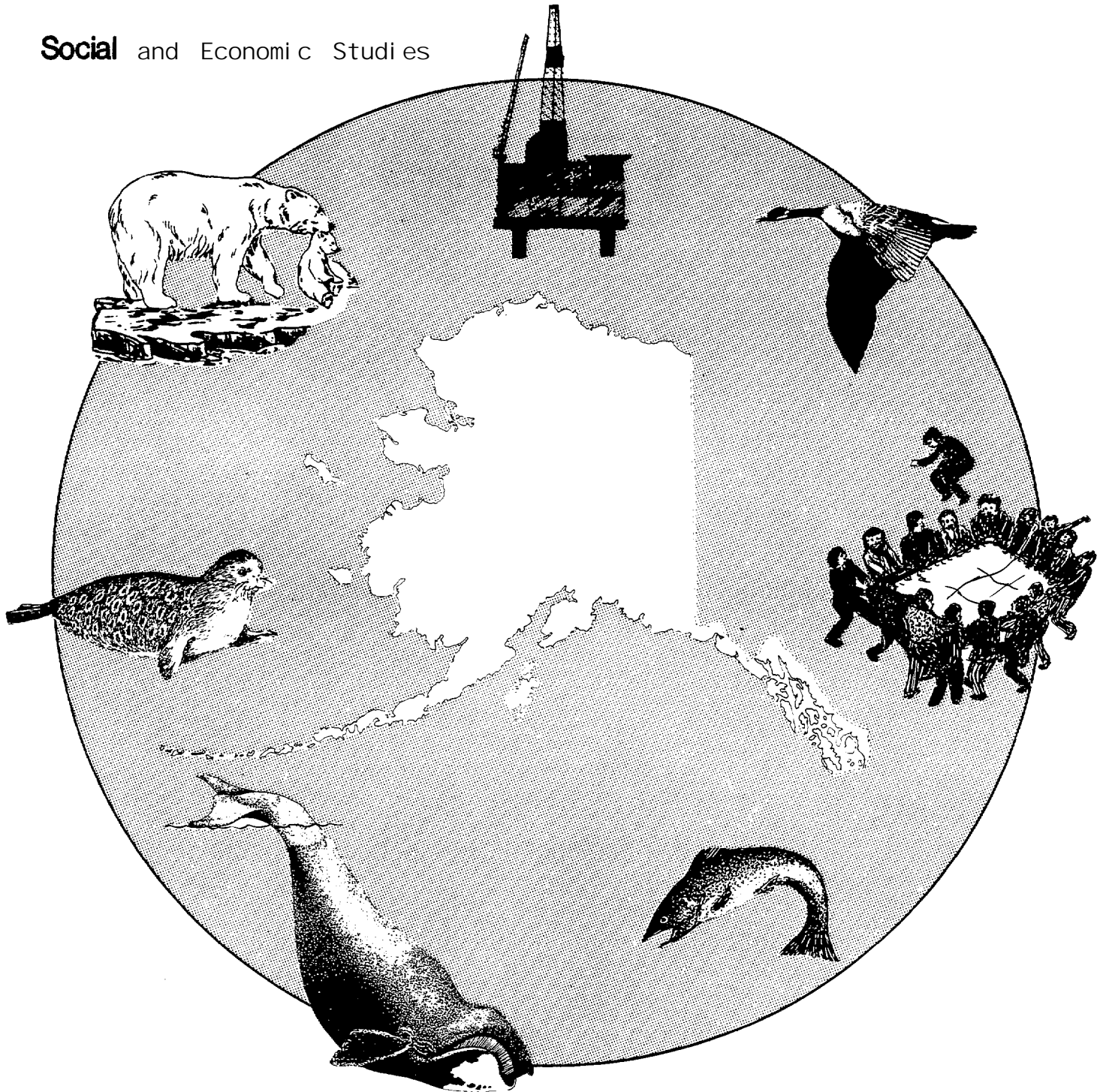


# Demographics And Employment Alaska Communities Volume I

Social and Economic Studies



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FINAL TECHNICAL REPORT

A DEMOGRAPHIC AND EMPLOYMENT ANALYSIS  
OF SELECTED ALASKA RURAL COMMUNITIES  
VOLUME I (SUMMARY)

submitted -to  
Minerals Management Service  
U.S. Department of the Interior

by

Kevin Waring Associates

In association with

Gillian Smythe & Associates

This report has been reviewed by the Minerals Management Service and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Service, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

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## I. INTRODUCTION

This is the first in of three volumes of a technical reports which compile, describe and analyze population and employment data for 21 rural communities in six Native regions of western and northern Alaska. The communities are: Barrow, Anaktuvuk Pass, Kaktovik, Point Hope, Wainwright, Kotzebue, Deering, Kivalina, Nome, Gambell, Unalakleet, Alakanuk, Aniak, Bethel, Scammon Bay, Dillingham, Togiak, Nikolski, St. Paul, Sand Point and Unalaska.

This report addresses general issues of methodology and terminology and the problems presented by historic and contemporary data sources. It also provides an overview of some broad demographic and employment trends affecting Alaska Natives or rural Alaska communities compared to State and national trends.

Section II defines key terms which will be used in the compilation of demographic and employment data and the methods to be used in the data analysis.

Section III evaluates historic and current secondary data sources on community population and employment.

Section IV contains detailed historic and current demographic and employment data for the 21 communities and employment data for regional and village Native corporations and for non-profit Native regional service agencies in several of the study communities.

Chapter V presents an annotated bibliography of sources of demographic and employment data for the study communities.

A brief description of the contents, of the other two volumes of the technical report are:

#### Volume II.

This report presents detailed historic and current demographic and employment data for the study communities of Barrow, Anaktuvuk Pass, Kaktovik, Point Hope, Wainwright, Kotzebue, Deering, Kivalina, Nome, Gambell, and Unalakleet. A separate chapter is devoted to each individual community, with each chapter divided into three topical sections: past population trends; population composition; and trends in wage and salary employment.

#### Volume II.

This report presents detailed historic and current demographic and employment data for the study communities of Alakanuk, Aniak, Bethel, Scammon Bay, Dillingham, Togiak, Nikolski, St. Paul and Sand Point. A separate chapter is devoted to each individual community, with each chapter divided into three topical sections: past population trends; population composition; and trends in wage and salary employment.

Special Report No. 7, "Regional and Village Corporation Employment Profiles. "

This report compiles data on current employment by six Alaska Native Claims Settlement Act regional corporations (Arctic Slope Regional Corporation, NANA Regional Corporation, Bering Straits Regional Corporation, Calista Corporation, Bristol Bay Native Corporation and the Aleut Corporation), five regional non-profit service agencies (Maniilaq Association, Kawerak, Inc., Association of Village Council Presidents, Bristol Bay Native Association and Aleutian-Pribilof Islands Association) and ten ANCSA village corporations (Ukpeagvik Inupiat Corporation [Barrow], Olgoonik corporation [Wainwright], Kikiktagruk Inupiat Corporation [Kotzebue], Sitnasuak Corporation [Home], Choggiung Ltd. [merger of Dillingham, Ekuk, New Stuyahok and Portage Creek], Togiak Natives Ltd. [Togiak], Tanadgusix Corporation [Saint Paul], Ounalashka Corporation [Unalaska] and Chaluka Corporation [Nikolski].

## II. METHODS AND TERMS

For a century and more, many scholars, individuals and public and private agencies have collected population and employment data for northern and western Alaska communities. The annotated bibliography presented in Section V of this report is a comprehensive list of the data sources which were used in this project to describe demographic and employment conditions in the study communities.

Not surprisingly, the overall quality and technical rigor of the data reported in these sources, some dating back to the 18th century, is inconsistent. Many of these sources represent spotty, one-time attempts to document local population or employment. Collectively, they contribute perspective on the historic development of the study communities, but the comparability and, sometimes? trustworthiness of individual data sources often cannot be taken for granted.

Several basic demographic and economic terms or concepts are used throughout this study. For the sake of historic and geographic comparisons, uniform definitions need to be established for these terms, especially since the terms are not used consistently in the secondary data sources.

Historically, two governmental agencies, the U.S. Bureau of the Census (since 1880) and the Alaska Department of Labor (since 1964), have produced the most extensive, standardized data series on rural Alaska population and employment, respectively. These two agencies will probably continue to generate and publish the most authoritative data series into the foreseeable future. For the post-World War II era, these baseline data series can be supplemented by other regular data series, once upon a time by the

Bureau of Indian Affairs and Indian Health Service and more recently by the Alaska Department of Education (school enrollment data), the Alaska Department of Revenue (permanent fund recipient data, IRS tax return data), the Alaska Department of Labor (current population estimates), the Alaska Department of Health and Social Services (**vital** statistics), the Alaska Department of Community and Regional Affairs (certified municipal **popul a-tions**) etc., as well as other episodic population and employment surveys produced by a variety of sources.

For the purposes of this report, it seems advisable to establish the definitions, methods and procedures used by the U.S. Bureau of the Census and Alaska Department of Labor as the standard of reference for demographic data (U.S. Census) and employment data (Alaska Department of Labor). These standards will allow the broadest and most detailed empirical comparisons over time and place, especially in the contemporary era, based on the most authoritative sources. Where other data sources use the defined terms in a significantly different sense, that fact and its implications for **com-**parisons of data will be noted.

Notwithstanding the baseline status of census and Alaska Department of Labor data, we propose an eclectic but skeptical regard for all data sources. As a rule, no single data source can be considered authoritative. Ultimately, the best way to corroborate or dispute the validity of the data and the data sources themselves is to cross-check independent data sources for coherence and consistency.

Neither Bureau of the Census nor Alaska Department of Labor data, though more comprehensive and systematic than other data sources, are faultless. For example, the 1970 Census missed the entire village of

Napaskiak on the Kuskokwim River, while **Kruse** and Travis (1981) offer an instructive account of some of the procedural problems associated with 1980 Census data for western Alaska communities. On the other hand, because of inadequate reporting to the Department of Labor, government agency field employment is often attributed to the central headquarters office rather than to the actual place of employment. For example, all employees of the Lake and Peninsula School District have been counted in Bristol Bay Borough where the District maintains its administrative offices even though all the District's schools and most of its employees are stationed outside the Bristol Bay Borough. The resulting employment figures are seriously misleading.

Still, the Bureau of the Census and Alaska Department of Labor each seek to maintain consistent professional standards and technical accountability. Both agencies' statistical publications undergo intense independent scrutiny by user groups. As a result, their shortcomings are likely to be discovered and remedies can often be taken.

Periodically, the Bureau of the Census and Alaska Department of Labor have revised or refined their definitions, methods and procedures. Usually, it is feasible to adjust for these changes to maintain comparability in time series data. For example, **local** and regional municipal jurisdictions are the most useful geographic units for recording population and employment data. However, there are frequent jurisdictional changes stemming from new incorporations, consolidations, annexations or other boundary changes. Both the Bureau of the Census and Alaska Department of Labor monitor these changes and provide methods to track their impact on data series.



Fortunately, there have been few recent local boundary changes in the 21 study communities. All but one (**Nikolski**) are incorporated municipalities and all but four (**Kaktovik--1971; Unalakleet--1974; Aniak--1971; St. Paul-1971**) were incorporated by 1970. Since the 1960 Census, only Nome and **Togiak** have undergone local boundary changes that significantly affected community population or employment data.

The use of regional population or employment data is potentially more of a problem since the boundaries of five (North Slope Borough, **Kobuk**, Bethel, Bristol Bay, Aleutian Islands) of the seven census areas covered in this study were modified between the 1970 and 1980 censuses. For several years after 1980, the Alaska Department of Labor continued to report employment data using the pre-1980 census divisions but it later converted post-1980 employment data to achieve consistency with the 1980 census areas. However, these boundary modifications are not expected to impede the present study, inasmuch as we expect to rely on census sub-area data for the description and analysis of community employment.

Incorporation of the Northwest Arctic Borough in 1986 made only trivial changes in the boundaries of the **Kobuk** and North Slope Borough census areas. The Aleutians East Borough, incorporated in 1987, split the Aleutian Islands census area. Alaska Department of Labor staff state that the Department plans to begin reporting employment data in conformity with the new boundaries sometime in 1988.

Some of the study communities, such as **Dillingham** and Unalaska, undergo extreme seasonal cycles in population and employment. Many of the remainder also experience significant, if lesser, fluctuations. Therefore, the time of year at which population and employment data are collected is

critical to data interpretation. For this reason, where relevant, the time of data collection ought be noted in any analysis.

Enumeration errors are another source of data discrepancies. Sometimes, a pattern of error can be identified and systematically compensated for to save information of value. For example, employment analysts can be alerted that, due to employer reporting errors, Alaska Department of Labor wage employment series data frequently overstate government and service employment in regional centers. On the other hand, random errors are more difficult to account **for** except by rejecting implausible data.

#### A. DEMOGRAPHIC TERMS

Several key demographic terms need to be defined. These terms include household, housing unit, head of household, race and residency. **Definitions** for these terms are offered **below**, together with a discussion of the issues associated with the terms. The definitions are derived from General Population Characteristics, 1980 Census of Population.

The key demographic data pertain to total population, race, sex, age, household and family size and composition, marital status and residency status and duration. Some of these terms, such as sex, age and marital status, are virtually unambiguous and trouble-free in definition and application. Others, such as race and residency, are perennial problems, often becoming embroiled in administrative, legal and political **controversy**.

0 Household. A household includes all the persons who occupy a housing unit.

This matter-of-fact practical definition is formulated in terms of housing occupancy patterns rather than **sociocultural** realities. It ignores

the importance of the extended family as a social and economic unit in village Alaska. Furthermore, the number and average size of households can change abruptly due to extraneous economic and political factors. For example, new public housing construction, not demographic factors, often accounts for abrupt changes in household patterns.

- o **Housing unit.** A housing unit is a house, an apartment, a group of rooms, or a single room occupied as a separate living quarters, or if vacant, intended for occupancy as a separate living quarters.
- o **Head of household.** One person in each household is designated as the head of household or "householder". In most cases, this is the person, or one of the persons, in whose name the home is owned or rented.
- o **Race.** The category "White" includes persons who indicated their race as White, as well as persons who did not classify themselves in one of the specific race categories listed on the **questionnaire** but entered a response such as Canadian, German, **Italian**, Lebanese, or Polish. The categories "American Indian," "Eskimo," and "**Aleut**" include persons who identified themselves as such in one of the specific race categories.

Accurate ethnic distinctions are crucial for monitoring population shifts and for identifying differences in demographic and economic traits between population subgroups. Nevertheless, ethnic identity is notoriously difficult to determine objectively and **unambiguously**.

The Census Bureau approach essentially **relies** upon self-disclosure of ethnic origin. Comparison of 1970 and 1980 Census data suggest that

changing social attitudes after passage of the Alaskan Native Claims Settlement Act resulted in more frequent self-denomination as Alaska Native by persons previously classed as non-Native. This general trend might account for part of the apparent sudden increase reported in Native population during the decade after the **1970** Census. Furthermore, this trend may be more prevalent among urbanized, acculturated Natives than among residents of the more traditional **rural** communities covered in this study. **If** so, reporting differences due to this factor could be expected to be lower for the study communities.

A second problem is that the grouping of "American Indian", "Eskimo" and "**Aleut**" persons muddles together ethnically and demographically distinctive groups of Alaska Natives. As a result, the ethnic statistics may gloss over the socioeconomic heterogeneity which exists among these groups. In practice, this confusion is likely to be more problematic in "melting pot" urban centers or census areas with diverse Native populations than in more remote, traditional rural settlements.

- o **Residency.** Residency or "usual place of residence" is construed to mean the place where the person lives and sleeps most of the time. This is not necessarily the same as the person's legal residence or voting residence.

Determination of residency is one of the most difficult and **controversial** definitional issues for demographic analysis and, in turn, for economic and employment analysis. Social statistics are increasingly employed by governments to determine program entitlements and benefits for persons, families and communities. Social statistics are also used to measure legal compliance with anti-discrimination legislation, preferential

employment statutes and similar laws. Consequently, population counts by residence take on great political and economic importance as the issue of residency is propagated through statistics on workforce participation, unemployment, average income, migration and labor mobility.

The Census Bureau definition cited above straightforwardly defines residency in terms of physical location. However, this simplicity runs counter to strongly held social and political notions of community of residence. For example, Native residents of predominantly Native communities may not accept even long-time non-Natives as full-fledged community residents.

Local censuses frequently omit transient (that is, temporary or seasonal) residents or part-year residents such as school teachers who may not be considered genuine or permanent community residents in some important respects. Typically, the demographic and economic traits of these residents differ sharply from permanent residents and the distinctive socioeconomic status of these non-indigenous sub-groups is a key social fact about the communities. Thus, a neutral decision to "roll" them in with bona fide permanent local residents may introduce statistical distortions in grouped data. Average incomes are raised, average family size shrinks, unemployment rates contract, **workforce** participation rates increase and educational attainment levels rise. On the other hand, omission of these persons ignores the **sociocultural** and economic schism between Native and non-Native residents which tends to pervade most rural Alaska Native communities. Where the data permits, it **is** advisable to probe for demographic and employment differences among sub-groups within the communities in addition to evaluating community-wide conditions.

For our analytic purposes, a single exclusive definition of residency is disadvantageous, since it suppresses many of the informative demographic and social distinctions which are most important to the analysis. Instead, we propose to take a pluralistic approach. Insofar as the data allow, we **will** distinguish several different residency status categories, e.g. permanent, temporary, transient, aboriginal and in-migrant. This approach **will** help sort out the typical demographic and economic traits of different sub-groups.

#### B. EMPLOYMENT TERMS

At the outset, it should be noted that the Minerals Management Service's study design stipulated a conventional definition of work similar to the definition followed in official Bureau of the Census and Alaska Department of Labor employment statistics. This conventional definition focusses on earned cash income, but excludes subsistence work and income.

This choice of definition was practically imposed by the circumstance that these two agencies are the only sources of systematic employment data series for rural Alaska communities. Unfortunately, there are no comparably comprehensive secondary sources of data about subsistence work and income for the study communities. This restrictive definition of the world of work has the advantage of highlighting the degree of individual and community integration into the market economy and conventional labor market. On the other hand, it sidesteps important substantive and technical complications stemming from the shifting roles of subsistence production and wage earnings in rural Alaska's transitional mixed economy. It effectively understates the full scope of productive economic activities

- o Government workers. This term includes persons who worked for any governmental unit, regardless of the activity of the particular agency. This category is subdivided by the level of government: (a) federal, (b) state, and (c) local.

As noted above, the definition of private employment includes employees of non-profit quasi-public regional and local organizations that might more meaningfully classified as public employees. This can be remedied in part by adjusting the count of private/public employees based upon data for local and distributed employment to be collected from the chief non-profit regional service organizations based in the regional centers of Kotzebue, Nome, Bethel, **Dillingham** and Anchorage (Aleutian Islands).

A second problem frequently arising with regard to governmental employment stems from chronic reporting errors. The total employment, including field staff, of federal, state and **regional** agencies providing services throughout the region is often assigned to the regional center, and not distributed to the actual place of employment. This practice inflates employment figures for regional centers and understates employment in hinterland communities.

- o Number of employees. The number of employees for a given month is a job count. It represents the total number of people who worked during the pay period including the 12th of each month. This is not an **unduplicated** count of number of different individuals because some workers are reported by more than one employer due to dual job holding and labor turnover.

The number of employees is not adjusted to account for part-time or overtime employment, seasonal employment, moonlighting or turnover.

Consequently, when this statistic is totalled, it may appear to overstate number of full-time positions (where part-time employment predominates) or overstate number of employees (where moonlighting and turnover are high) or even understate effective level of employment activity (when overtime is widespread). Therefore, some standardized method to measure different employment regimes in equal terms is desirable.

o Average annual full-time equivalent employment. This is an artificial measure of the level of total employment over a year.

**It** is calculated by converting fractional (part-time, seasonal, moonlighting, overtime) jobs into an equivalent number of full-time annual jobs and adding those jobs to the number of standard jobs.

o Self-employed workers. Self-employed workers include persons who worked for profit or fees in their own unincorporated business, profession, or trade. Included here are the owner-operators of large stores and manufacturing establishments as well as **small** merchants, independent draftspersons and professionals, farmers, peddlers, and other persons who conducted enterprises of their own. Self-employed workers are not covered by the Alaska Department of Labor's employment reports.

The main instances of self-employed workers in western Alaska are fishermen in some coastal communities, Native craft artisans, small merchants, repairmen and boat-builders. It is likely that some portion of self-employment and self-employed income escapes counting. An unknown amount of employment in illegal activities such as bootlegging and raw ivory trade, plus off-books employment in odd-jobs, also goes uncounted.



### III. SECONDARY DATA SOURCES

#### A. AVAILABLE SECONDARY LITERATURE

A wealth of written material deals with Alaska rural population and employment at the State, regional and community levels. This material often provides invaluable insights into particular issues and into general or local processes of change. However, despite the large body of existing information, few data series are maintained in any consistent and continuing way outside of those produced by the **U.S.** Census Bureau and the **Alaska** Department of Labor. This chapter characterizes the different types of materials being examined in terms of population and economic change which have some degree of relevance to the 21 communities being studied.

A list of the most significant publications in terms of the present study is contained in Chapter V of this report. The list has been annotated in detail, with relevant population and/or economic issues contained in particular reports noted. The publications cited in Chapter V have been organized into general (including multi-regional), regional and individual community categories. It is not proposed to duplicate those efforts in this chapter.

In addition to the Census, available population materials include estimates of prehistoric population size; Russian census data; population estimates by explorers, scientists and other early visitors; periodic population counts by government agencies other than the Census Bureau (such as the Bureau of Commercial Fisheries, the Bureau of Indian Affairs and the Indian Health Service); detailed studies of particular regions or communities conducted for a variety of special purposes; local censuses; and annual population estimates currently developed by or for government

agencies (Alaska Department of Labor, Alaska Department of Community and Regional Affairs and the Indian Health Service).

Meaningful employment data are much more limited due, in part, to the fact that systematic documentation of wage and salary employment is a relatively recent phenomenon in much of rural Alaska. Aside from regional employment data published by the Alaska Department of Labor (and data for smaller areas provided to the Minerals Management Service by the same Department), the only other source of employment information over time is the U.S. Census. However, analyses of employment at the local **level** have periodically been undertaken for such purposes as comprehensive development plans, engineering and other special studies, plus reports for the Minerals Management Service. Such studies are particularly valuable when they have used basic Alaska Department of Labor methodology to calculate employment.

Outside of community and regional studies, a number of Statewide reports are also relevant to an evaluation of processes of population and economic change at the community **level**. Such studies provide information on Statewide changes and trends or on **Alaska** Natives in general.

The following categories of available secondary literature at the State, regional and local level have been examined for this report:

- o Prehistoric **population estimates**. Estimates of pre-contact populations have been made by a number of archaeologists and anthropologists for particular regions and areas. For example, **Burch** examines pre-contact population in some detail for Point Hope (**1981**) and the Kotzebue region (1974). The same is true for Ray in the Bering Strait region (19759, VanStone (February 1971) in the **Nushagak** River region, and Lantis (1970) in the Aleutians.

- o Russian census information. These data are sketchy for areas north of the Aleutians. **Petroff** (1884) includes Russian census data in his own Census report. Other reports make reference to Russian population counts, but those contained in the 1880 Census are the most complete.
- o Early counts by explorers, scientists and other visitors. These data are generally area specific, with local population and economic issues being items of secondary interest to the authors. Included in this list are Beechey (1838), Ray (1885), Nelson (1979) and others. The main value of such reports to this project is the picture they sometimes present of the population of particular areas before there was significant white contact.
- o Periodic counts by Government agencies. Over the years, government agencies have periodically undertaken counts of local population, generally for their own internal purposes. For example, the Bureau of Indian Affairs counted community population, primarily to enable it to plan its school operations. The Indian Health Service has also periodically made estimates of community population in connection with its health care programs. By far the most comprehensive population records for any community were those maintained by the Bureau of Commercial Fisheries and its predecessors for St. Paul and reprinted in Elliott (1880), U.S. House of Representatives, Committee on Merchant Marine and Fisheries (1889), U.S. Treasury Department (1898), Foote, Fischer and Rogers (March 1968) and others.

- o Regional studies. Regional studies have been undertaken for a variety of purposes. They include general economic and population studies such those by **Kleinfeld, Kruse** and Travis (March 1980); **Kruse, Kleinfeld** and Travis (**n.d.**); **Mauneluk Association, Inc.** (1974); Alaska Planning Council (1940); Alaska Department of Labor, Research and Analysis Section (July **1981**); Hawkins and Daugherty (April 1958); Kresge, **Fison** and **Gasbarro** (1974); Jones (December 1970 and October 1973); U.S. Department of the Interior, Bureau of Indian Affairs, Planning Support Group (January 1974); and the University of Alaska, Institute of **Social** and Economic Research (January 1983). Other regional reports include coastal management plans such as Maynard and Partch (1984); Derbyshire and Associates (1982); and Nunam **Kitlutsisti** (January **1984**), Overall Economic Development Programs such as **Kozely** (April **1964**), reports prepared for the Minerals Management Service (too numerous to mention), regional health or housing studies such as Alaska Consultants, Inc. (September 1980), regional census reports such as **Ellanna** (September 1976), anthropological studies such as Chance (1966); **Burch** (1974); Ray (1975); **Fienup-Riordan** (1986); VanStone (1967 and February 1971); **Lantis** (1970 and 1984), and special purpose reports such as those prepared for **NPR-A** or in connection with documenting hardships suffered by **Aleuts** during World War II.
- o Community studies. There is a very large body of literature relating to particular communities. Key reports in this category are listed by village in Chapter V of this report, together with

an indication of their contents. They include comprehensive development plans, engineering studies, archeological and anthropological reports, reports prepared for the Minerals Management Service and others.

The following Statewide studies are also seen as being particularly relevant to this report:

- o General Statewide studies. Included in this category of reports are those dealing with Statewide population and economic trends but which have implications for rural areas of the State, such as Rogers and **Cooley** (1963), Rogers (December 1967), the U.S. Federal Field Committee for Development Planning in Alaska (1968), and **Siever** and **Fison** (April 1975).
- o General Statewide studies on Alaska Natives. This category includes early comprehensive reports on the status of Alaska Natives such as that by Anderson and **Eells** (1935) as well as more recent reports such as those by the U.S. Federal Field Committee for Economic Development in Alaska (October 1968), Rogers (November 1971), **Alonso** and Rust (March 1976), Davis (August 1978) and Lane, Nebesky and Hull (December 1982).
- o Community population estimates. Estimates of community population on a Statewide basis have been periodically undertaken by agencies such as the Alaska Rural Development Board (1959), the Federal Field Committee for Development Planning in Alaska (1967 and January 1969), the Indian Health Service (1969 and 1987), the Bureau of Indian Affairs and the U.S. Census Bureau (September 1984). In addition, the Alaska Department of Community and

Regional Affairs reviews population data submitted to it by municipalities and unincorporated places for Municipal Revenue Sharing Program funds (which are allocated on a per capita basis). Since the 1980 Census, the State Demographer in the Alaska Department of Labor has produced **annual** estimates of community population using Census methodology. These estimates appear to be the most reliable measure of population trends **during** the inter-Census period.

- o Community employment estimates. Except for data produced at the Statewide, regional (**i.e.** census district) and **local** (**i.e.** census sub-area) levels by the Alaska Department of Labor, no estimates of community employment are made on a consistent or continuing basis.

#### **B. LIMITATIONS OF EXISTING DATA SERIES**

Although Census and **Alaska** Department of Labor statistics provide the only consistent and continuing source of population and employment data at the local level, these sources also have weaknesses which need to be recognized.

- o U.S. Census. Early Census data for Alaska is often suspect. In particular, the 1910 and 1920 Censuses omitted significant areas of the State, including much of Northwest and Western Alaska. The 1980 Census, although generally considered a good count, had some problems with municipal boundaries, such as in Barrow and Nome. The primary virtue of the Census is that it produces a population count that is collected and compiled in a consistent, scientific and politically neutral manner. Its primary problem

is that it is conducted only once every ten years. As a result, population and economic trends are not always easily observable in the interim and the impact of significant events occurring in inter-Census years may not be easily detected.

- o Alaska Department of Labor. The Alaska Department of Labor produces several employment data series, with that most relevant to this study being the Statistical Quarterly series. The Statistical Quarterly contains non-agricultural wage and salary employment, estimated total employment and payroll data by census area. Non-agricultural wage and salary employment data are also maintained by the Department at the census sub-area, more closely equivalent to community-level data.

Like Census data, Alaska Department of Labor statistics have the virtue of being collected and compiled in a scientific and politically neutral manner. However, the data are not consistent over time due in part to changes in census area boundaries (primarily due to borough incorporation) and census sub-area boundaries. The latter makes comparisons of local employment possible only since 1980. Changes in reporting requirements also make regional employment comparisons (even where they have not been affected by boundary changes) over time largely invalid. In the 1960s, for example, non-agricultural wage and salary statistics omitted most State and local government employees.

A continuing difficulty with Department of Labor employment statistics is that they exclude persons (other than government employees) not covered by unemployment insurance, i.e. self-

employed persons, a category which includes most fishermen. In areas where commercial fishing is widespread, this is a significant problem.

Finally, especially at the census sub-area level, employment statistics are often skewed by reporting difficulties, e.g. an employer based in several locations may not disclose the location of his employees. This has proven to be a problem especially with local governments and rural regional school districts. For example, North Slope Borough general government and school district employment is all recorded for Barrow. Thus, knowledge of local conditions is essential for users of census sub-area statistics.

The Department of Labor has also maintained a series of population estimates by community since 1980. These are the most reliable figures available as they are compiled using Census methodology and are politically neutral. However, year to year comparisons, even during the limited period that these figures have been produced, is hampered by changes in methodology in 1985. Revised figures were issued for 1984 but comparisons with prior years may not be accurate.

o Alaska Department of Health and Social Services. The Department of Health and Social Services, among its other responsibilities, produces vital statistics data relating to births and deaths. These data are used by the State Demographer in the Department of Labor to estimate community employment. Published vital statistics data are not broken down beyond the regional level but



community data is available. These data appear to be reasonably reliable although there may **be** problems of location for births and deaths since hospitals where such events occur are often remote from the actual place of residence of the affected individuals. Timeliness is the main problem with vital statistics data put out by the Department as several years often elapse before the data are available.

- o Other. Other population estimates are maintained by the Alaska Department of Community and Regional Affairs for its Municipal Revenue Sharing program. In this case, the Department does not estimate population but relies on figures submitted to it by boroughs, cities and unincorporated communities. Since these local governments receive Revenue Sharing funds on a per capita basis and since communities are not required to report declines in population, these figures are more suspect than those produced by the State Demographer. In fact, the total population for which the Department of Community and Regional Affairs made Revenue Sharing payments exceeded the number counted by the U.S. Census by approximately 50,000 in 1980. Thus, while Community and Regional Affairs figures provide a useful check, caution should be exercised in using such figures exclusively.

The Indian Health Service has periodically maintained **community-**level population figures in the past and has recently (1987) published community estimates of Native population which it hopes to issue regularly in the future. These estimates are based on projections of 1980 U.S. Census figures and current patterns of

births minus deaths. Migration factors are not considered, an omission which could be significant.

School enrollment figures are also available over time and provide another means of monitoring population change. The Alaska Department of Education has made final enrollment figures by grade available from the 1956-57 **school** year. Generally, such figures are maintained in a consistent way except **where** there were Bureau of Indian Affairs schools as that agency counted average daily attendance rather than final enrollment.

The Department of Revenue also maintains **two** data series relevant to population change. These relate to Permanent Fund dividend recipients and to federal income taxpayers. Particularly in **small** rural villages without seasonal influxes of population, the number of Permanent Fund dividend recipients appears to track quite closely to population. However, this is certainly not true for places such as **Unalaska** or **Dillingham**. Comparable year to year data for this program has been issued since 1982.

Data on federal income taxpayers published by the Department of Revenue also provides continuing data relevant to population change in recent years. However, there are significant limitations in usage of this series because changes in federal tax law affect the number of persons required to file. In addition, introduction of the **Alaska** Permanent Fund dividend program in 1982 greatly increased the number of Alaskans required to file taxes.

#### IV. COMPARISONS AND TRENDS

This chapter presents selected data to compare gross demographic and employment situations and trends at the national, state and rural regional level and, in some instances for Alaska Natives.

##### A. POPULATION

###### 1. Historic Population Trends.

The demographic history of Alaska's aboriginal population and its **non-Native** settlers is a fitful story. Early **estimates** and censuses of historic population levels for Alaska's aboriginal peoples are shown in Table 1. These figures indicate that the estimated 1740-1780 **pre-contact** population of 74,000 Alaska Natives fell by more than one-half in the early post-contact era, reaching a low of about 25,300 by the 1909 Census. Thereafter, Alaska's Native population began a slow rebound. Population growth accelerated abruptly after 1950 as a result of improved environmental health and health care and reduced infant mortality, and finally regained pre-contact levels in 1984.

The growth of Alaska's non-Native population has been similarly erratic, but on a greater scale. First, it peaked during the early 1900s gold rush era, then slackened for three decades. Then, in the late 1930s, it began another stretch of generally rapid growth that continued, with momentary retreats, to the end of the petroleum revenue boom era in 1985. Except for a few years around 1930, Alaska's non-Native population has outnumbered its Alaska Native population since the turn of the century. By 1984, non-Natives were estimated at sixfold the Alaska Native population.

TABLE 1  
GENERAL POPULATION TRENDS IN ALASKA, 1740-1980

Year or Date	Native		Non-Native		Total	
	No. of Persons	Trend <sup>a</sup>	No. of Persons	Trend <sup>a</sup>	No. of Persons	Trend <sup>a</sup>
c. 1740-80	74,000	98.7	--	--	74,000	<b>14.1</b>
<b>1839</b>	39,107	52.2	<b>706</b>	<b>0.2</b>	39,813	<b>7.6</b>
1880	32,996	44.0	430	<b>0.1</b>	33,426	<b>6.4</b>
1890	25,354	33.8	6,698	<b>1.5</b>	32,052	<b>6.1</b>
June, 1900	29,536	39.4	34,056	<b>7.6</b>	63,592	<b>12.2</b>
Dec. 31, 1909	25,331	33.8	39,025	<b>8.7</b>	64,356	<b>12.3</b>
Jan. 1, 1920	26,558	35*4	28,478	6.4	55,036	10.5
Oct. 1, 1929	29,983	40.0	29,295	<b>6.5</b>	59,278	11.3
Oct. 1, 1939	32,458	43.3	40,066	<b>8.9</b>	72,524	<b>12.8</b>
Apr. 1, 1950	33,863	45.2	94,780	21.1	128,643	<b>43.2</b>
Apr. 1, 1960	<b>43,081</b>	57.5	183,086	40.8	226,167	<b>35.2</b>
Apr. 1, 1970	<b>51,712<sup>b</sup></b>	69.0	250,461	55.9	302,173	<b>57.7</b>
Apr. 1, 1980	64,357	85.2	337,494	75.3	401,851	76.8
<b>July 1, 1984</b>	74,981	100.0	448,067	100.0	523,048	100.0

<sup>a</sup> Number of person expressed as percentage of maximum for each series.

<sup>b</sup> Partly estimated; Eskimo and **Aleut** included with "other races" in 1970 census reports.

NOTE: This table adapted and updated from George W. Rogers, Alaska Native Population Trends and Vital Statistics, 1950-1985.

<sup>c</sup> Sources: 1740-80 based on estimates in J.W. Swanton, The Indian Tribes of North America (1952) and W.H. Oswalt, Alaskan Eskimos (1967). 1839 based on estimates by Veniaminov and others in "Resources of Alaska," 10th Census of the United States, 1880, Vol. VIII, pp. 36-38. Other data from U.S. Bureau of the Census reports 1880 through 1970. April 1, 1970 total population from **PC(1)A3**, issued May 1971. Native and non-Native for 1970 as tabulated from census tapes by Bureau of Indian Affairs and Alaska Department of Labor, May 4, 1971. April 1, 1980 population from U.S. Bureau of the Census report **PC80-1-B3**, General Population Characteristics, Alaska. July 1, 1984 estimates from Alaska Department of Labor report Alaska Population Overview, September 1985.

## 2. Trends in Village Settlement Patterns.

The past half-century of Alaska Native population growth has been accompanied by some definite trends in the number and size of rural settlements. Table 2 summarizes trends in the number, total population and average size of Native villages in the region covered in this study between 1939 and 1980. The 1939 census provided a particularly thorough count of small remote settlements and so is an excellent baseline. During those four decades, the number of Native villages was halved, the total population nearly doubled and the average village size grew fourfold. The pattern was repeated in every region, though not to a uniform degree. The process of consolidation was most pronounced in the Wade Hampton region where 65 villages were reduced to 14 and in the Bethel region, where 78 villages were reduced to 35. Population growth was unevenly distributed. The Bethel, **Dillingham** and North **Slope/Kobuk** regions grew fastest, while Nome and the Aleutian Islands lagged behind other regions. Bethel succeeded Nome as the most populous of these rural regions.

Tables 3 and 4 portray changing settlement patterns between 1950 and 1980 for a group of ten northern and western census areas. The data in Table 3 suggests that the process of village site abandonment recorded in Table 2 had largely stabilized by 1980. Each successive decade between 1950 and 1980 saw fewer new sites established, fewer old sites abandoned and a smaller net loss in total number of villages. Mainly, this outcome is the climax of public investment in community infrastructure (schools, housing, airfields, health and sanitation facilities, etc.) at selected villages. The extent and timing of these public investments served to

TABLE 2

VILLAGE SETTLEMENT PATTERNS, 1939 AND 1980  
SELECT NORTHERN AND WESTERN ALASKA CENSUS AREAS

Census Area*	1939		1980		Percent Change Population 1939-80
	Number of Native Villages	Total /Average Population	Number of Native Villages	Total /Average Population	
Nome	<b>29</b>	5, 285/182	<b>18</b>	6, 537/363	+23 .7%
North Slope/Kobuk	<b>31</b>	4, 151/134	<b>20</b>	8, 780/439	<b>111.5</b>
Aleutian Islands	25	<b>2,439/ 98</b>	<b>12</b>	3, 853/321	58.0
<b>Dillingham</b>	26	<b>1,932/ 74</b>	<b>25</b>	4, 616/184	<b>138.9</b>
<b>Bethel</b>	<b>78</b>	4, 477/ 57	<b>35</b>	10, 999/314	145.7
Wade Hampton	<b>65</b>	2, 441/ 38	<b>14</b>	4, 665/333	<b>91.1</b>
Total	254	20, 725/ 82	124	39, 450/318	90.3

\* Nineteen thirty-nine data adjusted for compatibility with 1980 census areas.

Source: 1940 Census; 1980 Census.

TABLE 3

CHANGES IN VILLAGE SETTLEMENTS, 1950-1980  
NORTHERN AND WESTERN ALASKA\*

	1950-60	1960-70	1970-80
Number at start of decade	181	173	168
New sites during decade	20	<b>15</b>	<b>2</b>
Sites abandoned	<b>28</b>	<b>20</b>	<b>5</b>
Number at end of decade	<b>173</b>	168	165
Net change	-8	-5	-3

\* Includes the following 1980 census areas: Aleutian Islands, Bethel, Bristol Bay Borough, **Dillingham**, Kobuk, Kodiak Island Borough, Nome, North Slope Borough, Wade Hampton, Yukon-Koyukuk.

Sources: Table format and 1950-60 and 1960-70 data from **Alonso** and Rust (1976). 1970-80 data compiled from 1980 Census.

Table 6. The most striking difference, however, relates to net migration which provided 1.6 percent of the nation's population growth, but 17.1 percent of Alaska's.

TABLE 5

ANNUAL RATE OF POPULATION CHANGE, 1970-1984  
UNITED STATES, STATE OF ALASKA AND ALASKA NATIVES

July 1 to July 1	<u>Percent Annual Population Change</u>		
	United* States	State of Alaska	Alaska Natives
1970-71**		<b>3.5%</b>	<b>3.3%</b>
1971-72		<b>3.1</b>	<b>2.6</b>
1972-73		<b>2.0</b>	<b>2.5</b>
1973-74		<b>3.4</b>	<b>2.5</b>
1974-75	1.0%	<b>9.8</b>	<b>2.4</b>
1975-76	1.0	<b>6.5</b>	<b>2.3</b>
1976-77	1.0	<b>2.0</b>	<b>2.3</b>
1977-78	<b>1.1</b>	<b>-1.5</b>	<b>2.2</b>
1978-79	<b>1.2</b>	0.5	<b>2.2</b>
1979-80	1.1	<b>1.5</b>	<b>1.6</b>
1980-81***	1.0	<b>3.3</b>	<b>4.3</b>
1981-82	<b>1.0</b>	7.0	<b>3.4</b>
1982-83	<b>1.0</b>	6.7	<b>4.2</b>
1983-84	1.0	4.8	<b>4.1</b>
Total Change 1970-1984	15.8%	74.1%	48.2%

\* January 1 to December 31 of last-named year.

\*\* April 1, 1970 to July 1, 1971.

\*\*\* April 1, 1980 to July 1, 1981.

Source: Alaska Population Overview, September 1985; Alaska Population Overview, 1985 Estimates.

Within Alaska, it is instructive to note that the rate of natural increase for all but one (Aleutian Islands) of the seven predominately

Alaska Native census areas covered in the present study *exceeded the statewide* figure. On the other hand, net migration was negligible or negative for all but the North Slope Borough, which experienced an economic boom and population influx during 1980-85.

TABLE 6  
COMPONENTS OF POPULATION CHANGE, 1980-1985  
STATE OF ALASKA AND SELECT CENSUS AREAS

	1980 Population	Natural Increase	Percent Change 1980-85	Net Mi grants	Percent Change 1980-85	1985 Popul ati on
United States	226.5 mil.	8.7 mil.	3.8%	3.5 mil.	1.6%	238.7 mil.
State of Alaska	419,800	48,144	11.5	71,656	17.1	539,600
Nome C.A.	6,821	792	<b>11.6</b>	202	<b>3.0</b>	<b>7,815</b>
North Slope Borough	4,412	655	<b>14.8</b>	443	<b>10.0</b>	5,510
Northwest Arctic Bor.	5,030	708	14.1	<b>52</b>	<b>1.0</b>	<b>5,790</b>
Aleutian Islands C.A.	8,153	690	<b>8.5</b>	<b>218</b>	<b>2.7</b>	9,061
Bethel C.A.	<b>11,475</b>	1,483	<b>12.9</b>	-52	<b>-0.5</b>	12,906
Dillingham C.A.	4,820	588	12.2	299	6.2	5,707
Wade Hampton C.A.	4,871	748	15.4	-28	-0.6	5,591

Source: 1980 Census.

These statistics are consistent with the premise that rural Alaska Native communities are currently dependent upon natural increase rather than net migration for their population growth. Moreover, net migration does not reflect the rate or composition of population turnover. It remains to be determined whether the recent net migration figures for rural communities typically combine a net out-migration of Alaska Natives offset by an influx of non-Natives. Certainly, it is plausible that the step-up in rural construction, service and public sector employment during the



1980-1985 petroleum revenue boom momentarily attracted many non-Natives to rural Alaska communities, thereby boosting in-migration and implying more Alaska Native departures than the net figures immediately indicate.

The post-1985 drop in State of Alaska petroleum revenues, and the economic recession that has followed, prompts speculation about what new migration trends will emerge, both statewide and in rural Alaska. Reportedly, urban regions such as Anchorage, Fairbanks North Star Borough, Kenai Peninsula Borough and Juneau Borough are now stagnant or losing population in the wake of job losses. In another technical report titled **A Demographic and Employment Analysis of Selected Alaskan Rural Communities**, issued as part of the present study, population and employment data for the study communities will be examined to assess the impact of Alaska's current economic downturn upon the Native and non-Native population trends in the study communities.

#### **4. Population Mobility.**

Table 7 reports responses to the 1980 Census question asking for 1975 place of residence. The data compare the residential mobility of Alaskans and Alaska Natives with the national population. The data show that Alaska Natives were similar in overall mobility to the national population but far less mobile than other Alaskans during the 1975-1980 period. (Note that the data in Table 7 are about where current, that is, 1980 residents formerly lived, not where former residents now dwell. Thus, it is not a full measure of historic mobility). In 1980, nearly 85 percent of Alaska Natives dwelled in the same county (that is, census area) as five years previously compared to about 60 percent for the State's population as a whole and 80 percent for the national population. On the other hand, less

than 5 percent of Alaska Natives resided in a different state in 1975 compared to 29 percent of all Alaskans and 33 percent of white Alaskans. This disparity results from the pipeline construction era of rapid population influx.

TABLE 7

MOBILITY STATUS OF POPULATION, 1975-1980  
UNITED STATES, ALASKA AND ALASKA NATIVES

	Total	Same House	Different House in US			Abroad
			Same County	Different Same State	Different County Different State	
<b>U.S.*</b>	100.0	58.3	22.1	9.1	8.7	1.8
Alaska	100.0	32.2	27.6	<b>8.7</b>	<b>29.1</b>	2.4
<b>White</b>	100.0	29.0	27.5	8.6	32.9	2.0
<b>Ak. Native</b>	<b>100.0</b>	53.5	30.8	<b>10.9</b>	4.3	<b>.4</b>
Male	100.0	55.0	30.2	<b>10.2</b>	4.1	.5
Female	100.0	52.0	<b>31.4</b>	11.7	4.6	<b>.3</b>

Source: 1980 Census.

These data suggest that Alaska Natives may be relatively less mobile in response to employment opportunities or economic incentives than other population subgroups. Among the reasons why this may be so are geographic and cultural dislocation, and such factors as employment discrimination, lack of union membership and inferior labor skills. The census data groups together urban and rural Alaska Natives; it is plausible that rural Natives are even less mobile than their urban counterparts.

Table 8 breaks down 1975-1980 migration behavior of Alaska Natives by sex and age. By and large, the data indicate no great differences in migration behavior between male and female Alaska Natives, except for the 20 to 34 year age group. The data indicate that females in that age group are far more mobile than males, both **intra-state** and interstate. Presumably, this is reflective of more mobility in pursuit of education, employment or new household formation.

After adjustments are made for "moved, residence not reported" and inaccuracies stemming from grouping Eskimo, Indian and **Aleuts** with other non-whites, comparison of the 1970 Census data in Table 9 with the 1980 data in **Table 8** suggests that Alaska Natives living in Alaska in 1970 may have been **slightly** more mobile within and outside Alaska than their 1980 counterparts. This finding is contrary to expectations that rural mobility has been increasing in recent decades. However, without more detailed data on **intra-** and inter-regional migration patterns, whether and why rural residential mobility rates may have stabilized remains open to speculation.

TABLE 8

MOBILITY STATUS OF ALASKA NATIVES, BY SEX AND AGE, 1975-1980

Males	Total	Same House	Different House in US			Abroad
			Same County	Same State	Dif'n't County Dif'n't State	
5 years +	100.0	55.0	30.2	10.2	<b>4.1</b>	.5
1 to 9 years	100.0	50.8	34.0	<b>10.2</b>	<b>4.6</b>	.4
10 to 14 years	100.0	61.9	23.4	10.8	<b>3.5</b>	.5
15 to 19 years	100.0	59.8	27.4	<b>9.4</b>	<b>3.2</b>	.1
20 to 24 years	100.0	49.7	32.9	<b>11.7</b>	<b>5.6</b>	.2
25 to 29 years	100.0	<b>38.4</b>	40.9	<b>13.6</b>	<b>6.1</b>	<b>1.0</b>
30 to 34 years	100.0	44.3	35.2	12.0	<b>7.2</b>	1.4
35 to 39 years	100.0	48.4	33.4	<b>10.5</b>	<b>6.2</b>	<b>1.5</b>
40 to 44 years	100.0	57.3	28.8	9.5	<b>3.1</b>	1.3
45 to 49 years	100.0	63.9	26.1	7.1	<b>2.9</b>	
50 to 54 years	100.0	63.9	26.7	6.8	<b>2.6</b>	
55 to 59 years	100.0	69.7	22.2	<b>7.9</b>	.2	
60 to 65 years	100.0	63.1	23.9	<b>10.7</b>	<b>2.2</b>	
65 years +	100.0	71.3	24.0	4.7	-	

Females	Total	Same House	Different House in US			Abroad
			Same County	Same State	Dif'n't County Dif'n't State	
5 years +	100.0	52.0	31.4	11.7	4.6	<b>.3</b>
1 to 9 years	100.0	48.4	34.7	11.9	<b>4.9</b>	.1
10 to 14 years	100.0	60.9	25.8	9.4	<b>3.7</b>	.2
15 to 19 years	100.0	59.3	27.0	<b>9.9</b>	3.3	.5
20 to 24 years	100.0	34.4	41.9	<b>17.3</b>	6.1	<b>.3</b>
25 to 29 years	100.0	30.9	39.4	18.3	10.2	<b>1.1</b>
30 to 34 years	100.0	39.7	36.8	15.9	<b>7.2</b>	.4
35 to 39 years	100.0	54.4	29.3	11.4	<b>4.0</b>	.9
40 to 44 years	100.0	60.7	28.0	<b>7.7</b>	3.7	-
45 to 49 years	100.0	67.9	22.8	<b>8.1</b>	1.2	
50 to 54 years	100.0	64.8	24.6	7.3	3.3	
55 to 59 years	100.0	67.8	25.8	5.5	.9	
60 to 65 years	100.0	71.4	21.2	6.8	.6	
65 years +	100.0	69.8	27.2	5.1	-	

Source: 1980 Census.

TABLE 9

MOBILITY STATUS OF POPULATION, 1965-1970  
UNITED STATES, ALASKA AND ALASKA NATIVES\*

	Total	Same House	Different House in US			Abroad
			Same County	Different State	Different County	
<b>U.S.</b>	100.0					
Alaska	100.0	30.2	21.6	8.2	37.4	2.6
White	100.0	24.9	<b>21.1</b>	<b>7.8</b>	43.3	2.8
<b>Ak. Native</b>	100.0	52.8	28.1	<b>12.4</b>	4.9	<b>1.8</b>
<b>Male</b>	100.0	54.7	28.4	11.3	4.4	1.2
Female	100.0	50.9	27.9	13.6	5.3	2.3

\* The 1970 Census did not report Alaska Natives separately. The figures for non-White, non-Negro respondents was used to estimate the Alaska Native population.

NOTE: About 14.4 percent of the State's population that moved between 1965-1970 did not report place of former residence. These non-respondents were prorated among other categories of movers.

Source: 1970 Census.

### 5. Age.

The median age of Alaska's population has risen steadily since 1970, but, as Table 10 shows, it is still well below the national median. The extremely low median age for Alaska Natives in 1970 was a reflection of high birth rates, coupled with improved health care and environmental health. These factors rapidly lowered infant mortality, generated a baby boom among rural Alaska Natives between 1950-1970, and skewed the population toward the early age brackets. Then, in the 1970-1980 decade, the median age of Alaska Natives rose by about 4 years, a remarkable reversal that reflected the rapid spread of family planning practices, resulting in

lower birth rates and an absolute decline in the number of Alaska Native newborns.

TABLE 10  
 UNITED STATES, STATE OF ALASKA AND ALASKA NATIVES  
 MEDIAN AGE IN YEARS  
 1970, 1980 AND 1984

	1970		1980		1984*	
	Male	Female	Male	Female	Male	Female
United States	26.8	29.3	28.8	31.3	30.3	32.7
State of Alaska	23.3	22.2	26.3	25.7	27.5	27.2
Alaska Natives	17.4	17.6	21.3	21.6	22.9	22.4

\* United States median age figure is for 1985.

Source: 1970 and 1980 Census; 1987 Statistical Abstract for U.S. 1985 data; Alaska Population Overview, 1985 Estimates for 1984 estimated median ages for Alaska and Alaska Native.

Even so, the momentum of the 1950-1970 baby boom will continue to be felt in high rates of natural increase for Alaska Natives for some time. For example, as previously noted the rate of natural increase for the seven study regions between 1980-1985 was two to four times the national rate. This high rate of natural increase will be sustained as the baby boom cohort matures to child-bearing years, even with lowered birth rates.

#### 6. Sex Ratios.

The ratio of males to females is often a sensitive index of differential migration patterns by males and females. Table 11 compares male/-female ratios for the United States, Alaska and Alaska Natives in 1970, 1980 and 1984 (estimated).

TABLE 11  
 MALE/FEMALE RATIO, 1970, 1980 AND 1984  
 UNITED STATES, STATE OF ALASKA AND ALASKA NATIVES

	1970	1980	1984
United States	.95	.94	.95
State of Alaska	1.19	1.13	1.15
Alaska Native	1.06	1.03	1.04

Source: 1987 Statistical Abstract; Alaska Population Overview, 1985 Estimates.

Compared to the national data, there was a marked imbalance in **the sex** ratio for the State's population as a whole and a lesser imbalance in the ratio for Alaska Natives. In both cases, there was an excess number of males. Subject to later analysis of more detailed age- and sex-specific **demographic** data for the study communities, two tentative hypotheses are offered. First, the statewide excess of males reflects differential in-migration of non-Native males to Alaska during the post-1970 era of rapid growth. Conversely, the excess of Alaska Native males reflects, in part, the differential out-migration of more mobile female Alaska Natives to other states. The differential out-migration of rural Alaska Native females to urban Alaskan communities will also be examined in greater detail to assess its long-term implications for family formation rates and population growth in the study communities and for the geographic redistribution of Alaska Natives within Alaska.

7. Educational Levels.

As shown in Table 12, at the time of the 1980 Census, there was a striking gap in the national and state levels of formal educational

attainment compared to Alaska Natives. Table 12 compares data for white and Alaska Native subgroups lest Alaska Natives dominate the comparative data for rural census areas.

TABLE 12  
 PERCENT HIGH SCHOOL AND COLLEGE GRADUATES, 1980  
 PERSONS 25 YEARS OLD AND OVER, BY RACE  
 UNITED STATES, STATE OF ALASKA AND SELECT CENSUS AREAS

	Percent High School Graduates		Percent College Graduates	
	Alaska White	Alaska Native	Alaska White	Alaska Native
United States	68.8	--	17.1	--
State of Alaska	88.5	46.2	24.4	3.5
Nome C.A.	93.7	39.6	48.2	0.8
North Slope Borough	89.8	<b>39.5</b>	33.9	2.0
Kobuk C.A.	94.2	<b>35.4</b>	50.9	1.7
Alutian Islands C.A.	<b>91.6</b>	36.5	20.9	<b>1.1</b>
Bethel C.A.	96.6	31.3	52.4	<b>2.7</b>
Dillingham C.A.	92.5	39.3	47.0	<b>1.8</b>
Wade Hampton C.A.	<b>n.a.</b>	<b>28.7</b>	<b>n.a.</b>	<b>1.5</b>
Anchorage Borough	<b>89.9</b>	<b>65.9</b>	25.1	9.8
FBX-North Star Bor.	89.1	56.2	23.9	6.3
Juneau Borough	93.6	77.8	36.6	7.8

Source: Alaska Population Overview, 1983.

White residents of the State of Alaska showed a substantially higher percentage of both high school (88.5 percent) and college (24.4 percent) graduates than national norms (68.8 percent and 17.1 percent respectively). On the other hand, Alaska Natives, at 46.2 percent and 3.5 percent for high school and college graduates respectively, lagged far behind state and national norms. Moreover, the spread widens when white and Native popula-



**tions** in the seven census areas of study are compared. There, white educational attainment tends to be higher and Alaska Native attainment lower than at the statewide level. In contrast, the data for Anchorage, Fairbanks and Juneau Boroughs indicate that urban Natives have a similar ratio of high school graduates but a lower share of **coll**ege graduates compared to the national norms.

Three explanations may help account for these data. First, urban Natives may complete more schooling than their rural counterparts. Second, well-schooled rural Natives may tend to relocate to urban areas. Third, many rural Natives who pursued their secondary and college education in urban schools or outside Alaska may have decided to resettle in urban centers after finishing their education. In any case, interpretation of these data must keep in mind that the overall figures for Alaska Natives are depressed **by the** limited opportunities for formal education formerly available to older rural Alaska Natives and that educational levels for younger Alaska Natives are now rising rapidly. The key question for demographic analysis concerns the interplay between educational achievement and population mobility among young Alaska Natives and, especially, any education-related differences in the mobility of Alaska Native males and females.

## B. EMPLOYMENT

In this section, we will review labor data to illustrate some broad historic trends in employment patterns for the State of Alaska and for the regions of study. Subsequent reports will describe and analyze in greater detail the work patterns of the individual study communities.

The review and comparison of labor data for the study regions with national and statewide figures shows some decided differences in employment patterns.

#### 1. Labor Force Participation Rates.

The data on labor force characteristics presented in Tables 13 and 14 show that in 1980 the labor force participation rate for all Alaska Natives (48.9 percent) is well below the national average rate (**62.0** percent), while the statewide rate (71.9 percent) is above average. For **all** but **one** (North Slope Borough) of the **rural** regions covered in this study, the discrepancies are substantially greater. Participation rates tend to be lower in rural areas for Alaska Natives **but much** higher for whites. The exceptionally high participation rates for whites in these regions no doubt reflects the influence of the economic motives that draw and hold non-Native adults to **rural** Alaska.

The low participation rate for Alaska **Natives** is compounded by typically higher unemployment rates. Thus, in 1980, when the State's unemployment rate was 9.5 percent compared to 6.6 percent nationally, the official unemployment rate for Alaska Natives was 20.3 percent. This latter rate understates Native unemployment, since a sizable share of rural Alaska Natives are so-called "discouraged workers" not actively looking for work and so not counted as officially unemployed. In sum, compared to national and state patterns in 1980, fewer Alaska Natives were in the workforce and fewer yet were employed.

TABLE 13

LABOR FORCE CHARACTERISTICS, 1980  
UNITED STATES, ALASKA AND ALASKA NATIVES

Labor Force Status in 1980	United States	State of Alaska	Alaska Natives
Persons 16 Years +	171,182,852	286,389	40,956
Labor Force	106,065,807	205,922	20,019
Percent of Persons 16 Years +	62.0	71.9	48.9
Civilian Labor Force	104,531,047	183,885	19,783
Employed	97,631,061	166,421	15,762
Unemployed	6,899,986	17,464	4,021
Percent of Civilian Labor Force	<b>6.6</b>	<b>9.5</b>	20.3
Not in Labor Force	<b>65,117,050</b>	<b>80,467</b>	20,937

Source: Alaska Department of Labor.

TABLE 14

LABOR FORCE PARTICIPATION RATES, BY RACE, 1980  
UNITED STATES, ALASKA AND SELECT CENSUS AREAS

	White	Alaska Native	Total
United States	62%	--	62%
State of Alaska	75	49	72
Alutian Islands C.A.	90	<b>40</b>	80
Bethel C.A.	89	<b>40</b>	<b>50</b>
<b>Dillingham C.A.</b>	81	<b>41</b>	<b>52</b>
<b>Kobuk C.A.</b>	87	<b>45</b>	52
Nome C.A.	81	<b>43</b>	53
North Slope Borough	94	<b>60</b>	70
Wade Hampton C.A.	93	<b>42</b>	46

Source: Alaska Department of Labor.

The compound effect of low participation and employment rates upon the study regions is shown in Table 15. This table, which compares the ratio of residents per employee for the study regions in 1970, 1980 and 1985, also suggests the economic transformation those regions underwent between 1970-1985, as well as their continuing economic diversity.

TABLE 15  
RESIDENTS PER JOB, 1970, 1980 AND 1985  
STATE OF ALASKA AND SELECT CENSUS AREAS

	1970*	1980	1985
State of Alaska	3.27	2.36	2.37
Alutian Islands C.A.	4.68	2.39	2.86
Bethel C.A.	7.54	<b>3.09</b>	3.26
<b>Dillingham C.A.</b>	<b>3.70</b>	<b>2.95</b>	<b>2.94</b>
Kobuk C.A.	6.32	3.36	<b>3.18</b>
Nome C.A.	6.13	3.07	2.84
North Slope Borough	<b>1.65</b>	0.60	0.59
Wade Hampton C.A.	8.37	4.59	4.33

\* April 1, 1970, April 1, 1980 and July 1, 1985 estimated population, divided by average annual nonagricultural wage and salary employment for 1970, 1980 and 1985 respectively.

NOTE: Due to post-1970 changes in census division boundaries, 1970 data are not fully comparable to later years. Bethel did not include present-day Aniak sub-area; **Dillingham** included Bristol Bay Borough. However, there is no reason to suspect that these boundary changes significantly distort the trends shown in this table.

Sources: 1970 and 1980 U.S. Census; Alaska Department of Labor Statistical Quarterly; Alaska Department of Labor, Alaska Population Overview: 1985 Estimates.

First, employment in all regions benefitted from the economic growth of the 1970s and the penetration of the market economy and cash employment opportunities into rural Alaska. The extreme disparities in residents per

job that affected the least developed regions (Wade Hampton, Bethel, Kobuk, **Nome**) were much reduced, but still substantial a decade later. On the other hand, those regions with strong, if narrow, seasonal or temporary industries (commercial fishing and seafood processing in the Aleutian Islands and **Dillingham**; petroleum development in the North Slope Borough) exhibited a relatively lower resident/employee ratio, partly because many employees in these industries are non-residents. At the extreme, more employees than residents were counted **in** the North Slope Borough. The employment situation of permanent and transient residents and Native and non-Native components of the **workforce** will be examined in the related technical report on demographic and employment conditions in the 21 study communities.

Though attenuated in degree, the broad pattern of disparities among the regions evident in 1970 persisted through 1985. That is, the same regions that ranked high in employment in 1970 (North Slope, **Dillingham**, Aleutian Islands) were at the top in 1985; those regions with depressed employment levels in 1970 (Wade Hampton, Bethel, Kobuk, **Nome**) were still depressed, though less so, in 1985. It is interesting to note that most of the change shown in Table 15 took place between 1970-1980, with little change in the 1980-1985 expansion.

Given the difference in participation rates previously noted in Table 14 between white and Native residents of these regions, it is likely that the population/employment ratio for Native residents is even more depressed.

## 2. Trends in Composition of Employment.

Tables 16, 17 and 18 provide snapshots of employment by industrial sector for the economy of the State and study regions in 1970, 1980 and 1986. These data suggest the trends in employment composition and economic structure that have occurred through this era of rapid growth.

First, it is worth noting that there was **relatively little** change in the composition of employment for the State as a **whole**. Consistent with national economic trends toward increased service industry growth, the share of employment arising within the combined trade and services sectors expanded from 29.0 percent in **1970** to 34.8 percent in 1980 to 39.3 percent in 1986. This increase was offset by shrinkage in total public sector employment from 38.4 percent in 1970 to 31.8 percent in 1980 and 30.5 percent in 1986. Within the public sector, the employment role of the federal government fell from **18.5** percent in **1970** to 8.2 percent in **1986** while the combined role of state and local government rose slightly. Otherwise, there were only minor shifts in the distribution by industry of statewide employment. Overall, though statewide aggregate employment grew by 137 percent between 1970 and 1986, the general structure of employment remained intact outside the shifts noted in trade, services and public sector employment.

Comparison of the 1970 to 1986 employment patterns for the individual study regions shows substantial diversity among the regions, along with surprising continuities within the individual regions. First, **all** the study regions' economies exhibit very imbalance development, with a consistent reliance on a single private industry (or petroleum development) and/or public sector employment. Thus, the North Slope region shows a

TABLE 16

DISTRIBUTION OF EMPLOYMENT, BY SECTOR, 1970  
STATE OF ALASKA AND SELECT CENSUS AREAS\*\*

	State of Alaska	Aleutian Islands	Bethel	Dillingham	Kobuk	Nome	North Slope	Wade Hampton
Mining	3.2	*	*	0	*	*	44.4	0
Construction	7.5	11.3	*	*	*	4.1	21.4	0
Manufacturing	<b>8.5</b>	27.7	9.1	55.3	<b>0</b>	*	*	*
Transp., Common. , Pub. Util.	<b>9.9</b>	<b>2.6</b>	6.9	8.8	<b>16.6</b>	12.2	6.2	*
Trade	16.6	<b>7.9</b>	11.2	<b>3.8</b>	15.6	13.6	3.8	16.0
Finance, Insur- ante, Real Est.	4.5	*	*	*	*	*	*	0
Services	12.4	8.5	7.3	1.8	2.7	9.9	13.6	24.1
Government	38.4	40.9	56.3	29.2	63.2	55.8	<b>7.9</b>	<b>30.8</b>
Federal	(18.5)	(30.7)	(33.8)	(12.9)	(46.9)	(19.8)	<b>(6.1)</b>	<b>(21.2)</b>
State & Local	(19.9)	(10.2)	(22.5)	(16.3)	(16.3)	(35.9)	(1.8)	(9.6)
Miscellaneous	(.2)	(*)	(0)	(*)	(0)	(0)	(0)	(*)
TOTAL	100.1	98.9	90.8	98.9	<b>98.1</b>	95.6	97.3	70.9

\* Withheld to avoid disclosure of data for individual firms.

\*\* Due to post-1970 changes in census division boundaries, 1970 data are not fully comparable to later years. Bethel did not include present-day Aniak sub-area; **Dillingham** included Bristol Bay Borough.

NOTE: Totals may not add to 100 percent due to rounding and non-disclosure of some data.

Source: Alaska Department of Labor, Statistical Quarterly.

TABLE 17

DISTRIBUTION OF EMPLOYMENT, BY SECTOR, 1980  
STATE OF ALASKA AND SELECT CENSUS AREAS

	State of Alaska	Aleutian Islands	Bethel	Dillingham	Kobuk	Nome	North Slope	Wade Hampton	
Min ing	3.9	<b>0.0</b>	1.5	0.0	*	*	<b>45.4</b>	*	
Constructi on	<b>6.3</b>	3.4	3*7	<b>2.6</b>	<b>5.7</b>	<b>1.6</b>	<b>11.5</b>	<b>1.5</b>	
Manufacturi ng	<b>8.2</b>	48.8	<b>1.6</b>	<b>31.0</b>	*	<b>1.8</b>	0	7.4	
Transp., Commun., Pub. Util.	10.0	3.9	6.4	8.8	8.7	6.7	<b>6.9</b>	<b>3.2</b>	
Trade	17.3	3.2	10.8	6.1	9.4	<b>11.7</b>	<b>5.4</b>	<b>14.7</b>	
Fi nance, ante, Real Est.	<b>Insur-</b>	4.5	2.3	3.3	1.7	1.2	5.6	<b>1.1</b>	<b>3.5</b>
Servi ces	17.5	4.5	28.0	17.7	<b>11.7</b>	28.4	6.6	6.7	
Government	31.8	33.3	44.5	<b>31.1</b>	61.3	<b>39.8</b>	<b>23.1</b>	61.9	
Federal	(10.4)	(20.8)	(12.5)	( <b>7.1</b> )	( <b>15.1</b> )	( 7.5 )	( 4.1 )	( <b>14.2</b> )	
State	( 9.0 )	( 2.1 )	( <b>5.3</b> )	( 3.7 )	( <b>4.1</b> )	( 8.3 )	( .7 )	( <b>1.4</b> )	
<b>Local</b>	<b>(12.3)</b>	<b>(10.4)</b>	(26.7)	(20.3)	<b>(42.1)</b>	<b>(24.0)</b>	(18.3)	(46.3)	
Mi scel l aneous	.5	*	*	*	*	*	*	*	
TOTAL	100.0	99.4	99.8	99.0	98.0	95.6	100.0	98.9	

\* Withheld to avoid disclosure of data for individual firms.

NOTE: Totals may not add to 100 percent due to rounding and non-disclosure of some data.

Source: Alaska Department of Labor, Statistical Quarterly.



TABLE 18

DISTRIBUTION OF EMPLOYMENT, BY SECTOR, 1986  
STATE OF ALASKA AND SELECT CENSUS AREAS

	State of Alaska	Aleutian Islands	Bethel	Dillingham	Kobuk	Nome	North Slope	Wade Hampton	
Mining	4.2	*	*	*	*	3.3	39.2	*	
Construction	6.1	6.1	2.0	1.6	*	1.3	14.2	*	
Manufacturing	5.8	28.3	*	24.8	0	*	*	*	
Transp., Commun., Pub. Util.	8.2	7.2	4.9	6.7	5.4	8.8	4.7	*	
Trade	20.0	5.8	10.6	8.1	12.7	<b>12.2</b>	5.9	14.4	
Finance, ante, Real Est.	<b>Insur-</b>	5.2	3.9	5.1	4.2	3.8	2.8	1.6	2.6
Services	19.3	7.7	18.5	18.2	15.2	21.7	12.8	7.7	
Government	30.5	40.5	54.4	35.0	60.6	49.5	21.2	65.2	
Federal	( 8.2)	(21.7)	( <b>7.5</b> )	( 5.0)	( 8.3)	( 3.7)	( 1.5)	( 2.1)	
State	( 9.2)	( 2.2)	( 6.9)	( 3.9)	( 5.0)	( 9.0)	( .4)	( 1.7)	
Local	<b>(13.1)</b>	(16.6)	(40.0)	(26.1)	(47.3)	(36.8)	(19.3)	(61.4)	
Miscellaneous	.9	*	.6	*	*	*	*	*	
TOTAL	100.2	99.5	96.1	99.0	97.7	99.6	99.6	89.9	

\* Withheld to avoid disclosure of data for individual firms.

NOTE: Totals may not add to 100 percent due to rounding and non-disclosure of some data.

Source: Alaska Department of Labor, Statistical Quarterly.

heavy dependence on petroleum-related mining and construction employment in 1970 and 1986, as did the **Dillingham** and Aleutian Islands regions on seafood processing. Likewise, the degree of dependence on public sector employment is very similar for the Aleutian Island, **Dillingham**, Kobuk and Nome regions at both periods. Only the Wade Hampton region, previously the region most neglected by federal and State governments, and the North **Slope**, whose local government development was boosted **by** oil industry tax revenues, showed sharp rises in overall public sector employment between 1970 and 1986.

Still, the employment data reveal a massive political and economic transformation beneath the persisting dependence on public sector employment. In 1970, the federal government still was the dominant governmental force in rural Alaska. However, over the past fifteen years, the federal role has greatly diminished as State and local governments assumed or added to many of the functions once provided by the federal government. In five of seven census areas, local government had clearly become the dominant employer by 1986 and would be the dominant employer of permanent residents in the Aleutian Islands and North Slope Borough, after allowance for those regions' employment of non-residents. Incidentally, it is interesting to note that State government maintained its traditionally strong role in the Nome region.

For most of these rural regions, the service sector showed strong employment growth from 1970 to 1986, consistent with national and statewide trends. Part of this growth is due to the emergence of regional non-profit quasi-public service organizations whose employment is usually included in the service sector.

Finally, the sector covered by finance, insurance and real estate, which provided negligible employment in 1970, showed modest growth in all regions, mainly reflecting the emergence of the Native regional and village corporations.

To summarize, the employment data in Tables 16, 17 and 18 partly show the economic diversity of the study regions, **partly** reflect the broad trends in the State's economy since 1970 and partly emphasize the persistence of some fundamental traits in the individual economic structures of these regions during an era of strong aggregate employment growth.

v. BIBLIOGRAPHY

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Using a definition of Westward Alaska as areas generally west and north of the Alaska Railroad (including the Aleutians), this report examines the subsistence economy of different sub-regions. Other sections of the report deal with the reindeer and mining industries and the extent of existing and possible future Native participation in those activities.

- \* Alaska Consultants and Rowan Group, Inc. October 1972. City of Lost River **Socio-Economic** Survey. Anchorage.

This 167-question survey was undertaken in August 1972 to ascertain the needs, aspirations and desires of potential residents of the proposed new community of Lost River. A total of 100 interviews were conducted in 10 communities (the regional centers of Nome and Kotzebue; the larger villages of **Noorvik, Selawik, Unalakleet and Gambell/Savoonga**; and the smaller villages of Shungnak, Deering, Wales and **Koyuk**). The survey results were analyzed under seven major categories: migration and the sense of community; housing; work; community facilities and services; travel; social interaction; and the proposed new community of Lost River. The report also includes computerized tabulations of the answers to each question, with **cross-tabulations**. Although this survey was conducted for a specific purpose which precluded the selection of "typical" respondents, answers to questions relating to migration and social interaction appear to be germane to the present study.

- \* Alaska Consultants, Inc. January 1982. Western Alaska Local Socioeconomic Systems Analysis. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. **69**).

This report presents an overview of existing socioeconomic conditions in **Dillingham** and Bethel **plus a projection of community growth** and land and **facilities** requirements **without OCS development**. Existing conditions studied for each city encompassed their population and economy, land use, community facilities and services, and local government organization and finances. Fieldwork for the project was conducted in late **1980** and included a calculation of average annual employment by industry in that year for both cities.

- \* Alaska Consultants, Inc. and Stephen Braund & Associates. January 1984. Subsistence Study of Alaska Eskimo Whaling Villages. Principal

investigators, Stephen Braund, Helen Armstrong and Sam W. Stoker. Prepared for the U.S. Department of the Interior. Anchorage.

This report examines the importance of bowhead whaling in the nine Alaska Eskimo whaling villages (including **Gambell, Kivalina**, Point Hope, **Wainwright**, Barrow and Kaktovik). As part of the project, a detailed questionnaire was administered to adults in 370 households. Although persons interviewed are not necessarily typical since the study required that a high proportion of whaling captains and crew members be surveyed, the profile of respondents nevertheless offers insights into subjects such as occupations, employment, income, education and mobility. The report also includes a chapter which contains profiles of individual villages.

- \* Alaska Department of Community and Regional Affairs, Division of Community Planning. March 1974. Selected 1970 Census Data for Alaska Communities. Juneau. (6 volumes. Part I - Interior Alaska; Part II - Northwest Alaska; Part III - Southwest Alaska; Part IV - Bristol Bay; Part V - **Southcentral** Alaska; Part VI - Southeast Alaska).

The data in this series of reports was derived from the 1970 Census first count microfilm. For each community, information is provided on total population, race and number of families. In addition, age composition data is provided for the total and Alaska Native populations. Other information provided relates to housing occupancy and housing conditions.

- \* Alaska Department of Community and Regional Affairs, Division of Community Planning. August 1974. Village Economics Issue Analysis, by **Gillian** Smythe. Juneau.

This issue analysis report addresses the feasibility of **government**-subsidized economic development in rural Alaska. It identifies existing economic problems in these areas, examines economic development alternatives and makes recommendations for State policy.

- \* Alaska Department of Community and Regional Affairs, Division of Municipal and Regional Assistance. Annual report. State Aid to Local Governments Municipal Services Revenue Sharing Program. Juneau.

State Revenue Sharing funds are disbursed on a per capita basis, with municipalities being responsible (via actual counts or other means acceptable to the Department) for providing justification for the claimed number of persons living within their jurisdiction. The resulting population information is available in computer print-out form. Although these population estimates tend to be higher than those of the State Demographer, particularly in the larger urban areas, they are nevertheless useful as an annual measure of population change at the community level.

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This volume contains profiles for 40 Alaska communities, including Barrow, Bethel, **Dillingham**, Nome and **Unalaska**. Each profile gives a brief summary of the local population and economy (including an estimate of employment by industry sector) and of local community facilities and amenities.

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This report series contains a wide variety of data relating to births, deaths, marriages, divorces and adoptions. However, the data are not broken down beyond the census area or regional corporation level. Information by community can be obtained by contacting the Department.

- \* Alaska Department of Labor, Research and Analysis Section. Quarterly report. Statistical Quarterly. Juneau.

The Statistical Quarterly series utilizes quarterly reports of employers subject to the State unemployment insurance law and those of Federal agencies to provide employment and payroll data by census division. More detailed information on employment by industry is provided on a Statewide **basis**.

The Statistical Quarterly provides the only comparable employment data over time (since **1964**) for different areas of the State. However, it has limitations. Significant segments of employment are not included. Currently, these are self-employed persons, unpaid family help, domestics and most persons engaged in agriculture and fishing. In the 1960s, most State and local government employees were also excluded. Another significant limitation in comparing data for a particular area over time is related to changes in area boundaries, primarily because of the incorporation of regional governments. A third limitation sometimes results from inadequate reporting by employers of employment by area.

In addition to published data, the Department of Labor maintains, and has made available to the Minerals Management Service, records of covered employment by census sub-area. This equates to **community-level** data for Barrow, **Wainwright**, Anaktuvuk Pass, Kotzebue, **Kivalina**, Nome, Bethel and **Nikolski**. For the remaining communities being studied, census sub-area data includes other settlements in the

immediate area, e.g. Kaktovik and the Barter Island DEW Line Station are in the same census sub-area, while the **Dillingham** census sub-area also includes Aleknagik, **Clarks** Point, Ekuk, Kanakanak, Manokotak and Nushagak. The limitations of census sub-area data are similar to those published in the Statistical Quarterly for census areas, but are magnified by non-disclosure regulations and shortcomings in reporting by employers. Nevertheless, they provide monthly employment data by sector for local areas and this type of information is not available over time from any other source.

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- \* Alaska Department of Revenue. Periodic report. Federal Income Taxpayer Profile by Alaska Community and by Income Levels and Filing Status. Juneau.

This series contains data by mailing address relating to the number of federal income tax returns filed; **plus** total and average figures by community on the number of exemptions and deductions claimed; taxable income; taxes paid; wages earned; and interest, dividend and miscellaneous income and pensions/annuities received. For larger communities (i.e. mailing addresses with more than 500 returns), more detailed data pertaining to the number of returns filed; taxable income; exemptions claimed; and taxes paid; is provided for a series of adjusted gross income ranges.

Although numbers of income tax returns filed do not equate directly to population, this data series nevertheless offers some insight into community income and population dynamics. Some caution needs to be exercised, however, as changes in federal income tax laws affect taxable income, while introduction of the Alaska Permanent Fund dividend program in 1982 increased the number of income tax returns required to be filed. In the case of **Unalaska**, data is provided separately for **Unalaska** and Dutch Harbor.

- \* Alaska Department of Revenue. Annual report. Permanent Fund Dividend Recipient Profile. Juneau.

This series contains data on characteristics of dividend recipients by community. The first report, published in May 1982, is a profile of 1979 dividend applicants and includes community data on the number of applicants, the number and percent born in Alaska, the number and percent with Alaska social security numbers, the average age and average years of residence; total dollar amount of dividends paid per

community; an age profile of applicants by mailing address; years of residency since 1959 by mailing address; plus a comparison by community of the number of Permanent Fund Dividend applicants with the number of persons counted by the 1980 Census, the number of 1979 taxpayers and the 1980 population figures accepted for the State Revenue Sharing program. More recent volumes in this series include community data on total recipients, average age, percentage with Alaska social security numbers and age composition.

This data series equates fairly closely to population, particularly in stable rural communities without a significant military presence. Beginning with the 1984 recipient profile, age composition data is provided by 5-year intervals **although** it is not **disaggregated by** sex. In the case of Unalaska, figures **are** provided **separately** for Unalaska and Dutch Harbor.

- \* Alaska Native Foundation. August 1977. **Alaska Native Corporations: a Status Report**, Anchorage.

This report includes background information on the profit and non-profit regional corporations formed to carry out provisions of the Alaska Native Claims Settlement Act. It also contains a 1976-77 status report on the holdings and ventures of regional profit corporations and the services provided by regional non-profit corporations.

- \* Alaska Native Foundation. **1972 - 1978**. The Alaska Native Management Report. Anchorage. Periodical published twice per month. **Final issue Vol. 7, Nos. 10 and 11, June 15, 1978.**

This periodical contained items on lands and other issues of interest to regional and village native corporations established under terms of the Alaska Native Claims Settlement Act. It also included news of the business activities of those corporations.

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- \* Alaska Planning and Management. September 1972. Alaska Community Survey. Prepared for the Alaska Department of Community and Regional Affairs. Anchorage (3 volumes).

This 3-volume series incorporates data on the physical setting, history, population and economy and local facilities for 271 Alaska communities with populations of up to 5,000. It includes data for Alakanuk, Anaktuvuk Pass, Aniak, Barrow, Bethel, Deering, **Dillingham**,



**Gambell**, Kaktovik, Kivalina, Kotzebue, **Nikolski**, Nome, Point Hope, St. Paul, Sand Point, Scammon Bay, Togiak, **Unalakleet**, Unalaska and **Wainwright**. It also includes data for several now abandoned sites relevant to this project such as Biorca, Northeast Cape and **Pauloff** Harbor.

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- \* Anderson, H. Dewey and Walter Crosby **Eells**. 1935. Alaska Natives: a Survey of their Sociological and Educational Status. Prepared for the U.S. Office of Education. Stanford University Press. Stanford.

This report consists of two parts: a sociological study of Alaska Eskimos and an educational study of Alaska Natives. The sociological study portion of the report includes analyses of early and contemporary Eskimo populations, their economic status, vital statistics and health, and the extent and effect of contact with whites. Aspects of modern Eskimo village life are also examined, as are economic prospects and recommendations for improvements. Fieldwork for this study took place in 1930 and 1931. Most data presented is in narrative form and is seldom broken down beyond the Census Division level. However, the report gives a comprehensive picture of the population and economic forces at work in rural Alaska at that time, complete with case histories throughout.

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This book describes a number of communities in Northwest Alaska, including **Kivalina** and **Wainwright**, based on personal visits by the author between 1892 and 1929. It includes a 1924 population estimate for **Wainwright**.

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This book traces the evolution of land claims by Alaska Natives since the U.S. purchase of Alaska. It also outlines major provisions of the Alaska Native Claims Settlement Act.

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analyses include employment estimates and a listing of major employers.

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This 2-volume report describes the Pacific and Arctic voyages of **Beechey**. Volume 1 includes the Arctic voyages when he visited **St. Lawrence Island, Kotzebue Sound, Point Hope, Icy Cape and Point Barrow**. The book is primarily descriptive but has historic interest.

- \* Bockstoce, John R. 1986. Whales, Ice, and Men: the History of Whaling in the Western Arctic. University of Washington Press in association with the New Bedford Whaling Museum. Seattle.

This book is an historical account of the whaling industry in the Western Arctic from the mid-nineteenth century until the early twentieth century. Although it focuses on the whaling industry and whaling vessels rather than on the coastal villages, this book nevertheless offers insights into an industry which had a significant impact on Eskimo communities in Northwest Alaska.

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This report examines the economic potential (by industry) of the Seward Peninsula, **Kobuk** and North Slope regions. It also includes brief descriptions of the economies of Nome, Kotzebue, **Unalakleet**, Barrow, **Wainwright** and Point Lay.

- \* Burch, Ernest S., Jr. 1975. Eskimo Kinsmen: Changing Family Relationships in Northwest Alaska. West Publishing Co. (The American Ethnological Society Monograph 59).

This book is primarily concerned with changes in kinship relationships among Northwest Alaska Eskimos but it also provides some insights into population change. 1969 household composition data for fifteen Northwest Alaska villages (including Anaktuvuk Pass, Deering, **Kivalina**, Point Hope and **Wainwright**) are analyzed, as is less complete information for **Kotzebue**).

- \* **Burch**, Ernest S., Jr. and Thomas C. **Correll**. 1971. Alliance and Conflict: Inter-Regional Relations in North America. In: Alliance in Eskimo Society, Lee **Guemple**, ed. Proceedings of the American **Ethnological Society**, 1971, Supplement. University of Washington Press. Seattle.

This paper examines inter-regional alliance mechanisms, including inter-regional migration, and conflicts in northern Alaska prior to European contact.

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This report contains an historical account of military construction projects underway in Alaska during World War II. It also indicates the number of military personnel to be accommodated at each site. Of interest to this particular project are data for Fort **Mears (Unalaska)**, Fort Glenn (**Umnak Island**), **St.** Paul, Nome and Bethel.

- \* Davis, Nancy Yaw. August 1978. Historical Indicators of Alaska Native Cultural Change. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 15).

This report examines anthropological literature on the culture and history of Alaska Native coastal communities and evaluates previous impacts of modernization on Native social and cultural systems.

- \* **Ellanna**, Linda J. April 1980. Bering-Norton Petroleum Development Scenarios: **Sociocultural** Systems Analysis. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 54). (2 volumes).

These reports describe existing **sociocultural** systems of the Bering Straits and Yukon Delta areas (including the communities of **Alakanuk**, **Gambell**, Nome and **Unalakleet**) and examine the impacts on those systems of future growth with and without OCS activity in the region. The description of existing **sociocultural** systems includes a review of traditional Eskimo culture, of changes in those systems during the various periods following white contact, and analyses of contemporary systems and values. Estimates of community population, disaggregate by race, have been compiled from existing sources and the author's field data.

- \* Federova, **Svetlana G.** January 1973. The Population of Russian America (1799 - 1867): (the Russian Population of Alaska and California). Institute of Social, Economic and Government Research, University of Alaska. Fairbanks. (**ISEGR** Research Note).

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- \* Gazaway, H. P. **n.d.** Staff Estimates of Native American Population, Labor Force, Employment and Unemployment by Agency with Area (State)

Totals for Years 1966 to **1976**, by H. P. Gazaway, Area Programs Officer, Bureau of Indian Affairs. Juneau.

This report contains annual estimates by BIA Agency (Southeast, Anchorage, Bethel, Nome and Fairbanks) and for the State as a whole of total Native population, total Native population under 16 years of age, total Native labor force, total Natives over 16 not in the labor force, total Natives employees and **total** Natives unemployed. No estimates are made at the community level.

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This book chronicles the activities of the **Moravian** Church in **Alaska** over the past hundred years. Mission and related activities in the Bethel area (which included enumeration of the 1890 Census and involvement in the reindeer industry) and Bristol Bay (including **Dillingham** and **Togiak**) are described in detail.

- \* Hippiar, Arthur E. October 1970. From Village **to** Town: an Intermediate Step in the Acculturation of Alaska Eskimos. Edited by Richard G. Woods and Arthur **M. Harkins**. Training Center for Community Programs in Coordination with Office of Community Programs, Center for Urban and Regional Affairs, University of Minnesota. Minneapolis.

This report examines differing levels of acculturation in six Northwest Alaska villages (including Kaktovik, Point Hope, **Kivalina** and **Gambell**) and in Nome.

- \* Hippiar, Arthur E. September 1969. Some Observations on the Persistence of Alaskan Native Village Populations. Institute of Social, Economic and Government Research, University of Alaska. Fairbanks. (Research Note No. AI).

This report examines Native population dynamics and composition of twelve Eskimo communities (including Deering and **Unalakleet**) and concludes that the villages are unlikely to decline dramatically in the foreseeable future. It also raises a number of questions relating to the persistence of villages and to the expectations of migrants and non-migrants from the villages.

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This report contains a descriptive account of the author's travels in **Alaska** in 1926, with notes on the archeology of the Western Eskimo

region (including notations of then existing and former village coastal sites between the Aleutians and Barrow). Most of the remainder of the report is concerned with the physical anthropology of Eskimos in places visited by the author.

- \* John Muir Institute, Inc. March 1984. A Description of the **Socio-economic** of Norton Sound, by Stephen **McNabb**, John Muir Institute; Dr. Lynn Robbins, Western Washington State University; Kevin Waring, Waring Associates; Paul Wasserman, Wasserman and Associates; and Kenneth **Weber**. Social and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region. Anchorage. (Technical Report No. 99).

This report examines socioeconomic characteristics (including population and, to a lesser extent, employment and income) at the regional and subregional (Yukon Delta, Upper Norton Sound and St. Lawrence Island) levels and in selected villages (Emmonak, **Alakanuk**, Unalakleet, **Golovin**, Nome and **Savoonga**). A 73-page appendix contains updated baseline information on **Nome**. Socioeconomic information contained in this report is primarily derived from existing sources, supplemented by field data collected from 82 families in the villages being studied.

- \* **Kruse**, John A. and Robert Travis. October 1981. A Technical Review of the 1980 U.S. Census in Alaska: Interviews with Census Workers. Prepared for the Office of the Governor. Institute of Social and Economic Research, University of Alaska. Anchorage.

This report examines possible deficiencies in data collection by the 1980 Census, based on interviews of about one quarter (114 persons) of the Census field staff working in Alaska. It concluded that the statewide count of population and housing was substantially correct, although some local counts might be too low. It also concluded that Census employment data was suspect and that high refusal rates for selected long-form questions (particularly those relating to fertility and marriage) could make the results unreliable. Finally, it noted that the high rate of long-form substitutions in western Alaska could lead to misinterpretation of the data.

- \* Lane, Theodore, Will Nebesky and Teresa Hull. December 1982. The Effects of State Expenditures on Rural Population Settlement and Intrastate Migration. Institute of Social and Economic Research, University of Alaska. Anchorage. (2 volumes).

This 2-volume report examines the relationship between State and federal government expenditures and rural **population settlement** patterns. Two data bases, an expenditure data base and a village net migration data base, were constructed and patterns between the two were then compared. The village net migration data base was developed from the 1970 and 1980 Censuses and vital statistics information from the Alaska Department of Health and Social Services. The data base of federal and State expenditures was primarily derived from 1981 and, to

a lesser extent, from FY 1982 statistics, plus historical data on federal capital expenditures at the village level. The report concluded that, despite data deficiencies, it appeared that State expenditures were reinforcing the long term trend for population to shift from the smallest Native villages (whose locational advantage is based on a subsistence economy) to larger communities with economies based on market exchange through the operating budget and slowing it down through the capital budget. The net result was little, if any, net short term effect of State expenditures on population settlement.

- \* Louis **Berger** & Associates, Inc. May 1983. Social Indicators for OCS Impact Monitoring. Alaska OCS Social and Economic Studies Program, Minerals Management Service, **Alaska** Outer Continental Shelf Region. Anchorage. (Technical Report No. 77). (3 **vol**umes).

The objective of this project was to conduct primary ethnographic and secondary quantitative data research in two dissimilar Alaska regions (NANA and the Aleutians) in order to ascertain how a systematic program for monitoring community wellbeing and stress could be conducted. Eight villages (**Kotzebue**, Selawik, Noatak and Kiana in the NANA region, and **Unalaska**, King Cove, **Nikolski** and St. George in the Aleutians region) were selected for primary ethnographic research. Population change in these communities between 1880 and 1980 is briefly analyzed, relying heavily on existing sources. The availability and adequacy of community and regional data pertaining to population, employment and other indicators is reviewed in an appendix to Volume 2.

- \* Mathematical Sciences Northwest, Inc. and Alaska Consultants, Inc. October 1976. A Social and Economic Impact Study of Off-Shore Petroleum and Natural Gas Development in Alaska: Phase **II**, Final Report. Prepared for the Bureau of Land Management, U.S. Department of the Interior. **Bellevue**, Washington.

The purpose of this project was to attempt to apply a model developed to fit petroleum industry developments in the Kenai Peninsula to more remote areas of the State with potential to be impacted by OCS oil and **gas** activities. The communities chosen for this study were Yakutat, Bristol Bay Borough, **Dillingham** and Kotzebue. For each community, population, employment and income characteristics were examined in detail, as also were community facilities and utilities, transportation facilities and services, and governmental powers and finances.

- \* **Naylor**, Larry L. and Lawrence A. **Gooding**. February 1978. Alaska Native Hire on the **Trans-Alaska** Oil Pipeline Project. Institute of Social and Economic Research, University of Alaska. Fairbanks. (Alaska Review of Social and Economic Conditions, **Vol.** XV, No. 1).

This report analyzes Native employment on construction of the **Trans-Alaska** Pipeline in terms of types of jobs held, skill categories, union affiliation, hometowns of workers and length of employment.

- \* Nelson, Edward William. 1979. The Eskimo About Bering Strait. Johnson Reprint Corporation. New York. (Originally published in 1899 by the Government Printing Office).

This book is primarily an ethnographic description of clothing, personal adornment, utensils, implements, housing, lifestyles and culture of Eskimos in the area between the Kuskokwim River and Barrow between 1877 and 1881. For most of this time, the author was based at the then fur trading center of St. Michael. The book also contains observations made during his travels, including a description of St. Lawrence Island shortly after the great famine.

- \* Ness, John Frederick. 1982. A Demographic Profile of Rural Alaska: 1980. University of Alaska. Fairbanks. (M.A. thesis).

This thesis analyzes 1980 Census data at the State, regional and community levels in terms of differences in population structure, mortality and fertility.

- \* Olson, Dean F. December 1969. Alaska Reindeer Herdsmen: a Study of Native Management in Transition. Institute of Social, Economic and Government Research, University of Alaska. College. (SEG Report No. 18).

This is an historical account of the Alaska Native reindeer industry as an agent of cultural change in Northwest **Alaska** during the period 1890 to 1968.

- \* Patterson, E. Arthur. March 1964. Nome Area Overall Economic Development Plan. Prepared for the Area Redevelopment Administration, U.S. Department of Commerce. Bureau of Indian Affairs. **Nome**.

This report is an overview of the population and economy of the **Nome** and **Kobuk** (including Point Hope) regions. It also includes an analysis of potentials for economic growth and a review of problems, plus a listing of village development activities. Tables indicating 1962-63 population composition by village, village population trends, State Rural Development projects by village, and welfare payments by village are contained in an appendix.

- \* Pennington, Dr. Robert and H. P. Gazaway. July 1967. Profile of the Native People of Alaska (Exclusive of the Southeast). U.S. Department of the Interior, Bureau of Indian Affairs. Juneau.

This report was prepared as background material for proposed Alaska Native Claims legislation. It includes general statements on the relationship between Alaska Natives and the federal government; Native population distribution and composition; the State economy; the Native cash and subsistence economies; the status of health, education and social services provided to Alaska Natives; and industries with economic potential for Alaska Natives. An appendix to the report

lists Native villages with 25 or more people and estimates of their total and Native populations.

- \* Petroff, Ivan. 1884. Report on the Population, Industries, and Resources of Alaska, by Ivan **Petroff**, Special Agent. Department of the Interior, Census Office. Government Printing Office. Washington, **D.C.**

The 1880 Census is primarily descriptive. **It** is divided into five chapters. Chapter **I** provides a statistical review of population by location and geographical division (disaggregate by race) plus accompanying text. The same chapter also contains data from earlier censuses, including estimates of the native population of the Russian colonies in 1818 and 1819, a census of the **Oonashka (Unalaska)** district in 1831 and Lieutenant **Zagoskin's** enumeration of natives of Norton Sound and the Lower Yukon in 1842, 1843 and 1844. Chapter II describes, with accompanying tables, the major industries of the **day-furs**, fisheries, timber, minerals and agriculture; Chapter **III** describes Alaska's geography and topography; Chapter IV contains an historical sketch of the territory; and Chapter V contains extensive notes on Alaskan ethnology.

- \* Policy Analysts, Limited. June 1980. Bering - Norton Petroleum Development Scenarios: Local Socioeconomic Systems Analysts, by Dr. Richard L. Ender, Stephen Braund, Susan **Gorski** and Dr. Gordon Harrison. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 53).

This report contains descriptions of existing socioeconomic conditions in Nome and Kotzebue plus projections of community growth and assessments of land and **infrastructural** requirements under non-OCS and four OCS scenarios. Existing conditions studied for each city encompassed their population and economy, land use and housing, community facilities and services, and local government revenues and expenditures. Fieldwork for the project included a November 1979 survey of employment in Nome. Employment information for Kotzebue was derived from Alaska Department of Labor data and that collected by **Northrim Associates** for the NANA Regional Strategy Survey.

- \* Policy Analysts, Limited. April 1980. Population and Racial Distributions by Areas of Alaska, by Dr. Richard L. Ender. Anchorage. This report contains population estimates by region (Northwest Alaska, Southwest Alaska, Southcentral Alaska, Southeast Alaska and Central Alaska), regional corporations and boroughs, and, in some cases by community (including Barrow, Kotzebue, Nome, Bethel and **Dillingham**). At the community level (except for Barrow), estimated population figures are given for 1970 (Census) and 1979 and for intervening years where other estimates or local census information were available.
- \* Porter, Robert P. 1893. Report on Population and Resources of Alaska at the Eleventh Census: 1890. Report by Robert P. Porter, Superin-



tendent, Department of the Interior, Census Office. Government Printing Office. Washington, D.C.

Like the 1880 Census, the 1890 Census is primarily descriptive. It is divided into two parts: Population, Geography and Topography, and Social Statistics; and Resources and Industries. Population statistics take up only six pages of Part I and include the total population of each place enumerated, with breakdowns by sex, citizenship and race. Most of the remainder of the Part I is taken up by descriptions by the census enumerators of each judicial division. These sections often provide additional population information. Other chapters in Part I include descriptions of Alaska's geography and topography; the Native inhabitants; villages, homes, families and conjugal condition (including tables indicating the number of houses and families by village); illiteracy and language. Part II describes the major industries of the day (furs, fisheries and mining), commerce and gives an historical review of the decade from 1880 to 1890.

- \* Ray, Charles K. 1959. A Program of Education for Alaskan Natives. University of Alaska. Fairbanks. (revised edition).

This report analyzes education programs and facilities then available to Alaska and evaluates their adequacy. It also includes recent (circa 1957) unofficial population estimates for Alaska villages with Bureau of Indian Affairs and Territorial Native schools.

- \* Robert R. Nathan Associates, Inc. n.d. 2(c) Report: Federal Programs and Alaska Natives. Prepared for the U.S. Department of the Interior. Anchorage. (3 volumes: Task I - An Analysis of Alaska Natives' Well-Being; Task II - Federal Programs for Alaska Natives' Benefit; and Task III - A Survey of Natives' Views).

This 3-volume report was a legislatively mandated study prepared for the U.S. Department of the Interior to describe the socioeconomic circumstances of Alaska Natives; to analyze federal programs of major benefit to Natives; and to survey Native opinions concerning federal programs and Native needs. Although data are not provided at the individual community level, this report series nevertheless provides considerable insight into socioeconomic conditions and perceptions in rural Alaska in the **mid-1970s**.

- \* Rogers, George W. November 1971. Alaska Native Population Trends and Vital Statistics, 1950 - 1985. Institute of Social, Economic and Government Research, University of Alaska. Fairbanks. (ISEGR Research Note).

This report analyzes components of population change for Alaska Natives between 1950 and 1970 on a Statewide and regional (Southeast, Southcentral, Southwest, Interior and Northwest Alaska) basis and makes projections to 1985. The forecasted allocation of population among regions is based on two extreme assumptions, one assuming no

migration and the other assuming identical allocation of the Native and non-Native populations.

- \* Rogers, George W. December 1967. Alaska Regional Population and Employment: Economic and Social Guidelines for the Regional Medical Program in Alaska. Institute of Social, Economic and Government Research, University of Alaska. (SEG Report No. 15).

This report examines Alaska regions in terms of their population, employment and income for the 1960-65 period and makes projections from 1970-2000.

- \* Rogers, George W. and Richard A. **Cooley**. 1963. Alaska's Population and Economy: Regional Growth, Development and Future Outlook. University of Alaska, Institute of Business, Economic and Government Research. College. (Economic Series: Publication No. 1). (2 volumes). (Reprinted with permission of the Alaska Division of State Planning).

This two-volume report provides an overview of Alaska's population and economy shortly after Statehood, including an analysis of regional trends and accompanying statistics.

- \* Rollins, Alden M., compiler. 1978. Census Alaska: Numbers of Inhabitants, 1792 - 1970. University of Alaska Anchorage Library, University of Alaska. Anchorage.

This volume incorporates basic population data for **Alaska** and its communities from the 1880 Census (which also included earlier counts from the Russian period) up to and including the 1970 Census. Although not strictly a primary information source, it is very convenient to have these data in a single volume. However, to gain a more complete picture of community data in the 1880 and 1890 censuses, examination of the text accompanying the tables in the original publications is required.

- \* **Seiver**, Daniel A. and Susan R. **Fison**. April 1975. Alaskan Population Growth and Movements, **1960-1973**. Institute of Social, Economic and Government Research, University of Alaska. Fairbanks. (**ISEGR** Research Note).

This paper examines rate of natural increase (fertility and mortality) and migration (military and civilian) for Alaska's population between 1960 and 1970.

- \* Southwest Alaska Municipal Conference. October 1987. Putting Resources to Work for People, prepared by John **Gliva** and Christy Miller, Alaska Department of Community and Regional Affairs, Municipal and Regional Assistance Division. Anchorage.

The Southwest Alaska Municipal Conference represents municipalities in the Bristol Bay, Aleutians and Kodiak areas. This publication is

essentially a series of profiles for eight member communities (including **Dillingham**, St. Paul, Sand Point, Togiak and **Unalaska**), plus a regional statement. Although the format for each profile is not entirely consistent, they all include an overview of the local population and economy, sometimes including a count of employment by industry sector. Other topics covered include the physical setting and community facilities and amenities.

- \* Spencer, Robert F. 1959. The North Alaskan Eskimo: a Study in Ecology and Society. U.S. Government Printing Office. Washington, D.C. (Smithsonian Institution, Bureau of American Ethnology No. 171).

This book is primarily described with describing traditional Northern Eskimo society. However, it also includes an overview of the various settlements plus a chapter on culture change resulting from contact with Europeans and the growing dependence on cash income.

- \* Sturtevant, William C., editor. 1984. Handbook of North American Indians, Volume 5: Arctic. David Damas, volume editor. Smithsonian Institution. Washington, D.C.

This volume includes papers by a number of authors under the general topics of Western Arctic, Canadian Arctic, Greenland, and the 1950-1980 period. Relevant Alaskan topics covered include the prehistory of various regions and regional ethnographic studies of the **Aleut** (annotated separately), Southwest Alaska Eskimo, St. Lawrence Island Eskimo, Bering Strait Eskimo, Kotzebue Sound Eskimo and North Alaska Coast Eskimo. Topics relating to the 1950 - 1980 period include Alaska Eskimo modernization and the Land Claims era.

- \* Sullivan, James and William Rose. July 1970. Alaska School Enrollments: Enrollments by Race and Location in Elementary and Secondary Schools, and College and University Enrollments, 1958-1969. Institute of Social, Economic and Government Research, University of Alaska. Fairbanks. (**ISEGR** Report No. 24).

This report is a compilation, by place, of elementary and secondary school enrollment by race (white, Native and other) and by year. General data on University enrollment is also included.

- \* U.S. Department of Commerce, Bureau of the Census. September 1984. Current Population Reports: Local Population Estimates, Alaska. U.S. Government Printing Office. Washington, D.C.

This publication contains U.S. Census Bureau population estimates as of July 1, 1982, plus 1981 *estimated* per capita money income for census areas, organized boroughs and incorporated cities.

- \* U.S. Department of Commerce, Bureau of the Census. 1932. Fifteenth Census of the United States: 1930. Outlying Territories and Possessions: Number and Distribution of Inhabitants, Composition and

Characteristics of the Population, Occupations, Unemployment and Agriculture. U.S. Government Printing Office. Washington, D.C.

This volume contains statistics for Alaska, Hawaii, Puerto Rico, American Virgin Islands, Guam, American Samoa and the Panama Canal Zone. The only community-specific population data given for Alaska are the 1910, 1920 and 1930 population of towns by census division and a listing of the 1920 and 1930 population of towns in alphabetical order.

- \* U.S. Department of Commerce, Bureau of the Census. September **1971**. 1970 Census of Population. General Characteristics: Alaska. U.S. Government Printing Office. Washington, **D.C.**

This volume contains a table listing general characteristics (age, sex, race and household population) for communities of **1,000** to **2,500**, including Barrow, Bethel, **Kotzebue** and **Nome**.

- \* U.S. Department of Commerce, Bureau of the Census. May **1971**. 1970 Census of Population. Number of Inhabitants: Alaska. U.S. Government Printing Office. Washington, **D.C.**

This volume contains fifteen series of tables, including a listing by place of the population within the various Census Divisions. The same information is also presented by size of **place**.

- \* **U.S.** Department of Commerce, Bureau of the Census. August **1984**. 1980 Census of Population. American Indian Areas and Alaska Native Villages: 1980. Supplementary Report. **U.S.** Government Printing Office. Washington, D.C.

The Alaska portion of this volume includes tables on the number of American Indians, Eskimos and **Aleuts** living within identified Alaska Native villages and within organized Boroughs, as well as breakdowns by regional corporation.

- \* U.S. Department of Commerce, Bureau of the Census. August 1982. 1980 Census of Population. General Population Characteristics: Alaska. U.S. Government Printing Office. Washington, D.C.

This volume contains tables on general population characteristics by race (age composition, household type and relationship, family type and marital status), for places of 2,500 or more (including Bethel) and similar but less detailed tables for American Indian, Eskimo and **Aleut** persons in Alaska Native villages.

- \* U.S. Department of Commerce, Bureau of the Census. November 1981. **1980** Census of Population. Number of Inhabitants: Alaska. U.S. Government Printing Office. Washington, D.C.

This volume contains thirteen series of tables, including a listing of

the population of Boroughs and Census Area Subdivisions for 1960, 1970 and 1980 and an alphabetical listing by place of the same information.

- \* U.S. Department of Commerce, Bureau of the Census. 1943. Sixteenth Census of the United States: 1940. Population: Characteristics of the Population (with Limited Data on Housing), Alaska. U.S. Government Printing Office. Washington, D.C.

This volume includes three tables providing data for incorporated places of 1,000 or more (including **Nome**). One table lists age composition by sex, racial composition by sex, and school attendance data; a second is concerned with the employment status of persons 14 and over, including employment by Standard Industrial Classification (SIC) code and by skill class; and the third contains information on occupied dwelling units by tenure, number of rooms, and value or monthly rent.

- \* U.S. Department of Commerce, Bureau of the Census. 1952. United States Census of Population: 1950. Number of **Inhabitants**, Alaska. U.S. Government Printing Office. Washington, D.C.

This volume includes five series of tables, one of which contains data on all cities, towns and villages with populations of 25 or more for 1950 and 1939.

- \* U.S. -Department of Commerce, Bureau of the Census. May **1961. United States Census of Population: 1960. General Population Characteristics**, Alaska. U.S. Government Printing Office. Washington, D.C.

Among the tables in this volume are two listing general population characteristics (sex, race, total and household population, and age by sex) for communities of 1,000 to 2,500, including Barrow, Bethel, Kotzebue and Nome.

- \* U.S. Department of Commerce, Bureau of the Census. 1960. United States Census of Population: 1960. Number of Inhabitants, Alaska. U.S. Government Printing Office. Washington, D.C.

This volume contains twelve series of tables, including a listing of the population of all incorporated and of unincorporated places of 25 or more for the years 1939, 1950 and 1960.

- \* U.S. Department of Health, Education and Welfare, Indian **Health Service**, Alaska Area Native Health Service. July 1969. Alaska Native Population Estimates, 1968. Prepared by the Office of Program Planning and Evaluation, Program Analysis Branch. **Anchorage**.

This report lists total Alaska Native population by community, disaggregated by age and sex. For communities with a significant non-Native component, an additional table giving the same information for the total population is also provided. The report contains no data for the **Pribilof** Islands.

- \* U. S. Department of Health and Human Services, Indian Health Service, Alaska Area Native Health Service. 1987. 1986 Native Populations for Alaskan Communities, by the Health Statistics Section, Alaska Area Native Health Service. Anchorage.

This publication provides 1986 estimates of Native population by Service Unit, Service Area and community. Estimates for Service Units were derived from the 1980 Census and projected to **1986** by the IHS Office of Program Statistics, based on the most current patterns of births minus deaths. No migration factors were used in these estimates. Estimates for Service Areas and communities were then derived based on the best information available to the Health Statistics Section. This may become an annual publication in the future.

- \* U. S. Department of the Interior, Bureau of **Indian** Affairs, Planning Support Group. October **1978**. Alaska Natives Regional Profiles. Prepared for the **Alaska** Federation of Natives. Billings, Montana. (Report No. 269).

This report contains a brief profile of the twelve Alaska-based Native regional corporations, including a listing and short description of their major subsidiaries. It also includes a listing (with **dollar** expenditures) of programs administered by the regional non-profit corporations.

- \* U. S. Department of the Interior, Bureau of Indian Affairs and Fish and Wildlife Service. 1949. The **Pribilof** Report: Living and Working Conditions Among the Natives of the **Pribilof** Islands and Other Communities of the Bering Sea Area. U. S. Department of the Interior. Washington, D. C.

This report was the result of a fact finding trip by the heads of the Bureau of Indian Affairs and the Fish and Wildlife Service, together with other high level officials from those agencies, the Alaska Native Service, the Home Missions Council of North America, the University of **Alaska** and two special consultants. The group held meetings in Nome, Bethel and St. Paul and traveled to a number of smaller villages. The report offers interesting insights into the thinking of these government agencies at that time. An appendix to the report includes FY 1949 population estimates by the Alaska Native Service for several communities, including Deering, **Gambell** and **Unalakleet**.

- \* U. S. Federal Field Committee For Development Planning in Alaska. October 1968. Alaska Natives and the Land. U. S. Government Printing Office. Washington, D. C.

This report on Native land claims was designed to record all relevant available information on Alaska Natives and Alaska's **land** and resources. As part of this effort, an overview of population and economic trends in village Alaska is included, as are data on historic and existing Native places in each region.

- \* U. S. Federal Field Committee for Development Planning in Alaska. January 1969. Estimates of Native Population in Villages, Towns, and Boroughs of Alaska. Compiled by the Federal Field Committee for Development Planning in Alaska with the cooperation of the Division of Planning and Research, Office of the Governor. Anchorage.

This is an update of an earlier report issued in 1967. The 1969 version lists 1966/67 total and Native school enrollment and estimated 1969 total and Native population by community. The information is presented both alphabetically and by census district.

- \* U. S. Federal Field Committee for Development Planning in Alaska. **1968**. A Subregional Economic Analysis of Alaska. Anchorage.

This economic study examines population and employment, income, the existing economies and potential for economic growth in five regions- Southeast Alaska, **Southcentral** Alaska (including the Aleutians and Bristol Bay), the Kuskokwim area, Interior Alaska and Northwest Alaska. **Two** final chapters examine the roles of public finance (taxation, expenditures and debt management) and of science and technology in regional economic development. For the Kuskokwim area and Northwest Alaska, summary tables listing the populations of communities between 1939 and 1967 (including 1966 and 1967 estimates) are included.

- \* U. S. Federal Field Committee for Development Planning in Alaska. 1967. Villages in Alaska and Other Places Having a Native Population of 25 or more: Estimates, 1967. Compiled by the Federal Field Committee for Development Planning in Alaska with the assistance of the Bureau of Indian Affairs and the Division of Indian Health, U.S. Public Health Service. Anchorage.

This report **lists** 1966/67 total and Native school enrollment and estimated 1967 total and Native population by community. The information is presented both alphabetically and by census district.

- \* U. S. Treasury Department, Division of Revenue-Cutter Service. 1899. Report of the Cruise of the U.S. Revenue Cutter Bear and the Overland Expedition for the Relief of the Whalers in the Arctic Ocean, from November 27, 1897 to September 13, 1898. Government Printing Office. Washington, D.C.

Although the primary mission of the Bear was to rescue whaling vessels and crews, the book also includes descriptions of Arctic coastal communities, particularly Point Hope and Barrow. Point Hope was estimated to have about 250 inhabitants at this time.

- \* University of Alaska, Institute of Social and Economic Research. June 1982. Economic and Demographic Structural Change in Alaska, by Lee Huskey, Will Nebesky, Bradford Tuck and **Gunnar** Knapp. Alaska OCS

Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 73).

This report is a collection of five papers which analyze different aspects of structural change associated with economic growth and OCS development in Alaska. One paper examines structural change and local economic response to OCS development in rural Alaska and another analyzes rural labor force participation and OCS development in Alaska. A model of rural labor markets is utilized to examine these issues.

- \* University of Alaska, Institute of Social, Economic and Government Research. September 1973. Age and Race by Sex Characteristics of Alaska's Village Population. Fairbanks. (Review of Business and Economic Conditions, Vol. **X**, No. 2).

This report provides a breakdown of unpublished 1970 **Census** data for **Alaska** cities and villages. For each community, it lists a count of the population by race and a count of persons by sex and by single years of age.

- \* University of Alaska, Institute of Social, Economic and Government Research. March 1972. Age and Sex Characteristics of Alaska's Population. Fairbanks. (Review of Business and Economic Conditions, Volume IX, **No. 1**).

This report contains unpublished 1970 Census data for the State as a whole and its census divisions. For the State and the census divisions (the latter divided into urban and rural components, where relevant), it provides a count of the population by single years of age, disaggregate by race and sex.

- \* **VanStone**, James W. 1984. Mainland Southwest Alaska Eskimo. In: Handbook of North American Indians, Volume 5: Arctic. Edited by David **Damas**. Smithsonian Institution. Washington, D.C.

The chapter by Vanstone describes the prehistory, history and culture of the Yukon-Kuskokwim delta and Bristol Bay regions.

- \* Wolfe, Robert J. and Linda J. **Ellanna**, compilers. March 1983. Resource Use and Socioeconomic Systems: Case Studies of Fishing and Hunting in Alaskan Communities. Alaska Department of Fish and Game, Division of Subsistence. Juneau. (Technical Paper No. 61).

This report contains subsistence case studies of communities and areas throughout the State. One case study examines resource uses in six small Lower Yukon River delta communities, one of which is **Alakanuk**, and includes a review of population, wage employment and income using Census, Alaska Department of Labor and Division of Subsistence sources. Another case study uses Nome as an example to examine resource uses in a middle-size regional center of Northwestern Alaska. This case study contains detailed socioeconomic data from a variety of



sources and unpublished Division of Subsistence research on population trends, household size, migration and residency characteristics, wage employment and income levels.

- \* **Zeusler**, Commander F. A. September 1937. Excerpts from the Report of Commander **F.A. Zeusler** on Sociological and Economic Conditions in Alaska. Typescript.

This is a report by the Commanding Officer of the "Northland" on conditions in 25 villages (including **Unalakleet, Gambell**, Point Hope, **Wainwright**, Deering, **Kivalina**, Kotzebue and **Biorka**) visited during the summer of 1937. Although the information contained in these brief village descriptions varies from place to place, population estimates and descriptions of economic activity are usually included. The report **also** includes recommendations made by local people toward improving village conditions and recommendations by the author on assistance for the Eskimos.

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## REGIONAL AND VILLAGE INFORMATION SOURCES

### North Slope Borough

- \* Alaska Consultants, Inc. **n.d.** Beaufort Sea - Petroleum Development Scenarios: Man Made Environment Impacts. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 19) .

This report makes projections of population and employment and resulting impacts on community facilities and local government revenues for Barrow, **Kaktovik**, **Nuiqsut** and **Wainwright** under a non-OCS and four OCS scenarios.

- \* Alaska Consultants, **Inc. n.d.** Beaufort Sea Region - Manmade Environment. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 8).

This report contains an overview of the North **Slope** Borough's economy and population, selected community facilities and services, and local government organization. The same subjects are reviewed at the community level for Kaktovik, Barrow, **Nuiqsut** and **Wainwright**, with additional information on land use, land status, utilities and transportation facilities and services being provided for **Nuiqsut** and **Wainwright**. Fieldwork for this project was undertaken in **1977** and included a survey of employment in each of the four communities.

- \* Alaska Consultants, **Inc.** November 1981. Detailed **Socio-Economic** Information, North Slope Borough Traditional Communities. Prepared for the U.S. Bureau of Land Management. Anchorage.

This report is a compilation of tables providing detailed information on population composition, composition of employment, heads of household characteristics, average length of residence, household income, average household size and interest in relocation for each of the eight North Slope Borough traditional villages. The information was derived from a comprehensive survey of all housing units in those communities between April and July 1980.

- \* Alaska Consultants, Inc. September 1980. North Slope Borough Housing Survey. Prepared for the North Slope Borough, Public Works Department. Anchorage.

This project consisted of a 100 percent, 83-question survey of housing units and their occupants in the Borough's traditional communities conducted between April and July 1980. For each community, a summary of dwelling units is presented, including their physical location, ownership, age, dwelling unit type and

condition, lot and unit size, and the number of occupants. Other tables in this report indicate substandard housing units needing to be replaced, overcrowded units and potential new household formation. Additional data collected in the 1980 Housing Survey was assembled and produced separately for the U.S. Bureau of Land Management in November 1981 (see above). Computer print-outs of all 83 survey questions, with cross-tabulations (which include disaggregations by village), were also produced as a result of this work.

- \* Alaska Consultants, Inc., Clyde S. **Courtnage** and Stephen **Braund** & Associates. January 1984. Barrow Arch Socioeconomic and **Sociocultural** Description. Social and Economic Studies Program, Minerals Management Service, Alaska OCS Region. Anchorage. (Technical Report No. 101).

Included in this report are an overview of the North Slope Borough as a whole (its population, economy, political organization, land use, community facilities and utilities, transportation systems, social organization **and** values) and a detailed examination of the population, economy, political organization, land use and housing, and community facilities and utilities of five communities (Point Hope, Point Lay, Wainwright, **Atkasuk** and Barrow) with some potential to be impacted by possible OCS activities in the Chukchi Sea.

- \* Arctic Slope Regional Corporation. Annual Report. Barrow. (Annual publication, 1st issue - 1973?)

These annual reports summarize corporate activities and are generally quite informative although they do not include employment information. The Corporation also periodically issues a shareholder newsletter (beginning in 1980).

- \* Chance, Norman A. 1966. The Eskimo of North Alaska. **Holt**, Rinehart and Winston. New York. (Case **Studies** in Cultural Anthropology).

This ethnographic study of the north Alaskan Eskimo was based on fieldwork conducted in Kaktovik, Barrow and **Wainwright** between 1958 and 1962. It examines traditional cultural life and values and the dynamics of social and economic change in those communities. Although it does not contain specific census or employment data, this book nevertheless offers insight into the period of petroleum exploration in the then NPR-4 and subsequent construction of the DEW Line system on the local communities.

- \* **Chilkat** Institute. September 1985. Monitoring Methodology and Analysis of North Slope Institutional Response and Change, 1979-1983, by Charles W. Smythe and **Rosita Worl** with the assistance of Steve J. Langdon, Thomas D. **Lonner** and Taylor **Brelsford**. Social and Economic Studies Program, Minerals Management Service, Alaska

Outer Continental Shelf Region. Anchorage. (Technical Report No. 117).

This is primarily a study of institutional change during the 1979-1983 period in three North Slope communities (Barrow, **Wainwright** and **Kaktovik**). A review of activities of the Arctic Slope Regional Corporation and village corporations for the three villages being studied is also included, as is a **sociocultural** monitoring methodology.

- \* Dupere and Associates, Inc. July **1974**. North Slope Borough Manpower Development and Community Survey Reports, Prepared for the North Slope Borough. Juneau.

This report contains a section on manpower development and a second section dealing with a community survey conducted in North Slope villages in April 1974. The 101-question survey was designed to obtain information on population, housing, income, mobility and a number of other subjects. The results of the survey are analyzed by topic, accompanied by copies of computer print-out responses to individual questions (with answers disaggregate by village).

- \* **Dupere** and Associates, Inc. October **1973**. North Slope Borough Reconnaissance Study: an Inventory of the Borough and its Communities. Prepared for the North **Slope** Borough. Juneau.

This report was prepared shortly after the North Slope Borough's incorporation to assist it in its assumption of planning and zoning powers. In addition to an overview of the Borough as a whole, it contains inventories of conditions (including physical setting/history, population and housing, economic resources, community organization and community needs) for individual villages and **Prudhoe** Bay.

- \* Jamison, Paul L. Ethnohistory of the Research Populations. In: Eskimos of Northwestern Alaska: a Biological Perspective, edited by Paul L. **Jamison**, Stephen L. **Zegura** and Frederick A. Milan. **US/IBP** Synthesis Series/8. Dowden, Hutchinson & Ross, Inc. **Stroudsburg**, Pa.

This paper consists of an overview of population change and cultural groupings on the North Slope.

- \* Jenness, Diamond. 1957. Dawn in Arctic Alaska. University of Minnesota Press. Minneapolis.

This book is based on diaries kept by Jenness during his participation in Stefansson's 1913 Arctic expedition. It includes a description of Barrow in 1913 and of excavations undertaken by the author on Barter Island, including a prehistoric village site now occupied by the DEW Line airport.

- \* **Kleinfeld, Judith, John A. Kruse and Robert M. Travis.** March 1981. Different Paths of **Inupiat** Men and **Women** in the Wage Economy: the North Slope Experience. Institute of Social and Economic Research, University of Alaska. Anchorage. (Man in the Arctic Program, Monograph No. 2).

The findings of this study are primarily based on a 1977/1978 household survey of 290 **Inupiat** adults in Barrow, Anaktuvuk Pass, Kaktovik, **Nuiqsut, Wainwright** and Point Hope (representing over 59 percent of North Slope **Inupiat** households). The first section examines the general effects of new job opportunities on the Borough's **Inupiat** population; the second section examines the different responses of **Inupiat** males and females to job opportunities. Most tables generated are not disaggregated by village. However, information on the 1977 employers of **Inupiat**s aged 18 or more is broken down by village, while labor force participation rates are presented separately for Barrow.

- \* **Kleinfeld, Judith, Jack Kruse and Robert Travis.** March 1980. Unemployment on the North Slope: Characteristics of Unemployed Eskimo Workers and of Eskimo Youth Entering the Labor Force. Prepared for the North Slope Borough Planning Department. Institute of Social and Economic Research, University of Alaska. Fairbanks.

This report examines characteristics of unemployed North Slope Eskimo wage earners and those of Eskimo youths entering the labor force. Data used is based on a survey of North Slope Eskimo adults carried out in a 1977/78 household survey of 290 **Inupiat** adults in Barrow, Anaktuvuk Pass, Kaktovik, **Nuiqsut, Wainwright** and Point Hope.

- \* Kruse, John, Judith **Kleinfeld** and Robert Travis. n.d. Energy Development and the North Slope **Inupiat**: Quantitative Analysis of Social and Economic Change. Edited by Linda Leask. Institute of Social and Economic Research, University of Alaska. Anchorage. (Man in the Arctic Program Monograph No. 1).

Like the other volumes in this series, the findings of this study are primarily based on a 1977/78 household survey of 290 **Inupiat** adults in Barrow, Anaktuvuk Pass, Kaktovik, **Nuiqsut, Wainwright** and Point Hope. This report contains analyses of population and related characteristics, employment and income, subsistence activities, and changes in village life between 1970 and 1977. Many of the answers relating to employment, income and changes in village life are disaggregated by village.

- \* Maynard and Partch, and **Woodward-Clyde** Consultants. 1984. North Slope Borough Coastal Management Program: Background Report. North Slope Borough. Anchorage.

This is one of four reports which, together, constitute the North Slope Borough Coastal Management Program. The background report includes chapters on natural resources, the **Inupiat**, and economy and infrastructure. All population and economic data utilized is derived from existing sources. A brief history and summary of social characteristics of each Borough community in the coastal zone (i.e. all except Anaktuvuk Pass) is included.

- \* Milan, Frederick **A.** 1978. Demography and Population Parameters of the Present Inhabitants of Northwest Alaska. In: Eskimos of Northwestern Alaska: a Biological Perspective, edited by Paul **L. Jamison**, Stephen **L. Zegura** and Frederick **A. Milan**. **US/IBP Synthesis Series/8. Dowden, Hutchinson & Ross, Inc. Stroudsburg, Pa.**

This paper examines the historical background **of** the North Slope's Eskimo population, with particular emphasis on case studies of **Wainwright**, Point Hope and Barrow. Population profiles of **Wainwright** (July 1968), Point Hope (**1969**) and Barrow (1970) are featured.

- \* Milan, Frederick **A.** 1980. The Demography of Selected **Circumpolar** Populations. In: The Human Biology of **Circumpolar** Populations, edited by **F.A. Milan**, International Biological **Programme** 21. Cambridge University Press. Cambridge, Mass.

This paper includes a brief outline of the historical demography of Alaska Natives, followed by a more detailed examination of the communities of **Wainwright** and Barrow.

- \* North Slope Borough, Planning Department. Irregular report. North Slope Borough Semi-Annual Economic Profile. Barrow. (First issue - Winter 1985).

This series is a compilation of information relating to population, employment, cost of living, government and subsistence activities within the North Slope Borough.

- \* Reed, John **C.** 1958. Exploration of Naval Petroleum Reserve No. 4 and Adjacent Areas Northern Alaska, 1944-53: Part **1**, History of the Exploration. U.S. Government Printing Office. Washington, D.C. (Geological Survey Professional Paper 301).

This report provides a year by year account of Navy exploration activities in the then Naval Petroleum Reserve No. 4 between 1944 and 1953, including the construction of NARL. The report also makes reference to the amount of local hire for these activities.

- \* University of Alaska, Arctic Environmental Information and Data Center. October 1978. National Petroleum Reserve in Alaska Socioeconomic Profile. Prepared for the National Petroleum Reserve in Alaska Task Force. U.S. Department of the Interior,

National Petroleum Reserve in Alaska, 105(c) Land Use Study. Anchorage. (Study Report #3).

This folder contains a synthesis report covering a range of topics for the North Slope Borough, including population and economy (including the subsistence economy), land use (including military and industrial complexes), housing conditions, land status, transportation and communications, community facilities and local government finances. The folder also contains community profiles dated July 1978 for each of the region's traditional villages.

- \* University of Alaska, Institute of Social and Economic Research. **July** 1978. Beaufort Sea Region Governance Study, by Thomas A. Morehouse and Linda E. **Leask**. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Reports No. 16 and 16a).

This report examines relationships between petroleum development and the evolution of local government institutions in the North Slope region, principally the North Slope Borough, since the **Prudhoe** Bay discoveries in 1968. It also analyzes relationships between the Borough and federal and State agencies and oil companies on key issues of taxation, development and environmental protection. Other relationships examined include those between the Borough and North Slope villages, and those between the Borough and the Arctic Slope Regional Corporation. Although this report is primarily descriptive, it provides valuable insights into community and regional economic dynamics. Technical Report No. 16a is an accompanying executive summary.

- \* University of Alaska, Institute of Social and Economic Research. **n.d.** Beaufort Sea Petroleum Development Scenarios: Economic and Demographic Impacts. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 18).

This report examines population and employment growth for the North Slope Borough as well as Anchorage, Fairbanks and the State of Alaska under a non-OCS and several Beaufort Sea OCS cases. An econometric model developed by the University was used to undertake these analyses.

- \* University of Alaska, Institute of Social and Economic Research. September 1983. A Description of the Socioeconomic of the North Slope Borough, by John A. Kruse, Michael Baring-Gould, William Schneider, Joseph Gross, **Gunnar** Knapp and George Sherrod. Alaska OCS Socioeconomic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report Nos. 85 and 85A). (2 volumes).

This report describes current and projected economic and social conditions on the North Slope, and assesses changes in those conditions due to OCS development. Appendixes to the main report contain a series of tables, some disaggregated by community, of current and projected population and employment developed by the University or obtained from other sources. The second volume contains transcripts of selected **Inupiat** interviews.

- \* University of Alaska, Institute of Social and Economic Research. October 1983. Economic and Demographic Systems Analysis, North Slope Borough, by **Gunnar** Knapp and **Will** Nebesky. Social and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region. Anchorage. (Technical Report No. 100).

This report describes current and projected economic conditions in the North **Slope** Borough and reviews possible impacts of **OCS** development on Borough revenues and expenditures and on **Inupiat** employment. A simulation model of the North Slope Borough's economy is used to examine these impacts. Population data used were derived from the 1980 Census and the 1980 North Slope Borough Housing Survey. Employment data used were derived from interpretations of 1980 Census, Alaska Department of Labor and North Slope Borough information.

- \* University of Alaska, Institute of Social and Economic Research. June 1986. Economic and Demographic Systems of the North **Slope** Borough: Beaufort Sea Lease Sale 97 and Chukchi Sea Lease Sale 109, by **Gunnar** Knapp, Stephen Colt and Troy Henley. Social and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region. Anchorage. (Technical Report No. 120). (2 volumes).

This 2-volume report contains detailed analyses of population, income and employment within the North Slope Borough, plus an examination of Borough government revenues, expenditures and debt. Projections of conditions under a non-OCS case and two OCS cases are made using a model of the Borough's economy. The second volume contains a compilation of population, employment, income, and Borough finances and property values data from a variety of sources.

- \* Worl, Robert, Rosita **Worl** and Thomas **Lonner**. November 1981. Beaufort Sea **Sociocultural** Systems Update Analysis. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 64).

This report updates prior analyses of North Slope political institutions and of **sociocultural** systems in Barrow and **Nuiqsut**. It also makes forecasts of trends in those systems without OCS development.



- \* Worl Associates. April 1978. Assessment of Change in the North Slope, Beaufort Sea Region **Sociocultural** Systems. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 22).

This report examines potential impacts on North Slope **sociocultural** systems resulting from population and employment growth under non-OCS and several OCS development scenarios.

- \* Worl Associates. **n.d.** Beaufort Sea Region **Sociocultural** Systems. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 9).

This report describes cultural dynamics of the North **Slope** region during aboriginal, historic and contemporary times. It reviews the major economic influences (exploration, commercial whaling, the fur industry and **NPR-4** exploration) of the historic period and analyzes the contemporary period in terms of political development (at the village and regional levels) and subsistence issues. Areas of inter-ethnic conflict are also examined.

a. Anaktuvuk Pass

- \* Alaska Consultants, Inc. June 1983. Background for Planning: City of Anaktuvuk Pass. Prepared for the North Slope Borough. Anchorage.

One of a series of nine reports prepared for the North Slope Borough, this report includes analyses of population trends through 1982, plus population composition and length of residence data from the 1980 Census and 1980 North Slope Borough housing survey. In addition, a field count of average annual full-time employment was undertaken in 1982 for this project. The results of this work are compiled by industry and analyzed. The report also contains descriptions and analyses of natural features, land use patterns, land tenure, community facilities and transportation facilities.

- \* Amsden, Charles **Wynn**. May 1977. A Quantitative Analysis of Nunamiut Eskimo Settlement Dynamics: 1898 to 1969. University of New Mexico. (Ph.D. thesis).

This thesis, based on 1969 fieldwork, focuses on traditional settlement patterns of Nunamiut Eskimos. It also provides an analysis of settlement dynamics during the precontact period and during six subsequent periods: 1898 - 1909; 1910 - 1919; the interim period, 1920 - 1934; 1934 - 1950; 1951-1959; and 1960 - 1969. A detailed village census by

household for 1969 is included in an appendix. The author estimated Anaktuvuk Pass' 1969 population to be 130.

- \* Binford, Lewis R. and W. J. **Chasko**, Jr. 1976. **Nunamiut Demographic History: a Provocative Case.** In: **Demographic Anthropology: Quantitative Approaches**, edited by Ezra B. W. **Zubrow.** University of New Mexico Press. Albuquerque. (A School "of American Research Book).

This is one of several papers presented at a January **1973** seminar. It is based on fieldwork conducted in **1969** and examines relationships between the permanent settlement of Anaktuvuk Pass **and** local birth rates. As part of this effort, detailed vital statistics for community residents for the 1935-1970 period are reviewed.

- \* **Cline, Michael Slater.** March 1972. The Impact of **Formal** Education upon the **Nunamiut** Eskimos, Alaska: a Case Study. University of Oregon. (**Ph.D.** thesis).

Although this thesis is primarily concerned with education impacts, it also includes data on total population in Anaktuvuk Pass in 1968-69 and makes estimates of 1968 household income. In addition, primary sources of cash income are identified and quantified. Fieldwork for the project was undertaken between **1967** and **1969** when the author was a teacher in the village.

- \* **Gubser, Nicholas J.** 1965. The Nunamiut Eskimos, Hunters of Caribou. Yale University Press. New Haven.

This book was based on fieldwork at Anaktuvuk Pass in 1959 and 1960. It contains a detailed account of the Nunamiut Eskimos up to and including the time of their settlement at Anaktuvuk Pass. An appendix contains a census of the summer camp at Anaktuvuk Pass in 1960. This information is provided by household and lists the names, ages and sexes of each individual and their relationship to the head of household.

- \* Hanson, Wayne C. September 1972. Anaktuvuk Pass, Alaska Village Census. Prepared for the U.S. Atomic Energy Commission. Department of Radiology and Radiation Biology, Colorado State University. Fort Collins, Colorado. (AEC Research and Development Report **BNWL-1242 UC-48**).

This census was undertaken as a guide for use in radiation ecology studies. It consists of a compilation, by family, of the names, sex, date and place of birth, marital status and relationship to head of household of persons living in Anaktuvuk Pass during the 1962 to 1972 period.

- \* **Spearman, Grant. n.d.** Land Use Values Through Time in the **Anaktuvuk** Pass Area. Anthropology and Historic Preservation, Cooperative Park Studies Unit, University of Alaska and the North Slope Borough. Fairbanks. (Occasional Paper No. 22).

This report outlines major historical events affecting **Nunamiut** families before Anaktuvuk Pass became a permanent settlement and gives an account of village life since that time. The main focus of the report is the change in subsistence land use patterns over time, together with descriptions of two representative historic sites.

- \* U.S. Department of the Interior, Bureau of Indian Affairs. **n.d.** Community Fact Survey - Anaktuvuk Pass. Juneau.

This report is one of a series prepared during the **1960s** by the Bureau of Indian Affairs. It contains a very brief description of **Anaktuvuk** Pass' existing community resources and population, plus opportunities for economic development.

b. Barrow

- \* Alaska Consultants, Inc. December 1983. Background for Planning: City of Barrow. Prepared for the North Slope Borough. Anchorage.

One of a series of nine reports prepared for the North Slope Borough, this report includes analyses of population trends through 1982, plus population composition and length of residence data from the 1980 Census and 1980 North Slope Borough housing survey. In addition, a field count of average annual full-time employment was undertaken in 1982 for this project. The results of this work are compiled by industry and analyzed and comparisons with a 1978 employment count are made. The report also contains descriptions and analyses of natural features, land use patterns, land tenure, community facilities and transportation facilities.

- \* Alaska State Housing Authority. July 1970. City of Barrow Comprehensive Development Plan. Prepared for the City of Barrow. Anchorage.

This comprehensive plan includes analyses of the local physical environment, population and economy, land use, community facilities and transportation facilities and makes recommendations for future city development. As part of the project, a field survey of employment and income was undertaken in 1969.

- \* Beck, R. W. and Associates. June 1977. Energy Study for Barrow, Alaska. Prepared for the U.S. Department of the Interior, Alaska Power Administration. Seattle.

The primary focus of this report was to estimate energy requirements and alternatives for Barrow through the year 2000. It also contains a review of socioeconomic forces operative in the community at that time, including the North Slope Borough (and its capital improvements program), the Native regional and village corporations, and the NARL base.

- \* Brewer, Charles D. 1942. *Fifty Years Below Zero: a Lifetime of Adventure in the Far North.* Dodd, Mead & Company. New York.

This autobiography covers the life of Charles Brewer between 1883 and 1937. Although it is primarily a narrative of his activities, it also includes descriptions of village life in Barrow and events of community significance, such as a 1902 measles epidemic.

- \* **Chilkat** Institute. September 1986. Barrow: a Decade of Modernization. The Barrow Case Study, by Rosita Worl and Charles W. Smythe. Social and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region. Anchorage. (Technical Report No. 125). (OCS Study MMS 86-0088).

This report describes current socioeconomic and **sociocultural** conditions in Barrow. Topics covered include community history; Barrow today; population and migration; economy; household economic organization; extended family groups; and extended families and the development of social services. Fieldwork for the project was conducted in 1975. However, data relating to population and employment was obtained from existing sources, principally the U.S. Census and North Slope Borough 1980 and 1985 data.

- \* Gruy Management Service Co. January 1979. A Study of Alternative Fuel Sources for Barrow, Alaska. Prepared for the U.S. Geological Survey. Dallas. (also a supplement to this report published in May 1979).

This report and its supplement examine alternative energy sources for Barrow and NARL when the reserves of the South Barrow gas fields can no longer meet local needs. Like the earlier Beck study, it examines trends in population and energy consumption in order to derive forecasts of probable future energy demands.

- \* **John Graham and Company.** May 1973. Barrow Regional Master Plan, Barrow, Alaska. Prepared for the Barrow **Inter-governmental** Coordinating Committee.

This planning report was prepared in response to the need for greater coordination among government agencies involved in the Barrow area. It contains analyses of economic and social issues then facing the community, lists of agencies involved in Barrow and a recommended land use plan and implementation measures.

- \* Masnick, G. S. and S. H. Katz. 1974. Trends in Fertility in a Northern Alaska Community. In: Shephard, Roy J. and S. **Itoh**, eds. 1976. International Symposium on **Circumpolar** Health, 3rd, **Yellowknife**, Northwest Territories, 1974. University of Toronto Press. Toronto.

This paper is primarily concerned with fertility trends of different age groups over time in Barrow. It includes community population data for 1940, 1944, 1946, 1950, 1951, 1954, 1957, 1958, 1962, 1966 and 1970. It also examines the influence of outside economic factors on community population change.

- \* North Slope Borough, Planning Department. February 1986. Barrow Census, Housing and Employment Survey. Barrow.

This 73-question survey of Barrow households was conducted during the summer of **1985**. In addition to providing census data, the survey results also yielded information on population composition (age, sex and race), employment and income.

- \* **Ray, P. H.** 1885. Report of the International Polar Expedition to Point Barrow, Alaska. Government Printing Office. Washington, D.C.

This lengthy book is primarily a scientific study of the physical environment of the Barrow area (natural history, meteorology, magnetism, tides and miscellaneous observations). However, it also contains a chapter devoted to an ethnographic sketch of the Natives of Point Barrow and nearby areas. This chapter includes a listing of population in the area between **Wainwright** and the **Colville** River and a census of Eskimos at the Cape Smythe village.

- \* Rice, E. F., J. Ronald **Saroff** and William B. Fuller. March 1964. The Barrow Community Development Study. A Report . . . to Aid in the Physical and Fiscal Development of Barrow, Alaska. Sponsored by the Bureau of Indian Affairs. University of Alaska. Fairbanks.

This community planning report includes detailed analyses of major components of population change at Barrow from the 1940s through the early 1960s. It also examines major sources of employment in the community, planned construction projects and makes projections of population through 1975.

- \* Schneider, William, **Sverre** Pedersen and David **Libbey**. January 1980. The Barrow-Atqasuk Report: a Study of Land Use Values Through **Time**. Anthropology and Historic Preservation, Cooperative Park Studies **Unit**, University of Alaska and the North Slope Borough. Fairbanks. (Occasional Paper 24) .

The primary focus of this report is a description of subsistence activities and the identification of historic sites. However, the report also includes descriptive profiles of Barrow and **Atqasuk** and gives an account of major recorded historical events in the **area**.

c. Kaktovik

- \* Alaska Consultants, Inc. June 1983. Background for Planning: City of **Kaktovik**. Prepared for the North Slope Borough. Anchorage.

One of a series of nine reports prepared for the North Slope Borough, this report includes analyses of population trends through 1982, plus population composition and length of residence data from the **1980** Census and **1980** North Slope Borough housing survey. In addition, a field count of average annual full-time employment was undertaken in 1982 for this project. The results of this work are compiled by industry and analyzed. The report also contains descriptions and analyses of natural features, land use patterns, land tenure, community facilities and transportation facilities.

- \* Alaska Consultants, Inc. October 1982. North Slope Borough Housing Survey Update: Kaktovik. Prepared for the Planning Department, North Slope Borough. Anchorage.

This report reports the results of an updated housing survey of Kaktovik carried out in October 1982. In addition to determining the number of local households who qualified for and wished to purchase mutual help housing, a listing of all units (except Borough public safety and teacher units and U.S. Fish and Wildlife Service housing) and their number of occupants is included.

- \* **Coffing**, Michael and **Sverre** Pedersen. December 1985. Caribou Hunting: Land Use Dimensions, Harvest Level and, Selected Aspects of the Hunt During Regulatory Year 1983-84

in Kaktovik, Alaska. Alaska Department of Fish and Game, Division of Subsistence. Fairbanks. (Technical Paper No. 120) .

This subsistence study contains the results of a household survey conducted in Kaktovik in August and September of 1984. The report also contains information on number of households in the community and some insights into the racial composition of Kaktovik's population and relationships between the local subsistence and wage economies.

- \* Jacobson, Michael J. and Cynthia Wentworth. 1982. Kaktovik Subsistence: Land Use Values Through Time in the Arctic National Wildlife Refuge Area. U.S. Fish and Wildlife Service, Northern Alaska Ecological Services. Fairbanks.

The primary focus of this report is on subsistence and traditional sites in the Arctic National Wildlife Refuge area, based on fieldwork conducted by the authors between 1977 and 1980. However, the report also includes a brief history of Kaktovik, a listing of 1938 populations of places between Brownlow and Demarcation Points compiled by the Bureau of Indian Affairs, and a discussion of the reindeer industry period in the Kaktovik area (including BIA statistics).

- \* Libbey, David. 1983. Kaktovik Area Cultural Resource Survey. North Slope Borough Planning Department and U.S. National Park Service.

This report traces settlement of the Kaktovik area. Fieldwork for the project located 28 historic sites. Descriptions and maps of these sites account for the bulk of the report.

- \* Nielson, Jon M. and the North Slope Borough Planning Department. November 1977. Kaktovik, Alaska: an Overview of Relocations. Prepared for the City of Kaktovik and the North Slope Borough Commission on History and Culture. Barrow.

This report is an account of the several moves of the community of Kaktovik to accommodate space requirements of the adjacent Barter Island DEW Line Station.

- \* Pedersen, Sverre, Michael Coffing and Jane Thompson. December 1985. Subsistence Land Use and Place Names for Kaktovik, Alaska. Alaska Department of Fish and Game, Division of Subsistence. Fairbanks. (Technical Paper No. 109) .

The goal of this report was to build a community data base on land use dimensions for each major subsistence resource category utilized by Kaktovik households. Although the report is heavily weighted to subsistence activities, it does include an historical overview of population trends at Kaktovik. It also includes a village census (disaggregate by age, sex and -household size) taken in April 1983 by the Department of Fish and Game.

- \* U.S. Department of the Interior, Fish and Wildlife Service. April **1987**. Arctic National Wildlife Refuge, Alaska, Coastal Plain Resource Assessment: Report and Recommendation to the Congress of the United States and **Final Legislative Environmental Impact Statement**. Prepared by the **U.S.** Fish and Wildlife Service in cooperation with U.S. **Geological Survey** and the Bureau of Land Management. Washington, D. C. (2 volumes: Volume 1 - Report; Volume **2** -Appendix).

This 2-volume report analyzes potential environmental consequences of five management alternatives for the Arctic National Wildlife Refuge coastal plain. It includes a brief description of population change at Kaktovik derived from other sources, plus an outline of past and present military activities in the Kaktovik area.

d. Point Hope

- \* Alaska Consultants, Inc. June **1983**. Background for Planning: City of Point Hope. Prepared for the North Slope Borough. Anchorage.

One of a series of nine reports prepared for the North Slope Borough, this report includes analyses of population trends through 1982, plus population composition and length of residence data from the 1980 Census and 1980 North Slope Borough housing survey. In addition, a field count of average annual full-time employment was undertaken in 1982 for this project. The results of this work are compiled by industry and analyzed. The report also contains descriptions and analyses of natural features, land use patterns, land tenure, community facilities and transportation facilities.

- \* **Burch**, Ernest S., Jr. 1981. The Traditional Eskimo Hunters of Point Hope, Alaska: 1800 - 1875. Prepared for the North **Slope** Borough. Anchorage.

This report was commissioned by the North Slope Borough as a baseline study of land use by the Point Hope people. It includes a chapter which analyzes the dynamics of population change in the Point Hope region in two periods between 1800 and 1875 and in two subsequent periods between 1875 and



1980. Another chapter examines traditional settlement patterns in the region.

- \* Foote, Don Charles. June 1960. The Eskimo Hunter at Point Hope, Alaska: September, 1959, to May 1960. Submitted to the United States Atomic Energy Commission in compliance with Contract No. AT (04-3)-315. (Reprinted August 1962).

This series of reprinted reports includes, aside from the above cited article, an article dated August 6, 1960 on Point Hope's economic base and another dated March 1961 on Project Chariot and the Point Hope people. The economic base article includes a 1959 census taken by the author and a listing of prior village counts taken by the Bureau of Indian Affairs. It also includes a count of employment in the village and a detailed analysis of earned and unearned income sources.

- \* Foote, Don Charles and H. A. Williamson. 1966. A Human Geographical Study. In: Environment of the Cape Thompson Region, Alaska. Norman J. Wilimovsky and John N. Wolfe, eds. U. S. Atomic Energy Commission, Division of Technical Information. Oak Ridge, Tennessee.

This report on the **Tigaraqmiut** (Point Hope) and the **Naupaktomiut** and **Noatagmiut (Noatak)** is based on fieldwork undertaken between 1959 and 1961 in connection with the Atomic Energy Commission's Project Chariot. For Point Hope, the study includes a comprehensive review of the local subsistence and money economies. An overview of key events since 1850 resulting in economic change is also presented.

- \* Larsen, Helge and Froelich Rainey. 1948. **Ipiutak** and the Arctic Whale Hunting Culture. American Museum of Natural History. New York. (Anthropological Papers of the American Museum of Natural History, Volume 42).

This classic archeological report is based on fieldwork conducted at Point Hope in 1939, 1940 and 1941. In addition to detailed descriptions of excavations carried out during this period, the report describes the **Tikerarmiut** and **Nunatarmiut** people of this region. It also describes the village of Point Hope as it was in 1939.

- \* MacLean, Bryan et al. Summer 1971. Point Hope Project Report. University of Alaska. Funded by the National Science Foundation, Division of Student Originated Studies, Grant No. 2, Dec 1/Y50-4603.

Based on 1981 fieldwork and published sources, this student project includes an examination of local history, resource utilization, physical environment and utility systems.

- \* North Slope Borough. 1986. Point Hope Survey of Population, Housing and Employment, February - March, 1986. Barrow.

This unpublished report details the results of an **83**-question survey on a variety of population, employment and housing issues conducted in Point Hope in **early** 1986. One of the products of this survey was a village census.

- \* U.S. Army Corps of Engineers, **Alaska** District. January 1972. Survey Report: Point Hope Beach Erosion, Point Hope, Alaska. Anchorage.

This survey of serious beach erosion and flood problems at the now-abandoned Point Hope townsite found that shore protection structures were technically feasible but not economically justifiable. As part of the project, an inventory of structures (including number of residences) and facilities in the old village was undertaken.

- \* VanStone, James W. 1962. Point Hope: an Eskimo Village in Transition. University of Washington Press. Seattle.

One of the earliest ethnographic descriptions of an Eskimo village, the findings of this book are based on fieldwork conducted **in 1955 and 1956**. Of special interest to this project are chapters on the community's setting and history, its social structure, housing and economy. Chapters dealing with subsistence cycles, individual life cycles, culture and religion are also included.

- \* VanStone, James W. **1960**. A Successful Combination of the Subsistence and Wage Economies at the Village Level. In: Economic Development and Cultural Change, Volume VII, **No. 2**. Chicago.

This paper traces economic change in the Point Hope area since European contact and describes how local residents combined elements of both the cash and subsistence economies to meet their particular needs. The findings of this paper were subsequently incorporated into the author's 1962 *book* on Point Hope (see above).

- \* VanStone, James W. and W. H. **Oswalt**. 1960. Three Eskimo Communities. Anthropological Papers of the University of Alaska, Volume 9, Number 1. Fairbanks.

This paper is a descriptive and analytical study of three Eskimo villages (Point Hope, **Napaskiak** and Eskimo Point). Each community is described in terms of settlement patterns, subsistence and wage economies, social structure and health

conditions. Differences in the extent of acculturation in the three villages are then compared.

e. **Wainwright**

- \* Alaska Consultants, Inc. **July 1983.** Background for Planning: City of **Wainwright.** Prepared for the North Slope Borough. Anchorage.

One of a series of nine reports prepared for the North Slope Borough, this report includes analyses of population trends through 1983, plus population composition and length of residence data from the 1980 Census and 1980 North Slope Borough housing survey. **In** addition, a field count of average annual full-time employment was undertaken in 1982 for this project. The results of this work are compiled by industry and analyzed. The report also contains descriptions and analyses of natural features, **land** use patterns, land tenure, community facilities and transportation facilities.

- \* Alaska Consultants, Inc. **n.d.** Summary Report: **Wainwright** Comprehensive Development Plan. Prepared for the North Slope Borough. Anchorage.

This comprehensive plan includes analyses of Wainwright's physical setting, population and economy, land use, community facilities and transportation facilities, and makes recommendations for future city development. As part of the project, a detailed socioeconomic survey (including a census) was conducted in April 1977. In addition, a field count of average annual full-time employment by industry sector was undertaken. Some of the results of the socioeconomic survey and employment count were incorporated into Technical Report No. 8 prepared by Alaska Consultants, Inc. for the Minerals Management Service.

- \* Alaska State Housing Authority. **May 1970.** **Wainwright:** Reconnaissance Report and Initial Housing Element. Anchorage.

This report was prepared shortly before the construction of ASHA housing in the village. It includes analyses of the village's population and economy, as well as assessments of housing and land use, health and sanitation needs and local community facilities, transportation and communication systems.

- \* Brosted, Jens. 1975. **Ulgunik:** a Report on Integration and Village Organization in Alaska. Prepared for the Department of Greenland. Copenhagen.

This report was prepared to give Denmark's Department of Greenland a view of conditions in an Alaska Eskimo village. It is based on 6 months of fieldwork in 1969/70 and includes an overview of **Wainwright's** natural and cultural environment, an assessment of social and cultural integration and a review of political organization. Of particular interest to this study is a detailed description of characteristics of male and female out-migrants from the village.

- \* **Ivie**, Pamela and William Schneider. May 1978. Land Use Values Through Time in the **Wainwright** Area. Prepared for the North Slope Borough for the **NPR-A** Planning Team. Anthropology and Historic Preservation, Cooperative Park Studies Unit, University of Alaska.

This report focuses on traditional and modern patterns of subsistence land use in the **Wainwright** area and the identification of historical sites. It also includes a culture history of the Utukokmiut and the Kukmiut, the two principal Eskimo groups who traditionally lived in this area.

- \* **Luton**, Harry H. January 1985. Effects of Renewable Resource Harvest Disruptions on Socioeconomic and **Sociocultural** Systems: **Wainwright**, Alaska. Prepared for the John Muir Institute. Social and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region. Anchorage. (Technical Report No. **91**).

This report includes analyses of the community's history and population; social institutions; the cash and subsistence economies; kinship and sharing; and subsistence resources. It also makes assumptions regarding potential harvest disruptions and assesses the extent of impact that would be likely to result. Fieldwork for the project was conducted in **1982** and 1983. As part of the analyses of the cash economy, 1982 **Inupiat** employment in the **village** was listed by employer. Households were also examined in terms of their size and structure, based on fieldwork conducted for the project.

- \* **Milan**, Frederick A. 1964. The Acculturation of the Contemporary Eskimo of **Wainwright**, Alaska. Fairbanks. (Anthropological Papers of the University of Alaska, Volume 11, Number 2).

This study was based on fieldwork carried out in the summer of 1955. It describes the mode of life of **Wainwright** villagers in the **1950s** and attempts to assess the degree of acculturation resulting from contact with Western values. As part of this work, a detailed census of each household in the village in 1955 was taken.

- \* Milan, Frederick A. 1970. The Demography of an Alaskan Eskimo Village. In: Arctic Anthropology, Vol. VII, Number 1, 1970. University of Wisconsin Press. (The research was supported by the U.S. Air Force Office of Scientific Research).

This study was based on fieldwork conducted in July and August of 1968 as part of a 19-man scientific team effort. Included in this particular analysis are examinations of reproductive histories, multiple births, birth and abortion rates, death rates and emigration. In conjunction with this work, a village census was conducted in July 1968.

- \* Richards, Eva **Alvey**. 1949\* Arctic Mood: a Narrative of Arctic Adventures. The **Caxton** Printers, Ltd. **Caldwell**, Idaho.

This book chronicles the experiences of a teacher at **Wainwright** during the 1924-25 school year. Although the author does not include a count of the local population, she does mention that there was a total of 40 families then living in the village.

- \* U.S. Department of the Interior, Bureau of Indian Affairs. **n.d.** Community Fact Survey - **Wainwright**. Juneau.

This report is one of a series of prepared during the 1960s by the Bureau of Indian Affairs. It contains a very brief description of **Wainwright's** existing community resources and population, plus opportunities for economic development.

## REGIONAL AND VILLAGE INFORMATION SOURCES

### NANA Region

- \* **Burch, Ernest S., Jr.** 1974. Eskimos of the Kotzebue Region: Ethnology and Culture History. Unpublished manuscript.

This paper describes settlement patterns and seasonal activities of different Eskimo groups which traditionally inhabited the Kotzebue region. **It** also describes the region's recent culture history which the author divides into four periods - **early** exploration and contact, 1816-1850; the period of destruction, 1850 to the turn of the century; the period of consolidation, from the turn of the century to **World War II**; and the period of reconstruction, for the years since **World War II**. Population estimates for the period 1850-1970 are provided for different areas (including Kotzebue and **Kivalina** specifically).

- \* Cultural Dynamics, Ltd. September 1983. **Chukchi Sea Sociocultural** Systems Baseline Analysis. Alaska OCS Social and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region. Anchorage. (Technical Report No. 74).

This is a baseline study of **sociocultural** systems in the NANA region and its eleven villages, including **Kotzebue, Kivalina** and Deering. Fieldwork for the project was carried out in **1980** and **1981**. Topics covered include a description of the study area and its communities> social organization, services and **facilities**, political organization, and economic organization. The report does not present a comprehensive picture of employment in any of the communities studied, nor does it include any new information on population. However, it does include a useful overview of past population trends.

- \* Derbyshire and Associates et al. 1982. NANA Coastal Resource Service Area Coastal Management Program. Prepared for the NANA Coastal Resource Area Board. Anchorage.

This report contains chapters on the coastal area boundary; issues, goals and objectives; natural systems; human systems; the economy (with a separate appendix on **Kotzebue's** economy); and the people of the region. As part of the project, an economic model was developed and a field survey of employment was conducted in January 1981. The results are analyzed and projected by sector for both the region and **Kotzebue**. The population analyses are based on existing sources and include past trends and current composition at both the regional and community levels.

- \* **Mauneluk** Association, Inc. 1974. The NANA Region: its History, Population and Economy. Prepared for the NANA Region by **Mauneluk** Association Inc., assisted by the Planning Support Group and Juneau Area Office, Bureau of Indian Affairs, U.S. Department of

the Interior. Bureau of Indian Affairs. Billings, Montana. (Report No. 221).

This report is a comprehensive overview of natural resources, human and social resources, and the economy and development potential of the NANA region. Community profiles and subsistence harvests by community are also included. Detailed regional and community statistics on the Native component of the population were abstracted from the 1980 Census by the Bureau of Indian Affairs Planning Support Group. The report also includes 1972 population estimates for each village and the region as a whole.

- \* NANA Regional Corporation, Inc. Annual Report. Kotzebue. (Annual publication, 1st issue - **1973**).

These annual reports summarize corporate activities. In NANA's case, regional operations are discussed separately from Statewide operations. The most recent report (1986) gives figures for shareholder hire in relation to the total number of employees during the 1982-1986 period although these statistics do not equate to average annual full-time employment.

a. Deering

- \* Holmes, **Charles** and Richard O. Stern. December 1982. Cultural Resources Survey: Deering Airport Material Site. Alaska Department of Natural Resources, Division of Geological and Geophysical Surveys. Anchorage.

This cultural resources survey was conducted in June 1982 in conjunction with an airport construction project. The report includes a description of Deering's history and **prehistory**.

- \* **Sobelman**, Sandra. March 1984. Background Paper on Subsistence Salmon Fishery, **Inmachuk** River, Deering. Alaska Department of Fish and Game, Division of Subsistence. Fairbanks. (Technical Paper No. 110).

This subsistence fishery report includes an overview of population growth at Deering since 1940 and a brief review of employment sources in the village.

- \* University of Alaska, Arctic Environmental Information and Data Center. December 1976. Deering. Prepared for the Alaska Department of Community and Regional Affairs. Anchorage. (Northwest Alaska Community Profiles series).

This community profile includes an overview of Deering's population and economy as well as a description of its physical setting, land use, community facilities and transportation facilities, plus a village map.

b. **Kivalina**

- \* Braund, Stephen R. and David C. **Burnham**. January 1983. Red Dog Mining Project: **Kivalina** and Noatak Subsistence Patterns. Submitted to **Cominco** Alaska. Anchorage.

This report was undertaken to identify subsistence resource use patterns which could be potentially impacted by the Red Dog mining project. As part of the 1982 fieldwork, a village August 1982 census was checked and a total Eskimo population of 260 persons living in **50** households was derived.

- \* **Burch**, Ernest S., Jr. 1966. Authority, Aid, and Affection: the Structure of Eskimo Kin Relationships. University of Chicago. Chicago. (**Ph.D.** thesis).

Although this thesis is primarily concerned with an analysis of kinship relationships, it also includes an overview of **Kivalina's** evolution and a comprehensive picture of village life in the community in the **mid-1960s**. Fieldwork for the study was conducted in 1964 and 1965 and included a local census.

- \* Gagnon, Paul L. April **1959**. Report on Village of **Kivalina**. Alaska **Rural** Development Board. Juneau.

This profile of **Kivalina** was one of a series produced by the **Alaska Rural** Development Board. It contains a general description of the community, including its 1958 population as recorded by the Remote Area Census, plus recommendations for a local economic development project.

- \* **Saario**, Doris J. and **Brina Kessel**. **1966**. Human Ecological Investigations at **Kivalina**. In: Environment of the Cape Thompson Region, Alaska. Norman **J. Wilimovsky** and John N. Wolfe, eds. U.S. Atomic Energy Commission, Division of Technical Information. Oak Ridge, Tennessee.

The **Kivalina** investigations were undertaken over a 22-month period between August 1959 and May 1961 for the Atomic Energy Commission's Project Chariot. The primary objectives of the study were to study local subsistence patterns and to gauge the degree of dependence on subsistence resources. As part of this work, **Kivalina's** "money" economy (1959-1961) and population composition (1955-1959) were also examined.

- \* University of Alaska, Arctic Environmental Information and Data Center. December 1976. **Kivalina**. Prepared for the Alaska Department of Community and Regional Affairs. Anchorage. (Northwest Alaska Community Profiles series).



This community profile includes an overview of **Kivalina's** population and economy as well as a description of its physical setting, land use, community facilities and transportation facilities, plus a village map.

c. Kotzebue

- \* Alaska State Housing Authority. March 1971. Kotzebue, Alaska: Comprehensive Development **Plan**. Prepared for the City of Kotzebue. Anchorage.

This comprehensive plan includes analyses of the local physical environment, population and economy, land use, community facilities and services, and transportation facilities, and makes recommendations for future city development. As part of the project, a field survey of population characteristics (65% sample) and income levels was undertaken in 1969.

- \* Smith, Lucy Valerie. June 1966. **Kotzebue: a Modern Alaskan Eskimo Community**. University of Utah. (Ph.D. thesis).

This thesis is based on 1965 fieldwork. It describes traditional **Kikiktarmiut** society and that which existed at **Kotzebue** in 1965, and examines the forces of change which led from one society to the other. Background information on the physical environment of the Kotzebue area is also included. As part of her 1965 fieldwork, the author undertook a household census. Sources of community employment in 1965 are also listed.

- \* U.S. Department of the Interior, Bureau of Indian Affairs. 1964. Kotzebue Community Survey, by **BIA** School Personnel. Kotzebue.

This report is one of a series prepared by the Bureau of Indian Affairs. It contains an overview of the community's physical setting and climate, village amenities and transportation facilities. It also includes analyses of the local population and economy.

- \* University of Alaska, Arctic Environmental Information and Data Center. December 1976. Kotzebue. Prepared for the Alaska Department of Community and Regional Affairs. Anchorage. (Northwest Alaska Community Profiles series).

This community profile includes an overview of Kotzebue's population and economy as well as a description of its physical setting, land use, community facilities and transportation facilities, plus a city map.

## REGIONAL AND VILLAGE INFORMATION SOURCES

### Bering Straits Region

- \* Alaska Planning Council. December 1940. Preliminary Economic Survey of the Seward Peninsula **Area**. Juneau.

This report examines the major industries of the Seward Peninsula (mining, reindeer and others), service industries and government agencies. It also examines development problems and suggests possible mitigating measures and solutions. The report includes a chapter on the region's total population (Native and non-Native) and its school population (territorial and Native schools) **plus** a chapter on the region's physical setting.

- \* Bering Straits Native Corporation. **Annual** Report. Nome. {Annual publication, 1st issue - 1973?}.

These annual reports summarize corporate activities. In recent years, they include little more than financial statements.

- \* **Ellanna**, Linda J. and Maureen C. Roche. September 1976. Bering Strait Regional Census (1975). Prepared for Kawerak, Inc. with assistance from the University of Alaska-Anchorage. Nome.

This mid-decade census was conducted in the fall of 1975 in all Bering Straits region communities (including Nome, **Unalakleet** and **Gambell**). Data compiled as part of this effort available for both the region and individual communities includes total population; number of households and average household size; population composition by age and sex; racial composition; formal education levels; income levels; number of months employed during 1975; and willingness to relocate for training and employment. The major findings of the census are also analyzed.

- \* Ray, Dorothy Jean. 1975. The Eskimos of Bering Strait, 1650-1898. University of Washington Press. Seattle.

The objective of this book was to describe and analyze the processes of social and economic change which occurred in the Bering Strait region during the historical period, 1650 - 1898. To accomplish that objective, the author utilized written sources, supplemented by her own considerable knowledge of the ethnography of the region.

- \* Ray, Dorothy Jean. 1983. **Ethnohistory** in the Arctic: the **Bering Strait Eskimo**. Edited by R.A. Pierce. The Limestone Press. Kingston, Ontario.

This book includes historical accounts of the Bering Strait region written by explorers, travelers, teachers and **missionaries**, as well as those by the author. Considerable **atten-**

tion is given to nineteenth century settlement patterns and population history in a chapter entitled "Nineteenth Century Settlement and Subsistence Patterns in Bering Strait".

- \* University of Alaska, Institute of Social and Economic Research. June 1980. Bering-Norton Petroleum Development Scenarios: Economic and Demographic Analysis, by Edward D. Porter. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 50).

This report examines the Alaska economy during the 1965-1978 period and the regional economies of Anchorage and the Norton Sound area. It also makes projections of Statewide and regional growth with and without OCS development in the Norton Sound area using the University's MAP and regional models.

- \* University of Alaska, Institute of Social and Economic Research. October 1984. Community Economic and Demographic Systems Analysis of the Norton Sound Basin Lease Sale 100, by Gunnar Knapp, Kathy May MarkAnthony, Will' **Nebesky** and Mark **Wildermuth**. Social and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region. Anchorage. (Technical Report No. 111).

This report includes a description of **Nome's** population and economy based on existing sources and calculations from data on 1980 Census tapes. It also includes projections of population and employment under different OCS scenarios using **ISER's** Rural Alaska Model (RAM).

a. **Gambel 1**

- \* Ackerman, Robert Edwin. 1961. Archeological Investigations into the Ethnohistory of St. **Lawrence** Island, **Alaska**. University of Pennsylvania. (Ph.D. thesis).

This study of archeological sites on St. Lawrence Island is based on fieldwork conducted in 1958. A brief outline of the Island's ecological setting and a summary of its history of European contact is included.

- \* Burgess, Stephen M. May 1974. The St. Lawrence Islanders of Northwest Cape: Patterns of Resource Utilization. University of Alaska. Fairbanks. (Ph.D. thesis).

The primary purpose of this thesis was to assess the role of local food resources in **Gambel 1**. Fieldwork was conducted in the summer of 1980 and between September 1981 and May 1982. In addition to subsistence considerations, the report includes a detailed description of population trends for St. Lawrence Island from 1850 to 1972 and a review of its (then)

current population characteristics. 1970 Census data is compared with a 1972 Census undertaken by the author.

- \* Byard, Pamela Joy. 1981. Population History, Demography, and Genetics of the St. Lawrence Island Eskimos. University of Kansas. (Ph.D. thesis).

This thesis is based on 1978 fieldwork, supplemented by an analysis of early records and previous anthropological research. It analyzes the components of population change on St. Lawrence Island following the famine of 1878. In addition, the different rates of population growth of **Gambell** and Savoonga after the founding of the **latter** community are examined in terms of effective population size and fertility rates. Population genetics of the two communities are also examined and compared with those of Siberian and mainland Alaska Eskimo communities.

- \* Collins, Henry B., Jr. August 1937. Archeology of St. Lawrence Island, Alaska. Smithsonian Institution. Washington, D.C. (Smithsonian **Miscellaneous Collections**, Volume 96, Number 1). (Publication 3411).

This archeological report is based on fieldwork conducted in the summers of 1928, 1929 and **1930**. It includes a section on St. Lawrence Island's physical setting and another **on** its history.

- \* **Ellanna**, Linda Justine. 1983. Bering Strait Insular Eskimo: a **Diachronic** Study of Ecology and Population Structure. The University of Connecticut. (Ph.D. thesis).

This thesis examines changes in population structure and ecological adaptations of five communities (**Gambell**, Savoonga, King Island, **Diomedes** and Wales) between 1650 and 1980. Data for the project was derived from existing sources and from extensive fieldwork by the author between 1970 and 1980. For **Gambell**, detailed community demographic statistics are provided for the 1650-1980 period.

- \* Environmental Services Limited. September 1980. **Gambell**. Prepared under contract with the Alaska Department of Community and Regional Affairs. Anchorage. (Bering Straits Region Community Profiles series).

This community profile includes an overview of **Gambell**'s population and economy as **well** as a description of its physical setting, **land** use, community facilities and transportation facilities, plus a city map.

- \* Gagnon, Paul L. April 1959. Report on Village of **Gambell**. Alaska Rural Development Board. Juneau.

This profile of **Gambell** was one of a series produced by the Alaska Rural Development Board. It contains a general description of the community, including its 1958 population as recorded by the 1958 Village Census, plus recommendations for community improvement.

- \* Geist, Otto William and **Froelich** G. Rainey. 1936. Archaeological Excavations at **Kukulik**, St. Lawrence Island, Alaska. Preliminary Report. Prepared under the direction of the Commissioner of Indian Affairs in cooperation with the University of Alaska. U.S. Government Printing Office. Washington, D.C.

This early archeological report was the result of fieldwork carried out between 1927 and 1935. It also includes a brief description of the Island's social organization at that time plus a 1934-35 population figure of 553.

- \* Holmes, Charles E. and Richard O. Stern. February 1983. Cultural Resources Survey: **Gambell** Evacuation Route, St. Lawrence Island. Alaska Department of Natural Resources, Division of Geological and Geophysical Surveys. Anchorage.

This cultural resources survey was conducted in June/July 1982 in conjunction with a proposed road project. The report includes a description of **Gambell**'s history and prehistory.

- \* Hughes, Charles Campbell. 1960. An Eskimo Village in the Modern World, by Charles Campbell Hughes with the collaboration of Jane Murphy Hughes. Cornell University Press. Ithaca, N.Y. (Cornell Studies in Anthropology).

This book is based on fieldwork carried out in 1954-55 by the authors and that carried out in 1940 by Alexander and Dorothea Leighton as a means of assessing **sociocultural** change. It includes detailed studies of population change at **Gambell** between 1940 and 1955, including analyses of birth and death rates and population mobility. Economic, health and social issues are also examined, as is a history of the community's development.

- \* Joint Overall Economic Development Committee of **Gambell** and Savoonga. May 1979. Overall Economic Development Plan for St. Lawrence Island and the Communities of **Gambell** and Savoonga. Alaska Department of Commerce and Economic Development, Division of Economic Enterprise. Juneau.

This report includes descriptions of the Island's physical setting and the population, economy (wage and subsistence) and community infrastructure of **Gambell** and Savoonga. It

also assesses options for community development and lists local development priorities. City population data from the 1975 Bering Straits Regional Census is given and a detailed list of Native employment by employer and job title is provided.

- \* Little, Ronald L. and Lynn A. Robbins. June 1984. Effects of Renewable Resource Harvest Disruptions on Socioeconomic and **Sociocultural** Systems: St. Lawrence Island. Prepared for John Muir Institute. **Social** and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region. Anchorage. (Technical Report No. 89).

This report includes analyses of the natural and **social** environments, cultural traditions and subsistence activities on St. Lawrence Island (**Gambell** and **Savoonga**); makes assumptions regarding potential harvest disruptions; and assesses the extent of impact that would be likely to result. Fieldwork for the project was conducted in 1982. As part of the analyses of the Island's social environment, a census of the Native population of both communities was conducted and the results were also disaggregated by age and sex and by household. In addition, wage labor jobs held by Natives are listed by employer for each community.

- \* U.S. Department of the Interior, **Bureau of Indian Affairs**. 1966. **Gambell, Alaska - Village Study**. Juneau.

This report is one of a series prepared by the Bureau of Indian Affairs. It contains an overview of the community's physical setting and climate, subsistence activities and village amenities. It also includes detailed analyses of the local population and economy.

- \* U.S. Department of the Interior, Bureau of Indian Affairs, Planning Support Group. January 1977. **Gambell: its History, Population and Economy**. Billings, Montana. (Report No. 243).

This report is a comprehensive overview of the physical environment, history, natural resources, human resources (population and economy), housing, community facilities and services, transportation and communications, government resources and development potential of **Gambell**. It includes an in-depth review of 1970 Census data pertaining to the community's population.

b. Nome

- \* Alaska Consultants. Fall 1968. City of Nome Comprehensive Development Plan. Prepared for the Alaska State Housing Authority. Anchorage.

This comprehensive plan includes analyses of Nome's physical setting, population and economy, land use, community facilities and transportation facilities and makes recommendations for future city development. As part of the project, a field count of average year-round full-time employment was undertaken in 1967 and the results were compiled by industry and analyzed. Population trends at Nome from the turn of the century to the **mid-1960s** were also examined.

- \* Bockstoce, John R. and **Froelich G.** Rainey. **n.d.** The Archaeology of Cape Nome. University Museum, University of Pennsylvania.

This archeological report includes a section on human habitation in the Cape Nome area.

- \* **Bogojavlensky, Sergei.** April **1969.** **Imaangmiut** Eskimo Careers: Skinboats in Bering Strait. Harvard University. Cambridge, Massachusetts. (Ph.D. thesis).

This thesis is based on fieldwork conducted between November 1966 and July 1968 and is a sociological study of Eskimo institutions of King Island and Diomedes. It also deals peripherally with the village of Wales. The report contains a chapter on historical population change in the region and details population and economic changes which occurred on King Island between 1929 and 1968, a period which includes the movement of King Islanders to Nome.

- \* **CH2M Hill Engineering of Alaska, Inc.** August 1976. City of Nome, Alaska: Water and Sewer Master Plan. Prepared for the City of Nome. Anchorage.

This report contains the results of a February 1976 housing survey conducted by the City of Nome specifically for the water and sewer plan project. A summary of the survey results (which include total population disaggregated by Native and non-Native households) is included in the text of the report. Data for individual households are incorporated into an appendix.

- \* Ducker, James H. **n.d.** Gold-Rushers to the North: the People of Nome in 1900. Prepared for the Alaska Historical Commission. Anchorage.

This report is a description and analysis of 1900 Census records for Nome.

- \* Environmental Services Limited. **July 1981.** City of Nome Coastal Management Program: Background Report. Prepared

for the City of Nome. Anchorage. (2 volumes - Volume II is entitled Public Hearing Draft).

This report describes the natural, cultural and economic resources of the Nome area. Fieldwork for the project included a January 1981 community information survey, the results of which are incorporated into the report findings. The section on cultural resources contains analyses of population trends and composition, while the section on economic resources includes an examination of employment trends, **seasonality** and major employment sectors. For the most part, population and employment data are taken from existing sources.

- \* Impact Assessment, Inc. January 1987. Institutional Change in Nome, 1980-1986, by John S. Petterson, Lawrence A. Palinkas, Michael A. Downs and Michael MacFadyen. Alaska OCS Socioeconomic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region. Anchorage. (Technical Report No. 127). (OCS Study No. MMS 86-0124).

This report assesses institutional and **sociocultural** change in Nome between 1980 and 1986 using methodology developed for use in the **Aleutian-Pribilof** region. Major topics covered include population, land, political **control**, **social** complexity, economic organization, health and **social** welfare, and education. Components of population **change** are analyzed on a year to year **basis**, using existing data sources. Estimates of annual employment by employer and industry sector are given for each year from 1980 to 1987 inclusive, based on the results of an April 1986 survey by the authors.

- \* Koutsky, Kathryn. 1981. Early Days on Norton Sound and Bering Strait: an Overview of Historic Sites in the BSNC Region, Volume IV - the Nome, Fish River and **Golovin** Areas. Anthropology and Historic Preservation, Cooperative Park Studies Unit, University of Alaska. Fairbanks. (Occasional Paper No. 29).

One of a series of eight reports designed to assess historic and cemetery sites in the Bering Straits region, the findings of this volume are based on fieldwork carried out in 1975 and 1976, plus the use of existing information sources. Subjects covered include population and settlement patterns, nineteenth century land use and the documented history of the **Nome-Fish River-Golovin** areas.

- \* University of Alaska, Institute of Social, Economic and Government Research. February 1974. Nome Socioeconomic Study. Fairbanks. (Report is part of a study conducted by the Institute of Marine Science, University of Alaska



entitled "Environmental Study of a Marine Environment Near Nome, Alaska").

This report examines Nome's population and economy; income and cost of living; and housing, public services and transportation. All information contained in the report is derived from existing sources.

c. **Unalakleet**

- \* **Correll**, Thomas Clifton. December 1972. **Ungalaqlingmiut: A Study in Language and Society**. University of Minnesota. (Ph.D. thesis).

This thesis is based on 1968 fieldwork, supplemented by an analysis of early records. It is a partial ethnology of the village of **Unalakleet** with special reference to the traditional and modern aspects of the boundary between **Inupik** and **Yupik** speaking Eskimos. The 1968 fieldwork included a village census.

- \* Environmental Services Limited. September 1980. **Unalakleet**. Prepared under contract with the Alaska Department of Community and Regional Affairs. Anchorage. (Bering Straits Region Community Profiles series).

This community profile includes an overview of **Unalakleet's** population and economy as well as a description of its physical setting, land use, community facilities and transportation facilities, plus a city map.

- \* Jorgensen, Joseph G. January 1984. Effects of Renewable Resource Harvest Disruptions on Socioeconomic and **Sociocultural** Systems Impact Analysis: **Unalakleet**, Norton Sound. Prepared for the John Muir Institute, Inc. Social and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region. Anchorage. (Technical Report No. 90).

This report contains analyses of the community's history; its subsistence economy; the village wage economy; and Native values. It also makes assumptions regarding potential renewable resource harvest disruptions and assesses the degree of impact that would be likely to result. Fieldwork for the project was conducted in 1982 and 1983. As part of the analyses of the village economy, full-time employment of Natives and non-Natives in the village in 1982 was counted by employer. A 1982 Modulation count was also undertaken and some-field data on household composition was collected.

- \* Koutsky, Kathryn. 1982. Early Days on Norton Sound and Bering Strait: an Overview of Historic Sites in the BSNC

Region, Volume VII - the **Unalakleet** Area. Anthropology and Historic Preservation, Cooperative Park Studies Unit, University of Alaska. Fairbanks. (Occasional Paper No. 29).

One of a series of eight reports designed to assess historic and cemetery sites in the Bering Straits region, the findings of this volume are based on fieldwork carried out in 1975 and 1976, plus the use of existing information sources. Subjects covered include population and settlement patterns, nineteenth century land use and the documented history of the **Unalakleet** area.

- \* **McMillan**, Patricia O'Brien. September 1985. **Sociocultural and Socioeconomic Assessment of Potential Effects of Mineral Leasing, Mineral Entry, and Settlement in the Anvik/Bonasila/Unalakleet** Planning Block: Final Report. Prepared for the U.S. Department of the Interior, Bureau of Land Management, Anchorage District Office. Arctic Environmental Information and Data Center, University of Alaska-Fairbanks. Fairbanks.

This report evaluates potential impacts of mineral leasing, mineral entry and settlement in the **Anvik/Bonasila/Unalakleet** planning block on the nearby communities of **Unalakleet**, **St. Michael** and **Stebbins**. All data used are taken from existing sources.

- \* Sheppard, William L. 1983. Continuity and Change in Norton Sound: Historic Sites and their Contexts. Anthropology and Historic Preservation, Cooperative Park Studies Unit, University of Alaska. Fairbanks.

This report deals with the identification of historic sites in eastern Norton Sound within the Bering Straits Native Corporation region. It includes a brief history of the origins of **Unalakleet** and of the community's role in early reindeer herding and mining activities in the region.

## REGIONAL AND VILLAGE INFORMATION SOURCES

### Calista Region

- \* Alaska Department of Labor, Research and Analysis Section. July 1981. Lower Yukon-Kuskokwim Region Labor Market Analysis. Prepared by Rod Brown, Jeff Hadland, Scott **Hannigan** and Stanley D. Burrows. Juneau.

This report presents detailed findings of a labor market analysis for the lower Yukon-Kuskokwim region designed to determine "true" information on employment, unemployment and labor force participation rates. To undertake this task, the Department of Labor carried out a survey of nine communities (including **Alakanuk**) in the Wade Hampton census division in January 1981, representing approximately 50 percent of the census division's total estimated working age population. The survey findings, including population composition, labor force participation rate, employment and unemployment were analyzed and compared with Department of Labor estimates and 1980 Census figures.

- \* **Calista** Corporation. Annual Report. Anchorage. (Annual publication, 1st issue - 1974).

These annual reports summarize corporate activities although the most recent report (1985; 1986 is in publication) is less informative than those of prior years.

- \* Fienup-Riordan, Ann. January 1982. Navarin Basin **Sociocultural** Systems Baseline Analysis. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Outer Continental Shelf Office. Anchorage. (Technical Report No. 70).

This report is a detailed examination of **sociocultural** systems of coastal communities in Western Alaska (including **Scammon** Bay, Bethel and, to a lesser extent, **Alakanuk**). Subjects covered are pre-contact history; the period of historical contact; events since Statehood; an examination of the villages today, including their political organization and wage and subsistence economies; and a review of major areas of impact on social, cultural, political and economic systems. A detailed look at sources of cash income from the public and private sectors is incorporated into the report. Fieldwork for the project was conducted in 1980 and was supplemented by previous work by the author in the region plus the use of village consultants.

- \* Fienup-Riordan, Ann. 1986. When Our Bad Season Comes: a Cultural Account of Subsistence Harvesting and Harvest Disruption on the Yukon Delta. Alaska Anthropological Association. Anchorage. (Aurora Monograph Series #1).

**This** report is primarily an ethnographic description of ecological, economic and cultural constraints, both past and present, which affect the harvest of renewable resources in three Yukon delta communities (Alakanuk, Scammon Bay and Sheldon's Point). Although subsistence activities are the primary focus of this report, it also includes a detailed look at sources of cash income in each of the three villages, plus an examination of some population issues. Fieldwork for the project was carried out between January 1982 and January 1983.

- \* **Kozely, Lado A. April 1964. Over-all Economic Development Plan ("Reservation OEDP")** Relating to the Yukon-Kuskokwim River Basins Within the Jurisdiction of the B.I.A.'s Bethel District Office. Bureau of Indian Affairs. Bethel.

This OEDP contains a detailed examination of the Bethel region (including Bethel, Alakanuk, Aniak and Scammon Bay) in terms of its physical environment; population; wage and subsistence economies; needs, potentials and problems; and a plan of action to help overcome poverty. Population analyses are made at the regional and community levels. For the latter, growth trends are analyzed in terms of past Census and BIA and other counts, number of households, and race and sex characteristics. Employment data by village includes estimates of the labor force (with numbers of persons under 14, over 64 and unemployable also listed) for the years 1961 to 1963.

- \* Kreinheder, Jack and Leslie Longenbaugh. January 1982. **Personal Income** in the Lower Yukon-Kuskokwim Region: an Overview of Income, Government Services and Transfer Payments. House Research Agency, Alaska State Legislature. Juneau. (House Research Agency Report 81-3).

This study was undertaken to examine the accuracy of published income information for the region; to ascertain the magnitude of economic activity and income generated by existing industries; to measure expenditures by the State and federal governments on transfer payments, including Social Security; and to quantify government expenditures on public services in the region, including education, health care, job training and employment, and other programs. The report uses 1979 data, the most recent information then available.

- \* Nunam Kitlutsisti et al. January 1984. Conceptually Approved Draft: **Cenaliulriit** Coastal Management Program. **Cenaliulriit** Coastal Management District. Bethel.

This regional coastal management program report includes analyses of the physical environment, Yupik history and culture, population and economy, housing, community facilities, transportation facilities, and local government, plus various elements of the coastal management plan itself. Data presented are generally on

a regional and sub-regional basis but do provide some insight into processes of change at the community level.

- \* **Oswalt, Wendel H.** 1980. Historic Settlements along the Kuskokwim River, Alaska. Alaska Division of State Libraries and Museums, Department of Education. Juneau. (Alaska State Library Historical Monograph No. 7).

This report lists former and existing places (including Aniak and Bethel) between the headwaters of the Kuskokwim River and the mouth of the Johnson River, a short distance below Bethel. A short history is included for each place listed and, where relevant, a listing of population counts by the U.S. Census and others. A chronology of major events affecting the region is **also** given.

- \* **Tussing, Arlon R.** and Robert D. Arnold. November 1969. Eskimo Population and Economy in Transition: Southwest Alaska. Prepared for Foundation **Francaise** d' Etudes Nordiques, Fourth International Congress, Rouen, France.

This paper provides a general description of the population and economic position of Alaska Natives and presents a quantitative survey of the population and economy of one predominantly Eskimo region - the Lower Yukon-Kuskokwim area. Existing data sources are used to examine existing and probable future broad economic and population trends in that region.

a. **Alakanuk**

- \* **Derbyshire and Associates.** December 1979. **Alakanuk.** Prepared under contract with the Alaska Department of Community and Regional Affairs. Anchorage. (Lower Yukon Region Community Profiles series).

This community profile includes an overview of **Alakanuk's** population and economy as well as a description of its physical setting, land use, community facilities and transportation facilities, plus a village map.

- \* **Frank Orth & Associates, Inc. and Stephen R. Braund & Associates.** December 1983. Village Economies of the Lower Yukon. Prepared for **Cenaliulriit** Coastal Management District. Bethel.

This report examines the economies of seven Lower Yukon villages, including **Alakanuk**, in terms of wage and non-wage income, subsistence activities, government transfer payments, capital expenditure programs and village expenditures. For each village, the authors counted 1982 employment by industry sector and listed total village income by source. Projections of future economic and subsistence

activities in the area are made and possible impacts of OCS and State oil lease sale activities are analyzed.

b. **Aniak**

- \* Derbyshire and Associates. December 1979. **Aniak**. Prepared under contract with the Alaska Department of Community and Regional Affairs. Anchorage. (Middle Kuskokwim Region Community Profiles series).

This community profile includes an overview of **Aniak's** population and economy as well as a description of its physical setting, land use, community facilities and transportation facilities, plus a village **map**.

c. **Bethel**

- \* Alaska State Housing Authority. Spring **1969**. Bethel, Alaska, Comprehensive **Plan**. Prepared for the City of Bethel. Anchorage.

This planning report includes analyses of Bethel's physical setting, its population and economy, land use and housing, community facilities and transportation facilities and makes recommendations concerning the form of future city development. Key factors in Bethel's economic development are identified and activities in each of the community's economic sectors are discussed. Statistical data used in this report are derived from existing sources.

- \* Bethel, City of. June 1983. Bethel Coastal Management **Plan**: Conceptually Approved Draft. Bethel.

This report includes analyses of the local physical environment, population and economy, and elements of community infrastructure. It also includes land use studies of certain areas (riverfront, wetlands and subsistence), the coastal management **plan** and implementation policies. Population and employment data used are derived from existing sources. However, results of a special City census conducted in 1982 are also included.

- \* Bethel Community Action Program Committee. 1965. **Socio-economic Report**, City of Bethel. Researched by Dr. Lado A. Kozely, Institute of Business, Economic and Government Research, University of Alaska. College.

This is a study of economic and social development problems in Bethel **in the mid-1960's**. **It** includes a brief history of major economic events in the community and analyses of population and employment as well as recommendations for

intermediate and long range capital improvement project needs.

- \* Derbyshire and Associates. October 1980. City of Bethel Comprehensive Plan. Prepared for the City of Bethel. Anchorage.

This comprehensive plan includes analyses of the local physical environment, population and economy, land use and housing, community facilities and services, and transportation facilities and makes recommendations for future city development. As part of the project, a community attitude survey was conducted in mid-1979. Demographic data derived from this survey was used to estimate total city population for that year. A 1978 employment survey also conducted as part of the project was the basis for developing a computer model of the local economy. That model was used to examine the economy in detail and to develop projections of future city growth.

- \* Lenz, Mary and James H. Barker. 1985. Bethel : the First 100 Years, 1885 - 1985. Photographs and History of a Western Alaska Town. City of Bethel. Bethel.

This book traces major events in the Bethel area over the past century based principally on interviews with local residents.

d. Scammon Bay

- \* Derbyshire and Associates. December 1979. **Scammon Bay**. Prepared under contract with the Alaska Department of Community and Regional Affairs. Anchorage. (Lower Yukon Region Community Profiles series).

This community profile includes an overview of **Scammon Bay's** population and economy as well as a description of its physical setting, land use, community facilities and transportation facilities, plus a village map.

- \* Wolfe, Robert J. October 1981. Norton Sound/Yukon Delta **Sociocultural** Systems Baseline Analysis. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 72).

The principal focus of this report is on subsistence activities in six Yukon River delta communities (including **Alakanuk**), although participation by residents in commercial fisheries activities in the area is also examined. Field research for the study was carried out between May and August 1981 and included a survey of 88 households in the

six communities. Aside from subsistence harvest data, the survey yielded household income data by source and by community for the June 1980 to May 1981 period.



## REGIONAL AND VILLAGE INFORMATION SOURCES

### Bristol Bay Region

- \* Bristol Bay Native Corporation. Annual Report. Anchorage. (Annual publication, 1st issue - 1973?)

These annual reports summarize corporate activities and are generally quite informative although they do not include employment information.

- \* Hawkins, James E. and Elizabeth A. Daugherty. April 1958. The Silver Fleece: an Economic Study of the Bristol Bay Region. Alaska Rural Development Board. Juneau.

This report was written shortly before Statehood. It examines the Bristol Bay region's history, past population trends and present population, its fisheries industry and other industries with potential for economic growth.

- \* Impact Assessment, Inc. August 1984. **Sociocultural -Socio-economic Organization of Bristol Bay: Regional and Subregional Analyses**, by John S. Petterson, Lawrence A. **Palinkas**, Bruce M. Harris, Kathleen Barlow and Michael Downs with the assistance of Steve Langdon, University of Alaska; William Nebesky and Lee Huskey, **ISER**; and Jeffrey **Tobolski**, Earl R. Combs, Inc. **Social and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region.** Anchorage. (Technical Report No. 103).

This report contains an overview of the Bristol Bay region's population and economy, plus analyses at the subregional and village levels. The fishing and fish processing industry is analyzed in considerable depth. Other topics covered in this study include regional and local political organizations, cultural values and cultural stress. Socioeconomic data utilized is primarily from existing sources, supplemented by fieldwork in **Dillingham.**

- \* Kresge, David T., Susan R. **Fison** and Anthony F. **Gasbarro.** 1974. Bristol Bay: a Socioeconomic Survey. Institute of Social, Economic and Government Research, University of Alaska. Fairbanks. (**ISEGR** Report No. 41).

This regional socioeconomic study includes chapters on population and education, labor force and employment, income and cost of living, housing and public services, industrial activity, transportation facilities and costs, and land use and land status. Population and employment data are derived from U.S. **Census** and Alaska Department of Labor sources respectively. Total population and racial composition data from the 1970 Census are the only population data presented by community.

- \* Payne, James T. and Stephen R. **Braund**. November 1983. North Aleutian Shelf Basin **Sociocultural** Systems Analysis. Social and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region. Anchorage. (Technical Report No. 67).

This report was designed to provide baseline **sociocultural** systems information in the Bristol Bay region. It contains descriptions of the prehistory and history of the region, plus examinations of existing conditions at the subregional and community levels (including **Dillingham** and **Togiak**). Regional land issues, political systems and **social** health systems are also examined. Fieldwork for the project was undertaken in **1982** and 1983.

- \* University of Alaska, Institute of **Social** and Economic Research. January 1983. Bristol Bay Cooperative Management Plan: Economic, Subsistence and **Sociocultural** Projections in the Bristol Bay Region - Volume **II**, by Will **Nebesky**, Steve Langdon and Teresa **Hull**. Prepared for the U.S. Fish and Wildlife Service. Anchorage.

This volume contains a description of the 38 villages contained in the Bristol Bay Cooperative Management Plan study area (including Dillingham, **Togiak** and Sand Point). Information on **Dillingham** and **Togiak** has been excerpted directly from community profiles prepared for those communities. Information on Sand Point appears to have been taken from that city's **1981** comprehensive plan.

- \* Wright, John M, Judith M. Morris and Robert Schroeder. **July 1985**. Bristol Bay Regional Subsistence Profile. Alaska Department of Fish and Game, Division of Subsistence. **Dillingham**. (Technical Report No. 114).

This report provides an overview of the evolution of the region's commercial economy as well as subregional analyses of subsistence activities.

a. **Dillingham**

- \* Alaska State Housing Authority. June 1971. City of **Dillingham** Comprehensive Plan. Anchorage.

This comprehensive plan includes analyses of **Dillingham's** history, physical setting, population and economy, land use and housing, community facilities and transportation facilities and makes recommendations for future city development. As part of the project, a housing and land use survey conducted in October **1970** collected population information (disaggregate by age and sex) and data relating

to migration. The same survey also provided information on 1970 household income levels.

- \* **Dillingham** High, Alaskan History Class. June 1974. The Last of Yesterday: the History of **Dillingham** and Nushagak Bay. **Dillingham**.

This document includes written histories of **Dillingham**, Kanakanak and Nushagak, plus a chronological history of Nushagak Bay and photographic illustrations.

- \* DOWL Engineers. January 1982. **Dillingham**. Prepared under contract with the Alaska Department of Community and Regional Affairs. Anchorage. (Upper Bristol Bay Region Community Planning Profiles series).

This 2-sheet community profile includes an overview of **Dillingham's** population and economy as well as a description of its physical setting, land use, community facilities and transportation facilities, plus a city map.

- \* DOWL Engineers. November 1981. **Dillingham** Comprehensive Plan Update, Phase I. Prepared for the City of **Dillingham**. Anchorage.

This planning report includes a listing of city goals and objectives plus analyses of **Dillingham's** population and economy, land use and housing, and recommendations for additional planning work. As part of the project, a community attitudes survey was conducted in March 1981. Population and employment data cited are derived from existing sources, principally the Census and Alaska Consultants, Inc. (Technical Report No. 69).

- \* Fall, James A., Janet C. **Schichnes**, Molly **Chythlook** and Robert J. Walker. December 1986. Patterns of Wild Resource Use in **Dillingham**: Hunting and Fishing in an Alaskan Regional Center. Alaska Department of Fish and Game, Division of Subsistence. Juneau. (Technical Paper No. 135).

The primary focus of this report is subsistence resource usage in **Dillingham**, based on a survey of 153 households between March and May 1985. However, the report also includes analyses of the community's population and cash economy, based both on the household survey and other research. A 1986 breakdown of full-time and seasonal employment by individual federal, State and local government agencies, plus private non-profit organizations is provided, as are analyses of the local commercial fishing and fish processing industry.

- \* Rogers, George W. August 1955. Preliminary Economic Survey of **Dillingham**, Alaska and the Bristol Bay Region. Alaska Rural Development Board. Juneau.

This report provides general economic background material on **Dillingham** and nearby areas during the mid-1950's. It includes an examination of population trends since 1880, with more detailed analyses of changes in total population and in population composition which occurred between 1939 and 1950. The economy of the area, including the commercial salmon industry and other lesser activities such as trapping, government expenditures and mining, is assessed and secondary business activities are also reviewed. This report relies on existing information sources but provides a good overall view of **Dillingham's** population and economy a short time before Statehood.

- \* VanStone, James W. 1967. Eskimos of the **Nushagak** River. University of Washington Press. Seattle.

Based on fieldwork carried out in 1964 and 1965, this book provides a comprehensive overview of agents of change (Russian and American exploration, missionary activity, traders, the commercial fishing industry, mining and reindeer herding, and the provision of educational and medical services) and emerging socioeconomic patterns (population and settlement patterns in the nineteenth and twentieth centuries) in the Nushagak River region, including **Dillingham**.

- \* VanStone, James W. February 25, 1971. Historic Settlement Patterns in the Nushagak River Region, Alaska. **Fieldiana: Anthropology**, Volume 61. Field Museum of Natural History. Chicago. (Publication 1120).

This report was the result of five seasons of archeological and ethnographic fieldwork in the **Nushagak** River region. It includes detailed descriptions and analyses of changing settlement patterns and components of population change in the **Dillingham** area from prehistoric times to the early years of the twentieth century.

#### b. Togiak

- \* DOWL Engineers. January 1982. **Togiak**. Prepared under contract with the Alaska Department of Community and Regional Affairs. Anchorage. (Upper Bristol Bay Community Planning Profiles series).

This community profile includes an overview of **Togiak's** population and economy as well as a description of its

physical setting, land use, community facilities and transportation facilities, plus a city map.

- \* Kowta, **Makoto**. June 1963. **Old Togiak in Prehistory**. University of California - Los Angeles. (Ph.D. thesis).

The primary focus of this thesis is a description of artifacts found during archeological fieldwork at Old **Togiak** during the summer of 1960. However, it does examine the impact of the Russian and American presence on the **Togiak** area. A population estimate for old **Togiak** before 1880 is also included.

- \* U.S. Department of the Interior, Alaska Planning Group. 1974. **Final Environmental Statement: Proposed Togiak National Wildlife Refuge, Alaska**. Anchorage.

This environmental impact statement was prepared in conjunction with establishment of the **Togiak** National Wildlife Refuge. It includes a brief outline of socioeconomic considerations associated with this federal land withdrawal, principally the effects this would have on six nearby villages, including **Togiak** and Twin Hills. The report also includes a listing of traditional settlements within the proposed refuge.

- \* U.S. Department of the Interior, Bureau of Indian Affairs. August 1966. **Togiak, Alaska - Village Study. Juneau**.

This report is one of a series prepared by the Bureau of Indian Affairs. It contains an overview of the community's physical setting and climate, village amenities and transportation facilities, plus analyses of the local population (including that of Twin Hills) and economy.

- \* **Wolfe, Robert J., Joseph J. Gross, Steven J. Langdon, John M. Wright, George K. Sherrod, Linda J. Ellanna, Valerie Sumida** and Peter J. Usher. February 1984. **Subsistence-Based Economies in Coastal Communities of Alaska**. Prepared for the Division of Subsistence, Alaska Department of Fish and Game and the U.S. Minerals Management Service, Alaska Region. Social and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Program. Anchorage. (Technical Report No. 95).

This report analyzes the wage and subsistence economies and examines the impact of the former on the latter in four traditional **Yupik** communities (including **Togiak**) in Southwest and Western Alaska. Fieldwork for the project was conducted in 1983 (supplemented by prior work in 1982), and included an April 1983 census of permanent **Togiak** residents (excluding school teachers). The 1983 census data are

disaggregate by age and sex and by place of birth of heads of household. Field data on wage and salary and fishing employment and income were also collected and analyzed as part of this project, as were data on subsistence activities.

- \* Wright, John M. and Molly B. **Chythlook**. March 1985. Subsistence Harvests of Herring Spawn-on-Kelp in the **Togiak** District of Bristol Bay. Alaska Department of Fish and Game, Division of Subsistence. Juneau. (Technical Paper **No. 116**).

Although the primary focus of this report is on the subsistence use of herring spawn on kelp in the **Togiak** fisheries district, it also includes a discussion of historic and contemporary settlement patterns and current socioeconomic conditions in the immediate **Togiak** area, plus a brief description of the area's commercial herring spawn on kelp and sac roe fisheries.

## REGIONAL AND VILLAGE INFORMATION SOURCES

### Aleutian Region

- \* Alaska Consultants, Inc. May 1981. St. George Basin Petroleum Development Scenarios: Local Socioeconomic Systems Analysis. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 59).

This report includes detailed community baseline information on the population and economy, land use, community facilities and services, and local government organization of **Unalaska**, Cold Bay and St. Paul. Fieldwork for the project was undertaken in 1980 and included a survey of employment in each of the three communities. The report also includes projections of community growth and, in the case of **Unalaska**, of growth under conditions of OCS development.

- \* **Aleut** Corporation. Annual Report. Anchorage. (Annual publication, 1st issue - 1973?)

These annual reports summarize corporate activities and are generally quite informative although they do not include employment information.

- \* Coppock, Henry Aaron. **1969**. Interactions Between Russians and Native Americans in Alaska, 1741 - **1840**. Michigan State University. (Ph.D. thesis).

This thesis examines **Aleut** and **Tlingit** culture before contact, describes the Russian movement across Northwest North America between 1741 and 1799 and compares the extent of resulting culture change of the **Aleuts** (1743-1840) and **Tlingits** (1775-1840). It includes estimates of total **Aleut** population between 1740 and 1910.

- \* **Dmytryshyn**, Basil and **E.A.P.** Crownhart-Vaughan, translators. 1976. Colonial Russian America: **Kyrill T. Khlebnikov's** Reports, 1817-1832. Oregon Historical Society. Portland.

Most of this report is concerned with Russian activities in Southeast Alaska and California. However, appendixes to the report include a breakdown of the population of St. Paul by sex and race in 1825.

- \* **Impact Assessment, Inc.** August 1987. **Analysis of Aleut Institutional Response and Change: 1980-1985**, by John S. Petterson, Michael A. Downs and Lawrence A. **Palinkas**. **Social and Economic Studies**, U.S. Department of the Interior, Minerals Management Service, Alaska Outer Continental Shelf Region. Anchorage. (Technical Report No. 128). (OCS Study MMS 87-0014).

This report examines the communities of Sand Point, **Unalaska**, Atka and St. Paul and compares **sociocultural** change and institutional response among them. Elements studied are population, land, political control, **sociocultural** institutions, economy, health and education. Fieldwork for this project included a 1986 census of St. Paul.

- \* Jones, Dorothy C. December **1970**. Changes in Population Structure in the Aleutian Islands. Institute of Social, Economic and Government Research, University of Alaska. Fairbanks. (**ISEGR** Research Note No. A-2).

In this brief report, data on changes in population structure in four remaining Aleutian **Island** villages (**Atka, Akutan, Nikolski** and **Unalaska**) between 1897 and 1970 are analyzed and compared.

- \* Jones, Dorothy C. October **1973**. Patterns of **Village** Growth and Decline in the Aleutians. Prepared with the research assistance of John R. Wood. Institute of Social, Economic and Government Research, University of Alaska. Fairbanks. (**ISEGR** Occasional Paper No. 11).

This report analyzes population changes and **intervillage** migration patterns in the Aleutians, excluding the **Pribilof** Islands, between 1890 and 1970. The author uses U. S. Census data, supplemented by population counts by other government agencies and herself. In terms of the present study, analyses of migrations from smaller regional villages to Sand Point and **Unalaska** are particularly relevant.

- \* **Kirtland**, John C. and David F. Coffin, Jr. September 1981. The Relocation and Internment of the **Aleuts** During World War **II**. **Aleutian/Pribilof** Islands Association, Inc. Anchorage. (8 volumes).

These reports are a compilation of government and other records relating to the resettlement of **Aleuts** from the **Pribilofs** and the Western Aleutian Islands during World War **II**. Military records include the names and ages of people who were relocated from each village. Less complete records are available to document the number of persons returning to the Aleutians after the War and those who died in Southeast Alaska, except in the case of **Nikolski**.

- \* Lantis, Margaret. 1984. **Aleut. In:** Handbook of North American Indians, Volume **5:** Arctic. William C. Sturtevant, General Editor; David **Damas**, Volume Editor. Smithsonian Institution. Washington, D. C.

This paper examines **Aleut** history, population, settlement patterns and elements of traditional culture and subsistence



pursuits. Of particular interest to this study, it summarizes census information by village for 1834, 1890, 1970 and 1980 and analyzes the components of population change.

- \* Lantis, Margaret. 1970. The **Aleut** Social System, 1750 to 1810, from Early Historical Sources. In: Ethnohistory in Southwestern Alaska and the Southern Yukon: Methodology and Content, edited by Margaret Lantis. University Press of Kentucky. Lexington, Kentucky.

This is a compilation of descriptive information recorded by early explorers, scientists, priests, Census takers, archeologists, anthropologists and others relating to social systems in the Aleutians between 1750 and the 1960's. It also includes early community population estimates and Census data compiled by Veniaminov, the Russian-American Company and others.

- \* Stein, Gary C. October 1977. Cultural Resources of the Aleutian Region. University of Alaska, Cooperative Park Studies Unit. Fairbanks. (Occasional Paper No. 6). (2 volumes).

This report is primarily concerned with identifying sites in the Aleutians warranting further archeological study. However, Volume I also includes a discussion of the history of population change in the region.

- \* Stephen R. **Braund** & Associates, ResourceEcon, Patrick Burden & Associates, Social Research Institute and Kirkwood and Associates. April 1986. A Description of the Socioeconomic and **Sociocultural** Systems of the **Aleutian-Pribilof** Islands Region. Social and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region. Anchorage. (Technical Report No. 118).

This is a study of three **Aleutian-Pribilof** Islands communities, including St. Paul, plus a regional overview which includes some economic information on **Unalaska**. Fieldwork for St. Paul was conducted between June and August 1985. The report includes very detailed analyses of St. Paul's population and economy derived from a combination of fieldwork and existing sources, as well as descriptions of land use and housing, community facilities, transportation facilities, and social and political organization.

- \* U. S. Department of the Interior, Bureau of Indian Affairs, Planning Support Group. January 1974. **Socio-Economic** Characteristics for Natives Living in the **Aleut** Corporation Area. Billings, Montana. (Report No. 217).

This report examines population composition, employment, income and educational data for Native and white populations in the **Aleut** region through examination of "fourth count" tapes of 1970 Census data. All data presented is at the regional level.

- \* University of Alaska, Institute of Social and Economic Research. June 1984. St. George Basin and North Aleutian Basin: Economic and Demographic Systems Impacts Analysis, by **Gunnar** Knapp, Teresa Hull, Will Nebesky and Kathy May MarkAnthony, and by Judy **Zimicki** of Down-to-Earth Science. **Social** and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region. Anchorage. (Technical Report No. 87).

Using Census and other available data, this report examines 1980 population and employment composition in **Unalaska**, **Cold Bay**, Sand Point, St. Paul, St. George and Nelson Lagoon. Population and employment projections for **Unalaska** and **Cold Bay** under a number of scenarios and for Sand Point under a "base case" scenario are developed using ISER's Rural Alaska **Model** (RAM).

- \* University of Alaska, Institute of **Social** and Economic Research. " April 1981. St. George Basin Petroleum Development Scenarios: Economic and Demographic Analysis, by Bradford H. Tuck and Lee Huskey. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 57).

This report provides an historic baseline analysis of the Alaska economy, the regional economies of Anchorage, Southcentral and Southwest Alaska, and of the Aleutian Islands Census Division. It also makes projections of Statewide and regional growth with and without OCS development in the St. George Basin area using the University's MAP and regional models. For the Aleutian Islands Census Division, projections are made through the use of the University's Small Community Population Impact Model (**SCIMP**).

- \* **Veniaminov**, Ivan. 1984. Notes on the Islands of the **Unalashka** District. Translated by Lydia T. Black and **R.H. Geoghegan**. Edited, with an introduction by Richard A. Pierce. Published jointly by the Elmer **E. Rasmuson** Library Translation Program, University of Alaska and The Limestone Press. Kingston, Ontario. (Alaska History, No. 27).

This book contains **Veniaminov's** observations on the Aleutian region and on individual Aleutian Islands, including the **Pribilofs**. It also includes his observations on the region's inhabitants and their lifestyles and culture. Of interest to this study are **Veniaminov's** analyses of population change and his listing of Aleutian village population. Data on births and deaths in the **Unalashka** district between 1833 and 1837, leading causes of death, age at time of death and nationality of births and deaths are included in an appendix.

a. Nikolski

- \* Bank, Theodore P. III, Albert C. Spaulding, Harvey Alfred Miller and Janet Fowler Bank. June 1950. The University of Michigan Expedition to the Aleutian Islands, 1948-49. A Preliminary Report to the Office of Naval Research, Department of the Navy. Botanical Gardens and Museum of Anthropology, University of Michigan. Ann Arbor.

This report is principally concerned with documenting botanical and archeological investigations conducted on more than 15 islands in the Western Aleutians, including Umnak, in 1948 and 1949. It includes a description of the village of **Nikolski** and its population.

- \* Berreman, Gerald D. June 1953. A Contemporary Study of **Nikolski**: an Aleutian Village. University of Oregon. (M.A. thesis).

This thesis examines the history of **Nikolski**, the community's population and economy, its social structure and world view. Fieldwork for the project was conducted in 1952 and included a detailed census (by name, age, sex, years in community, birthplace, highest grade of education, languages spoken, major source of cash income and miscellaneous information).

- \* Kozely, Lado A. May 1963. Community Fact Survey - Village of **Nikolski**, Alaska. Bureau of Indian Affairs. Anchorage.

This report is one of a series prepared by the Bureau of Indian Affairs. It contains an overview of the community's physical setting and climate, its history and local amenities. It also includes detailed analyses of the local population and economy and examines the potential for economic development.

- \* University of Alaska, Arctic Environmental Information and Data Center. May 1978. **Nikolski**. Prepared for the Alaska Department of Community and Regional Affairs. Anchorage. (**Aleutian/Pribilof** Islands Region Community Profiles series).

This community profile includes an overview of **Nikolski's** population and economy as well as a description of its physical setting, land use, community facilities and transportation facilities, plus a village map.

b. St. Paul

- \* Alaska, Special Commission. September 1965. Economic and Social Conditions on the **Pribilof** Islands. Report by

Special Commission Appointed by the Governor of Alaska.  
Juneau.

This Commission was established to study the problems of **Pribilof** Island residents after a series of complaints alleging that Island residents were living under conditions of servitude. The Commission visited the Islands in **June 1965** where it conferred with village councils and held public meetings. The resulting report includes data provided to the Commission by the Bureau of Commercial Fisheries on population (December **31, 1964**), family income (**1950** and 1964), housing conditions (1962) and occupancy status (June 1965).

- \* Dames & Moore. June **1983**. Economic Strategies Plan, St. Paul Island, Alaska. Prepared for the City of St. **Paul**. Anchorage.

This report was written for the City of St. Paul shortly before the scheduled withdrawal of the National Marine Fisheries Service (**NMFS**) from the **Pribilof** Islands. It examines alternate sources of income and employment, makes a series of recommendations and a time schedule for those recommendations to be implemented, with the organization(s) responsible indicated. **It** also makes projections of employment and population accruing to **St. Paul**, assuming implementation of the recommended development strategies.

- \* Dames & Moore and Norgaard (USA) Inc. January **1982**. St. Paul Harbor Baseline Studies. Anchorage.

This document contains the baseline data upon which an accompanying harbor development plan is based. The baseline volume includes detailed fisheries analyses, plus comprehensive information on the community's population, economy and culture. Socioeconomic data used in this report has been taken from prior studies by the Corps of Engineers and Management and Planning Services.

- \* Economics Research Associates. April 1983. **Aleut** Community of St. Paul Island, Alaska: Economic Development Assistance Program Strategy. Prepared for the **Aleut** Community of St. Paul Island. **Mercer** Island, Washington.

The major portion of this report is concerned with strategies and proposed implementation measures for an economic development assistance program following the loss of St. Paul's major employer, the National Marine Fisheries Service fur seal program. However, it also includes analyses of the community's economy and economic development problems, primarily from existing sources.

- \* Elliott, Henry W. 1880. Report on the Seal Islands of Alaska. Submitted to the Superintendent, Tenth Census. Washington, D.C.

This report was based on field observations made by the author from 1872 to 1874 inclusive and in 1876. It includes chapters on the natural environment of the **Pribilof** Islands, the fur seals and other animal life, and on the occupants of the islands. The report also includes a listing by name of **St. Paul's** resident population (**Aleut** and white) as of **July 1, 1870.**

- \* Foote, Don C., Victor Fischer and George W. Rogers. March 1968. St. Paul Community Study: an Economic and **Social** Analysis of St. Paul, **Pribilof** Islands, Alaska. Institute of Social, Economic and Government Research, University of Alaska. College. (SEG Report No. 18).

This report **was** undertaken for the U.S. Bureau of Commercial Fisheries to analyze St. Paul's economic and social base and to assess the community's ability to support municipal government and services. The report includes a wealth of data on population and employment data provided by the Bureau of Commercial Fisheries, supplemented by field surveys of income sources conducted by the authors. It also describes local community facilities and services and their administration; makes projections of population, employment and income; and reaches conclusions regarding economic viability and municipal services.

- \* Johnson, Susan Hackley. 1978. The **Pribilof** Islands: a Guide to St. Paul, Alaska. Tanadgusix Corporation. St. Paul.

This is an informational brochure sponsored by the **Tanadgusix** Corporation. It includes a history of the community, a description of the fur seal industry and information of interest to visitors.

- \* Jones, Dorothy Knee. 1980. A **Century** of Servitude: **Pribilof Aleuts** under U.S. Rule. University Press of America. Washington, D.C.

This book analyzes the major forces of change affecting the lives of **Pribilof** Islanders following the U.S. purchase of Alaska.

- \* Management and Planning Services. December 1980. **Pribilof** Islands Services Plan: Final Report. Prepared for the National Marine Fisheries Service. Seattle.

This study was undertaken to assist in the transfer of facilities and services provided by the National Marine Fisheries Service to the communities of St. Paul and St. George. For St. Paul, it examines the local population and economy, land use, community facilities and transportation facilities, including an assessment of costs to the City and the federal government for providing those facilities and services. Projections of community growth and needs are made and management and action plans are recommended for St. **Paul** to assume responsibility for meeting future city demands. The report includes a review of local population censuses and a **1979** count of employment.

- \* **Torrey, Barbara Boyle. 1983.** Slaves of the Harvest. Tanadgusix Corporation. Anchorage.

This book is an historical account of conditions **on** the **Pribilof** Islands from prehistoric times **to** the present. Major events affecting the people of the Islands are discussed in detail.

- \* U.S. Army Corps of Engineers, Alaska District. May 1982. Final Harbor Feasibility Report and Environmental Impact Statement: St. Paul Island, Alaska. Anchorage.

This harbor feasibility study contains an economic analysis of St. **Paul's** human and capital resources, including changes in population composition (age, sex and race) in off-Census years and a 1979 count of full-time and seasonal/part-time employment by employer.

- \* U.S. House of Representatives, Committee On Merchant Marine and Fisheries. 1889. Investigation of the Fur-Seal and Other Fisheries of Alaska. Government Printing Office. Washington, D.C.

The Committee report was principally concerned with investigating the Alaska fur seal industry and examining government contracts and leases relating to the taking of fur seals and other fur-bearing animals in the Territory. However, the report also contains information about the social and economic condition of the **Aleut** inhabitants of St. Paul and St. George, including censuses of the two islands taken in **1887 and 1888**.

- \* U.S. Treasury Department. 1898. Seal and Salmon Fisheries and General Resources of Alaska. Government Printing Office. Washington, D.C. (4 volumes).

The major portion of this 4-volume series is devoted to the fur seal industry. Volume I contains annual census data for St. Paul from 1872-1888 (disaggregate by sex and age) and

detailed census data for St. Paul and St. George (by name of the individual, sex, age, relationship to other household members and, sometimes, including place of birth) for 1890, 1891 (St. George only), 1892, 1893, 1894 and 1895. Volume **III** contains **Henry Elliott's** report on the **Pribilof** Islands (annotated separately above) **plus** a report on the introduction of domestic- reindeer into Alaska, while Volume **IV** contains Petroff's 1880 Census report (also annotated separately).

- \* University of Alaska, Arctic Environmental Information and Data Center. May 1978. St. Paul. Prepared for the Alaska Department of Community and Regional Affairs. Anchorage. (Aleutian/Pribilof Islands Region Community Profiles series).

This community profile includes an overview of **St.** Paul's population and economy as well as a description of its physical setting, land use, community facilities and transportation facilities, plus a city map.

- \* **Veltre**, Douglas W. and Mary J. **Veltre**. October 1981. A Preliminary Baseline Study of Subsistence Resource Utilization in the **Pribilof** Islands. Alaska Department of Fish and Game, Division of Subsistence. (Technical Paper No. 57).

Although this is primarily a subsistence study of St. Paul and St. George, it also includes descriptions of the history of both communities and demographic information based on local censuses conducted in 1979 (St. Paul) and St. George (1981). **In** addition, a summary of total population for each community is presented for selected years since 1825.

- \* Wolf and Company. September 1972. Economic Development Guidelines for the **Aleut** Community of **St.** Paul Island, Alaska. Prepared for the Economic Development Administration, U.S. Department of Commerce. New York.

This economic development study was undertaken at the request of the City of St. Paul to identify ways and means by which the community's economy could be broadened and diversified to relieve chronic under-employment problems. As part of this work, a detailed look at the local economy and employment situation was included.

c. Sand Point

- \* Alaska Consultants. Summer 1970. City of Sand Point Comprehensive Plan. Prepared for the Alaska State Housing Authority. Anchorage.

This comprehensive plan includes analyses of Sand Point's physical setting, population and economy, land use, community facilities and transportation facilities and makes recommendations for future city development. As part of the project, a survey of employment and income was undertaken in 1967 and the results analyzed.

- \* Alaska Department of Community and Regional Affairs. April 1983. Sand Point: Prospects for Development, by Michael **Cushing**. Juneau.

This report analyzes Sand Point's population and economy and assesses the community's development potential. Population analyses include Census data and two City population counts (June 1980 and July 1982). Economic analyses include a June 1980 City survey of employment and an examination of major industry sectors.

- \* **Bomhoff & Associates, Inc. June 1977.** City of Sand Point Comprehensive Plan. Prepared for the City of Sand Point. Anchorage.

This comprehensive plan includes analyses of the **local** physical environment, population and economy, land use, community facilities and transportation facilities, and makes recommendations for future city development. As part of the project, a survey of employment and income were undertaken in **1976**.

- \* Earl **R. Combs, Inc.** October **1982**. Alaska Peninsula Socioeconomic and **Sociocultural** Systems Analysis. Alaska OCS Socioeconomic Studies Program, Bureau of Land Management, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 71).

This report provides information on the socioeconomic and **sociocultural** systems and structures of several Alaska Peninsula and **Shumagin** Island communities, including Sand Point. Fieldwork for the project was undertaken in the summer of 1981. For Sand Point, detailed information on the community's fishing and fish processing industry and an estimate of local non-fisheries employment are presented. Other subjects covered include population, subsistence activities, and social and political organization.

- \* Impact Assessment, **Inc.** August 1982. North Aleutian Shelf Non-OCS Forecast Analysis. Alaska OCS Socioeconomic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Office. Anchorage. (Technical Report No. 75). (2 volumes).



The two volumes contain generalized assessments of elements of economic and **sociocultural** change operative in communities in the North Aleutian Shelf area, including Sand Point.

- \* **Jon Isaacs** and Associates, Gary Hennigh Associates and **ResourceEcon.** October 28, 1986. Sand Point Socioeconomic Forecast and Airport Demand Study. Prepared for the City of Sand Point. Anchorage.

This is primarily an airport improvement study but it also includes analyses of the **local** economy and makes projections of community population under three different scenarios of economic activity.

- \* Sand Point, City of. January 1981. City of Sand Point Community Comprehensive Plan, Ordinance #81-4. Sand Point.

This comprehensive plan includes analyses of the local physical environment, development history, population and economy, land use, community facilities and transportation facilities and makes recommendations for future city development. Of particular interest is a list of development milestones and a June 1980 survey of employment conducted by the City of Sand Point.

- \* U.S. Army Corps of Engineers, Alaska District. **1974.** Final Environmental Impact Statement: Proposed Humboldt Harbor, Sand Point, Alaska. Anchorage.

This environmental impact statement was prepared in conjunction with the construction of harbor facilities at Sand Point. Although its primary source of economic information is the community's 1970 comprehensive plan, the Corps conducted its own survey of employment which is included in this document.

- \* U.S. Congress, House of Representative, Committee on Public Works. October 1970. Humboldt Harbor at Sand Point, Alaska. Letter from the Secretary of the Army Transmitting a Letter from the Chief of Engineers, Department of the Army, Dated June 26, 1970, Together with Accompanying Papers and an Illustration, on Humboldt Harbor at Sand Point, Alaska . . . U.S. Government Printing Office. Washington, **D.C.**

This document is a justification for construction of a boat harbor at Sand Point. It includes the results of a 1968 survey of fishing and fish processing employment and income at Sand Point conducted by the Corps of Engineers.

d. Unalaska

- \* Alaska State Housing Authority. December 1967. Dutch Harbor - **Unalaska**: Preliminary Development Plan. Prepared for the City of **Unalaska**. Anchorage.

This report was prepared immediately prior to the disposal of portions of the former Dutch Harbor **naval** base by the U.S. General Services Administration. It includes a description of the local economy and community facilities and services (including those formerly used by the Navy), assesses the potential of existing improvements, and makes recommendations for land use and land disposal. As part of this project, a **field** count of employment by industry sector was undertaken in December 1967.

- \* Impact Assessment, Inc. August 1983. **Unalaska**: Ethnographic Study and Impact Analysis, by John S. **Petterson**, Lawrence A. **Palinkas**, Bruce M. Harris, Michael A. Downs and Beverly Holmes. Social and Economic Studies Program, Minerals Management Service, Alaska Outer Continental Shelf Region. (Technical Report No. 92).

This report includes a lengthy history of the **Unalaska** area from prehistoric times to the present, a look at other Aleutian communities with historic ties to Unalaska (**Nikolski** and the **Pribilofs**), **plus** an examination of the local economy, community infrastructure and its political and social organization. Impacts of different growth scenarios on the community's socioeconomic and **sociocultural** systems are also analyzed. Population and economic statistics in this report have been obtained from existing sources. Updated information is anecdotal in nature. An executive summary has been published as Technical Report No. 92A.

- \* **Jones**, Dorothy M. March 1969. A Study of Social and Economic Problems in Unalaska, an **Aleut** Village, University of California, Berkeley. (Ph.D. thesis).

This thesis was written to ascertain how the community of Unalaska perceived and acted upon a series of social problems and to determine the impact of government agency policies, programs and practices on the community. Fieldwork for the report was carried out in 1967/68. As part of the project, an informal census (246 permanent residents and about 125 transient crab plant employees) was conducted in 1967 and a count of permanent and temporary employment **by** employer was undertaken. An overview of **Unalaska's** history and of the modern community in 1967/68 is provided and a listing of population for **Unalaska** and **Unalaska** Island between 1759 and 1967 is also included.

- \* Martinson, Charles Richard. June 1973. **Aleut** Settlements of the **Makushin** Bay Area, Alaska. University of Oregon. (Ph.D. thesis).

The primary purpose of this thesis was to investigate soils and vegetation and old village sites in the **Makushin** Bay area. To accomplish this, the author spent one year undertaking the necessary fieldwork. The report also contains chapters on **Aleut** ethnology and **Unalaska's** past.

- \* **Surla, Leo T., Jr.** March 1970. Economic Potential of Alaskan Military Surplus Property, Volume **II: Recommendations for the Development of Unalaska.** Prepared for the Division of State Planning and Research, Office of the Governor. Doxidi s-System Development Corporation. Washington, **D.C.**

This report was prepared to facilitate disposal of the former **Dutch** Harbor navy base. It includes a sector analysis of **Unalaska's** economy and a series of recommendations to aid in community development. Most data cited are derived from existing sources.

- \* Tryck, Nyman and Hayes. November 1977. City of **Unalaska,** Alaska: Recommended Community Development Plan. Prepared for the City of **Unalaska.** Anchorage.

This proposed comprehensive plan includes analyses of the local physical environment, history, economy and population, land use (including coastal zone management considerations and Section 14(c)(3) reconveyances), housing, community facilities and transportation facilities, and makes recommendations for future city development. As part of the project, a survey of employment in the community was undertaken in 1976. A census of the city's population undertaken under a separate contract in September/October 1977 is included as an appendix to this report.

- \* **Veltre, Douglas W.** and Mary J. **Veltre.** October 1982. Resource Utilization in **Unalaska,** Aleutian Islands, Alaska. Alaska Department of Fish and Game, Division of Subsistence. Juneau. (Technical Paper No. 58).

Although this is primarily a community subsistence study, it also includes an historical overview of **Unalaska** Island from pre-contact times to the present, plus a contemporary profile of **Unalaska.** Fieldwork for the project was undertaken in early and mid-1982. Historical population data used is taken from existing sources except for a 1982 estimate provided to the authors by the City of **Unalaska.**

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. Administration.

