

3 0455 0003 0457 6



BIA ALASKA RESOURCES LIBRARY
SUSITNA Hydroelectric Project Cantwell



SUSITNA HYDROELECTRIC PROJECT

FEDERAL ENERGY REGULATORY COMMISSION
PROJECT No. 7114

CANTWELL BUSINESS SURVEY REPORT

FRAZER ORTH & ASSOCIATES, INC.

UNDER CONTRACT TO

HARZA-EBASCO
SUSITNA JOINT VENTURE

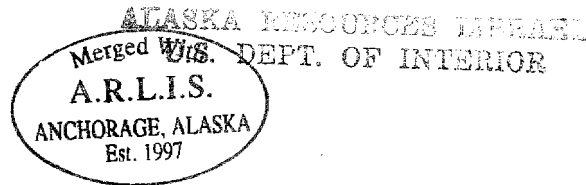
FINAL REPORT

**FEBRUARY 1984
DOCUMENT No. 1112**

ALASKA POWER AUTHORITY

APR 20 1984

Document No. 1112



TK
1425
.58
F472
no. 1112

SUSITNA HYDROELECTRIC PROJECT

CANTWELL BUSINESS SURVEY REPORT

Report by

Frank Orth & Associates, Inc.

Under Contract to
Harza-Ebasco Susitna Joint Venture

Prepared for
Alaska Power Authority

Final Report
February 1984

ARLIS
Alaska Resources
Library & Information Services
Anchorage, Alaska

NOTICE

ANY QUESTIONS OR COMMENTS CONCERNING
THIS REPORT SHOULD BE DIRECTED TO
THE ALASKA POWER AUTHORITY

TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
1.0 APPROACH AND METHODOLOGY	2
1.1 Overview	2
1.2 Objectives	2
1.3 Sampling Technique	3
1.4 The Questionnaire	4
2.0 ANALYSIS OF RESULTS	5
2.1 Introduction	5
2.2 Products and Services Provided	6
2.3 Duration in Business and Ownership	7
2.4 Characteristics of Employees	8
2.4.1 Full-time and Part-time Employees	8
2.4.2 Family Member Employees	9
2.4.3 Residence of Employees	10
2.5 Business Volume	11
2.6 Business Constraints	12
2.7 Plans for Expansion or New Business	13
2.8 Lodges	14
2.9 Businesses Dependent on Fish and Wildlife Resources	15
2.9.1 Businesses Dependent on Fishing Activities	15
2.9.2 Businesses Dependent on Hunting Activities	16
2.9.3 Businesses Dependent on Trapping Activities	17
APPENDIX A - TABULATION RESULTS	
APPENDIX B - SURVEY INSTRUMENT	
APPENDIX C - INSTRUCTIONS TO INTERVIEWERS	

LIST OF TABLES

Table 1:	Cantwell Businesses That Were Interviewed	6
Table 2:	Standard Industrial Codes for Cantwell Businesses	7
Table 3:	Years in Operation and Present Ownership	8
Table 4:	Percent of Businesses That Had Full-Time Employees	8
Table 5:	Number of Full- and Part-Time Employees by Season	9
Table 6:	Number and Percent of Family Member Employees Employed by Business by Season	10
Table 7:	Length of Residency of Employees by Season	10
Table 8:	Business Volume in Current Year Versus Previous Year	11
Table 9:	Reasons for Changes in Business Volume	12
Table 10:	Business Constraints	13
Table 11:	Importance of Species Hunted to Business by Area	16

INTRODUCTION

Surveys of communities that may be significantly affected by the construction and operation of the Susitna Hydroelectric Project were conducted as part of the Social Sciences Program to support the needs of the Alaska Power Authority. At present, the communities that may be significantly affected by the construction and operation of the dam do not have much reported baseline economic information. In order to profile the local economies of these communities and determine how they would respond to changes both before and during the construction and operation of the dam, a time-series data base on business indicators is being developed to support the basis upon which impact projections are made. This business survey was designed to obtain information on types of services and products offered, length of operation and ownership, number of employees, residence of employees, business volumes, short-term expansion and start-up plans, and dependency upon fish and wildlife resources.

1.0 APPROACH AND METHODOLOGY

1.1 OVERVIEW

Three steps were taken to determine the approach and methodology for the business surveys in Cantwell. First, the major objectives and specific types of information needed were clarified. Next, a review of the literature on surveys was conducted. Finally, the sampling methodology was determined.

The questions to be included in the interviews were then developed in conjunction with the formatting of the questionnaire. Finally, an interviewer guide was developed which laid out general guidelines for the interviewers and instructions on specific questions.

The questionnaire was extensively reviewed internally as well as by the Alaska Department of Community and Regional Affairs, the Alaska Department of Fish and Game, the Mat-Su Borough Planning Department, and Charlotte Thomas, an independent consultant. The survey instrument went through several iterations to reflect the review comments that were received.

1.2 OBJECTIVES

The major objective of the business survey was that, in conjunction with the public sector survey, a comprehensive characterization of the local economy could be developed. Specifically, the results would be used for the following:

1. Updating the data and assumptions on local baseline conditions.
2. Providing supplementary data that the Federal Energy Regulatory Commission requested after reviewing Exhibit E of the License Application for the Susitna project.
3. Refining and expanding the socioeconomic impact mitigation program and plan.

4. Comparing baseline data with information to be collected later as part of the socioeconomic impact monitoring program.

In addition, the project team adopted the following objectives relating to the design of the survey:

1. A methodologically sound approach that takes into account the rural nature of the area.
2. A data collection listing which is consistent to and complementary with other efforts/data bases such as the Standard Industrial Code classifications.
3. A survey instrument that can be used throughout project planning and construction.
4. A design that will facilitate tabulation.

The project team reviewed literature pertaining to statistical theory, sampling methodologies, questionnaire design, tabulation systems, and analytical techniques. In addition, the methodologies used in other surveys in Alaska were reviewed, including an Institute of Social and Economic Research survey used for the Tetrachemical Study in the Mat-Su Borough. Contacts were also made with individuals who had experience in conducting formal survey efforts in Alaska. Individuals contacted included Steve Langdon of the University of Alaska, Jack Kruse of the Institute of Social and Economic Research, and Don Dillman of Washington State University.

1.3 SAMPLING TECHNIQUE

An initial sampling frame was developed by identifying business listings in the phonebooks for the community. Interviewers also added other businesses that were observed while in the community. Finally, respondents of the household surveys who mentioned that they owned a business were requested to participate in the business survey.

Representatives from each identified business that was in operation from November 1982 to October 1983 were interviewed. However, some businesses which were operated out of homes may not be included. Businesses in the Cantwell vicinity which do not have a listed phone number, and which were not discovered during the household survey conducted concurrent with this survey, were not interviewed. As a result, businesses conducted in semi-remote locations, such as trappers and other natural-resource based businesses, may have been excluded from the sample.

1.4 THE QUESTIONNAIRE

The interview instrument is 8 pages long. Two hand-out sheets were used to facilitate understanding of several questions about sales volume classifications and comparisons between business volume in this year and previous years. Two maps were used to assist respondents in answering questions pertaining to hunting, fishing, and trapping. A copy of the interview instrument is provided in Appendix B.

The interview instrument was pretested in Cantwell on October 21 and 22, 1983. It was tested for its clarity, consistency, and logic of question ordering. It was also tested on Native and non-Native respondents and young and elderly business owners to ensure comprehension by all of the respondents who were likely to be interviewed. Minor modifications to the questionnaire were made on October 23-24, 1983 as a result of the pre-test.

The field work was conducted between October 26, 1983 and November 2, 1983. The Cantwell interviewer completed 25 business interviews in that time. The interviewer was familiarized with the substantive aspects of this questionnaire and reviewed basic interviewing techniques. In addition, this interviewer was given a written set of guidelines to follow should specific situations or questions arise. This information is contained in Appendix C. Completed questionnaires were checked each night after interviewing to identify data problems or inconsistencies.

2.0 ANALYSIS OF RESULTS

2.1 INTRODUCTION

Businesses were defined as those enterprises in which the owner received income for the products or services provided. For example, trapping animals for the express purpose of selling the pelts was considered to be a business activity. Trapping animals and using the pelts to make clothes for the family was not considered to be a business activity. Based on this definition, a total of 26 businesses were identified in Cantwell. Cantwell includes all of the structures that are located near the railhead, all of the structures near the vicinity of the junction of the Parks and Denali highways, and all the structures located in the Draschner subdivision. Twenty-five businesses were interviewed, which resulted in a response rate of 96 percent.

Because of the small number of businesses in Cantwell, there are some tables which cannot be presented without risking disclosure of data on individual businesses. Accordingly, tables are only displayed in this report if there are three or more responses in each category, or if the information contained therein is not confidential information.

Several conventions were followed throughout the analysis section to allow the reader quick and easy reference to the tables in Appendix A. Tables in the Appendix were ordered in a sequence that corresponds to the way in which the questions appear in the interview instrument. However, some responses will not appear in the Appendix because of the disclosure problems already mentioned or because they were incorporated in the text. Tables that appear in the text are referenced to a question that appears in the interview instrument.

A list of the businesses interviewed in Cantwell appears in Table 1.

Table 1
Cantwell Businesses That Were Interviewed

1. Ray Atkins Reg. Guide & Outfitter	14. Cantwell Lodge
2. Denali Dog Supply	15. Golden North Service
3. M.O. Wright & Sons	16. Denali Guns & Ammo
4. Wind & Sun Enterprises	17. Cantwell Cafe
5. Backwood Enterprises-Laundromat	18. Cantwell Store
6. Backwood Enterprises-Gen. Store	19. Longhorn Bar
7. Backwood Enterprises-Repair Ser.	20. Carlson's Snow Removal Ser.
8. Denali Rentals	21. Copper Acre Kennels
9. Krazy Photos	22. B & B Equipment, Inc.
10. Watana Lodge	23. Reindeer Mountain Lodge
11. Parkway Gift Shop	24. H. Peters of Cantwell Twice
12. Cantwell Chevron	25. Multi-Services
13. Wiebe's Grocery	

Source: Frank Orth & Associates, Inc., 1984.

2.2 PRODUCTS AND SERVICES PROVIDED

Cantwell had a limited private sector economy represented by six industrial sectors. Since it was known which classification the one business that was not interviewed fell into, it was included in this section of the analysis. The majority of businesses were categorized as retail (50 percent) and service (31 percent) establishments. Other enterprises interviewed in Cantwell were categorized as construction (8 percent), transportation, communications, and utilities (4 percent), wholesale trade (4 percent), and manufacturing (8 percent) operations.

Table 2
Standard Industrial Codes for Cantwell Businesses

Classification	Frequency Distribution	
	Number	Percent
Construction	01	3.8%
Manufacturing	01	3.8%
Transportation, Communications, & Utilities	02	7.7%
Wholesale Trade	01	3.8%
Retail Trade	13	50.0%
Services	08	30.8%
Total	26	99.9%

Source: (Q1); Frank Orth & Associates, Inc., 1984.

2.3 DURATION IN BUSINESS AND OWNERSHIP

Eighty-four percent (21) of the interviewed businesses in the community have been in operation for three years or more, and 36 percent have been in operation for more than ten years, according to the information presented in Table 3.

In contrast, a somewhat lower percentage of the current proprietors have owned their businesses for three years or more (72 percent), and 24 percent have been in business for more than ten years. The mean number of years in present ownership was 6.5 compared to 9 years the businesses have been in operation. Sixteen percent (4) of the 25 interviewed businesses in Cantwell have experienced at least one change in ownership. Three of the four businesses that experienced a change in ownership were those that have operated for more than ten years.

Table 3
Years in Operation and Present Ownership

Years	Frequency Distribution			
	<u>In Operation</u>		<u>In Present Ownership</u>	
	Number	Percent	Number	Percent
Less than One	03	12.0	05	20.0
One to Two Years	01	4.0	02	8.0
Three to Five Years	06	24.0	06	24.0
Six to Ten Years	06	24.0	06	24.0
More than Ten years	09	36.0	06	24.0
Total	25	100.0%	25	100.0%

Source: (Q2a and b, Q3a and b); Frank Orth & Associates, Inc., 1984.

2.4 CHARACTERISTICS OF EMPLOYEES

2.4.1 Full-time and Part-Time Employees.

As shown in the community employment data displayed in Table 4, Cantwell businesses were very small and employment opportunities were extremely limited. The majority of the businesses (80 percent) never had more than two full-time employees during the past year. About half (12) of the businesses had no full-time employees during the past year. Only one business had more than four full-time employees during the past summer.

Table 4
Percent of Businesses That Had Full-Time Employees by Season
N = 25

Number of Full-Time Employees	Percent of Businesses With Summer Employees (1983)	Percent of Businesses With Winter Employees (1982-83)
0	48.0	62.5
1	20.0	20.8
2	12.0	12.5
3	8.0	4.2
4	8.0	0.0
16	4.0	0.0

Source: (Q4 and 9); Frank Orth & Associates, Inc., 1984.

Altogether, the 25 businesses surveyed accounted for 75 jobs in the summer of 1983, for an average of 3 jobs per business. Of these positions, about 55 percent were full-time and 45 percent were part-time. Employment has been highly seasonal. The number of winter full-time jobs represented only about 34 percent of the number of summer full-time positions. The differences in the number of part-time positions during different times of the year is less pronounced; the number of winter part-time jobs represented about 71 percent of the number of part-time positions available in the summer. Total employment in the winter averaged slightly more than 50 percent of summer employment. Information on seasonal employment is presented in Table 5.

Table 5
Number of Full and Part-Time Employees by Season

Season	Number of Full Time Employees	Number of Part- Time Employees	Total Employees
Summer	41	34	75
Winter	14	24	38

Source: (Q4, 6, 9, and 11); Frank Orth & Associates, Inc., 1984.

2.4.2 Family Member Employees.

As shown in Table 6, a significant proportion of the employees in Cantwell businesses were family members both in the summer and the winter. In the summer, family members represented slightly more than 45 percent of total employment and in the winter, family members represented about 82 percent of total employment. The larger share of family members in total employment can be partly attributed to a large decrease in winter employment.

Table 6
Number and Percent of Family Member Employees
Employed by Business by Season

Season	Number of Employees	Employees That Are Family Members Number	Percent
Summer	75	34	45.3%
Winter	38	31	81.6%

Source: (Q5, 7, 10, and 12); Frank Orth & Associates, Inc., 1984.

2.4.3 Residence of Employees.

Employers indicated that most of their employees in both the summer and winter months had been residents of the community for a year or more, but the responses indicated that a somewhat higher percentage of the summer employees in the community had been relatively new to the area. About 27 percent (6) of the 22 businesses that responded stated that their summer employees were a mixture of residents for a year or more and for less than a year. About 11 percent (2) of the businesses with winter employees had employees that were a mixture of residents for more than a year and for less than a year. Information on the length of residency of employees by season is presented in Table 7.

Table 7
Length of Residency of Employees by Season

Length of Residency of Employees	Number	Percent
<u>Summer Employees</u>		
Residents for a year or more	16	72.7
Residents for less than a year	00	0.0
Mixture of older and newer residents	06	27.3
Total	22	100.0
<u>Winter Employees</u>		
Residents for a year or more	17	89.5
Residents for less than a year	00	0.0
Mixture of older and newer residents	02	10.5
Total	19	100.0

Source: (Q8 and 13); Frank Orth & Associates, Inc., 1984.

2.5 BUSINESS VOLUME

One of the businesses declined to respond to the question on annual business sales volume. Of the 24 businesses that did respond, approximately 71 percent (17) reported annual sales volume of under \$50,000. About 13 percent (3) of the businesses had sales volumes of between \$50,000 and \$99,999. The remaining businesses had sales of \$100,000 or more.

As shown in Table 8, 40 percent (10) of the respondents indicated that the 1983 volume of business was higher or much higher than the average business volume in previous years. At the same time, 20 percent (5) reported declines in business sales, 20 percent (5) experienced an average year, and 20 percent (5) said there was no basis for comparison.

Table 8
Business Volume in Current Year Versus Previous Years

Category 1983 Volume Compared to Previous Years	Frequency Distribution	
	Number	Percent
Much More in the Last 12 Months	02	8.0%
More in the Last 12 Months	08	32.0%
About the Same in the Last 12 Months	05	20.0%
Less in the Last 12 Months	05	20.0%
Much Less in the Last 12 Months	00	0.0%
No Basis For Comparison	05	20.0%
Total	25	100.0%

Source: (Q14a); Frank Orth & Associates, Inc., 1984.

According to Table 9, thirty percent (3) of the ten businesses experiencing increases in business volume indicated that the change was caused by an increase in demand for their products. Twenty percent (2) also said that the Intertie project was the cause of increases in business volumes during the last year over previous years. Better advertising and reputation accounted for 20 percent of the reasons for businesses experiencing increases in business volume.

Of the five businesses experiencing decreases in business volumes during the past year as compared to previous years, 40 percent (2) stated that the change was due to a loss of competitive advantage or shift in market, 20 percent (1) said that the change was due to lack of demand, 20 percent (1) said that the change was due to poor weather, and 20 percent (1) said that the change was attributable to poor advertising.

Table 9
Reasons for Changes in Business Volume

Reasons Given	Increase in Volume		Decrease in Volume	
	Number	Percent	Number	Percent
Intertie Project	2	20.0%	0	0.0%
Change in Demand	3	30.0%	1	20.0%
Change in No. of Jobs	1	10.0%	0	0.0%
Advertising, Reputation, & Location	2	20.0%	1	20.0%
Business Investment	1	10.0%	0	0.0%
Weather	0	0.0%	1	20.0%
Chg. in Mkt./Comp. Advantage	0	0.0%	2	40.0%
Owner Involvement	<u>1</u>	<u>10.0%</u>	<u>0</u>	<u>0.0%</u>
Total	10	100.0%	5	100.0%

Note: Three businesses experiencing increases in volume due to the Intertie, change in demand, and business investment gave additional reasons for the increase: Alaska economic growth (1), tourism (2), and state funding (1).

Source: (Q14b); Frank Orth & Associates, Inc., 1984.

2.6 BUSINESS CONSTRAINTS

Eight of the 25 businesses reported no constraints during the last year. However, the other 17 businesses experienced at least one constraint during the last year. Several gave more than one answer for a total of 29 responses received. The breakdown for the responses appear in Table 10. The most important constraints cited were lack of demand, supply, and "other." With regard to "other" constraints, the business people in

Cantwell mentioned scarcity of game animals, the cost of rehabilitating structures, the inability of people to pay their bills, and the lack of time to prepare for expansion as some of the reasons under this heading.

Table 10
Business Constraints

Business Constraints In Last Year	Frequency Distribution	
	Number	Percent
Lack of Demand	07	24.1%
Inadequate Community Infrastructure	01	3.4%
Financing	04	13.8%
Supply	05	17.2%
Insurance	02	6.9%
Labor	01	3.4%
Weather	02	6.9%
Customer Access to Business	01	3.4%
Other	06	20.7%
Total	29	99.8%

Source: (Q15); Frank Orth & Associates, Inc., 1984.

2.7 PLANS FOR EXPANSION OR NEW BUSINESS

Approximately 48 percent (12) of the 25 respondents plan to expand their businesses during November 1983 to October 1984. Of these, 58 percent (7) planned to expand during the 2nd quarter of 1984. Eleven of the expansions would occur in Cantwell, and are expected to create 15 local job opportunities. Seventy-five percent (6) of the 8 service businesses in the community indicated expansion plans. In contrast, about 31 percent of the 13 retail businesses plan to expand during the next year.

Of the businesses planning an expansion, 60 percent (6) were doing so in order to capture a greater share of existing markets or serving new ones such as the tourist market and the rental housing market. Thirty percent (3) of the businesses are planning to expand in response to perceived increases in demand. One business was planning to expand because it was considering a change in location to allow for better access.

Of the twelve businesses considering expansion, 5 saw no constraints to their plans in the coming year and two did not give a response. The remaining 5 businesses mentioned a variety of possible constraints to expansion. Eight responses were received. Of these, about 38 percent (3) were related to financing. About 13 percent (1) of the responses were related to each of the following constraints: reduction in economic growth; changes in the status of the Intertie project; decreases in the level of tourism; obtaining qualified labor help; and closure of the Parks Highway.

Thirty-six percent (9) of the businesses in Cantwell were considering starting a new business during the next year. About 31 percent (4) of the retail businesses are planning to start a new business in the next year while 38 percent (3) of the service businesses are planning to do so. The other two businesses were not specified because of potential disclosure problems. The types of new businesses being considered include four involved in retail trade, two involved in the service area, one in the manufacturing area, and one in the mining sector. Specifics are not given in order to maintain respondent confidentiality.

2.8 LODGES

Four lodges and inns in the community contain a total of 40 rooms which can accomodate up to 96 people. Average 1983 summer occupancy rates in Cantwell were about 60 percent. Winter (1982-1983) occupancy rates were about 10 percent.

Two lodges are planning to expand during the spring of 1984. The expansions could add 41 beds to the existing number in the community. Reasons cited for expansion include anticipation of more guests in the future.

2.9 BUSINESSES DEPENDENT ON FISH AND WILDLIFE RESOURCES

All 26 businesses were included in the responses to the questions about hunting, fishing, and trapping activities. Twelve of the 26 businesses were dependent on either hunting, fishing, or trapping activities. Therefore, some generalizations can be made with respect to the community.

Approximately 46 percent (12) of the businesses indicated that a portion of their gross annual sales were dependent on hunting, fishing, or trapping activities. These 12 businesses included air service businesses, guiding services, specialized retail merchandise establishments, and lodging establishments. The revenues of five businesses were almost entirely dependent on these activities while 6 businesses probably received less than 25 percent of their annual sales from these activities. The remaining business received between 50 and 74 percent of its sales from these activities.

2.9.1 Businesses Dependent On Fishing Activities.

Eight businesses were dependent on fishing activities for a portion of their annual sales volume. Of these, 7 businesses reported that between zero and 25 percent of their sales volumes were attributable to fishing activities. One reported that between 50 percent and 74 percent of its sales volume was attributable to fishing.

Five of the eight businesses were dependent on fishing activities that occurred in areas that may be impacted by the Susitna Hydroelectric project. All of them received less than 25 percent of their sales volume from fishing activities that take place in Area 1 (refer to Map 1 in Appendix B).

Four of the five businesses mentioned that the species of most importance in Area 1 to business sales were grayling. Three businesses stated that rainbow trout was important to their sales activities. Two of the businesses mentioned that king salmon, dolly varden, and lake trout from this area were important to their sales.

2.9.2 Businesses Dependent On Hunting Activities.

Eleven Cantwell businesses reported a dependency on hunting activities for their sales. Six of these businesses had less than 25 percent of their revenue attributable to this activity; one had no sales attributable to hunting in Areas 1 and 2 that may be affected by the dam and the other 5 had sales related to hunting activities that were entirely attributable to these areas. Another 5 businesses had between 75 and 100 percent of sales attributable to hunting activities; one had no sales that were attributable to hunting activities in Areas 1 or 2 and four of these businesses had all their sales related to hunting activities occurring in these areas. The remaining business which received between 50 and 74 percent of its sales from hunting activities did not rely on hunting that occurred in either Area 1 or 2.

The number of businesses that mentioned the species that were sought in connection with their activities is shown in Table 11. It is clear that hunting activity in Area 2 was as important to Cantwell businesses as hunting in Area 1 in terms of the number of businesses that mention species.

Table 11
Importance of Species Hunted To Business by Area
N = 11

Species	Area 1	Area 2
Moose	7	7
Caribou	5	6
Sheep	5	5
Black Bear	6	5
Grizzly Bear	5	4
Wolf	2	2
Ptarmigan	1	1
Red Fox	2	2
Wolverine	4	4

Source: (Q22a1 to j2); Frank Orth & Associates, Inc., 1984.

2.9.3 Trapping Activities.

Of the 11 businesses whose sales were dependent upon hunting and fishing activities, 6 earned revenue from trapping activities. One business earned revenue exclusively from trapping activities. Trapping contributed less than 25 percent to annual sales for all 6 businesses. All 6 of these businesses had sales attributable to trapping activities occurring in areas that may be affected by the Susitna Hydroelectric Project. One hundred percent of sales attributable to trapping activities for all six businesses occurred because of trapping activities in Area 1 and Area 2.

The number of businesses that mentioned the species that were sought in connection with their activities is shown in Table 12. It is clear that trapping activity in Area 2 was slightly less important to Cantwell businesses as trapping in Area 1 in terms of the number of businesses that mention species. However, the dollar value attached to trapping activities was determined collectively, rather than separately, for both Areas 1 and 2.

Table 12
Importance of Species Hunted To Business by Area
N = 6

Species	Area 1	Area 2
Beaver	4	2
Marten	1	1
Lynx	3	3
Mink	1	2
Muskrat	1	2
Otter	1	1
Red Fox	6	5
Wolverine	6	5
Wolf	4	3

Source: (Q28a1 to k2); Frank Orth & Associates, Inc., 1984.

0336h

APPENDIX A

02/21/84

BUSINESS SURVEY/CANTWELL
MEAN AND STANDARD DEVIATIONS

	MEAN AND STANDARD DEVIATION	
	MEAN	STAND DEV
NUMBER OF YEARS IN OPERATION	9.0	15.3
NUMBER OF YEARS IN PRESENT OWNERSHIP	6.5	24.8

	MEAN AND STANDARD DEVIATION	
	MEAN	STAND DEV
BUSINESSES WITH _____ SUMMER F-T FAMILY EMPLOYEES	.6	.7
BUSINESSES WITH _____ SUMMER P-T FAMILY EMPLOYEES	.8	.9
BUSINESSES WITH _____ WINTER F-T FAMILY EMPLOYEES	.5	.7
BUSINESSES WITH _____ WINTER P-T FAMILY EMPLOYEES	.8	1.0
SUMMER OCCUPANCY RATE (%)	.6	.3
WINTER OCCUPANCY RATE (%)	.1	.2

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUSINESSES WITH _____ SUMMER F-T EMPLOYEES	FREQUENCY DISTRIBUTION NUMBER	PERCENT
0	12	48.0%
1	05	20.0%
2	03	12.0%
3	02	8.0%
4	02	8.0%
16	01	4.0%
	---	----
	25	100.0%
TOTAL NUMBER OF SUMMER F-T EMPLOYEES 41.00		

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUSINESSES WITH _____ SUMMER F-T FAMILY EMPLOYEES	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
0	14	56.0%
1	08	32.0%
2	03	12.0%
	----	-----
	25	100.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUSINESSES WITH ____ SUMMER P-T EMPLOYEES	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
0	08	32.0%
1	05	20.0%
2	08	32.0%
3	03	12.0%
4	01	4.0%
	---	-----
	25	100.0%
TOTAL NUMBER OF SUMMER P-T EMPLOYEES 34.0		

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUSINESSES WITH ____ SUMMER P-T FAMILY EMPLOYEES	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
0	12	48.0%
1	07	28.0%
2	05	20.0%
3	01	4.0%
	---	-----
	25	100.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUSINESSES WITH ____ WINTER F-T EMPLOYEES	FREQUENCY DISTRIBUTION NUMBER	PERCENT
0	15	62.5%
1	05	20.8%
2	03	12.5%
3	01	4.2%
	----	-----
	24	100.0%

TOTAL NUMBER OF WINTER F-T EMPLOYEES 14.0

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUSINESSES WITH ____ WINTER F-T FAMILY EMPLOYEES	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
0	16	66.7%
1	05	20.8%
2	03	12.5%
	----	-----
	24	100.0%

ALASKA RESOURCES LIBRARY
U.S. DEPT. OF INTERIOR

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUSINESSES WITH _____ WINTER P-T EMPLOYEES	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
0	09	37.5%
1	09	37.5%
2	04	16.7%
3	01	4.2%
4	01	4.2%
	----	-----
TOTAL NUMBER OF WINTER P-T EMPLOYEES 24.0	24	100.1%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUSINESSES WITH ___ WINTER P-T FAMILY EMPLOYEES	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
0	11	45.8%
1	09	37.5%
2	02	8.3%
3	01	4.2%
4	01	4.2%
	---	----
	24	100.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

PLANS FOR EXPANSION IN THE NEXT YEAR	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
YES	09	36.0%
NO	13	52.0%
NOT SURE	03	12.0%
	---	----
	25	100.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

WHEN IS EXPANSION PLANNED TO OCCUR?	FREQUENCY DISTRIBUTION NUMBER	PERCENT
83/4	01	10.0%
84/1	01	10.0%
84/2	07	70.0%
84/3	01	10.0%
	---	----
	10	100.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

WHERE WILL EXPANSION TAKE PLACE?	FREQUENCY NUMBER	DISTRIBUTION PERCENT
LOCAL	11	100.0%
	---	-----
	11	100.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

NUMBER OF NEW HIRE ANTICIPATED	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
0	03	33.3%
1	02	22.2%
2	02	22.2%
3	01	11.1%
6	01	11.1%
	---	----
TOTAL NUMBER OF NEW-HIRES EXPECTED	09	99.9%
15.0		

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

	FREQUENCY DISTRIBUTION NUMBER	PERCENT
WHY ARE YOU PLANNING TO EXPAND?		
TO HANDLE INCREASED DEMAND	03	30.0%
TO CAPTURE GREATER SHARE OF EXISTING MARKET OR SERVE NEW ONE	06	60.0%
OTHER	01	10.0%
	---	-----
	10	100.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

CONSTRAINTS TO BUSINESS EXPANSION PLANS	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
ECONOMIC GROWTH	01	12.5%
FINANCING	03	37.5%
GROWTH IN TOURISM	01	12.5%
INTERTIE STATUS	01	12.5%
QUALIFIED LABOR HELP	01	12.5%
OTHER	01	12.5%
	----	-----
	08	100.0%

NO CONSTRAINTS = 5
NON-RESPONSES = 2

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUSINESSES WITH PLANS TO START A NEW BUSINESS	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
YES	03	13.0%
NO	14	60.9%
NOT SURE	06	26.1%
	---	-----
	23	100.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

	LODGES WITH PLANS FOR INCREASING NO. OF BEDS	FREQUENCY DISTRIBUTION NUMBER	PERCENT
YES		02	50.0%
NO		02	50.0%
		----	-----
		04	100.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

REASON FOR ADDING BEDS	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
ANTICIPATE MORE GUESTS IN THAN NOW/RECENTLY	02	100.0%
	---	-----
	02	100.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

ANNUAL BUSINESS SALES VOLUME	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
UNDER \$50,000	17	70.8%
\$50,000 TO \$99,999	03	12.5%
\$100,000 OR MORE	04	16.6%
	---	-----
	24	99.9%

MEDIAN = UNDER \$50,000

NUMBER OF NON-RESPONSES = 1

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUSINESSES WITH ___% OF GROSS ANNUAL REVENUES-- HUNTING	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
ZERO	15	57.7%
GREATER THAN ZERO BUT LESS THAN 25%	06	23.1%
50% TO 74%	02	7.7%
75% TO 100%	03	11.5%
	---	-----
	26	100.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUS. WITH <u> </u> % OF GROSS ANNUAL REVENUES-- HUNTING IN AREAS 1 & 2	FREQUENCY NUMBER	DISTRIBUTION PERCENT
ZERO	16	61.5%
GREATER THAN ZERO BUT LESS THAN 25%	05	19.2%
50% TO 74%	01	3.8%
75% TO 100%	04	15.4%
	----	-----
	26	99.9%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTIONS

IMPORTANCE OF SPECIES HUNTED TO BUSINESS IN AREA 1
N = 11

CATEGORY	NUMBER	PERCENT OF BUSINESSES
MOOSE	07	63.6%
CARIBOU	05	45.5%
SHEEP	05	45.5%
BLACK BEAR	06	54.5%
WOLF	02	18.2%
WATERFOWL	00	0.0%
PTARMIGAN	01	9.1%
OTHER 1	07	63.6%
OTHER 2	02	18.2%
OTHER 3	02	18.2%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTIONS

IMPORTANCE OF SPECIES HUNTED TO BUSINESS IN AREA 2
N = 11

CATEGORY	NUMBER	PERCENT OF BUSINESSES
MOOSE	07	63.6%
CARIBOU	06	54.5%
SHEEP	05	45.5%
BLACK BEAR	05	45.5%
WOLF	02	18.2%
WATERFOWL	00	0.0%
PTARMIGAN	01	9.1%
OTHER 1	06	54.5%
OTHER 2	02	18.2%
OTHER 3	02	18.2%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUSINESSES WITH ___% OF GROSS ANNUAL REVENUES-- FISHING	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
ZERO	18	69.2%
GREATER THAN ZERO BUT LESS THAN 25%	07	26.9%
50% TO 74%	01	3.8%
	---	----
	26	99.9%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUS. WITH % OF GROSS ANNUAL REVENUES-- FISHING IN AREAS 1 AND 2	FREQUENCY NUMBER	DISTRIBUTION PERCENT
ZERO	21	80.8%
GREATER THAN ZERO BUT LESS THAN 25%	05	19.2%
	---	-----
	26	100.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTIONS

IMPORTANCE OF SPECIES FISHED TO BUSINESS IN AREA
N = 8

CATEGORY	NUMBER	PERCENT OF BUSINESSES
SALMON	02	25.0%
RED OR SOCKEYE	00	0.0%
PINK OR HUMPY	00	0.0%
SILVER OR COHO	00	0.0%
DOG OR CHUM	00	0.0%
KING OR CHINOOK	02	25.0%
GRAYLING	04	50.0%
RAINBOW TROUT	03	37.5%
BURBOT	01	12.5%
DOLLY VARDEN		25.0%
OTHER	02	25.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUSINESSES WITH ___% OF GROSS ANNUAL REVENUES— TRAPPING	FREQUENCY DISTRIBUTION NUMBER	PERCENT
ZERO	20	76.9%
GREATER THAN ZERO BUT LESS THAN 25%	06	23.1%
	---	----
	26	100.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTION REPORTS

BUS. WITH ___% OF GROSS ANNUAL REVENUES-- TRAPPING IN AREAS 1 AND 2	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
ZERO	20	76.9%
GREATER THAN ZERO BUT LESS THAN 25%	06	23.1%
	---	----
	26	100.0%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTIONS

IMPORTANCE OF SPECIES TRAPPED TO BUSINESS IN AREA 1

N = 6

CATEGORY	NUMBER	PERCENT OF BUSINESSES
BEAVER	04	66.7%
MARTEN	01	16.7%
LYNX	05	83.3%
MINK	06	100.0%
MUSKRAT	02	33.3%
OTTER	00	0.0%
RED FOX	01	16.7%
WOLVERINE	06	100.0%
OTHER 1	04	66.7%

02/07/84

BUSINESS SURVEY/CANTWELL
FREQUENCY DISTRIBUTIONS

IMPORTANCE OF SPECIES TRAPPED TO BUSINESS IN AREA 2
N = 6

CATEGORY	NUMBER	PERCENT OF BUSINESSES
BEAVER	02	33.3%
MARTEN	01	16.7%
LYNX	03	50.0%
MINK	02	33.3%
MUSKRAT	02	33.3%
OTTER	01	16.7%
RED FOX	05	83.3%
WOLVERINE	05	83.3%
OTHER 1	03	50.0%

APPENDIX B

Questionnaire #: _____
Community: _____
Interviewer: _____
Date: _____

SUSITNA HYDROELECTRIC PROJECT
BUSINESS SURVEY

Business Name: _____

Address (Location
If no address available): _____

Telephone Number: (907) _____ - _____

Owner's Name: _____

Manager's Name (if different than owner): _____

First Contact Attempt:

Contact Made: 1. YES
2. NO

Comments:

Second Contact Attempt:

Contact Made: 1. YES
2. NO

Comments:

Third Contact Attempt:

Contact Made: 1. YES
2. NO

Comments:

Hello, my name is _____ and I am conducting a survey for the Alaska Power Authority.

The survey is part of the Susitna Hydroelectric Project. A more complete understanding of businesses in the area is needed to plan for the construction and operation of the Project.

The survey questions are about your business, and any plans for expansion you may have.

We would like you to participate in this survey. Your answers will be completely confidential and voluntary, and will be greatly appreciated.

Q-1 What are the main products or services that your business provides?

- a. Products _____

- b. Services _____

Q-2 How many years has the business been in operation?

- a. _____ (code)
b. _____ (actual number of years)

1. LESS THAN 1
2. 1-2
3. 3-5
4. 6-10
5. MORE THAN 10

Q-3 How many years have you owned this business?

- a. _____ (code)
b. _____ (actual number of years)

1. LESS THAN 1
2. 1-2
3. 3-5
4. 6-10
5. MORE THAN 10

Q-4 How many persons, including yourself, were employed full-time during the summer of 1983? (Full-time = greater than 34 hours of work per week)

Q-5 Of the total number of full-time employees, how many were family members?

Q-6 How many persons, including yourself, were employed part-time during the summer of 1983? (Part-time = 1-34 hours of work per week)

Q-7 : Of the total number of part-time employees, how many were family members?

Q-8 Were most of your summer, 1983 employees, residents of the area for a year or more, less than a year, or a mixture of both?

1. RESIDENTS FOR A YEAR OR MORE
2. RESIDENTS FOR LESS THAN A YEAR
3. MIXTURE OF BOTH TYPES OF RESIDENTS

Q-9 How many persons, including yourself, were employed full-time during the winter of 1982-1983?

Q-10 Of the total number of full-time employees, how many were family members?

Q-11 How many persons, including yourself, were employed part-time during the winter of 1982-1983?

Q-12 Of the total number of part-time employees, how many were family members?

Q-13 Were most of your winter, 1983 employees, residents of the area for a year or more, less than a year, or a mixture of both?

1. RESIDENTS FOR A YEAR OR MORE
2. RESIDENTS FOR LESS THAN A YEAR
3. MIXTURE OF BOTH TYPES OF RESIDENTS

Q-14a How has your volume of business this year (1983) compared to your volume of business during the previous five years (1978-1982)? Please choose from among these choices (SHEET A)

1. A LOT MORE IN THE LAST 12 MONTHS THAN IN PREVIOUS YEARS
2. MORE IN THE LAST 12 MONTHS THAN IN PREVIOUS YEARS
3. ABOUT THE SAME IN THE LAST 12 MONTHS THAN IN PREVIOUS YEARS
4. LESS IN THE LAST 12 MONTHS THAN IN PREVIOUS YEARS
5. A LOT LESS IN THE LAST 12 MONTHS THAN IN PREVIOUS YEARS
6. NO BASIS FOR COMPARISON

IF 1,2,4, or 5, THEN:

Q-14b What were the main factors that contributed to this change in business volume?

Q-15 What kinds of problems has your business faced within the last year?

1. LACK OF DEMAND _____
2. INADEQUATE COMMUNITY INFRASTRUCTURE _____
3. FINANCING _____
4. SUPPLY _____
5. INSURANCE _____
6. LABOR _____
7. WEATHER _____
8. CUSTOMER ACCESS TO BUSINESS _____
9. OTHER _____

Q-16a Do you have any plans for expanding this business during the next year?

IF 1 or 3, ASK NEXT 2 QUESTIONS.

1 YES

2 NO

3 NOT SURE

Q-16b: What are your business expansion plans?

When _____

Where (town) _____

Number of new hires _____

Why _____

Other comments _____

Q-16c: Are there any factors that would constrain your business expansion plans?

Q-17a Do you have any plans for starting a new business?

IF 1 OR 3, ASK THE NEXT TWO QUESTIONS.

1 YES

2 NO

3 NOT SURE

Q-17b: What are your plans for starting a new business?

Products/services _____

When _____

Where (town) _____

Number of new hires _____

Why _____

Other comments _____

Q-17c: Are there any factors that would constrain your
business start-up plans?

ASK ALL OF QUESTION 18 IF THE BUSINESS IS A LODGING ESTABLISHMENT
(HOTEL, MOTEL OR LODGE).

Q-18a How many rooms does your lodging establishment have? _____

Q-18b How many beds does your lodging establishment have? _____

Q-18c What was the occupancy rate during the summer of 1983? _____

Q-18d What was the occupancy rate during the winter of 1982-1983? _____

Q-18e Are you planning to add more beds?

_____ IF 1 OR 3, ASK NEXT QUESTIONS.

1 = YES

2 = NO

3 = NOT SURE

Q-18f How many beds are you planning to
add? _____

Q-18g When do you plan to add these beds?

1. OCT-DEC, 1983
2. JAN-MAR, 1984
3. APR-JUN, 1984
4. JUL-SEP, 1984
5. AFTER SEP, 1984

Q-18h Why are you going to add these beds?

1. MORE GUESTS NOW/RECENTLY THAN I CAN ACCOMMODATE.
2. ANTICIPATE MORE GUESTS IN FUTURE THAN
NOW/RECENTLY.
- 3.

OTHER _____

Q-19. (SHOW SHEET B) In which category would you place your gross annual business sales volume?

1. UNDER \$50,000
2. \$50,000-\$99,000
3. \$100,000-\$249,000
4. \$250,000-\$499,999
5. \$500,000-\$999,999
6. \$1,000,000 OR MORE

ASK THE FOLLOWING QUESTIONS IF THE BUSINESS IS ENGAGED IN OR IS RELATED TO HUNTING, FISHING OR TRAPPING ACTIVITIES.

Q-20. What percentage of your gross annual business revenues would you attribute to hunting activities?

1. LESS THAN 25%
2. 25% - 49%
3. 50% - 74%
4. 75% - 100%

Q-21. What percentage of your gross annual business revenues would you attribute to your hunting activities in the areas shown on this map?

1. LESS THAN 25%
2. 25% - 49%
3. 50% - 74%
4. 75% - 100%

Q-22. What species of animals were hunted as part of your business activities in these areas last year (SEASON)?

	MOOSE	CARIBOU	SHEEP	BLACK BEAR	WOLF	WATER- FOWL	PTARMI- GAN	OTHER		
Area #1	a1	b1	c1	d1	e1	f1	g1	h1	i1	j1
Area #2	a2	b2	c2	d2	e2	f2	g2	h2	i2	j2

Q-23. What percentage of your gross annual business revenues would you attribute to fishing activities?

1. LESS THAN 25%
2. 25% - 49%
3. 50% - 74%
4. 75% - 100%

Q-24 What percentage of your gross annual business revenues would you attribute to your fishing activities in the area shown on the map?

1. LESS THAN 25%
2. 25% - 49%
3. 50% - 74%
4. 75% - 100%

Q-25 What species of fish were caught as part of your business activities in this area last year (SEASON)?

- a. _____ SALMON (IF THEY SAY SALMON, ASK THEM TO BE MORE SPECIFIC)
b. _____ RED OR SOCKEYE
c. _____ PINK OR HUMPY
d. _____ SILVER OR COHO
e. _____ CHUM OR DOG
f. _____ KING OR CHINOOK
g. _____ GRAYLING
h. _____ RAINBOW TROUT
i. _____ BURBOT
j. _____ DOLLY VARDEN
k. _____ OTHER (specify) _____, _____, _____

Q-26 What percentage of your gross annual business revenues would you attribute to trapping activities?

1. LESS THAN 25%
2. 25% - 49%
3. 50% - 74%
4. 75% - 100%

Q-27 What percentage of your gross annual business revenues would you attribute to trapping activities in the areas shown on the map?

1. LESS THAN 25%
2. 25% - 49%
3. 50% - 74%
4. 75% - 100%

Q-28 What furbearers were caught as part of your business activities in these areas last year (SEASON)?

	BEAVER	MARTEN	LYNX	MINK	MUSK- RAT	OTTER	RED FOX	WOL- VERINE	OTHER		
Area #1	a1	b1	c1	d1	e1	f1	g1	h1	i1	j1	k1
Area #2	a2	b2	c2	d2	e2	f2	g2	h2	i2	j2	k2

SHEET A

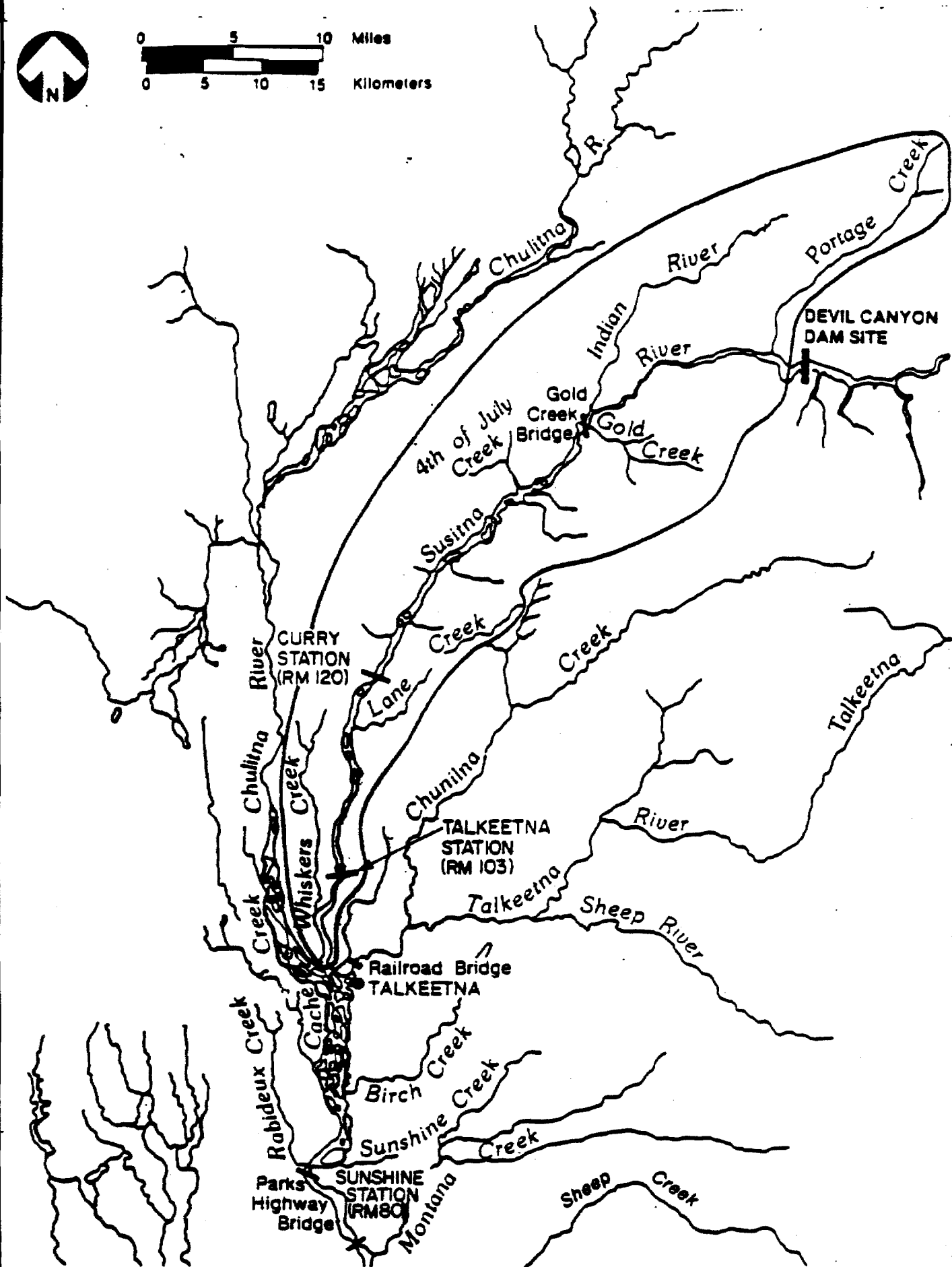
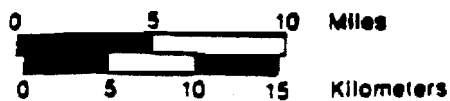
1. A LOT MORE IN THE LAST 12 MONTHS THAN IN PREVIOUS YEARS
2. MORE IN THE LAST 12 MONTHS THAN IN PREVIOUS YEARS
3. ABOUT THE SAME IN THE LAST 12 MONTHS THAN IN PREVIOUS YEARS
4. LESS IN THE LAST 12 MONTHS THAN IN PREVIOUS YEARS
5. A LOT LESS IN THE LAST 12 MONTHS THAN IN PREVIOUS YEARS
6. NO BASIS FOR COMPARISON

0156h

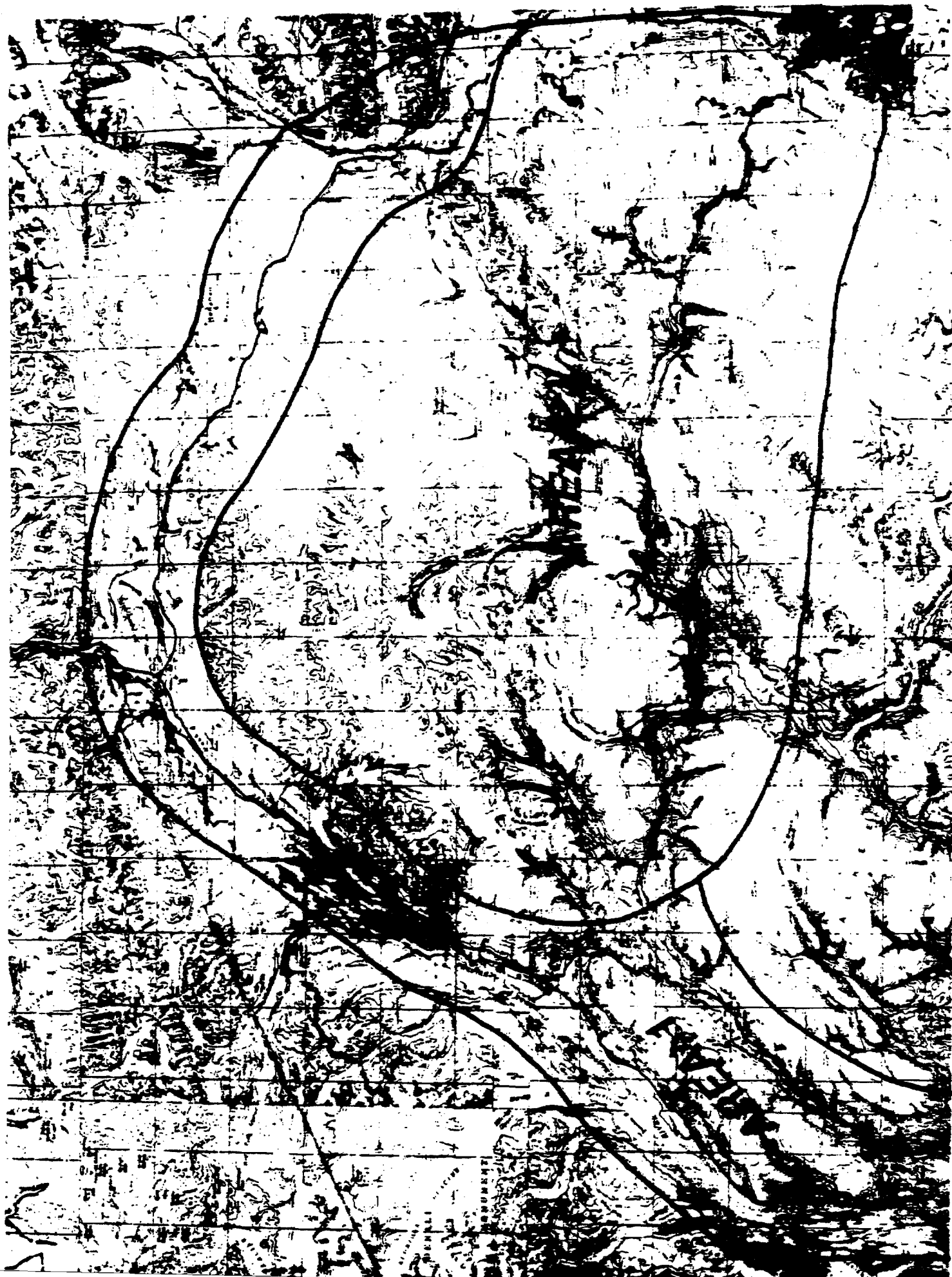
SHEET 8

1. UNDER \$50,000
2. \$50,000-\$99,000
3. \$100,000-\$249,000
4. \$250,000-\$499,999
5. \$500,000-\$999,999
6. \$1,000,000 OR MORE

0156h



SUSITNA RIVER AND MAJOR TRIBUTARIES FROM MONTANA CREEK TO DEVIL CANYON



APPENDIX C

SUSITNA HYDROELECTRIC PROJECT SURVEYS
IN CANTWELL, TRAPPER CREEK AND TALKEETNA

INFORMATION FOR INTERVIEWERS

1. INTRODUCTION

A. Types of Surveys

There are three types of surveys that will be conducted in the communities:

1. Household survey - 30% of the community's^a households
2. Business survey - 100% of the identifiable^b business establishments; In addition, business surveys should be conducted when home businesses are identified in the household survey.
3. Construction Worker Survey (in Talkeetna and Cantwell only)
This survey will be self-administered and will be distributed by the project managers. Completed questionnaires will be mailed to us.

^a As delineated in our maps of the community.

^b From telephone directories, 1983 for Talkeetna, Trapper Creek, and Cantwell.

B. Survey materials:

1. The list of blocks of housing units that will be contacted and additional blocks that may be needed; the list includes the number of housing units that are expected to be in each block and the total target number of households that you should try to interview in that community.
2. A preliminary listing of businesses.
3. Maps which show where the blocks are, in relation to roads and other identifiable landmarks.
4. A set of questionnaires.
5. A set of answer lists and 2 fish and game maps which will be used to support the administration of the survey. (from Harza-Ebasco)
6. A log to record housing units contacted.
7. Waterproof (e.g. clear plastic with zip-lock) container for several surveys
8. Compass (hand-held)
9. Flashlight
10. ID card, from the Alaska Power Authority (from APA)
11. A set of George Gleason's business cards (from APA)
12. Fact sheet on the project (from APA)
13. A copy of the latest newsletter on the project (from APA)
14. Call back sheets, to be placed at households where no one is home
15. Red pens
16. Time and expense sheets

II. HOUSEHOLD SURVEY

A. Background on the methodology:

Possible households were identified from the Mat-Su Borough's assessor records of housing units. These were clustered into areas called blocks. A random sampling method was used to choose the blocks that will be surveyed. Each household in a chosen block should be surveyed. This methodology was chosen in order to limit the amount of travel time needed to conduct the surveys.

Because of the methodology used, a number of issues may come up in trying to locate households:

1. Some units may be vacant.
2. We do not have the names of the residents we are trying to reach.
3. In some areas where roads are scarce, the map will not be specific as to where the housing unit is. This will be of most consequence in the Trapper Creek survey.
4. The assessor records may be outdated, and additional housing units may be found in some blocks.

B. Operational procedures:

1. Attempt to survey the blocks in the order listed.
2. Conduct the interviews between 9 a.m. and 9 p.m. If it appears that the time is inconvenient for the respondent, set an appointment for a better time. Be on time for appointments.
3. In areas designated as parcel "A16" or "B4", etc., the location of the "X" on the map is not meant to indicate the location within the parcel the housing unit is. It is not possible to determine the location with the data available to us.
4. If there is no one present at a possible residence, try at least 2 callbacks. Callbacks should be done at different times of the day, in order to maximize the possibility of finding the residents at home. If you are able to interview a neighbor of a housing unit that has no one at home, ask the neighbor about the unit (is it occupied; if so, what is a good time to catch the residents at home?).
5. Do not spend more than 30 minutes trying to locate a housing unit.
6. Some areas of the Mat-Su Borough have a high incidence of no-trespass signs at driveways and private roads. If you run across one, try to go on in to see someone. However, if you run into any signs of hostility, leave immediately.
7. A housing unit will be considered successfully canvassed if:
 1. An interview occurs.
 2. The unit is identified as vacant by a neighbor.
 3. The interviewer has attempted to call on the housing unit three times, at different times of day, and has not been able to find someone at home.

A housing unit will be considered not successfully canvassed if:

1. The household refused to respond.
 2. The housing unit can not be located.
 3. It is impossible to gain access, due to barriers, dogs, etc.
8. The listing of blocks contains information on the target number of housing units to be canvassed. If you are unable to meet the target number of households, either because of households that refuse to respond or because the housing unit can not be located, there is a secondary listing of blocks that should be used. As always, interview every household in each secondary block that it is necessary to canvass.
 9. If more housing is found in a block than was expected, go ahead and interview those additional units. This is especially likely to happen in Cantwell. Do not count such households as part of the listing of successfully canvassed housing units. These households will be in addition to the original target survey households.

10. Try to park your car as close to the housing unit as possible.
11. The questionnaires have been designed to allow open-ended questions to be precoded, as the interviewer is taking down the response. Also, there are instructions on several pages for the interviewer.

In order to help the interviewer distinguish quickly between text that should be spoken aloud and instructions which are only there for the interviewer's purposes, a convention in the typing of the questionnaire has been used:

1. All questions and sentences which should be said to the respondent are typed in lower-case letters.
 2. All words which are not to be spoken aloud (instructions and precoded answers) are typed in upper-case letters.
12. In the course of doing some of the surveys, the interviewer may become aware that a member of the household owns a business (question Q-50).

If this is the case, you should explain to the respondent that we are doing two types of surveys, and that you would like to ask a few more questions after the household survey is complete. Upon completion of the household survey, take out a copy of the business questionnaire and run through it.

13. Read the questions exactly as written on the questionnaire. If the respondent does not understand the question, repeat it. It is permitted to elaborate on the meaning of the question, if that appears to be necessary (this is because we are a small group, and we will have gone over the purpose of each question in detail).

Keep a record of any questions that appear to be unclear to the respondent.

14. Some of the questions ask for pretty detailed information and may be construed as an invasion of privacy by some respondents. If a respondent seems reluctant to answer a question, reiterate that the questionnaires will be kept completely confidential, and that only the aggregated results will be made public. If the respondent refuses to answer the question, indicate this with an R in the answer slot, and go on to the next question. We do not want to encourage people to skip questions, but it is more important to complete the interview than to press for the answer to any particular question.

After the respondent has answered the last question, ask him if he will answer the unanswered question(s).

15. There are a couple of questions that should be coded by the interviewer, after leaving the house (including Q-31, Q-33, Q-34). Check over the questionnaires each evening for accuracy, legibility, clarity of the wording on the free-answer questions, and to identify/eliminate any conflicting answers.
16. In the case of conflicting answers that you identify later, make a note of the original responses and then correct the coded portion of the questionnaire as appropriate.

C. Filling In the Questionnaire

1. If there are a list of choices on the questionnaire, choose the one that best fits the respondent's answer and write the number of the question in the answer slot. If the answer does not fit into one of the categories, code the answer as Other, and write down the exact answer.
2. If the question asks for a number of years, people, etc., be sure to put a number in the answer slot. Thus, if the respondent answers "a couple of years", confirm that he means 2.
3. There are a few questions that are answered by putting check marks in the answer slots (Q:5-16, Q:38-49, 61, 72, and 83).
4. For any other questions, write down exactly what the respondent says, and add interviewer notes to clarify, where necessary.
5. If a respondent refuses to answer a question, write an R in the answer slot.

D. Guidelines to Questions that Respondents May Ask

1. How will this information be used?

- For project planning
- This is an opportunity for you and other residents to provide input to the planning process.
- Try and move back to the survey questions.

2. How long have you lived in Alaska?

- Stress that you've worked in Alaska a lot/ a long time/ many times.
- Trained to work on the surveys

3. Why do you keep studying this?

- It is a big and expensive project, important, deserves a lot of consideration.

6. How often will you be doing this survey?

- Once a year.
- If concern is shown: This is to provide continual input to project planning.
- We are only surveying about one-third of the households, using a random sample. Your household may or may not be part of the sample next year.

7. Skepticism about the APA running roughshod over communities.

- The purpose of the surveys and the socioeconomic program is to make sure the communities closest to the project are taken into account.

E. Guidelines on selected survey questions

Intro Display your Alaska Power Authority ID card at each household.

Present the full explanation of the survey to each respondent (client's request). There may be a number of respondents that are hesitant about participating, or that just refuse. Be as persuasive as possible, focusing specifically on the usefulness of the data to project planning (and the mitigation of impacts to the community).

If the respondent asks for more information on the project, explain a little and give him/her a fact sheet.

If the respondent asks to receive a copy of the results, explain that the APA has not determined distribution policy, and take down his/her name and address.

If the respondent asks questions about the project that are outside our scope of work, give him/her George Gleason's card, and explain that he will best be able to answer their questions.

If an adult that lives there is not available, try to determine, from the child or non-resident you are speaking with, a likely time to reschedule the interview.

Q-1 Head of household = primary wage earner. If more than one person makes the same amount of money, they are both heads of household.

Q-2a The answer should include people that are away at the hospital or on a trip.

Q-2b-2d Many people forget to identify new-born infants as members of the household because they aren't used to thinking of them as individuals yet. That is why there is an indication to the interviewer that this should be checked.

Age is determined by the person's last birthday. So, if someone is going to be 5 years old tomorrow, they should be listed as under 5 years.

Children who live in the resident on a part-time basis should be included as a fraction.

Q:5-16 Be sure to confirm that the respondent understands the question was asked in the negative. Place check marks next to the months they mention

Q-17 Write down the respondent's exact answer, and then fill in the coded answer.

Q-20 Trailer = unit on wheels; Mobile home = unit on blocks

Q:23-24 If the respondent answers that he/she considers the facility and service in question poor or very poor, ask what his/her reasons are.

Review the listing of facilities/services that are available in the community or for the community, and eliminate any sub-questions that are not relevant.

Q-30 Employment is considered to be an activity for which the respondent gains income. Working at their own business is employment. Building one's own house is not considered employment.

The answer is 2, Unemployed and actively seeking work, if the person has sought work during the past month.

Q-31 Write down the respondent's exact answer, and then fill in the coded answer.

Q-33 Write down the respondent's exact answer, and then fill in the coded answer.

Q-34 Write down the respondent's exact answer, and then fill in the coded answer.

Q-35 If you are unsure if the community the respondent mentions is within 10 miles of their home, ask him/her.

Q-50 If the answer is YES (1), make a note to do a business survey after the household survey is completed.

Q-65,
Q-78,
Q-87 A cultural activity is an activity you traditionally do with family or friends, that you do on a regular basis, and that is related to your way of life.

Q-90 If the respondent has not lived in the community since 1980, ask him/her to talk about any changes since moving there.

Q-91 As the respondent mentions changes, note the type of change in the left-hand column. Then, ask the respondent to rate the magnitude of the change and place the code in the second column.

III. BUSINESS SURVEY

A. Methodology

All businesses in each community should be interviewed. Each interviewer will start out with a listing of known businesses in the community. During the first couple of days, you should ask members of the community to identify any other businesses that there are.

In addition there will be some businesses that will be identified from the household surveys. These businesses should also be surveyed.

B. Procedures

1. Conduct the interviews between 9 a.m. and 9 p.m.
2. Ask to speak with the owner or manager. If that person is not there, determine a better time to reach him or her.

If the respondent is the manager and cannot answer all questions, obtain the owner's phone number. We will contact the owner at a later time.

3. Some respondents may operate more than one business. If this is the case, a questionnaire should be filled out on each business.
4. The questionnaires have been designed to allow open-ended questions to be precoded, as the interviewer is taking down the response. Also, there are instructions on several pages for the interviewer.

In order to help the interviewer distinguish quickly between text that should be spoken aloud and instructions which are only there for the interviewer's purposes, a convention in the typing of the questionnaire has been used:

1. All questions and sentences which should be said to the respondent are typed in lower-case letters.
2. All words which are not to be spoken aloud (instructions and precoded answers) are typed in upper-case letters.
5. Read the questions exactly as written on the questionnaire. If the respondent does not understand the question, repeat it. It is permitted to elaborate on the meaning of the question, if that appears to be necessary (this is because we are a small group, and we will have gone over the purpose of each question in detail).

Keep a record of any questions that appear to be unclear to the respondent.

6. Some of the questions ask for pretty detailed information and may be construed as an invasion of privacy by some respondents. If a respondent seems reluctant to answer a question, reiterate that the questionnaires will be kept completely confidential, and that only the aggregated results will be made public. If the respondent refuses to answer the question, indicate this with an R in the answer slot, and go on to the next question. We do not want to encourage people to skip questions, but it is more important to complete the interview than to press for the answer to any particular question.

After the respondent has answered the last question, ask him if he will answer the unanswered question(s).

7. Check over the questionnaires each evening for accuracy, legibility, clarity of the wording on the free-answer questions, and to identify/eliminate any conflicting answers.

C. Filling in the Questionnaire

1. If there are a list of choices on the questionnaire, choose the one that best fits the respondent's answer and write the number of the question in the answer slot. If the answer does not fit into one of the categories, code the answer as Other, and write down the exact answer.
2. If the question asks for a number of years, people, etc., be sure to put a number in the answer slot. Thus, if the respondent answers "a couple of years", confirm that he means 2.
3. There are a few questions that are answered by putting check marks in the answer slots (Q-22, Q-25, Q-28).
4. For any other questions, write down exactly what the respondent says, and add interviewer notes to clarify, where necessary.
5. If a respondent refuses to answer a question, write an R in the answer slot.

D. Guidelines on selected questions

- Q-1 Be sure that the respondent is answering the question for only that one business.
- Q-8a Met your needs = been able to provide you with the amount of goods and services that you need.
- Q-9a Expansion of an existing business and the start of a new business may not appear to be distinct actions to the respondent, when this first question is asked. If the respondent begins to talk about starting a new business, record this answer under Q-10. Then, clarify the distinction and ask if the respondent plans on expanding his/her present business as well.

Talkeetna

Talkeetna is an unincorporated community in the Mat-Su Borough. Incorporated status was voted down in 1982.

1. Closest state Trooper post is in Trapper Creek.
2. School is new and well-equipped. Handles grades K-6.
3. Has a fire station and new equipment. Staffed by volunteers.
4. Nearby landfill operated by the borough.
5. Ambulance and active EMT organization
6. No medical care available in the community; Use hospitals in Anchorage, Fairbanks, Palmer. Doctors in Wasilla as well.
7. Road System - maintenance of state roads by the state, borough roads by the borough.
8. Railroad passes through. Airfield. Residents use float planes on nearby lakes.
9. Social Services - a counselling center available in Palmer; extension services were rejected by the Talkeetna community.
11. There is a library.
12. Indoor Recreation - none
13. Outdoor Recreation Facilities - nearby Denali State Park, McKinley National Park. Talkeetna is historically the take-off point for expeditions to Mt. McKinley, and fishing/hunting parties.
14. No water system
15. No sewage treatment system

Trapper Creek

Trapper Creek is an unincorporated community in the Mat-Su Borough.

1. State Trooper post
2. School is new and well-equipped. Handles grades K-6.
3. No fire protection. Old building and equipment that is not used or maintained.
4. Nearby landfill operated by the borough.
5. Ambulance and active EMT organization
6. No medical care available in the community; a nurse that lives in the community helps out when she can. Use hospitals in Anchorage, Fairbanks, Palmer. Doctors in Wasilla as well.
7. Road System - maintenance of state roads by the state, borough roads by the borough.
8. No other transportation facilities; residents use float planes on nearby lakes.
9. Social Services - a counselling center available in Palmer; there is an extension service in Trapper Creek periodically.
11. Library - was a hot political issue. I believe it was voted down..
12. Indoor Recreation - none
13. Outdoor Recreation Facilities - nearby Denali State Park, McKinley National Park.
14. No water system
15. No sewage treatment system

Cantwell

Cantwell is an unincorporated community in an unorganized borough.

1. State Trooper post
2. School is new and well-equipped. Handles grades K-12.
3. Fire hall under planning/construction
4. Garbage dump is on land that is technically private (Native-owned).
Obtaining a better landfill is a high-priority need.
5. Ambulance would be associated with fire hall
6. No medical care available in the community. Use hospitals in Anchorage, Fairbanks, Palmer. There is a small clinic in Healy, doctors in Wasilla as well.
7. Road System - maintenance of state roads by the state.
8. There is a private air strip. The Railroad passes through, and a couple of residents use float planes on nearby lakes.
9. Social Services - only those provided by the state in Anchorage, Fairbanks.
11. Library - there is a library at the school.
12. Indoor Recreation - the Native community built a community building.
13. Outdoor Recreation Facilities - nearby McKinley National Park.
14. No water system
15. No sewage treatment system