

NATIVE VILLAGE OF EKUK 2019-2024 FINAL-ADOPTED TRIBAL TRANSPORTATION SAFETY PLAN November 2019

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ACRONYMS AND ABBREVIATIONS

°F	Degrees Fahrenheit
%	Percent
AHSO	Alaska Highway Safety Office
ATAP	Alaska Transportation Alternatives Program
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	Ekuk, Alaska
Council	Native Village of Ekuk
DCCED	Department of Commerce, Community, and Economic Development
DHSS	Alaska Department of Health and Social Services
DOT&PF	Department of Transportation and Public Facilities
EMS	Emergency Medical Services
FARS	Fatality Analysis Reporting
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
in.	Inches
ITS	Intelligent Transportation System
LTAP	Local Technical Assistance Program
mph	Miles per hour
NHI	National Highway Institute

NHTSA	National Highway Traffic Safety Administration
RSA	Road Safety Audit
SHSP	Strategic Highway Safety Plan
SMS	Safety Management Systems
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
TEP	Tribal Environmental Plan
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 Native Village of Ekuk (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 Ekuk, 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 risks, 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 October 10, 2018. 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

Ekuk is located on the east coast of Nushagak Bay, 17 miles south of Dillingham. It is spread out for about 2 miles along a narrow gravel spit that extends from the Ekuk Bluffs in the shape of a hook. Within the Bristol Bay Recording District and the Dillingham Census Area, the Community is located at approximately 58.8160 degrees north latitude and -158.5608 degrees west longitude within Section 2, Township 016S, Range 053W of Seward Meridian (Department of Commerce, Community, and Economic Development [DCCED], 2018).

Exhibit 1: Community Location Map

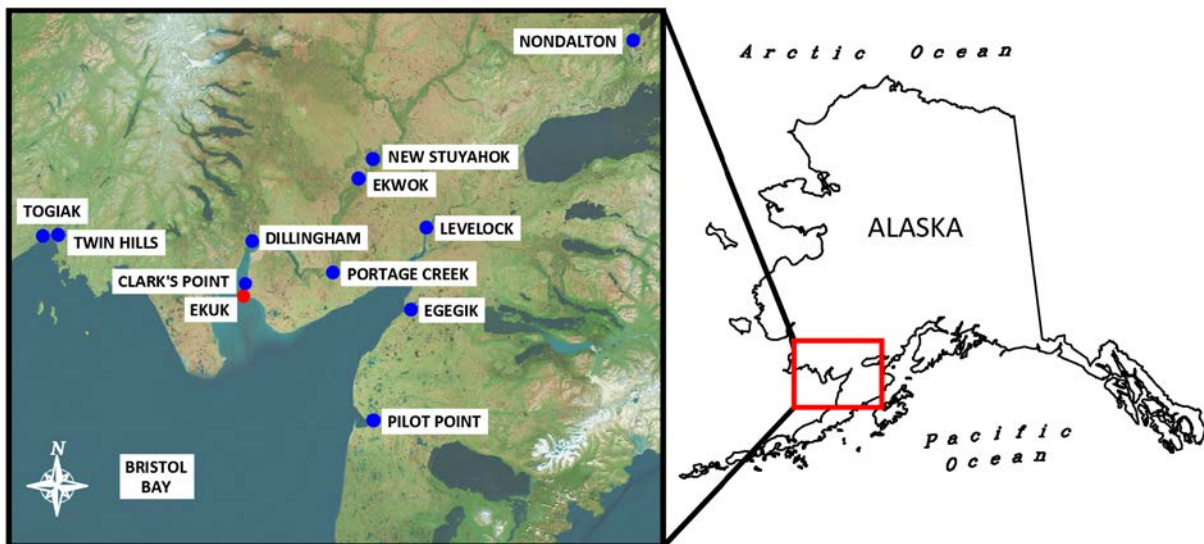


Image source: Bing Geomap, AutoCAD Civil 3D, 2018

1.3.2 History & Culture

The word Ekuk means "the last village down," reflecting that Ekuk is the farthest village south on the Nushagak Bay. The village is mentioned in Russian accounts of 1824 and 1828 as Village Ekouk and Seleniye Ikuk. It is thought that Ekuk was a major Eskimo village at one time. Russians employed Natives as guides for their boats as they navigated up Nushagak Bay to the trading post at Aleksandrovsk after 1818. Before the North Alaska Salmon Company opened a cannery at Ekuk in 1903, many residents had moved to the Moravian Mission at Carmel. In addition, numerous canneries sprang up during 1888 and 1889 on the east and west sides of the bay, which drew many residents away from the village. Ekuk had

a school from 1958 to 1974. Today, the cannery watchman's family are the only year-round residents. In the summer, the village comes alive with cannery crews, commercial fishing, and subsistence activities (DCCED, 2018).

Today, the Community is an Unincorporated City that is only inhabited seasonally. Historically a Yup'ik Eskimo village, Ekuk is now used only as a summer commercial cannery and subsistence-use site. Many families have set net sites in Ekuk (DCCED, 2018). In the summers, approximately 250 fishermen and 200 cannery operators stay in the village. Several families may visit for weeks at a time in the winter if they have good access on winter trails.

1.3.3 Transportation & Access

Air transport is the most frequent means of getting to Ekuk. The Council owns a dirt/gravel airstrip. Scheduled and charter flights are available from Dillingham during the summer months. There is a small public dock located on the south side of the community, and other private docks are in use. The cannery has two docks and a boat haul-out. Clark's Point, two miles north, can be reached by snow machine during winter (DCCED, 2018).

1.3.4 Climate

Ekuk falls within the transitional climate zone, characterized by tundra interspersed with boreal forests, and weather patterns of long, cold winters and shorter, warm summers. Fog and high winds are common during winter months. The bay is ice-free from June through mid-November (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)	22.1	23.0	29.3	38.2	50.3	58.7	62.5	60.6	53.9	39.7	28.7	20.7	40.6
Average Min. Temperature (°F)	10.1	9.8	14.9	24.6	34.9	43.2	47.4	46.6	40.3	26.5	16.7	8.1	26.9
Average Total Precipitation (in.)	1.79	1.35	1.49	1.01	1.47	1.93	2.79	3.92	3.47	2.21	2.19	1.87	25.48
Average Total Snowfall (in.)	17.1	11.2	13.2	5.4	0.3	0.0	0.0	0.0	0.1	2.1	15.5	18.1	82.9
Average Total Snow Depth (in.)	17	18	18	12	1	0	0	0	0	0	4	12	7

Source: Western Regional Climate Center (WRCC), 2018 Alaska Summaries for Dillingham FAA Airport, Alaska Station 502457 for Period of Record 12/2/1951 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 Environmental Coordinator take on responsibility of “Safety Champion,” in charge of updating this Plan and managing local transportation safety projects. They coordinate with other Council members for project assistance, as needed. They also collect community complaints about safety issues and relay the issues to the Council.

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:

- Native Village of Ekuk
 - The local Tribal Government is responsible for developing and updating this Plan, as well as coordinating with the other Safety Partners to manage safety and transportation improvement projects within the community.
- Ekuk Fisheries
 - The local fish processing plant in Ekuk is a valuable partner for community safety resources.
- Alaska State Troopers, Dillingham Post
 - If needed, the Dillingham State Troopers can provide emergency assistance.
- Bristol Bay Area Health Corporation (BBAHC)
 - BBAHC provides tribal health care management and health services for the Bristol Bay region through the Kanakanak Hospital out of Dillingham.
- Bristol Bay Native Association (BBNA)
 - BBNA is the regional Native Non-Profit that helps fund and coordinate community development projects, including this Plan, and is a great resources 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 (Dillingham Native 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.

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

Primary on-going safety efforts within the community include a summer health aide, annual road and airport maintenance, and boating safety efforts, as described below.

2.3.1 Summer Health Aide

The best safety resource in Ekuk during summer months is the local health aide. Every year, the Council posts a new job position online to temporarily station a health aide in Ekuk to assist with emergencies, as needed. The cannery will post the health aide's contact information in the plant. Additionally, at the beginning of the summer the health aides goes door-to-door to introduce their selves and pass out their contact information.

The health aide is called in the event of an emergency such as a car crash. They will arrive on scene, assess the situation, and transport injured people with their personal 4-wheeler or truck. If the injury or emergency is out of their capabilities, they can outsource to the Alaska State Troopers in Dillingham for assistance, or to the Kakanak Hospital in Dillingham for a medivac. The health aide also works closely with a local pilot, who remains on-call to transport people to Dillingham, if needed.

2.3.2 Road & Airport Maintenance

When the cannery and processing plant is open in the summer, most people drive trucks and commercial vehicles. In order to reduce wear and tear on the vehicles, the cannery operators take responsibility to maintain the roads by regrading the surface to remove potholes. The effort also reduces the risk of car crash due to bumpy roads. The operators will also grade the airport as necessary. Additionally, sometimes the winter watchman will plow snow off the runway, if needed.

2.3.3 Boating Safety

Most people within the community wear safety vests while boating. There is a “kids don’t float” kiosk on the beach with extra life vests for people to borrow if needed. Additionally, the cannery maintains safety at the existing dock by removing built-up sand brought in by the tide. Commercial fishing boats use lights at night (in the fall) to reduce the risk of boating accidents during non-daylight hours. Sometimes the Alaska Department of Fish and Game will perform inspections and write tickets for any vehicles that do not have the proper safety gear on board.

2.4 PLANNING DOCUMENTS

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

- 2018 Ekuk Long-Range Transportation Plan (LRTP)
- 2016 Ekuk Tribal Environmental Plan (TEP)
- 2006 Ekuk Community Economic Development Plan
- Bristol Bay Comprehensive Economic Development Strategy: 2017-2022
- 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 an emergency occurs, locals and cannery operators know to call the summer health aide. The health aide may not be the same person each year, so people can call the Village Council for the health aide’s contact information if needed.

The Council phone number and other regional and state emergency contacts are listed in Table 2. This list may not contain all available emergency response resources for the community, and should be updated often.

Table 2: Emergency Response Contacts

Local / Regional	State
Medical Response / Emergencies Summer Health Aide Native Village of Ekuk 907-842-3842	Natural Disaster & Search and Rescue State Emergency Operations Center 1-800-478-2337 (toll free) 907-428-7100 (local Anchorage area)
Emergencies Alaska State Troopers, Dillingham Post 907-842-5641	Wildland Fire Southwest Area Forestry Office 907-524-3010 Or Alaska Interagency Coordination Center 1-800-237-3633
Local Safety & Maintenance Resources Ekuk Fisheries 907-236-2051	
Regional Hospital Kanakanak Hospital (Dillingham) 907-842-5201	Recovery-Needs Support American Red Cross of Alaska 1-888-345-4376

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 there is no local police presence, ticketing system, or crash reporting system for the community, crash data is not readily available. In lieu of using crash data, this plan was based on anecdotal evidence from community members and results from a community survey.

3.1 ANECDOTAL CRASH DATA

Safety emphasis areas are chosen based on evaluation of crash data. However, since there is no local police force in Ekuk, crash data is not recorded. The Council was consulted for anecdotal accounts of historic car crashes and boating accidents. According to the Council, there has been one recent car crash, which involved a truck falling into a large excavation on the beach. The truck needed assistance being towed out of the hole. There were no reported injuries or vehicle damage. No other car crashes or all-terrain vehicle (ATV) accidents are known to have occurred within the last 10 years.

Since Ekuk is a large fishing community in the summer, local waterways experience heavy boating traffic of all kinds from small open skiffs to commercial fishing boats. According to the Council, there have been numerous boating accidents in the past, occurring as often as every five years. People have fallen overboard and drowned from various causes. One typical cause of these incidents is fast speeds over set nets. When people drive too fast, they cannot see set nets in the water. The boat propellers can get caught up in the nets causing the speeding boat to come to a dead stop, either throwing people overboard or causing serious injuries and vehicle damage. This is especially a concern if boaters are not wearing life vests.

3.2 BOATING ACCIDENTS

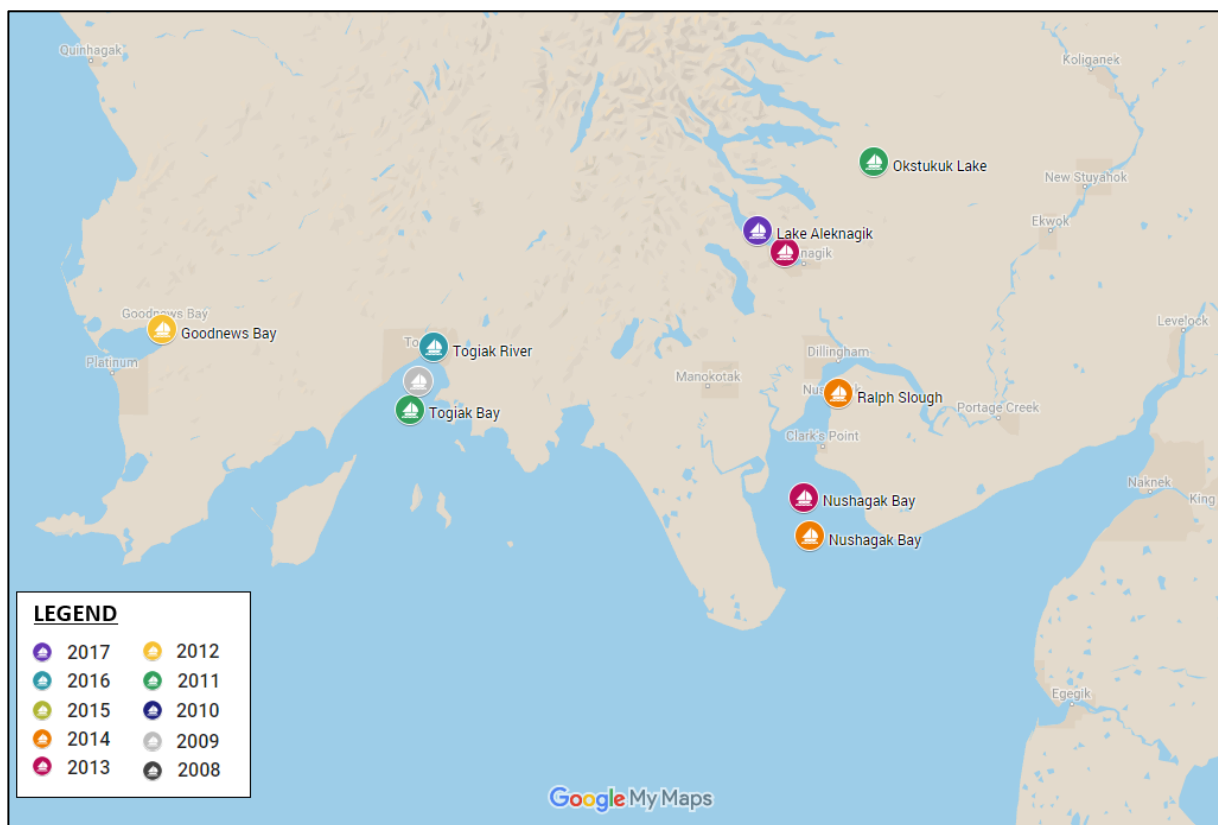
The U.S. Coast Guard Boating Safety Resource Center online database was consulted for boating accidents in Alaska within the last 10 years. The search results indicate three boating accidents occurred in Nushagak Bay within 20 miles of Ekuk. The accidents are listed by the body of water where they occurred, but the exact locations are not described. Two of the accidents resulted in a death, and one accident resulted in injuries of three

people. These accidents are summarized in Table 3 and displayed in Exhibit 2. It is important to note that this data only includes boating accidents that were reported to the U.S. Coast Guard. There may have been additional accidents that were not reported, such as accidents that resulted in only minor injuries or vessel damage (U.S. Coast Guard, 2018).

Table 3: Summary of Boating Accidents near Ekwok

Year	Body of Water	Accidents	Vessels	Injuries	Deaths
2013	Nushagak Bay	1	1	0	1
2014	Ralph Slough	1	1	0	1
2014	Nushagak Bay	1	1	3	0

Exhibit 2: Bristol Bay Boating Accident Map



3.3 COMMUNITY SURVEY

A public survey was conducted within the Community throughout September and October 2018. Raw survey results are provided in Appendix B. The survey was distributed to community members during two separate public meetings. An online version of the survey

was also made available. A total of 8 surveys were submitted to Bristol, one of which was submitted online. 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 3, which are sorted by priority from highest priority to lowest priority.

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 3, the highest community concerns regarding transportation include speeding and the lack of an evacuation route or safety shelter. Approximately 67% of the survey respondents marked these issues as a high priority. The next top priorities include dusty roads and lack of natural disaster preparedness, both of which were marked as a high priority by 50% of the survey respondents.

Since Ekuk is a very small community only inhabited during summer months as a fish camp, the transportation infrastructure is largely undeveloped. Many infrastructure issues do not apply such as trail markers, bridges, streetlights, sidewalks, bike lanes, and winter road maintenance. All of these safety amenities were marked as a low priority by 100% of the survey respondents.

3.3.2 Question #2: Survey Respondent Age

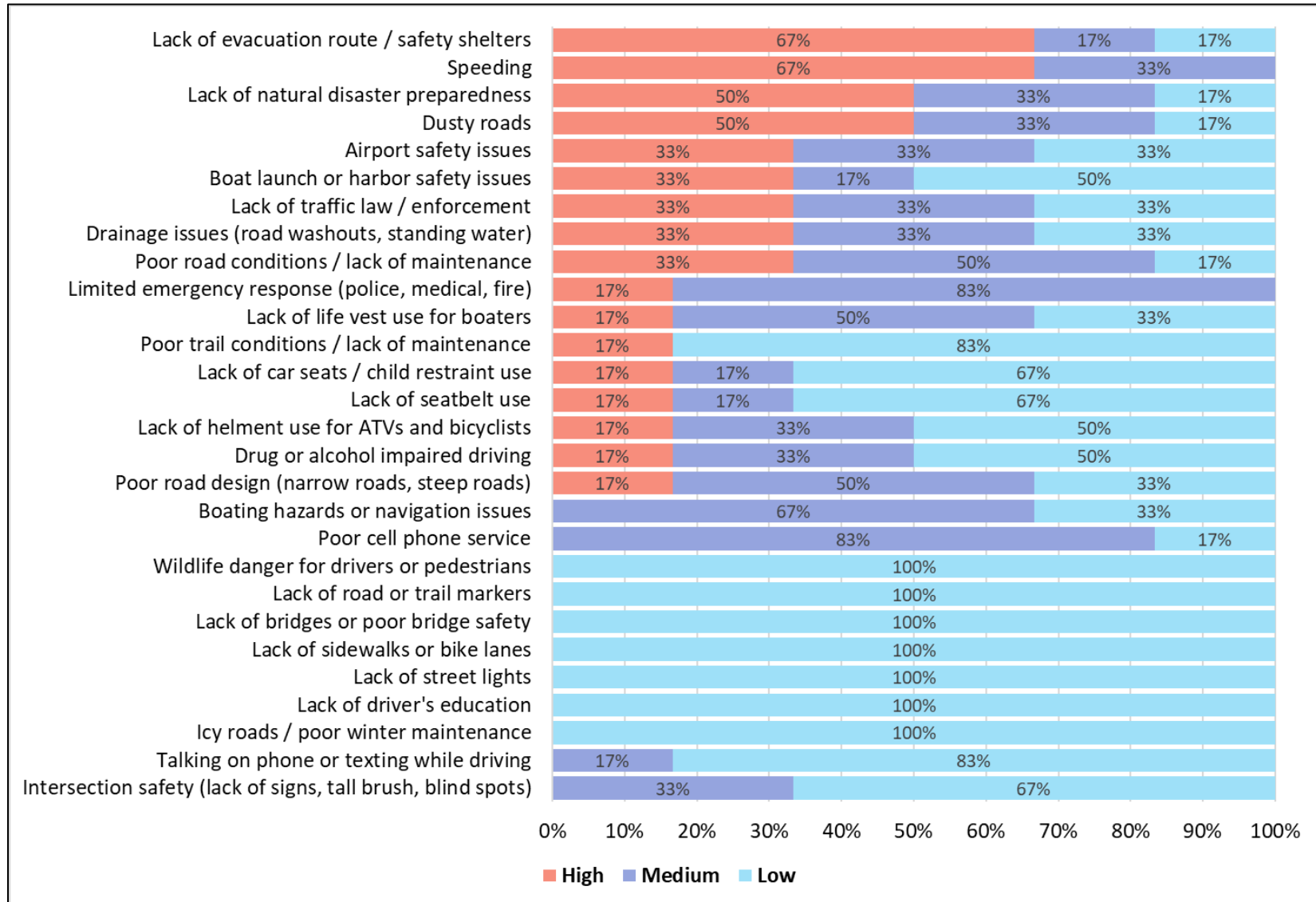
Question #2 collects data about the age of survey respondents, providing demographic information for the survey. This data helps correlate age groups to the various modes of transportation used throughout the community (Question #3), which can help identify where to focus safety education and outreach.

2. How old are you? _____

Survey results show that one survey respondent was 55 years old, two were 34, and three people left the question blank.

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Exhibit 3: Community Safety Priorities



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3.3.3 Question #3: Transportation Modes

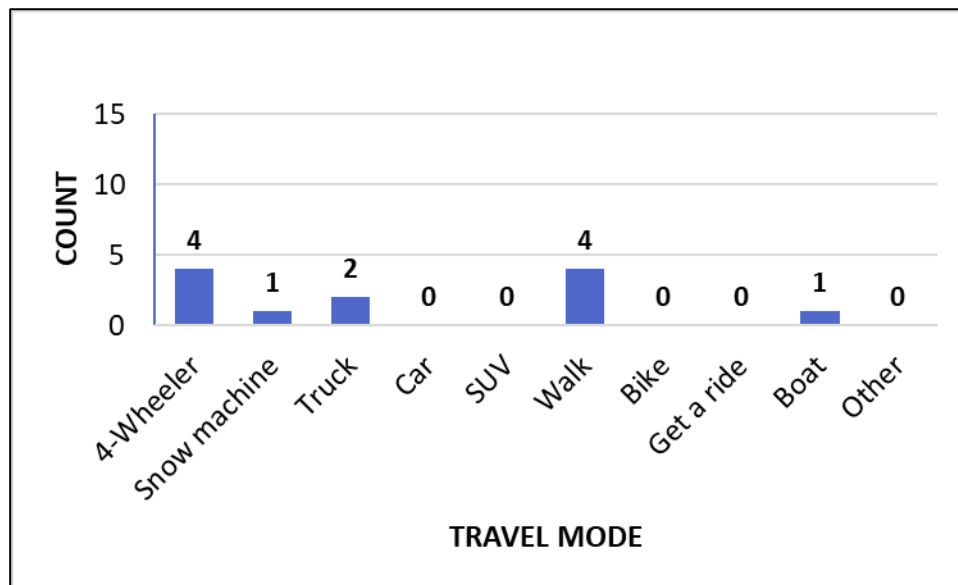
Question #3 demonstrates the most common transportation modes within the Community.

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 4 shows the results of Question #3. Since the option was given to select more than one answer, Exhibit 4 shows the number of respondents that circled each mode of travel at least once.

Exhibit 4: Most Common Modes of Transportation



The results from Question #3 show that walking is just as common as driving a 4-wheeler to get around the community. Some people also drive snowmobiles and trucks. According to residents, cannery workers are the primary users of trucks. Many of the trucks have commercial features such as hydraulic dump beds. EkuK is a summer fish camp, so boating is very common in the summer.

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**

None of the survey takers responded to Question #4. This could be an indication that very few transportation accidents occur in Ekuk, if any.

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?

Only one person gave a response to Question #5. They suggested “community meetings discussing road conditions and speed and respect of land and property.”

4.0 EMPHASIS AREAS

Bristol coordinated with the Council 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 four emphasis areas for this Plan:

1. Speeding
2. Boating Safety
3. Road Conditions
4. Airport 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 SPEEDING

4.1.1 Background

Speeding is a significant issue in Ekuk. There are very few roads between the beach and the cannery, which forces commercial pickup trucks to drive past homes to reach their destinations. With no police presence or enforcement in place, truck and ATV drivers speed at will. Many residents have children that play near the road and are concerned about their safety. Residents have gone as far as blocking off the roadway with stakes to prevent road grading in front of their homes, with the idea that potholes will act as speed bumps. As a result, the speeders have begun driving around the potholes and stakes, creating wider roads or illegal trails across private or tribally owned land. The stakes are a safety hazard of their own, especially for ATV drivers. The problem speeding areas are highlighted on Figure 1.

The speeding issue is evident from the number of complaints the Council receives every summer regarding speeders within the community. Unfortunately, the Council can do little to mitigate the issue except talk with the individuals. Additionally, the survey results

support the need to address speeding. Four of six survey respondents marked “speeding” as a high priority, and two people gave it a medium priority, making it the community’s top safety priority.

Half of the survey respondents also marked “dusty roads” as a high priority. Road dust is often associated with speeding because excessive speeds can increase airborne dust on gravel roads. 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.

4.1.2 Objectives

Decrease speeding throughout the community to reduce dust emissions and improve safety of children at play, pedestrians, and other drivers.

4.1.3 Strategies

Education

- Install permanent, highly visible “slow, children at play” signs near homes on the main road
- Educate the community about the relationship between speeding and dust and the health hazards associated with dust through community meetings, posters, and other means of outreach

Enforcement

- Review and update the Tribal Constitution and local ordinances to include speed limit regulations within the community
- Investigate ways to enforce speed limits through the Council without police

Engineering

- Investigate ways to separate vehicle and pedestrian traffic such as wider roads or an alternate route for commercial vehicles

Emergency Services

- Maintain a health aide every summer to ensure medical response is available in the event of a crash related to speeding
- Provide respiratory masks at the clinic to protect people from airborne dust

4.2 BOATING SAFETY

4.2.1 Background

People travel to Ekuk every summer for one reason: to fish. Boating is an essential mode of transportation, and boating safety is very important to the community. According to the Council, there have been numerous boating accidents in the past, occurring as often as every five years. Data from the Boating Safety Resource Center indicates three reported boating accidents in Nushagak Bay within 20 miles of Ekuk, totaling two deaths and three serious injuries within the last 5 years. Seasonal residents explained that local waterways experience heavy boating traffic of all kinds from small open skiffs to commercial fishing boats. The Council estimates between 200 to 250 fishermen camp in Ekuk every summer. There are so many nets in the water that there is a buoy at least every 400 feet along the coast. The buoys are often knocked loose during fall storms, and speeding boats are known to hit unmarked set nets. Although there is a Kids Don't Float kiosk near the beach, people rarely return the life vests. The Council feels that not enough people wear life vests while boating.

Another concern is boat swamping causing fuel leaks. Although there is a dock at the cannery, many people launch and land their boats directly on the sand beach. In recent years, locals report a tender and two gill-netters getting swamped on the beach, causing fuel to leak into the water. Everyone had to pull in their set nets, disrupting local fishing. Ekuk currently has no means of containing spills or removing swamped boats from the water. Whenever fuel spills occur, it is a threat to both the environment and the economy.

4.2.2 Objectives

Reduce the risk of boating accidents by improving boating safety education, increasing life vest use, and developing a fuel spill response program.

4.2.3 Strategies

Education

- Community outreach about using and returning Kids Don't Float life vests
- Post flyers to caution people about unmarked set nets
- Train Council staff members to respond to and mitigate fuel spills from fishing boats

Enforcement

- Work with local safety partners to enforce boat speeds

Engineering

- Obtain fuel response equipment such as containment booms and machinery to haul swamped boats out of the water
- Develop a fuel spill response plan for the community

Emergency Services

- Continue to stock the existing Kids Don't Float loaner board to ensure life vests of all sizes are always available at the beach

4.3 ROAD CONDITIONS

4.3.1 Background

Poor road conditions in Ekuk affect the community in various ways. Locals say most of the roads are in fair condition, except for those areas that are not maintained due to obstructions from residents (see Section 4.1 about speeding areas). There is no designated maintenance crew; cannery workers are known to grade the roads as needed. All roads in Ekuk have a gravel or sand surface course. The sandy material causes soft spots during spring break up. Potholes and standing water are common on the roads. Most of the roads are not elevated, causing rain and snowmelt to accumulate on the roads, contributing to faster deterioration of the roadbed.

Since Ekuk is a coastal community, flooding is a major concern. However, there is no emergency evacuation route to higher ground. At least 67% of survey respondents marked lack of evacuation route and safety shelters as a high priority. The proposed beginning of the evacuation route is currently a rough 4-wheeler trail that extends from the southern end of Main Road. In this location, residents say it can be difficult to access the existing cabins due to deep sinkholes. The proposed evacuation route is also the tie-in location for the proposed Clark's Point to Ekuk Road. The 4.3-mile road has been a community priority since at least 2007, when project planning and design began. The road would not only provide an evacuation route, but it would improve travel safety between the two communities, and support local economy.

Additionally, there is no local gravel material to apply to the roads, and importing gravel is expensive. Because of this, the community resorts to excavating sand off the beach for the roads. This is problematic for several reasons: (1) the beach is experiencing natural erosion and excavation can increase erosion rates, (2) the sand is not a great road material, and (3) the beach excavations can be hazardous; there has been at least one incident of a truck crashing and getting stuck in one of these unmarked excavations. The Council has

conducted gravel explorations in the past. They are interested in continued exploration of material sites, potentially along the proposed Clark's Point to Ekuk Road.

4.3.2 Objectives

Improve driver safety and comfort by increasing road maintenance efforts, rehabilitating poor road conditions, and securing a local gravel source for future use.

4.3.3 Strategies

Education

- Community outreach during road planning and construction

Enforcement

- Investigate options for an alternate route for commercial vehicles so that residents will not block off portions of the road from road grading, working with Choggiung Limited for right-of-way acquisition

Engineering

- Rehabilitate roads by raising the roadbed, resurfacing with better gravel material, and improving drainage throughout the community
- Coordinate with BBNC and other safety partners for assistance with funding additional gravel explorations

Emergency Services

- Develop a road maintenance plan with local safety partners to ensure road surface is smooth and free of potholes or standing water so emergency vehicles have safe access around the community
- Continue to seek construction funding for the Clark's Point to Ekuk Road, to serve as an emergency evacuation route to higher ground and a safe access route between the two communities

4.4 AIRPORT SAFETY

4.4.1 Background

There are two gravel airstrips in Ekuk, one is public (owned by the Council) and the other is private, as indicated on Figure 1. There are several issues with the public airstrip. First, topographic maps indicate the airport is the lowest elevation point within the community. Standing water accumulates on the entire length of the runway, often creating landing hazards for pilots and disabling plane access at times. The community is concerned that medevacs may not have access in the event of an emergency. The second major issue is

vehicles driving on the runway. Since the primary access road to the cannery is covered in potholes, people drive illegally on the runway to bypass them. In the past, the Council has had to install barricades to reroute a road that used to intersect with the airstrip. However, the rerouted road still crosses the very end of the runway. The Council desires a complete separation between roads and the runway for safety.

4.4.2 Objectives

Improve safety and access to the airport by building up the airport, improving surface drainage, and keeping unauthorized vehicles off the runway.

4.4.3 Strategies

Education

- Community education (such as signs) to reroute unauthorized traffic away from the airstrip

Enforcement

- Install barricades at the road-runway crossing
- Evaluate other formal methods to enforce vehicle restrictions on the runway (such as tribal ordinances and fines)

Engineering

- Rehabilitate the airstrip by building up, resurfacing with better gravel, improving drainage, and installing additional needed features such as a wind sock and fencing

Emergency Services

- Develop an airport maintenance plan to remove potholes and ensure safe access for emergency vehicles
- Mitigate flooding at airport

5.0 IMPLEMENTATION PLAN

The Council plans to begin implementation of this TTSP in the 2019 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 C. 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.

- o 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
 - o 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).
 - o Other funding resources are available on their website including grant application forms and instructions, tips and tactics for success, and traffic data sources.
 - o More information can be found at:
<http://www.dot.state.ak.us/highwaysafety/forms.shtml>
- Alaska DOT&PF Highway Safety Improvement Program (HSIP)
 - o 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.
 - o More information can be found at:
<http://dot.alaska.gov/stwddes/dcstraffic/hsip.shtml>
- Alaska DOT&PF Safe Routes to School Grant
 - o Grants are available through the Safe Routes to School Program to help plan, design, or complete construction improvements that enable and encourage children to safely walk or bicycle to school.
 - o More information can be found at:
<http://www.dot.state.ak.us/stwdplng/saferoutes/grants.shtml>
- Alaska Transportation Alternatives Program (ATAP)
 - o 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.
 - o More information can be found at:
<http://dot.alaska.gov/stwdplng/atap/index.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
- IRR Program jointly administered by the Bureau of Indian Affairs (BIA) DOT and the Federal Lands Highway Office and funded by FHWA:
 - 2% Planning Funds

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

6.0 REFERENCES

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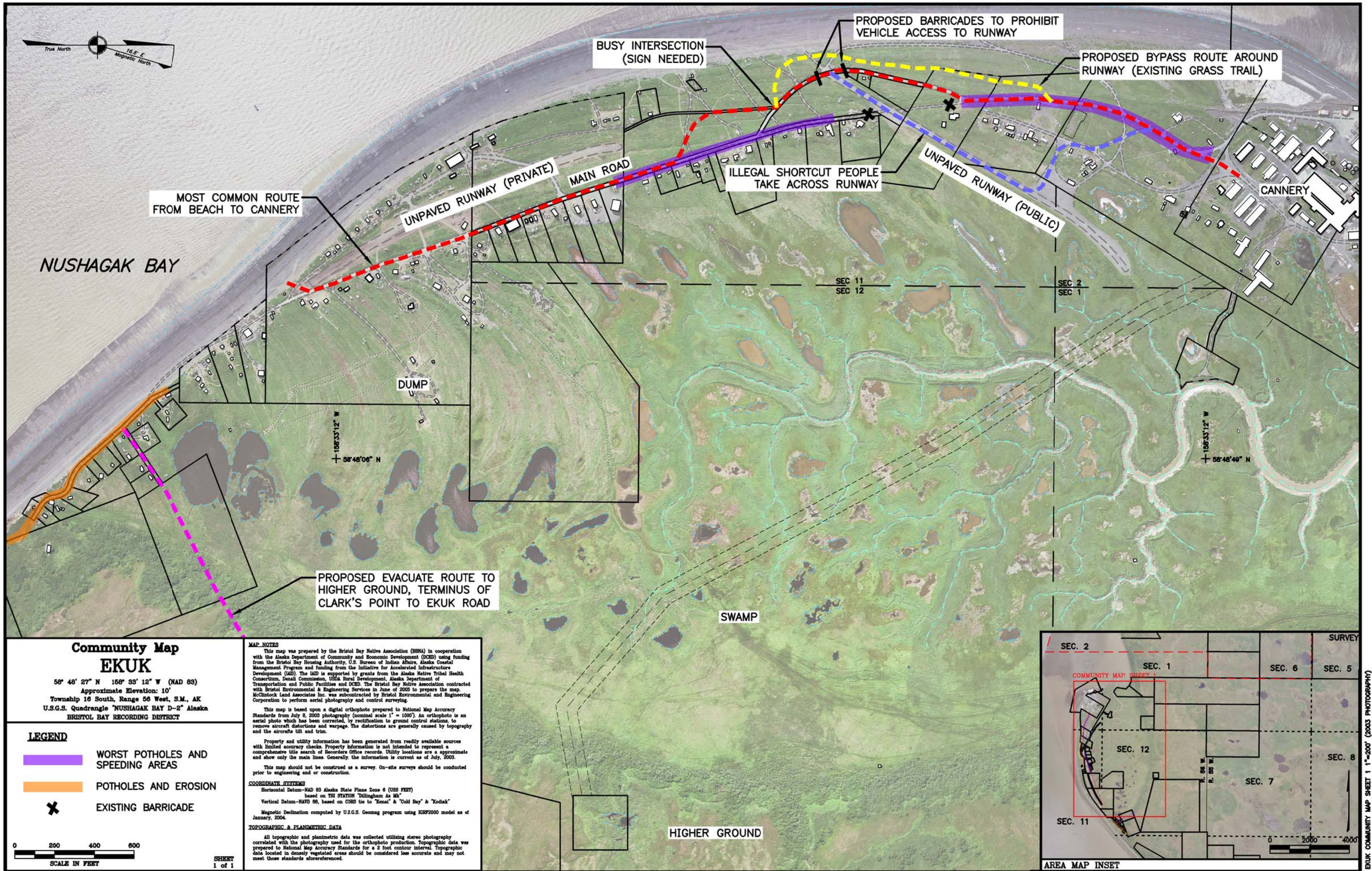
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FIGURES



**Community Map
EKUK**

58° 48' 27" N 158° 33' 12" W (NAD 83)
Approximate Elevation: 10'
Township 16 South, Range 56 West, S.M., AK
U.S.G.S. Quadrangle "NUSHAGAK BAY D-2" Alaska
BRISTOL BAY RECORDING DISTRICT

LEGEND

- WORST POTHoles AND SPEEDING AREAS
- POTHoles AND EROSION
- EXISTING BARRICADE

0 200 400 600
SCALE IN FEET

SHEET
1 of 1

MAP NOTES

This map was prepared by the Bristol Bay Native Association (BBNA) in cooperation with the Alaska Department of Community and Economic Development (DCE) using funding from the Bristol Bay Housing Authority, U.S. Bureau of Indian Affairs, Alaska Coastal Management Program and funding from the Initiative for Accelerated Infrastructure Development (IAID). The IAID is supported by grants from the Alaska Native Tribal Health Consortium, Detail Commission, USDA Rural Development, Alaska Department of Transportation and Public Facilities and DCE. The Bristol Bay Native Association contracted with Bristol Environmental & Engineering Services in June of 2003 to prepare the map. McClintock Land Associates Inc. was subcontracted by Bristol Environmental and Engineering Corporation to perform aerial photography and control surveying.

This map is based upon a digital orthophoto prepared to National Map Accuracy Standards from July 8, 2003 photography (nominal scale 1" = 1000'). An orthophoto is an aerial photo which has been corrected, by rectification to ground control stations, to remove aircraft distortions and warpage. The distortions are generally caused by topography and the aircraft tilt and trim.

Property and utility information has been generated from readily available sources with limited accuracy checks. Property information is not intended to represent a comprehensive title search of Records Office records. Utility locations are an approximate and show only the main lines. Generally, the information is current as of July, 2003.

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

COORDINATE SYSTEMS

Horizontal Datum-NAD 83 Alaska State Plane Zone 6 (USS FEET)

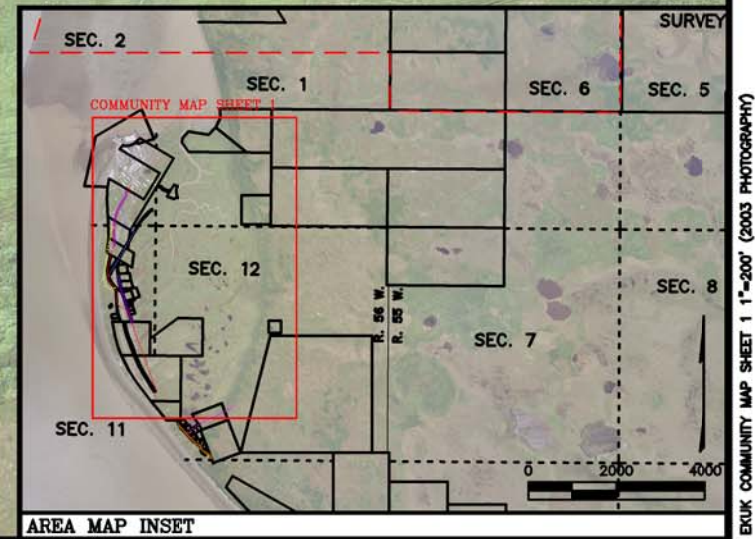
based on T31 STATION "Dillingham As Mt."

Vertical Datum-NAVD 88, based on CORS tie to "Kenai" & "Cold Bay" & "Kodiak"

Magnetic Declination computed by U.S.G.S. Geomag program using IGRF2000 model as of January, 2004.

TOPOGRAPHIC & PLANIMETRIC DATA

All topographic and planimetric data was collected utilizing stereo photography correlated with the photography used for the orthophoto production. Topographic data was prepared to National Map Accuracy Standards for a 2 foot contour interval. Topographic data located in densely vegetated areas should be considered less accurate and may not meet those standards referenced.



APPENDIX A: PUBLIC INVOLVEMENT



TRIP REPORT & MEETING MINUTES

Project: **BBNA THMP & TTSP Project**

Bristol Project No: 32190013

Reference: Ekuk Planning Team Meeting & Public Meeting

Date of Meeting: October 9, 2018

Location of Meeting: Ekuk Tribal Building

Participants:

Bristol: Jackie Wander

BBNA: Dan Breedon

Planning Team/Public Meeting: See attached sign in sheet

Summary

Jackie arrived in Dillingham around 1:30 PM on October 10, 2018. Since her flight had a weather delay, the Planning Team Meeting was combined with the Public Meeting. The same people attended both. Dan accompanied Jackie for the meeting, which was held in the Ekuk Tribal Building at 6:30 PM. Jackie explained the Tribal Transportation Safety Plan (TTSP) Project with the group. Then, they discussed potential emphasis areas and strategies for the plan. They marked up the maps, highlighting areas of concern on the local transportation system.

Planning Team Meeting Notes

- The Council is concerned about their authority to enforce laws within the community. Dan did some quick research which suggested that as long as the Tribe has a constitution, they can make and enforce their own laws. Need to do some more research to determine the best way to enforce laws. The Council would like to consider updating their constitution.
- There is a need to build up the roads and airport runway. Elevation maps show the airport as one of the lowest points within the community. Standing water accumulates on the roads causing potholes and on the runway, disabling plane access at times.
- Residents sometimes put out stakes in the road to prevent road grading (they want to keep the potholes to force slow speeds), but the stakes can be a safety hazard for ATVs.
- There is a Kids Don't Float kiosk at the beach, but people rarely return the life vests, need to remind people to put them back, or replenish the kiosk
- Most boats are open skiffs
- There are so many nets in the water that there is a buoy at least every 400 feet along the coast, the buoys get knocked loose during fall storms
- Fishing is the only reason people are there. Protecting the subsistence resource is a high priority. In the past, boats have been swamped on the beach (a tender and 2 gill netters), causing fuel leaks in the water. People had to pull their nets. They would like a rapid response to pull out the boats and contain the contamination.

- There is no gravel source within the community. People have to excavate sand off the beach for the roads. This causes a safety hazard and contributes to erosion. The Tribe has done gravel explorations in the past. They dug 58 20-foot deep test holes on the bluff and did not find any gravel. They are interested in pursuing another gravel source in Clark's Point or along the proposed Clarks-Ekuk road. Can BBNC assist?
- Flooding often occurs late in the season when cabins are unoccupied, but this year, they flooded in August. Tsunamis are a concern. A route to higher ground is needed.
- The community is concerned about grass fires. They would like a 4-wheeler with a water tank and hose to respond to possible fires.
- Would like to improve the airstrip for medevac access.
- The health aid lives in Ekuk from June through July (at least 30 days). The cannery has EMTs on staff as well.
- Ekuk Fisheries are a safety partner.
- Pothole areas are shown on the map where there are children playing and slow speeds need to be enforced. They are interested in installing official speed limit and "children playing" signs.
- The Tribe is currently working with Choggiung Ltd. to construct a bypass route so that people are not driving on the end of the runway (along an existing grass road). One of the roads crossing the runway was already blocked off.
- The Ekuk airport runway property lines are not shown on the map. Need to identify.
- There is no brush cutting needed because the vegetation is mostly grass.
- Difficult to access cabins at southern end of road due to deep sinkholes.
- Chosen emphasis areas:
 - Speeding
 - Boating safety
 - Road conditions (build up, maintain, mitigate drainage, secure gravel source)
 - Emergency response (evacuation route, health aid, community awareness, oil spills, enforcement)
 - Airport safety (build up runway to mitigate drainage, block vehicle access, provide a bypass route)
 - Remove flooding – incorporate drainage issues into other emphasis areas

Attachments:

1. Sign-in Sheet
2. Candidate Emphasis Areas
3. Safety Implementation Plan Notes
4. Map Markups
5. Public Meeting Flyer
6. Public Meeting Handout
7. Public Meeting Presentation Slides

End Meeting Minutes

CC: File

3

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Ekuk Tribal Transportation Safety Plan
Candidate Emphasis Areas

Emphasis Area	Strategic Linkage	Potential Strategies
Speeding	• Community complaints • People preventing road grading to keep potholes • 4/5 people marked speeding as high priority on survey • 3/5 people marked dusty roads as high priority	• Speed limit signs • Enforcement • Dust control (water truck?) • Alternate route for commercial vehicles? • Speed bumps?
Flooding	• Standing water, flooding, erosion issues on beach, roads and at airport	• Improve drainage, culverts, ditches • Build up roads
Boating Safety	• Accounts of drowning accidents and speeding • 2/5 people marked boat launch/harbor safety as a high priority	• Encourage life vests • Enforce slow speeds • Community awareness about set nets • Beach improvements
Road Maintenance	• Existing potholes • Lack of gravel source	• Regrade roads • Secure a gravel source
Emergency Response	• Lack of evacuation route, lack of natural disaster preparedness, and lack of law enforcement were all marked as high priorities on the survey	• Provide law enforcement • FEMA plan • Evacuation route • Post emergency response resources
Airport Safety	• Road intersects runway • Frequent standing water • No public shelter	• Signs at runway crossing • Improve drainage and snow maintenance • Provide public building

Emphasiss Area #1			Strategic Linkage			
Speeding						
Objectives						
Success Indicators						
4Es	Actions	Target Output	Responsible Parties	Date of Completion	Performance Measures	Monitoring and Evaluation
Education	Install an official "slow children playing" sign		Council	2022		
Enforcement	Signs, research tribal authority		Council			
Engineering						
Emergency Services	Maintain health aid		Council & BBAHC	On-going, every summer		

Emphasiss Area #2			Strategic Linkage			
Boating Safety						
Objectives						
Success Indicators						
4Es	Actions	Target Output	Responsible Parties	Date of Completion	Performance Measures	Monitoring and Evaluation
Education	Outreach about using and return vests to kids don't float, flyers to watch out for set nets					
Enforcement	Work with coast guard to enforce speeding					
Engineering	Train staff members to respond to and mitigate oil spills from fishing boats					
Emergency Services	Continue to fund kids don't float to ensure there are always vests available of all sizes					

Emphasiss Area #3			Strategic Linkage			
Road Maintenance						
Objectives						
Success Indicators						
4Es	Actions	Target Output	Responsible Parties	Date of Completion	Performance Measures	Monitoring and Evaluation
Education						
Enforcement	Create alternate route for commercial vehicles to avoid homes with playing children					
Engineering	Raise roads, resurface roads					
Emergency Services	Grade roads and potholes					

Emphasiss Area #4			Strategic Linkage			
Airport Safety						
Objectives						
Success Indicators						
4Es	Actions	Target Output	Responsible Parties	Date of Completion	Performance Measures	Monitoring and Evaluation
Education	Consider signs to reroute traffic					
Enforcement	Consider barricades, research Tribe's legal right to enforce keeping drivers off the runway					
Engineering	Build up airport, construct alternate road around end of runway					
Emergency Services	Airport maintainance, build up to mitigate flooding					



EKUK TRANSPORTATION SAFETY PLAN

COMMUNITY MEETING

Come learn about Ekuk's Tribal Transportation Safety Plan. The Safety Plan evaluates the community's transportation concerns and proposes strategies to improve safety on local roads, trails, boating facilities, and airport.

We want to hear from you!

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

Posting date 9/27/2018

**Wednesday
October 10, 2018
6:30 PM**

**Ekuk Tribal
Council Building**

Refreshments

Door Prizes

**Discuss the
future of Ekuk!**

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 Ekuk Tribal Transportation Safety Plan October 10, 2018

Dear Participant;

Thank you for attending the public meeting for the Ekuk 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 Ekuk Village Council 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
Engineering Services Company, LLC

Tribal Transportation Safety Plan
October 10, 2018

Ekuk Village Council Tribal Transportation Safety Plan

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

Bristol
Engineering Services Company, LLC

Tribal Transportation Safety Plan
October 10, 2018

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.**

Bristol
Engineering Services Company, LLC

Tribal Transportation Safety Plan
October 10, 2018

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
- Door Prize!!



Bristol
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Tribal Transportation Safety Plan
October 10, 2018

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

Bristol
Engineering Services Company, LLC

Tribal Transportation Safety Plan
October 10, 2018

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



Bristol
Engineering Services Company, LLC

Tribal Transportation Safety Plan
October 10, 2018

Importance of Safety Plans

- Proactive Approach to Planning
 - Prevents crashes
 - Improves unsafe transportation conditions
- Addresses Most Critical Safety Needs
- Develops Partnerships
- Fosters Multidisciplinary Cooperation
- Increases Access to Safety Funding

"Planning with safety in mind saves lives"

Bristol Tribal Transportation Safety Plan October 10, 2018

Four E's of Safety

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



7

Bristol Tribal Transportation Safety Plan October 10, 2018

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

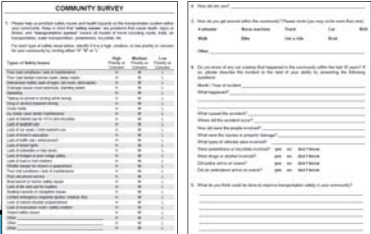


8

Bristol Tribal Transportation Safety Plan October 10, 2018

Data Collection

- ▶ No Crash Data Available
- ▶ Public Surveys Online Link: <https://www.surveymonkey.com/r/TSCMKXK>



9

Bristol Tribal Transportation Safety Plan October 10, 2018

Anecdotal Crash Data

- ▶ 1 Recent Crash
 - Truck drove into hole on beach
 - Needed to be towed
- ▶ Drowning accidents in the past
 - 1 approximately every 5 years
 - Speeding over set nets



10

Bristol Tribal Transportation Safety Plan October 10, 2018

Survey Data – Question #1: Safety Priorities



11

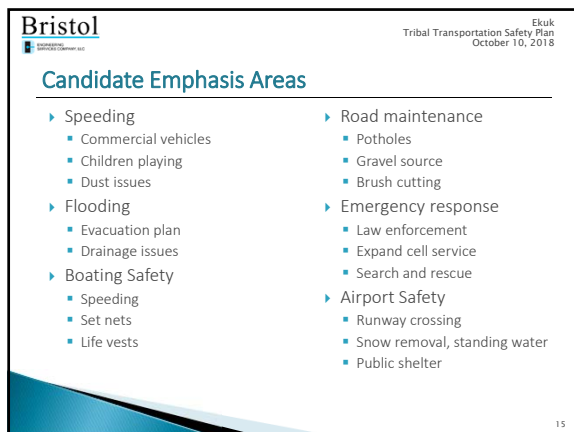
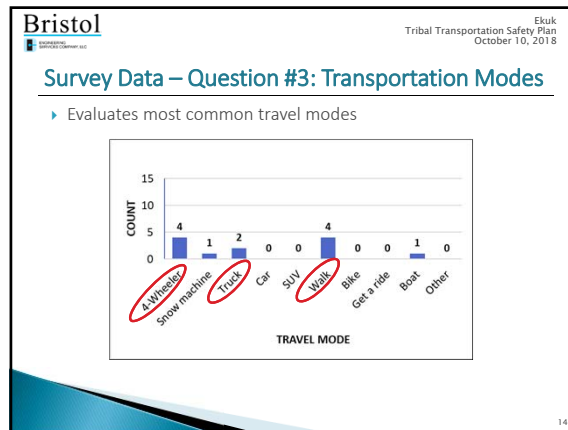
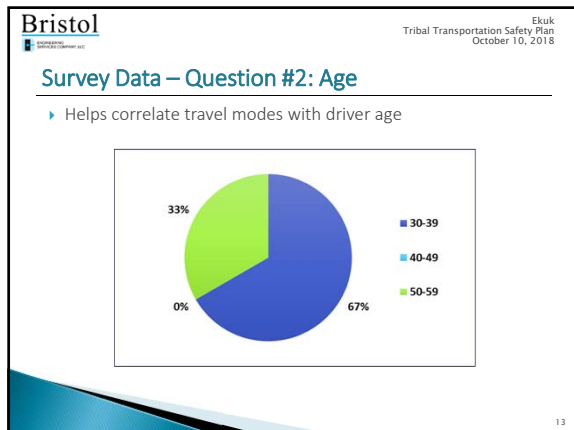
Bristol Tribal Transportation Safety Plan October 10, 2018

Survey Data – Question #1: Safety Priorities

- ▶ Top Safety Priorities
 1. 80% Speeding
 2. 60% Lack of evacuation route / safety shelters
 3. 60% Dusty roads
 4. 40% Lack of natural disaster preparedness
 5. 40% Boat launch or harbor safety issues
 6. 40% Lack of traffic law / enforcement



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Bristol
Tribal Transportation Safety Plan
October 10, 2018

Tribal Transportation Safety Plan
October 10, 2018

Implementation Plan

	EMPHASIS AREA #1		STRATEGIC LANGUAGE			
	SPEEDING		80% of survey respondents marked "speeding" as a high priority, making it the 4th highest community safety priority			
	OBJECTIVES		Installing speed bumps was the second most common suggestion in the community survey regarding actions to improve transportation safety.			
	SUCCESS INDICATORS		At least 2 out of 5 reported car crashes involved excessive rate of speed.			
	Slower driving speeds around the community					
KEY	ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Install more speed limit signs around the VPSO 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 enforce 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	On-going, especially during school months	Reduced number of complaints from community members about speeders	Keep record of speeding complaints before and after installation of speed bumps
ENGINEERING	Install painted speed bumps at local locations to reduce speeds, especially within the school zone 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 bumps installed around the community. Reduced number of speeding-related accidents	Keep record of speeding-related accidents before and after installation of speed bumps
EMERGENCY RESPONSE	Maintain a local VPSO. Encourage people to plan 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	On-going	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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- = potholes, protection areas, slow speeds, children playing
- = common route

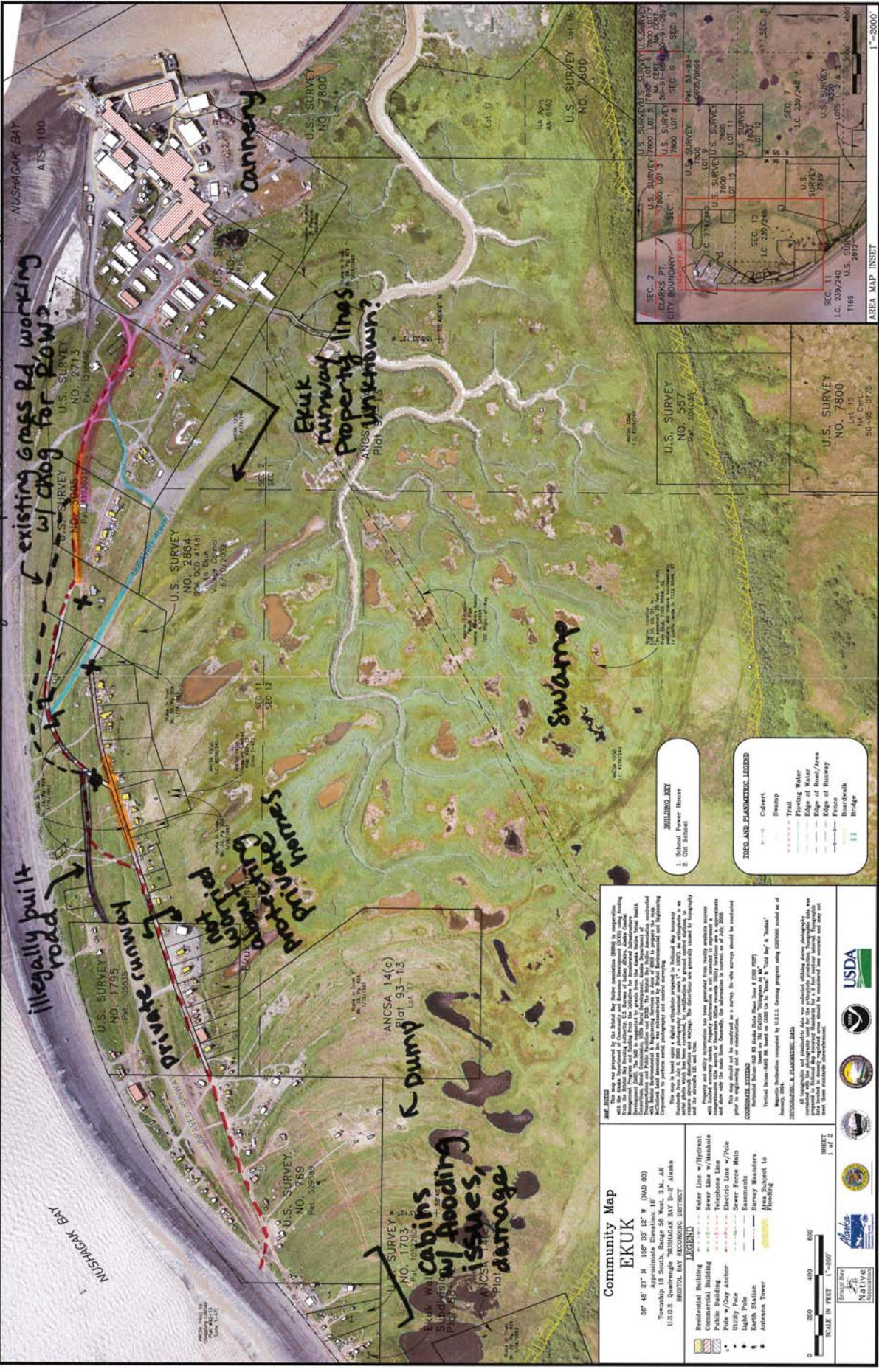
--- = need a bypass around end of highway
XX = existing barricades

ZZ = proposed barricades
— = people driving away

on avoid bottles

$\bullet$ = highest speed
 $\bullet$ = proposed road intersection

highest speeding issues
proposed road crossing,
intersection sign



APPENDIX B: 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 _____	H	M	L
Other _____	H	M	L
Other _____	H	M	L

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.

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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

EKUK
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 55

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

<u>4-wheeler</u>	Snow machine	<u>Truck</u>	Car	SUV
<u>Walk</u>	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

? don't know

EKUK
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 34

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

<u>4-wheeler</u>	Snow machine	Truck	Car	SUV
<u>Walk</u>	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:

None I know of

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 meeting discussing road conditions & speed and respect of land and property

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

EKUK
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

EKUK
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?

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Tuesday, September 18, 2018 12:48:54 PM
Last Modified: Tuesday, September 18, 2018 12:57:54 PM
Time Spent: 00:08:59

Page 1: Tribal Transportation Safety Plan

Q1

How old are you? (use slider to select age)³⁴

Q2

How do you get around within the community? (check all that apply)^{4-wheeler}
Walk

Q3

Please help us prioritize safety issues and health hazards on the transportation system within your community. For each safety issue listed below, identify if it is a high, medium, or low priority or concern for your community:

Intersection safety (lack of signs, tall brush, blind spots)
LowPriority or Concern

Drainage issues (road washouts, standing water)
MediumPriority or Concern

Speeding
HighPriority or Concern

Talking on phone or texting while driving
LowPriority or Concern

Drug or alcohol impaired driving
MediumPriority or Concern

Dusty roads
HighPriority or Concern

Icy roads / poor winter maintenance
LowPriority or Concern

Lack of helmet use for ATV and bicycle users
LowPriority or Concern

Lack of seat belt use
LowPriority or Concern

Lack of car seats / child restraint use
LowPriority or Concern

Lack of driver's education
LowPriority or Concern

Lack of traffic law / enforcement
HighPriority or Concern

Lack of streetlights
LowPriority or Concern

Lack of sidewalks or bike lanes
LowPriority or Concern

Lack of bridges or poor bridge safety
LowPriority or Concern

Lack of road or trail markers
LowPriority or Concern

Wildlife danger for drivers or pedestrians
LowPriority or Concern

Poor trail conditions / lack of maintenance
LowPriority or Concern

Poor cell phone service
MediumPriority or Concern

Boat launch, dock, or harbor safety issues
HighPriority or Concern

Lack of life vest use for boaters
LowPriority or Concern

Boating hazards or navigation issues
MediumPriority or Concern

Limited emergency response (police, medical, fire)
HighPriority or Concern

Lack of natural disaster preparedness
HighPriority or Concern

Lack of evacuation route / safety shelters
HighPriority or Concern

Airport safety issues
Medium Priority or Concern

Q4

Please help us gather information about car crashes that have occurred in the community in the past. Describe the incident to the best of your ability by answering the following questions. If you do not know an answer, you may skip it and leave the line blank.

Respondent skipped this question

Q5

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

Respondent skipped
this question

APPENDIX C: IMPLEMENTATION PLAN

IMPLEMENTATION PLAN

EMPHASIS AREA #1			STRATEGIC LINKAGE			
Speeding			▶ 67% of survey participants marked "speeding" as a high safety priority. ▶ 50% of survey participants marked "dusty roads" as a high priority. ▶ Multiple complaints every summer about speeding.			
OBJECTIVES						
Decrease speeding, reduce dust emissions, and improve safety of children at play, pedestrians, and other drivers.						
SUCCESS INDICATORS						
Reduced speeds throughout the community.						
4Es	ACTIONS	TARGET OUTPUT	RESPONISBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Install "slow, children at play" sign near homes on main road. Education about health risks of dust.	Improve awareness about children at play areas. Improve community knowledge about health risks of dust.	Council	2022	Sign ordered and installed. Educational flyers posted in public locations.	Evaluate effectiveness of signs. Community outreach.
ENFORCEMENT	Review and update Tribal Constitution and local ordinances about speed limits.	Determine strategies to enforce speeding through the Tribe without police.	Council	On-going	N/A	Discuss at monthly Council meetings.
ENGINEERING	Investigate engineering strategies to reduce speeding and reduce dust.	Determine strategies to implement in future years.	Council	On-going	N/A	Discuss at monthly Council meetings.
EMERGENCY SERVICES	Maintain health aide every summer. Provide respiratory masks at the clinic.	Provide emergency response to accidents and protection against dust for sensitive individuals.	Council & BBAHC	On-going (every summer)	Yearly job postings. Masks ordered and announced to public.	Replenish stock of masks as needed.

IMPLEMENTATION PLAN

EMPHASIS AREA #2			STRATEGIC LINKAGE			
Boating Safety			► 3 reported boating accidents within 20 miles of Ekuk, resulting in 2 fatalities and 3 serious injuries within 5 years. ► Fishing is a primary component of the local culture and economy. Approximately 200 to 250 fishermen move to Egegik every summer. ► Past incidences of boats swamping and fuel leaks.			
OBJECTIVES						
Reduce the risk of boating accidents and improve fuel spill response resources.						
SUCCESS INDICATORS						
Reduced number of boating accidents.						
4Es	ACTIONS	TARGET OUTPUT	RESPONISBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Inform people about proper use of Kids Don't Float loaner board. Flyers to caution about unmarked set nets.	Ensure rental life vests are returned to loaner board. Improve public awareness about set net-caused accidents.	Council	On-going	Posted flyers	Discuss education strategies at Council meetings.
ENFORCEMENT	Work with US Coast Guard to enforce boating speed limits.	Reduce boating speeds.	Council, US Coast Guard	On-going	Coordination with Safety Partners	Discuss enforcement strategies at Council meetings.
ENGINEERING	Obtain fuel response equipment such as containment booms and haul machinery.	Improve resources to respond to fuel spills.	Council	2024	Funding and acquisition of equipment.	Equipment maintenance.
EMERGENCY SERVICES	Train Council staff to respond to fuel spills. Develop a fuel response plan. Continue to stock Kids Don't Float loaner board.	Improve resources to respond to fuel spills. Ensure life vests are always available to the public.	Council	On-going	Completed training. Completed Plan.	Update training. Inspect stock of Kids Don't Float loaner board.

IMPLEMENTATION PLAN

EMPHASIS AREA #3			STRATEGIC LINKAGE			
Road Conditions			► Deteriorating road conditions, potholes, and drainage issues. ► Lack of road maintenance and gravel source. ► 67% of survey participants marked "lack of evacuation route and safety shelters" as a high safety priority.			
OBJECTIVES						
Improve driver safety, improve road conditions, and provide an emergency evacuation road.						
SUCCESS INDICATORS						
Road rehabilitation, secure a local gravel source, construction of Clark's Point to Ekuk Road.						
4Es	ACTIONS	TARGET OUTPUT	RESPONISBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Community outreach during road maintenance and construction.	Inform the public about construction activities to ensure safety and control traffic.	Counil, contractor	As needed	Outreach measures such as flyers and signs.	Coordinate with construction contractors.
ENFORCEMENT	Create alternate route to access cannery avoiding homes.	Restrict commercial vehicles and speeding in residential areas. Mitigate potholes and maintenance issues.	Council, landowners	TBD	Planning, design, right-of-way acquisition, funding, and construction.	Evaluate alternatives at monthly Council meetings.
ENGINEERING	Raise, widen, and resurface roads. Improve drainage. Gravel pit exploration and development.	Rehabilitate deteriorating roads. Provide a local, affordable gravel source for road maintenance and construction.	Council	TBD	Planning, design, funding, and construction.	Set schedules and budgets to monitor and track projects.
EMERGENCY SERVICES	Grade roads and potholes, as needed. Continue to pursue funding and construction of Clarks Point to Ekuk Road.	Allow safe and rapid access for emergency vehicles. Provide an evacuation route to higher ground.	Council, Ekuk Fisheries	On-going	Maintenance as needed.	Discuss maintenance needs at monthly Council meetings.

IMPLEMENTATION PLAN

EMPHASIS AREA #4			STRATEGIC LINKAGE			
Airport Safety			► Limited access to airport due to standing water. ► Accounts of illegal driving on runway. ► 33% of survey participants marked "airport safety issues" as a high priority.			
OBJECTIVES						
Improve safety and access to the airport and restrict unauthorized vehicles.						
SUCCESS INDICATORS						
Reduce unauthorized use of the runway, improved runway conditions.						
4Es	ACTIONS	TARGET OUTPUT	RESPONISBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Determine best community education strategy to keep unauthorized vehicles off of runway (such as signs).	Reduce unauthorized use of the runway, keeping it clear for pilots to land safely.	Council	On-going	Implemented educational strategies.	Discuss strategies at Council meetings
ENFORCEMENT	Consider installing barricades at the runway crossing. Evaluate other methods to penalize unauthorized vehicles.	Improve local enforcement.	Council	On-going	Implemented enforcement strategies.	Discuss strategies at Council meetings
ENGINEERING	Resurface and improve drainage of runway.	Rehabilitate runway.	Council	2024	Planning, funding, design, and construction.	Planning at monthly Council meetings.
EMERGENCY SERVICES	Develop airport maintenance plan. Mitigate airport flooding.	Ensure airport is accessible (no standing water) for planes and emergency medevacs.	Council	2024	Completed maintenance plan.	Update plan.

APPENDIX D: RESOLUTION

Ekuk Village Council
P.O. Box 530
Dillingham, Alaska 99576

Resolution No. 2019-09
A Resolution adopting the
Ekuk 2019-2024 Tribal Transportation Safety Plan

WHEREAS, the Native Village of Ekuk hereafter "Tribe" is a federally recognized tribe; and

WHEREAS, the Ekuk Village 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 Ekuk; and

WHEREAS, the Tribe has gained significant community input on identifying transportation safety concerns and priorities for Ekuk through a public survey administered in September and October 2018, and a public meeting held on October 10, 2018; and

WHEREAS, the Tribe has identified and prioritized strategies to improve transportation safety throughout the community, and upon approval and adoption of the Ekuk 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 Ekuk 2019-2024 Tribal Transportation Safety Plan.

CERTIFICATION

The Ekuk Village Council has adopted this resolution during a meeting held on Friday, the 13th of September, 2019, in Dillingham, Alaska, with a quorum present.

For 4 Against _____ Abstain _____ Present 4 Absent 1

Robert Heyang
Signature

ROBERT HEYANG
Print Name

PRESIDENT
Title

9/17/2019
Date

Priscilla Murphy
Signature

Priscilla Murphy
Print Name

Secretary / Treasurer
Title

09/17/19
Date

APPENDIX E: ANNUAL REVIEW DOCUMENTATION
(To Be Added Annually)