

EGEGIK VILLAGE

2019-2024 FINAL ADOPTED

TRIBAL TRANSPORTATION SAFETY PLAN

August 2019

Prepared for:

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ACRONYMS AND ABBREVIATIONS

°F	Degrees Fahrenheit
%	Percent
AADT	Average annual daily traffic
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	Egegik, Alaska
Council	Egegik Village
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 Egegik Village (Council), Bristol Bay Native Association (BBNA), by means of a professional service agreement with Bristol Engineering Services Company, LLC (Bristol), developed this Strategic Tribal Transportation Safety Plan (TTSP) for Egegik, 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 25, 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

Egegik is located on the south bank of the Egegik River on the Alaska Peninsula, 100 miles southeast of Dillingham and 326 air miles southwest of Anchorage (Exhibit 1). Within the Kvichak Recording District and the Lake and Peninsula Borough, the Community is located at approximately 58.2122 degrees north latitude and -157.3755 degrees west longitude within Section 1, Township 023S, Range 050W of the Seward Meridian. The Community consists of 32.8 square miles of land and 101.2 square miles of water (Department of Commerce, Community, and Economic Development [DCCED], 2018).

Exhibit 1: Community Location Map

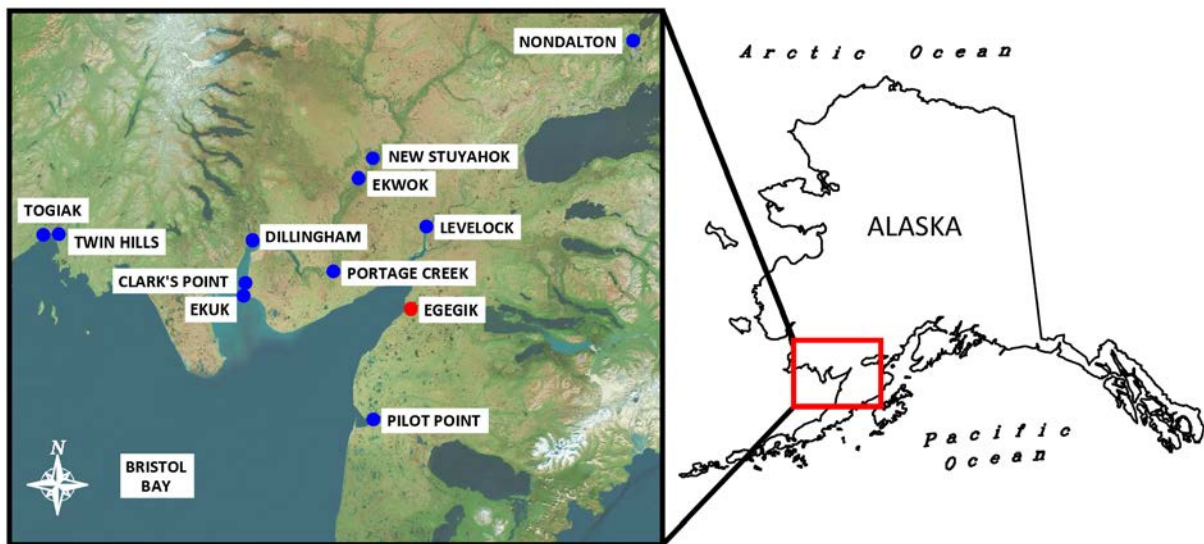


Image source: Bing Geomap, AutoCAD Civil 3D, 2018

1.3.2 History & Culture

According to anthropologists, settlement of the Bristol Bay region first occurred over 6,000 years ago. Yup'ik Eskimos and Athabascan Indians jointly occupied the area. Aleuts arrived in later years. The first recorded contact by non-Natives was with Russian fur traders between 1818 and 1867. The village was reported by Russians as a fish camp called "Igagik" (meaning "throat") in 1876. Local people would travel each year from Kanatak on the gulf coast through a portage pass to Becharof Lake and then hike or kayak on to the Egegik Bay area for summer fish camp. In 1895, an Alaska Packers Association salmon saltery was

established at the mouth of Egegik River, and a town developed around the former fish camp. During the influenza outbreaks beginning in 1918, Natives from other villages moved to Egegik in an attempt to isolate themselves from the disease. During World War II, men from Egegik were enlisted to help build the King Salmon Airport, with many subsequently serving in Dutch Harbor and elsewhere. Egegik later grew into a major salmon production port. Egegik incorporated as a second-class city in 1995. Today, the community is home to approximately 76 people (DCCED, 2018).

1.3.3 Transportation & Access

The community is accessible by air and water. A City-owned lighted gravel runway with crosswind airstrip is located approximately two miles south of Egegik. Scheduled and charter flights are available. There is also a private airstrip across from Coffee Point. A boat haul-out is available and the City has a deep water dock that services barges from Anchorage and Seattle. Two privately-owned docks and marine storage are also available. Motorized vehicles used by residents include automobiles, trucks, skiffs, all-terrain vehicles (ATVs) and snowmobiles (DCCED, 2018).

1.3.4 Climate

Egegik falls within the southwest maritime climate zone, characterized by persistently overcast skies, high winds, and frequent cyclonic storms (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)	22.0	25.3	30.4	40.9	52.4	59.8	63.2	62.0	55.1	40.9	29.9	23.3	42.1
Average Min. Temperature (°F)	7.0	9.1	13.3	24.3	34.1	41.6	46.7	46.4	39.6	25.8	15.2	7.8	25.9
Average Total Precipitation (in.)	1.01	0.77	0.87	1.01	1.31	1.63	2.31	3.02	3.01	2.09	1.47	1.25	19.76
Average Total Snowfall (in.)	8.2	6.7	7.3	4.5	1.0	0.0	0.0	0.0	0.0	2.9	6.4	8.9	46.0
Average Total Snow Depth (in.)	3	3	3	1	0	0	0	0	0	0	1	3	1

Source: Western Regional Climate Center (WRCC), 2018 Alaska Summaries for King Salmon AP, Alaska Station 504766 for Period of Record 6/14/1917 to 6/9/2016.

2.0 EXISTING RESOURCES

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

2.1 SAFETY TEAM

The Tribal Administrator is the acting Safety Champion for the village, working closely with Council members to coordinate transportation and safety projects within the community. The Safety Champion is also responsible for updating this plan.

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:

- Egegik Village Council
 - The local Tribal Government (Tribe) 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. The Tribe coordinates with the City to maintain transportation facilities, and enforces safety standards by communicating via word-of-mouth to the public.
- City of Egegik
 - The City works with the Tribe and other local agencies to plan and organize safety improvement projects, as needed. The City has a maintenance crew to keep the roads and transportation facilities safe for public use. The City also manages a local Volunteer Fire Department, equipped with a fire truck and fire suppression gear.
- Becharof Corporation
 - The local Native Corporation coordinates with the Tribe for safety planning and community development projects.
- Egegik Clinic
 - The local clinic provides emergency response and medical services for transportation accidents. The clinic is closed most of the year, but 2-3 health aides are available in the summer when the town grows in population for commercial fishing. The clinic has their own ambulance.

- Alaska State Troopers, King Salmon Post
 - There is no police presence stationed in Egegik. However, the King Salmon State Troopers are available for emergency response, if needed.
- 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 the regional hub, Dillingham. If emergency medical services are required beyond the capability of the local clinic, the community knows to call for a medivac from the Kanakanak Hospital.
- Bristol Bay Native Association
 - BBNA is the regional Native Non-Profit that helps fund and coordinate community development projects, including this Plan, and is a great 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

The Council manages several on-going safety efforts including facility maintenance and a volunteer community response effort, as described below.

2.3.1 Maintenance

The largest component to upholding transportation safety in Egegik is providing frequent maintenance of all local transportation facilities including roads, trails, the beach, dock, and airport. The City and Tribe work together to maintain these facilities. The City is responsible for maintaining the roads. They have all the necessary equipment to grade the roads, mitigate potholes, replace burnt out streetlights, and clear the roads of snow in the

winter. The City also maintains the airport, community dock, and beach. They re-grade the gravel cross-strip runway as needed, and place new gravel at the beach at the beginning of every summer to improve boat-launching access. The City is very diligent at maintaining the facilities; however, they lack a maintenance building to store their equipment.

The Tribe also assists with maintenance as needed. The Tribe is responsible for brush cutting along the roadways to improve driving visibility and intersection safety. They cut brush at least once per year, especially along Airport Road where brush is the thickest. The Tribe also maintains the subsistence trails (primarily the one accessing American Creek) by placing new gravel and cutting brush.

2.3.2 Volunteer Community Response Effort

Since Egegik is a small community, the Council is able to communicate and enforce good safety practices to the public via word-of-mouth. Since there are no local police to enforce traffic laws, the Council takes responsibility to talk to individuals caught speeding, boating without a life vest, or acting in an unsafe manner. In addition, the Council coordinates with the clinic, or if there are no health aides in town, with volunteers who are trained to assist with emergencies. Residents volunteer their private vehicles to transport injured people, and call each other for help, if needed. This community effort helps improve road, trail, and boating safety year-round.

2.4 PLANNING DOCUMENTS

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

- Lake and Peninsula Borough Comprehensive Plan
- The Southwest Alaska Transportation 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 a transportation accident or emergency occurs, locals call either the clinic, volunteer first responders, or the Kanakanak Hospital in Dillingham depending on the severity of the incident. If the clinic is open, injured people will be taken to the clinic first (via either personal vehicles or the clinic ambulance) where the clinic physicians will assess the situation, and if needed, call for a medivac to another facility.

The clinic, regional hospital, and other 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
Car Crash / Emergencies / Search and Rescue Egegik Village 907-233-2211	Car Crash / Emergencies State Troopers, King Salmon Post 907-246-3464
Medical Response Egegik Clinic 907-233-2229	Regional Hospital Kanakanak Hospital (Dillingham) 907-842-5201
Fire City of Egegik Volunteer Fire Department 907-439-4391 Or 907-233-2400 (City Office)	Natural Disaster & Search and Rescue State Emergency Operations Center 1-800-478-2337 (toll free) 907-428-7100 (local Anchorage area)
	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

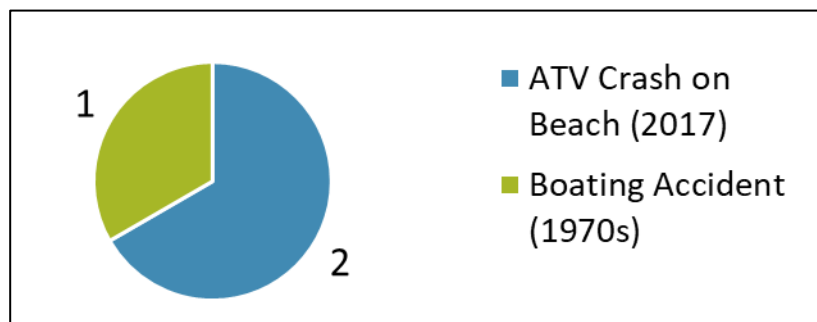
Crash data and other safety data are valuable to any transportation safety plan. The data is used to identify safety issues, select appropriate countermeasures, and evaluate performance. Other data sources may include traffic citations, hospital records, insurance claims, traffic counts, and anecdotal evidence from safety partners. At least three years of data is recommended to evaluate the overall traffic patterns.

Since there is no local VPSO, 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. In addition, traffic count data was obtained for select roads within the community, and a public survey provided additional data regarding community safety priorities.

3.1 CRASH DATA

Safety emphasis areas are chosen based on evaluation of crash data. However, with no police presence in the community, crash records are not kept. The Council was consulted to provide anecdotal crash data. Based on the Council's account, there have only been two ATV crashes within the last 30-years, both of which occurred on the beach in the summer of 2017. Additionally, there have been boating accidents in the past, but not since the 1970s. These transportation incidents are described below.

Exhibit 2: Count of Most Recent Transportation Accidents in Egegik

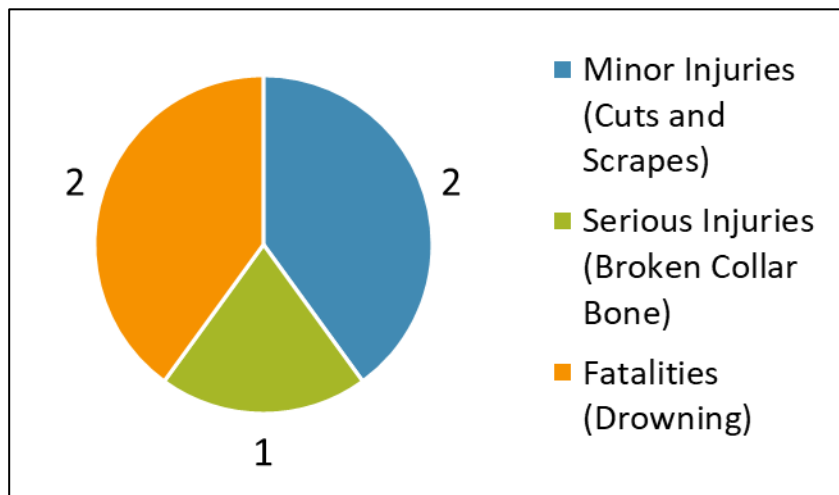


In Egegik, ATVs frequently drive along the beach to access different areas of the community. Around late June-early July, a set netter had placed his ropes too high up the beach. Two ATV drivers ran into the ropes on two different occasions. The first accident involved a 26-year old male driving a 4-wheeler on the beach with his 5-year old son. Without seeing the rope in time, the ATV hit the rope and lost control. The young boy

sustained bad cuts on his face. The second accident occurred in a similar manner. It involved a 16-year old female driving a 4-wheeler who hit the rope and lost control, resulting in a broken collarbone. A medivac was required for transport to the Kanakanak Hospital in Dillingham. After these incidents, the Council approached the fisherman and required him to place his ropes lower on the beach closer to the water.

According to the Council, the most recent boating incident occurred sometime in the 1970s. Two men set out in a small skiff the evening and the waters were rough. Reportedly, they had been drinking, both fell overboard, and drowned. Today, the Council requires all boaters to wear life vests, and there have not been any accidents on local waters since then.

Exhibit 3: Injury Count for Most Recent Transportation Accidents in Egegik

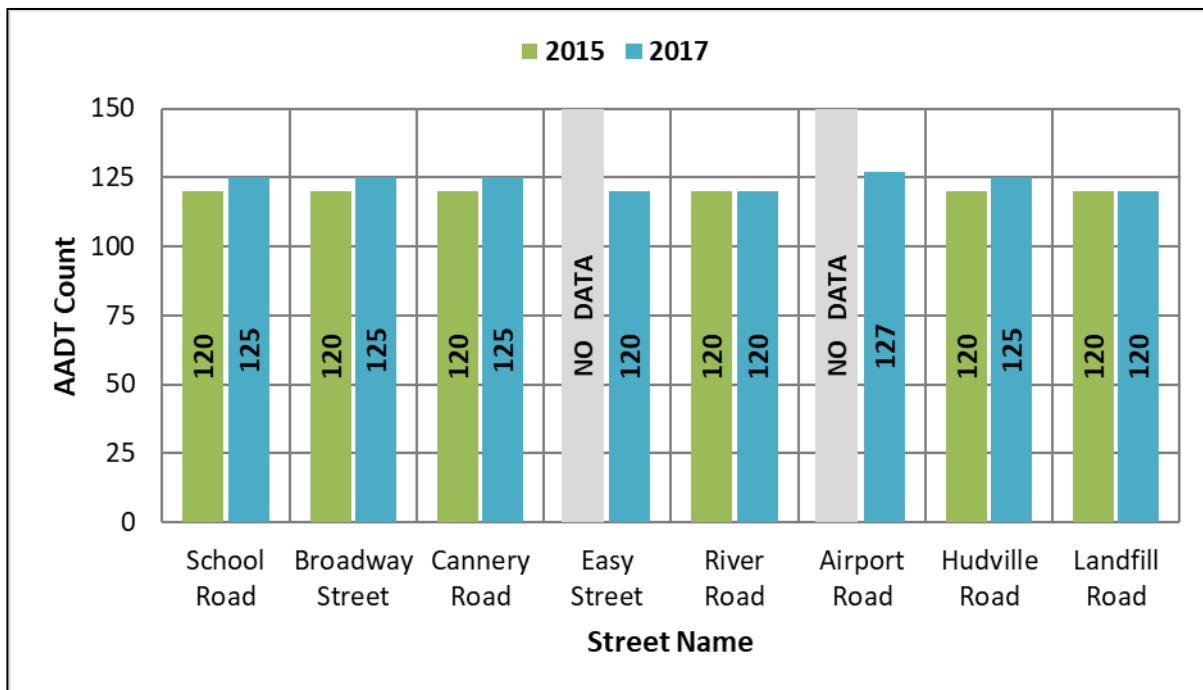


Since community crash data is limited, it is difficult to draw conclusions from the data. Based on the anecdotal crash reports, the transportation systems in Egegik are generally in good condition and free of safety hazards. The community is diligent about keeping each other safe, communicating issues, and assisting with emergency response. However, the crash data indicates that the beach experiences a relatively high traffic volume, the most recent car crashes occurred on the beach, and the crashes resulted in minor-to-serious injuries. Based on these factors, the beach traffic-way may be considered a high priority for transportation safety.

3.2 TRAFFIC COUNTS

Traffic counts were evaluated in the Community, where available. Traffic count data helps identify correlations between traffic volume and number of crashes. Historical Average Annual Daily Traffic (AADT) counts are available for eight roads in the Community, and are displayed in Exhibit 4 for years 2015 and 2017. AADT Year 2016 and earlier traffic counts were not available. Additionally, no data was available for 2015 for Easy Street and Airport Road, as shown. Exhibit 5 shows a map of the AADT routes in the Community, along with traffic counts for year 2017 (DOT&PF, 2018).

Exhibit 4: Community AADT Counts, 2015 & 2017



According to the available AADT counts, all of the monitored roads have a similar AADT count between 120 and 127 trips per day (DOT&PF, 2018). Additionally, Exhibit 4 shows a slight increasing trend in traffic volume of about five counts per year for at least four of the roads. As more people use the transportation system, more safety features may be needed to control traffic and mitigate hazards in the future.

Exhibit 5: Community AADT Count Map



Note: Road names shown are based on Alaska DOT&PF AADT data and may not be consistent with local road names.

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 Council distributed the surveys out of the Village Office in Egegik, and also collected some responses at the public meeting on October 25, 2018. A total of 8 surveys were submitted to Bristol. A summary and analysis of the survey results is discussed below.

3.3.1 Question #1: Safety Concerns & Priorities

Question #1 helps portray what the community regards as high priorities in terms of transportation safety issues. The results are shown in Exhibit 6, 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 6, the top community safety priority is poor cell phone service. Approximately 63% of survey respondents marked this is a high priority on the survey. Dusty roads is the second highest priority at 50%. Additionally, 38% of survey respondents expressed a high concern for the lack of an evacuation route or safety shelter, lack of helmet use, speeding, and drainage issues.

3.3.2 Question #2: Survey Respondent Age

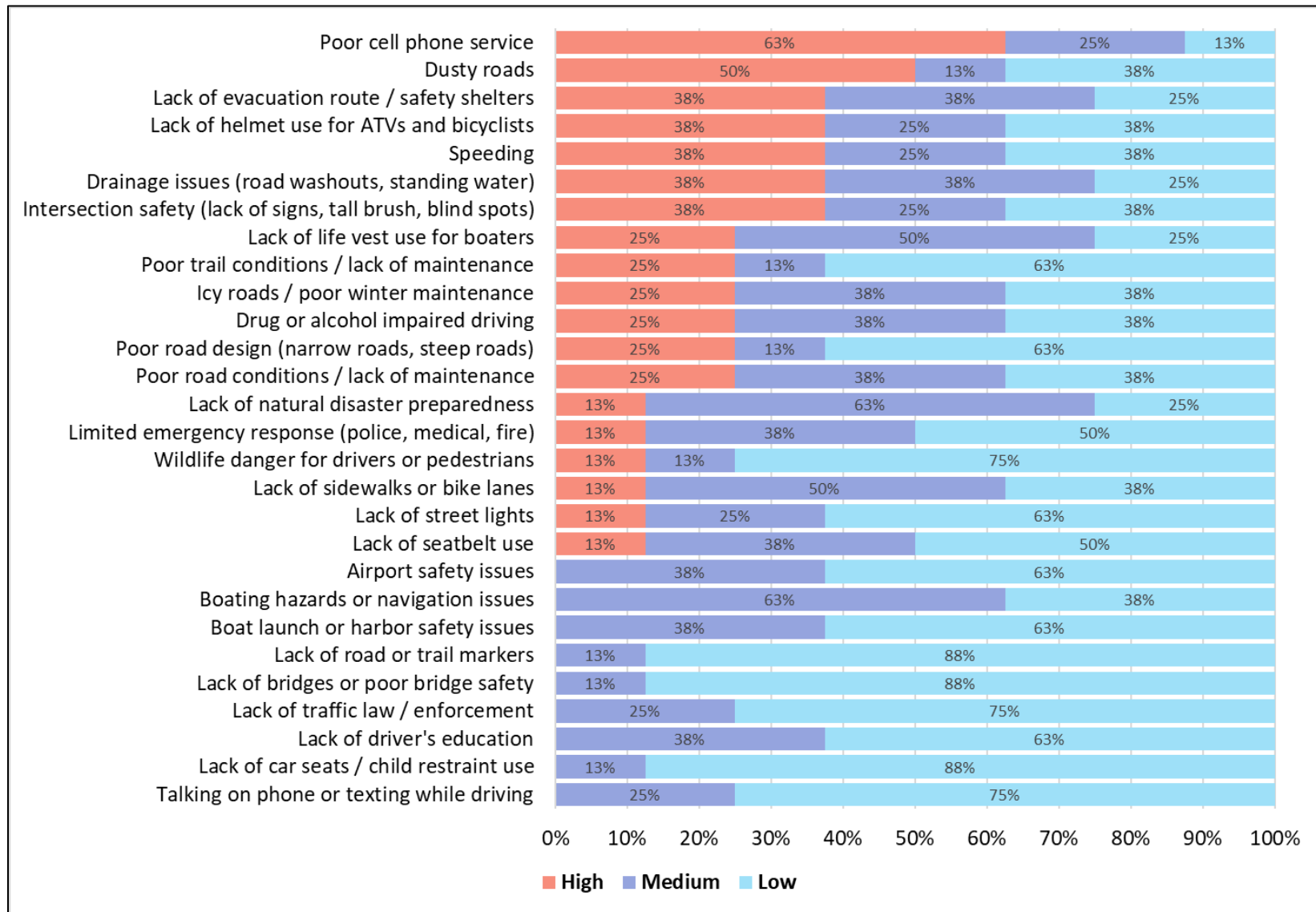
Question #2 collects data about the age of survey respondents, providing demographic information for the survey. This data helps correlate age groups to the various modes of transportation used throughout the community (Question #3), which can help identify where to focus safety education and outreach.

2. How old are you? _____

The results of Question #2 are shown in Exhibit 7.

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Exhibit 6: Community Safety Priorities



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Exhibit 7: Survey Respondent Ages

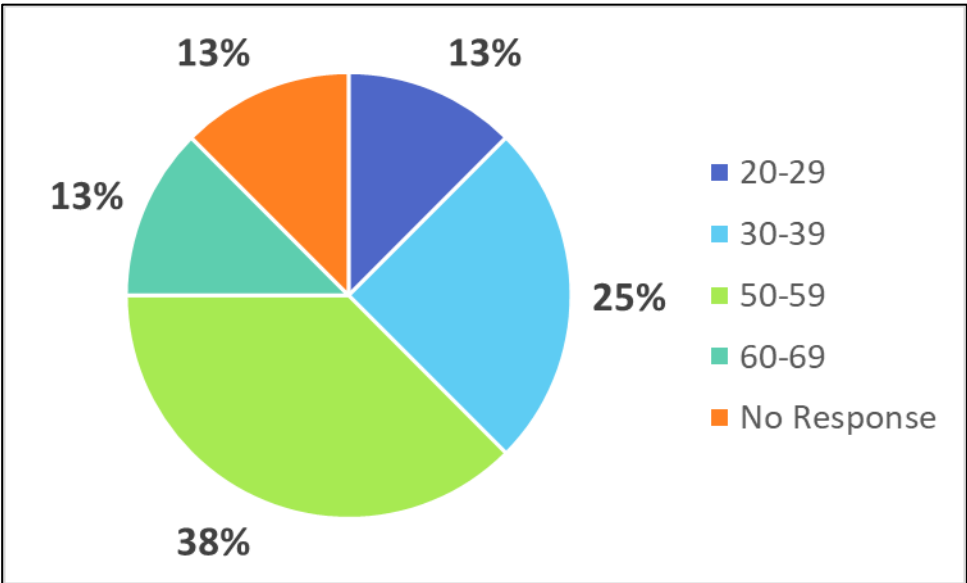


Exhibit 7 shows a fair distribution of ages participated in the survey. Most survey respondents were in their 50s. An Egegik resident explained that there are few children in the community due to lack of a school, and there are also few elders. However, the demographics change drastically in the summer, as the community expands for commercial fishing.

3.3.3 Question #3: Transportation Modes

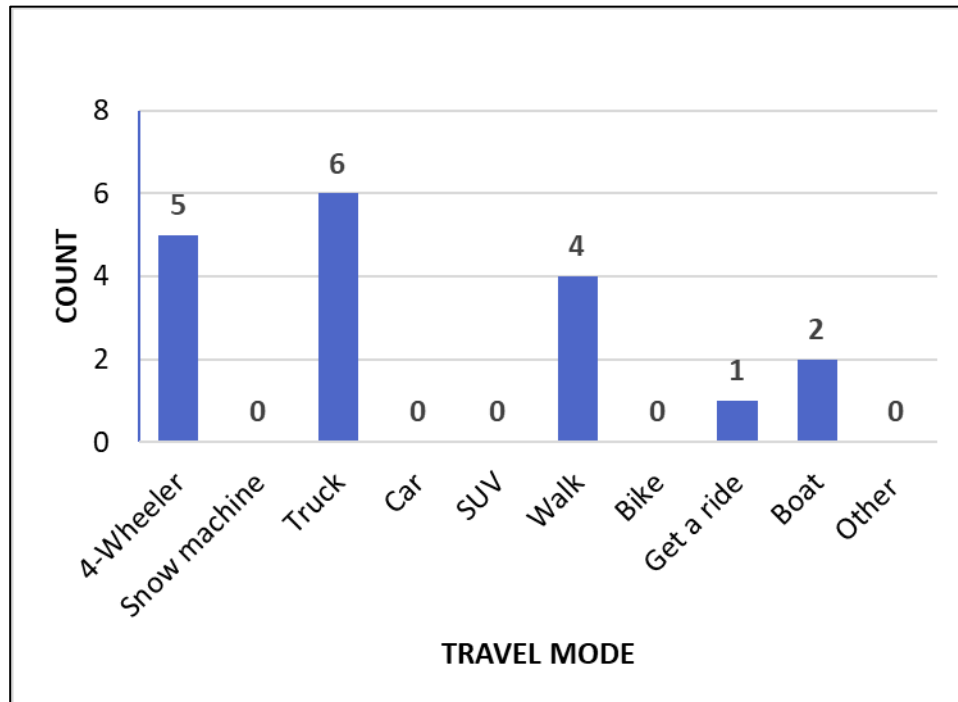
Question #3 demonstrates the most common transportation modes within the Community.

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 8 shows the results of Question #3. Since Question #3 allows more than one answer, Exhibit 8 shows the number of times each mode was selected.

Exhibit 8: Most Common Modes of Transportation



The results show that most people travel around the community by four-wheeler, truck, and walking. Boating is another common mode of transportation, although underrepresented in the graph. Almost every local owns his or her own boat. Additionally, most boating occurs in the summer when an influx of commercial fishermen move to Egegik, where an estimated 600 to 700 boats are out in Egegik Bay.

3.3.4 Question #4: Anecdotal Crash Data

Question #4 of the survey helped gather data about recent transportation related accidents within the Community. Only two people answered Question #4 on the survey. The two responses are summarized below:

1. “Four-wheeler speeding and driving on wrong side of the road around a blind corner; Smacked into a truck turning slowly; Downtown by Icicle; Both men walked away okay; No drug or alcohol use.”
2. “Most likely driving too fast at corners; Probably intoxicated; Young teens or early 20s; No injury, bent up vehicle; Trucks.”

Although many of the details were left out of the incident reports, one commonality can be drawn from the two responses: both seemed to occur at corners or road intersections. This

could indicate the need to improve visibility and traffic control in similar areas throughout 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**

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?

Four people provided answers to Question #5. Their suggestions are listed below:

- “Honestly, if four wheelers would slow down, especially late at night, I feel it would be more safe, but unfortunately that's a personal choice even though we have set speed limits posted for safety.”
- “Fix roads.”
- “Clear corners of brush.”
- “Concrete.”

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4.0 EMPHASIS AREAS

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

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

1. Speeding / Dust
2. Road Conditions
3. Trail Conditions
4. Boating Safety

These emphasis areas were selected based on factors such as crash data, 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 / DUST

4.1.1 Background

Speeding is a significant issue in Egegik. Community members have expressed concern about speeding ATVs and cannery trucks. Loose dogs are also a concern with speeding. If a dog crosses the street at the same time as a speeding vehicle, the dog or driver may not have time to react to avoid a collision. Parents also have the same concerns about young children in the village. The community survey results show that 38% of respondents marked “speeding” as a high priority. Additionally, survey respondents expressed that accidents have occurred due to speeding around corners, that speeders are often young drivers below the age of 25, and that speeding is especially dangerous at night with reduced visibility.

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.

4.1.2 Objectives

Decrease speeding throughout the community to reduce the risk of ATV or car accidents and reduce dust emissions.

4.1.3 Strategies

Education

- Install more speed limit signs and slow signs at corners
- Hang up posters around town about the potential health risks of dust

Enforcement

- Continue to monitor speeding through word of mouth warnings
- Investigate and adopt a system for the Tribal Council to penalize repeat offenders

Engineering

- Invest in a water truck to wet roads during dry conditions, and identify a clean source to pump water

Emergency Services

- Have dust masks available at the clinic and/or Tribal Building

4.2 ROAD CONDITIONS

4.2.1 Background

Many roads in Egegik could use improvement. Some roads are very steep while others are narrow. Steep roads are unusable during the winter due to ice. Narrow roads are a concern in the summer when population swells from 40 to nearly 2,000, significantly increasing traffic demand. Additionally, most of the beach access roads are experiencing erosion issues due to poor drainage, one of which has almost completely washed out (see Photo 1). Blind corners and uncontrolled intersections are another concern. Tall, thick brush blocks visibility at nearly every horizontal curve and intersection within the community.

Three out of eight survey responders marked both “drainage issues” and “intersection safety” as high safety priorities. At least two crashes were mentioned in the public survey, both of which reportedly occurred at a blind corner. One survey respondent explained the

best way to improve transportation safety is to “fix roads,” and another recommended “clear corners of brush.” Figures 1 and 2 (attached) show areas with blind corners, erosion, and drainage issues.

The Council is in the process of upgrading several roads and constructing a storage building. The road rehabilitation areas are shown on Figures 1 and 2 (attached). These projects are included as strategies to improve road conditions and maintenance efforts.



Photo 1 – Severe Erosion on Beach Access Road, October 2018

4.2.2 Objectives

Improve intersection safety and year-round transportation on the road system by widening narrow streets, reducing the grade on steep roads, resurfacing washout areas, and improving drainage patterns throughout the community.

4.2.3 Strategies

Education

- Install warning signs at horizontal curves
- Improve training opportunities for maintenance operators and road construction

Enforcement

- Continue combined effort between the City and Tribe to maintain roads and uphold the maintenance agreement
- Enforce brush clearing at blind corners more frequently

Engineering

- Pursue funding for design and construction of prioritized road rehabilitation projects
- Improve drainage on roads experiencing erosion with engineered drainage ditches and properly sized culverts
- Demolish old, abandoned buildings that are blocking visibility at corners
- Complete construction of the Village Maintenance Storage Building to protect maintenance equipment

Emergency Services

- Prioritize maintenance (pothole grading, snow plowing) on emergency access routes such as the road to the Village Council Building, clinic access, and Chuckie's hill road to higher ground

4.3 TRAIL CONDITIONS

4.3.1 Background

There are three ATV trails leading out of Egegik primarily used for subsistence, hunting, and camping: Dog Team Trail, American Creek Trail, and South Spit Trail. A narrow dirt trail cuts across the village from the City Shop to access the Village Council Building. The beach is also commonly used as a trail in the summer during commercial fishing season. All of these trails have safety issues of their own.

The primary concern with subsistence trails is the lack of cell phone service. If travelers were stranded or injured during a hunting excursion, they would have no way to call for help. Another concern is creek crossings, particularly one on South Spit Trail where locals describe the need to dismount your four-wheeler in order to cross. Without bridges, vehicles can become stuck or damaged. Additionally, brush encroaches into the traveled way of the trails, reducing visibility of oncoming travelers or nearby bears.

The Village Council Building access trail is narrow, steep, muddy, and bumpy (see Photo 2). This route is becoming more popular because it is a shortcut across the village, yet was not designed to support two-way traffic.

In addition, the beach is considered a trail because people drive ATVs and trucks frequently on the beach during commercial fishing season. Every so often, the beach needs to be graded to improve safety and accessibility. The Beach trail is a high community priority because there were two ATV accidents on the beach in the summer of 2017. Both accidents involved ATV drivers crashing into set nets that were placed in the common driving path. A number

of factors including poor placement of the nets, poor visibility of the nets, and speeding may have caused the accidents.



Photo 2 – Village Council Building Access Trail, October 2018

4.3.2 Objectives

Improve safety of local trail system by expanding cell service, improving trails conditions, and reduce the risk of set net accidents on the beach.

4.3.3 Strategies

Education

- Encourage use of GPS tracking cell phone applications to keep friends and family informed about traveler locations while hunting or camping
- Install a signs on beach access roads to educate community about proper set net placement and local safety regulations

Enforcement

- Require people to tie neon orange ribbons on set nets to improve visibility of the nets for people driving on the beach

Engineering

- Improve brush cutting efforts on trails to improve visibility
- Increase efforts to replace boards at creek crossings, as needed
- Continue to grade beach trails to maintain safety

Emergency Services

- Evaluate locations for a new cell tower to improve communications on subsistence trails that lead out of the main village
- Develop an emergency action plan for rescuing lost / stranded travelers

4.4 BOATING SAFETY

4.4.1 Background

Fishing is a way of life in Egegik. Almost every household owns their own boat. In the summers during fishing season, locals estimate anywhere between 600 and 700 boats are stationed in Egegik Bay. A variety of boats are found among the waters including skiffs, gillnetters, tenders, and more. Since boating is such a common mode of transportation, the community values boating safety highly.

According to locals, there have not been any recent boating accidents, crashes, or drownings in Egegik waters since the 1970s. However, during the Safety Plan public meeting community members expressed the need to improve boating education and enforcement of boating safety gear. They explained that most skiffs do not have the proper safety gear, and although commercial boats undergo safety inspections, skiffs do not. It can be unsafe to get stuck on a sandbar with no safety gear or means of communication. There is also no dedicated search and rescue skiff. Volunteers typically have to use private vehicles for search and rescue operations, but the Council desires having one readily available at all times. Additionally, at least 75% of community survey respondents marked “lack of life vest use” as a high or medium safety priority.

4.4.2 Objectives

Improve education, enforcement, and emergency response of boating safety to reduce the risk of boating accidents on local waterways.

4.4.3 Strategies

Education

- Encourage use of life jackets through word-of-mouth communication
- Hang flyers, pictures, and educational posters on community bulletin boards at the Village Council office, City office, and post office.
- Utilize Kids Don’t Float curriculum to host a community boating safety course or public meeting

Enforcement

- Educate community on proper boating safety gear to keep in skiffs and improve access to these supplies
- Continue to enforce life vest use through word-of-mouth warnings

Engineering

- Build a visible Kids Don't Float sign and cabinet to store rental life jackets closer to the beach and advertise availability (proposed location shown on Figure 1)

Emergency Services

- Acquire a search and rescue skiff and trailer to ensure one is always available in the event of an emergency

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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
 - o 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

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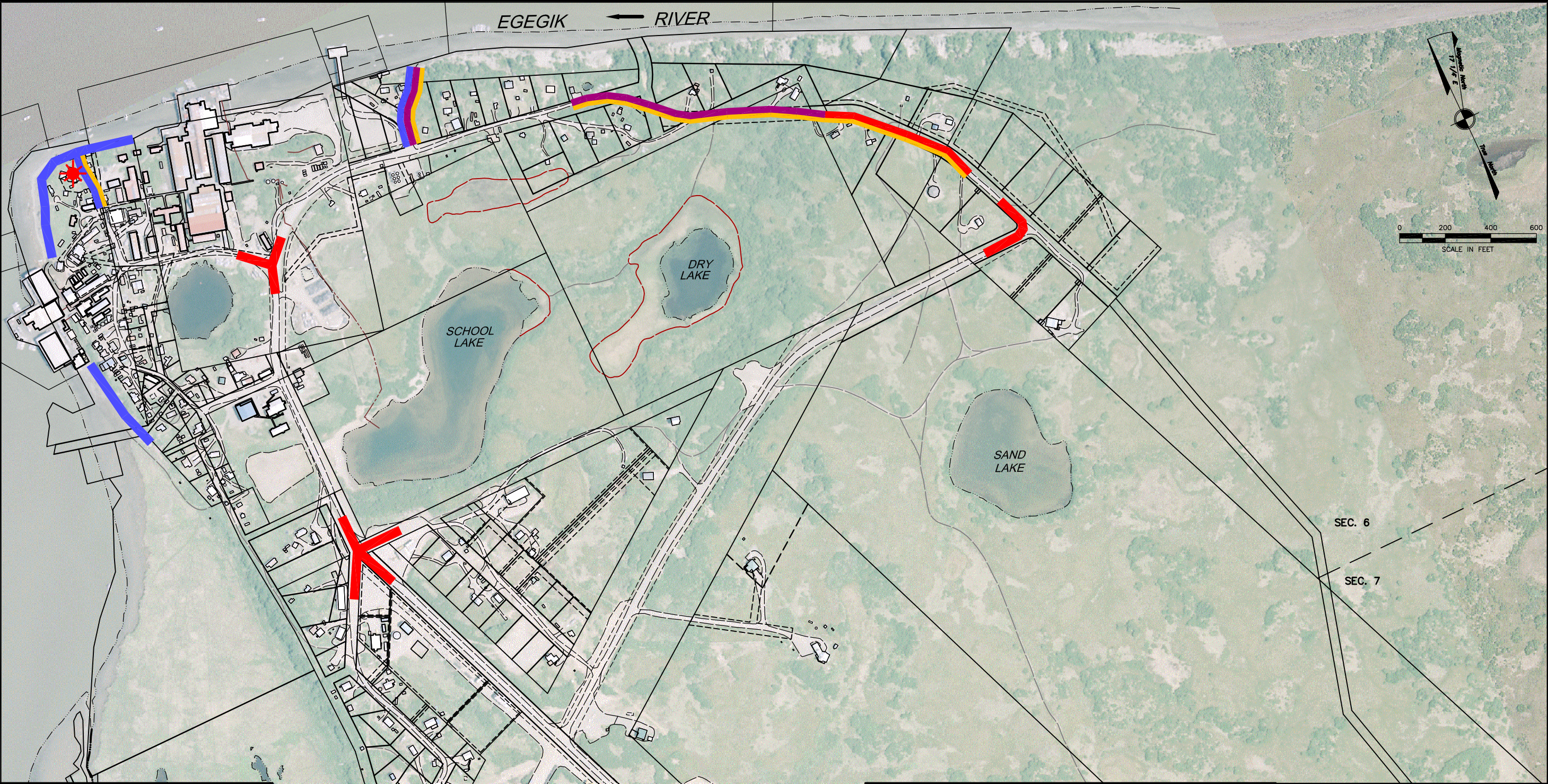
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FIGURES



MAP NOTES

This map was prepared by the Lake and Peninsula Borough (LPB) in cooperation with the Alaska Department of Community and Economic Development (DCEd) using funding from the Coastal Impact Assistance Program, Coastal Management Program, Bureau of Indian Affairs Transportation Planning and funding from the Initiative for Accelerated Infrastructure Development (IAID). The IAID is supported by grants from the Denali Commission, USDA Rural Development, Alaska Department of Transportation and Public Facilities and DCEd. The Alaska Native Tribal Health Consortium provided evaluation facility records. The LPB contracted with Global Positioning Services Incorporated in June of 2002 to prepare the map.

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

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

Property and utility information has been generated from readily available sources with limited accuracy checks. Property information is not intended to represent a title search of the Records Office record. Utility location is approximate and shows only the main lines as the service lines have been omitted for clarity. Generally, the information is current as of December 2002.

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

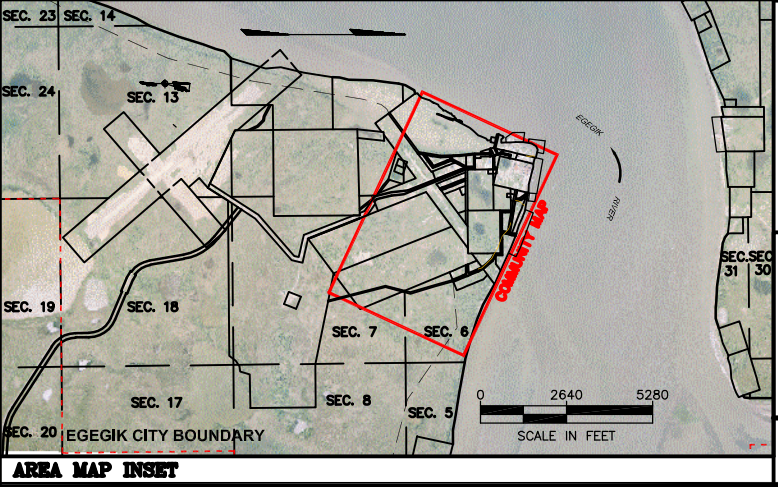
AeroMap U.S. prepared the orthophoto and topographic mapping.

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

HORIZONTAL AND VERTICAL CONTROL

The control monument for the digital orthophoto was N.G.S. PILOT PT 1949. Published horizontal datum NAD 1983 coordinates for this monument are North 57° 33' 57.28524" and East 157° 34' 41.36844". The vertical datum NGVD 1929 for this monument is 108 feet above mean high water (MHW).

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



LEGEND

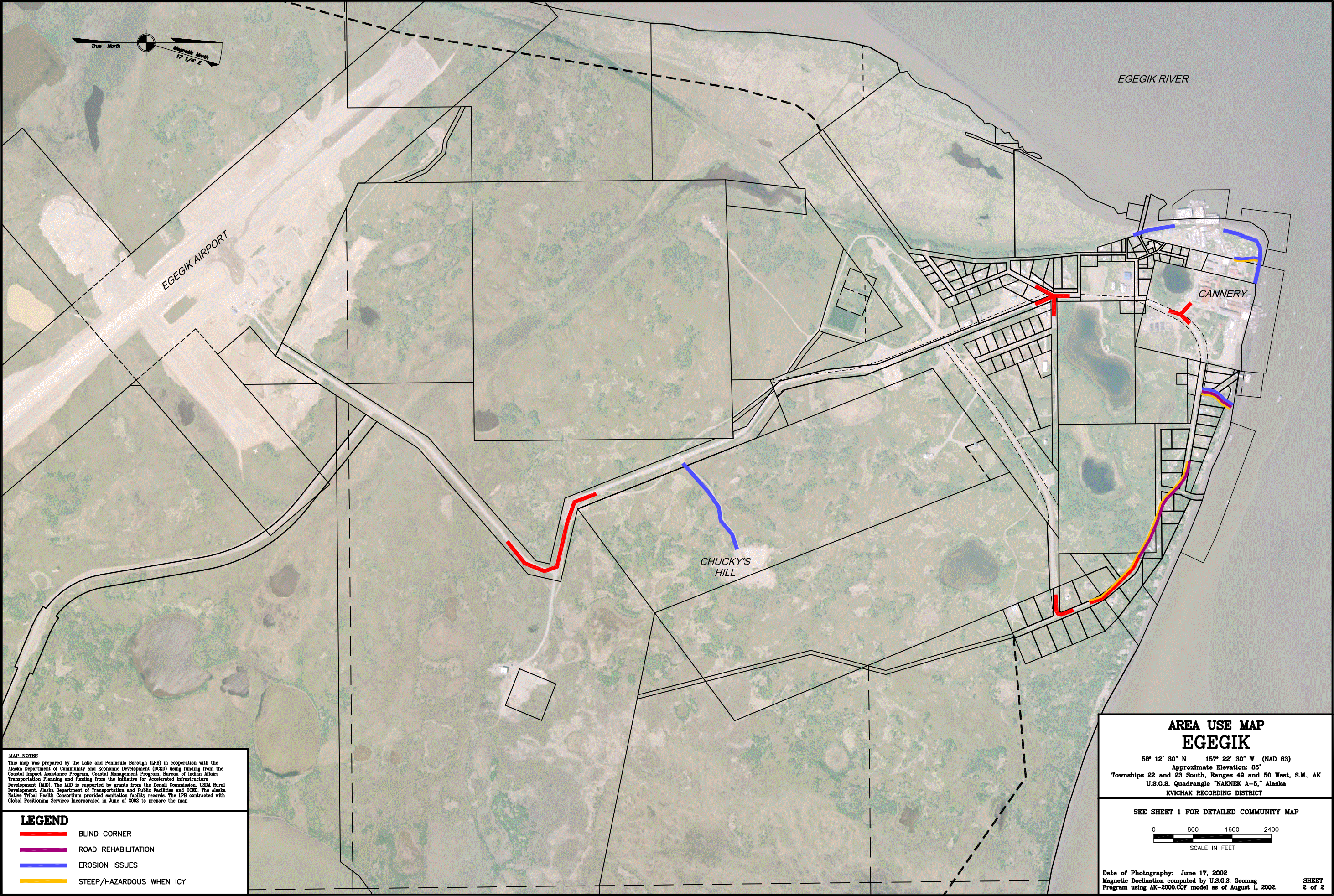
- BLIND CORNER
- ROAD REHABILITATION
- EROSION ISSUES
- STEEP/HAZARDOUS WHEN ICY
- PROPOSED KIDS DONT FLOAT BOARD

**Community Map
EGEGIK**

58° 12' 30" N 157° 22' 30" W (NAD 83)
Approximate Elevation: 85'
Township 23 South, Ranges 49 and 50 West, S.M., AK
U.S.G.S. Quadrangle "NAKNEK A-5," Alaska
KVICHAK RECORDING DISTRICT

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

SHEET
1 of 2



MAP NOTES
This map was prepared by the Lake and Peninsula Borough (LPB) in cooperation with the Alaska Department of Community and Economic Development (DCEM) using funding from the Coastal Impact Assistance Program, Coastal Management Program, Bureau of Indian Affairs Transportation Planning and funding from the Initiative for Accelerated Infrastructure Development (IAID). The IAID is supported by grants from the Denali Commission, USDA Rural Development, Alaska Department of Transportation and Public Facilities and DCEM. The Alaska Native Tribal Health Consortium provided sanitation facility records. The LPB contracted with Global Positioning Services Incorporated in June of 2002 to prepare the map.

LEGEND

- BLIND CORNER
- ROAD REHABILITATION
- EROSION ISSUES
- STEEP/HAZARDOUS WHEN ICY

**AREA USE MAP
EGEGIK**

58° 12' 30" N 157° 22' 30" W (NAD 83)
Approximate Elevation: 85'
Townships 22 and 23 South, Ranges 49 and 50 West, S.M., AK
U.S.G.S. Quadrangle "NAKNEK A-5," Alaska
KVICHAK RECORDING DISTRICT

SEE SHEET 1 FOR DETAILED COMMUNITY MAP

0 800 1600 2400
SCALE IN FEET

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

SHEET
2 of 2

EGEGIK AREA USE MAP SHEET 2 1"=800' (2002 PHOTOGRAPHY)

APPENDIX A: PUBLIC INVOLVEMENT

TRIP REPORT & MEETING MINUTES

Project: BBNA THMP & TTSP Project

Bristol Project No: 32190013

Reference: Egegik Planning Team Meetings & Public Meetings

Date of Meeting: October 24, 2018

Location of Meeting: Egegik Tribal Building / Community Center

Participants:

Bristol: Danielle Dance, Jackie Wander

Planning Team: See attached sign in sheet

Public Meeting: See attached sign in sheet

Summary

Jackie and Danielle arrived in Egegik around 11:15 AM on Wednesday, October 24, 2018. They met with Ashley Strickland and Craig Chernikoff (Egegik Planning Team) from approximately noon until 5:00 PM. At the planning team meeting, they discussed both the Tribal Transportation Safety Plan (TTSP) and the Tribal Hazard Mitigation Plan (THMP). Background data was collected and emphasis areas were chosen for the TTSP. Additionally, Worksheets #1 through #6 were filled out for the THMP. The Public meeting was originally scheduled for that evening at 6:00 PM. However, no community members were able to attend, so the meeting was rescheduled for lunch break the next day from 12:00 PM to 1:30 PM. Danielle and Jackie departed Egegik in the afternoon of October 25.

Notes taken during the planning team and public meetings are summarized below.

TTSP Planning Team Meeting Notes

- Speeding and Dust
 - People speed up and down steep hill
 - Icicle & AGS rucks speed when unloading barge & connex (cannery)
 - Loose dogs are a concern with speeding
 - Dust clouds
 - Kids walking
 - Water truck would come on the barge, need to find funding
- Road conditions
 - Reduce the grade on one road
 - Build up the road to the beach
 - Still working on the design – Bristol Engineering (ask Isaac)
 - New equipment, village has capability to brush clear, city does clearing for fire hydrants, guardrails etc.
 - City does the winter plowing
- Trail Conditions
 - Dog Team Trail / American Creek Trail

- o There is another one going down to south spit
 - Creek crossing, have to get off the 4-wheeler
 - No cell service, if people get stuck
- o Beach needs to be graded- water eats up Dawns Beach road
- o Trail from village to City Shop
- o Beach trail
- o People use trails in summer and in the fall for duck hunting
- o Interested in the Spot app
- o Would be nice if GCI tower were up on Chuckie's hill, not in town
 - Heard a rumor that GCI would be installing fiber optics to improve?
- o Village maintenance building supposed to start next year
- Boating Safety
 - o Concerned about search and rescue boat, having a boat already hooked to a trailer
 - High priority, people are always using the river for recreation and fishing
 - o Have sent a kids don't float life jacket, everyone knows they can get one, have all sizes still available
 - Have a sign at the post office to advertise the boards
 - Or a storage cabinet near beach to store them and protect
 - o Boating inspections – life jackets, fire hydrants, flotation devices, etc.
 - o Haven't been drownings in a while
 - o Fish & game and coast guard do inspection
 - o 600-700 boats in the summers, almost every local owns their own boat
- Tribal Administrator takes notes and pictures
- Use bulletin boards at village, city and post office to post flyers and pictures
- There is a sign at the airport to keep people off runway, people knows the rules
- Good city lights and visibility, lights were recently replaced
- One health aide year round (depending on availability), current one (Brenda) is training right now, doctor comes in as needed, PA comes in the summer
- Approximately 40 people in the winter

THMP Planning Team Meeting Notes

Worksheet #1 – Hazard Identification

- Avalanche
 - o No avalanches
 - o Do not profile
- Drought
 - o Always raining, not an issue
 - o Do not profile
- Earthquakes
 - o No damages, just feel the tremors
 - o Last year, most recent big earthquake, lasted for several minutes, put a crack in the drywall in the ceiling, no pictures falling or anything
 - o Everyone is on City water system, no pipes breaking

- During the 1964 earthquake the roads were rolling like waves, don't know what damage was done back then
 - Have been having a lot of earthquakes lately along the fault line
 - Happens every other year, but are expecting one to happen soon
 - Everyone knows they can go to the City or Village office, there is a food bank resource if needed, education is good within the community
 - Not concerned about it, but agree to profile just in case
- Erosion
 - Beach Road experiences bad erosion, and by Anna's house
 - Desire rock lined ditches along the roads to mitigate erosion on the roads
 - Anna's house will need to be relocated soon
 - There is a cemetery down there too by the beach, set net sign was eroded away
 - Would like to protect the entire beach area
 - Jessica has pictures from IGAP about erosion, monitoring documentation
 - Icebergs increase erosion, took out an entire sultry last year
- Extreme Cold
 - Sometimes the temperature is not very cold, but wind chill makes it miserable
 - Have to have water running continuously, some homes are not winterized and people have to get water from the village, a couple of people are not hooked up to City water
 - No cases of hypothermia or illness
 - Sometimes have to throw a blanket and use heaters to get equipment to start
 - Does not last that long, maybe a week at the longest, -13 degrees last year
 - Good building insulation
 - Not that worried about it
- Extreme Heat
 - No concerns
 - Do not profile
- Flooding
 - Driveways have flooded/standing water
 - Southwest winds blowing hard with icebergs tears up AGS dock, could have fallen through the dock, holes, damaged piers
 - If there is a tidal surge, it floods up over the flats and banks of the beach, no buildings are impacted
 - Do not profile
- Landslides
 - Big chunks of earth sluff off of the beach area, considered erosion
 - No other landslide areas
 - Do not profile
- Severe Wind
 - Everything seems to be pretty well built, but some older buildings are at risk (1950s or older), a small 2 story building winds took off entire second story including walls, roof, etc. hazards cleaning it up, the rest of it is at risk of being knocked over in a big storm
 - Every now and then they have power outages, City generators, power is not out very long

- o Planes won't come for a couple of days to a week, 5 days at the longest
 - o Concern about medevacs, someone had a throat cut, it took hours for the response due to high winds, they are too slow and too unprepared
 - o Grey building across from liquor store is old, uninhabited right now
 - o Tin roofing has been blown off of houses, alder branches, debris, etc.
- Severe Winter Weather
 - o Back when they were kids you couldn't open the door because it was blocked with snow, but has not happened recently at all since the 1970s
 - o It will snow for a week and be cold, then it will melt the next year, only a few feet tall snow banks, city good at maintaining
 - o Roads do get slick in the winter, orange highlighted road is too steep to drive on
 - o Older people usually use cleats
 - o Quick responses to snow plowing, the moment it happens, they are plowing, even at night
 - o They have a sand machine, but never seen them use it, but use the grader to chip away at the ice if needed
- Subsidence
 - o Have some construction issues with building foundations (logs under the houses shift), but not due to subsidence
 - o Do not profile
- Tsunamis
 - o No tsunamis
 - o Do not profile
- Volcano
 - o Volcanic smoke never comes into the community
 - o Do not profile
- Wildfire
 - o Have had smoke/haze from nearby fires
 - o Once a year a wildfire starts but it is put out right away
 - o Last year they were burning trash across the river in the summer, City guys had to cross the river in the boat to help put it out
 - o Chucky had a fire at his house, fire department responded
 - o Someone accidentally lit a fire up the hill and came through towards the village building
 - o Very good response, so the planning area could be protected
 - o Have had to send in fire fighters in the 80s to contain, fire out on the tundra started off the dump site
 - o Last year there was lighting going all across the river, getting more thunder and lightning than they have in the past

Worksheet #3 – Asset Analysis

- The incinerator (aka the BOSS) is about 1 miles down the road from the landfill, vegetation is cleared around the boss within the fence, a lot of fire response equipment out there too
- Clinic has 1 occupant year round, up to 3 in the summer, brand new building
- City office is a 2 story building, could be affected worse by wind & earthquakes etc.

- Water supply at fire hall
- Fisherman's hall (10-15 people in the winter max, 40+ people in summer) for shower, wifi, snacks, etc., brand new building, surrounded by dirt
- School is not open right now, one small building used to be an apartment building for the teachers and it is locked up – much older at risk of wind, excess heat from power plant is pushed to the school building, loose power pole near school – on the city agenda to fix
- Post office has a good foundation, not at risk for earthquake, older frames thin insulation, dirt all around – building not at risk of catching fire
- AGS office, very old building, near bank
- Icicle office, very old (over 100 years old), closed down in the winter, winterize everything, drain water etc. – winter watchmen all winter
- AGS has two long bunk houses and approximately 5 small cabins/housing units, summertime use only, wind could tear off roof
- Icicle has four long bunk houses, longer than 70 feet long, 100 people each, people come from all over the world, wind has impacted the icicle bunkhouses but they fix every year
- City woodshed, built solid, gravel pad surrounding (no vegetation), usually empty but sometimes 2 people working in there
- City dock is solid and not impacted by icebergs, made of concrete and metal
- Community Center / Village office is two story
- City shop well built, metal building
- Community Baptist church is only used in the summer, older building, surrounded by gravel
- Two cemeteries, old and new cemetery, church hill cemetery bodies were moved to the “old” cemetery in the 1970s but many of them were unmarked – may still find remnants (bones, coffins, etc.), people go up to new cemetery every day, old cemetery has rotting crosses and could be blown over
- Bookshelves are not secured in the library, have not finished up the base to protect the pipes yet
- Sewer lines are buried down by 6 feet, would be difficult to repair in the winter getting through frozen ground
- Village duplex is by a lake, concerns about soil being undermined in earthquake
- No specific subsistence areas (berry patches are all over)
- Only City dock is used in fall, winter, spring
- Icicle dock has hundreds of people at a time in the summer, roof shingles blew off creating a hole but the dock was not impacted

Worksheet #4 – Vulnerability Statements

- Bristol will develop more vulnerability statements and the Council will have an opportunity to review and modify them

Worksheet #5 – Mitigation Goals

- Everyone communicates word of mouth during emergencies
- AGS & Icicle have their own emergency plans
- Would be interested in having emergency non-perishable foods, backup food supply for the community (separate from food bank)

- Recently did a winterization checklist for one home, would be interested to do this for other homes throughout community, and other communication

Worksheet #6 – Mitigation Action Plan

- Earthquake – City has on-call maintenance crew for sewer and water breaks, trying to clean up the old buildings and demolish, three village people have HAZMAT but would need to refresh training, the buildings are old and may have asbestos risk, need to determine land owners first
- Erosion – they have tried many things, concrete blocks, going to try to put a connex down against the bank and fill with rocks or dirt, have seen steel sheet piles in Naknek and think that would be the best, people have put old equipment down on the beach which have been buried over time
- Extreme cold – Have supplies at home and clinic, post office is a good place to post informational checklists, traveling in the winter to other villages and camping at cabins, people are well prepared with excess clothes and food, etc.
- Severe wind – Secure items in lawn, thermal blackout shades or visqueen, the village building has a backup generator, wind turbine was installed but kept sinking and they never brought backup batteries so it is not currently usable, clinic needs a backup generator – but City has enough power to supply entire village
- Severe winter weather – like the idea of giving out ice cleats, nothing to do about the icebergs, investigate the City's use of the gravel applicator for icy roads
- Wildfire – Training for proper burn barrel procedure, need to educate and enforce to stop trash burning, everyone should have a fire extinguisher, stop burning on tundra – use a pit or burn on the beach, brush clearing around homes, there are wells at Coffee Point

TTSP Public Meeting Notes

- Crashes don't happen very often
- Drownings
 - At least 4 drownings have happened in the last 10 years,
 - Across the river boat flipped and person didn't come up.
 - Set nets pull up.
- Took quanza hut out so no more blind corner
- Strategies
 - Signs around town for the road to help navigate traffic (speed limit signs)
 - Clear corners (blind corners) – brush cutting
 - Buildings falling apart – old buildings, plan to take them down
- Emphasis areas
 - Dust/Speeding
 - Water truck - wait until it rains, identify water source (need to do), possibly use fire truck (way to use it for multiple things and as a way to check hoses)
 - Road Conditions
 - Education for building roads (training)
 - Installing culverts
 - Figure out way to get water off of the road

- o Trail Conditions
 - 4 – 5 years was supposed to a taller tower for cell service, but hasn't happened yet
 - Sign to identify set net rules, near beach accesses (2)
- o Boating Safety
 - Icicle rolled a boat and had to wait until they could drive out to get it out – last summer
 - Sign for stats of drownings
 - Most skiffs don't have any safety equipment, stuck on a sand bar with nothing, not safe
 - Education about safety items that need to be in skiffs
 - Commercial boats get checked for safety equipment, but skiffs don't get that inspection.

THMP Public Meeting Notes

- There was a fire in Fairbanks and spent the whole summer in smoke, 7 years ago
- Isolated village, nobody has a satellite phone, they had a disaster 5 years ago, snow blizzard, 20 foot drifts, lost a guy, could not contact, 26 degrees below, whiteout conditions, could not get in and out, 3 days before someone dug a road with loaders, not enough generators, plumbing freezing, pumps going down, people were freezing
- 5 years ago there was an acre fire near Egegik
- Fires burn under the tundra and you might not even notice for weeks
- Wards cove where people camp and burn fires
- Had a burn ban in Egegik a couple of years ago
- Identify key personnel – who runs the fire truck, when is the last time they got their volunteer fire department together, train guys how to turn the pump on, people in the community change every year, on-going training a few times per year
- Need a satellite phone for if the power goes out, and a designated person
- Everyone is tight knit within the community, can easily reach out to people for help
- Put emergency contact information posted, put in every mail box
- Potlucks are the best way to get together
- “In Reach” text to coast guard, emergency contact, uridian phone?
- No service at airport and incinerator

Attachments:

- | | |
|--|---|
| 1. Planning Team Meeting Sign-in Sheet | 8. THMP Worksheet #5: Mitigation Goals |
| 2. Planning Team Meeting Agenda | 9. THMP Worksheet #6: Mitigation Strategies |
| 3. Safety Plan Candidate Emphasis Areas | 10. Public Meeting Sign-in Sheet |
| 4. Safety Implementation Plan Notes | 11. Public Meeting Flyer |
| 5. THMP Worksheet #1: Hazard Identification | 12. Public Meeting Handouts |
| 6. THMP Worksheet #3: Risk Analysis | 13. Public Meeting Presentation Slides |
| 7. THMP Worksheet #4: Vulnerability Statements | |

End Meeting Minutes – CC: File

Planning Team Meeting

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

Date / Location: October 24 , 2018

Sign In Sheet

[illegible]

POC

HAZARD MITIGATION PLAN & TRANSPORTATION SAFETY PLAN

PLANNING TEAM MEETING AGENDA

Transportation Safety Plan

11:30 AM Introductions & Project Background

11:45 AM Determine Emphasis Areas

12:00 PM Implementation Plan

1:00 PM BREAK

Hazard Mitigation Plan

1:15 PM Worksheet 1 – Hazard Identification
Worksheet 2 – Hazard Analysis

2:45 PM BREAK

3:00 PM Worksheet 3 – Risk Analysis

3:30 PM Worksheet 4 – Vulnerability Statements
Worksheet 5 – Mitigation Goals

4:00 PM Worksheet 6 – Mitigation Action Plan

5:00 PM BREAK

6:00 PM COMBINED PUBLIC MEETING (1.5 HOURS)

Egegik Tribal Transportation Safety Plan
Candidate Emphasis Areas

Emphasis Area	Strategic Linkage	Potential Strategies
Speeding / Dust	• 3/4 surveys marked dusty roads as a high priority • Survey concerns about speeding around corners	• Speed limit signs • Education • Dust control • Masks at clinic
Road / Trail Maintenance	• 2 reports of crashes occurring near a blind corner (surveys)	• Brush cutting • Boards on trail creek crossings • Maintenance storage building
Road Rehabilitation	• Road washouts, steep and narrow roads	• Rehabilitate roads • Improve drainage
Beach Safety	• 2 ATV accidents last summer, driving fast, hitting set nets	• Orange flagging on nets • Beach grading • Community awareness
Emergency Response	• Lack of emergency response resources • 4/4 surveys marked “poor cell phone service” as high priority • 3/4 surveys marked “lack of evacuation route/safety shelters” as a high priority	• Search & rescue boat • Better cell phone service • Hire VPSO • First responder training • Evacuation route / safety shelter

Legend:

Village Council Wish List

Others?

Other Common Emphasis Areas:

- Intoxicated driving
- Young drivers
- Pedestrian safety
- Boating safety
- Airport Safety

IMPLEMENTATION PLAN

EMPHASIS AREA #1			STRATEGIC LINKAGE			
Speeding/Dust						
OBJECTIVES						
SUCCESS INDICATORS						
4Es	ACTIONS	TARGET OUTPUT	RESPONISBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Posted speed limit sign, slow signs on corners, Poster for awarness about the issues of dust,		City and Village	2020		
ENFORCEMENT	Continue to talk and monitor speeding with each other, Tribal Council adopt a system for repeat offenders (warning)		City and Village			
ENGINEERING	Water Truck,		Village Council	2023		
EMERGENCY SERVICES	having masks available at clinic and/or tribal building		Village and Clinic	2019-2020		

IMPLEMENTATION PLAN

EMPHASIS AREA #2			STRATEGIC LINKAGE			
Road Conditions						
OBJECTIVES						
SUCCESS INDICATORS						
4Es	ACTIONS	TARGET OUTPUT	RESPONISBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Signs on corners (Slow corner),		Village and City	2020		
ENFORCEMENT	Continue combined effort to keep roads maintained		City and Village			
ENGINEERING	See maps for 2 road rehab projects, brush clearing at blind corners, Maintenance Storage Building		Village (road rehab, and storage building), Village and City (Maintenance)			
EMERGENCY SERVICES	Road maintenance ongoing (grading out potholes, culvert cleaning), maintain Chucky's Hill and trail to village council for emergency access to higher ground		City	ongoing		

IMPLEMENTATION PLAN

EMPHASIS AREA #3			STRATEGIC LINKAGE			
Trail Conditions						
OBJECTIVES						
SUCCESS INDICATORS						
4Es	ACTIONS	TARGET OUTPUT	RESPONISBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Ribbons on nets, sign for set net		Village and Community	Yearly (summer)		
ENFORCEMENT	Word of mouth communication to make sure nets are marked		Village and Community	Yearly (summer)		
ENGINEERING	Continued brush cutting, continue grading Don's Beach		Village and City, City (Grading)	as needed or annually		
EMERGENCY SERVICES	Continue to replace boards for creek crossing, additional cell tower or a better placement for cell tower.		Hunters/Volunteers	Yearly (summer / fall)		

IMPLEMENTATION PLAN

EMPHASIS AREA #4			STRATEGIC LINKAGE			
Boating Safety						
OBJECTIVES						
SUCCESS INDICATORS						
4Es	ACTIONS	TARGET OUTPUT	RESPONISBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Word of mouth to encourage life jacket use, Kids Don't Float curriculum		Community	Ongoing		
ENFORCEMENT	Continue boat inspections and life jacket use		Fish and Game & Coast Guard	Ongoing		
ENGINEERING	install sign/cabinet to provide life jackets and advertise availability		City and Village	Summer 2019		
EMERGENCY SERVICES	acquire a search and rescue boat and trailer,		Village	2023		

WORKSHEET #1: HAZARD IDENTIFICATION

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

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

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

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

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

SELECT HAZARD DEFINITIONS

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

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

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

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

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

INSTRUCTIONS FOR WORKSHEET #1

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

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

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

Table 1: Location (Geographic Area Affected)

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

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

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

Table 2: Maximum Probable Extent (Magnitude/Strength)

Color Code	Maximum Extent	Definition
BLUE	Weak	- Little to no damage done - Slow speed of onset or short duration of event - Limited classification on scientific scale (if applicable)
GREEN	Moderate	- Some damage and loss of services for days - Moderate speed of onset or moderate duration of event - Moderate classification on scientific scale (if applicable)
YELLOW	Severe	- Devastating damage and loss of services for weeks or months - Fast speed of onset or long duration of event - Severe classification on scientific scale (if applicable)
RED	Extreme	- Catastrophic damage and uninhabitable conditions - Immediate onset or extended duration of event - Extreme classification on scientific scale (if applicable)

3. Probability of Future Events – [Column C]

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

Table 3: Probability of Future Events

COLOR CODE	Probability of Future Event	Definition
BLUE	Unlikely	- Less than 1% probability of occurrence in the next year - Recurrence interval of greater than every 100 years
GREEN	Occasional	1% to 10% probability of occurrence in the next year - Recurrence interval of 11 to 100 years
YELLOW	Likely	10% to 90% probability of occurrence in the next year - Recurrence interval of 1 to 10 years
RED	Highly Likely	90% to 100% probability of occurrence in the next year - Recurrence interval of less than 1 year

4. Overall Significance – [Column D]

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

Table 4: Overall Significance

COLOR CODE	Impact	Definition
GREEN	Low	- Event has minimal impact on planning area - Two or more criteria fall in lower classifications (2 or more BLUE) - Profile – Likely doesn't need to be profiled but can
YELLOW	Medium	- Event's impacts on the planning area are noticeable but not devastating - Criteria fall mostly in the middle ranges of classifications (2 or more GREEN or YELLOW) - Profile – Choice of the Planning Team
RED	High	- Event is likely/highly likely to occur with severe strength over a significant or extensive portion of the planning area - Criteria consistently fall in the high classifications (2 or more RED) - Profile – Definitely profile

5. Profile (Yes OR No) – [Column E]

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

Worksheet #3: Risk Analysis*(Profiled Hazards Only)*

Column A Facility Name	Column B Number of Occupants	Column E: Hazard Impacts (Fill in Hazards in Blank Columns Below)					
		Earthquake	Erosion	Extreme Cold	Severe Wind	Severe Winter Weather	Wildfire
Power Plant (Privately Owned)	1						
Community Baptist Church (summer)	40	x					
Old Cemetery	N/A				x		x
Church Hill Cemetery	N/A		x				
Cemetery	N/A				x		x
Roads	N/A		x	x	x	x	
Library	3	x		x		x	
Tribally Owned Equipment (bulldozer, dump truck, excavator, front end loader, village truck, fork lift, ATV)	N/a			x		x	
Overhead Power Lines / Telephone lines / Street Lights	N/A	x			x	x	x
Sewer Line	N/A	x				x	
Water Line	N/A	x				x	
Dump/Landfill	1				x		
Boss (incinerator)	2						
Airport / Storage / Airstrip	1				x	x	x
Sewage Lagoon	N/A						
Health Clinic	3	x		x	x	x	x
City Office Building	6	x			x		
Fire Hall	1	x		x	x	x	x
Fishermans Hall (Summer)	40						
School / Gym / Cafeteria	N/A	x			x		
Post Office	1			x	x	x	x
AGS Office	4	x	x		x	x	
Icicle Office	6	x	x		x	x	
AGS Bunkhouses (2 long/2 cabins) (summer)	100	x			x	x	

Worksheet #3: Risk Analysis
(Profiled Hazards Only)

Column A Facility Name	Column B Number of Occupants	Column E: Hazard Impacts (Fill in Hazards in Blank Columns Below)					
		Earthquake	Erosion	Extreme Cold	Severe Wind	Severe Winter Weather	Wildfire
Icicle Bunkhouse (4 long) (summer)	400	x			x	x	
Icicle Fuel Storage (summer)	2	x					
City Fuel Storage	1	x					
City Woodshed	2						x
City Dock	N/A						
Community Center	8	x		x	x	x	x
City Shop	8			x		x	
Village DOT Building (under construction)	N/A						
Village Connex's (Material Storage 7 total)	N/A						
GCI Tower	N/A	x			x	x	
Old Community Center	N/A	x					
AGS Dock (Summer)	N/A	x	x	x	x	x	
Village Duplex (Rental)	N/A	x		x		x	
Village Single Family Home (Rental)	N/A	x		x		x	
Trails	N/A		x				x
Don's Beach	N/A		x		x	x	
AGS Boat Storage	N/A	x			x	x	
Icicle Boat Storage	N/A	x			x		
AT&T Building / Tower	N/A	x			x	x	
Icicle Dock (Summer)	N/A						
AGS Cannery (Summer)	40	x	x		x	x	
Icicle Cannery (Summer)	200	x	x		x	x	

WORKSHEET #4: VULNERABILITY STATEMENTS

Based on the information gathered in Worksheets #1 through #3, develop “Vulnerability Statements” i.e. Problem Statements, and list them below in the space provide. These statements will guide you to determine mitigation goals and later, mitigation actions.

These statements should summarize the most significant risks and vulnerabilities in the community based on the information collected during the hazard analysis and risk analysis. For example, if you identified Avalanche as a significant hazard, and determined an asset such as the Clinic to be located in an avalanche zone, the Clinic may be a community vulnerability.

Below is a small set of examples.

- The North Creek Sewage Treatment Plant is located in the 100-year floodplain and has been damaged in past events.
- Newberg City recently annexed the South Woods area located in the wildland-urban interface. The City’s land use and building codes do not address wildfire hazard areas. Future development in South Woods will increase vulnerability to wildfires.
- The lighthouse, of significant historic value, is threatened by erosion from coastal flooding. The rate of erosion is 5 feet per year.
- Residents of the Village describe ground failure impacts such as some homes and facilities sinking on their pilings, particularly in the downtown “old town” area.
- The boardwalk to the new school, which is used for evacuation, has ground failure damage.
- The community’s marine fuel header has begun to sink into the ground and slant to one side.

Community Vulnerability Statements:

**Note: You many have more or less than 15 statements.*

- 1.) The community is near a fault line that has been experiencing many earthquakes recently and is concerned about a large earthquake hitting soon. Older buildings are particularly at risk.
- 2.) The entire beach front experiences erosion putting homes and nearby buildings at risk. Icebergs contribute to erosion.
- 3.) Many homes are not winterized, and people have to run their water continuously to prevent their pipes from freezing during extreme cold events. Access to water is an issue for homes not connected to the City water.
- 4.) Severe wind is a high concern for the community. Structures have lost tin roofs and flying debris is a hazard. Medivacs and air transportation is limited during high wind events.
- 5.) The community has experienced winter weather events where they could not keep up with snow removal and they were now able to get their air traffic in for several days. A community member was lost due to this event. Freezing events also happen and present a hazard on the roads. The community has a steep road that is dangerous during these events.
- 6.) The community is surrounded by grass and alders. Many community members use burn barrels which cause fires. There is limited cell service near the incinerator. If a spark ignites the tundra it can smolder and go unnoticed.

Community Vulnerability Statements (Continued):

7.) _____

8.) _____

9.) _____

10.) _____

11.) _____

12.) _____

13.) _____

14.) _____

15.) _____

WORKSHEET #5: MITIGATION GOALS

Mitigation goals are general guidelines that explain what the community wants to achieve with the Tribal Hazard Mitigation Plan. They are broad policy-type statements that are long-term, and represent the vision for reducing or avoiding losses from the identified hazards.

The following are a few examples of mitigation goals.

- Promote development that is disaster-resistant.
- Build capacity of the Tribe to prepare, respond to, and recover from disasters.
- Reduce possibility of damages from [disaster].
- Promote recognition and mitigation of all natural hazards that affect the Community.
- Prevent damage to structures and infrastructure.
- Promote cross-referencing of mitigation goals and actions with other Tribal planning mechanisms and projects.

Using the previously created vulnerability statements as a guide, and the provided examples, create the Community Tribal Hazard Mitigation Plan (THMP) Mitigation Goals.

Mitigation Goals:

**Note: You may have more or less than 15 statements.*

- 1.) Reduce the possibility of damages due to earthquakes. _____
- 2.) Reduce the possibility of damages due to erosion. _____
- 3.) Reduce the possibility of damages due to extreme cold events. _____
- 4.) Reduce the possibility of damages due to severe wind. _____
- 5.) Reduce the possibility of damages due to severe winter weather. _____
- 6.) Reduce the possibility of damages due to wildfires. _____
- 7.) Promote development that is disaster-resistant. _____
- 8.) Build the capacity of the Tribe to prepare, respond to, and recover from disasters. _____
- 9.) Promote recognition and mitigation of all natural hazards that affect the Community. _____
- 10.) _____

- 11.) _____

- 12.) _____

Worksheet #6 Mitigation Actions

ACTIONS
Column B2
Description
Earthquake - securing shelving in library, Encourage people to secure wall mounts/tv/bookshelves, back up water if waterline breaks, City has an oncall maintenance, clean up old buildings (tear down, land ownership needs to be established /) Training for hazmat for building clean up of older structures,
Erosion - Feasibility Study, Sheet Piling?, structure relocations, culvert, rock lined ditches
Extreme Cold - Extra blankets/supplies at clinic, Reminders about checking pipes (post office flyers), flyer about appropriate winter gear
Severe Wind - Continue to repair roofs, flyers for securing loose objects, ideas to share with community to better insulate windows, back up power source, wind turbine?, encourage back up food storage, continue food bank
Severe Winter Weather - emergency supplies (education) checklist, winterization checklist, continue road maintenance, supply of ice cleats,
Wildfire - fire extinguishers for homes, educate on proper burning procedures, enforce trash burning laws, education on keeping water source or leaving barrel unattended while burning (proper places to burn) [Coffee Point], educating home owners on proper fire barrier,
evacuation plan (Chucky's Hill, Community Village Trail - road rehab)
Emergency Plan
Emergency 72-hour kits
Spot App/ GPS Device (Communication Device)
Emergency Shelter (emergency supplies, generator) - Underground

Community Meeting

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

Date / Location: October 23, 2018 at 6 PM / Egegik Tribal Council Building

Sign In Sheet

Name	Name	Name
Merrianna Boehm	Charles S. Abalama	
★ Ashley Strickland	Craig Chernikoff	
★ Pam Hainzel		
Richard Alto		
Steph in		
★ Josh W. Boehm		
Lynn Gravelle		
Penny Johnson		
Debbie Olsen		
Gerald Olsen Sr		
Anthony Gaskill		
William R. Hoff		
Ben Chernikoff		
Robert Alto		
Jessica Chernikoff		
Jamie Chernikoff		
Seede Chernikoff		



EGEGIK TRANSPORTATION SAFETY PLAN & HAZARD MITIGATION PLAN

COMMUNITY MEETING

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

We want to hear from you!

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

Posting date 10/15/2018

**Wednesday
October 24, 2018
6:00 PM**

**Egegik Tribal
Council Buiding**

Refreshments

Door Prizes

**Discuss the
future of Egegik!**

For more information or to
submit comments contact:

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

Bristol



ENGINEERING
SERVICES COMPANY, LLC

Bristol



ENGINEERING
SERVICES COMPANY, LLC

111 W. 16th Avenue, Third Floor
Anchorage, AK 99501-5169
phone (907) 563-0013
fax (907) 563-6713
www.bristol-companies.com

Community Meeting Handout **Egegik Tribal Transportation Safety Plan** October 24, 2018

Dear Participant;

Thank you for attending the public meeting for the Egegik 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.

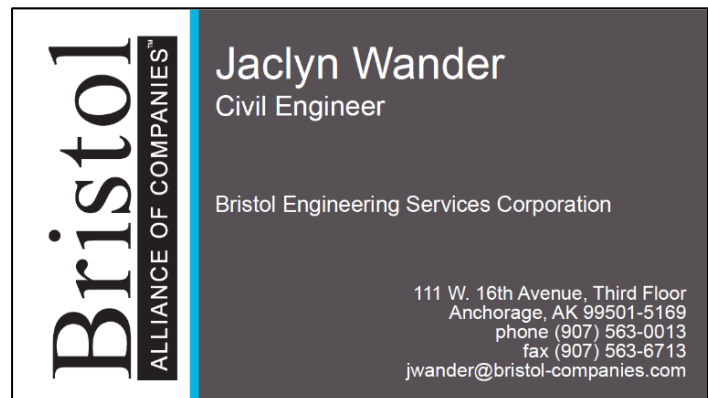
Bristol Engineering has been contracted by Bristol Bay Native Association (BBNA) on behalf of the Egegik Village Council to develop a Tribal Transportation Safety Plan (TTSP) for your community. A TTSP is a collaborative and comprehensive document that identifies transportation safety issues and strategies 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





Community Meeting Handout Egegik Tribal Hazard Mitigation Plan October 23, 2018

Dear Participant;

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

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

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

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

Sincerely,

Danielle Dance
Civil Engineer I

Attachments:

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





Bristol Bay Native Association Transportation and Infrastructure Development

August 2018 Newsletter 1

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

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

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

What is Hazard Mitigation?

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

Why Do We Need A Hazard Mitigation Plan?

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

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

The Planning Process

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

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

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

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

We Need Your Help

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

Establishing a Planning Team is a very important step.

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

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

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

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

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

BBNA Tribal Hazard Planning Team

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

Public Participation

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

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

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

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

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

Volcano Information

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

Weather Information

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

WEBSITES

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



TAKE ACTION AND PREPARE



FEMA V-1021
Catalog No. 1872-3

April 2018

There are many ways to take action and prepare before a disaster occurs.
The actions on this card include some of the most important ways to help
yourself, your family, and your community increase your preparedness.
Simple actions at home and in your neighborhood can make a big difference!



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[Fema.gov/mobile-app](https://fema.gov/mobile-app)



Ready.gov/prepare



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[Facebook.com/readygov](https://facebook.com/readygov)



[Fema.gov/mobile-app](https://fema.gov/mobile-app)



Ready.gov/prepare



12 WAYS TO PREPARE



Sign up
for Alerts
and Warnings



Make a Plan



Save for a
Rainy Day



Practice
Emergency
Drills



Test Family
Communication
Plan



Safeguard
Documents



Plan with
Neighbors



Make Your
Home
Safer



Know
Evacuation
Routes



Assemble or
Update
Supplies



Get Involved in
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Your Community



Document and
Insure Property

Bristol
Engineering Services Company, LLC

Egegik Village
Public Meeting
October 24, 2018

Egegik Village Tribal Transportation Safety Plan

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

Bristol
Engineering Services Company, LLC

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October 24, 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.**

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October 24, 2018

Presentation Overview

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



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Engineering Services Company, LLC

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Tribal Transportation Safety Plan

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

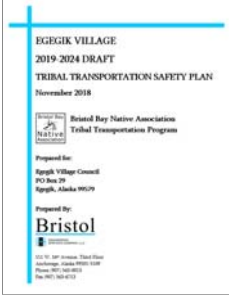
~ U.S. Department of Transportation Federal Highway Administration
Developing a Transportation Safety Plan

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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
- Evaluates Existing Efforts



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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"

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Four E's of Safety

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



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Safety Plan Development

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



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Safety Partners

- ▶ Egegik Village Council
- ▶ City of Egegik
- ▶ Becharof Corporation
- ▶ Egegik Clinic
- ▶ Alaska State Troopers
 - King Salmon Post
- ▶ BBAHC
- ▶ BBNA
- ▶ Bristol Engineering / BBNC
- ▶ Alaska DOT&PF
- ▶ FHWA
- ▶ BIA TTP
- ▶ DNR / Coast Guard



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Existing Safety Efforts

- ▶ City Road Maintenance
 - Grade roads
 - Replace streetlights
 - Snow plowing
- ▶ City Airport, Dock & Beach Maintenance
- ▶ Tribe Trail maintenance
 - Brush cutting
 - Gravel
- ▶ Health Aid in Summer
- ▶ Volunteer Community Response Efforts
 - Word-of-mouth community awareness
 - Volunteer first responders
 - Volunteer private vehicles to transport injured people / search & rescue



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Data Collection

- ▶ Anecdotal Crash Data
- ▶ Traffic Counts
- ▶ Public Surveys

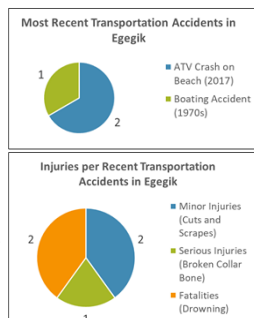


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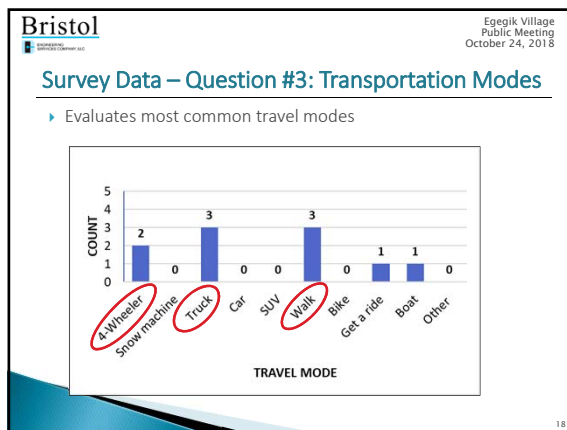
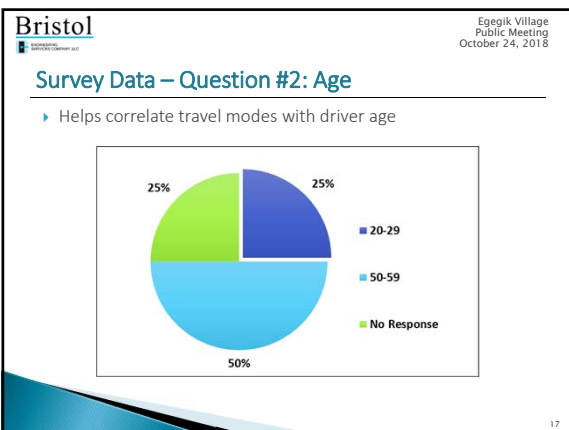
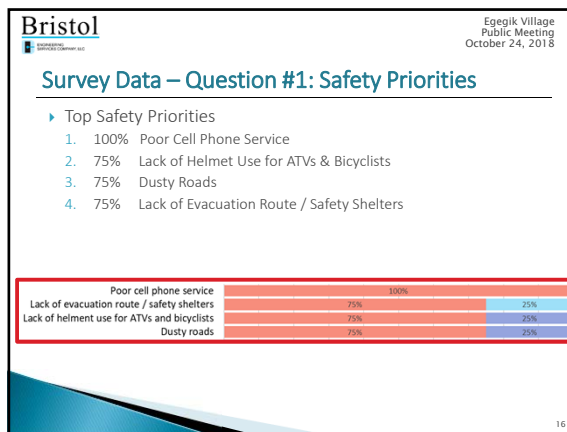
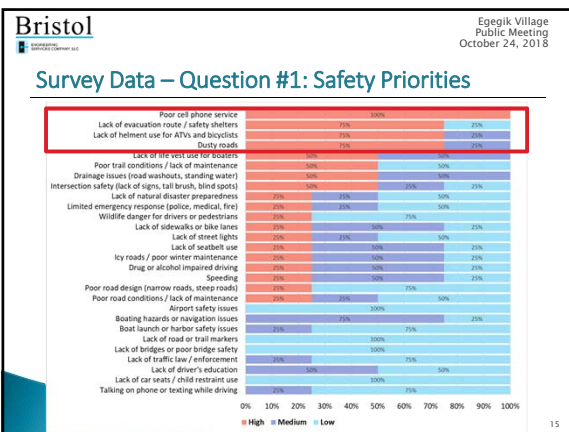
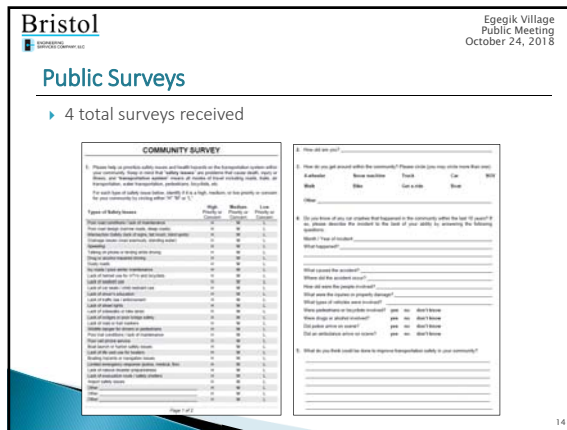
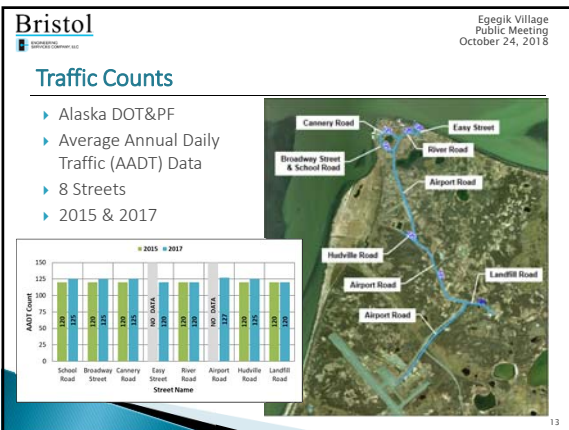
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Anecdotal Crash Data

- ▶ 2 ATV Crashes Last Summer
 - Both involved hitting set nets on beach
 - Crash 1
 - 26-y.o. male w/ 5-y.o. son
 - Face cuts
 - Crash 2
 - 16-y.o. female
 - Broken collarbone
- ▶ 1 Boating Accident in 1970s
 - Small skiff, evening, rough waters, drinking
 - 2 Fatalities



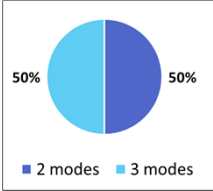
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Survey Data – Question #3: Transportation Modes

► How many answers did people circle?



50% 50%

■ 2 modes ■ 3 modes



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Survey Data – Question #4: Car Crashes

► Response 1

- Four wheeler speeding on wrong side of road around blind corner
- Smacked into truck slowly turning
- Downtown by Icicle
- None or minor injuries

► Response 2

- Trucks driving too fast at corners
- Probably intoxicated
- Young teens or early 20s
- Bent up vehicles, no injuries

► Other crashes?



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Survey Data – Question #5: Strategies

► What could be done to improve transportation safety?

- Fix roads
- Slow down, especially at night

► Other strategies?



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October 24, 2018

Candidate Emphasis Areas

► Speeding / Dust

- Signs
- Water truck
- Education

► Road Conditions

- Cut brush at blind corners
- Street signs
- Fix steep / narrow roads
- Improve drainage
- Maintenance / storage building

► Trail Conditions

- Better cell phone service
- Cut brush
- Mark set nets

► Boating Safety

- Tribal boat for search & rescue
- Life vest loaner board
- Beach grading
- Education

► Others? Comments?

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Implementation Plan

EMPHASIS AREA #3		STRATEGIC LINKAGE			
KEY ACTIONS	TARGET OUTPUT	RESPONSIBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
OBJECTIVES Reduce the risk and severity of speeding-related car crashes.					
SUCCESS INDICATORS Slower driving speeds around the community.					
EDUCATION	Install more speed limit signs around the community, as needed.	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 increase enforcement of speed limits, especially within the school zone before and after school.	Transportation Coordinator, Tribal Administrator	Ongoing, especially during school months	Reduced number of complaints from community members about speeders.	Keep record of speeding-related accidents before and after installation of speed bumps.
ENGINEERING	Install painted speed bumps at ideal locations to reduce speeds, especially within the school zones or on streets with high pedestrian traffic.	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 SERVICES	Maintain a local VPSO. Incentivize people to join the volunteer emergency response team to respond to traffic accidents caused by speeding or other factors.	Transportation Coordinator, Tribal Administrator	Ongoing	Number of days the VPSO patrolled the school zone. Increased number of volunteers on the emergency response team.	Schedule seasonal meetings with the VPSO & response team to monitor performance.

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October 24, 2018

Next Steps

► Public Surveys!!

► Draft Safety Plan

- November-December 2018
- Collect public comment

► Final Draft Safety Plan

- January-February 2019
- Council review

► Final Safety Plan

- June 2019
- Resolution

► Implementation




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Egegik FEMA Tribal Hazard Mitigation Plan

Bristol Engineering Services Company, LLC
Danielle Dance

Bristol
ENGINEERING SERVICES COMPANY, LLC

Egegik Village Public Meeting
October 24, 2018

Presentation Overview

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

U.S. Army Corps of Engineers, Alaska District
Alaska Baseline Erosion Assessment
Erosion Information Paper - Egegik, Alaska
March 3, 2009

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Project Background

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

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October 24, 2018

FEMA Tribal Hazard Mitigation Plan (THMP)

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

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Bristol
ENGINEERING SERVICES COMPANY, LLC

Egegik Village Public Meeting
October 24, 2018

Funding

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

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Identified Hazards

- ▶ Hazards Identified Based on
 - Location
 - Extent
 - Probability of Future Event
 - Overall Significance
- ▶ Hazards Detailed in Plan
 - Location
 - Extent
 - History
 - Probability of Future Events
- ▶ Hazards
 - Earthquake
 - Erosion
 - Extreme Cold
 - Severe Wind
 - Severe Winter Weather
 - Wildfire
- ▶ What experiences have you had?

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Community Assets

- ▶ Asset
 - People
 - Economy
 - Built Environment
 - Natural Environment
- ▶ Major Community Assets
 - Community Center
 - Library
 - Post Office
 - Church / Cemeteries
 - Clinic
 - Roads / Trails
 - Airport
 - Utilities
 - Landfill
 - Canneries
 - Beach
 - Other

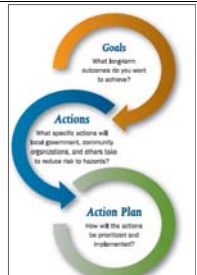


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October 24, 2018

Mitigation Goals

- ▶ Goals Based on Vulnerability Statements
 - The Community is experiencing more earthquakes recently. Older buildings are at risk.
 - The entire beach front experiences erosion putting homes and nearby buildings at risk.
 - People have to continuously run water during extreme cold events to prevent pipes from freezing.
 - Medivacs and air transportation is limited or delayed during high wind events.



FEMA Local Mitigation Planning Handbook
March 2013

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October 24, 2018

Mitigation Goals

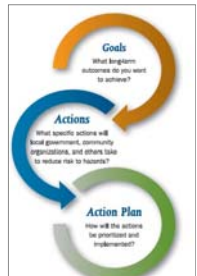
- ▶ Community Goals
 - Reduce possibility of damages due to:
 - Earthquake
 - Extreme Cold
 - Severe Winter Weather
 - Erosion
 - Severe Wind
 - Wildfire
 - Promote development that is disaster-resistant.
 - Build the capacity of the Tribe to prepare, respond to, and recover from disasters.
 - Promote recognition and mitigation of all natural hazards that affect the Community.

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Mitigation Actions

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



FEMA Local Mitigation Planning Handbook
March 2013

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October 24, 2018

Mitigation Actions (Continued)

- ▶ Mitigation Actions
 - Encourage residents to secure objects to wall
 - Construct rock lined ditches
 - Supply ice cleats
 - Develop a winterization checklist
 - Securing objects outside
 - Encourage / educate about fire extinguishers in home
 - Educate on proper burning procedures
 - Educate on proper fire barrier
- ▶ Enforce trash burning laws
- ▶ Emergency plan
- ▶ Tribally owned communication device
- ▶ Emergency supplies / 72-hour kits
- ▶ Maintain evacuation routes
- ▶ What other suggestions do you have?

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Egegik Village

Public Meeting

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Continued Public Involvement

Public Involvement is Important

Next Steps

How can the Planning Team keep you informed and involved in this process?

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Questions or Comments

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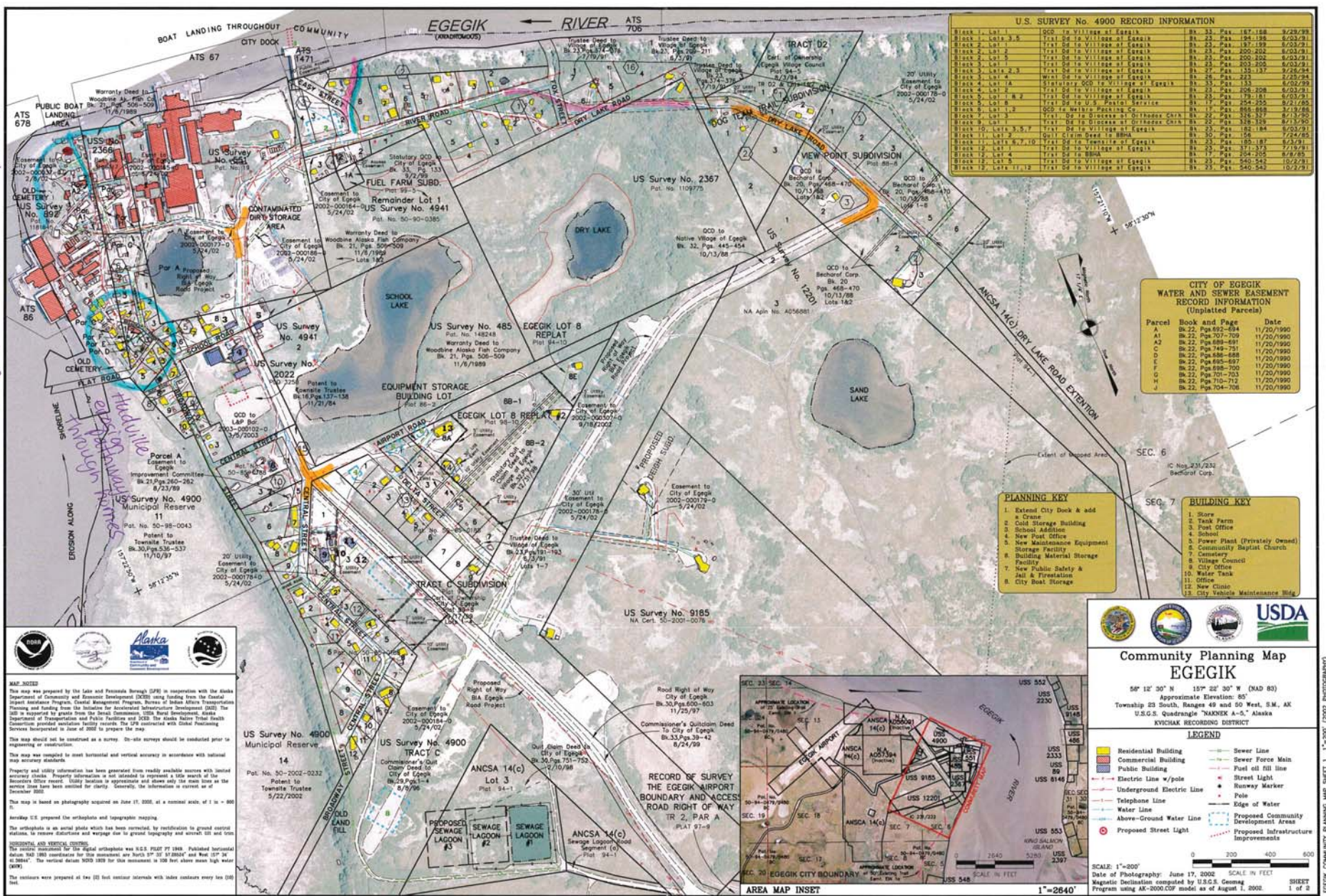
October 24, 2018

QUYANA!

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Road Rehab
 Blind corners
 Kids don't float
 sign or cabinet
 erosion concerns



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

EGEGIK
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 57

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

4-wheeler

Snow machine

Truck

Car

SUV

Walk

Bike

Get a ride

Boat

Other _____

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

Month / Year of incident N/A

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

EGEGIK
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 25 years old

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 unknown

What happened? four wheeler speeding & driving on wrong side of the road around a blind corner. Struck into a truck slowly turning.

What caused the accident? four wheeler

Where did the accident occur? Downtown by icicle

How old were the people involved? unknown

What were the injuries or property damage? unknown property. Both men walked away okay

What types of vehicles were involved? truck & four wheeler

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?

Honestly if four wheelers would slow down, especially late at night I feel it would be more safe but unfortunately that's a personal choice even though we have set speed limits posted for safety

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

EGEGIK
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 59

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 N/A

What happened? _____

What caused the accident? _____

Where did the accident occur? _____

How old were the people involved? _____

What were the injuries or property damage? _____

What types of vehicles were involved? _____

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

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

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

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

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

Fix Roads

COMMUNITY SURVEY

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

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

Types of Safety Issues	High Priority or Concern	Medium Priority or Concern	Low Priority or Concern
Poor road conditions / lack of maintenance	H	M	L
Poor road design (narrow roads, steep roads)	H	M	L
Intersection Safety (lack of signs, tall brush, blind spots)	H	M	L
Drainage issues (road washouts, standing water)	H	M	H
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

EGEGIK
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? N/A

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? Most likely driving too fast at corners then off the road

What caused the accident? probably intoxicated

Where did the accident occur? _____

How old were the people involved? young - teens or early 20's

What were the injuries or property damage? NO injury - bent up vehicle

What types of vehicles were involved? trucks

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

EGEGIK
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 30

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
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?

I don't know

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

EGEGIK
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 62 years

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?

clear corners of Brush

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

EGEGIK
2019 TRIBAL TRANSPORTATION SAFETY PLAN

2. How old are you? 36

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

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

Other _____

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

Month / Year of incident None

What happened? _____

What caused the accident? _____

Where did the accident occur? _____

How old were the people involved? _____

What were the injuries or property damage? _____

What types of vehicles were involved? _____

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

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

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

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

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

Connect

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

EGEGIK
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2. How old are you? 53

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?

APPENDIX C: IMPLEMENTATION PLAN

IMPLEMENTATION PLAN

EMPHASIS AREA #1			STRATEGIC LINKAGE			
Speeding / Dust			► 38% of survey participants marked "speeding" as a high priority. ► 50% of survey participants marked "dusty roads" as a high priority. ► Two accounts of ATV / car accidents due to speeding described on survey. ► Health risks of dust emissions from gravel roads.			
OBJECTIVES						
Decrease speeding throughout the community to reduce the risk of ATV or car accidents and reduce dust emissions.						
SUCCESS INDICATORS						
Noticable decreased speeds						
4Es	ACTIONS	TARGET OUTPUT	RESPONISBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Install speed limit sign. Install slow signs on corners. Hang posters for awarness about the health hazards of dust.	Improve community awareness about speed limits and blind corners on the roads, and about the health risks of road dust.	City and Village	2020	Road signs ordered and installed. Posters ordered and hung up around town.	Discuss effectiveness of signs and posters at monthy Council meetings.
ENFORCEMENT	Continue to monitor speeds by talking with each other. Evaluate options for Tribal Council adopting a warning system for repeat offenders.	Develop a system to monitor speeds and penalize speeders.	City and Village	On-going	Signed Tribal ordinance or Resolution adopting a warning system.	Evaluate speeding offenses and the need to improve enforcement efforts.
ENGINEERING	Purchase Village water truck to mitigate dust.	Reduced dust emissions in the summers. Improved air quality.	Village Council	2023	Truck procurement. Operator training.	Develop a maintenance system.
EMERGENCY SERVICES	Purchase dust masks to have available at clinic and/or Tribal building.	Provide protection for people sensitive to dust.	Village and Clinic	2019-2020	Mask procurement. Community outreach.	Check and replenish stock of masks once per year, or as needed.

IMPLEMENTATION PLAN

EMPHASIS AREA #2			STRATEGIC LINKAGE			
Road Conditions			► Notable deterioration of road surface due to erosion and flooding. ► 38% of survey participants marked both "intersection safety" and "drainage issues" as a high priority. ► Two accounts of ATV / car accidents occurring at a blind corner described on the public survey.			
OBJECTIVES						
Improve intersection safety and year-round access through road widening, grade reduction, road rehabilitation, and improved drainage.						
SUCCESS INDICATORS						
Successful road rehabilitation.						
4Es	ACTIONS	TARGET OUTPUT	RESPONISBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Install turn warning signs at intersections and blind corners.	Improve driver awareness about blind corners and intersections.	Village and City	2020	Road signs ordered and installed.	Discuss effectiveness of signs at monthly Council meetings.
ENFORCEMENT	Continue combined effort to keep roads maintained, including brush cutting.	Internal enforcement of road maintenance efforts. Reduce brush at intersections to improve visibility of oncoming traffic.	City and Village	On-going	Brush cutting at least once per year.	Evaluate other enforcement methods to protect road conditions.
ENGINEERING	Work with Bristol Engineering for road rehabilitation projects. Construct Maintenance Storage Building.	Rehabilitate deteriorating / washed out roads. Protect maintenance equipment.	Village (road rehab, and storage building), Village and City (Maintenance)	In Progress	Completed planning, funding, design, permitting, and construction of projects.	Develop project budgets and schedules to stay on track.
EMERGENCY SERVICES	Continue road maintenance (grading out potholes, culvert cleaning). Maintain Chucky's Hill and the trail to village council for emergency access to higher ground.	Ensure emergency vehicles have safe / rapid access to entire village. Provide an emergency evacuation route in case of a major flood.	City	On-going	Annual maintenance efforts.	Evaluate maintenance efforts at monthly Council meetings.

IMPLEMENTATION PLAN

EMPHASIS AREA #3			STRATEGIC LINKAGE			
Trail Conditions			► Two accidents on beach in summer 2017 involving ATVs hitting unmarked set nets, resulting in minor to serious injuries. ► Lack of cell phone service on hunting trails.			
OBJECTIVES						
Improve communications and safety of local trail system and reduce risk of set net accidents on beach trail.						
SUCCESS INDICATORS						
Expanded cell network, improved trail conditions, zero accidents on beach in subsequent years.						
4Es	ACTIONS	TARGET OUTPUT	RESPONISBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Install signs on beach regarding set net requirements. Encourage use of GPS tracking applications while traveling on trails.	Improve awareness about beach safety and proper set net placement. Provide a means to find people in case they get lost, stuck, or injured out on trails.	Village and Community	Yearly (summer)	Signs ordered and installed. Official forms community outreach.	Evaluate various forms of trail communication devices.
ENFORCEMENT	Require people to tie bright orange ribbons on set nets.	Improve visibility of set nets on beach to prevent people from hitting ropes with ATVs.	Village and Community	Yearly (summer)	Postings or announcements.	Periodically remind people to mark their set nets.
ENGINEERING	Continue brush cutting on trails. Continue grading beach trails. Continue to replace boards for creek crossings.	Trail maintenance to improve safety and accessibility of trails. Improve safety and access at creek crossings.	Village and City, City (Grading), Volunteers (boards at creek crossings)	As needed or annually	Completion of scheduled maintenance activities.	Discuss maintenance needs at monthly Council meetings.
EMERGENCY SERVICES	Relocate existing cell tower or install new cell tower. Develop an emergency action plan for rescuing lost / stranded travelers.	Improve cell communication on trails for emergencies. Improve response time of search and rescue.	Village, GCI	2024	Coordination w/ communications company. New or replaced tower.	Stakeholder coordination.

IMPLEMENTATION PLAN

EMPHASIS AREA #4			STRATEGIC LINKAGE			
Boating Safety			► Boating and fishing is a primary component of local the culture and economy. Approximately 600 to 700 boats are stationed in Egegik Bay every summer. ► One boating accident resulting in a fatality in the 1970s. ► 25% of survey participants marked "lack of life vest use" as a high priority.			
OBJECTIVES						
Reduce the risk of boating accidents on local waterways.						
SUCCESS INDICATORS						
Zero boating accidents in subsequent years, higher use of life jackets, enhanced emergency response resources.						
4Es	ACTIONS	TARGET OUTPUT	RESPONISBLE PARTIES	DATE OF COMPLETION	PERFORMANCE MEASURES	MONITORING AND EVALUATION
EDUCATION	Encourage residents to wear life jackets. Utilize Kids Don't Float curriculum. Community educational outreach via public bulletin boards.	Improve boating education within community and provide safety resources.	Community	On-going	Community meetings or announcements.	Collect public feedback to schedule future boating safety classes.
ENFORCEMENT	Coordinate with regulating agencies to continue boat inspections for proper safety gear and life jacket use.	Improve compliance with safety regulations and improve use of safety gear.	Alaska Department of Fish & Game, US Coast Guard	On-going	N/A	Discuss boating enforcement needs at Council meetings.
ENGINEERING	Construct Kids Don't Float cabinet and sign.	Provide rental life jackets for public and advertise availability.	City and Village	Summer 2019	Participation in Kids Don't Float program. Construction of loaner board.	Continue to replace life vests, as needed.
EMERGENCY SERVICES	Acquire a search and rescue boat and trailer.	Ensure a vehicle is always available for search and rescue operations.	Village	2023	Funding and acquisition of vehicles.	Maintain vehicles.

APPENDIX D: RESOLUTION

The Egegik Village Council

Resolution No. 07-19

A Resolution adopting the

Egegik 2019-2024 Tribal Transportation Safety Plan

WHEREAS, the Egegik Village hereafter "Tribe" is a federally recognized tribe; and

WHEREAS, the Egegik 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 Egegik; and

WHEREAS, the Tribe has gained significant community input on identifying transportation safety concerns and priorities for Egegik through a public survey administered in September and October of 2018 and a public meeting held on October 25, 2018; and

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

CERTIFICATION

The Egegik Village Council has adopted this resolution during a meeting held on 6-3, 2019, in Egegik, Alaska, with a quorum present.

For 4 Against 0 Abstain 0 Present 4 Absent 0

Ben Chernikoff
Ben Chernikoff, First Chief

Roberta Alto
Tribal Secretary

Ben Chernikoff
Print Name

Roberta Alto
Print Name