice road if needed).
		x	educate home owners exhaust pipes and chimney condensation freezes and then it comes back in.
		x	educate check water pipes
		x	educate about what to take when out traveling
		x	winterization checklist
			Continue newsletter reminder to let people know where you are going
5	Flood	x	educate about frost bite and hypothermia and treatments
			future construction make sure you build above flood level
		x	school education about ponding water
6	Severe Wind	x	clearing driftwood / debris
		x	educate homeowner - secure roof / home elements
			trash management
		x	back up fuel storage
		x	educate - back up food supply
		x	back up heat source (wood storage, back up fuel for generator)
		x	Community back up generator
	educate - community individual generator		
	Feasibility study for solar or wind turbine		
7	Severe Winter Weather	x	supply ice cleats , sanding buckets
		x	educate - winter travel
			freeze thaw
			community sanding
		x	winter survival kit (travel)
		x	educate about prepare for weather in advance
			snow loads on power lines, roofs (educated home owners)
	clear easment to reduce trees snapping from snow load		

Worksheet #6 Mitigation Actions

GOALS		ACTIONS	
No.	Goal	ID	Description
8	Subsidence		future construction - build on secure foundation (geotech)
			Community education about what is happening
			inspect foundation and improve as needed
		x	Underground utility repair / inspection (poles as well are tilting)
9	Volcanos	x	education - how to deal with ashfall
		x	masks at clinic
		x	covering material for equipmet
			back up set of filters for water and equipment
		x	educate - effects of natural resources, cleaning
10	Wildfires	x	Updated fire equipment as needed
			Fire breaks around buildings
		x	Participate in Firewise
		x	training personel
			educate - home owners barrier around home
		x	breaks around community
			how to put fire out when camping / precautions for fire
			masks at clinic
11	Build capacity of the Tribe and City to prepare, respond to, and recover from disasters.	x	Build emergency kits / provide education to residents about how to build an emergency kit.
			More handheld radios for emergencies/ stationary VHF Radios
		x	Identify a muster point / educate all community members about muster point
		x	SCERP - development
		x	Emergency shelters (Yurts, tents, etc)
		small solar panel for charging / Alternative power/energy source	

Community Meeting

Nondalton Tribal Hazard Mitigation Plan (2019 - 2024) & Tribal Transportation Safety Plan

Date / Location: January 31, 2019 at 4 PM / Community Center

Sign In Sheet

Name	Name	Name
Teresa Pickler		
* Briana Delkittie		
Natalia Marttila		
Liz Ballou		
Gary Marttila		
Billy Treason Jr		
Fawn Silas		
Clyde Trefan		
Walter Engstrom		
Chris Crookman		
Randy / Kank		
Clarence Delkittie		
* Gust Suvola	Gus Evanoff	



NONDALTON TRANSPORTATION SAFETY PLAN & HAZARD MITIGATION PLAN

COMMUNITY MEETING

Come learn about two new projects in the works! The first is a Tribal Transportation Safety Plan, which proposes strategies to improve safety of local roads, trails, boating facilities, and airport. The second project is a Tribal Hazard Mitigation Plan, which proposes strategies to protect the community against natural disasters such as wildfires, floods, earthquakes, & more.

We want to hear from you!

Attendees can provide input about safety and hazard priorities for the community. The project planners will be available for any questions or feedback from the public.

Posting date 1/16/2019

Thursday
January 31, 2019
4:00 PM

Community
Center

Door Prizes!

Snacks &
Refreshments

Discuss the
future of
Nondalton!

For more information or to
submit comments contact:

Jackie Wander
(907) 563-0013
jwander@bristol-
companies.com

Bristol



ENGINEERING
SERVICES COMPANY, LLC

Community Meeting Handout
Nondalton Tribal Hazard Mitigation Plan
January 31, 2019

Dear Participant;

Thank you for attending the public meeting for the Nondalton FEMA Tribal Hazard Mitigation Plan (THMP). Your comments and participation are very important to the planning process. We appreciate any feedback you may have on this meeting or the project in general.

Bristol Bay Native Association (BBNA) Department of Transportation and Infrastructure Development (DOTID) has contracted Bristol Engineering Services Company, LLC (Bristol) to assist with the preparation of the FEMA THMP. The THMP is a planning document used to identify hazards that your community is exposed to and ways to reduce potential losses of important assets from these hazards. A FEMA approved and community adopted THMP enables the Local government to apply for grants through disaster related assistance programs like the Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM), and others.

The purpose of this public meeting is to inform the community about the THMP, collect community feedback about the identified hazards and mitigation actions / projects. We are looking for personal experiences with the identified hazards, and assistance with identifying problem areas and issues of concern. We would also like input on the identified mitigation strategies and ways that the Planning Team can keep the public informed and involved in the process. This information will be used in the THMP. A draft copy will be available for review when completed.

Public comment is key to a successful project. Please feel free to contact me directly with any comments or concerns. My email is ddance@bristol-companies.com.

Sincerely,



Danielle Dance
Civil Engineer I

Attachments:

- Newsletter
- List of Preparedness Resources
- 12 Ways to Prepare Postcard





This newsletter describes the Bristol Bay Native Association Transportation and Infrastructure Department's Tribal Hazard Mitigation Planning project development processes to all interested agencies, stakeholders, and the public and to solicit comments. It can also be viewed on the BBNA's website at www.bbna.com

Bristol Bay Native Association (BBNA) Transportation and Infrastructure Department (DOTID) was awarded a Pre-Disaster Mitigation Program grant from the Federal Emergency Management Agency (FEMA) to prepare your 2019 Tribal Hazard Mitigation Plan (THMP). Bristol Engineering Services Company, LLC (BESC) was contracted to assist the BBNA DOTID with preparing a 2019 FEMA approvable THMP plan.

The THMP will identify all natural hazards, such as earthquake, flood, erosion, severe weather, and wildland/tundra fire hazards, etc. The plan will also identify the people and facilities potentially at risk and ways to mitigate damage from future hazard impacts. We will document the public participation and planning process as part of this project.

What is Hazard Mitigation?

Hazard mitigation projects eliminate the risk or reduce the hazard impact severity to people and property. Projects may include short- or long-term activities to reduce exposure to or the effects of known hazards. Hazard mitigation activities could include relocating or elevating buildings, replacing insufficiently sized culverts, using alternative construction techniques, developing, implementing, or enforcing building codes, or developing, and implementing education programs.

Why Do We Need A Hazard Mitigation Plan?

Communities must have a State, FEMA approved, and community adopted mitigation plan to receive a project grant from FEMA's pre- and post- disaster grants identified in their Hazard Mitigation Assistance and other agency's mitigation grant programs. BBNA DOTID plans to apply for mitigation funds after our plan is complete.

A FEMA approved and community adopted THMP enables the Local government to apply for the Hazard Mitigation Grant Program (HMGP), a disaster related assistance program; the Pre-Disaster Mitigation (PDM), and the National Flood Insurance Program (NFIP) Flood Mitigation Assistance (FMA) grant programs.

The Planning Process

There are very specific federal requirements that must be met when preparing a FEMA approvable THMP. These requirements are commonly referred to as the planning process requirements of 44 CFR 201.7 (c)

The following steps describe the planning process in order to develop the THMP.

1. **Establish the Planning Team**
2. **Education of the Planning Team**
3. **Assess Risks**
4. **Assess Capabilities**
5. **Develop a Mitigation Strategy**
6. **Monitor, Evaluate, and Plan Updates**

We are currently in the very beginning stages of preparing the plan development. We will be conducting a Planning Team Meeting to introduce the project and planning team, to gather comments from community residents, identify hazards, and collect data to refine the vulnerability assessment.

We Need Your Help

BESC has prepared survey packets to begin collecting information for your THMP. Survey packets will be mailed to your village council and sent by email to your village administrator.

Establishing a Planning Team is a very important step.

We will need a point of contact (POC)/team leader from your community. This group will consist of 2-5 people that have good knowledge about land use, the transportation system, public facilities, and safety resources within the community. BBNA DOTID will be in contact with your tribe to determine a POC and your planning team.

Once the Planning Team has been developed, they will begin to work on the following items:

- Identifying the hazards that impact your community;
- Determining information about the hazards such as, location, history, extent, and the probability of future events;
- Completing a risk analysis, and;
- Developing problem statements and goals.

BBNA DOTID will be in contact with your tribe to set up an initial teleconference meeting with the Planning Team, BBNA DOTID, and BESC to continue to work on the THMP development.

The BBNA DOTID team will be led by Annie Fritze, DOTID Program Manager or Dan Breeden, Department Director with assistance from Bristol Engineering Service Company, LLC (contracted by BBNA). BESC will be developing materials and lead the planning process with guidance from BBNA DOTID staff.

BBNA Tribal Hazard Planning Team

Team Member	Title	Involvement
Annie Fritze	Program Manager	THMP Team Leader, data gathering and plan review
Dan Breeden	Department Director	THMP Team Leader, data gathering and plan review
Isaac Pearson, P.E.	Senior Engineer	THMP Consultant
Danielle Dance	Civil Engineer	THMP Consultant

Public Participation

The purpose of this newsletter is to keep you informed, and to allow you every opportunity to voice your opinion regarding these important projects. We want to encourage public involvement as a continuous effort throughout the project.

We encourage you to take an active part in the development effort, and preparation of the Tribal Hazard Mitigation Plan.

The goal is to receive comments, identify key issues or concerns, and improve mitigation ideas, and to guide the community.

Please contact BBNA DOTID program staff or BESC if you have any questions, comments, or requests for more information:

<p>Bristol Bay Native Association DOTID</p> <p>Annie Fritze OR Dan Breeden PO Box 310 Dillingham, Alaska 99576 (907) 842-6219</p>	<p>Bristol Engineering Services Company, LLC</p> <p>Danielle Dance, Consultant 111 W. 16th Avenue, Third Floor Anchorage, Alaska 99501 (907)563-0013</p>
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Useful web links

Volcano Information

- Visit the AVO website: www.avo.alaska.edu
- Sign up for the VNS: <https://volcanoes.usgs.gov/vns2/>
- Ash Impacts website: https://volcanoes.usgs.gov/volcanic_ash
- Ashfall advisories come from the NWS: www.weather.gov/afc/
- AVO would *love* your volcano observations and ash samples
 - Find us at www.avo.alaska.edu/contact.php/
 - Is Ash Falling: www.avo.alaska.edu/ashfall/ashreport.php
 - Collection instructions: <https://avo.alaska.edu/ashfall.php>
 - Facebook: <http://facebook.com/alaska.avo>
 - Twitter: http://twitter.com/alaska_avo
- Air Quality Advisories, DEC: <http://dec.alaska.gov/air>
- Airborne ash hazards to aircraft, NOAA: <http://aawu.arh.noaa.gov>
- Local Notice to Mariners, USCG: www.navcen.uscg.gov

Weather Information

- Watches and Warnings: <https://alerts.weather.gov/cap/ak.php?x=1>
- Any forecast: <http://www.weather.gov/afc>
- Mobile information (low bandwidth): <http://www.weather.gov/source/afc/mobile/>
- River Information: <http://www.weather.gov/aprfc>
- Rainfall: <http://www.weather.gov/aprfc>
- Breakup Info: <http://www.weather.gov/aprfc/breakupESRIMap>
- River Conditions: <http://www.weather.gov/aprfc/riverConditions>
- Alaska Weather T.V. Maps: <http://www.weather.gov/afc/tv>
- Sea Ice forecasts: <http://www.weather.gov/afc/ice>
- Outlook (temperatures and precipitation): <http://www.cpc.noaa.gov>
- Send us a storm report:
http://www.srh.noaa.gov/StormReport_new/SubmitReport.php?site=AFC

WEBSITES

- Alaska DHS&EM: <http://ready.alaska.gov>
- Ready, Department of Homeland Security: <https://www.ready.gov/>
- Department of Commerce, Community and Economic Development (DCCED), State of Alaska Floodplain Management: <http://www.commerce.state.ak.us/dca/nfip/nfip.htm>
- Flood information for Alaskans: <http://www.flood.alaska.gov>
- Association of State Floodplain Managers: <http://www.floods.org/>
- Alaska-Pacific River Forecast Center (APRFC): <http://aprfc.arh.noaa.gov>
- Natural Resources Conservation Service (NRCS), Alaska Snow, Water and Climate Services: <http://ambcs.org>
- National Weather Service (NWS), Alaska Region Headquarters: <http://www.arh.noaa.gov/>
- Federal Aviation Administration (FAA), Alaskan Region's Weather Cameras: <http://avcams.faa.gov/>
- U.S. Department of the Interior—Bureau of Land Management (BLM), Alaska Fire Service: <http://fire.ak.blm.gov/>
- Alaska Energy Authority (AEA): <http://www.akenergyauthority.org/>
- Department of Commerce, Community and Economic Development (DCCED), Community Profiles: <http://www.commerce.state.ak.us/dca>
- Alaska Department of Public Safety, Rural Fire Training Office: <http://www.dps.state.ak.us/fire/TEB/ruralfireprotection.aspx>
- Department of Environmental Conservation (DEC): <http://www.state.ak.us/dec/>
- National Weather Service, Forecast Office Alaska Ice Desk: <http://pafc.arh.noaa.gov/ice.php>
- Federal Emergency Management Agency (FEMA): <http://www.fema.gov/>
- American Red Cross of Alaska: <http://www.alaska.redcross.org>
- Small Business Administration: <http://www.sba.gov/localresources/disasteroffices/focwest/index.html>



Community Meeting Handout Nondalton Tribal Transportation Safety Plan January 31, 2019

Dear Participant;

Thank you for attending the public meeting for the Nondalton Tribal Transportation Safety Plan project. Your participation is crucial to the planning process. We appreciate any feedback you may have on this meeting or the project in general.

Bristol Engineering has been contracted by Bristol Bay Native Association (BBNA) on behalf of the Nondalton Village to develop a Tribal Transportation Safety Plan (TTSP) for your community. A TTSP is a collaborative and comprehensive document that identifies transportation safety issues and strategies to address them. The overarching goal is to reduce risk of car crashes, fatalities, and injuries on the local transportation system. The TTSP is also essential for obtaining funding for safety projects. The TTSP project is currently at the Draft report level. After this public meeting, Bristol will incorporate public comments into a Final Draft TTSP, which will be submitted to the Council for review.

The purpose of this public meeting is to present the Draft TTSP to the community, as well as better understand the community's transportation safety priorities. Priorities can be any project or program aimed at improving safety for any mode of travel including roads, trails, pedestrian features, boating and aviation facilities, and more. Your comments will help determine emphasis areas for the plan.

Public comment is key to a successful project. Please feel free to contact me directly with any comments or concerns. I can be reached by email at jwander@bristol-companies.com or by phone (907) 743-9314.

Sincerely,

Jaclyn (Jackie) Wander
Civil Engineer II

Bristol ALLIANCE OF COMPANIES™	Jaclyn Wander Civil Engineer
	Bristol Engineering Services Corporation
111 W. 16th Avenue, Third Floor Anchorage, AK 99501-5169 phone (907) 563-0013 fax (907) 563-6713 jwander@bristol-companies.com	

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Nondalton
 Tribal Transportation Safety Plan
 January 31, 2019

Nondalton Village Tribal Transportation Safety Plan


Bristol Engineering Services Company, LLC
Jackie Wander, Civil Engineer II

1

Bristol
ENGINEERING SERVICES COMPANY, LLC

Nondalton
 Tribal Transportation Safety Plan
 January 31, 2019

Safety Minute



Code Zero means zero incidents, zero injuries, and zero losses. Code Zero positively influences how we think and act. **Code Zero is the Bristol way.**

2

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Nondalton
 Tribal Transportation Safety Plan
 January 31, 2019

Presentation Overview

- ▶ What is a Safety Plan?
- ▶ Importance of Safety Plans
- ▶ The Four E's of Safety
- ▶ Steps to Develop Safety Plans
- ▶ Data Collection & Surveys
- ▶ Emphasis Areas
- ▶ Implementation Plan
- ▶ Next Steps
- ▶ Questions / Comments
- ▶ **Break**
- ▶ Hazard Mitigation Plan
- ▶ Door Prizes!



3

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Nondalton
 Tribal Transportation Safety Plan
 January 31, 2019

Tribal Transportation Safety Plan

“A Transportation Safety Plan is a collaborative and comprehensive document that identifies transportation safety issues and strategies to address them. Effective Transportation Safety Plans lead to projects that make the transportation system safer.”

*~ U.S. Department of Transportation Federal Highway Administration
 Developing a Transportation Safety Plan*

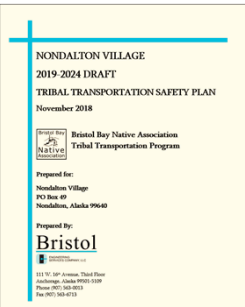
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Nondalton
 Tribal Transportation Safety Plan
 January 31, 2019

Tribal Transportation Safety Plan

- ▶ Uses Data to Guide Transportation Investment Decisions
- ▶ Mechanism to Coordinate Safety Efforts
 - Engage leadership/stakeholders
 - Collect/analyze data
 - Determine emphasis areas
 - Identify strategies



5

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Nondalton
 Tribal Transportation Safety Plan
 January 31, 2019

Importance of Safety Plans

- ▶ Proactive Approach to Planning
 - Prevents crashes
 - Improves unsafe transportation conditions
- ▶ Address Most Critical Safety Needs
- ▶ Develops Partnerships
- ▶ Increases Access to Safety Funding




“Planning with safety in mind saves lives”

6

Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Four E's of Safety

- EDUCATION**
 - Gives drivers information about making good choices
 - Informs about rules of the road
- ENGINEERING**
 - Addresses roadway infrastructure
- ENFORCEMENT**
 - Enforces traffic laws
 - Provides visible police presence
- EMERGENCY SERVICES**
 - Provides rapid response
 - Quality of care when responding to collisions causing injury




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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Safety Plan Development

- Step 1 – Establish Safety Leadership Framework
- Step 2 – Collect & Analyze Safety Data
- Step 3 – Determine Emphasis Areas
- Step 4 – Identify Strategies
- Step 5 – Prioritize/Incorporate Strategies
- Step 6 – Draft a Plan
- Step 7 – Evaluate/Update the Transportation Safety Plan



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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Data Collection

- Traffic Counts
- Public Surveys






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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Traffic Counts

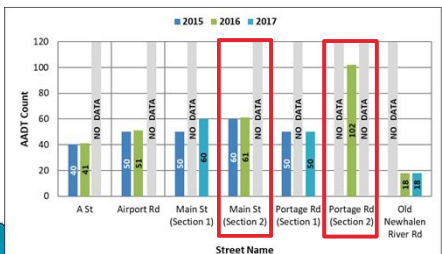


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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Traffic Counts

- Portage Road is the busiest (AADT = 102 in 2016)
- Followed by Main Street (AADT = 61 in 2016)

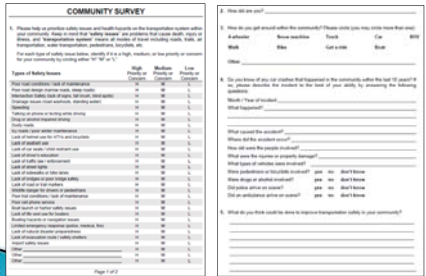


11

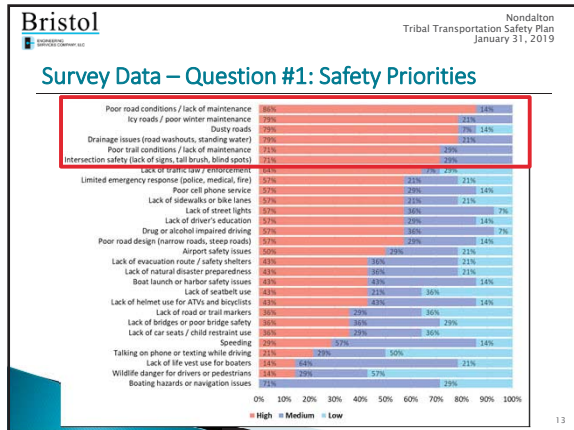
Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Public Surveys

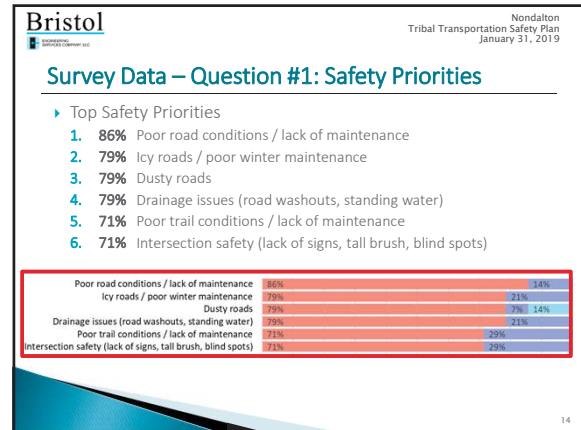
- 14 total surveys received!



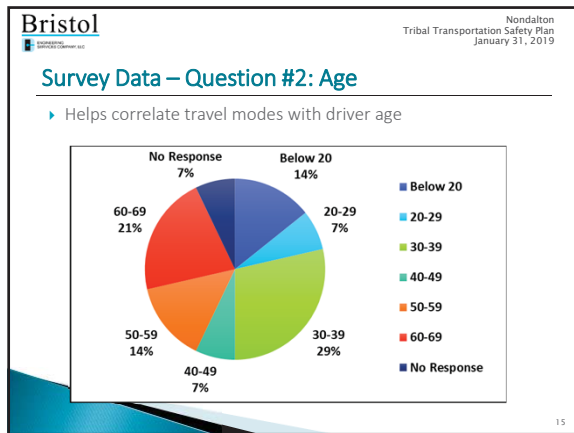
12



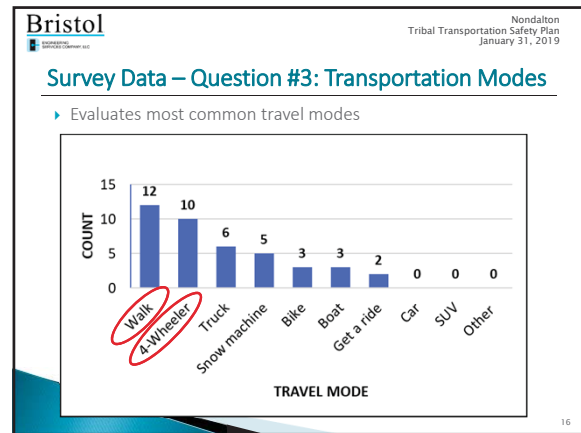
13



14



15



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Month	Summer
Year	2016
Incident	Truck turning left bumped SUV at blind corner
Cause	Blind spot
Location	Intersection at end of airport hill
Age	28, 4, 34
Injuries	None
Property Damage	SUV had dent on hood and broken light
Vehicle Types	Dodge Ram 1500 and SUV
Pedestrian Involvement	No
Drug or Alcohol Use	No
Police on Scene	No
Ambulance on Scene	No

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- What could be done to improve transportation safety?
 - Road maintenance, training and equipment
 - Rebuild / resurface roads
 - Brush cutting
 - Streetlights
 - Fix culverts
 - Identify gravel source
 - Sanding in the winter
 - Tie up dogs
 - Enforcement
 - Reflectors for pedestrians
 - Street signs
 - Driver's education

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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Candidate Emphasis Areas

- Road Conditions
 - Fix drainage
 - Pothole maintenance
- Winter Driving
- Dust
- Trail Safety
- Intersection Safety
 - Brush clearing
 - Signs
- Pedestrian Safety
 - Streetlights
 - Reflectors
- Airport Safety
 - Brush cutting
 - Public building
 - Unauthorized access



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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Implementation Plan


EMPHASIS AREA #1		STRATEGIC LINKAGE				
SPEEDING		<ul style="list-style-type: none"> 80% of survey respondents marked "Speeding" as a high priority, making it the 4th highest community safety priority Installing speed bumps was the second most common suggestion in the community surveys regarding actions to improve transportation safety At least 2 out of 6 reported car crashes involved excessive rate of speed 				
OBJECTIVES		<ul style="list-style-type: none"> Reduce the risk and severity of speeding-related car crashes 				
SUCCESS INDICATORS		<ul style="list-style-type: none"> Slower driving speeds around the community 				
KEY	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
ENFORCEMENT	Install more speed limit signs around the community, as needed	Improve awareness of speed limits	Transportation Coordinator, Tribal Administrator	Summer 2020	Number of speed limit signs installed or replaced	Inspect road signs (once per year) and repair or replace as needed
ENFORCEMENT	Work with the VPSO to penalize speeders, as appropriate. Increase VPSO presence in the school zone before and after school	Improve enforcement of speed limits and increase visibility of police force	Transportation Coordinator, Tribal Administrator	Ongoing, especially during school months	Reduced number of speeding complaints from community members about speeders	Keep record of speeding accidents before and after installation of speed bumps
ENFORCEMENT	Install partial speed humps at liberal locations to reduce speeds, especially within the school zones or on streets with high pedestrian traffic	Reduce speeding on community streets. Reduce the number of speeding-related car crashes	Transportation Coordinator, Tribal Administrator	Summer 2023	Number of speed humps installed around the community. Reduced number of speeding-related accidents	Keep record of speeding-related accidents before and after installation of speed humps
ENFORCEMENT	Maintain a local VPSO. Incentivize private to join the volunteer emergency response team to respond to traffic accidents caused by speeding or other factors	Have reliable police and medical services within the community to improve quality of care during a transportation incident	Transportation Coordinator, Tribal Administrator	Ongoing	Number of days the VPSO patrolled the school zone. Increased number of volunteers on the emergency response team	Schedule seasonal meetings with the VPSO & response team to monitor performance

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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Next Steps

- Draft Safety Plan
 - February 2019
 - Collect public comment
- Final Draft Safety Plan
 - March 2019
 - Council review
- Final Safety Plan
 - April 2019
 - Resolution
- Implementation



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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Questions or Comments



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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Nondalton FEMA Tribal Hazard Mitigation Plan

Bristol Engineering Services Company, LLC
Danielle Dance

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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Presentation Overview

- Project Background
- FEMA Tribal Hazard Mitigation Plan (THMP)
- Funding
- Identified Hazards
- Assets
- Mitigation Goals
- Mitigation Action Plan





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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Project Background

- ▶ BBNA DOTID awarded Pre-Disaster Mitigation Program grant from FEMA
 - Develop the Tribal Hazard Mitigation Plan
 - Contracted BESC
- ▶ Hazard Mitigation
 - eliminates risk to or reduces hazard impact severity to community assets
 - Projects can be long or short term
- ▶ Purpose of Plan
 - Identify ways to make community safer and more prepared
 - Provides opportunity for funding options through FEMA

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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

FEMA Tribal Hazard Mitigation Plan (THMP)

- ▶ Follows Code of Federal Regulations (CFR)
 - 44 CFR Part 201
- ▶ Identifies
 - Planning Process / Planning Team
 - Plan to keep the THMP current
 - Natural hazards in your community
 - Community assets
 - Mitigation strategy / action plan
 - Funding Opportunities



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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Funding

- ▶ Eligibility Requirement for FEMA Pre- and Post- Disaster Grants
 - FEMA approved and community adopted Hazard Mitigation Plan
 - Plan identifies mitigation projects for the community
- ▶ Grants
 - Hazard Mitigation Grant Program (HMGP)
 - Pre-Disaster Mitigation (PDM)
 - National Flood Insurance Program (NFIP)
 - Flood Mitigation Assistance (FMA)
- ▶ Other Grant Opportunities
 - State
 - Tribal



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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Identified Hazards

- ▶ Hazards Identified Based on
 - Location
 - Extent
 - Probability of Future Event
 - Overall Significance
- ▶ Hazards Detailed in Plan
 - Location
 - Extent
 - History
 - Probability of Future Events
- ▶ Hazards
 - Drought
 - Earthquake
 - Erosion
 - Extreme Heat
 - Flood
 - Severe Wind
 - Subsidence
 - Volcano
 - Wildfire
- ▶ What experiences have you had?

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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Community Assets

- ▶ Asset
 - People
 - Economy
 - Built Environment
 - Natural Environment
- ▶ Major Community Assets
 - Clinic
 - Churches / Cemeteries
 - School
 - Utilities
 - Airport / Roads
 - B&B's
 - Doll Factory
 - Store / Post Office
 - City Offices
 - Tribal Office
 - Community Center
 - Others




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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Mitigation Goals

- ▶ Goals Based on Vulnerability Statements
 - VULNERABILITY STATEMENTS HERE



FEMA Local Mitigation Planning Handbook March 2013

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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Mitigation Goals

- Community Goals
 - Reduce possibility of damages due to the profiled hazards.
 - GOALS HERE

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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Mitigation Actions

- Mitigation Actions Reduce Long-Term Vulnerability
- Types
 - Local plans and regulations
 - Structure and infrastructure projects
 - Natural systems protection
 - Education and awareness programs
 - Additional – Preparedness and Response Actions
- Actions Will be Used to Create a Mitigation Action Plan

FEMA Local Mitigation Planning Handbook March 2013

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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Mitigation Actions (Continued)

- Mitigation Actions
 - Actions that help reduce the impact from natural hazards.
- What suggestions do you have?

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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Continued Public Involvement

- Public Involvement is Important
 - Next Steps
- How can the Planning Team keep you informed and involved in this process?

Contact	
BBNA DOTID	Bristol Engineering (BESC)
Annie Fritze (907) 842-6143 afritze@bbna.com	Danielle Dance (907) 563-0013 ddance@bristol-companies.com

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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

Questions or Comments

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Bristol Nondalton Tribal Transportation Safety Plan January 31, 2019

CHINAN!

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X Reduce speed / school zone signs
 - guardrails
 - flooding



NONDALTON COMMUNITY MAP SHEET 1 1"=200' (2022 PHOTOGRAPHY)

Block	Lot	Area	Notes
BLOCK 4	1-4	0.12	Traverse Deed to City of Nondalton 11/14/02
	5-8	0.12	Traverse Deed to City of Nondalton 11/14/02
	9-12	0.12	Traverse Deed to City of Nondalton 11/14/02
	13-16	0.12	Traverse Deed to City of Nondalton 11/14/02
BLOCK 5	1-4	0.12	Traverse Deed to City of Nondalton 11/14/02
	5-8	0.12	Traverse Deed to City of Nondalton 11/14/02
	9-12	0.12	Traverse Deed to City of Nondalton 11/14/02
	13-16	0.12	Traverse Deed to City of Nondalton 11/14/02
BLOCK 6	1-4	0.12	Traverse Deed to City of Nondalton 11/14/02
	5-8	0.12	Traverse Deed to City of Nondalton 11/14/02
	9-12	0.12	Traverse Deed to City of Nondalton 11/14/02
	13-16	0.12	Traverse Deed to City of Nondalton 11/14/02
BLOCK 7	1-4	0.12	Traverse Deed to City of Nondalton 11/14/02
	5-8	0.12	Traverse Deed to City of Nondalton 11/14/02
	9-12	0.12	Traverse Deed to City of Nondalton 11/14/02
	13-16	0.12	Traverse Deed to City of Nondalton 11/14/02
BLOCK 8	1-4	0.12	Traverse Deed to City of Nondalton 11/14/02
	5-8	0.12	Traverse Deed to City of Nondalton 11/14/02
	9-12	0.12	Traverse Deed to City of Nondalton 11/14/02
	13-16	0.12	Traverse Deed to City of Nondalton 11/14/02
BLOCK 9	1-4	0.12	Traverse Deed to City of Nondalton 11/14/02
	5-8	0.12	Traverse Deed to City of Nondalton 11/14/02
	9-12	0.12	Traverse Deed to City of Nondalton 11/14/02
	13-16	0.12	Traverse Deed to City of Nondalton 11/14/02
BLOCK 10	1-4	0.12	Traverse Deed to City of Nondalton 11/14/02
	5-8	0.12	Traverse Deed to City of Nondalton 11/14/02
	9-12	0.12	Traverse Deed to City of Nondalton 11/14/02
	13-16	0.12	Traverse Deed to City of Nondalton 11/14/02
BLOCK 11	1-4	0.12	Traverse Deed to City of Nondalton 11/14/02
	5-8	0.12	Traverse Deed to City of Nondalton 11/14/02
	9-12	0.12	Traverse Deed to City of Nondalton 11/14/02
	13-16	0.12	Traverse Deed to City of Nondalton 11/14/02
BLOCK 12	1-4	0.12	Traverse Deed to City of Nondalton 11/14/02
	5-8	0.12	Traverse Deed to City of Nondalton 11/14/02
	9-12	0.12	Traverse Deed to City of Nondalton 11/14/02
	13-16	0.12	Traverse Deed to City of Nondalton 11/14/02
BLOCK 13	1-4	0.12	Traverse Deed to City of Nondalton 11/14/02
	5-8	0.12	Traverse Deed to City of Nondalton 11/14/02
	9-12	0.12	Traverse Deed to City of Nondalton 11/14/02
	13-16	0.12	Traverse Deed to City of Nondalton 11/14/02
BLOCK 14	1-4	0.12	Traverse Deed to City of Nondalton 11/14/02
	5-8	0.12	Traverse Deed to City of Nondalton 11/14/02
	9-12	0.12	Traverse Deed to City of Nondalton 11/14/02
	13-16	0.12	Traverse Deed to City of Nondalton 11/14/02
BLOCK 15	1-4	0.12	Traverse Deed to City of Nondalton 11/14/02
	5-8	0.12	Traverse Deed to City of Nondalton 11/14/02
	9-12	0.12	Traverse Deed to City of Nondalton 11/14/02
	13-16	0.12	Traverse Deed to City of Nondalton 11/14/02
BLOCK 16	1-4	0.12	Traverse Deed to City of Nondalton 11/14/02
	5-8	0.12	Traverse Deed to City of Nondalton 11/14/02
	9-12	0.12	Traverse Deed to City of Nondalton 11/14/02
	13-16	0.12	Traverse Deed to City of Nondalton 11/14/02



USDA

Alaska

MA-2022

This map was prepared by the Lake and Wetland Planning Unit in cooperation with the Alaska Department of Natural Resources, Planning and Conservation Division. The map was prepared for the Lake and Wetland Planning Unit in cooperation with the Alaska Department of Natural Resources, Planning and Conservation Division. The map was prepared for the Lake and Wetland Planning Unit in cooperation with the Alaska Department of Natural Resources, Planning and Conservation Division.

Community Map

NONDALTON

59° 58' 15" N 154° 21' 01" W (NAD 83)

Approximate Elevation: 250' M. AS

U.S.G.S. Quadrangle: "LANANA D-5", BARNA

ILIANA RECORDING DISTRICT

LEGEND

- Residential Building
- Commercial Building
- Public Building
- Water Line
- Periodic Flooding
- Severe Force Main
- Edge of Water
- Clasification Areas
- Chert
- 200' Contour
- 400' Contour
- 600' Contour
- Telephone Line w/pole
- Electric Line w/pole
- Water Line
- Sewer Line
- Severe Force Main
- Edge of Water
- Clasification Areas
- Chert
- 200' Contour
- 400' Contour
- 600' Contour

Scale: 1"=200'

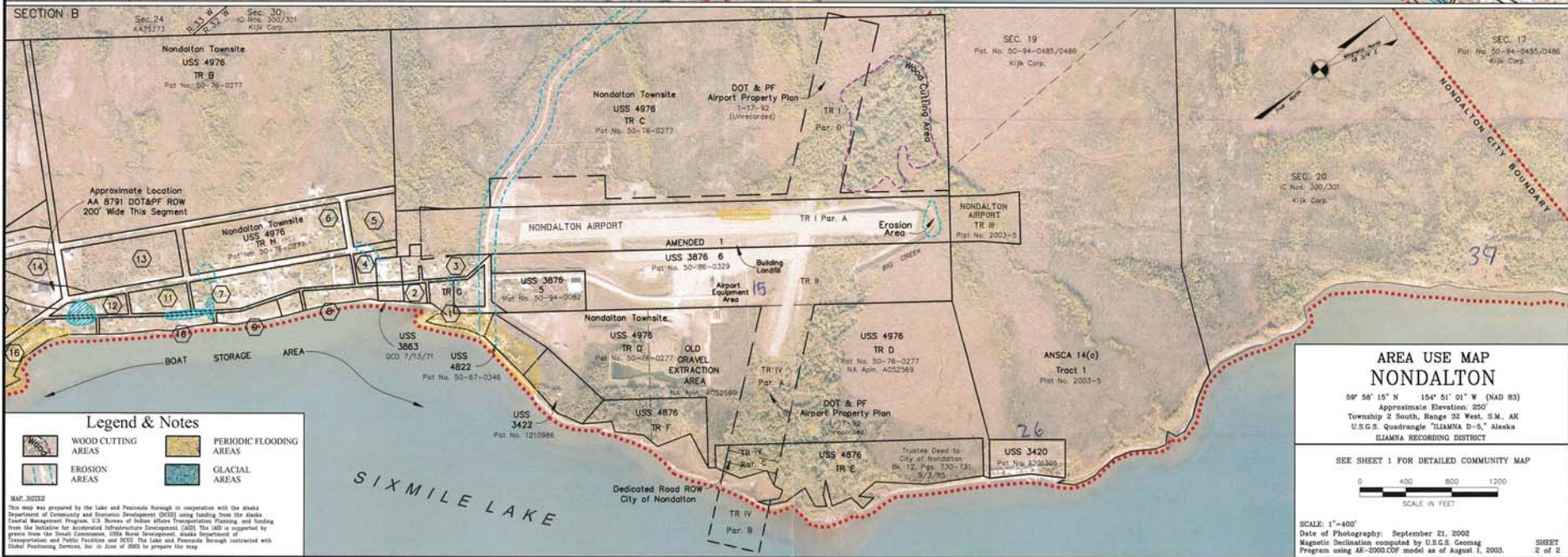
Date of Photography: August 17, 2002

Scale: 1"=200'

Program using Arc-3000/2007 model as of August 1, 2002.

SHEET 1 OF 2

-quadrants is desired



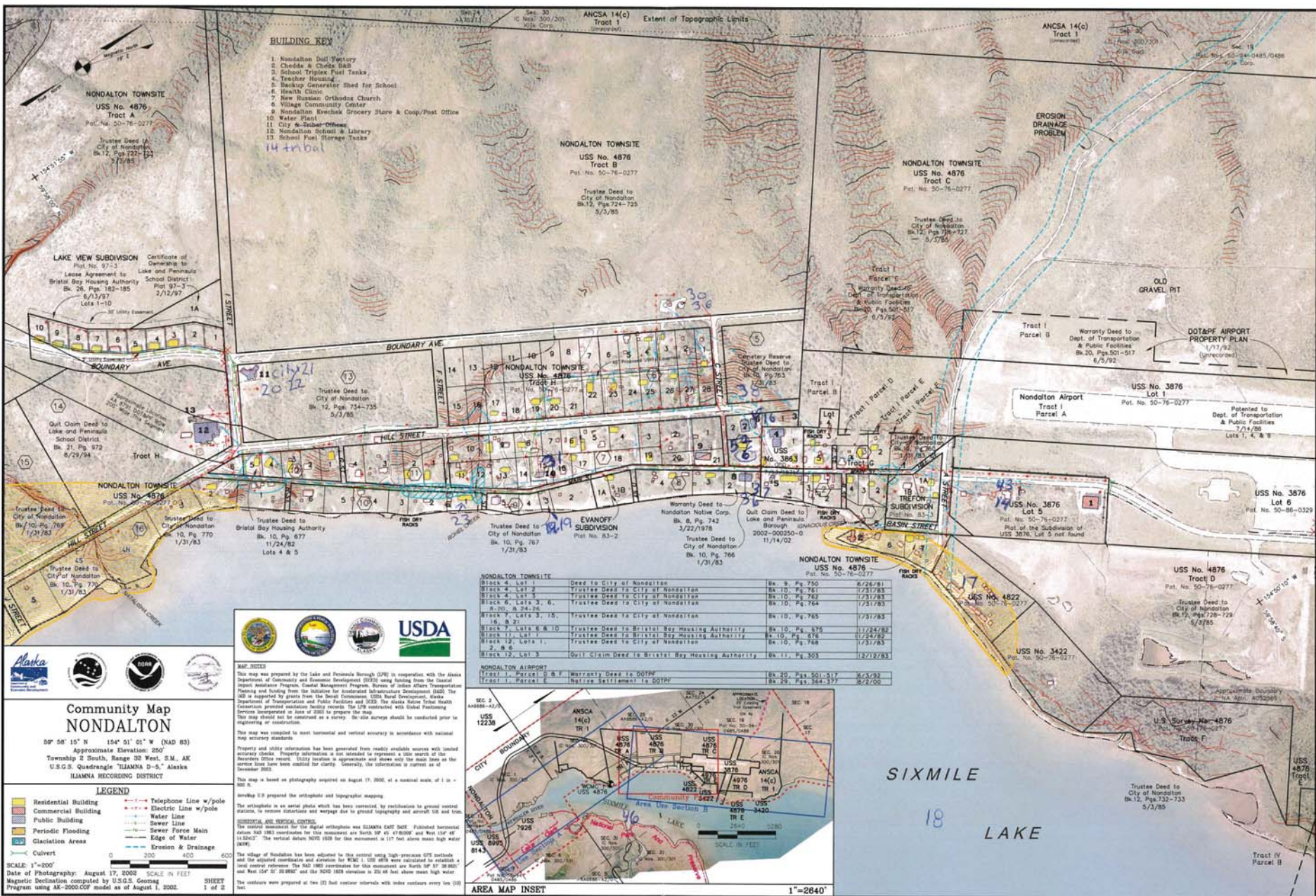
NONDALTON AREA USE MAP SHEET 2 1"=400' (2002 PHOTOGRAPH)

Legend & Notes

	WOOD CUTTING AREAS		PERIODIC FLOODING AREAS
	EROSION AREAS		GLACIAL AREAS

MAP NOTES
This map was prepared by the Lake and Peninsula through its cooperation with the Alaska Department of Community and Economic Development (CDE) using funding from the Alaska Coastal Management Program, US Bureau of Indian Affairs (Emergency Planning, and Funding from the Initiative for Accelerated Infrastructure Development. (IAID). The IAID is supported by grants from the Small Communities USDA Rural Development, Alaska Department of Transportation and Public Facilities and NOAA. The Lake and Peninsula through contract with Global Positioning Services, Inc. in June of 2003 to prepare the map.

community asset number index



- BUILDING KEY**
1. Nondalton Doll Factory
 2. Chedda & Chedda Bldg
 3. School/Triples Fuel Tanks
 4. Teacher Housing
 5. Backup Generator Shed for School
 6. Health Clinic
 7. New Russian Orthodox Church
 8. Village Community Center
 9. Nondalton Kvenek Grocery Store & Coop/Post Office
 10. Water Plant
 11. City & Tribal Offices
 12. Nondalton School & Library
 13. School Fuel Storage Tanks



MAP NOTES

This map was prepared by the Lake and Peninsula Borough (LPB) in cooperation with the Alaska Department of Community and Economic Development (C&ED) using funding from the Coastal Impact Assistance Program, Coastal Management Program, Bureau of Indian Affairs Transportation Planning and Funding from the Institute for Sustainable Development (ISD). The ISD is supported by grants from the Small Communities, USDA Rural Development, Alaska Department of Transportation and Public Facilities and C&ED. The Alaska Native Title State Consortium provided resolution history records for the LPB conducted with United Positioning Services Incorporated in June of 2002 to prepare the map.

This map should not be construed as a survey. On-site surveys should be conducted prior to engineering or construction.

This map was compiled to meet horizontal and vertical accuracy in accordance with national map accuracy standards.

Property and other information has been generated from readily available sources with limited accuracy checks. Property information is not intended to represent a title search of this Borough Office records. Titles information is approximate and does not show the exact lines on the service lines have been studied for clarity. Generally, the information is current as of December 2002.

This map is based on photography acquired on August 17, 2002, at a nominal scale of 1" = 300'.

Inventory 02 prepared the orthographic and topographic mapping.

This orthographic is a aerial photo which has been corrected by rectification to ground control stations, to remove distortions and skew due to ground topography and aircraft tilt and trim.

HORIZONTAL AND VERTICAL CONTROL

The ground monument for the digital orthographic was ILLIAMA D-567. Published horizontal datum NAD 1983 coordinates for this monument are North 59° 45' 47.8088" and West 154° 46' 14.0643". The vertical datum NAVD 1983 for this monument is 117' feet above mean high water (MHW).

The ellipsoid of Nondalton has been adjusted to this control using high precision GRS methods and the adjusted coordinates are shown for NAD 1983. USGS 9815 were established to establish a local control reference. The NAD 1983 coordinates for this monument are North 59° 57' 38.8811" and West 154° 57' 30.8992" and the NAD 1983 elevation is 200.48 feet above mean high water. The contours were prepared at two (2) foot contour intervals with index contours every five (5) feet.

NONDALTON AIRPORT

Tract I - Parcel D & F	Warranty Deed to DOT/PA	Bk. 20, Pg. 501-517	8/3/92
Tract I - Parcel E	Native Settlement to DOT/PA	Bk. 29, Pg. 364-377	8/22/00

NONDALTON TOWNSHIP

Block 4, Lot 1	Deed to City of Nondalton	Bk. 9, Pg. 750	6/26/81
Block 4, Lot 2	Trustee Deed to City of Nondalton	Bk. 10, Pg. 741	7/31/83
Block 4, Lot 3	Trustee Deed to City of Nondalton	Bk. 10, Pg. 743	7/31/83
Block 4, Lots 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100	Trustee Deed to City of Nondalton	Bk. 10, Pg. 764	7/31/83
Block 7, Lots 3, 15, 16, 8, 21	Trustee Deed to City of Nondalton	Bk. 10, Pg. 765	7/31/83
Block 7, Lots 6 & 10	Trustee Deed to Bristol Bay Housing Authority	Bk. 10, Pg. 675	11/24/82
Block 12, Lot 1	Trustee Deed to Bristol Bay Housing Authority	Bk. 10, Pg. 674	11/24/82
Block 12, Lot 2	Trustee Deed to City of Nondalton	Bk. 10, Pg. 748	7/31/83
Block 12, Lot 3	Civil Claim Deed to Bristol Bay Housing Authority	Bk. 11, Pg. 303	12/21/83



Community Map NONDALTON

59° 50' 15" N 154° 51' 01" W (NAD 83)
 Approximate Elevation: 250'
 Township 2 South, Range 30 West, S.1M, 4K
 U.S.G.S. Quadrangle "ILLIAMA D-5", Alaska
 ILLIAMA RECORDING DISTRICT

LEGEND

Residential Building	Telephone Line w/pole
Commercial Building	Electric Line w/pole
Public Building	Water Line
Periodic Flooding	Sewer Line
Glaciation Areas	Sewer Force Main
Erosion & Drainage	Edge of Water
Culvert	Erosion & Drainage

SCALE: 1"=200'
 Date of Photography: August 17, 2002 SCALE IN FEET
 Magnetic Declination computed by U.S.G.S. Geomatics
 Program using AK-2000.COP model as of August 1, 2002. SHEET 1 of 2

NONDALTON COMMUNITY MAP SHEET 1 1"=200' (2002 PHOTOGRAPHY)

Photos of Nondalton Drainage Issues, January 2019



Photos of Nondalton Drainage Issues, January 2019



Photos of Nondalton Drainage Issues, January 2019



APPENDIX B: CRASH DATA FORM & SUMMARY TABLE

Incident Data Collection Form

Year _____

Month _____

What happened? _____

What caused the accident? _____

Where did the accident occur? (Provide street name, cross street, or landmark)

How old was the driver? _____

How many other people were involved (passengers)? _____

Were there any injuries? _____

(If yes, please describe) _____

What types of vehicles were involved?

Vehicle 1 _____

Vehicle 2 _____

Vehicle 3 _____

Was there any property damage? _____

(If yes, please describe) _____

Were pedestrians or bicyclists involved? _____

Were animals or wildlife involved? _____

Were drugs or alcohol involved? _____

Was an ambulance required? _____

Was a medevac required? _____

Nondalton Crash Data (Incident Collection Forms)

Year	Month	What Happened?	Cause?	Location	Driver Age	No. Ppl Involved	Injuries	Vehicle 1	Vehicle 2	Vehicle 3	Property Damage	Pedestrian / Bicyclist?	Animal / Wildlife?	Drugs / Alcohol?	Ambulance?	Medevac?
2016	July	Truck driver going up on the hill next to the airport was turning left and bumped another car due to blind spot. The corner is sharp.	Blind spot	Intersection at end of airport hill	20-29	2	None	Pickup Truck	SUV	N/A	Dented hood on SUV and broken head light	No	No	No	No	No
2003	January	During a winter snow blizzard, an ATV hit a pedestrian who was walking in the dark wearing all black with no flashlight. The pedestrian was killed. The ATV had only one headlight.	Low visibility	Second Road	20-29	2	Fatality (Pedestrian)	4-Wheeler	N/A	N/A	Unknown	Pedestrian	No	No	Yes	No
2000	July	While the City was working on a water main break repair, an elder on a 4-wheeler drove into the open trench and was killed.	Intoxicated driving, unmarked open trench	First Road close by the elder's home	Over 70	1	Fatality (Driver)	4-Wheeler	N/A	N/A	Unknown	No	No	Yes	Yes	No
Before 2000	July	Kids driving a 4-wheeler, loaded with kids on the front and back racks going too fast, hit something, causing all kids to fly off.	Speeding, overloaded ATV, obstruction in road	Road going down to the landfill by the Big Creek	Under 20	6+	Minor scrapes and burns	4-Wheeler	N/A	N/A	Unknown	No	No	No	Unknown	Unknown
2016	July	3 kids driving an ATV, driving too fast up a steep hill and flipped the bike.	Speeding	By airport gravel pit	Under 20	3	Major face injuries, rip on upper lip (driver)	4-Wheeler	N/A	N/A	Unknown	No	No	No	Unknown	Unknown
2007	November	Drunk driver on a 4-wheeler going fast drove off the road during a blizzard, had a 4-year-old passenger.	Intoxicated	Second Road	40-49	2	Scrapes on face (4-year-old)	4-Wheeler	N/A	N/A	Unknown	No	No	Yes	Unknown	Unknown
2013	January	City suburban slid into a ditch by basketball court during a New Years celebration. Driver reversed too far and went into ditch.	Improper driving	Third Road by the basketball court	40-49	1	Unknown	SUV	N/A	N/A	Unknown	No	No	No	Unknown	Unknown
Before 2000	January	4-wheeler driving on thin ice fell into river during bad weather and thick fog. Driver drove too far down from ice road.	Thin ice	Across the Six Mile Lake	Under 20	~3 (several)	Several fatalities	Snow-machine	N/A	N/A	Unknown	No	No	No	Unknown	Unknown
2018	November	A person on a bicycle was intoxicated going fast down a hill and crashed. Their front wheel came off.	Intoxicated, speeding	Hill by the church and clinic	Under 20	1	Deep abrasions on face, needed stitches	Bicycle	N/A	N/A	Damage to bicycle	Bicyclist	No	Yes	Yes	Yes
Unknown	Unknown	A person driving a 4-wheeler on the runway hit the airport lights, knocking most of them out. It took almost a month to get the lights repaired.	Reckless and unauthorized driving on airport	Nondalton Airport runway	Under 20	1	Unknown	4-Wheeler	N/A	N/A	Damaged runway lights	No	No	Unknown	Unknown	Unknown
2018	January	Three guys went out hunting on a clear day, but the weather turned while they were out, and they got caught in a blizzard on the mountain. They did not have cell service but were able to contact the Coast Guard on a satellite phone.	Weather	Mountain	40-49	2	Moderate hypothermia	Snow-machine	Snow-machine	N/A	None	No	No	Unknown	Unknown	Unknown
Unknown	Unknown	Driver's ATV slid into the mouth of the Newhalen River. Another ATV did the same thing to help the driver.	Alcohol	Mouth of Newhalen River	Under 20	2	2 Fatalities	4-Wheeler	ATV	N/A	Yes	No	No	Yes	Yes	Yes
Unknown	Unknown	Two float planes collided in the Tazimina River. Both Pilots weren't paying attention. One float plane was coming out of river and the other was getting ready to land. Fatalities both planes.	Inattention	Tazimina River	Under 20	2 (at least)	At least 1 fatalities	Float plane	Float plane	N/A	Float plane damage	No	No	No	Yes	Yes

APPENDIX C: COMMUNITY SURVEY RESULTS

COMMUNITY SURVEY

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that **"safety issues"** are problems that cause death, injury or illness, and **"transportation system"** means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either "H" "M" or "L"

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	H	M	L
Poor road design (narrow roads, steep roads)	H	M	L
Intersection Safety (lack of signs, tall brush, blind spots)	H	M	L
Drainage issues (road washouts, standing water)	H	M	L
Speeding	H	M	L
Talking on phone or texting while driving	H	M	L
Drug or alcohol impaired driving	H	M	L
Dusty roads	H	M	L
Icy roads / poor winter maintenance	H	M	L
Lack of helmet use for ATVs and bicyclists	H	M	L
Lack of seatbelt use	H	M	L
Lack of car seats / child restraint use	H	M	L
Lack of driver's education	H	M	L
Lack of traffic law / enforcement	H	M	L
Lack of street lights	H	M	L
Lack of sidewalks or bike lanes	H	M	L
Lack of bridges or poor bridge safety	H	M	L
Lack of road or trail markers	H	M	L
Wildlife danger for drivers or pedestrians	H	M	L
Poor trail conditions / lack of maintenance	H	M	L
Poor cell phone service	H	M	L
Boat launch or harbor safety issues	H	M	L
Lack of life vest use for boaters	H	M	L
Boating hazards or navigation issues	H	M	L
Limited emergency response (police, medical, fire)	H	M	L
Lack of natural disaster preparedness	H	M	L
Lack of evacuation route / safety shelters	H	M	L
Airport safety issues	H	M	L
Other <u>4 WHEELERS ON RUNWAY + TAXIWAYS</u>	H	M	L
Other <u>DRIVING AROUND AIRCRAFT</u>	H	M	L
Other _____	H	M	L

NONDALTON
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 60

3. How do you get around within the community? Please circle (you may circle more than one):

4-wheeler

Snow machine

Truck

Car

SUV

Walk

Bike

Get a ride

Boat

Other _____

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident _____

What happened? _____

What caused the accident? _____

Where did the accident occur? _____

How old were the people involved? _____

What were the injuries or property damage? _____

What types of vehicles were involved? _____

Were pedestrians or bicyclists involved? **yes** **no** **don't know**

Were drugs or alcohol involved? **yes** **no** **don't know**

Did police arrive on scene? **yes** **no** **don't know**

Did an ambulance arrive on scene? **yes** **no** **don't know**

5. What do you think could be done to improve transportation safety in your community?

REBUILD, RESURFACING ALL ROADS

COMMUNITY SURVEY

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that "safety issues" are problems that cause death, injury or illness, and "transportation system" means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either "H" "M" or "L"

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	H	M	L
Poor road design (narrow roads, steep roads)	H	M	L
Intersection Safety (lack of signs, tall brush, blind spots)	H	M	L
Drainage issues (road washouts, standing water)	H	M	L
Speeding	H	M	L
Talking on phone or texting while driving	H	M	L
Drug or alcohol impaired driving	H	M	L
Dusty roads	H	M	L
Icy roads / poor winter maintenance	H	M	L
Lack of helmet use for ATVs and bicyclists	H	M	L
Lack of seatbelt use	H	M	L
Lack of car seats / child restraint use	H	M	L
Lack of driver's education	H	M	L
Lack of traffic law / enforcement	H	M	L
Lack of street lights	H	M	L
Lack of sidewalks or bike lanes	H	M	L
Lack of bridges or poor bridge safety	H	M	L
Lack of road or trail markers	H	M	L
Wildlife danger for drivers or pedestrians	H	M	L
Poor trail conditions / lack of maintenance	H	M	L
Poor cell phone service	H	M	L
Boat launch or harbor safety issues	H	M	L
Lack of life vest use for boaters	H	M	L
Boating hazards or navigation issues	H	M	L
Limited emergency response (police, medical, fire)	H	M	L
Lack of natural disaster preparedness	H	M	L
Lack of evacuation route / safety shelters	H	M	L
Airport safety issues	H	M	L
Other <u>Need bathroom @ airport</u>	H	M	L
Other _____	H	M	L
Other _____	H	M	L

NONDALTON
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? _____

3. How do you get around within the community? Please circle (you may circle more than one):

4-wheeler	Snow machine	Truck	Car	SUV
Walk	Bike	Get a ride	Boat	

Other _____

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident _____

What happened? _____

What caused the accident? _____

Where did the accident occur? _____

How old were the people involved? _____

What were the injuries or property damage? _____

What types of vehicles were involved? _____

Were pedestrians or bicyclists involved? **yes** **no** **don't know**

Were drugs or alcohol involved? **yes** **no** **don't know**

Did police arrive on scene? **yes** **no** **don't know**

Did an ambulance arrive on scene? **yes** **no** **don't know**

5. What do you think could be done to improve transportation safety in your community?

COMMUNITY SURVEY

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that **“safety issues”** are problems that cause death, injury or illness, and **“transportation system”** means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either “H” “M” or “L”

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	H	M	L
Poor road design (narrow roads, steep roads)	H	M	L
Intersection Safety (lack of signs, tall brush, blind spots)	H	M	L
Drainage issues (road washouts, standing water)	H	M	L
Speeding	H	M	L
Talking on phone or texting while driving	H	M	L
Drug or alcohol impaired driving	H	M	L
Dusty roads	H	M	L
Icy roads / poor winter maintenance	H	M	L
Lack of helmet use for ATVs and bicyclists	H	M	L
Lack of seatbelt use	H	M	L
Lack of car seats / child restraint use	H	M	L
Lack of driver's education	H	M	L
Lack of traffic law / enforcement	H	M	L
Lack of street lights	H	M	L
Lack of sidewalks or bike lanes	H	M	L
Lack of bridges or poor bridge safety	H	M	L
Lack of road or trail markers	H	M	L
Wildlife danger for drivers or pedestrians	H	M	L
Poor trail conditions / lack of maintenance	H	M	L
Poor cell phone service	H	M	L
Boat launch or harbor safety issues	H	M	L
Lack of life vest use for boaters	H	M	L
Boating hazards or navigation issues	H	M	L
Limited emergency response (police, medical, fire)	H	M	L
Lack of natural disaster preparedness	H	M	L
Lack of evacuation route / safety shelters	H	M	L
Airport safety issues	H	M	L
Other _____	H	M	L
Other _____	H	M	L
Other _____	H	M	L

NONDALTON
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 63

3. How do you get around within the community? Please circle (you may circle more than one):

4-wheeler

Snow machine

Truck

Car

SUV

Walk

Bike

Get a ride

Boat

Other _____

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident _____

What happened? _____

What caused the accident? _____

Where did the accident occur? _____

How old were the people involved? _____

What were the injuries or property damage? _____

What types of vehicles were involved? _____

Were pedestrians or bicyclists involved? yes no don't know

Were drugs or alcohol involved? yes no don't know

Did police arrive on scene? yes no don't know

Did an ambulance arrive on scene? yes no don't know

5. What do you think could be done to improve transportation safety in your community?

PROPER ROAD MAINTENANCE
HAVE TRIBAL PROGRAM PURCHASE EQUIPMENT
SPECIFIC TO ROAD MAINTENANCE TO TRAIN DRIVERS
ALSO WELL DRILLING EQUIPMENT AND WELL WATER

COMMUNITY SURVEY

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that **"safety issues"** are problems that cause death, injury or illness, and **"transportation system"** means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either "H" "M" or "L"

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	(H)	M	L
Poor road design (narrow roads, steep roads)	H	(M)	L
Intersection Safety (lack of signs, tall brush, blind spots)	(H)	M	L
Drainage issues (road washouts, standing water)	H	(M)	L
Speeding	H	(M)	L
Talking on phone or texting while driving	H	(M)	L
Drug or alcohol impaired driving	(H)	M	L
Dusty roads	(H)	M	L
Icy roads / poor winter maintenance	(H)	M	L
Lack of helmet use for ATVs and bicyclists	(H)	M	L
Lack of seatbelt use	H	(M)	L
Lack of car seats / child restraint use	H	(M)	L
Lack of driver's education	H	(M)	L
Lack of traffic law / enforcement	(H)	M	L
Lack of street lights	(H)	M	L
Lack of sidewalks or bike lanes	H	(M)	L
Lack of bridges or poor bridge safety	H	(M)	L
Lack of road or trail markers	H	(M)	L
Wildlife danger for drivers or pedestrians	H	(M)	L
Poor trail conditions / lack of maintenance	(H)	M	L
Poor cell phone service	H	(M)	L
Boat launch or harbor safety issues	H	(M)	L
Lack of life vest use for boaters	H	(M)	L
Boating hazards or navigation issues	H	M	(L)
Limited emergency response (police, medical, fire)	(H)	M	L
Lack of natural disaster preparedness	H	(M)	L
Lack of evacuation route / safety shelters	H	(M)	L
Airport safety issues	H	M	(L)
Other _____	H	M	L
Other _____	H	M	L
Other _____	H	M	L

NONDALTON
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 47

3. How do you get around within the community? Please circle (you may circle more than one):

- 4-wheeler Snow machine Truck Car SUV
 Walk Bike Get a ride Boat

Other _____

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident _____

What happened? _____

What caused the accident? _____

Where did the accident occur? _____

How old were the people involved? _____

What were the injuries or property damage? _____

What types of vehicles were involved? _____

Were pedestrians or bicyclists involved? **yes** **no** **don't know**

Were drugs or alcohol involved? **yes** **no** **don't know**

Did police arrive on scene? **yes** **no** **don't know**

Did an ambulance arrive on scene? **yes** **no** **don't know**

5. What do you think could be done to improve transportation safety in your community?

cut grass + brush at corners
street lights
road maintenance

COMMUNITY SURVEY

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that **“safety issues”** are problems that cause death, injury or illness, and **“transportation system”** means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either “H” “M” or “L”

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	H	M	L
Poor road design (narrow roads, steep roads)	H	M	L
Intersection Safety (lack of signs, tall brush, blind spots)	H	M	L
Drainage issues (road washouts, standing water)	H	M	L
Speeding	H	M	L
Talking on phone or texting while driving	H	M	L
Drug or alcohol impaired driving	H	M	L
Dusty roads	H	M	L
Icy roads / poor winter maintenance	H	M	L
Lack of helmet use for ATVs and bicyclists	H	M	L
Lack of seatbelt use	H	M	L
Lack of car seats / child restraint use	H	M	L
Lack of driver's education	H	M	L
Lack of traffic law / enforcement	H	M	L
Lack of street lights	H	M	L
Lack of sidewalks or bike lanes	H	M	L
Lack of bridges or poor bridge safety	H	M	L
Lack of road or trail markers	H	M	L
Wildlife danger for drivers or pedestrians	H	M	L
Poor trail conditions / lack of maintenance	H	M	L
Poor cell phone service	H	M	L
Boat launch or harbor safety issues	H	M	L
Lack of life vest use for boaters	H	M	L
Boating hazards or navigation issues	H	M	L
Limited emergency response (police, medical, fire)	H	M	L
Lack of natural disaster preparedness	H	M	L
Lack of evacuation route / safety shelters	H	M	L
Airport safety issues	H	M	L
Other _____	H	M	L
Other _____	H	M	L
Other _____	H	M	L

NONDALTON
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 65

3. How do you get around within the community? Please circle (you may circle more than one):

- | | | | | |
|---|---------------------------------------|-------------------------------------|-------------------------------|------------------------------|
| <input checked="" type="checkbox"/> 4-wheeler | <input type="checkbox"/> Snow machine | <input type="checkbox"/> Truck | <input type="checkbox"/> Car | <input type="checkbox"/> SUV |
| <input checked="" type="checkbox"/> Walk | <input type="checkbox"/> Bike | <input type="checkbox"/> Get a ride | <input type="checkbox"/> Boat | |

Other _____

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident _____

What happened? _____

What caused the accident? _____

Where did the accident occur? _____

How old were the people involved? _____

What were the injuries or property damage? _____

What types of vehicles were involved? _____

Were pedestrians or bicyclists involved? **yes** **no** **don't know**

Were drugs or alcohol involved? **yes** **no** **don't know**

Did police arrive on scene? **yes** **no** **don't know**

Did an ambulance arrive on scene? **yes** **no** **don't know**

5. What do you think could be done to improve transportation safety in your community?

Start with high priority first
by finding the funding for number one
on list. And start looking for good road -
gravel to start building the road up -
for fixing.
Rigth colverts for each creek on road.

COMMUNITY SURVEY

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that **"safety issues"** are problems that cause death, injury or illness, and **"transportation system"** means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either "H" "M" or "L"

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	H	M	L
Poor road design (narrow roads, steep roads)	H	M	L
Intersection Safety (lack of signs, tall brush, blind spots)	H	M	L
Drainage issues (road washouts, standing water)	M	M	L
Speeding	H	M	L
Talking on phone or texting while driving	H	M	L
Drug or alcohol impaired driving	H	M	L
Dusty roads	H	M	L
Icy roads / poor winter maintenance	H	M	L
Lack of helmet use for ATVs and bicyclists	H	M	L
Lack of seatbelt use	H	M	L
Lack of car seats / child restraint use	H	M	L
Lack of driver's education	H	M	L
Lack of traffic law / enforcement	H	M	L
Lack of street lights	H	M	L
Lack of sidewalks or bike lanes	H	M	L
Lack of bridges or poor bridge safety	H	M	L
Lack of road or trail markers	H	M	L
Wildlife danger for drivers or pedestrians <u>dogs</u>	H	M	L
Poor trail conditions / lack of maintenance	H	M	L
Poor cell phone service <u>cut brush along roads</u>	H	M	L
Boat launch or harbor safety issues <u>falls</u>	H	M	L
Lack of life vest use for boaters	H	M	L
Boating hazards or navigation issues	H	M	L
Limited emergency response (police, medical, fire)	H	M	L
Lack of natural disaster preparedness	H	M	L
Lack of evacuation route / safety shelters	H	M	L
Airport safety issues <u>both tall brush end of approach</u>	H	M	L
Other <u>both ends - people cut</u>	H	M	L
Other <u>brush in airport path</u>	H	M	L
Other <u>Near Runway approach</u>	H	M	L

NONDALTON
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 57

3. How do you get around within the community? Please circle (you may circle more than one):

- 4-wheeler Snow machine Truck Car SUV
 Walk Bike Get a ride Boat

Other _____

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident _____

What happened? blind spot on third Rd up and Down, need a slow
marker, some one bumped once.

What caused the accident? blind spot

Where did the accident occur? _____

How old were the people involved? _____

What were the injuries or property damage? _____

What types of vehicles were involved? _____

Were pedestrians or bicyclists involved? yes no don't know

Were drugs or alcohol involved? yes no don't know

Did police arrive on scene? yes no don't know

Did an ambulance arrive on scene? yes no don't know

5. What do you think could be done to improve transportation safety in your community?

cut brush near All corners, and All tall brush
where certain Homes are in line with run way Approach
cut All Tall brush & Trees Down. And in winter sand All
Hills, Roads. And Tie up All Dogs because they chase
Honda's.

COMMUNITY SURVEY

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that **"safety issues"** are problems that cause death, injury or illness, and **"transportation system"** means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either "H" "M" or "L"

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	(H)	M	L
Poor road design (narrow roads, steep roads)	(H)	M	L
Intersection Safety (lack of signs, tall brush, blind spots)	(H)	M	L
Drainage issues (road washouts, standing water)	(H)	M	L
Speeding	H	(M)	L
Talking on phone or texting while driving	H	(M)	L
Drug or alcohol impaired driving	(H)	M	L
Dusty roads	(H)	M	L
Icy roads / poor winter maintenance	(H)	M	L
Lack of helmet use for ATVs and bicyclists	H	(M)	(L)
Lack of seatbelt use	H	(M)	L
Lack of car seats / child restraint use	H	(M)	L
Lack of driver's education	(H)	M	L
Lack of traffic law / enforcement	(H)	M	L
Lack of street lights	H	(M)	L
Lack of sidewalks or bike lanes	(H)	M	L
Lack of bridges or poor bridge safety	(H)	M	L
Lack of road or trail markers	(H)	(M)	L
Wildlife danger for drivers or pedestrians	(H)	M	L
Poor trail conditions / lack of maintenance	(H)	M	L
Poor cell phone service	(H)	M	L
Boat launch or harbor safety issues	(H)	M	L
Lack of life vest use for boaters	H	M	(L)
Boating hazards or navigation issues	H	(M)	(L)
Limited emergency response (police, medical, fire)	(H)	M	L
Lack of natural disaster preparedness	(H)	M	L
Lack of evacuation route / safety shelters	(H)	M	L
Airport safety issues	H	M	L
Other <u>No terminal Building</u>	(H)	M	L
Other <u>No security</u>	(H)	M	L
Other <u>Air traffic control</u>	(H)	M	L

NONDALTON
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 56

3. How do you get around within the community? Please circle (you may circle more than one):

- 4-wheeler Snow machine Truck Car SUV
Walk Bike Get a ride Boat

Other _____

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident none

What happened? _____

What caused the accident? _____

Where did the accident occur? _____

How old were the people involved? _____

What were the injuries or property damage? _____

What types of vehicles were involved? _____

Were pedestrians or bicyclists involved? **yes** **no** **don't know**

Were drugs or alcohol involved? **yes** **no** **don't know**

Did police arrive on scene? **yes** **no** **don't know**

Did an ambulance arrive on scene? **yes** **no** **don't know**

5. What do you think could be done to improve transportation safety in your community?

- Enforce laws on curfew
Enforce speed limit, Repair blind spots
Report D.W.I's.
Restrict children from streets unless supervised by adult.
Use reflectors
Have wider roads.
Have street signs Yield...

COMMUNITY SURVEY

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that **"safety issues"** are problems that cause death, injury or illness, and **"transportation system"** means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either "H" "M" or "L"

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	(H)	M	L
Poor road design (narrow roads, steep roads)	(H)	M	L
Intersection Safety (lack of signs, tall brush, blind spots)	(H)	M	L
Drainage issues (road washouts, standing water)	(H)	M	L
Speeding	(H)	M	L
Talking on phone or texting while driving	(H)	M	L
Drug or alcohol impaired driving	(H)	M	L
Dusty roads	(H)	M	L
Icy roads / poor winter maintenance	(H)	M	L
Lack of helmet use for ATVs and bicyclists	(H)	M	L
Lack of seatbelt use	(H)	M	L
Lack of car seats / child restraint use	(H)	M	L
Lack of driver's education	(H)	M	L
Lack of traffic law / enforcement	(H)	M	L
Lack of street lights	(H)	M	L
Lack of sidewalks or bike lanes	(H)	M	L
Lack of bridges or poor bridge safety	H	(M)	L
Lack of road or trail markers	H	(M)	L
Wildlife danger for drivers or pedestrians	(H)	M	L
Poor trail conditions / lack of maintenance	(H)	M	L
Poor cell phone service	(H)	M	L
Boat launch or harbor safety issues	(H)	M	L
Lack of life vest use for boaters	(H)	M	L
Boating hazards or navigation issues	H	(M)	L
Limited emergency response (police, medical, fire)	(H)	M	L
Lack of natural disaster preparedness	(H)	M	L
Lack of evacuation route / safety shelters	(H)	M	L
Airport safety issues	(H)	M	L
Other _____	H	M	L
Other _____	H	M	L
Other _____	H	M	L

NONDALTON
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 21

3. How do you get around within the community? Please circle (you may circle more than one):

- | | | | | |
|---|--|---|-------------------------------|------------------------------|
| <input checked="" type="checkbox"/> 4-wheeler | <input type="checkbox"/> Snow machine | <input checked="" type="checkbox"/> Truck | <input type="checkbox"/> Car | <input type="checkbox"/> SUV |
| <input checked="" type="checkbox"/> Walk | <input checked="" type="checkbox"/> Bike | <input type="checkbox"/> Get a ride | <input type="checkbox"/> Boat | |

Other _____

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident _____

What happened? _____

What caused the accident? _____

Where did the accident occur? _____

How old were the people involved? _____

What were the injuries or property damage? _____

What types of vehicles were involved? _____

Were pedestrians or bicyclists involved? yes no don't know

Were drugs or alcohol involved? yes no don't know

Did police arrive on scene? yes no don't know

Did an ambulance arrive on scene? yes no don't know

5. What do you think could be done to improve transportation safety in your community?

Remove all alcohol beverages from
the community ~~and~~ and have a safety
meeting every week. Stop letting kids
drive hondas. Report all kids that are
out late at night. Wear bright colored
clothing.

COMMUNITY SURVEY

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that **“safety issues”** are problems that cause death, injury or illness, and **“transportation system”** means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either “H” “M” or “L”

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	H	M	L
Poor road design (narrow roads, steep roads)	H	M	L
Intersection Safety (lack of signs, tall brush, blind spots)	H	M	L
Drainage issues (road washouts, standing water)	H	M	L
Speeding	H	M	L
Talking on phone or texting while driving	H	M	L
Drug or alcohol impaired driving	H	M	L
Dusty roads	H	M	L
Icy roads / poor winter maintenance	H	M	L
Lack of helmet use for ATVs and bicyclists	H	M	L
Lack of seatbelt use	H	M	L
Lack of car seats / child restraint use	H	M	L
Lack of driver's education	H	M	L
Lack of traffic law / enforcement	H	M	L
Lack of street lights	H	M	L
Lack of sidewalks or bike lanes	H	M	L
Lack of bridges or poor bridge safety	H	M	L
Lack of road or trail markers	H	M	L
Wildlife danger for drivers or pedestrians	H	M	L
Poor trail conditions / lack of maintenance	H	M	L
Poor cell phone service	H	M	L
Boat launch or harbor safety issues	H	M	L
Lack of life vest use for boaters	H	M	L
Boating hazards or navigation issues	H	M	L
Limited emergency response (police, medical, fire)	H	M	L
Lack of natural disaster preparedness	H	M	L
Lack of evacuation route / safety shelters	H	M	L
Airport safety issues	H	M	L
Other _____	H	M	L
Other _____	H	M	L
Other _____	H	M	L

NONDALTON
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 30 yrs. old.

3. How do you get around within the community? Please circle (you may circle more than one):

- | | | | | |
|---|---------------------------------------|---|-------------------------------|------------------------------|
| <input checked="" type="checkbox"/> 4-wheeler | <input type="checkbox"/> Snow machine | <input checked="" type="checkbox"/> Truck | <input type="checkbox"/> Car | <input type="checkbox"/> SUV |
| <input checked="" type="checkbox"/> Walk | <input type="checkbox"/> Bike | <input type="checkbox"/> Get a ride | <input type="checkbox"/> Boat | |

Other _____

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident Summer 2016

What happened? I was driving my truck on the road going up on the hill next to the airport and was turning left and bumped another car due to my blind spot and a patch of

What caused the accident? Brush. Blind spot and patch Brush.

Where did the accident occur? intersection at end of airport hill.

How old were the people involved? 28, 4, 34

What were the injuries or property damage? The car that I bumped got a dent on hood.

What types of vehicles were involved? Dodge Ram 1500 and SUV

Were pedestrians or bicyclists involved? yes no don't know

Were drugs or alcohol involved? yes no don't know

Did police arrive on scene? yes no don't know

Did an ambulance arrive on scene? yes no don't know

5. What do you think could be done to improve transportation safety in your community?

Cut all brush and tall grass around corners and fix all roads (fill in potholes and smooth out roads).

COMMUNITY SURVEY

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that **“safety issues”** are problems that cause death, injury or illness, and **“transportation system”** means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either “H” “M” or “L”

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	(H)	M	L
Poor road design (narrow roads, steep roads)	H	M	(L)
Intersection Safety (lack of signs, tall brush, blind spots)	(H)	M	L
Drainage issues (road washouts, standing water)	H	(M)	L
Speeding	H	M	(L)
Talking on phone or texting while driving	H	M	(L)
Drug or alcohol impaired driving	(H)	M	L
Dusty roads	(H)	M	L
Icy roads / poor winter maintenance	H	(M)	L
Lack of helmet use for ATVs and bicyclists	(H)	M	L
Lack of seatbelt use	(H)	M	L
Lack of car seats / child restraint use	(H)	M	L
Lack of driver's education	(H)	M	L
Lack of traffic law / enforcement	(H)	M	L
Lack of street lights	(H)	M	L
Lack of sidewalks or bike lanes	(H)	M	L
Lack of bridges or poor bridge safety	(H)	M	L
Lack of road or trail markers	H	M	(L)
Wildlife danger for drivers or pedestrians	H	M	(L)
Poor trail conditions / lack of maintenance	H	(M)	L
Poor cell phone service	(H)	M	L
Boat launch or harbor safety issues	(H)	M	L
Lack of life vest use for boaters	H	(M)	L
Boating hazards or navigation issues	H	(M)	L
Limited emergency response (police, medical, fire)	(H)	M	L
Lack of natural disaster preparedness	(H)	M	L
Lack of evacuation route / safety shelters	(H)	M	L
Airport safety issues	H	(M)	L
Other _____	H	M	L
Other _____	H	M	L
Other _____	H	M	L

NONDALTON
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 19

3. How do you get around within the community? Please circle (you may circle more than one):

- | | | | | |
|------------------|---------------------|-------------------|-------------|------------|
| 4-wheeler | Snow machine | Truck | Car | SUV |
| Walk | Bike | Get a ride | Boat | |

Other _____

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident _____

What happened? _____

What caused the accident? _____

Where did the accident occur? _____

How old were the people involved? _____

What were the injuries or property damage? _____

What types of vehicles were involved? _____

Were pedestrians or bicyclists involved? **yes no don't know**

Were drugs or alcohol involved? **yes no don't know**

Did police arrive on scene? **yes no don't know**

Did an ambulance arrive on scene? **yes no don't know**

5. What do you think could be done to improve transportation safety in your community?

Street lights, better roads maybe paved

COMMUNITY SURVEY

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that **“safety issues”** are problems that cause death, injury or illness, and **“transportation system”** means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either “H” “M” or “L”

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	H	(M)	L
Poor road design (narrow roads, steep roads)	H	(M)	L
Intersection Safety (lack of signs, tall brush, blind spots)	H	(M)	L
Drainage issues (road washouts, standing water)	H	(M)	L
Speeding	H	(M)	L
Talking on phone or texting while driving	H	(M)	L
Drug or alcohol impaired driving	H	(M)	L
Dusty roads	(H)	M	L
Icy roads / poor winter maintenance	H	(M)	L
Lack of helmet use for ATVs and bicyclists	H	(M)	L
Lack of seatbelt use	H	(M)	L
Lack of car seats / child restraint use	H	(M)	L
Lack of driver's education	H	(M)	L
Lack of traffic law / enforcement	H	(M)	L
Lack of street lights	H	(M)	L
Lack of sidewalks or bike lanes	H	(M)	L
Lack of bridges or poor bridge safety	H	(M)	L
Lack of road or trail markers	H	(M)	L
Wildlife danger for drivers or pedestrians	H	(M)	L
Poor trail conditions / lack of maintenance	H	(M)	L
Poor cell phone service	H	(M)	L
Boat launch or harbor safety issues	H	(M)	L
Lack of life vest use for boaters	H	(M)	L
Boating hazards or navigation issues	H	(M)	L
Limited emergency response (police, medical, fire)	H	(M)	L
Lack of natural disaster preparedness	H	(M)	L
Lack of evacuation route / safety shelters	H	(M)	L
Airport safety issues	H	(M)	L
Other _____	H	M	L
Other _____	H	M	L
Other _____	H	M	L

NONDALTON
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 18

3. How do you get around within the community? Please circle (you may circle more than one):

4-wheeler

Snow machine

Truck

Car

SUV

Walk

Bike

Get a ride

Boat

Other _____

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident _____

What happened? _____

What caused the accident? _____

Where did the accident occur? _____

How old were the people involved? _____

What were the injuries or property damage? _____

What types of vehicles were involved? _____

Were pedestrians or bicyclists involved? **yes** **no** **don't know**

Were drugs or alcohol involved? **yes** **no** **don't know**

Did police arrive on scene? **yes** **no** **don't know**

Did an ambulance arrive on scene? **yes** **no** **don't know**

5. What do you think could be done to improve transportation safety in your community?

COMMUNITY SURVEY

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that **“safety issues”** are problems that cause death, injury or illness, and **“transportation system”** means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either “H” “M” or “L”

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	H	M	L
Poor road design (narrow roads, steep roads)	H	M	L
Intersection Safety (lack of signs, tall brush, blind spots)	H	M	L
Drainage issues (road washouts, standing water)	H	M	L
Speeding	H	M	L
Talking on phone or texting while driving	H	M	L
Drug or alcohol impaired driving	H	M	L
Dusty roads	H	M	L
Icy roads / poor winter maintenance	H	M	L
Lack of helmet use for ATVs and bicyclists	H	M	L
Lack of seatbelt use	H	M	L
Lack of car seats / child restraint use	H	M	L
Lack of driver's education	H	M	L
Lack of traffic law / enforcement	H	M	L
Lack of street lights	H	M	L
Lack of sidewalks or bike lanes	H	M	L
Lack of bridges or poor bridge safety	H	M	L
Lack of road or trail markers	H	M	L
Wildlife danger for drivers or pedestrians	H	M	L
Poor trail conditions / lack of maintenance	H	M	L
Poor cell phone service	H	M	L
Boat launch or harbor safety issues	H	M	L
Lack of life vest use for boaters	H	M	L
Boating hazards or navigation issues	H	M	L
Limited emergency response (police, medical, fire)	H	M	L
Lack of natural disaster preparedness	H	M	L
Lack of evacuation route / safety shelters	H	M	L
Airport safety issues	H	M	L
Other _____	H	M	L
Other _____	H	M	L
Other _____	H	M	L

NONDALTON
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 36

3. How do you get around within the community? Please circle (you may circle more than one):

4-wheeler

Snow machine

Truck

Car

SUV

Walk

Bike

Get a ride

Boat

Other _____

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident _____

What happened? _____

What caused the accident? _____

Where did the accident occur? _____

How old were the people involved? _____

What were the injuries or property damage? _____

What types of vehicles were involved? _____

Were pedestrians or bicyclists involved? **yes** **no** **don't know**

Were drugs or alcohol involved? **yes** **no** **don't know**

Did police arrive on scene? **yes** **no** **don't know**

Did an ambulance arrive on scene? **yes** **no** **don't know**

5. What do you think could be done to improve transportation safety in your community?

COMMUNITY SURVEY

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that **“safety issues”** are problems that cause death, injury or illness, and **“transportation system”** means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either “H” “M” or “L”

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	(H)	M	L
Poor road design (narrow roads, steep roads)	(H)	M	L
Intersection Safety (lack of signs, tall brush, blind spots)	(H)	M	L
Drainage issues (road washouts, standing water)	(H)	M	L
Speeding	H	(M)	L
Talking on phone or texting while driving	H	M	(L)
Drug or alcohol impaired driving	H	(M)	L
Dusty roads	H	(M)	L
Icy roads / poor winter maintenance	(H)	M	L
Lack of helmet use for ATVs and bicyclists	H	(M)	L
Lack of seatbelt use	H	M	(L)
Lack of car seats / child restraint use	H	M	(L)
Lack of driver's education	H	(M)	L
Lack of traffic law / enforcement	H	M	(L)
Lack of street lights	H	(M)	L
Lack of sidewalks or bike lanes	H	(M)	L
Lack of bridges or poor bridge safety	H	(M)	L
Lack of road or trail markers	H	M	(L)
Wildlife danger for drivers or pedestrians	H	M	(L)
Poor trail conditions / lack of maintenance	H	(M)	L
Poor cell phone service	H	(M)	L
Boat launch or harbor safety issues	H	M	(L)
Lack of life vest use for boaters	H	M	(L)
Boating hazards or navigation issues	H	M	(L)
Limited emergency response (police, medical, fire)	(H)	M	L
Lack of natural disaster preparedness	H	(M)	L
Lack of evacuation route / safety shelters	H	(M)	L
Airport safety issues	(H)	M	L
Other _____	H	M	L
Other _____	H	M	L
Other _____	H	M	L

NONDALTON
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 31

3. How do you get around within the community? Please circle (you may circle more than one):

- | | | | | |
|------------------|---------------------|-------------------|------|-----|
| <u>4-wheeler</u> | <u>Snow machine</u> | Truck | Car | SUV |
| <u>Walk</u> | Bike | <u>Get a ride</u> | Boat | |

Other _____

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident ?

What happened? ?

What caused the accident? ?

Where did the accident occur? ?

How old were the people involved? ?

What were the injuries or property damage? ?

What types of vehicles were involved? ?

Were pedestrians or bicyclists involved? yes no don't know

Were drugs or alcohol involved? yes no don't know

Did police arrive on scene? yes no don't know

Did an ambulance arrive on scene? yes no don't know

5. What do you think could be done to improve transportation safety in your community?

Fix potholes and keep blind corners clear.
clear water ways of debris

2019

COMMUNITY SURVEY

1. Please help us prioritize safety issues and health hazards on the transportation system within your community. Keep in mind that **“safety issues”** are problems that cause death, injury or illness, and **“transportation system”** means all modes of travel including roads, trails, air transportation, water transportation, pedestrians, bicyclists, etc.

For each type of safety issue below, identify if it is a high, medium, or low priority or concern for your community by circling either “H” “M” or “L”

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	(H)	M	L
Poor road design (narrow roads, steep roads)	(H)	M	L
Intersection Safety (lack of signs, tall brush, blind spots)	(H)	M	L
Drainage issues (road washouts, standing water)	(H)	M	L
Speeding	(H)	M	L
Talking on phone or texting while driving	H	M	(L)
Drug or alcohol impaired driving	H	(M)	L
Dusty roads	(H)	M	L
Icy roads / poor winter maintenance	(H)	M	L
Lack of helmet use for ATVs and bicyclists	H	(M)	L
Lack of seatbelt use	H	M	(L)
Lack of car seats / child restraint use	H	M	(L)
Lack of driver’s education	(H)	M	L
Lack of traffic law / enforcement	(H)	M	L
Lack of street lights	H	M	(L)
Lack of sidewalks or bike lanes	(H)	M	L
Lack of bridges or poor bridge safety	H	(M)	L
Lack of road or trail markers	(H)	M	L
Wildlife danger for drivers or pedestrians	H	M	(L)
Poor trail conditions / lack of maintenance	(H)	M	L
Poor cell phone service	(H)	M	L
Boat launch or harbor safety issues	H	(M)	L
Lack of life vest use for boaters	H	(M)	L
Boating hazards or navigation issues	H	(M)	L
Limited emergency response (police, medical, fire)	(H)	M	L
Lack of natural disaster preparedness	H	(M)	L
Lack of evacuation route / safety shelters	H	(M)	L
Airport safety issues	H	M	(L)
Other _____	H	M	L
Other _____	H	M	L
Other _____	H	M	L

NONDALTON
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 37

3. How do you get around within the community? Please circle (you may circle more than one):

- 4-wheeler Snow machine Truck Car SUV
 Walk Bike Get a ride Boat

Other _____

4. Do you know of any car crashes that happened in the community within the last 10 years? If so, please describe the incident to the best of your ability by answering the following questions:

Month / Year of incident 2015 or 2016

What happened? Truck ran into a smaller ATV on a blindspot.

What caused the accident? Truck driver wasn't paying attention

Where did the accident occur? on a turn

How old were the people involved? 28, 30

What were the injuries or property damage? Broken light on SUV

What types of vehicles were involved? small SUV and Truck

Were pedestrians or bicyclists involved? yes no don't know

Were drugs or alcohol involved? yes no don't know

Did police arrive on scene? yes no don't know

Did an ambulance arrive on scene? yes no don't know

5. What do you think could be done to improve transportation safety in your community?

Fixing the sharp turn on the road.

Teaching all drivers the right of way for stop signs and trails.

APPENDIX D: IMPLEMENTATION PLAN

IMPLEMENTATION PLAN

EMPHASIS AREA #1			STRATEGIC LINKAGE			
ROAD CONDITIONS AND DRAINAGE			<p>► One crash in 2016 occurred at a blind intersection due to tall brush.</p> <p>► 86% of survey participants marked "poor road conditions / lack of maintenance" as a high priority, making it the community's #1 top priority.</p> <p>► 79% of survey participants marked both "drainage issues (road washouts, standing water)" and "icy roads / poor winter maintenance" as high priorities, putting these issues in the top 4 community safety priorities.</p>			
OBJECTIVES						
Rehabilitate roads to mitigate potholes and drainage issues, and improve resources for future road maintenance.						
SUCCESS INDICATORS						
Improved roadways and reduced standing water. More consistent road maintenance activities.						
4Es	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Operator training for road crowning. Teach operators how to properly maintain equipment.	Improve drainage away from road surface. Increase the operation-life of maintenance equipment and ensure equipment is functioning for use when needed.	City, Tribe	On-going equipment maintenance, Operator training once per year	Hire operators, scheduled training.	Schedule future training. Develop system to track when training refreshers are needed.
ENFORCEMENT	Include daily maintenance checks on the equipment logs.	Monitor the condition of maintenance equipment.	City, Operators	On-going	Development of new equipment log. Teach operators how to use logs. Purchase of equipment tools and fluids.	File and upgrade equipment logs as needed. Maintain supply of equipment tools and fluids.
ENGINEERING	Build up and resurface roads. Coordinate with BBNC for gravel access. Hydrology study and drainage improvements. Install guardrails, as needed.	Reduce potholes and standing water on roadways, and improve safety and accessibility.	City, Tribe, BBNC	5-10 years	Secure funds for road planning, design, and construction. Hire consultant to perform Hydrology Study. Public involvement.	Develop project scope, budget, and schedule. Discuss milestones at Council meetings.
EMERGENCY SERVICES	Increase sanding on roads in winter.	Reduce sliding risks and ice hazards on roadways in the winter.	City, Tribe	As needed during winter	Develop a sanding maintenance plan between City and Tribe. Operator training, as needed.	Maintain sanding equipment and supply of sand.

IMPLEMENTATION PLAN

EMPHASIS AREA #2			STRATEGIC LINKAGE			
SPEEDING AND DUST			<p>► 79% of survey participants marked "dusty roads" as a high priority, putting it in the top 4 community safety priorities.</p> <p>► Resident complaints about speeding from all age groups.</p>			
OBJECTIVES						
Reduce incidences of speeding on local roads and reduce airborne dust.						
SUCCESS INDICATORS						
Observed reduced speeds around community. Reduced exposure to airborne dust.						
4Es	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Educate younger kids on speeding and how it increases dust through presentations at school and culture camp.	Improve community awareness about the sources of airborne dust and its health hazards to reduce incidences speeding.	Trans- portation Coordinator, School	Once per year before spring.	Scheduled meetings and presentations through the school and culture camp organizers.	Schedule future presentations. Evaluate other forms of education.
ENFORCEMENT	Speed limit signs (especially at school). Encourage parental enforcement.	Improve awareness of locals and tourists about local speed limits.	City, Tribe	Summer 2021	Determine best locations for speed limit signs. Install signs.	Inspect and repair signs as needed. Consider other enforcement strategies.
ENGINEERING	Research and implement dust suppression methods. Use water tank for dust suppression. Develop road watering plan.	Find a dust suppression method that is economical and safe for the environment. Reduce airborne dust from gravel roads to protect residents and subsistence.	City, Tribe	On-going	Discuss dust research findings at a Council meeting. Public involvement meeting.	Development of dust suppression plan.
EMERGENCY SERVICES	Continue to provide dust masks at clinic.	Provide an emergency protection for people sensitive to dust such as those with respiratory or heart health conditions.	Nondalton Clinic	On-going	Purchase of masks. Announcing availability of masks via VHF radio and flyers.	Check stock of dust masks yearly.

IMPLEMENTATION PLAN

EMPHASIS AREA #3			STRATEGIC LINKAGE			
PEDESTRIANS			<ul style="list-style-type: none"> ▶ One reported pedestrian fatality involving a 4-wheeler collision during a snow storm while it was dark, and the pedestrian was wearing black with no reflectors. ▶ Walking is the most common mode of transportation in Nondalton, according to survey results, which indicate that 86% of people rely on walking to get around. ▶ 57% of survey participants marked both "lack of sidewalks or bike lanes" and "lack of streetlights" as a high safety priority. 			
OBJECTIVES						
Improve visibility of pedestrians, reduce slipping hazards due to ice, and enhance community awareness about pedestrian safety.						
SUCCESS INDICATORS						
Observed improved use of bright clothing, reflectors, and ice cleats. Installed streetlights. Zero crashes involving pedestrians in future years.						
4Es	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Teach residents to drive slower at night time. Host a school presentation on how to safely cross roads.	Improve awareness about pedestrian safety.	Trans- portation Coordinator, School	2020, Present twice per year (spring and fall)	Scheduled safety presentations at school. Provide resources to teachers.	Schedule future presentations. Evaluate other educational strategies.
ENFORCEMENT	Install speed limit signs and slow signs by church, school, and blind corners.	Reduce speeds at high pedestrian traffic areas and blind corners.	City, Tribe	5-10 years	Determine best locations for signs. Purchase and install signs.	Inspect and repair signs as needed.
ENGINEERING	Install streetlights on all community streets. Widen roads. More frequent brush and grass clearing. Perform road sanding, as needed.	Improve visibility of pedestrians. Provide more space to separate foot and vehicle traffic. Improve traction traffic on ice.	City, Tribe	5-10 years for road projects, Sanding as needed, brush clearing once per year	Installation of streetlights. Reduced number blind intersections and corners.	Replace burnt out streetlights as needed. Monitor frequency of brush clearing and sanding efforts.
EMERGENCY SERVICES	Purchase flashlights, reflectors, and ice cleats for residents. Construct a safety building with restrooms at airport.	Provide safety gear to improve visibility of pedestrians in the dark. Protect pedestrians from the elements at the airport.	City, Tribe	2020 (every other year), Airport building 5-10 years	Order and advertise availability of safety gear. Planning, design, funding and construction of airport building.	Replace stock of safety gear, as needed. Discuss progress of airport building at Council meetings.

IMPLEMENTATION PLAN

EMPHASIS AREA #4			STRATEGIC LINKAGE			
IMPAIRED DRIVING			<p>► One fatality in 2000 involving an elder drinking while driving and crashing into an open trench during utility work. Another drunk driving accident in 2007 involving a 4-wheeler running off the road during a blizzard, resulting in bad facial scrapes of a 4-year-old passenger. Approximately 1 DUI related crash per year from two men who are known to drink and drive regularly.</p> <p>► 64% of survey respondents marked "lack of traffic law / enforcement" as a high safety priority, and 57% marked "drug or alcohol impaired driving" as a high priority.</p>			
OBJECTIVES						
Reduce incidences of impaired driving , improve public awareness about State DUI laws and hazards, enhance effort to combat impaired driving.						
SUCCESS INDICATORS						
Notable reduction in impaired driving incidences based on safety logs.						
4Es	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Presentations hosted by DOT and Troopers. Install signs on roads stating DUI laws. Post flyers reminding about laws and DUI hazards.	Increase Police presence and visibility within the community. Improve community awareness of state laws.	City, Tribe, Troopers, Alaska DOT	Flyers 2020. Signs 2021. Presentations every 3 years.	Contact with DOT representatives and Troopers. Scheduled presentations. Order and install signs and post flyers.	Set a timeline to reschedule presentations. Post more flyers as needed.
ENFORCEMENT	Enforce through City Work Service (require violators to perform community service).	Provide a feasible penalty for clear violations of DUI laws.	City, Tribe	Develop system by end of 2020. On-going enforcement.	Adopt official Tribal ordinances and penalty system in Tribal constitution. Coordination with City.	Evaluate other enforcement strategies. Discuss effectiveness at Council meetings.
ENGINEERING	Install guardrails. Keep a safety log of DUI incidences and crashes.	Reduce risk of road departures in high risk areas including steep embankments. Track drunk driving incidences to evaluate future safety improvements.	City, Tribe	Guardrails with road improvements in 5-10 years. Safety logs on-going.	Engineering selection of guardrail locations. Development of a safety log. Appoint Council member to manage safety logs.	Replace damaged guardrails as needed. Use safety logs as data for future Safety Plan updates.
EMERGENCY SERVICES	Have a combined meeting with local entities to develop an Action Plan against impaired driving.	Improve multi-jurisdictional safety coordination. Determine the most effective and feasible strategies for the community based on available resources.	City, Tribe, Corporation, Other Safety Partners	2020	Scheduled meeting. Development of Action Plan and related strategies. Public involvement.	Hold future combined meetings, especially during Safety Plan updates.

IMPLEMENTATION PLAN

EMPHASIS AREA #5			STRATEGIC LINKAGE			
TRAILS			<p>► Search and rescue required from the Coast Guard in the winter of 2018 to save two hunters who got caught in a blizzard with no cell service.</p> <p>► 71% of survey participants marked "poor trail conditions / lack of maintenance" as a high safety priority, putting it in the top 6 community priorities.</p> <p>► Past fatalities (over 20 years ago) involving travelers falling through thin ice on a winter trail.</p>			
OBJECTIVES						
Improve trail conditions, enhance emergency communication, and increase community awareness about trail safety.						
SUCCESS INDICATORS						
Reduced number of hazard areas on trail system. Reduction in need for search and rescue missions.						
4Es	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Continue announcements / education about ice conditions on winter trails.	Reduced risk of travelers falling through thin ice on ice roads.	Tribe, City, Corporation, INNEC	Every winter, as needed	Frequent inspections of ice and VHF announcements (several times per week).	Discuss educational strategies at monthly Council meetings.
ENFORCEMENT	Consider hiring a Trespass Officer.	Improved enforcement of trespassing on private and restricted lands.	Corporation, Tribe	On-going	Funding, posted job opening, training, coordination with land owners, etc.	Evaluate effectiveness of Trespass Officer at Council meetings.
ENGINEERING	Upgrade bridges on traditional trails. Map out existing bridges and where more are needed. Trail improvements, consider new gravel or mats.	Improve safety and accessibility to subsistence areas and reduce risk of accidents caused by rough trail conditions.	Tribe, Corporation	Trail maps 2020. Bridges and trail improvements 5-10 years.	Creation of trail maps. Formal inspection of existing bridges. Funding, design, research, construction of trail project.	Upgrade trail maps as needed. Coordinate with city and landowners to maintain trails.
EMERGENCY SERVICES	Continue placing safety cones at thin ice. Upgrade cell towers. Construct safety cabins on trail to Lime Village and Ground Hog Mountain.	Improve radius of cell network for better emergency communications on trail system. Provide emergency shelters for travelers on long trips.	City, Tribe, Corporation, GCI	Cones on-going, as needed. Cell towers and cabins 5-10 years.	Coordination with GCI, funding, and tower upgrades. Planning and design for safety cabin locations. Land acquisition.	Move and monitor thin ice and safety cones frequently.

IMPLEMENTATION PLAN

EMPHASIS AREA #6			STRATEGIC LINKAGE			
BOATING			<p>► Five reported boating incidences near Nondalton within the last 20 years, one of which involved a fatality. No life jackets were worn in any of these accidents. Two of the accidents involved improper/reckless driving, and one accident involved alcohol.</p> <p>► 43% of survey participants said "boat launch or boat harbor safety issues" is a high safety priority.</p> <p>► Lack of public boat launch or barge landing facilities, despite local cultural and economic dependency of boating transportation.</p>			
OBJECTIVES						
Reduce boating accidents, increase life jacket use, improve public education about safe boating practices, improve emergency response.						
SUCCESS INDICATORS						
Visible improvement in life jacket use. More rapid emergency response to boating accidents.						
4Es	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Training for spill kits. Continue boating safety at culture camp. Teach boat maintenance, safe driving, and proper safety equipment. Education for DUIs.	Reduced incidences of improper boating and intoxicated boating. Increased use of life jackets.	Tribe, City, State Troopers, U.S. Fish and Game	Training and classes once per year	Develop curriculum for boating education at culture camps. Scheduled spill response training.	Schedule future boating education. Refresh spill response training as needed.
ENFORCEMENT	Continue annual beach cleanup. Continue Kids Don't Float program. Enforce boat registration.	Keep beach clear of debris and hazards. Ensure rental life jackets are available for boaters. Reduce number of unregistered boats.	Tribe, City, Individuals (registration)	Annual	Development of a schedule for beach cleanups and Kids Don't Float orders.	Order Kids Don't Float life jackets every year.
ENGINEERING	Funding for new floating dock, concrete boat launch ramp, and barge landing facility.	Construct public boat launch and barge landing facility to improve safety and accessibility of boating transportation.	Tribe	5-10 years	Grant application research and submission.	Reapply for grants in subsequent years. Monitor grant postings. Develop a TTP savings plan.
EMERGENCY SERVICES	Building near beach to house emergency equipment (small boat, ropes, etc.). Implement ferry/haul service across lake. Procure spill kit equipment.	Improved emergency response time and resources for both boating accidents and spills.	Tribe, City, Clinic (South Central)	Emergency equipment 2021. Ferry service 5-10 years.	Develop a safety response gear list and budget to purchase equipment. Research feasibility of ferry service.	Replace equipment as needed.

IMPLEMENTATION PLAN

EMPHASIS AREA #7			STRATEGIC LINKAGE			
ATV SAFETY			<p>► Survey results show 4-wheelers are most common vehicle used in Nondalton. However, Council members expressed that only two people are known to wear helmets on ATVs, including dirt bikes, bicycles, snowmachines, and motorcycles.</p> <p>► 57% of survey participants marked "lack of driver's education" as a high priority.</p> <p>► Anecdotal accounts of kids overloading 4-wheelers, causing passengers to falling off, and one bicycle accident in 2018 due to excessive speed and intoxication, requiring a medevac for deep abrasions on face.</p>			
OBJECTIVES						
Reduce the number of loose dogs around the community, and improve safety / access for all types of ATVs used locally.						
SUCCESS INDICATORS						
Notable reduction in loose dogs and complaints about loose dogs. Reduce number of ATV accidents and improper driving behavior.						
4Es	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Education about city ordinance for loose dogs. Evaluate providing a local dog training service. Educate kids about unauthorized airport access.	Train pets to not chase ATVs and snap at drivers. Reduce unauthorized ATVs driving on the airport runway and apron.	City, Tribe	2020, On-going	Outreach and awareness efforts via radio announcements, posters, etc.	Evaluate additional educational strategies at Council meetings.
ENFORCEMENT	Awareness about state laws (ATV age restrictions). Enforce city ordinance for dogs.	Enforce age limit for ATV drivers. Provide penalties for violators of loose dog and ATV ordinances.	City, Tribe	2020, On-going	Outreach and awareness efforts via radio announcements, posters, etc.	Evaluate additional enforcement strategies at Council meetings.
ENGINEERING	Improve subsistence trail near airport to reduce ATVs taking short-cut across runway.	Reduce ATVs on runway.	City, Tribe	5-10 years	Funding, design, and construction of trail improvements.	Discuss project progress at monthly Council meetings.
EMERGENCY SERVICES	Helmet program. Combined meeting with safety partners to develop a plan to deal with loose dogs.	Provide helmets for residents to improve helmet use. Improve multi-jurisdictional coordination for ATV safety issues.	City, Tribe, Clinic, other safety partners	2020-2021	Sizing, procurement, and distribution of helmets. Coordinate and schedule combined meeting.	Hold future combined meetings, especially during Safety Plan updates.

APPENDIX E: RESOLUTION

Nondalton Tribal Council
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Resolution No. 12-20-19-1
A Resolution adopting the
Nondalton 2019-2024 Tribal Transportation Safety Plan

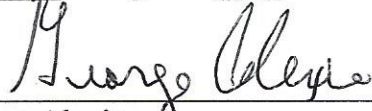
- WHEREAS, the Nondalton Village hereafter "Tribe" is a federally recognized tribe; and
- WHEREAS, the Nondalton Tribal Council is the governing body of the Tribe; and
- WHEREAS, the Tribe recognizes the importance of improving transportation safety for its tribal members and all residents of Nondalton; and
- WHEREAS, the Tribe has gained significant community input on identifying transportation safety concerns and priorities for Nondalton through a public survey administered in October of 2018 and a public meeting held on January 31, 2019; and
- WHEREAS, the Tribe has identified and prioritized strategies to improve transportation safety throughout the community, and upon approval and adoption of the Nondalton 2019-2024 Tribal Transportation Safety Plan, the Tribe also approves implementing the priorities identified in the plan.

NOW, THEREFORE, BE RESOLVED, that the Tribe hereby adopts the Nondalton 2019-2024 Tribal Transportation Safety Plan.

CERTIFICATION

The Nondalton Tribal Council has adopted this resolution during a meeting held on December²⁰, 2019, in Nondalton, Alaska, with a quorum present.

For 7 Against 0 Abstain 0 Present 7 Absent 0


George Alexie,
President


Darren Carltikoff
Secretary

APPENDIX F: ANNUAL REVIEW DOCUMENTATION

(To be Added Annually)