



## SCOPE OF WORK: COMPREHENSIVE SUBSISTENCE BASELINE UPDATE FOR EASTERN-INTERIOR AND NORTH SLOPE OF ALASKA

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### INTRODUCTION

Between 2011 and 2013, the Division of Subsistence will conduct comprehensive subsistence baseline studies in Alaska communities located along the proposed corridor of a natural gas pipeline. These communities span from the northern coast of Alaska, through the eastern-interior to Delta Junction, then along the Alaska Highway to the border with Canada. This project is referred to as the Alaska Pipeline Project or APP.

The potential development of APP necessitates updated baseline information about the full range of subsistence harvests, uses, and areas of harvest, as well as demographic and economic information to understand the subsistence way of life in all its complexity. The communities included in this study are located within 50 miles of the proposed pipeline route (See Figure 1). Based on existing information, a 50 mile radius reflects the distance road-connected communities may travel to meet their subsistence needs. Thirty-one communities have been identified within 50 miles of the route or have been identified by APP as communities that need updated subsistence data. Two of the 31 communities were surveyed in 2011 which leaves a total of 29 communities (see Table 1).

In order to complete the work in a timely manner the communities were broken down into a two-year study plan (see Table 1). Year 1 will be conducted in 2012 for the 2011 calendar study year and will consist of 15 communities with an estimated 907 households. Year 2 will be conducted in 2013 and will cover the 2012 calendar study year and will comprise 14 communities with approximately 2951 households. The focus in the first year on generally smaller communities reflects the more limited time available to work with communities to set up the project. Year 1 also reflects a wide diversity of communities in size and geographic scope for a representative sample of communities located along the pipeline route. Several of the large communities in Year 2 will take more time for community consultation as well as to design a sampling strategy.

This study will be conducted by the Division of Subsistence of the Alaska Department of Fish and Game (ADF&G) in collaboration with the study communities. The data collection will follow standard ADF&G comprehensive household baseline survey methods, as outlined in the Community Subsistence Information System (CSIS), and which routinely address FERC's seven specific requirements for subsistence analysis: 1) detailed harvest data linked to locations; 2) spatial and temporal trends in subsistence use; 3) harvest maps; 4) demographic data; 5) profiling

of community-level subsistence patterns; 6) associations between subsistence harvests and other economic activities; and 7) descriptions of subsistence use patterns and trends based on local and traditional knowledge. In addition the Division of Subsistence will include a Health Impact Assessment (HIA) component to the survey. This component was developed in cooperation with the Department of Health and Social Services and their contractor for the HIA, Newfields.

Communities will be first consulted and given a presentation on the scope of the work and the timeline. Community support will be sought. If communities decide not to participate a community from the Year 2 list will be chosen based on criteria such as representative size and geographic location. The community will be contacted again in Year 2 to be given a second opportunity to participate in the project. Communities will be asked to provide a letter of support. Local community liaisons will be contracted either through the community or directly to assist with household surveys and data collection. Study findings will be presented to the community following the project and comments incorporated in the final report. This project will produce two final reports; one for each study year which will be presented to the project contractor APP and will be available to the public on the ADF&G website.

## GENERAL STUDY OBJECTIVES

- A. Design a survey instrument to produce updated comprehensive baseline information about subsistence hunting, fishing, and gathering and other topics that address subsistence needs and are compatible with information collected in past household interviews.
- B. Conduct community scoping meetings.
- C. Train community liaisons in administration of the systematic household survey.
- D. Conduct household surveys to record the following information:
  - 1. Demographic information.
  - 2. Involvement in use, harvest, and sharing of fish, wildlife, and wild plants in their study year (i.e. 2011 or 2012).
  - 3. Estimates of amount of resources harvested in their study year.
  - 4. Information about employment and cash income.
  - 5. Assessments of changes in subsistence harvest and use patterns.
  - 6. Location of fishing, hunting, and gathering activities in their study year.
- E. Collaboratively review and interpret study findings.
- F. Communicate study findings to the communities.
- G. Produce a final report.

## DESCRIPTION OF SERVICES TO BE PERFORMED

A. PRE-WORK MEETINGS: ADF&G will work with community/tribal governments in the study communities to obtain community approvals of the research, identify local research assistants and key respondents, finalize the project schedule, and organize community planning and data review meetings.

B. RESEARCH DESIGN: ADF&G will prepare a draft research design according to overall purpose, standards, methods, and schedules delineated in the aforementioned meetings by November 1<sup>st</sup>, 2011. Elements of the design will be discussed at community visits in the study communities in October, November, and December 2011. Following receipt of comments, the design, including the household survey will be revised and finalized in advance of January 2011. A key goal is to structure the survey instrument to collect the full complexity of subsistence activities, uses, needs, as well as demographic and other economic. The household survey instrument may be

modified in June 2011 for the following 2012 study year if any anomalies are detected during coding and analysis of data from Year 1.

**C. ALASKA FEDERATION OF NATIVES INFORMATION SESSION:** In October of each project year, the Division of Subsistence will contact communities in advance of the AFN Annual Meeting to inform them that ADF&G Division of Subsistence staff will be available to meet with them at any time during the AFN meeting to answer their questions or document their subsistence concerns.

**D. TRAINING OF SUBSISTENCE STAFF:** ADF&G Division of Subsistence will hold a 2-day training session in December 2011 and 2012 prior to the commencement of fieldwork for all ADF&G staff identified to take part. This training will directly address the collection of comprehensive baseline subsistence data and ethics training.

**E. SYSTEMATIC HOUSEHOLD SURVEYS:** ADF&G personnel will contract community liaisons and conduct an orientation session in each community. The goal will be to interview a representative of each year-round household in all the study communities. Participation will be voluntary and all individual and household level responses will be confidential. The contractors will conduct the household survey and ADF&G staff will conduct the harvest mapping component.

**G. FISHING, HUNTING, AND GATHERING LOCATIONS IN YEAR 1 AND YEAR 2:** During household interviews, respondents who harvested subsistence resources in 2011 and 2012 will be asked to indicate on maps the areas in which they hunted, fished, or gathered. ADF&G staff will collaborate with the community liaisons conducting the harvest surveys to visit resident's homes at the same time.

**H. DATA ENTRY AND ANALYSIS:** ADF&G staff will code surveys for data entry and analysis, and produce a set of standard tables and figures to serve as the basis for discussion and preparation of a final report. Data obtained concerning harvest locations will be used to create a set of harvest area maps at the community level.

**I. COMMUNITY REVIEW MEETINGS:** When preliminary survey findings are available, ADF&G staff, working with community governments, will organize community meetings in the study communities to present and discuss these results. Comments provided at these meetings will be included in the final report.

**J. FINAL REPORT:** ADF&G staff will write a draft final report, summarizing the results of the key respondent interviews, mapping, and systematic household surveys for each study year. The draft report will be submitted to the study communities and the contractor for review and comment. Upon receipt of these comments, the report will be finalized and each community will receive one. The report will be available to the public on the ADF&G website. Furthermore, a short (four-page) summary of the study findings will be mailed to every household in the communities.

**K. DATABASE:** The corrected, final data from the household survey will be added to the Division of Subsistence Community Subsistence Information System (CSIS). This publicly accessible database includes community-level study findings.

## PRODUCTS

- A. Research design
- B. Draft and final report
- C. Maps of areas used for fishing, hunting, or gathering subsistence resources in 2011 at the community level.
- D. Data set added to the Community Subsistence Information System at the community level.
- E. A short 4-page summary of research findings, provided to all households in the study communities.

## RELATIONSHIP WITH ALASKA NATIVE COMMUNITIES

The overall project is designed to encourage a collaborative, working relationship between ADF&G and the Alaska Natives living in the study communities. The ethical conduct of all researchers will meet or exceed the principles of conduct adopted by the Alaska Federation of Natives in 1993 and the Interagency Arctic Research Policy Committee, June 28, 1990. All personnel will work in a manner that develops, rather than jeopardizes, relations between ADF&G and Alaska Native peoples.

## WORK SCHEDULE

A general work schedule has been included as Table 2. Below is an outline of that schedule.

- A. July 2011 thru September 2011 – Project development and design
- B. October 2011 – Letters of project notice sent to Year 1 communities
- C. October 2011 – Information booth at AFN meetings
- D. October thru December 2011 – Year 1 community visits to introduce project and schedule survey
- E. December 2011 – Subsistence staff training, finalize research materials
- F. January thru March 2012 – Year 1 community household surveys
- G. January thru May 2012 – Data coding and analysis
- H. May thru June 2012 – Community review meetings
- I. June thru July 2012 – Prepare Year 1 draft of report
- J. June 2012 – Begin consultation with larger Year 2 communities
- K. July 31, 2012 – Draft report to APP
- L. August 31, 2012 – Final report to APP, 4-page overview to communities
- M. September 2012 – Letters of project notice sent to Year 2 communities
- N. October 2012 – Information booth at AFN meetings
- O. October thru December 2012 – Year 2 community visits to introduce project and schedule survey
- P. December 2012 – Subsistence staff training, finalize research materials
- Q. January 2013 thru March 2013 - Year 2 community household surveys
- R. January 2013 thru May 2013 – Data coding and analysis
- S. May thru June 2013 – Community review meetings
- T. May thru July 2013 – Prepare Year 2 draft of report
- U. July 31, 2013 – Draft report to APP
- V. August 31, 2013 – Final report to APP, 4-page overview to communities

## BUDGET NARRATIVE

The following tables provide overviews of estimated project costs. Table 3 includes costs for Year 1 of the project and Table 4 includes costs for year 2 of the project. The tables also include a separate section with additional costs to conduct the HIA.

The total project cost for Year 1 is \$845,491 of which \$741,658 is direct costs and \$103,832 is indirect costs (14% of direct costs). The budget includes approximately 11 months of the lead Subsistence Resource Specialist (SRS III) time to introduce the project in the 14 study communities, conduct the research, and write the final report. The budget includes 3.5 months of time for the Subsistence Program Manager to design and implement the project as well as to oversee the progress of the project and the final report. The budget also includes time for 5 permanent Subsistence Resource Specialists (SRS) and one Fish and Wildlife Tech with an average of 4.2 months in the first year to conduct the research and write the final report. A College Intern III will also participate in one community. Because of the nature and scope of the project, two additional non-permanent SRS staff will be hired for 9 months each. Research in communities will require the time of anywhere from 1-9 staff depending on the number of households in the community. Personnel costs also cover information management staff and a Publications Specialist for report preparation. Travel costs include one trip to each community to introduce the project, one trip for fieldwork (surveys and interviews), and a final trip for review of the study findings. Other project costs include hiring local research assistants in the 14 communities, survey instrument and report printing, and fieldwork and printing supplies. The cost of the HIA is estimated at \$18,370 of which \$16,114 is direct cost and \$2,256 is indirect costs. This includes staff time to administer the 1 page HIA component of the survey as well as staff time for information management to enter the data and create the tables.

The total project cost for Year 2 is \$1,068,074 of which \$936,907 is direct costs and \$131,167 is indirect costs (14% of direct costs). The budget includes approximately 11 months of the lead Subsistence Resource Specialist (SRS III) time to introduce the project in the 15 study communities, conduct the research, and write the final report. The budget includes 5 months of time for the Subsistence Program Manager to design and implement the project as well as to oversee the progress of the project and the final report. The budget also includes time for 5 permanent SRS staff and one Fish and Wildlife Tech with an average of 5.25 months in the second year to conduct the research and write the final report. A College Intern III will also participate in one community. Because of the nature and scope of the project, two additional non-permanent SRS staff will be hired for 9 months each. Research in communities will require the time of anywhere from 1-9 staff depending on the number of households in the community. Personnel costs also cover information management staff and a Publications Specialist for report preparation. Travel costs include one trip to each community to introduce the project, one trip for fieldwork (surveys and interviews), and a final trip for review of the study findings. Other project costs include hiring local research assistants in the 14 communities, survey instrument and report printing, and fieldwork and printing supplies. The cost of the HIA is estimated at \$30,185 of which \$26,478 is direct cost and \$3,707 is indirect costs. This includes staff time to administer the 1 page HIA component of the survey as well as staff time for information management to enter the data and create the tables.

Table 1. Community schedule by study year

Community	Estimated # of Households in 2010	Projected samples (%HHs)	Projected Number of HH survey	Study Year		
				2010	2011	2012
Alatna	12	90%	11		1	
Allakaket	44	90%	40		1	
Anaktuvuk Pass	99	90%	89		1	
Beaver	36	90%	32		1	
Bettles	9	90%	8		1	
Coldfoot	6	90%	5		1	
Dot Lake	7	90%	6		1	
Dot Lake Village	19	90%	17		1	
Dry Creek	29	90%	26		1	
Evansville	12	90%	11		1	
Healy Lake	7	90%	6		1	
Nolan	unknown	90%	unknown		1	
Tanacross	53	90%	48		1	
Tetlin	43	90%	39		1	
Tok	532	25%	133		1	
Wiseman	5	90%	5		1	
Alcan Border	16	90%	14			2
Barrow	1,280	25%	315			2
Delta Junction & Deltana	1161	25%	310			2
Kaktovik	72	90%	65			2
Livengood	7	90%	6			2
Minto	65	90%	59			2
Northway	27	90%	24			2
Northway Junction	20	90%	18			2
Northway Village	30	90%	27			2
Nuiqsut	114	90%	103			2
Rampart	10	90%	9			2
Stevens Village	26	90%	23			2
Mentasta	46			3		
Slana/Nabesna Road	77			3		

Category 1 = modified year one study communities; 2 = modified year 2 study communities; 3 = study communities with recent (<3 years) data

Table 2. ALASKA PIPELINE PROJECT WORK SCHEDULE

YEAR 1	July	August	September	October	November	December	January	February	March	April	May	June	July	August
Project Development and Design														
Start-Up/Orientation of new SRS III														
Budget Revision														
Letters Sent and Contacting Communities for Visit														
Interviewing and Hiring of Seasonal SRS Personnel														
Information Booth at AFN Meetings														
Preparing Community Presentation														
Community Visits to Introduce the Project														
Community Approval														
Baseline Study Interview Training														
Finalization of Interview Teams' Logistical Plans														
Household Interviews/Fieldwork														
Data analysis														
Community Reviews														
Write Draft Report of First Year's Findings														
Submit Draft of Second Year's Report														
Final Year 1 Report to APP														

YEAR 2	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August
Begin Consultation with with Larger Year 2 Communities															
Letters Sent and Contacting Communities for Visit															
Preparing Community Presentation															
Information Booth at AFN Meetings															
Community Visits to Introduce the Project															
Community Approval															
Baseline Study Interview Training															
Household Interviews/Fieldwork															
Data Analysis															
Community Reviews															
Write Draft Report of Second Year's Findings															
Submit Draft of Second Year's Report															
Submits Final Report to APP and overview to Communities															

**Table 3. APP Budget Year I**

<b>Personnel</b>		<b>\$578,234</b>
	Project management	\$129,613
	Community planning meetings	\$17,063
	Key respondent interviews	\$17,063
	Household surveys	\$85,761
	Data coding and review	\$58,578
	Community data review meetings	\$18,169
	Report preparation	\$102,155
	Leave for field personnel @ 15% of cost	\$64,260
	Data Management	\$78,926
	Leave for IM @ 15% of cost	(in above)
	Publications Specialist	\$6,645
<b>Travel and per diem</b>		<b>\$116,329</b>
	Community scoping meetings	\$27,196
	Research	\$59,437
	Community review meetings	\$27,196
	Data management	\$2,500
<b>Contractual</b>		<b>\$39,695</b>
	Local research assistants	\$22,245
	Survey & map printing	\$3,000
	Report Printing	100 copies @\$15/each
	Data management	\$5,000
	Key respondents (2 per community @ \$50/each)	\$1,200
	Translator Services	\$1,500
	Misc. (meeting space, ATV fuel, etc @ \$350/community)	\$5,250
<b>Supplies</b>		<b>\$7,400</b>
	Computer/Software/Recording Equipment	\$7,400
<b>Subtotal</b>		<b>\$741,658</b>
<b>Indirect @ 14%</b>		<b>\$103,832</b>
<b>Total</b>		<b>\$845,491</b>
<b>HIA Budget</b>		
<b>Personnel</b>		<b>\$16,114</b>
	Household survey collection	\$11,367
	Data entry / archiving (Program Technician and Intern)	\$1,791
	Data Analysis (Research Analyst III)	\$1,947
	Data validation and final product (Research Analyst I)	\$1,009
<b>Subtotal</b>		<b>\$16,114</b>
<b>Indirect @ 14%</b>		<b>\$2,256</b>
<b>Total</b>		<b>\$18,370</b>



**Table 4. APP Budget Year II**

<b>Personnel</b>		<b>\$691,440</b>
	Project management	\$80,557
	Community planning meetings	\$19,542
	Key respondent interviews	\$19,542
	Household surveys	\$176,060
	Data coding and review	\$61,056
	Community data review meetings	\$23,125
	Report preparation	\$102,155
	Leave for field personnel @ 15% of cost	\$72,305
	Data Management	\$130,453
	Leave for IM @ 15% of cost	(in above)
	Publications Specialist	\$6,645
<b>Travel and per diem</b>		<b>\$178,767</b>
	Community scoping meetings	\$42,123
	Research	\$92,021
	Community review meetings	\$42,123
	Data management	\$2,500
<b>Contractual</b>		<b>\$59,300</b>
	Local research assistants	\$41,050
	Survey & map printing	\$4,000
	Report Printing	100 copies @\$15/each
	Data management	\$5,000
	Key respondents (2 per community @ \$50/each)	\$1,000
	Translator Services	\$1,500
	Misc. (meeting space, ATV fuel, etc @ \$350/community)	\$5,250
<b>Supplies</b>		<b>\$7,400</b>
	Computer/Software/Recording Equipment	\$7,400
<b>Subtotal</b>		<b>\$936,907</b>
<b>Indirect @ 14%</b>		<b>\$131,167</b>
<b>Total</b>		<b>\$1,068,074</b>
<b>HIA Budget</b>		
<b>Personnel</b>		<b>\$26,478</b>
	Household survey collection	\$21,731
	Data entry / archiving (Program Technician and Intern)	\$1,791
	Data Analysis (Research Analyst III)	\$1,947
	Data validation and final product (Research Analyst I)	\$1,009
<b>Subtotal</b>		<b>\$26,478</b>
<b>Indirect @ 14%</b>		<b>\$3,707</b>
<b>Total</b>		<b>\$30,185</b>

# DIVISION OF SUBSISTENCE - ALASKA DEPARTMENT OF FISH AND GAME

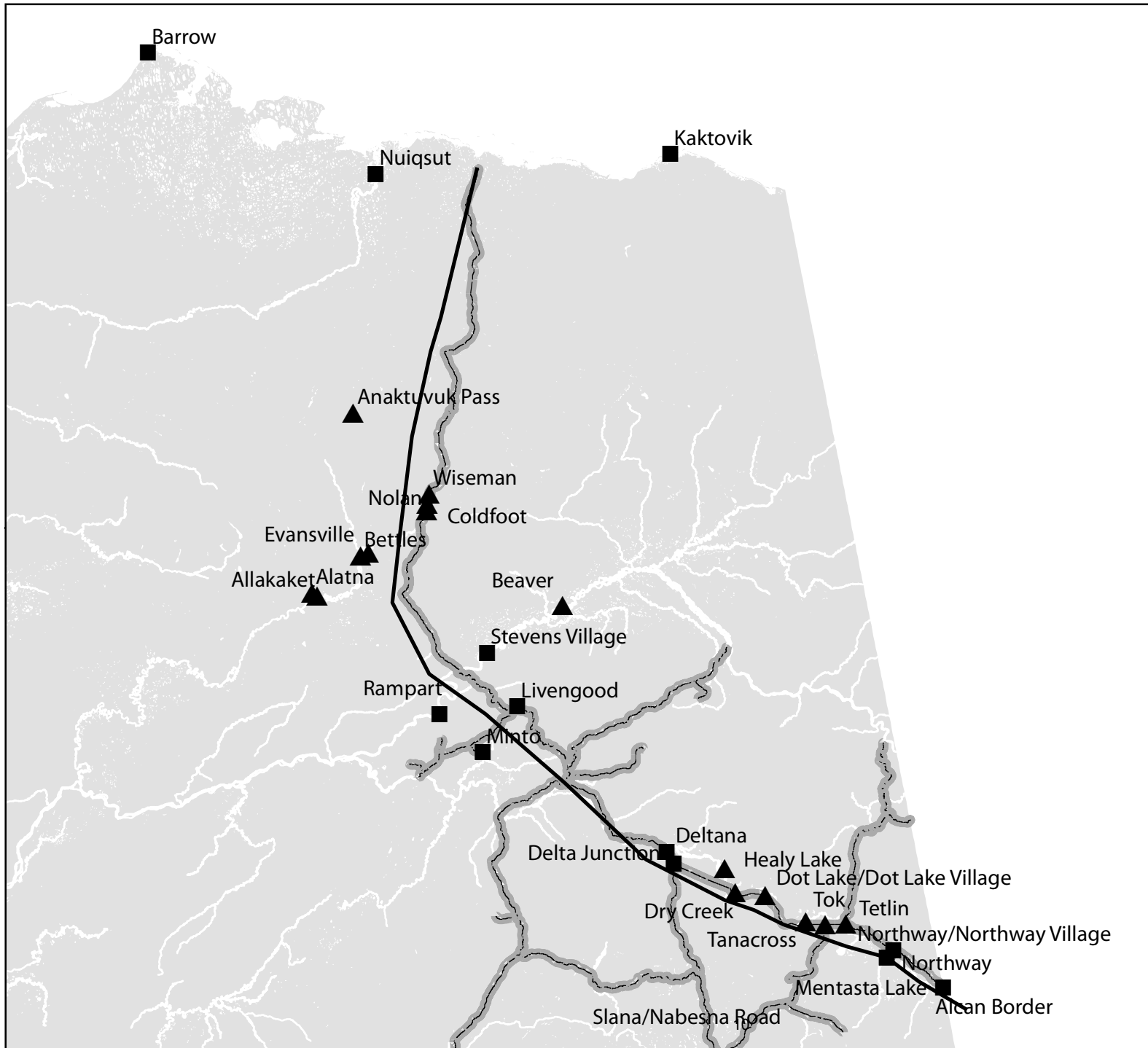


Figure 1.



## Study Communities

- ▲ Year 1
- Year 2

— APP



Alaska Highways

