

**SUSITNA
HYDROELECTRIC PROJECT**

FEDERAL ENERGY REGULATORY COMMISSION
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**TALKEETNA
HOUSEHOLD SURVEY REPORT**

FRANK ORTH & ASSOCIATES, INC.

UNDER CONTRACT TO

HARZA-EBASCO
SUSITNA JOINT VENTURE

FINAL REPORT

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SUSITNA HYDROELECTRIC PROJECT

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Report by

Frank Orth & Associates, Inc.

Under Contract to
Harza-Ebasco Susitna Joint Venture

Prepared for
Alaska Power Authority

Final Report
February 1984

NOTICE

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

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INTRODUCTION

Surveys of communities that are expected to 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 expected to be significantly affected by the construction and operation of the dam do not have much reported baseline economic and demographic information. In order to profile the 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 community trends is being developed to support the basis upon which impact projections are made. This household survey is designed to obtain information on demographic characteristics, employment, length of residency, housing characteristics, satisfaction with public services and facilities of residents living in Talkeetna, and use by residents of fish and wildlife resources.

1.0 SUMMARY DISCUSSION OF MAJOR FINDINGS

Surveys of households in Talkeetna were conducted during the period October 26, 1983 to November 2, 1983. An estimated 124 housing units existed in the survey defined area of Talkeetna at that time. A total of 50 housing units were identified in the canvassed primary and secondary blocks of which 45 were successfully canvassed. Of the 45 housing units successfully canvassed, 14 were determined to be vacant and interviews were conducted with the remaining 31 households. An estimated 35 percent of the 89 households in the survey defined area of Talkeetna were interviewed.

- o A summary of demographic characteristics for Talkeetna residents shows: 1) an estimated population size of 281 people in the survey defined area; 2) an estimated average age for adults of 37.1 years old; 3) an estimated sex distribution for the adults in the sample of 50 percent male and 50 percent female; 4) approximately five percent of the adults sampled belong to a Native organization; 5) about 45 percent of the sample households contained married heads of household with the spouse present; 6) an estimated average household size of 3.16; and 7) about 0.9 school-age children (5 to 17 years old) per household in the sample.
- o A summary of economic characteristics for Talkeetna residents shows that: 1) 75 percent of all adults were in the labor force; 2) approximately 66 percent of all adults were either employed or self-employed; 3) the unemployment rate at the time of the survey was between 13 and 14 percent; 4) the largest industry sectors in terms of employment were transportation, communication, and utilities (25 percent), construction (23 percent), and federal, state and local government (slightly higher than 18 percent); and 5) 91 percent of presently employed and recently unemployed adults in the sample at the time of the survey worked in the Mat-Su Borough, between 2 and 3 percent of the sample worked in Anchorage, and 7 percent worked on the North Slope.

- o A summary of housing characteristics for Talkeetna residents shows that: 1) 48 percent of the interviewed households lived in owner-occupied dwelling units; 2) 77 percent of all surveyed households lived in single-family dwelling units, 7 percent lived in mobile homes, and 16 percent lived in travel trailers; and 3) the overall vacancy rate in the sample was 28 percent.
- o Over half of all replies received from Talkeetna residents to questions about attitudes toward available public facilities and services in the community were classified as very satisfied or satisfied. For individual services, residents were most satisfied with libraries (89 percent favorable), other transportation (68 percent favorable), ambulance (64 percent favorable), and solid waste or garbage disposal (64 percent favorable). Residents expressed the most dissatisfaction with the road system (50 percent unfavorable) and the lack of medical services in the community besides ambulance (43 percent unfavorable).
- o Over 39 percent of the respondents lived outside Alaska prior to moving to Talkeetna. Former Anchorage households made up about 26 percent of the Talkeetna households in the sample. Frequently cited reasons for moving to Talkeetna were to obtain a job (about 43 percent), the quality of life (about 17 percent), and the availability of land (10 percent).
- o Talkeetna residents rely upon fishing and hunting for recreation and food. Approximately 48 percent of the population fishes and 29 percent hunt. Of the 25 sample households that fished, no more than 28 percent fished for any one species in the area that may be impacted by the Susitna Hydroelectric Project. Thirty-five percent of the total 402 person-days spent fishing by Talkeetna residents in the sample occurred in this area. Of the 18 sample households that hunted, none spent any time in Area 2 during the last year. In Area 1, seven households hunted moose, 2 households sought caribou and ptarmigan, and 2 households went after other species. About 41 percent of the 272 person-days spent hunting by Talkeetna residents in the sample occurred in Area 1. Four percent of Talkeetna residents trap. None of the 22 person-days spent trapping occurred in areas that may be impacted by the Susitna Hydroelectric Project.

2.0 APPROACH AND METHODOLOGY

2.1 OVERVIEW

A number of steps were taken to determine the approach and methodology for the household survey in Talkeetna. First, the major objectives and specific types of information needed to update the socioeconomic projections were identified. Next, a review of the literature on surveys was conducted. Third, the definitions of the populations for each of the three communities were determined.¹

A sampling frame and sampling methodology were selected.² 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 those review comments.

¹ In statistical theory, the population refers to the total universe of "data elements" about which the researcher wishes to generalize. In this case, the population refers to the households located, at the time of the survey, within specific geographic boundaries.

² A sampling frame is the comprehensive listing, of the population, from which the sample was chosen.

2.2 OBJECTIVES

The survey program was developed with the general objective that the results would enhance the following socioeconomic program activities:

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 annual survey of population and housing conducted by the Mat-Su Borough Planning Department.
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, the advantages and disadvantages of alternative interview approaches, question formulation, 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 have 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.

2.3 SAMPLING TECHNIQUE

Some of the considerations taken into account during this analysis included:

1. The need for a relatively large sample because of the small size of the population.
2. The significant percentage of residents in the northern part of the Mat-Su Borough that do not have phones.
3. The low density of housing units in many areas, and the significant percentage of residents that live away from direct road access.
4. The need for a high response rate, to avoid a skewed or unsuccessful survey.

It was believed that a representative sample of the preliminary population could best be obtained by using a face-to-face approach. Face-to-face approaches typically provide high response rates. In Talkeetna, the only disadvantage of using a face-to-face interview approach was that the population was dispersed. There were significant numbers of

residents living away from the roads and the core of the community. The target population in Talkeetna was, therefore, reduced to the townsite area only, allowing for a statistically valid sample to be drawn. Residents living along the Talkeetna Spur road, south of the townsite, and near the Comsat road, to the east, were not interviewed.

2.3.1 Sampling Frame

The Mat-Su Borough Assessor's records of housing units, reported in an array by township-range-section-parcel, were selected to be the sampling frame for the survey in Talkeetna. This sampling frame was consistent with the annual survey of population and housing conducted by the Mat-Su Borough. It was considered to provide a representative sampling frame for the northern part of the Mat-Su Borough; other possible listings, such as the phone book and voters registration records, were less comprehensive and would not provide a valid basis for the sampling. The Borough does not require building permits for housing units, so an up-to-date listing for housing units was not available.

The use of assessment records has the following limitations:

1. Some housing units are vacant.
2. Assessment records may be up to a year old, depending upon where the borough is in the cycle of field work at the time the computer run was conducted.
3. Mobile homes are sometimes recorded as personal property rather than real property and thus are not included on the real property assessment records.
4. Structures are classified by principal use; therefore, residences which are within or above commercial buildings are not identified on the computer record.

To compensate for the two most important of these limitations (#2 and #3), the sample was drawn in blocks. The interviewers were instructed to interview all housing units in the block, even if this unit did not appear on the assessment records. In order to limit the amount of time spent trying to locate residents in households that may not be occupied, the interviewers were instructed to attempt to contact a household up to three times, and then to list the unit as vacant or not-at-home, as appropriate. To facilitate the call-back process, a card was used by the interviewer that specified the next time a call would occur. If the respondent would not be home at that time, he or she was asked to state on the call-back card when they would be available and to leave the card out upon the interviewer's second call-back.

2.3.2 Sample Selection

A sample size of 30 percent of the housing units listed in the Assessor's was established. The sample selection process used was similar to the process used by the Mat-Su Borough in its annual population surveys. The communities were divided into blocks (census blocks, when these were delineated on the maps provided by the Mat-Su Borough), the blocks were each assigned a number, and a sample of blocks was chosen using a random sample technique, as described below. All housing units in the designated blocks on the list were canvassed, in the block order listed.

A target number of successfully canvassed housing units was developed for each community. The primary blocks selected for each community contained more than the required 30 percent of housing units, in order to allow for unsuccessful interviews. However, a procedure was developed for canvassing secondary blocks in case the required number of successful interviews was not obtained.

If the interviewer was unable to meet the target number of households from within the primary block listings, for any of the reasons listed below, the interviewer was directed to canvass secondary blocks until the target was reached.

A housing unit was considered to be successfully canvassed if:

1. An interview occurred.
2. The unit was identified as vacant by a neighbor.
3. The interviewer attempted to call on the housing unit three times, at different times of day, was not able to find anyone at home and there was no evidence that the unit was currently occupied.

A housing unit was considered not successfully canvassed if:

1. The household declined to be interviewed.
2. The housing unit could not be located.
3. It was impossible to gain access to the housing unit.
4. It was clear that someone was living at the residence, even though 3 calls at the household were not sufficient to find a resident at home.

A completely random sampling technique was deemed appropriate for sample selection in Talkeetna because there was no apparent geographic stratification of the population.³ The primary blocks were chosen using a random number table.

³ The 1983 Mat-Su Borough annual population survey in Talkeetna showed somewhat different estimates for vacancy rates, occupied housing units and population estimates than the results obtained from this survey. A number of factors contributed to this difference. First, the Mat-Su Borough survey was based upon a population frame of 140 housing units, whereas this survey had a population frame of 120. Second, the surveys were taken at different times of the year; the Mat-Su Borough survey occurred in August 1983, whereas this survey was conducted in late October and early November. Finally, with a random sampling procedure, it is likely that the results of two separate samples from a given population will differ to a certain degree.

The interviewer found three housing units which were clearly in use but where respondents could not be located, within three call-backs. According to neighbors, several of these households belonged to individuals who work on the North Slope and commute back and forth to Talkeetna (the most common work schedule is two weeks working/ two weeks off). Housing units in secondary blocks were canvassed in order to complete the required number of successful canvasses. The substitution is expected to primarily affect the representativeness of the survey's results for Question #35, which asks the location of the respondents' place of work.

For six months prior to the survey, Talkeetna was a staging area for construction of the Anchorage-Fairbanks Intertie transmission line. The managers of the project lived in a project-specific mobile home park. However, the majority of workers on the Intertie project lived in homes throughout the community, and thus were represented in the survey. Approximately 24 percent of the adults in the sample were working or had worked on the Intertie.

2.3.3 The Questionnaire

The survey instrument is 20 pages long. Four hand-out sheets were used to facilitate understanding of questions about employment status, industry of the employed, occupation, and attitudes about public facilities and services, and two maps were used to assist respondents in answering questions dependent upon geographic areas (most notably, questions pertaining to hunting, fishing, and trapping). A copy of the survey instrument is provided in Appendix B.

The field work was conducted between October 26, 1983 and November 2, 1983. The Talkeetna interviewer completed 31 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.

The survey instrument was pre-tested in Cantwell on October 21-22, 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 residents to ensure comprehension by all of the respondents who were likely to be included in the sample. Modifications to the questionnaire were made as a result of the pre-test.

Completed questionnaires were checked each night for data problems or inconsistencies by the community interviewer.

3.0 ANALYSIS OF RESULTS

3.1 INTRODUCTION

Several conventions are followed throughout the analysis section to allow the reader quick and easy reference to the tables in Appendix A. Tables in the appendix are ordered in a sequence that corresponds to the way in which the questions appear in the survey instrument. Some responses will not appear in the appendix. Those responses not appearing at this time were not included because either they were contingent or secondary questions that received few responses or they are already incorporated in the text. Tables that appear in the text were referenced to a question that appears in the survey instrument. The instrument is presented as Appendix B.

Responses to the survey questions allow the researcher to derive sample statistics such as means or proportions. These statistics are used to generalize from the sample to the entire population. Sample statistics provide a point estimate of the true population parameter. However, due to sampling error, it would be an exceptional coincidence if the point estimate provided by the sample statistic were identical to the population parameter. A major weakness of point estimates is that they do not permit any expression of uncertainty about the sample statistic's ability to estimate the population parameter of interest. Uncertainty about estimating ability requires a procedure that calculates an interval about which one has a degree of certainty that the true population parameter is contained within a specified range.

Construction of confidence intervals was the technique employed to provide a degree of certainty about the sample statistic's ability to estimate the population parameter. The intervals are created about the sample statistic and require information about the probability of error that one is willing to accept, the size of the sample, the sampling distribution, and the sample statistic used as an estimator.

Smaller sample sizes, extreme values in the distribution of observations, and acceptable risks of error no larger than 10 percent led to several confidence intervals that were quite large for some of the sample statistics.

In calculating confidence intervals, the researcher determines the risk of error that is acceptable for the purposes of the research. A five percent probability of error that intervals constructed will not contain the true population parameter value is typically selected. Confidence levels are defined as one minus the probability of error. In this case, a 95 percent confidence interval procedure would be used. Construction of intervals using 95 percent confidence levels implies that in 95 out of 100 samples of the same size, the intervals constructed about the sample statistics would be expected to contain the population parameter value. In the other five intervals, the population parameter value would lie outside the interval constructed. In other words, by using this procedure we would be assured that the probability of any interval containing the population parameter value is 95 percent.

3.2 SURVEY RESULTS

3.2.1 Demographic Characteristics

Demographic characteristics that profile the population consist of age, sex, race, relationship to head of household, marital status, household size, number of school-age children, and size of the population.

3.2.1.1 Age. According to Table 1, children in Talkeetna made up almost 41 percent of the persons in households while the elderly (65 or more years old) accounted for about 4 percent of the sample. The elderly proportion was similar to that estimated for the entire Mat-Su Borough during 1982. There were more children and fewer elderly as a proportion of the Talkeetna population as compared to the State. Recent State estimates (1982) show these proportions to have been 30 to 35 percent and 3 percent, respectively. Mean age of the sample was 25.8 years while the median was 27 years. A smaller mean implies that the distribution of ages for the sample is slightly skewed to the left. In 1982, average age in Alaska was 27.6 years.

Adult inhabitants ranged in age from 18 years old to 87 years old. The median age of adults was 33 years old, and the mean age was 37 years.

Table 1
Age Distribution of Sample Residents

Age	Frequency Distribution	
	Number	Percent
0 - 4	12	12.2%
5 - 13	15	15.3%
14 - 17	13	13.3%
18 - 19	2	2.0%
20 - 29	15	15.3%
30 - 39	23	23.5%
40 - 49	9	9.2%
50 - 64	5	5.1%
65 +	4	4.1%
	<u>98</u>	<u>100.0%</u>
Median = 27.0		
Mean = 25.8		

Source: (Q27), Frank Orth & Associates, Inc., 1984.

3.2.1.2 Sex. Fifty percent of the adults in the sample were male, and 50 percent were female. The percentage of males in the 1982 State of Alaska population was between 52 and 53 percent.

3.2.1.3 Member of Native Corporation. About five percent of the adults were members of a Native organization.

3.2.1.4 Household Relationships and Marital Status. About 51 percent (30) of the 58 adults in the sample stated that they were the head of household, and 24 percent (14) were defined as spouses of the head of household. One other adult was classified as a family member, and the remaining 22.4 percent of the sample were classified as roommates or friends. The latter category represents a relatively large proportion of non-related households as compared to the State proportion. The proportion of non-related individuals in households in the entire state during 1980 was estimated at almost 5 percent of all persons in households.

The average age of heads of household was 38 years old. The defined heads of household in Talkeetna were estimated to be over 64 percent male (18) and over 35 percent female (10). The other three households had no clearly defined head.

The responses to questions about relationship to head of household indicated slightly more than 48 percent of the adults in the sample were married and living with their spouses. A 95 percent confidence interval about the sample proportion is between 35 percent and 62 percent. A 95% confidence interval implies that if 100 samples were drawn from the population of the size 58, in 95 out of the 100 samples, we would expect the population proportion to fall into the interval specified.

3.2.1.5 Household Size. Talkeetna had an average household size of 3.16 persons per household compared to the statewide average household size in 1980 of 2.93. The number of adults per household in Talkeetna was estimated at 1.89.

3.2.1.6 School-Age Children. There were approximately 1.27 children per household in the sample. In total, the sample population was composed of about 12 percent pre-school children, about 15 percent primary school-age children, and about 13 percent secondary school-age children. Primary school-age children represented 54 percent of total school-age children in the community.

The proportions of children per household were extended to the total estimated number of households that exist in the survey-defined area of Talkeetna (89 households) to yield estimates of the total number of children in the community: 34 pre-school children, 43 primary school-age children, and 37 secondary school-age children. It was not possible to check these numbers against school enrollment figures since the survey-defined area of Talkeetna represents only a portion of the area that is included in the local school district.

3.2.1.7 Population. There were 126 housing units in the survey-defined area of Talkeetna during 1982. Based on 1983 survey results, the total was adjusted to 124 housing units in 1983. A vacancy rate of 28 percent was determined from sample results. The October vacancy rate is higher than the summer rate because, by the end of October, many seasonal job holders and householders will have left the area. The July vacancy rate for Talkeetna was estimated at 16 to 17 percent by the Mat-Su Borough. Because the vacancy rate is likely to be higher in January than in October, it was assumed that 28 percent provides a reasonable estimate of the annual average rate. Higher rates in January are due to the out-migration of all remaining seasonal jobholders and householders and verified in survey results in Table 13. Therefore, an overall occupancy rate for the community of 72 percent is considered accurate.

Multiplying the 124 housing units by the occupancy rate yields an estimated 89 occupied households in the community. Multiplying the number of households by the estimated average household size of 3.16 yields an estimated population of 281 people in the survey-defined area of Talkeetna. The Mat-Su Borough estimate of the Talkeetna population in 1983 was 325. The difference is due to the different time periods when the

surveys were conducted and the differences in the survey-defined areas used in each effort. The Borough's survey, which was conducted in July 1983, found lower vacancy rates and more housing units.

3.2.2 Economic Characteristics

Economic characteristics that profile the population consist of employment status, occupation status, industry of the employed, occupation of the unemployed, and the location of jobs. In addition, several characteristics can be combined from the household and business surveys to provide information on employment by place of work versus employment by place of residence, and commuting patterns.

3.2.2.1 Employment. All the adults in the sample were asked to describe their current employment status. About 76 percent of adults in the sample (44) out of the 58 respondents described themselves as labor force participants, according to Table 2. Of the 44 adults, more than 86 percent were currently employed (or self-employed) and about 14 percent were unemployed but actively seeking work. Retired adults made up about 9 percent of the sample, homemakers made up close to 14 percent of the sample, and inactive unemployed accounted for about 2 percent of the respondents.

Table 2
Employment Status

Category	Frequency Number	Distribution Percent
Employed or Self-Employed	38	65.5%
Retired	5	8.6%
Unemployed (Active)	6	10.3%
Unemployed (Inactive)	1	1.7%
Homemaker	8	13.8%
	58	99.9%

Source: (Q30), Frank Orth & Associates, Inc., 1984.

3.2.2.2 Hours Worked Per Week. Of the 45 respondents who were currently or recently employed, over 84 percent were considered to be employed fulltime. Full-time employment is defined as working at least 35 hours per week. About 11 percent worked less than 20 hours per week. Adults

working between 20 and 29 hours accounted for 4 to 5 percent of the sample. Results appear in Table 3.

Table 3
Hours Worked Per Week

Category	Frequency Number	Distribution Percent
0 - 9 Hours	3	6.7%
10 - 19 Hours	2	4.4%
20 - 29 Hours	2	4.4%
35 or More Hours	38	84.4%
	<u>45</u>	<u>99.9%</u>
Median = 35 or More Hours		
Source: (Q36), Frank Orth & Associates, Inc., 1984.		

3.2.2.3 Occupation and Industry. The primary occupation of respondents in the labor force was placed into categories used by the Alaska Department of Labor. Results appear in the Table 4 below. The occupation that represented the largest number of residents was the professional, technical, and managerial category.

Table 4
Primary Occupation

Category	Frequency Number	Distribution Percent
Professional, Technical, & Managers	10	22.7%
Clerical Workers and Sales Persons	5	11.4%
Service Workers	5	11.4%
Agriculture, Fishery and Forestry	3	6.8%
Machine Trades	5	11.4%
Structural	5	11.4%
Recreation-Based Occupations	1	2.3%
Motor Freight and Transportation	5	11.4%
Packaging and Materials Handling	2	4.5%
Mining	2	4.5%
Miscellaneous	1	2.3%
	<u>44</u>	<u>100.1%</u>

Source: (Q31), Frank Orth & Associates, Inc., 1984.

Secondary skills held by Talkeetna residents were weighted toward the service occupation groups (about 26 percent), the machine trades (about 13 percent), and the professional, technical, and managerial group (about 13 percent). Representing about 10 percent each of the 31 responses received to this question were the agriculture, fishery, and forestry occupations, structural trades, recreation-based occupations, and mining trades.

Respondents were asked to identify the name of the establishment that they presently or most recently worked for. The establishments were subsequently classified into industry categories that are used by the Alaska Department of Labor. The largest industry sector is Transportation, Communications and Utilities, accounting for 25 percent of the labor force. One reason for large number of jobs in this sector is related to the Intertie project. The community also contains a number of air transport businesses which service the construction sector as well as the tourist sector.

The construction sector was also an important component of the Talkeetna economy, accounting for about 23 percent of employment. Agriculture, Forestry, and Commercial Fisheries accounted for about 14 percent of the total employment in the sample. The effects of the Intertie project are also an important factor in explaining the importance of these two sectors to the local economy.

Another important sector is government. It accounted for slightly over 18 percent of all employment in the Talkeetna economy.

3.2.2.4 Location of Employment. According to Table 5, about 84 percent of the 44 currently employed residents and recently employed residents in the sample said that their job was located within 10 miles of their residence. Close to 7 percent had jobs in other locations in the Mat-Su Borough. Over 9 percent had jobs that were located outside of the Mat-Su Borough.

Table 5
Location of Principal Job

Category	Frequency Number	Distribution Percent
Local (Within 10 Miles)	37	84.1%
Other Mat-Su Borough	3	6.8%
Anchorage	1	2.3%
North Slope	3	6.8%
	<u>44</u>	<u>100.0%</u>

Source: (Q35), Frank Orth & Associates, Inc., 1984.

3.2.2.5 Business Ownership. Slightly more than 23 percent of all adults in Talkeetna owned a business. Many of these businesses were in the services sector and the transportation sector. They include hotels and inns and helicopter and aviation services. Additionally, retail trade business types consist of arts and crafts establishments, restaurants, and general merchandise businesses.

3.2.2.6 Seasonality of Employment. The number of full-time employed adults varied from about 40 percent of the total 58 adults in January and February to 69 percent in October during 1983, as shown in Table 6. Comparing the peak and valley months of full-time employment during 1983 with average employment of about 31 adults shows that seasonal variations have ranged from 129 percent of average to as low as 74 percent.

Table 6
Seasonality of Baseline Full-time Employment Patterns in Talkeetna
(As a Percent of All Adults and As a Percent of Average Full-time
Employment)
N = 58

Month	Baseline Full-time Employment		
	Number	Percent of Adults	Percent of Average*
October	40	69.0%	129.0
November	29	50.0%	93.9
December	24	41.4%	77.7
January	23	39.7%	74.4
February	23	39.7%	74.4
March	27	46.6%	87.4
April	29	50.0%	93.9
May	31	53.4%	100.3
June	34	59.6%	110.0
July	36	63.2%	116.5
August	36	63.2%	116.5
September	39	68.4%	126.2

* Average Monthly Full-time Employment = 30.9.

Source: (Q63 to Q74); Frank Orth & Associates, 1984.

3.2.2.7 Estimate of Total Employment in the Community. It was estimated that 1.23 adults per household are employed on average (38 employed residents divided by 31 households). Multiplying this by the estimated 89 occupied households in the survey defined area yields a total of 109 employees by place of residence. Place of work estimates can be obtained by adding the responses to employment from surveys of businesses, the public sector, and the Intertie construction worker survey. Place of work estimates for Talkeetna are 177 jobs. Since over 84 percent of all residents work within 10 miles, 92 of the 109 employees by place of residence were estimated to work in Talkeetna. Seventeen commuted to jobs outside the area. Of the 177 jobs in Talkeetna, 92 belonged to Talkeetna residents and 85 were estimated to belong to non-residents.

3.2.2.8 Transportation And Travel. Information about travel behavior and preferences for commuting were obtained from respondents. Using the approximate mid-points of each classification in the frequency distribution tables, it was possible to develop an estimate of the amount of

time respondents were spending traveling to work and the amount of time they were willing to spend traveling to work. The majority of respondents have been spending about 30 minutes per day traveling in their current or most recent job, according to Table 7.

Table 7
Average One-Way Daily Commute Time

Category	Frequency Distribution	
	Number	Percent
Less Than 30 Minutes	36	87.8%
31 to 60 Minutes	2	4.9%
5 Hours (And Some Minutes)	3	7.3%
	<u>41</u>	<u>100.0%</u>

Source: (Q52), Frank Orth & Associates, Inc., 1984.

An average of 5.4 round trips to work were made each week by residents of Talkeetna, according to Table 8. The preferred mode of transportation to work was use of a personal motor vehicle. Two thirds of the 45 respondents use such transportation to get to work, 24 plus percent travel on foot or use a bicycle to get to their place of employment, and nine percent go to work by plane. The latter responses were divided equally between North Slope workers and Intertie workers.

Table 8
Number of Round Trips to Work Per Week

Category	Frequency Distribution	
	Number	Percent
Less Than One	3	9.1%
One	2	6.1%
Four	1	3.0%
Five	11	33.3%
Six	6	18.2%
Seven Or More	10	30.3%
	<u>33</u>	<u>100.0%</u>

Source: (Q53), Frank Orth & Associates, Inc., 1984.

On average, respondents were willing to travel up to 1 hour and 50 minutes a day to get to and from work. In jobs that require only one round

trip per week, respondents would be willing to travel about 4 hours and 50 minutes each way to their job.

3.2.3 Housing Characteristics

Housing characteristics of interest in the survey include home ownership patterns, dwelling unit types, vacancy rates, and information on housing stock characteristics. A total of 31 responses were possible for household characteristics.

3.2.3.1 Type of Structure. Housing unit types were tabulated for households with which interviews were conducted. Results appear in Table 9. Of the 31 responses to this question, over 77 percent (24) of the households were living in single-family dwelling units, between 6 and 7 percent resided in mobile homes on single-family lots, and slightly more than 16 percent lived in travel trailers.

Table 9
Housing Type

Category	Frequency Number	Distribution Percent
Single Family	24	77.4%
Mobile Home on S-F Lot	2	6.5%
Travel Trailer	5	16.1%
	<u>31</u>	<u>100.0%</u>

Source: (Q20), Frank Orth & Associates, Inc., 1984.

3.2.3.2 Ownership Characteristics. Forty-eight percent of the 31 households interviewed owned the dwelling unit that they lived in, while 42 percent of the adults in households were renters. The remaining three housing units, comprising ten percent of the sample, were owned by a business, which used them to house its employees.

3.2.3.3 Vacancy Rates. A vacancy rate was tabulated for all of the 50 housing units that were canvassed. Twenty-eight percent of the housing units were determined to be vacant in the sample blocks at the time the

survey was taken. A ninety-five percent confidence about the sample proportion for vacancy rate implies that the true proportion would lie between 15.7 percent and 40.3 percent in 95 out of 100 samples of size 50 drawn from the population.

3.2.3.4 Housing Characteristics. Each household in the sample was asked whether five characteristics existed in the household. The percentage responding positively to each characteristic is shown below in Table 10.

Table 10
Housing Characteristics
N = 31

Category	Frequency Distribution	
	Number	Percent
Cold Running Water	26	83.8%
Hot Running Water	26	83.8%
Septic Tank	25	80.6%
Telephone	23	74.1%
Electricity	29	93.5%

Source: (Q22), Frank Orth & Associates, Inc., 1984.

Households were also asked about the type of fuel they use to heat their dwelling. Of the 31 responses received, 55 percent (17) said they relied primarily on wood, 32 percent (10) said they relied primarily on oil, and 13 percent (4) said they relied on other fuel sources. Other fuel sources included some form of electric heat.

3.2.4 Resident Attitudes About Public Facilities and Services

Inhabitants of Talkeetna were asked to rank their level of satisfaction (which included five options) with available facilities and services. Respondents could also answer with no opinion. In addition, no response was considered as not applicable since many services were not immediately available to respondents. Twenty-eight responses were obtained for each of these questions. Results appear in Table 11.

Most of the 13 services included in the survey instrument were locally available to residents of Talkeetna. One exception was mental health

services. This service was obtained from outside the area. In addition, medical care and services besides ambulance and social services were only locally available in limited quantities. For example, a public health nurse from Palmer was available one day every two weeks in Talkeetna and a few people were able to obtain assistance with paperwork related to social services through their local political representatives.

The library received the highest percentage of positive responses (89 percent), followed by other transportation (68 percent), ambulance service (64 percent) and the school system (54 percent). Fifty percent of the respondents were dissatisfied or very dissatisfied with the road system, and cited poor and infrequent maintenance or plowing as the reasons. Other medical care and services besides ambulance also received a high percentage of dissatisfied responses, mainly due to the lack of physician care and pharmacies near Talkeetna.

Table 11
Levels of Satisfaction with Selected Public Facilities and Services*
N = 28

<u>Facility or Service</u>	<u>Very Satis- fied</u>	<u>Satisfied</u>	<u>Neither Satis- fied nor Dis satisfied</u>	<u>Dissat- isfied</u>	<u>Very Dis- satisfied</u>	<u>No Opin- ion</u>
State Trooper Pro- tection	3.6%	57.1%	21.4%	10.7%	3.6%	3.6%
Schools	25.0%	28.6%	7.1%	7.1%	7.1%	25.0%
Fire Protection	14.3%	32.1%	10.7%	10.7%	10.7%	21.4%
Solid Waste or Garbage Disposal	10.7%	53.6%	7.1%	14.3%	7.1%	7.1%
Ambulance	35.7%	28.6%	14.3%	0.0%	3.6%	17.9%
Other Medical Care & Services	3.6%	21.4%	10.7%	32.1%	10.7%	21.4%
Road System	3.6%	35.7%	7.1%	32.1%	17.9%	3.6%
Other Transportation	17.9%	50.0%	7.1%	10.7%	3.6%	10.7%
Mental Health Services	0.0%	10.7%	3.6%	17.9%	3.6%	64.3%
Social Services	3.6%	10.7%	3.6%	14.3%	3.6%	64.3%
Libraries	32.1%	57.1%	0.0%	0.0%	0.0%	10.7%
Indoor Recreation Facilities	0.0%	32.1%	10.7%	25.0%	21.4%	10.7%
Outdoor Recreation Facilities	14.3%	35.7%	17.9%	7.1%	7.1%	17.9%

* The percentages in this table all add up to 100 percent except for some minor differences due to rounding.

Source: (Q23), Frank Orth & Associates, Inc., 1984.

Respondents were also asked to rank their levels of satisfaction with their water supply and wastewater systems. As shown in Table 12, most respondents were satisfied with their water quantity (96 percent) and somewhat less were satisfied with water quality (74 percent) and their septic tank system (73 percent). The source of the water for almost 93 percent of Talkeetna residents was from the ground. Only 7 percent received their drinking water from surface sources.

Table 12
Levels of Satisfaction with Water and Wastewater Treatment Systems

Water Characteristic	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied	No Opinion	Total
Water Quantity	22.2%	74.1%	0.0%	0.0%	0.0%	3.7%	100.0%
Water Quality	29.6%	44.4%	0.0%	11.1%	11.1%	3.7%	100.0%
Septic Tank	15.7%	57.7%	3.8%	3.8%	11.5%	7.7%	100.0%

Source: (Q24), Frank Orth & Associates, Inc., 1984.

3.2.5 Residency and Settlement Patterns

Residency and settlement pattern characteristics include seasonality of residents, length of residency, and reasons for choosing to settle in Talkeetna.

3.2.5.1 Residency and Seasonality. It is important to differentiate between the population of a community at a certain point in time from the number of residents in the community because the State of Alaska distributes certain types of grants to local governments on the basis of the number of people who qualify as residents. The State of Alaska defines a resident as one who lives in a community more than six months of the year or four or more days a week on an annual basis.

Accordingly, questions similar to those in the Mat-Su Borough survey of population and housing were asked of respondents about the amount of time spent in Talkeetna. Four residents in the sample of 58 adults answered

that they usually work outside of Talkeetna in one-week work/one week home or two-week work/two-week home schedules, and thus would not qualify with the residency requirement of living in Talkeetna four days a week or more. About 7 percent of all adult inhabitants would not be classified as residents based on this criterion. However, as noted in the methodology section, it is believed that people who work on the North Slope were underrepresented in the sample. People who work on the North Slope may or may not be counted as residents depending on the actual amount of time that they spend in the Borough, including vacations. Thus, it is likely that the percentage of individuals in Talkeetna who do not meet the residency requirement is somewhat larger than the sample suggests.

The monthly difference in the number of adult inhabitants who live in Talkeetna throughout the year was identified in the sample results and shown in Table 13. The number of adults living in Talkeetna in January and February 1983 was equal to only 54 percent of the number living in the community in September.

Table 13
Seasonality of Adult Residents
N = 58

Category	Number	Percent
October	53	91.4%
November	32	55.2%
December	30	51.7%
January	29	50.0%
February	29	50.0%
March	33	56.9%
April	35	60.3%
May	35	60.3%
June	39	67.2%
July	45	77.6%
August	47	81.0%
September	54	93.1%
Monthly Averages Within Quarter		
First Quarter	38.3	
Second Quarter	30.3	
Third Quarter	36.3	
Fourth Quarter	48.7	

Source: (Q5), Frank Orth & Associates, Inc., 1984.

Seasonal variations are important factors in explaining the number of year-round residents and in estimating the demand on public facilities and services in the community. The survey data suggest that only 50 percent of the population living in the community in October 1983 were there year-round.

It is important to note two aspects of the survey that may limit the usefulness of these statistics. First, three of the 14 homes that were identified as vacant appeared to be in good condition and to have been recently lived in. To the extent that these homes are used only in the summer months, the seasonal variations are probably greater than the survey data indicates.

In addition, the trend noted above may reflect an influx of population related to the Intertie construction project, rather than usual seasonal fluctuations. The Intertie project began hiring employees in Talkeetna in the Spring of 1983. In the autumn, employment had begun to increase. The effect of the Intertie on the length of residency can be seen in Table 14; these figures show that about 48 percent of the adult inhabitants interviewed in Talkeetna have lived in the community for less than 2 years, with almost 33 percent having moved into the community in the six months prior to the survey. Of the 18 residents who arrived within the last six months, 50 percent (9) were new residents who were working on the Intertie.

Table 14
Length of Residence

Category	Frequency Distribution	
	Number	Percent
Less than 6 Months	18	31.0%
6 Months to Less Than 2 Years	10	17.2%
2 - 5 Years	12	20.7%
6 - 9 Years	10	17.2%
10+ Years	8	13.8%
	58	99.9%

Median = 2.5 years

Source: (Q26); Frank Orth & Associates, Inc., 1984.

3.2.5.2 Prior Location of Residence. Respondents were asked to state where they lived prior to moving to Talkeetna and why they chose to move to Talkeetna. About 39 percent of residents (12) lived out-of-state before moving to Talkeetna, according to Table 15. The next largest number of in-migrants came from Anchorage (26 percent). Other communities in the Mat-Su Borough accounted for about 19 percent of the in-migrants to Talkeetna. Other locations in Alaska excluding Anchorage and the Mat-Su Borough accounted for over 16 percent of the in-migrants in Talkeetna.

Table 15
Prior Location of the Household

Category	Frequency Distribution	
	Number	Percent
Another Community in the Mat-Su Borough	6	19.4%
Anchorage	8	25.8%
Fairbanks	1	3.2%
Other Railbelt	2	6.5%
Other Alaska	2	6.5%
Out-Of-State	12	38.7%
	<u>31</u>	<u>100.0%</u>

Source: (Q17), Frank Orth & Associates, Inc., 1984.

3.2.5.3 Reasons For Moving. As shown in Table 16, the most frequently cited reasons for moving to Talkeetna were related to obtaining a job (43 percent), the quality of life (17 percent) and the availability of land (10 percent). Other reasons which accounted for over 13 percent of the respondents' answers include aesthetic quality of environment, adventure, religious reasons, and negative attitudes toward urban living.

Table 16
Reasons for Moving to Present Location

Category	Frequency Distribution	
	Number	Percent
To Obtain a Job	13	43.3%
To Set Up a Business	1	3.3%
Availability of Land, Land Disposal, Homestead Opportunity	3	10.0%
Born or Raised Here	1	3.3%
Friends or Relatives Nearby	2	6.7%
Community Services	1	3.3%
Quality of Life	5	16.7%
Other	4	13.3%
	<u>30</u>	<u>99.9%</u>

Source: (Q18a and b), Frank Orth & Associates, Inc., 1984.

Additional reasons for moving, as shown in Table 17, were also weighted heavily toward the quality of life response (about 26 percent) and friends and relatives nearby (about 16 percent). Other reasons made up over 47 percent of the responses. Similar to the primary reason for moving to Talkeetna, aesthetic quality of environment and religious reasons were cited most frequently under this category. The weather and negative attitudes about prior places of residences were also cited as reasons for moving.

Table 17
Additional Reasons for Moving to Present Location

Category	Frequency Distribution	
	Number	Percent
Availability of Housing	1	5.3%
Friend or Relatives Nearby	3	15.8%
School System	1	5.3%
Quality of Life	5	26.3%
Other	9	47.4%
	<u>19</u>	<u>100.1%</u>

Source: (Q17, Q18), Frank Orth & Associates, Inc., 1984.

3.2.6 Fish and Wildlife Resource Use

These questions were asked of households so that questions related to frequency distributions could contain a total of 31 responses. The percentages and calculations in this section should be used with a great deal of caution, as it is highly speculative to base conclusions on fish and wildlife use on data collected for a twelve month period from one point in time.

3.2.6.1 Fishing Activity. The average number of people per household who fish was estimated at 1.51 persons per household. Based on an estimated number of 89 occupied households, there are about 134 people in the survey-defined area of Talkeetna who fish. Over 80 percent of the households had at least one person who fishes.

There were a total of 402 person-days spent by the 44 people in the sample who fish, and 35 percent of the days (141) were spent in Area 1 (see Map 1 in Appendix B).

Data on the species sought by people who fish in Area 1 were gathered from responses to questions about person-days spent fishing in Area 1 and what species were sought. In the sample, the people who fish in Talkeetna were most likely to fish for salmon, (28 percent), especially silver and sockeye, and rainbow trout (24 percent), as shown in Table 18. Percentages represent the number of households that fished in Area 1 for a species in the past twelve months, out of the total number of households in the sample who responded that they fish in Area 1.

Table 18
Households That Fish in Area 1 by Species Sought
N = 25

Category	Number	Percent
Salmon:	7	28.0%
Red or Sockeye	5	20.0%
Pink or Humpy	1	4.0%
Silver or Coho	7	28.0%
Chum or Dog	2	8.0%
King or Chinook	3	12.0%
Grayling	4	16.0%
Rainbow Trout	6	24.0%
Burbot	1	4.0%
Dolly Varden	2	8.0%
Other	1	4.0%

Source: (Q61); Frank Orth & Associates, 1984.

As shown in Table 19, the majority, or 62.5 percent, of households that fish responded that their primary reason is sport and recreation. The remaining 37.5 percent indicated that obtaining food is their main reason. No respondents mentioned fishing for cultural reasons.

Table 19
Main Reason For Fishing

Category	Frequency Distribution	
	Number	Percent
Food	9	37.5%
Sports & Recreation	15	62.5%
	<u>24</u>	<u>100.0%</u>

Source: (Q58), Frank Orth & Associates, Inc., 1984.

Answers to the question about the percentage of protein supplied from fishing activities give an idea of the extent to which local residents rely on fishing for food. Of the fifteen households responding to the question, about 47 percent said that none of their protein needs were met

by fishing, about 47 percent of the households said that up to one quarter of their protein needs during the last year were met by fishing activities, and one respondent indicated that fish caught by household members accounted for between one-quarter and one-half of the household's protein needs during the past year. Results appear in Table 20.

Table 20
Fish as a Percent of Annual Protein Needs

Category	Frequency Distribution	
	Number	Percent
None	7	46.7%
Less Than One Quarter	7	46.7%
One Quarter to One Half	1	6.7%
	15	100.1%

Source: (Q62), Frank Orth & Associates, Inc., 1984.

A final question about the importance of fishing in Area 1 for recreation was asked of the twenty households. Of the 11 households responding, 27 percent (3) stated that Area 1 was important or very important to their recreational fishing activities. More than 36 percent of the households answered that Area 1 was not so important for recreation and the same percentage responded that Area 1 was unimportant.

3.2.6.2 Hunting Activity. Approximately 55 percent of the households contain people that hunt. The average number of people per household who hunt was estimated at 0.93 persons per household. Based on an estimated number of 89 occupied households, there are an estimated 83 people in the survey-defined area of Talkeetna who hunt.

There were a total of 272 person-days spent by the 29 people in the sample who hunt; 41 percent of the days (112) were spent in Area 1 and none were spent in Area 2 (see Map 2 in Appendix B). Area 1 represents those areas within 10 miles of the Parks Highway and Denali Highway corridors. Area 2 represents the area that would be made more accessible if an access road is built from the Denali Highway to the project site.

The distribution of species sought by people in Talkeetna who hunt in Area 1 was gathered from responses to questions about person-days spent hunting in Area 1 and Area 2 and what species were sought. In addition, the total harvest by species was also asked of households. Harvest information has been summarized in Table 21 for Area 1.

Table 21
Harvest Count For Sample Household For Area 1 by Species

Species	1983 Harvest Count
Moose	1
Caribou	1
Sheep	0
Blackbear	0
Wolf	0
Ptarmigan	40
Ducks	25
Spruce Hens	20

Source: (Q72a to 1, Q73a to 1), Frank Orth & Associates, Inc., 1984.

None of the 17 households in the sample that hunt in Area 1 did so for cultural reasons, according to Table 22. Over three-fourths hunted primarily for food and approximately one-fourth hunted primarily for sport.

Table 22
Main Reason For Hunting

Category	Frequency Number	Distribution Percent
Food	13	76.5%
Sports & Recreation	4	23.5%
	17	100.0%

Source: (Q67), Frank Orth & Associates, Inc., 1984.

Answers to the question about the percentage of protein supplied from hunting activities revealed a somewhat substantial reliance upon hunting in the last year to support protein needs. According to Table 23, slightly more than 8 percent (1) of the 12 responding households said that less than one-quarter of their protein needs during the last year were met by hunting activities, about 17 percent said that approximately one-half of their protein needs were met by hunting activities in the last year and another 17 percent answered that meat from hunting accounted for more than one-half of their protein needs. However, more than 58 percent (7) said that none of their protein needs were met by hunting during the last year. This means that several households which hunted primarily for food, according to Table 22, were unsuccessful in obtaining meat from hunting activities last year.

Table 23
Game as a Percent of Annual Protein Needs

Category	Frequency Distribution	
	Number	Percent
None	7	58.3%
Less Than One Quarter	1	8.3%
About One Half	2	16.7%
One Half to Three Quarters	2	16.7%
	<u>12</u>	<u>100.0%</u>

Source: (Q75), Frank Orth & Associates, Inc., 1984.

A final question about the importance of hunting in Area 1 for recreation was answered by the four households that indicated they hunt for sport. One-half of these respondents (representing 6.5 percent of the overall sample of 31) stated that Areas 1 and 2 were very important or important to their recreational hunting activities. The other one-half of the respondents indicated that Areas 1 and 2 were unimportant to their recreational hunting activities.

3.2.6.3 Trapping Activities. Thirteen percent of the households in the sample contained people who trap. The average number of people per household who trap was estimated at 0.12 persons per household. Based on an estimated number of 89 occupied households, there may be about 11 people

who live in the survey-defined area of Talkeetna who trap. A ninety-five percent confidence about the sample mean for people per household who trap implies that the true mean would lie between 0 people and 1.03 people per household in 95 out of 100 samples of size 31 drawn from the population.

There were a total of 22 person-days spent by the 4 people in the sample who trap. None of those days were spent in Area 1 or Area 2 (see Map 2 in Appendix B).

Seventy-five percent of the four households (3) that responded to questions about the main reason for trapping stated that recreation was the primary reason for trapping. According to Table 24, the remaining respondent said that trapping for income was the primary reason.

Table 24
Main Reason For Trapping

Category	Frequency Number	Distribution Percent
Sports/Recreation	3	75.0%
Money/Income	1	25.0%
	<u>4</u>	<u>100.0%</u>

Source: (Q80), Frank Orth & Associates, Inc., 1984.

Two respondents answered the question about the percentage of income gained from trapping activities, and both indicated that they had gained no income from trapping during the previous 12 months. Results appear in Table 25.

Table 25
Trapping as a Percent of Yearly Income

Category	Frequency Number	Distribution Percent
None	2	100.0%
	<u>2</u>	<u>100.0%</u>

Source: (Q87), Frank Orth & Associates, Inc., 1984.

A final question about the importance of trapping in Areas 1 and 2 for recreation was asked of the 28 households. Of the 2 households responding, one stated that Areas 1 and 2 were very important or important to their recreational trapping activities, although it is apparent that this was not the case for the last year since no households said that they used either area. The one household represented 3.2 percent of the total sample of households. The other household stated that these areas were unimportant for their recreation needs.

3.2.7 Community Change

Households were asked if they had noticed any changes in their community since 1980. Eighty percent of the 30 respondent households answered in the affirmative and twenty percent noticed no changes at all. The most noticeable change in Talkeetna was the large increase in population. Related changes that were commonly mentioned include: 1) increase in employment opportunities and business activity; 2) increase in theft; 3) increase in traffic, speeding and careless driving; 4) increase in the number of transients in the community; 5) a change away from the small-town atmosphere that long-time residents had enjoyed; 6) more businesses, more variety of goods available, and more professional service by the businesses; 7) higher school enrollments; 8) changing aesthetics, and increase in number of buildings, cutting down of trees; and 9) criticism of the way in which the Intertie contractors treated members of the community.

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APPENDIX A

12/08/83

HOUSEHOLD SURVEY/TALKEETNA
MEAN AND STANDARD DEVIATIONS

	MEAN AND STANDARD DEVIATION	
	MEAN	STAND DEV
ADULTS PER HOUSEHOLD	1.87	.8
PRE-SCHOOL AGE CHILDREN	0.38	.7
PRIMARY SCHOOL AGE CHILDREN	0.48	.8
SECONDARY SCHOOL AGE CHILDREN	0.41	.8
HOUSEHOLD AVERAGE	3.16	

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HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

HOUSEHOLDS WITH YEAR-ROUND RESIDENCE
STAYING LESS THAN 4DAYS/WEEK

FREQUENCY DISTRIBUTION
NUMBER PERCENT

YES
NO

08 25.8%
23 74.2%

31 100.0%

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

	HSEHOLDS WITH RESIDENTS OUTSIDE COMM. DURING LAST 12 MOS.	FREQUENCY DISTRIBUTION NUMBER	PERCENT
YES		18	58.1%
NO		13	41.9%
		---	---
		31	100.0%

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

HOME OWNERSHIP
OWN/BUYING
RENT
OTHER

FREQUENCY DISTRIBUTION NUMBER	PERCENT
15	48.4%
13	41.9%
03	9.7%
---	---
31	100.0%

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

WATER SOURCE
SURFACE
GROUND

FREQUENCY DISTRIBUTION	
NUMBER	PERCENT
02	7.1%
26	92.9%
----	----
28	100.0%

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

PRIMARY HEAT SOURCE
WOOD BURNING HEATER
OIL HEATER
OTHER

FREQUENCY DISTRIBUTION	
NUMBER	PERCENT
17	54.8%
10	32.3%
04	12.9%
---	---
31	100.0%

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

RELATIONSHIP TO HEAD OF HOUSEHOLD
SPOUSE
PARENT OR PARENT-IN-LAW
ROOMMATE OR FRIEND
HEAD OF HOUSEHOLD

FREQUENCY DISTRIBUTION NUMBER	PERCENT
14	24.1%
01	1.7%
13	22.4%
30	51.7%
---	---
58	99.9%

1/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

AGE OF HEAD OF HOUSEHOLD

	NUMBER	PERCENT
18-19 YEARS	1	3.3%
20-44 YEARS	22	73.3%
45-64 YEARS	4	13.3%
65+ YEARS	<u>3</u>	<u>10.0%</u>
TOTAL	30	99.9%

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HOUSEHOLD SURVEY/TALKEETNA
MEAN AND STANDARD DEVIATIONS

	MEAN AND STANDARD DEVIATION	
	MEAN	STAND DEV
LENGTH OF RESIDENCE (IN YEARS)	4.25	5.3

	MEAN AND STANDARD DEVIATION	
	MEAN	STAND DEV
AGE	37.10	14.5

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HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

SEX
MALE
FEMALE

FREQUENCY DISTRIBUTION	
NUMBER	PERCENT
29	50.0%
29	50.0%
---	---
58	100.0%

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

	MEMBER OF NATIVE CORPORATION	FREQUENCY NUMBER	DISTRIBUTION PERCENT
YES		03	5.2%
NO		55	94.8%
		---	---
		58	100.0%

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

INDUSTRY CATAGORIES	FREQUENCY NUMBER	DISTRIBUTION PERCENT
AGRICULTURE, FORESTRY, & COMMERCIAL FISHERIES	06	13.6%
MINING	03	6.8%
CONSTRUCTION	10	22.7%
TRANSPORTATION, COMMUNICATION, & UTILITIES	11	25.0%
WHOLESALE TRADE	01	2.3%
RETAIL TRADE	04	9.1%
SERVICES	01	2.3%
FEDERAL GOVERNMENT	04	9.1%
STATE GOVERNMENT	01	2.3%
LOCAL GOVERNMENT	03	6.8%
	---	---
	44	100.0%

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

BUSINESS OWNERSHIP

YES
NO

FREQUENCY DISTRIBUTION	
NUMBER	PERCENT
12	23.1%
40	76.9%
---	---
52	100.0%

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

PREFERENCE FOR AVERAGE DAILY COMMUTING TIME
LESS THAN 15 MINUTES
15 TO 29 MINUTES
30 TO 60 MINUTES
1 HOUR
2 HOURS

FREQUENCY NUMBER	DISTRIBUTION PERCENT
03	10.3%
06	20.7%
11	37.9%
07	24.2%
02	6.9%
---	---
29	100.0%

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

PREFERENCE FOR AVERAGE WEEKLY COMMUTE TIME	FREQUENCY DISTRIBUTION	
	NUMBER	PERCENT
2 HOURS (AND SOME MINUTES)	06	26.1%
3 HOURS (AND SOME MINUTES)	03	13.0%
5 HOURS (AND SOME MINUTES)	05	21.7%
6 HOURS OR MORE	09	39.1%
	---	---
	23	99.9%

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

DOES THE HOUSEHOLD CONTAIN PEOPLE THAT FISH?

YES
NO

FREQUENCY DISTRIBUTION

NUMBER	PERCENT
25	80.6%
06	19.4%

---	---
31	100.0%

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

HOUSEHOLDS WITH _____ PEOPLE THAT FISH		FREQUENCY DISTRIBUTION	
		NUMBER	PERCENT
0		06	20.7%
1		13	44.8%
2		02	6.9%
3		06	20.7%
4		01	3.4%
5		01	3.4%
		---	---
		29	99.9%

1/26/84

HOUSEHOLD SURVEY/TALKEETNA
MEAN AND STANDARD DEVIATIONS

		MEAN AND STANDARD DEVIATION	
		MEAN	STAND DEV
HOUSEHOLDS WITH _____	PEOPLE THAT FISH	1.51	1.3
HOUSEHOLDS WITH _____	PEOPLE THAT HUNT	0.93	1.0
HOUSEHOLDS WITH _____	PEOPLE THAT TRAP	0.12	0.3

0290h

1/26/84

HOUSEHOLD SURVEY/TALKEETNA
CROSS TABS, INDICES & FREQUENCY DISTRIBUTIONS

TOTAL PERSON DAYS/FISHING

402.00

FREQUENCY OF USE OF AREA/FISHING

35.0 %

290h

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

IMPORTANCE OF FISHING IN AREA 1-RECREATION
VERY IMPORTANT
IMPORTANT
NOT SO IMPORTANT
UNIMPORTANT

FREQUENCY DISTRIBUTION	
NUMBER	PERCENT
01	9.1%
02	18.2%
04	36.4%
04	36.4%
---	---
11	100.1%

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

DOES THE HOUSEHOLD CONTAIN PEOPLE THAT HUNT?

YES
NO

FREQUENCY DISTRIBUTION

NUMBER PERCENT

17 54.8%

14 45.2%

31 100.0%

01/26/84

HOUSEHOLD SURVEY/TALKEETNA
FREQUENCY DISTRIBUTION REPORTS

HOUSEHOLDS WITH _____ PEOPLE THAT HUNT		FREQUENCY DISTRIBUTION	
		NUMBER	PERCENT
0		13	41.9%
1		11	35.5%
2		03	9.7%
3		04	12.9%
		---	---
		31	100.0%

1/26/84

HOUSEHOLD SURVEY/TALKEETNA
CROSS TABS, INDICES & FREQUENCY DISTRIBUTIONS

TOTAL PERSON DAYS/HUNTING	272.00
% OF TOTAL PERSON DAYS HUNTING/AREA 1	41.0 %
% OF TOTAL PERSON DAYS HUNTING/AREA 2	00.0 %

290h

APPENDIX B

Questionnaire #: _____

SUSITNA HYDROELECTRIC PROJECT
HOUSEHOLD SURVEY

Community: _____
Interviewer: _____
Date: _____

Location of Household:

Block #: _____ Housing Unit # (assigned. by interviewer): _____

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

This study is part of the Susitna Hydroelectric Project. Its purpose is to provide current information on the _____ area that can be used for project planning.

The questions are about housing, characteristics of the people in your household, hunting and fishing that you do, and recent changes in your community. IF THEY REQUEST MORE INFORMATION, SHOW SUSITNA BROCHURE OR APA LETTER.

I need to speak with someone 18 years or older that lives here. Would that be you?

The first set of questions will focus on the size of your household and the length of time that you have lived here.

Q-1 Are you the head of this household?

1. YES
2. NO
3. NO HEAD OF HOUSEHOLD

Q-2a How many adults (age 18 or older) live in this household?
IF THIS IS NOT CLEAR, SAY: I mean, all adults who consider this their permanent residence, including people that are not related to you.

FOR A CHILD THAT STAYS PART-TIME, RECORD AS A FRACTION IN QUESTIONS 2b-2d

Q-2b How many children under 5 years of age live in this household?

MAKE SURE THAT THE RESPONDENT INCLUDED INFANTS.

Q-2c How many children ages 5 through 11 live in this household?

Q-2d How many children ages 12 through 17 live in this household?

Q-3a Are there any household members that live here all year round, but usually stay here less than four days per week?

IF 1, ANSWER FOLLOWING QUESTION

1. YES
2. NO

Q-3b (IF 1) How many?

Q-4 Did you or other household members live outside _____ (Cantwell, Trapper Creek, or Talkeetna) sometime in the last 12 months?

IF YES, ANSWER QUESTIONS 5-16

1. YES
2. NO

Q:5-16 In which months during the last twelve months did you not live here?

How about the other adults in your household?
Which months during the last twelve months did they not live here?

Respondent	Adult #2	Adult #3	Adult #4	Adult #5	Adult #6
5a _____ OCTOBER	5b _____ OCTOBER	5c _____ OCTOBER	5d _____ OCTOBER	5e _____ OCTOBER	5f _____ OCTOBER
6a _____ NOVEMBER	6b _____ NOVEMBER	6c _____ NOVEMBER	6d _____ NOVEMBER	6e _____ NOVEMBER	6f _____ NOVEMBER
7a _____ DECEMBER	7b _____ DECEMBER	7c _____ DECEMBER	7d _____ DECEMBER	7e _____ DECEMBER	7f _____ DECEMBER
8a _____ JANUARY	8b _____ JANUARY	8c _____ JANUARY	8d _____ JANUARY	8e _____ JANUARY	8f _____ JANUARY
9a _____ FEBRUARY	9b _____ FEBRUARY	9c _____ FEBRUARY	9d _____ FEBRUARY	9e _____ FEBRUARY	9f _____ FEBRUARY
10a _____ MARCH	10b _____ MARCH	10c _____ MARCH	10d _____ MARCH	10e _____ MARCH	10f _____ MARCH
11a _____ APRIL	11b _____ APRIL	11c _____ APRIL	11d _____ APRIL	11e _____ APRIL	11f _____ APRIL
12a _____ MAY	12b _____ MAY	12c _____ MAY	12d _____ MAY	12e _____ MAY	12f _____ MAY
13a _____ JUNE	13b _____ JUNE	13c _____ JUNE	13d _____ JUNE	13e _____ JUNE	13f _____ JUNE
14a _____ JULY	14b _____ JULY	14c _____ JULY	14d _____ JULY	14e _____ JULY	14f _____ JULY
15a _____ AUGUST	15b _____ AUGUST	15c _____ AUGUST	15d _____ AUGUST	15e _____ AUGUST	15f _____ AUGUST
16a _____ SEPTEMBER	16b _____ SEPTEMBER	16c _____ SEPTEMBER	16d _____ SEPTEMBER	16e _____ SEPTEMBER	16f _____ SEPTEMBER

Q-17 Where was your household located before it came to _____?

(Cantwell, Trapper Creek, or Talkeetna)

- a. TOWN/CITY: _____
- b. STATE: _____
- c. COUNTRY: _____
- d. ENTER CODE: _____

- 1. ANOTHER COMMUNITY IN THE MAT-SU BOROUGH
- 2. ANCHORAGE
- 3. FAIRBANKS
- 4. OTHER RAILBELT
- 5. OTHER ALASKA
- 6. OUT-OF-STATE

Q-18 What are the two most important reasons the household moved here?

- a. _____: Reason #1
- b. _____: Reason #2

- 1. TO OBTAIN A JOB
- 2. TO SET UP A BUSINESS
- 3. AVAILABILITY OF LAND/LAND DISPOSAL/HOMESTEAD OPPORTUNITY
- 4. AVAILABILITY OF HOUSING
- 5. RECREATION--HUNTING/FISHING/OUTDOOR RECREATION
- 6. INEXPENSIVE TO LIVE
- 7. BORN OR RAISED HERE
- 8. FRIENDS OR RELATIVES NEARBY
- 9. QUALITY OF HOUSING
- 10. SHOPPING FACILITIES
- 11. COMMUNITY SERVICES
- 12. SCHOOL SYSTEM
- 13. PROXIMITY TO WORK
- 14. QUALITY OF LIFE
- 15. OTHER _____

The next set of questions deal with the type of housing you live in.

Q-19 Does the household own or rent this dwelling?

- 1. OWN/BUYING IT
- 2. RENT
- 3. OTHER _____

Q-20 DO NOT ASK UNLESS IT IS NOT OBVIOUS
What type of home is this?

1. SINGLE FAMILY
2. DUPLEX
3. MULTIFAMILY BUILDING (BUILDING FOR THREE OR MORE FAMILIES)
4. MOBILE HOME ON SINGLE FAMILY LOT
5. MOBILE HOME IN MOBILE HOME PARK
6. TRAVEL TRAILER
7. ROOM/CABIN IN A LODGE
8. TENT OR OTHER TENT-LIKE STRUCTURE
9. OTHER _____

Q-21 Where do you get your water?

1. SURFACE
2. GROUND

Q-22 Does the home you live in have:

- a. Cold Running Water..... 1. YES 2. NO
- b. Hot Running Water..... 1. YES 2. NO
- c. Septic Tank..... 1. YES 2. NO
- d. Telephone..... 1. YES 2. NO
- e. Electricity..... 1. YES 2. NO
(HOOKUP OR GENERATOR) IF 1, ANSWER NEXT QUESTION

f. What is your main source of electricity?

1. MATANUSKA ELECTRIC ASSOCIATION
2. GENERATOR
3. BUY ELECTRICITY FROM NEIGHBOR/NEARBY BUSINESS
4. OTHER _____

g. How do you heat your home?

WRITE DOWN MORE THAN ONE CODE, IF APPLICABLE.

- I. _____
- II. _____
- III. _____

1. WOOD-BURNING HEATER
2. OIL HEATER
3. GAS-FIRED HEATER
4. PROPANE OR KEROSENE HEATERS
5. COAL BURNING STOVE
6. OTHER _____

Q-23 I'd like to ask you to rank, on a scale of 1 to 7, your satisfaction with the following public facilities and services (SHEET A). Of course, some of these are provided by the state and some by the Mat-Su Borough (IF IN CANTWELL, SAY other governmental entities). NO FRACTIONAL SCORES.

IF 4 OR 5, ASK Why?

- a. _____ State Trooper protection _____

- b. _____ Schools _____

- c. _____ Fire Protection _____

- d. _____ Solid Waste or Gar-
bage disposal _____

- e. _____ Ambulance _____

- f. _____ Other Medical Care &
Services _____

- g. _____ Road System _____

- h. _____ Other transportation
(Railroad, airports) _____

- i. _____ Mental Health Services _____

- j. _____ Social Services
(GIVE EXAMPLES)
Mental Health, Alcohol Treatment _____

- k. _____ Libraries _____

- l. _____ Indoor Recreation
Facilities _____

- m. _____ Outdoor Recreation
Facilities _____

Q-24 How do you rate, on a scale of 1 to 7, your water and waste water treatment system?

- a. _____ Quantity of Water _____

- b. _____ Water Quality _____

- c. _____ Septic Tank or Other
Sewage System _____

This next section contains questions about employment. I'll be asking you questions about each adult that lives in your household. You said there were _____ adults. Let's begin with yourself.

	<u>Respondent</u>	<u>Adult #2 in Hsehd</u>	<u>Adult #3 in Hsehd</u>
First Name	_____	_____	_____
Q-25 What is your relationship to the head of household?	a. _____ 1. SPOUSE 2. PARENT OR PARENT IN-LAW 3. SON OR DAUGHTER 4. GRANDPARENT 5. ROOMMATE OR FRIEND 6. OTHER _____	b. _____ 1. SPOUSE 2. PARENT OR PARENT IN-LAW 3. SON OR DAUGHTER 4. GRANDPARENT 5. ROOMMATE OR FRIEND 6. OTHER _____	c. _____ 1. SPOUSE 2. PARENT OR PARENT IN-LAW 3. SON OR DAUGHTER 4. GRANDPARENT 5. ROOMMATE OR FRIEND 6. OTHER _____
Q-26 How long has (USE FIRST NAME) lived in _____? (INSERT COMMUNITY NAME)	a. _____	b. _____	c. _____
Q-27 What is your age?	a. _____	b. _____	c. _____
Q-28 Is that person male or female?	a. _____ 1. Male 2. Female	b. _____ 1. Male 2. Female	c. _____ 1. Male 2. Female
Q-29 Are you a member of a native, regional, or village Corporation?	a. _____ 1. YES 2. NO	b. _____ 1. YES 2. NO	c. _____ 1. YES 2. NO
Q-30 Which category best describes your present employment status? (SHEET B)	a. _____ 1. Employed or self-employed 2. Retired 3. Unemp. (active) 4. Unemp. (inactive) 5. Homemaker 6. Student 7. Disabled	b. _____ 1. Employed or self-employed 2. Retired 3. Unemp. (active) 4. Unemp. (inactive) 5. Homemaker 6. Student 7. Disabled	c. _____ 1. Employed or self-employed 2. Retired 3. Unemp. (active) 4. Unemp. (inactive) 5. Homemaker 6. Student 7. Disabled
Q-31 What do you do for a living (primary occupation)?	a. _____	b. _____	c. _____
INTERVIEWER PUTS INTO CATEGORY (SHEET D)	a. _____	b. _____	c. _____

Adult #4 in Hsehd

Adult #5 in Hsehd

Adult #6 in Hsehd

First Name

d. _____

e. _____

f. _____

Q-25 What is your relationship to the head of household?

d. _____

e. _____

f. _____

1. SPOUSE
2. PARENT OR PARENT IN-LAW
3. SON OR DAUGHTER
4. GRANDPARENT
5. ROOMMATE OR FRIEND
6. OTHER _____

1. SPOUSE
2. PARENT OR PARENT IN-LAW
3. SON OR DAUGHTER
4. GRANDPARENT
5. ROOMMATE OR FRIEND
6. OTHER _____

1. SPOUSE
2. PARENT OR PARENT IN-LAW
3. SON OR DAUGHTER
4. GRANDPARENT
5. ROOMMATE OR FRIEND
6. OTHER _____

Q-26 How long has (USE FIRST NAME) lived in _____?
(INSERT COMMUNITY NAME)

d. _____

e. _____

f. _____

Q-27 What is your age?

d. _____

e. _____

f. _____

Q-28 Is that person male or female?

d. _____

e. _____

f. _____

1. Male
2. Female

1. Male
2. Female

1. Male
2. Female

Q-29 Are you a member of a native, regional, or village Corporation?

d. _____

e. _____

f. _____

1. YES
2. NO

1. YES
2. NO

1. YES
2. NO

Q-30 Which category best describes your present employment status?
(SHEET B)

d. _____

e. _____

f. _____

1. Employed or self-employed
2. Retired
3. Unemp. (active)
4. Unemp. (inactive)
5. Homemaker
6. Student
7. Disabled

1. Employed or self-employed
2. Retired
3. Unemp. (active)
4. Unemp. (inactive)
5. Homemaker
6. Student
7. Disabled

1. Employed or or self-employed
2. Retired
3. Unemp. (active)
4. Unemp. (inactive)
5. Homemaker
6. Student
7. Disabled

Q-31 What do you do for a living (primary occupation)?

d. _____

e. _____

f. _____

INTERVIEWER PUTS INTO CATEGORY
(SHEET D)

d. _____

e. _____

f. _____

	<u>Respondent</u>	<u>Adult #2 in Hsehd</u>	<u>Adult #3 in Hsehd</u>
Q-32 Is there anything else you do for a living (secondary occupation)?	a. _____ 1. YES 2. NO	b. _____ 1. YES 2. NO	c. _____ 1. YES 2. NO
Q-33 IF YES TO Q-32, what else do you do for a living?	a. _____	b. _____	c. _____
INTERVIEWER PUTS INTO CATEGORY (SHEET D)	a. _____	b. _____	c. _____
Q-34 Who do you work for now or most recently?	a. _____	b. _____	c. _____
INTERVIEWER PUTS INTO CATEGORY (SHEET C)	a. _____	b. _____	c. _____

IF THEY HAVE MORE THAN ONE EMPLOYER, ANSWER FOR PRINCIPAL JOB.

Q-35 Where is/was your principal/last job located? [Is it within 10 miles of your home?]	a. _____ 1. Local(w/in 10 mi) 2. Other Mat-Su 3. Anchorage 4. Fairbanks 5. North Slope 6. Elsewhere	b. _____ 1. Local(w/in 10mi) 2. Other Mat-Su 3. Anchorage 4. Fairbanks 5. North Slope 6. Elsewhere	c. _____ 1. Local(w/in 10 mi) 2. Other Mat-Su 3. Anchorage 4. Fairbanks 5. North Slope 6. Elsewhere
Q-36 About how many hours per week do/did you work?	a. _____ 1. 0-9 2. 10-19 3. 20-29 4. 30-34 5. 35 or more	b. _____ 1. 0-9 2. 10-19 3. 20-29 4. 30-34 5. 35 or more	c. _____ 1. 0-9 2. 10-19 3. 20-29 4. 30-34 5. 35 or more
Q-37 If you are working part-time (34 hours or less per week), would you be interested in working full-time?	a. _____ 1. YES 2. NO 3. POSSIBLY	b. _____ 1. YES 2. NO 3. POSSIBLY	c. _____ 1. YES 2. NO 3. POSSIBLY

Adult #4 in Hsehd

Adult #5 in Hsehd

Adult #6 in Hsehd

Q-32 Is there anything else you do for a living (secondary occupation)?

d. _____

1. YES
2. NO

e. _____

1. YES
2. NO

f. _____

1. YES
2. NO

Q-33 IF YES TO Q-32, what else do you do for a living?

d. _____

e. _____

f. _____

INTERVIEWER PUTS INTO CATEGORY (SHEET D)

d. _____

e. _____

f. _____

Q-34 Who do you work for now or most recently?

d. _____

e. _____

f. _____

INTERVIEWER PUTS INTO CATEGORY (SHEET C)

d. _____

e. _____

f. _____

IF THEY HAVE MORE THAN ONE EMPLOYER, ANSWER FOR PRINCIPAL JOB

Q-35 Where is/was your principal/last job located? [Is it within 10 miles of your home?]

d. _____

1. Local(w/in 10 mi)
2. Other Mat-Su
3. Anchorage
4. Fairbanks
5. North Slope
6. Elsewhere

e. _____

1. Local(w/in 10mi)
2. Other Mat-Su
3. Anchorage
4. Fairbanks
5. North Slope
6. Elsewhere

f. _____

1. Local(w/in 10 mi)
2. Other Mat-Su
3. Anchorage
4. Fairbanks
5. North Slope
6. Elsewhere

Q-36 About how many hours per week do/did you work?

d. _____

1. 0-9
2. 10-19
3. 20-29
4. 30-34
5. 35 or more

e. _____

1. 0-9
2. 10-19
3. 20-29
4. 30-34
5. 35 or more

f. _____

1. 0-9
2. 10-19
3. 20-29
4. 30-34
5. 35 or more

Q-37 If you are working part-time (34 hours or less per week), would you be interested in working full-time?

d. _____

1. YES
2. NO
3. POSSIBLY

e. _____

1. YES
2. NO
3. POSSIBLY

f. _____

1. YES
2. NO
3. POSSIBLY

WORKING OR UNEMPLOYED, ASK THE FOLLOWING QUESTIONS

Respondent

Adult #2 in Hsehd

Adult #3 in Hsehd

38-49 During which of the
past twelve calendar
months were you
employed or self-
employed full-time?

38a ☐ OCTOBER
39a ☐ NOVEMBER
40a ☐ DECEMBER
41a ☐ JANUARY
42a ☐ FEBRUARY
43a ☐ MARCH
44a ☐ APRIL
45a ☐ MAY
46a ☐ JUNE
47a ☐ JULY
48a ☐ AUGUST
49a ☐ SEPTEMBER

38b ☐ OCTOBER
39b ☐ NOVEMBER
40b ☐ DECEMBER
41b ☐ JANUARY
42b ☐ FEBRUARY
43b ☐ MARCH
44b ☐ APRIL
45b ☐ MAY
46b ☐ JUNE
47b ☐ JULY
48b ☐ AUGUST
49b ☐ SEPTEMBER

38c ☐ OCTOBER
39c ☐ NOVEMBER
40c ☐ DECEMBER
41c ☐ JANUARY
42c ☐ FEBRUARY
43c ☐ MARCH
44c ☐ APRIL
45c ☐ MAY
46c ☐ JUNE
47c ☐ JULY
48c ☐ AUGUST
49c ☐ SEPTEMBER

Q-50 Have you
owned your
own business during
the last 12 months?

a ☐ _____
1. YES
2. NO

b ☐ _____
1. YES
2. NO

c ☐ _____
1. YES
2. NO

IF WORKING OR UNEMPLOYED, ANSWER THE FOLLOWING QUESTIONS

38-49 During which of the

past twelve calendar months were you employed or self-employed?

38d ☐ OCTOBER
 39d ☐ NOVEMBER
 40d ☐ DECEMBER
 41d ☐ JANUARY
 42d ☐ FEBRUARY
 43d ☐ MARCH
 44d ☐ APRIL
 45d ☐ MAY
 46d ☐ JUNE
 47d ☐ JULY
 48d ☐ AUGUST
 49d ☐ SEPTEMBER

38e ☐ OCTOBER
 39e ☐ NOVEMBER
 40e ☐ DECEMBER
 41e ☐ JANUARY
 42e ☐ FEBRUARY
 43e ☐ MARCH
 44e ☐ APRIL
 45e ☐ MAY
 46e ☐ JUNE
 47e ☐ JULY
 48e ☐ AUGUST
 49e ☐ SEPTEMBER

38f ☐ OCTOBER
 39f ☐ NOVEMBER
 40f ☐ DECEMBER
 41f ☐ JANUARY
 42f ☐ FEBRUARY
 43f ☐ MARCH
 44f ☐ APRIL
 45f ☐ MAY
 46f ☐ JUNE
 47f ☐ JULY
 48f ☐ AUGUST
 49f ☐ SEPTEMBER

Q-50 Have you owned your own business during the last 12 months?

d ☐ _____
 1. YES
 2. NO

e ☐ _____
 1. YES
 2. NO

f ☐ _____
 1. YES
 2. NO

INSTRUCTIONS FOR INTERVIEWER: ASK QUESTIONS 51-53 FOR EACH ADULT WHO IS CURRENTLY OR RECENTLY EMPLOYED, AND FOR THE JOB THAT REQUIRES THE MOST TRAVEL TIME.

Q-51 How do you travel to work now (or in the most recent job that required travel)?

<u>Respondent</u>	<u>Adult #2 in Hsehd</u>	<u>Adult #3 in Hsehd</u>
a1 _____	b1 _____	c1 _____
a2 _____	b2 _____	c2 _____
a3 _____	b3 _____	c3 _____

1. PERSONAL MOTORIZED VEHICLE (CAR, TRUCK, VAN)
2. BUS
3. TRAIN
4. OTHER MOTOR VEHICLE
5. PLANE
6. ON FOOT/BICYCLE
7. NOT APPLICABLE

Q-52 What is the average time it takes/took to travel one way to work?

<u>Respondent</u>	<u>Adult #2 in Hsehd</u>	<u>Adult #3 in Hsehd</u>
a _____	b _____	c _____

1. LESS THAN 30 MINUTES
2. 31 TO 60 MINUTES
3. 1 HOUR (AND SOME MINUTES)
4. 2 HOURS (AND SOME MINUTES)
5. 3 HOURS (AND SOME MINUTES)
6. 4 HOURS (AND SOME MINUTES)
7. 5 HOURS (AND SOME MINUTES)
8. 6 HOURS OR MORE
9. NOT APPLICABLE

Q-53 How many round-trips to work do/did you make in an average week?

<u>Respondent</u>	<u>Adult #2 in Hsehd</u>	<u>Adult #3 in Hsehd</u>
a _____	b _____	c _____

1. LESS THAN ONE
2. ONE
3. TWO
4. THREE
5. FOUR
6. FIVE
7. SIX
8. SEVEN OR MORE
9. NOT APPLICABLE

INSTRUCTIONS FOR INTERVIEWER: ASK QUESTIONS 51-53 FOR EACH ADULT WHO IS CURRENTLY OR RECENTLY EMPLOYED, AND FOR THE JOB THAT REQUIRES THE MOST TRAVEL TIME.

Q-51 How do you travel to work now (or in the most recent job that required travel)?

Adult #4 in Hsehd

d1 _____

d2 _____

d3 _____

Adult #5 in Hsehd

e1 _____

e2 _____

e3 _____

Adult #6 in Hsehd

f1 _____

f2 _____

f3 _____

1. PERSONAL MOTORIZED VEHICLE (CAR, TRUCK, VAN)
2. BUS
3. TRAIN
4. OTHER MOTOR VEHICLE
5. PLANE
6. ON FOOT/BICYCLE
7. NOT APPLICABLE

Q-52 What is the average time it takes/took to travel one way to work?

Adult #4 in Hsehd

d _____

Adult #5 in Hsehd

e _____

Adult #6 in Hsehd

f _____

1. LESS THAN 30 MINUTES
2. 31 TO 60 MINUTES
3. 1 HOUR (AND SOME MINUTES)
4. 2 HOURS (AND SOME MINUTES)
5. 3 HOURS (AND SOME MINUTES)
6. 4 HOURS (AND SOME MINUTES)
7. 5 HOURS (AND SOME MINUTES)
8. 6 HOURS OR MORE
9. NOT APPLICABLE

Q-53 How many round-trips to work do/did you make in an average week?

Adult #4 in Hsehd

d _____

Adult #5 in Hsehd

e _____

Adult #6 in Hsehd

f _____

1. LESS THAN ONE
2. ONE
3. TWO
4. THREE
5. FOUR
6. FIVE
7. SIX
8. SEVEN OR MORE
9. NOT APPLICABLE

INSTRUCTIONS TO INTERVIEWER: ASK QUESTIONS 54-55 OF RESPONDENT AND ANY OTHER ADULT MEMBER OF HOUSEHOLD THAT IS PRESENT

Q-54 What is the average amount of time you would be willing to travel to work one way on a daily basis?

Respondent

Adult #2 in Hsehd

Adult #3 in Hsehd

a _____

b _____

c _____

1. LESS THAN FIFTEEN MINUTES
2. 15 TO 29 MINUTES
3. 30 MINUTES - 60 MINUTES
4. 1 HOURS
5. 2 HOURS
6. 3 HOURS
7. 4 HOURS OR MORE
8. NOT APPLICABLE

Q-55 What is the average amount of time you would be willing to travel to work one way on a weekly basis?

Respondent

Adult #2 in Hsehd

Adult #3 in Hsehd

a _____

b _____

c _____

1. LESS THAN THIRTY MINUTES
2. 31 TO 60 MINUTES
3. 1 HOUR (AND SOME MINUTES)
4. 2 HOURS (AND SOME MINUTES)
5. 3 HOURS (AND SOME MINUTES)
6. 4 HOURS (AND SOME MINUTES)
7. 5 HOURS (AND SOME MINUTES)
8. 6 HOURS OR MORE

INSTRUCTIONS TO INTERVIEWER: ASK QUESTIONS 54-55 OF RESPONDENT AND ANY OTHER ADULT MEMBER OF HOUSEHOLD THAT IS PRESENT

Q-54 What is the average amount of time you would be willing to travel to work one way on a daily basis?

Adult #4 in Hsehd

d _____

Adult #5 in Hsehd

e _____

Adult #6 in Hsehd

f _____

1. LESS THAN FIFTEEN MINUTES
2. 15 TO 29 MINUTES
3. 30 MINUTES - 60 MINUTES
4. 1 HOURS
5. 2 HOURS
6. 3 HOURS
7. 4 HOURS OR MORE
8. NOT APPLICABLE

Q-55 What is the average amount of time you would be willing to travel to work one way on a weekly basis?

Adult #4 in Hsehd

d _____

Adult #5 in Hsehd

e _____

Adult #6 in Hsehd

f _____

1. LESS THAN THIRTY MINUTES
2. 31 TO 60 MINUTES
3. 1 HOUR (AND SOME MINUTES)
4. 2 HOURS (AND SOME MINUTES)
5. 3 HOURS (AND SOME MINUTES)
6. 4 HOURS (AND SOME MINUTES)
7. 5 HOURS (AND SOME MINUTES)
8. 6 HOURS OR MORE

This last set of questions concerns the hunting, fishing and/or trapping that you or members of this household may do. The purpose of these questions is to get an idea of how construction of the dam could affect your hunting, fishing, and trapping activities.

Fishing

Q-56 Do you or other members of your household fish?

- a. _____ (IF YES, HOW MANY?) b. _____
1. YES
2. NO

IF THE ANSWER TO QUESTION 56 IS NO, SKIP TO QUESTION 65.

Q-57 What are the reasons you or other household members fish?

IF ONLY ONE REASON IS GIVEN, ASK "Are There Any Other Reasons?"

REASON #1 _____
REASON #2 _____
REASON #3 _____

1. FOR FOOD
2. FOR SPORT/RECREATION
3. FOR CULTURAL REASONS
4. FOR MONEY/INCOME
5. OTHER

Q-58 Of these reasons, what is the main reason?

Q-59 How many total days have you and other members of your household spent fishing in the last twelve months? (INTERVIEWER SHOULD PROVIDE AN EXAMPLE SO THE RESPONDENT UNDERSTANDS THAT WE ARE CONCERNED WITH FINDING OUT THE TOTAL PERSON-DAYS FOR ALL MEMBERS OF THE HOUSEHOLD). IF TWO PEOPLE ON A GIVEN DAY, WERE OUT FISHING FOR ANY PART OF THE DAY, THAT WOULD BE COUNTED AS TWO PERSON-DAYS

Q-60 How many total days have you and members of your household spent fishing in the last 12 months in the area shown on the map?

Q-61 What kinds of fish does your household catch in this area? (show map)

- a. _____ SALMON (IF THEY SAY SALMON, ASK THEM TO BE MORE SPECIFIC)
- b. _____ RED OR SOOKEYE
- 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-62 Of the total amount of meat and fish eaten by your household during the last 12 months, what portion comes from this area?

- _____
- 1. NONE
 - 2. LESS THAN ONE QUARTER
 - 3. ONE QUARTER TO ONE HALF
 - 4. ABOUT ONE HALF
 - 5. ONE HALF TO THREE QUARTERS
 - 6. MORE THAN THREE QUARTERS

ASK QUESTIONS 63 AND 64 ONLY IF CULTURAL AND RECREATION WERE GIVEN AS REASONS IN QUESTION 57.

Q-63 Of all your cultural activities, how important is fishing in the area shown on the map?

- _____
- 1. VERY IMPORTANT
 - 2. IMPORTANT
 - 3. NOT SO IMPORTANT
 - 4. UNIMPORTANT

Q-64 Of all your recreational activities, how important is fishing in the area shown on the map?

- _____
- 1. VERY IMPORTANT
 - 2. IMPORTANT
 - 3. NOT SO IMPORTANT
 - 4. UNIMPORTANT

Hunting

Q-65 Do you or other members of your household hunt?

a. _____ (IF YES, HOW MANY?) b. _____

1. YES

2. NO

IF THE ANSWER TO QUESTION 65 IS NO, SKIP TO QUESTION 78.

Q-66 What are the reasons you or other household members hunt?

IF ONLY ONE REASON IS GIVEN, ASK "Are There Any Other Reasons?"

a. _____ REASON #1

b. _____ REASON #2

c. _____ REASON #3

1. FOR FOOD

2. FOR SPORT/RECREATION

3. FOR CULTURAL ACTIVITIES

4. FOR MONEY/ INCOME

5. OTHER

Q-67 Of those reasons, what is the main reason?

Q-68 Do you or other household members have a subsistence permit from the Department of Fish and Game?

_____ (IF YES, ANSWER THE NEXT QUESTION)

1. YES

2. NO

Q-69 How many household members hold such permits?

Q-70 How many total days have you and other members of your household spent hunting in the last 12 months? (IF NECESSARY, MAKE IT CLEAR THAT YOU ARE INTERESTED IN TOTAL PERSON-DAYS FOR ALL MEMBERS OF YOUR HOUSEHOLD). COUNT EACH PERSON FOR HOWEVER LONG THEY SPENT HUNTING AS ONE PERSON-DAY.

Q-71 How many total days have you and members of your household spent hunting in the last 12 months in the two areas shown on the map?

a. _____ Area #1

b. _____ Area #2

Q-72 What kinds of animals does your household hunt within each area?

	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-73 How many animals did you and other household members harvest in each area (by species)?

	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-74 How many animals did you and other household members obtain from road kills (by species)?

	MOOSE	CARIBOU	SHEEP	BLACK BEAR	WOLF	WATER- FOWL	PTARMI- GAN		OTHER
--	-------	---------	-------	---------------	------	----------------	----------------	--	-------

a1	b1	c1	d1	e1	f1	g1	h1	i1	j1
----	----	----	----	----	----	----	----	----	----

Q-75 Of the total amount of meat and fish eaten by your household during the last twelve months, what portion comes from your harvests in these areas (combined) excluding road kills?

1. NONE
2. LESS THAN ONE QUARTER
3. ONE QUARTER TO ONE HALF
4. ABOUT ONE HALF
5. ONE HALF TO THREE QUARTERS
6. MORE THAN THREE QUARTERS

ASK QUESTIONS 76 AND 77 ONLY IF CULTURAL AND RECREATION WERE GIVEN AS REASONS IN QUESTION 66.

Q-76 Of all your cultural activities, how important is hunting within these areas?

1. VERY IMPORTANT
2. IMPORTANT
3. NOT SO IMPORTANT
4. UNIMPORTANT

Q-77 Of all your recreational activities, how important is hunting within these areas?

1. VERY IMPORTANT
2. IMPORTANT
3. NOT SO IMPORTANT
4. UNIMPORTANT

TRAPPING .

Q-78 Do you or other members of your household trap?

a. _____ (IF YES, HOW MANY?) b. _____

1. YES
2. NO

IF THE ANSWER TO QUESTION 78 IS NO, SKIP TO QUESTION 88.

Q-79 What are the reasons you or other household members trap?

IF ONLY ONE REASON IS GIVEN, ASK "Are there any other reasons?"

- a. _____ REASON #1
- b. _____ REASON #2
- c. _____ REASON #3

1. FOR FOOD
2. FOR SPORT/RECREATION
3. FOR CULTURAL ACTIVITIES
4. FOR MONEY/INCOME
5. OTHER

Q-80 Of those reasons, what is the main reason?

Q-81 How many total days have you and other members of your household spent trapping in the last 12 months? (IF NECESSARY, MAKE IT CLEAR THAT YOU ARE INTERESTED IN TOTAL PERSON-DAYS FOR ALL MEMBERS OF YOUR HOUSEHOLD). COUNT EACH PERSON FOR HOWEVER LONG THEY SPENT IN THE AREA AS ONE-PERSON DAY.

Q-82 How many total days have you and members of your household spent trapping in the last 12 months in the two areas shown on the map?

- a. _____ Area #1
- b. _____ Area #2

Q-83 What kinds of animals does your household trap within each area?

	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

Q-84 How many animals did you and other household members harvest in each area (by species)?

	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	i1	j2	k2

ASK QUESTIONS 85 AND 86 ONLY IF CULTURAL AND RECREATION WERE GIVEN AS ANSWERS TO

QUESTION 79.

Q-85 Of all your cultural activities, how important is trapping within these areas?

- _____
1. VERY IMPORTANT
 2. IMPORTANT
 3. NOT SO IMPORTANT
 4. UNIMPORTANT

Q-86 Of all your recreational activities, how important is trapping within these areas?

- _____
1. VERY IMPORTANT
 2. IMPORTANT
 3. NOT SO IMPORTANT
 4. UNIMPORTANT

Q-87 What portion of your yearly income is from animals trapped in these areas shown on the map?

- _____
1. NONE
 2. LESS THAN ONE QUARTER
 3. ONE QUARTER TO ONE HALF
 4. ABOUT ONE HALF
 5. ONE HALF TO THREE QUARTERS
 6. MORE THAN THREE QUARTERS

Q-88 That is it for the questions on hunting, fishing and trapping. Now can you tell me, Have you noticed any changes in your community since 1980?

(IF 1, ANSWER QUESTION 89)

1. YES

2. NO

Q-89 Please describe how your community has changed since 1980 (GIVE THEM SHEET E). (probe until no more: Yes, can you think of any others?)

CHANGE	CODE

Thank you for your cooperation and for sharing your thoughts. You have been very helpful and it is greatly appreciated. When we are putting this information together, it is possible that some problems may come up, if for instance a mistake was made in recording an answer. Would you be willing to give me your phone number (or post office box number), to use only in such a case?.

RESPONDENT'S FIRST NAME: _____

Phone Number _____

Box Number _____

0132h

HOUSEHOLD SURVEY

SHEET A

- 1. VERY SATISFIED**
- 2. SATISFIED**
- 3. NEITHER SATISFIED NOR DISSATISFIED**
- 4. DISSATISFIED**
- 5. VERY DISSATISFIED**

HOUSEHOLD SURVEY

SHEET B

EMPLOYMENT STATUS

1. EMPLOYED OR SELF-EMPLOYED
2. RETIRED
3. UNEMPLOYED AND ACTIVELY SEEKING WORK
4. UNEMPLOYED AND NOT ACTIVELY SEEKING WORK
(DURING THE PAST MONTH)
5. HOMEMAKER
6. STUDENT
7. DISABLED

HOUSEHOLD SURVEY

SHEET C

INDUSTRY-EMPLOYER

1. Agriculture, Forestry and Commercial Fishing (loggers, farm implement & fertilizer sales, farmers and ag. laborers, trappers)
2. Mining (metal mining, oil & gas extraction, nonmetallic minerals)
3. Construction (carpenters, bricklayers, electricians, plumbers)
4. Manufacturing (Forest and Wood Products, Seafood Processors, Chemical and Allied Products, Paper and Paper Products)
5. Transportation, Communications, Utilities, excluding government utilities (telephone company, air transportation, electric, gas and sanitary services, and trucking and warehousing)
6. Wholesale Trade (establishments that sell goods to retail outlets and not directly to consumers such as distributors of furniture, alcoholic beverages, automotive parts, construction machinery)
7. Retail trade (establishments that sell goods directly to consumers such as clothing, hardware, and food stores, gasoline stations, eating and drinking establishments, automotive dealers)
8. Finance, insurance and real estate (banks, realty offices, insurance companies, credit agencies, and investment companies)
9. Services, other than wholesale and retail trade (hotels, legal services, auto repair shops, and business services)
10. Federal government
11. State government (including education)
12. Local government (including education and utilities)

HOUSEHOLD SURVEY

SHEET D

OCCUPATION

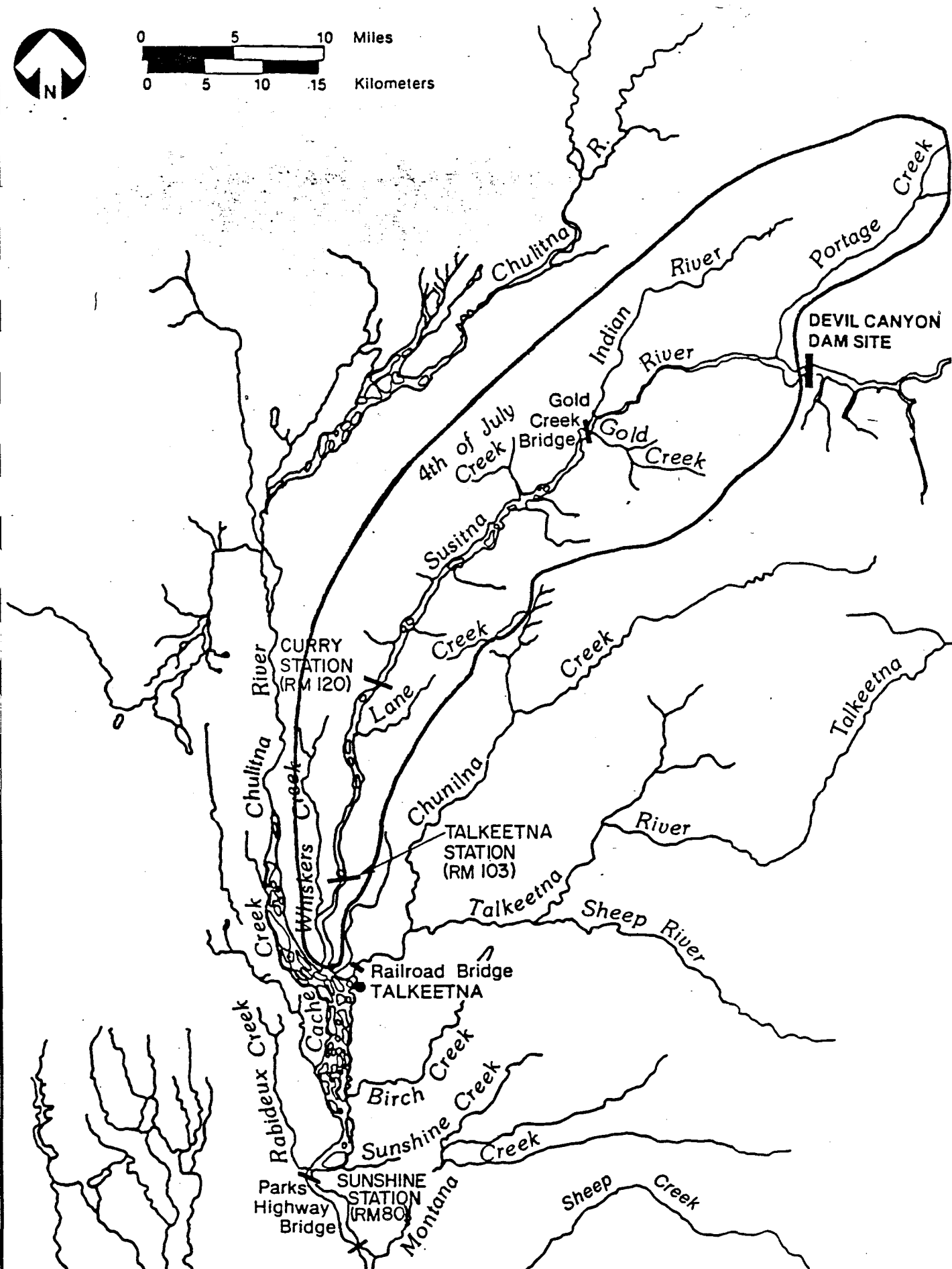
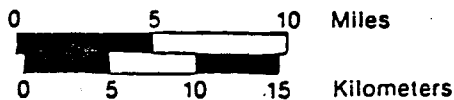
1. Professional, technical and managers (teachers, engineers, accountants, lawyers, medical & dental technicians, airplane pilots)
2. Clerical workers and sales persons (bookkeepers, secretaries, shipping & receiving clerks, tele. oper., and clothing sales people)
3. Service Workers (Hospital, hotel, restaurant workers, private household workers, police officers, firefighters)
4. Agriculture, fishery and forestry related workers (loggers, commercial fishers, trappers, farmers, and landscapers)
5. Processing (food, metal processing, ore refining)
6. Machine trades (Machinists, mechanics, printers, cabinetmakers)
7. Benchwork (Fabricators, Assemblers, & Repairers of metal, jewelry, photo equip. & textiles, tailors, sewing machine operators)
8. Structural (welders, electrical workers, carpenters, painters)
9. Armed Forces
10. Recreation-based occupations (guiding, mountain-climbing)
11. Motor freight & transportation (truck drivers, air transportation, railroad, parking lot)
12. Packaging and Materials Handling (packagers, movers, stevedores)
13. Mining (borers, drillers, cutters, and blasting specialists)
14. Miscellaneous (elec. util., water and water treatment, graphic

HOUSEHOLD SURVEY

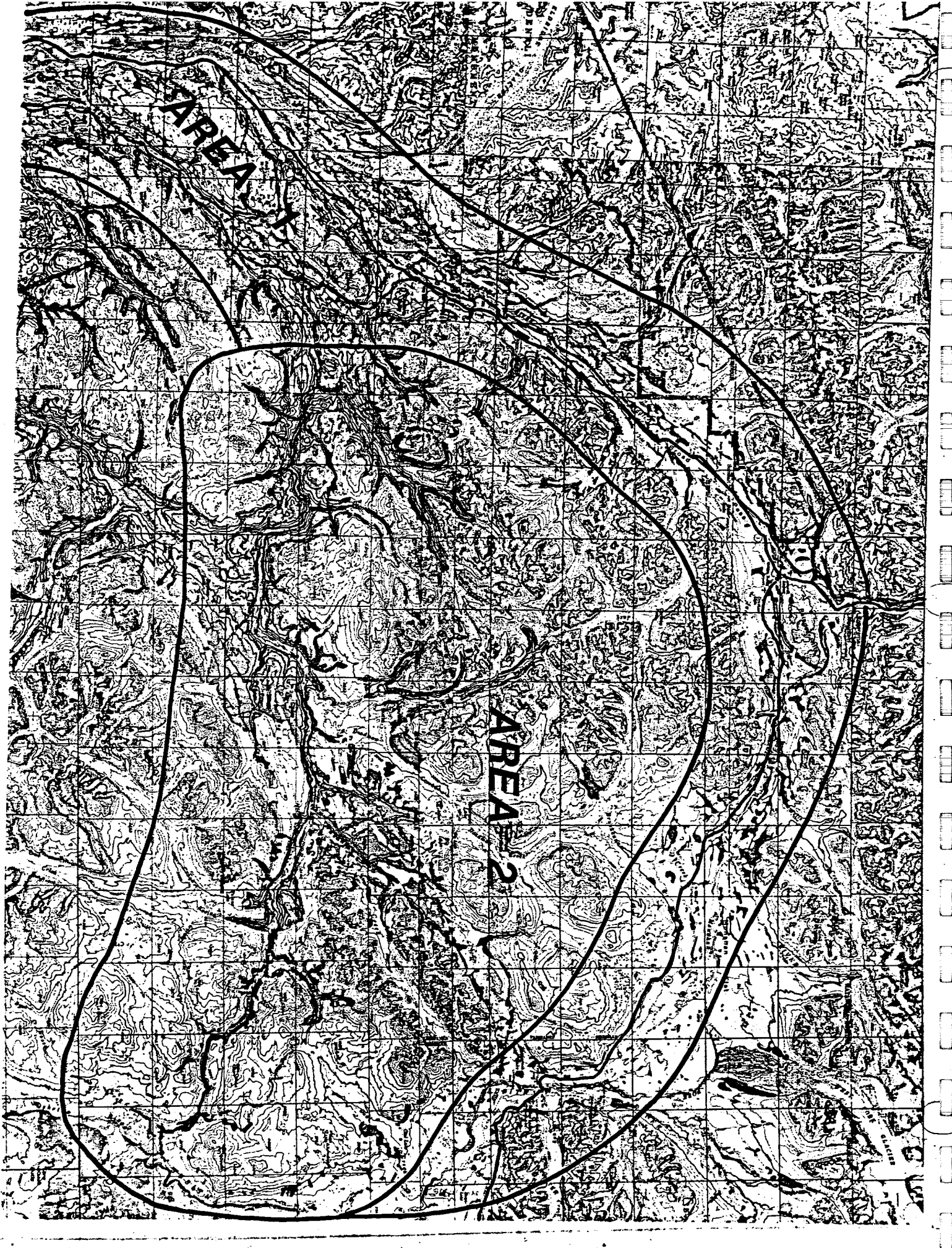
SHEET E

1. BIG CHANGE FOR WORSE
2. SMALL CHANGE FOR WORSE
3. BIG CHANGE FOR BETTER
4. SMALL CHANGE FOR BETTER

0136h



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

11. 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