

# Demographics And Employment Alaska Communities Volume III

Social and Economic Studies



FINAL TECHNICAL REPORT

A DEMOGRAPHIC AND EMPLOYMENT ANALYSIS  
OF SELECTED ALASKA RURAL COMMUNITIES  
VOLUME III (SOUTHERN COMMUNITIES)

Submitted to  
Minerals Management Service  
U.S. Department of the Interior

by

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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]).



## BETHEL

### A. PAST POPULATION TRENDS

The 1880 Census recorded a small settlement of 29 persons at the site of present day Bethel, then known as Mumtrekhtagamute Station. Oswalt (1980) reports that the first trading post at Mumtrekhtagamute Station probably opened in the early 1870s, followed by an Alaska Commercial Company post in 1884. At about the same time, Moravian missionaries selected Mumtrekhtagamute Station as the site for a mission and school, conferring the name "Bethel" on the settlement after the day's biblical text, "God said unto Jacob, Arise, go up to Bethel, and dwell there, and make there an altar unto God that appeared unto thee". Things haven't been the same at Mumtrekhtagamute Station since.

In a region of small, dispersed, often seasonally inhabited camps, Bethel's role as a water transportation center and mission school site first helped establish it as a permanent settlement. The mission school opened its doors in 1886. Other key events in the community's early development were the arrival of a medical doctor in 1896, the introduction of reindeer in 1901, establishment of a post office and consecration of the Moravian church building in 1905, and construction of a federal school in 1913, a roadhouse in 1914, a U.S. Army Signal Corps radio station in 1922, a territorial school in 1923 and a federal day school for Native children in 1927. Throughout this period, Bethel remained an active trading center. Nevertheless, many decades passed before Bethel became the dominant center

for the lower Kuskokwim River and Kuskokwim delta region. At the turn of the century, the village of Akiak about 30 miles upriver from Bethel was a larger, busier commercial center, due in part to its proximity to the Nyac goldfields. Akiak paralleled Bethel's early development and from 1918 to 1933 was the site of the region's first Alaska Native Medical Service hospital.

Bethel is situated about 80 miles upriver from the mouth of the Kuskokwim River. The deep water channel to Bethel was first discovered in 1908 and was mapped in 1912 by the U.S. Army Corps of Engineers. By 1915, ocean-going ships began to visit Bethel regularly. Shallow draft ocean-going vessels could actually navigate as far upriver as Aniak and that community was initially a more important transshipment destination for cargo bound upriver. On the other hand, Bethel was better positioned to redistribute inbound freight destined for Southwest coastal and inner Norton Sound communities. In fact, in the late 1800s, Bering Sea Eskimos and Nunivak Islanders traveled to Bethel to trade.

By the late 1930s, Bethel had gained a foothold as the region's center for aviation and government administration. The construction of a 45-bed Native Health Service hospital here in 1939 was a pivotal event as, by that time, the region's traditional settlement pattern was poised for the thorough-going changes which boosted Bethel's subsequent growth.

The Lower Yukon-Kuskokwim region was Alaska's last rural region to make the shift from small, dispersed often nomadic settlement groups to the new

pattern of sedentary, centralized permanent villages. As recently as 1939, the Census counted 78 settlements in the Bethel census area with an average population of 57 residents and 65 settlements in the Wade Hampton census area with an average population of only 38 residents.

Over the next four decades, settlement patterns changed radically. By the 1980 Census, the number of Bethel census area villages had shrunk by half to 35 permanent year-round settlements with an average village size of 314 residents, while the number of Wade Hampton census area villages was reduced by more than three-quarters to only 14 villages with an average of 333 residents.

During the four and a half decades from 1939 to 1985, the Bethel census area's population also tripled from 4,026 to 12,906 persons, largely due to natural increase, making it the largest and fastest growing of the six census areas covered in this study.

Bethel's own rapid growth after 1939 and its emergence as the largest town in Western and arctic Alaska by 1980 is largely a result of the two above-noted trends: the region's changing settlement patterns and its rapid overall population growth.

By 1939, after four decades of slow steady growth, Bethel's population reached 376, already making it the largest settlement in the Lower Yukon-Kuskokwim region. During and after World War II, Bethel's pace of growth

TABLE 222

POPULATION ESTIMATES  
 BETHEL  
1880 - 1987

<u>Year</u>	<u>Census</u>	<u>Other Estimates</u>	<u>Sources of Other Estimates</u>
1880	29		
1890	20		
1910	110		
1920	221		
1929	278		
1939	376		
1950	651		
1957		1,000	Ray, 1959
1958		1,000	Alaska Rural Development Board (per Kozely)
1960	1,258	1,280	Ak. Department of Labor (July)
1963		1,538	BIA school census (per Kozely)
1965		1,600	City census
1967		1,750	Federal Field Committee - 1,530 Native; 220 non-Native
1968		2,000	Alaska Area Native Health Service - 1,650 Native
1969		2,000	Federal Field Committee - 1,750 Native; 250 non-Native
1969		2,043	ASHA August survey - 86 percent Native
1970	2,416	2,440	Ak. Department of Labor (July)
1975		2,931	U.S. Census Bureau
1976		3,166	U.S. Census Bureau
1980	3,576		
1980	3,580*	3,853	Dept. Community/Regional Affairs
1981	3,549*	3,549	Dept. Community/Regional Affairs
1982		3,850	U.S. Census Bureau (July)
1982	3,681*	3,681	Dept. Community/Regional Affairs
1982		3,494	City of Bethel census
1983	3,442*	3,681	Dept. Community/Regional Affairs
1984	2,930*	3,681	Dept. Community/Regional Affairs
1985	3,075*	3,681	Dept. Community/Regional Affairs
1986		4,462	Dept. Community/Regional Affairs
1987		4,462	Dept. Community/Regional Affairs

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\* Alaska Department of Labor estimates derived using U.S. Census methodology. Where these figures are the same as those cited by the Department of Community and Regional Affairs, the Department of Labor accepted local censuses or estimates.

Sources: U.S. Census (1880 - 1980 figures).  
Alaska Department of Labor (1980 - 1985 figures).



TABLE 223  
 POPULATION TRENDS  
 BETHEL  
1910 - 1985

<u>Year</u>	<u>Population</u>	<u>Percent Change</u>	
		<u>Decennial</u>	<u>Annual</u>
1880	29		
1890	20	-31.0	
1900	n.a.		
1910	110	550.0	
1920	221	100.9	
1930	278	25.8	
1939	376	35.3	
1950	651	73.1	
1960	1,258	93.2	
1970	2,416	92.1	
1980	3,576	48.0	
1981	3,549		-0.8
1982	3,681		3.7
1983	3,442		6.5
1984	2,930		-14.9
1985	3,075		4.9

Sources: U.S. Census (1880 - 1980 figures).  
 Alaska Department of Labor (1981 - 1985 figures).

accelerated dramatically as it consolidated its position as regional center and more federal and territorial (later State) agencies established field offices here.

By 1950, Bethel had clearly become the region's dominant community as the administration of federal services began to have a significant impact on Western Alaska community development patterns. The central administration of federal services from Bethel promoted consolidation into fixed settlements oriented to a dominant regional center. Other factors gave impetus to this trend. Most obviously, the availability of better educational, health and transportation services at selected localities facilitated the trend toward fewer, larger permanent villages. Likewise, new air transport, communications and service distribution networks radiating from Bethel, together with Bethel's expanding wage economy, reinforced the trend to regionalism. Finally, the regionwide population explosion ensuing from better health conditions and increased birth rates gave further impetus to the growth of Bethel and its hinterland villages.

Bethel incorporated as a city in 1957, the second community in Western and arctic Alaska (Nome was the first) to assume municipal status. Because of its size and the number of agency personnel located there, Bethel was also usually among the first communities in the region to acquire community improvements such as electricity, a local secondary school and public housing. Meanwhile, Bethel continued to be selected as the location for region-serving amenities such as improved air and water transportation facilities, the first regional high school, a community college, public

safety and court facilities and regional health and social service programs. In turn, these community developments further reinforced Bethel's role as a regional center.

By the late 1960s, federal agencies located in Bethel included the Alaska Native Health Service, Bureau of Indian Affairs, Federal Aviation Administration, U.S. Weather Bureau, U.S. Bureau of Sport Fisheries, U.S. Department of Military Affairs, U.S. Post Office, Office of Economic Opportunity, Arctic Health Research Laboratory and the Alaska Communications System. The lengthening list of State agencies represented in Bethel included the Departments of Education, Highways, Health and Social Services, Labor, and Fish and Game, along with the Division of Aviation, Alaska National Guard, Alaska State Troopers, RuralCAP, Neighborhood Youth Corps and the Alaska State Housing Authority.

The net result of these trends was that Bethel's population grew tenfold between 1939 and 1985, from 376 to 4,006, largely through immigration from its hinterland villages, supplemented by a steady rise in the number of non-Natives pursuing new employment opportunities here. The decades of Bethel's most rapid growth were 1950-1960 and 1960-1970 when the community's population doubled and redoubled. Thereafter, population growth slowed. From 1970 to 1980, Bethel grew by 48 percent; from 1980 to 1985, by only 12 percent.

During the same period, the population of the Bethel census area as a whole tripled from 4,026 to 12,906 persons. Bethel's own share of the census

area's population almost quadrupled from 9.3 percent in 1939 to 31.0 percent by 1985.

TABLE 224  
POPULATION CHANGE  
CITY OF BETHEL AND BETHEL CENSUS AREA  
1929 - 1985

Year	City of Bethel		Balance of Area		Bethel Census Area		City as Percent of Census Area
	Number	Percent Increase	Number	Percent Increase	Number	Percent Increase	
1930	278						
1939	376	35.3	3,650		4,026		9.3
1950	651	73.1	4,019	10.1	4,670	16.0	13.9
1960	1,258	93.2	5,102	26.9	6,360	36.2	19.8
1970	2,416	92.1	6,115	19.9	8,531	34.1	28.3
1980	3,576	48.0	7,423	21.4	10,999	28.9	32.5
1985	4,006	12.0	8,900	19.9	12,906	17.3	31.0

Sources: U.S. Census.  
Alaska Department of Labor.

Alaska Department of Labor data on the components of population change in the Bethel census area from 1970 to 1985 suggest some ongoing trends in the dynamics of the region's recent population growth. During that time, the figures show that all of the region's net population growth stemmed from natural increase. Net migration trends varied but, overall, there was a small net loss from migration. It is likely there was a net in-migration of non-Natives, especially into Bethel as well as into the region, to staff schools and other public services and for other economic purposes. If so, then this non-Native immigration was more than offset by out-migration of Native residents.

TABLE 225

COMPONENTS OF POPULATION CHANGE  
 BETHEL CENSUS AREA  
 1970 - 1985

Population at End of Period	July 1 to July 1				Average Annual Rate of Change				
	Population Change	Births	Rate Per 1,000	Deaths		Rate Per 1,000	Natural Increase	Net Migrants	
1970*	8,917								
1970 - 1980*	10,999	2,451	24.6	549	6.2	1,902	180	2.09	
1980 - 1981	11,551	316	28.7	56	5.1	260	-183	0.66	
1981 - 1982	12,023	349	30.2	56	4.8	293	179	4.00	
1982 - 1983	12,490	382	31.8	66	5.5	316	151	3.81	
1983 - 1984	12,797	391	31.3	86	6.9	305	2	2.43	
1984 - 1985	12,906	393	30.7	84	6.6	309	-199	0.85	
1980 - 1985	12,906	1,831		348		708	-52	2.35	

\* As of April 1.

Source: Alaska Department of Labor, Alaska Population Overview, 1985 Estimates.

In addition, the Alaska Department of Labor estimates that the region's annual birth rate since 1980 (ranging between 28.7 and 31.8 per 1,000) has been significantly higher than the average rate (24.6 per 1,000) which prevailed through the 1970s. This trend is consistent with elementary school enrollment figures. Those data show an enrollment increase through the 1960s corresponding with higher birth rates and lower infant mortality during the 1950s, slackening enrollments in the 1970s due to lower birth rates, and a more recent rebound in enrollments due to again rising birth rates.

Since 1980, Bethel's growth compared with that of the region appears to have slowed. If Department of Labor 1985 population estimates for Bethel and the region are accurate, Bethel's recent average annual growth rate has been its slowest since 1930 and, for the first time since 1939, its hinterland villages were growing faster than Bethel itself. This trend reversal may partly be due to the emergence of sub-regional centers in such communities as Aniak, St. Mary's and Mountain Village. Another key factor was the construction of local high schools throughout the region. This event strengthened the economies and the cultural hold of the smaller villages which formerly sent their schoolchildren to Bethel or elsewhere for secondary education. (Bethel secondary school enrollment data show a steep rise after the regional high school was opened in 1973, followed by an equally steep drop after construction of the village high schools). Finally, it is plausible that expanded public programs for housing, sanitation facilities, electrification, transportation, education and other improvements raised living standards in the satellite villages and

TABLE 226  
FINAL ENROLLMENT BY GRADE  
BETHEL  
1956/57 - 1986/87

<u>Year</u>	<u>Kind</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>Ung/ Spec</u>	<u>Tot</u>
1956/57		62	39	36	23	22	18	20	14	8	7	1	5		255
1957/58		61	51	33	32	23	23	14	17	14	6	8	1		283
1958/59		57	57	34	27	32	25	18	12	15	11	3	6		297
1959/60		50	39	49	32	24	32	21	15	10	14	10	3		299
1960/61	36	61	44	40	53	30	25	27	14	10	8	12	8		368
1961/62	37	58	50	42	41	54	26	22	19	12	12	9	11		393
1962/63	50	65	60	55	43	45	54	24	26	22	9	13	10		476
1963/64	46	75	47	54	50	38	48	50	23	28	14	9	9		491
1964/65	45	74	56	40	60	40	40	40	48	25	22	10	7		507
1965/66	59	75	71	46	49	60	41	45	35	40	20	17	10		568
1966/67	67	73	60	60	40	55	49	53	38	30	39	18	12	51	645
1967/68	61	79	79	57	50	52	45	58	41	36	31	35	23	54	701
1968/69	71	109	78	58	60	48	51	39	51	37	35	30	34	54	755
1969/70	51	124	83	88	55	66	49	42	43	74	43	45	32	49	844
1970/71	72	90	92	83	87	61	57	59	40	58	76	41	35	45	896
1971/72	70	105	86	74	96	77	54	61	48	66	82	64	33	49	965
1972/73	64	91	72	78	87	90	67	64	56	99	82	81	50	34	1,015
1973/74	52	82	83	78	82	84	85	72	47	157	115	88	36	15	1,076
1974/75	63	66	78	87	91	90	90	90	60	155	145	101	43	10	1,169
1975/76	79	66	59	75	87	78	75	83	77	145	144	112	43		1,123
1976/77															
1977/78															
1978/79	80*	82	81	69	75	70	78	80	76	120	96	107	69		1,083
1979/80	78*	78	54	87	60	65	74	66	83	111	68	82	81		987
1980/81	84*	81	73	59	84	65	60	65	58	73	62	47	50		861
1981/82	74*	87	63		72					55	61	48	39		847
1982/83															
1983/84															
1984/85															
1985/86	106*	106	73	76	68	54	73	65	60	71	46	37	37		856
1986/87	87	101	87	70	68	61	55	63	69	54	53	52	40		860

\* Figures may include Pre-Elementary age children.

Source: Alaska Department of Education, Educational Finance and Support Services.

neutralized some of Bethel's former appeal for villagers seeking to better their living conditions.

Even as Bethel was apparently losing some of its attraction for villagers, many of the new employment opportunities generated over the past decade in Bethel called for professional skills not easily acquired by Bethel's resident labor force. Consequently, much of the community's recent growth stems from an influx of non-Native professionals rather than village immigrants.

#### B. POPULATION COMPOSITION

As with other Western Alaska communities which have become administrative, service and commercial centers, a steadily increasing share of Bethel's population has been made up of non-Natives. As recently as 1960, 90 percent of Bethel's residents were Alaska Natives. By 1970, the town's population composition was about 77 percent Alaska Native and about 23 percent non-Native. From 1960 to 1970 to 1980, the number of non-Native residents increased from 126 to 537 to 1,159 persons. A Darbyshire and Associates' sample survey estimated a 1979 population of 3,899 residents, of whom 2,495 were Native (65 percent) and 1,404 were non-Native (34 percent). This split was close to the 1980 Census, which found that non-Natives accounted for about 32 percent of the total population. Although there are no more recent authoritative data on the community's ethnic composition, it is likely that the number and share of non-Natives has continued to rise since 1980, in step with public sector expansion.



TABLE 227  
 RACIAL COMPOSITION OF POPULATION  
 BETHEL  
 1960 - 1980

<u>Year</u>	<u>Alaska Native Number</u>	<u>Percent</u>	<u>Non-Native Number</u>	<u>Percent</u>	<u>Total Number</u>
1960	1,132	90.0	126	10.0	1,258
1970	1,853	76.7	563	23.3	2,416
1980	2,417	67.6	1,159	32.4	3,576

Source: U.S. Census.

Various migration data confirm Bethel's role as a destination for intra-regional migration during the 1950 to 1970 period. For example, ANCSA enrollment data show that about 30 percent of Bethel's Native residents in 1974 were enrolled to another village, indicating that many Native residents still retained vital ties to their former home communities. This figure was exceeded only by Aniak among the 21 study communities. On the other hand, about 21 percent of the Alaska Natives enrolled to Bethel were living elsewhere, indicating that many Natives with close ties to Bethel had relocated to other places.

Census data on previous residency provide some measure of immigration to Bethel from outside the region. According to the 1980 Census, about 12 percent of Bethel residents had lived in a different Alaska census division five years previously and another 21 percent had lived outside Alaska. Thus, fully one-third of Bethel's 1980 population had moved there from outside the region within the prior five years. It is likely that the

bulk of the inter-regional migrants, especially those from outside Alaska, were non-Native.

The findings of a 1979 sample survey of Bethel residents conducted as part of a comprehensive planning project suggest an even greater rate of population turnover. Darbyshire and Associates (1979) reported that about one-third of survey respondents had lived in Bethel for 2 years or less and another third had lived in Bethel for 3 to 10 years. Non-Natives were more transient than Natives. The survey found that 70 percent of Native respondents, but only 25 percent of non-Natives respondents, had lived in Bethel for 6 years or more. Finally, the survey found that the origin of Bethel's population was almost evenly split between those coming from the Bethel region and those coming from the lower 48 states. Thirty-seven percent of respondents reported that they originally came from Bethel or nearby villages; while 35 percent reported origins in the continental United States. Only 18 percent reported moving to Bethel from other parts of Alaska. (Note: unaccountably, the reported findings add up only to 90 percent). It may be noted that this sample survey reported far higher rates of extra-regional and outside immigration into the Bethel region than was reported by the 1980 Census. Possibly, the results were skewed by an imperfectly random sample.

As a result of differential emigration, most rural Native communities have a large surplus of unmarried adult males compared with unmarried females. Bethel shows a different pattern. Population composition data since 1960 show that the male and female components of Bethel's Native population have

remained evenly balanced in number and symmetric in age distribution. This outcome is perhaps due to Bethel's role as a destination for intra-regional migrants rather than as point of departure for emigration.

On the other hand, the population composition data show that non-Native males outnumbered females by a significant margin in 1980. This imbalance is concentrated in the 20 to 54 year age group and reflects the usual pattern of differential immigration by sex and age among non-Natives. That is, since 1970, there have been many more adult male than female non-Native newcomers to Bethel.

As noted above, the age/sex distribution of Bethel's Native population has been quite symmetric, at least since 1960. However, the median age of Native residents has risen steadily over the past two decades, from 17.0 in 1970 to 20.3 in 1980. Although there are no post-1980 age data exclusively for Native residents, the age distribution of Permanent Fund dividend recipients indicates that the median age continued to rise after 1980, reaching 26.1 years for the population as a whole in 1985, compared with 23.6 years at the time of the 1980 Census.

Consistent with other information reported above about non-Native migration patterns, the non-Native population is significantly older. In 1980, the median age for non-Native residents was 28.6. This reflects the presence of many unattached or childless non-Native adults, which gives an upward skew to the age distribution.

TABLE 228  
 PERMANENT FUND DIVIDEND RECIPIENTS  
 BETHEL  
 1982 - 1985

<u>Age Group</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
0 - 4		423	431	455
5 - 9			363	406
10 - 14			330	350
15 - 19			273	303
20 - 24			411	408
25 - 29			425	469
30 - 34			455	514
35 - 39			329	361
40 - 44			243	260
45 - 49			130	127
50 - 54			127	135
55 - 59			99	116
60 - 64			57	53
65 - 69			44	44
70 - 74			31	29
75 & over			18	28
Unknown	2	15	5	6
<b>TOTAL</b>	<b><u>4,018</u></b>	<b><u>3,838</u></b>	<b><u>3,771</u></b>	<b><u>4,064</u></b>

Note: 1982 age breakdown: 0-17 - 1,424; 18-27 - 844; 28-37 - 897; 38-47 - 420; 48-57 - 237; 58-67 - 127; 68-77 - 57; 78+ - 10; Unknown - 2; Total - 4,018.  
 1983 age breakdown: 0-4 - 423; 5-17 - 869; 18-27 - 799; 28-37 - 876; 38-47 - 426; 48-57 - 244; 58-67 - 115; 68-77 - 57; 78+ - 14; Unknown - 15; Total - 3,838.

Source: Alaska Department of Revenue.

TABLE 229  
POPULATION COMPOSITION BY SEX AND AGE  
BETHEL  
1960

<u>Age Range</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Under 5 years	125	119	244
5 - 14	159	164	323
15 - 24	77	101	178
25 - 34	112	106	218
35 - 44	67	78	145
45 - 54	46	37	83
55 - 64	20	18	38
65 and over	14	15	29
<u>TOTAL</u>	<u>620</u>	<u>638</u>	<u>1,258</u>
<u>Median Age</u>	<u>18.4</u>	<u>18.6</u>	<u>18.5</u>

Source: U.S. Bureau of the Census.

TABLE 230  
POPULATION COMPOSITION BY SEX AND AGE<sup>a</sup>  
BETHEL  
1965

<u>Age Range</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
0 - 10 years	271	242	513
11 - 20	141	159	300
21 - 30	88	94	182
31 - 40	77	78	155
41 - 50	62	73	135
51 - 60	34	35	69
60 and over	22	22	44
<u>TOTAL</u>	<u>695</u>	<u>703</u>	<u>1,398</u>
<u>Median Age</u>	<u>16.5</u>	<u>17.9</u>	<u>17.2</u>

<sup>a</sup> "Permanent" residents only; does not include another 202 persons considered "transient" government personnel and families.

Source: City of Bethel census, per Kozely, 1965.

TABLE 231  
POPULATION COMPOSITION  
BETHEL  
1970

<u>Age Range</u>	<u>Alaska Native</u>			<u>Non-Native</u>		
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Under 5 years	136	163	299	35	33	68
5 - 14	295	271	566	63	64	127
15 - 24	175	202	377	27	35	62
25 - 34	99	120	219	61	58	119
35 - 44	77	89	166	56	33	89
45 - 54	67	58	125	24	14	38
55 - 64	34	35	69	11	11	22
65 and over	31	27	58	9	3	12
<u>TOTAL</u>	<u>914</u>	<u>965</u>	<u>1,879</u>	<u>286</u>	<u>251</u>	<u>537</u>
<u>Median Age</u>	<u>16.5</u>	<u>17.4</u>	<u>17.0</u>	<u>28.0</u>	<u>23.3</u>	<u>26.0</u>

<u>Age Range</u>	<u>Total</u>		
	<u>Male</u>	<u>Female</u>	<u>Total</u>
Under 5 years	171	196	367
5 - 9	203	181	384
10 - 14	155	154	309
15 - 19	132	123	255
20 - 24	70	114	184
25 - 29	102	109	211
30 - 34	58	69	127
35 - 39	62	71	133
40 - 44	71	51	122
45 - 49	56	47	103
50 - 54	35	25	60
55 - 59	26	29	55
60 - 64	19	17	36
65 and over	40	30	70
<u>TOTAL</u>	<u>1,200</u>	<u>1,216</u>	<u>2,416</u>
<u>Median Age</u>	<u>17.7</u>	<u>18.2</u>	<u>17.9</u>

Note: Native is defined as Aleut, Eskimo, Indian and others, excluding White and Negro.

Source: U.S. Census.

TABLE 232

POPULATION COMPOSITION  
 BETHEL  
 1980

Age Range	Alaska Native		Non-Native		Total	
	Male	Female	Male	Female	Male	Female
Under 5 years	167	153	61	37	228	190
5 - 9	127	136	43	29	170	165
10 - 14	146	142	42	34	188	176
15 - 19	162	159	30	32	192	191
20 - 24	135	141	72	62	207	203
25 - 29	122	137	100	90	222	227
30 - 34	79	88	109	88	188	176
35 - 39	72	69	63	40	135	109
40 - 44	40	47	36	30	76	77
45 - 49	34	41	38	20	72	61
50 - 54	35	31	35	17	70	48
55 - 59	30	20	10	9	40	29
60 - 64	13	27	16	9	29	36
65 - 69	16	14	2	2	18	16
70 - 74	14	7	2	0	16	7
75 and over	7	6	0	1	7	7
<b>TOTAL</b>	<b>1,199</b>	<b>1,218</b>	<b>659</b>	<b>500</b>	<b>1,858</b>	<b>1,718</b>
<b>Median Age</b>	<b>19.9</b>	<b>20.7</b>	<b>29.1</b>	<b>28.1</b>	<b>23.6</b>	<b>23.5</b>
		<b>20.3</b>		<b>28.6</b>		<b>23.6</b>
		<b>2,417</b>		<b>1,159</b>		<b>3,576</b>

Source: U.S. Census.

TABLE 233

MARITAL STATUS, BY SEX  
PERSONS 15 YEARS AND OLDER  
BETHEL  
1980

<u>Marital Status</u>	<u>Male</u>	<u>Female</u>
Single	582	464
Married	576	554
Separated	17	19
Widowed	25	73
Divorced	72	77
<u>TOTAL</u>	<u>1,272</u>	<u>1,187</u>

Source: 1980 Census.

TABLE 234

HOUSEHOLD TYPE AND RELATIONSHIP  
BETHEL  
1980

<u>Household Type and Relationship</u>	<u>Number</u>	<u>Percent</u>
In Family Household		
Householder	718	20.1
Spouse	531	14.8
Other Relatives	1,670	46.7
Non-Relative	94	2.6
Sub-Total	3,013	84.2
In Non-Family Household		
Male Householder	228	6.4
Female Householder	137	3.8
Non-Relative	149	4.2
Sub-Total	514	14.4
In Group Quarters		
Inmate of Institution	22	.6
Other	27	.8
Sub-Total	49	1.4
<u>TOTAL</u>	<u>3,576</u>	<u>100.0%</u>

Source: 1980 Census.



### C. TRENDS IN WAGE AND SALARY EMPLOYMENT

Bethel's post-war transformation into a transportation, commercial and government center generated an expanding wage economy in which Native residents increasingly participated. According to Kozely, the Alaska Native Health Service hospital was the major employer of Native wage earners in 1965, followed by private employers such as Consolidated Airlines and other transportation firms, the Northern Commercial Company and Bristol Bay cannery operators. (For many years, it was common for Bethel area residents to take seasonal work in the Bristol Bay fish processing industry). However, Kozely also reported that, during this transitional period, 49 percent of the male workforce and 69 percent of the female workforce aged 21 and over was not permanently employed.

The 1969 Bethel Comprehensive Plan (Alaska State Housing Authority, 1969) presents a good summary description of the general employment situation that Native residents of Bethel faced at that time.

The few sources of earned money income available to the native people of Bethel are in government, construction, commercial fishing and trapping, and with local transportation, retail and service businesses. The Public Health Service Hospital employs a total of about 100 people and many of the unskilled hospital jobs are held by natives. Governmental construction projects throughout the region have provided seasonal employment. The regional high school and dormitory construction and hospital expansion will mean a large, though temporary, increase of local construction employment. Fire fighting work is another important source of money income for the natives. Alaska State Housing Authority (1969), p.32.

An early Alaska Department of Labor employment survey conducted in 1969 and reported in the Alaska Community Survey (Alaska Planning and Management,

1972) identified 491 wage jobs. Over 60 percent of these jobs were in government positions, with 14 percent in construction and another 10 percent in trade. Thus, according to this survey, those three sectors then accounted for about 85 percent of total employment.

TABLE 235  
ESTIMATED EMPLOYMENT  
CITY OF BETHEL  
1969

<u>Industry</u>	<u>Number</u>	<u>Percent</u>
Agriculture	0	0.0
Mining	0	0.0
Construction	70	14.3
Manufacturing	40	8.1
Trans., Commun. & Util.	15	3.1
Trade	50	10.2
Finance	6	1.2
Services	10	2.0
Government	300	61.1
<u>TOTAL</u>	<u>491</u>	<u>100.0</u>

Source: Alaska Planning & Management, 1972.

The 1970 Census gave a quite different employment picture, counting many more employees (685) and a dissimilar employment distribution. Also, the Census reported significantly more jobs in transportation and trade and less in construction, manufacturing and the combined categories of public administration and services. Several factors may help explain apparent discrepancies between the 1969 Alaska Department of Labor survey and the 1970 Census. The Census includes self-employed workers not counted by the Alaska Department of Labor survey. Furthermore, the Census assigns public service employment to the service sector. Finally, differences in

TABLE 236  
 SELECTED LABOR FORCE DATA  
 BETHEL  
 1980

LABOR FORCE STATUS, PERSONS OVER 16 YEARS, 1980

<u>Labor Force Status</u>	<u>Alaska Natives</u>		<u>All Races</u>		
	Male	Female	Male	Female	Total
Armed Forces	3	0	6	0	6
Civilian Employed	405	332	860	642	1,502
Civilian Unemployed	48	40	71	53	124
Not in Labor Force	269	373	290	444	734
Labor Force Participation Rate	62.0%	49.0%	76.0%	61.0%	68.0%
Unemployment Rate: 1980	10.6%	10.8%	7.6%	7.6%	7.6%
1970	*	*	16.2%	5.2%	11.6%

EMPLOYMENT BY INDUSTRY, 1970 AND 1980

<u>Industry</u>	<u>1970</u>	<u>1980</u>
Construction	9	81
Manufacturing	11	28
Transportation	50	123
Communications	8	29
Trade	107	171
Finance, Insurance & Real Estate	10	45
Services	239	724
Public Administration	187	286
Other	64	15
<u>TOTAL</u>	<u>685</u>	<u>1,502</u>

\* Data missing or suppressed.

Source: U.S. Census, 1980.

manufacturing and construction employment may be due to seasonal factors. A comparison of 1978 and 1980 employment figures from four different sources (Darbyshire & Associates, 1980; Alaska Consultants, Inc., 1982; 1980 U.S. Census; and Alaska Department of Labor) illustrate how differing definitional, reporting, sampling and estimating procedures can affect "factual" findings. The three surveys presented as inventories or estimates of total employment (Darbyshire; U.S. Census; Alaska Consultants) yielded employment counts of 1,931, 1,502 and 1,691 respectively. Oddly, the Alaska Department of Labor employment data, which include covered employment only and omit self-employed persons, produced by far the highest figure -- 2,604 employees.

The Alaska Department of Labor 1980 total employment figure (2,604) for Bethel is clearly erroneous. It exceeds the 1980 Census count of 2,360 persons over 16 years of age for Bethel. In general, it appears that the widespread practice of assigning regionwide employment to headquarters offices has inflated employment figures for Bethel, as for many other regional centers. Two particular discrepancies stand out in the Department of Labor figures. First, the reported local government employment figure (599) appears unaccountably high, more than twice the Alaska Consultants' figure of 292.5 jobs. Very likely, this is the recurring problem of misallocated regional school district and other headquarters employment. Second, the amount of service sector employment is also implausibly high; this may also stem in part from the attribution of regionwide employment by quasi-public service agencies to their Bethel offices.

TABLE 237

COMPOSITION OF EMPLOYMENT  
CITY OF BETHEL  
1978 AND 1980

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<u>Industry</u>	Darbyshire <sup>a</sup> & Assoc. (1978)	U.S. Census <sup>a</sup> (1980)	Ak.Cons. <sup>b</sup> (1980)	ADOL <sup>c</sup> (1980)
Agriculture, Forestry and Fishing	47	-	30	-
Mining	-	-	0	*
Construction	98	81	93.5	106
Manufacturing	85	28	-	36
Transportation, Communication & Public Utilities	220	152	240.5	192
Trade	258	171	238	294
Finance, Insurance & Real Estate	39	45	24	24
Services	857	724	255	840
Public Administration	319	286	-	-
Government	-	-	796	1,019
Federal	-	-	(303)	(239)
State	-	-	(200.5)	(181)
Local	-	-	(292.5)	(599)
Miscellaneous/Other	8	15	-	25
<u>TOTAL</u>	<u>1,931</u>	<u>1,502</u>	<u>1,691</u>	<u>2,604</u>

\* Figure withheld to comply with disclosure regulations.

a Total employment; includes self-employed.

b Average annual full-time employment; includes self-employed.

c Covered employment only.

Sources: Darbyshire & Associates (1980).  
U.S. Bureau of the Census special tabulations.  
Alaska Consultants, Inc. (1982).  
Alaska Department of Labor special tabulations.

TABLE 238  
 AVERAGE ANNUAL FULL-TIME EMPLOYMENT<sup>a</sup>  
 CITY OF BETHEL  
 1980

<u>Industry</u>	<u>Number</u>	<u>Percent</u>	<u>Percent Basic</u>	<u>Number Basic</u>	<u>Number Secondary</u>
Agriculture, Forestry and Fishing	30.0	1.8	100	30.0	0.0
Mining	0.0	0.0	---	0.0	0.0
Contract Construction	93.5	5.5	62	58.0	35.5
Transportation, Communication & Public Utilities	240.5	14.2	54	130.0	110.5
Trade	238.0	14.1	52	124.0	114.0
Finance, Insurance & Real Estate	24.0	1.4	46	11.0	13.0
Service	255.0	15.1	64	164.0	91.0
Government	796.0	47.1	54	426.0	370.0
Federal	(303.0)	(17.9)	(76)	(229.5)	( 73.5)
State	(200.5)	(11.9)	(73)	(145.5)	( 55.0)
Local	(292.5)	(17.3)	(17)	( 51.0)	(241.5)
<u>TOTAL</u>	<u>1,691.0</u>	<u>100.0</u>	<u>56</u>	<u>954.0</u>	<u>737.0</u>

<sup>a</sup> Includes self-employed personnel.

Source: Alaska Consultants, Inc., January 1982.

The employment levels (1,931 workers) reported by Darbyshire & Associates for 1978 also appear improbably high when compared with the 1980 workforce size, especially after allowance is made for Bethel's relatively high unemployment and low labor force participation rates. It can be noted that the Darbyshire & Associates figures were based on a sample survey of a cross-section of businesses and agencies, including at a minimum the largest employer in each industry type. Reportedly, the "survey sample included one-fifth of the business firms in Bethel and/or the employers of 88 percent of the employed labor force". Possibly, the sampling procedure may have injected an upward bias into the survey results. Also, it may be noted that the Darbyshire survey used the employment classification scheme followed by the Bureau of the Census, but produced significantly different numerical findings.

The two remaining sources of 1980 Bethel employment data (U.S. Census; Alaska Consultants) are relatively similar. These two sources classified public service employment differently. The Census classified non-administrative public sector employment as "service". Alaska Consultants, following Alaska Department of Labor procedure, classified direct government employees as "government" and quasi-public agency employees as "service". In fact, the combined tally of service/public administration employment (1,010) by the Census is very close to the combined tally of service/government employment (1,051) by Alaska Consultants.

The main discrepancy between these two sources arises in the employment count for the trade and transportation/communication/public utilities

sectors. It is not obvious what accounts for these particular differences or for the difference in total employment. However, it may be relevant to observe that the 1980 Census generally appears to have systematically understated employment levels in rural Alaska communities.

Regardless of the data discrepancies noted above, all of the employment data sources support certain conclusions about employment trends at Bethel during the 1970s. First, Bethel's wage economy expanded rapidly over the decade. For example, according to the decennial Census figures, employment rose by 119 percent while population grew by 48 percent from 1970 to 1980. Meanwhile, the number of persons per employee fell from 3.5 persons in 1970 to 2.4 persons in 1980. This index signifies a trend toward a stronger wage economy and more widespread participation in the labor force. Second, by all accounts, Bethel's wage economy is heavily dependent upon public sector employment. Exact figures vary, but roughly speaking, about half of Bethel's wage earners are directly employed by government agencies. Transportation, trade and services account for the bulk of the remaining jobs. Local employment in resource-based industries is very minor.

Notwithstanding the general improvement in the wage economy just noted, 1980 Census data on labor force status by race indicate that there still remained a wide gulf in Native and non-Native employment and workforce participation rates. For example, according to the Census, 90 percent of Bethel's non-Native residents over 16 years of age were in the labor force compared with 56 percent of Alaska Natives. About 86 percent of non-Natives of working age were employed, compared with about 50 percent of



Natives of working age. The employment and workforce participation rates for Bethel's non-Natives are well above national norms. Among other things, these statistics reflect the overriding role of economic motives for Bethel's non-Native adult residents, as well as the incomplete assimilation of Native residents into the wage economy.

TABLE 239  
 CIVILIAN LABOR FORCE STATUS  
 PERSONS OVER 16 YEARS OF AGE  
 CITY OF BETHEL  
 1980

	<u>Employed</u>		<u>Unemployed</u>		<u>Not In Labor Force</u>		<u>Total</u> Number
	Number	Percent	Number	Percent	Number	Percent	
Non-Native							
Male	455	91.2	23	4.6	21	4.2	499
Female	310	78.7	13	3.3	71	18.0	394
Sub-Total	765	85.7	36	4.0	92	10.3	893
Alaska Native							
Male	405	56.1	48	6.6	269	37.3	722
Female	332	44.6	40	5.4	373	50.0	745
Sub-Total	737	50.2	88	6.0	642	43.8	1,467
Total							
Male	860	70.4	71	5.8	290	23.8	1,221
Female	642	56.4	53	4.6	444	39.0	1,139
Sub-Total	1,502	63.6	124	5.3	734	31.1	2,360

Source: U.S. Census.

The Department of Labor's covered employment data series since 1980 shows a relatively static overall employment picture, with a slight employment loss (-5.6 percent) through 1986. In view of the problematic features of these data, it seems moot to draw firm conclusions about recent trends in

Bethel's structure. The data do show sharp drops in construction employment (plausible) and services employment (implausible), along with increases in State government employment (plausible) and local government employment (exaggerated).

Unlike many rural communities, Bethel's employment levels do not exhibit any strong seasonal variation. Alaska Department of Labor data on average monthly employment levels for 1980 - 1986 indicate that wage employment is actually at its lowest level in the mid-summer months of July and August. However, this anomaly probably stems from the Lower Kuskokwim School District's reporting its regionwide employment to Bethel. As previously noted, this reporting error inflates local government employment figures during the school year, then exaggerates the employment loss during summer school closure. Taking this distortion into account, it seems more likely that summer is actually the period of peak employment.

TABLE 240  
 AVERAGE MONTHLY EMPLOYMENT  
 CITY OF BETHEL  
 1980 - 1986

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	<u>Average Monthly Employment</u>	<u>Percent Dif- ference from Annual Average</u>
January	2,446	-3.2%
February	2,516	-0.4
March	2,569	+1.7
April	2,599	+2.8
May	2,673	+5.8
June	2,575	+1.9
July	2,421	-4.2
August	2,310	-8.6
September	2,605	+3.1
October	2,573	+1.8
November	2,545	+0.7
December	2,495	-1.3
Annual Average	2,527	

Source: Alaska Department of Labor.

TABLE 241  
COVERED INDUSTRY EMPLOYMENT  
CITY OF BETHEL  
1980 - 1986

<u>Industry Classification</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
Mining	*	*	*	*	*	*	*
Construction	106	162	142	106	62	44	23
Manufacturing	36	*	*	*	*	*	*
Transportation, Communication and Public Utilities	192	193	203	191	180	153	133
Trade	294	236	257	270	252	244	248
Finance, Insurance and Real Estate	24	32	42	47	46	43	59
Services	840	615	528	573	595	579	565
Government							
Federal	239	250	208	219	236	247	225
State	181	210	231	251	235	258	260
Local	599	660	732	826	794	900	804
Miscellaneous	25	*	*	*	*	*	14
<u>TOTAL</u>	<u>2,604</u>	<u>2,451</u>	<u>2,451</u>	<u>2,619</u>	<u>2,512</u>	<u>2,595</u>	<u>2,457</u>

\* Figures withheld to comply with disclosure regulations.

Source: Alaska Department of Labor.

TABLE 242

COVERED INDUSTRY EMPLOYMENT  
CITY OF BETHEL  
1980

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	*	*	*	*	*	*
Construction	69	84	71	67	69	87	99	113	132	163	184	139
Manufacturing	6	6	5	10	17	134	106	87	16	9	17	14
Transportation, Communication and Public Utilities	139	141	151	166	178	211	250	249	240	221	176	176
Wholesale Trade	*	*	*	*	*	*	*	*	*	*	*	*
Retail Trade	222	235	257	266	273	308	335	367	369	301	308	282
Finance, Insurance and Real Estate	22	23	24	23	21	25	28	23	22	25	23	24
Services	875	857	958	928	1,423	936	954	911	797	685	759	695
Miscellaneous	10	10	10	10	32	54	46	45	25	18	19	16
Government												
Federal	204	206	210	231	237	237	235	246	264	270	266	258
State	182	200	226	192	173	114	133	131	166	203	204	252
Local	619	619	620	615	615	617	545	541	530	605	621	635
<u>TOTAL</u>	<u>2,351</u>	<u>2,383</u>	<u>2,535</u>	<u>2,510</u>	<u>3,050</u>	<u>2,746</u>	<u>2,747</u>	<u>2,728</u>	<u>2,563</u>	<u>2,522</u>	<u>2,601</u>	<u>2,516</u>

\* Figures withheld to comply with disclosure regulations.

Source: Alaska Department of Labor.

TABLE 243

COVERED INDUSTRY EMPLOYMENT  
CITY OF BEIHEL  
1981

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	*	*	*	*	*	*
Construction	135	120	129	148	174	228	264	209	144	141	129	124
Manufacturing	7	9	12	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	171	164	173	161	195	215	213	232	228	216	179	174
Wholesale Trade	*	*	*	73	57	45	*	*	*	6	4	6
Retail Trade	243	244	244	244	265	262	224	228	241	219	213	202
Finance, Insurance and Real Estate	25	25	25	31	37	38	32	32	33	34	35	38
Services	545	649	662	608	623	619	930	551	525	545	609	511
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	256	258	260	260	259	259	255	258	253	232	224	220
State	187	225	242	254	232	173	150	152	204	225	234	243
Local	653	674	693	689	698	658	503	446	694	733	744	738
<b>TOTAL</b>	<b>2,233</b>	<b>2,379</b>	<b>2,452</b>	<b>2,497</b>	<b>2,589</b>	<b>2,719</b>	<b>2,752</b>	<b>2,248</b>	<b>2,418</b>	<b>2,399</b>	<b>2,418</b>	<b>2,309</b>

\* Figures withheld to comply with disclosure regulations.

Source: Alaska Department of Labor.

TABLE 244

COVERED INDUSTRY EMPLOYMENT  
CITY OF BETHEL  
1982

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	*	*	*	*	*	*
Construction	104	99	118	112	123	121	151	204	178	209	153	137
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	162	170	168	189	198	202	268	266	264	218	187	149
Wholesale Trade	*	*	*	*	*	*	51	50	44	13	14	8
Retail Trade	240	243	245	255	255	259	279	272	270	259	257	246
Finance, Insurance and Real Estate	37	38	41	38	43	42	43	45	46	44	44	45
Services	529	543	541	483	493	467	633	491	611	593	424	528
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	207	197	195	197	201	203	208	215	221	218	216	217
State	203	258	272	280	194	162	164	184	236	269	278	277
Local	747	788	787	796	785	761	335	292	811	876	900	908
<u>TOTAL</u>	<u>2,318</u>	<u>2,428</u>	<u>2,460</u>	<u>2,423</u>	<u>2,371</u>	<u>2,321</u>	<u>2,219</u>	<u>2,124</u>	<u>2,796</u>	<u>2,787</u>	<u>2,559</u>	<u>2,602</u>

\* Figures withheld to comply with disclosure regulations.

Source: Alaska Department of Labor.

TABLE 245

COVERED INDUSTRY EMPLOYMENT  
CITY OF BEIHEL  
1983

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	*	*	*	*	*	*
Construction	120	113	96	82	101	100	122	142	151	107	75	64
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	160	157	156	167	189	199	198	215	213	235	215	186
Wholesale Trade	6	8	5	7	14	44	*	*	*	6	6	7
Retail Trade	247	253	270	286	283	301	275	270	283	259	256	262
Finance, Insurance and Real Estate	41	48	52	45	44	52	48	53	48	45	45	44
Services	544	593	608	655	593	570	690	552	494	492	557	524
Miscellaneous	77	71	78	*	*	*	*	*	*	*	*	*
Government												
Federal	208	207	207	200	217	234	227	226	238	227	215	216
State	288	327	308	303	256	184	172	197	218	286	238	239
Local	943	942	936	1,015	993	921	299	304	867	865	910	915
<b>TOTAL</b>	<b>2,671</b>	<b>2,757</b>	<b>2,754</b>	<b>2,885</b>	<b>2,843</b>	<b>2,784</b>	<b>2,320</b>	<b>2,188</b>	<b>2,615</b>	<b>2,566</b>	<b>2,557</b>	<b>2,488</b>

\* Figures withheld to comply with disclosure regulations.

Source: Alaska Department of Labor.



TABLE 246

COVERED INDUSTRY EMPLOYMENT  
CITY OF BETHEL  
1984

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	*	*	*	*	*	*
Construction	86	64	73	66	58	70	61	51	60	55	53	44
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	178	164	159	162	201	199	206	214	215	197	138	133
Wholesale Trade	7	9	6	10	9	30	*	*	*	*	*	*
Retail Trade	242	235	246	245	266	274	265	260	226	261	249	253
Finance, Insurance and Real Estate	45	45	47	46	47	50	53	46	43	45	41	40
Services	545	561	566	606	586	626	703	588	598	598	601	560
Miscellaneous	*	*	*	7	7	7	5	5	11	10	12	12
Government												
Federal	207	211	218	216	216	213	262	257	257	263	254	252
State	223	237	230	271	217	212	198	199	237	281	256	255
Local	914	929	928	940	942	647	276	298	823	924	944	965
<u>TOTAL</u>	<u>2,470</u>	<u>2,485</u>	<u>2,504</u>	<u>2,592</u>	<u>2,583</u>	<u>2,577</u>	<u>2,290</u>	<u>2,227</u>	<u>2,627</u>	<u>2,681</u>	<u>2,563</u>	<u>2,539</u>

\* Figures withheld to comply with disclosure regulations.

Source: Alaska Department of Labor.

TABLE 247

COVERED INDUSTRY EMPLOYMENT  
CITY OF BEIHEL  
1985

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	*	*	*	*	*	*
Construction	51	50	59	39	40	37	46	40	40	37	41	45
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	134	156	139	139	155	166	169	167	177	175	140	124
Wholesale Trade	3	3	3	5	5	17	18	19	19	7	7	5
Retail Trade	234	227	229	249	245	250	257	260	237	249	246	244
Finance, Insurance and Real Estate	41	42	38	41	45	45	45	42	45	43	46	43
Services	548	583	585	596	568	642	672	505	529	565	601	558
Miscellaneous	10	9	8	*	*	*	*	*	*	*	*	*
Government												
Federal	260	264	264	241	242	242	244	246	243	244	242	237
State	252	273	280	280	228	223	234	246	257	257	275	296
Local	981	1,007	1,032	1,065	1,100	1,074	365	346	908	965	983	975
<b>TOTAL</b>	<b>2,527</b>	<b>2,634</b>	<b>2,674</b>	<b>2,757</b>	<b>2,690</b>	<b>2,837</b>	<b>2,396</b>	<b>2,175</b>	<b>2,613</b>	<b>2,593</b>	<b>2,649</b>	<b>2,597</b>

\* Figures withheld to comply with disclosure regulations.

Source: Alaska Department of Labor.

TABLE 248

COVERED INDUSTRY EMPLOYMENT  
CITY OF BETHEL  
1986

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	*	*	*	*	*	*
Construction	9	14	19	23	16	17	16	22	29	37	43	31
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	127	131	113	118	139	148	143	134	139	138	137	124
Wholesale Trade	4	4	4	5	6	11	*	*	*	*	*	*
Retail Trade	229	235	219	236	242	241	283	257	247	262	262	268
Finance, Insurance and Real Estate	59	58	58	60	59	59	61	61	60	55	59	61
Services	608	605	595	575	582	579	540	546	546	561	536	505
Miscellaneous	25	24	24	19	18	14	5	6	7	7	7	6
Government												
Federal	234	239	244	219	220	225	224	220	223	217	215	221
State	275	256	289	281	279	263	226	239	258	255	253	248
Local	974	978	974	960	936	319	276	599	894	893	926	918
<u>TOTAL</u>	<u>2,554</u>	<u>2,548</u>	<u>2,604</u>	<u>2,529</u>	<u>2,588</u>	<u>2,039</u>	<u>2,223</u>	<u>2,460</u>	<u>2,601</u>	<u>2,463</u>	<u>2,466</u>	<u>2,411</u>

\* Figures withheld to comply with disclosure regulations.

Source: Alaska Department of Labor.

## ALAKANUK

### A. PAST POPULATION TRENDS

Alakanuk is located on Alakanuk Slough near the major southern channel of the Yukon River, about 15 miles upriver from the Bering Sea. Neighboring communities include Emmonak and Sheldon Point, about 8 and 14 miles away respectively.

In pre-contact and early contact times, the Yukon delta was dotted with innumerable small, seasonal settlement and camp sites. Fixed, year-round villages did not become the prevalent settlement pattern until after World War II. Partly because of their traditional seasonally nomadic lifestyle, partly because of the delta's lack of commercially attractive resources, the historic record for the Yukon delta/coastal lowlands peoples in pre-contact and early post-contact times is unusually sketchy. As characterized by the authors of Alaska Natives and the Land:

. . . the pre-history of the Yukon-Kuskokwim delta Eskimos is a confusing haze. Recorded history of the area is itself very brief; attention by ethnographers and anthropologists must be regarded as slight despite investigations since the 1930's. Before recorded history there are only traditional tales to go by. Alaska Natives and the Land (1968), p. 178.

Alaska Natives and the Land then goes on to identify seven distinct population sub-groups of Yupik-speaking Eskimos in the Yukon-Kuskokwim delta region. Alakanuk residents are classified with the Chnagmiut people who inhabitant the lower Yukon delta and shore of Pastol Bay. Alaska Natives and the Land identified 49 traditional village sites occupied by

the Chnagmiut. (Other scholars adopt the term Kwikpagmiut [Wolfe, 1982] or Kuigpagmiut [Fienup-Riordan, 1986] and Fienup-Riordan further distinguishes between the Kuigpagmiut and Pastuligmiut people along Pastol Bay). Wolfe estimates that the Kwikpagmiut numbered about 1,780 people at the time of historic contact, which compares with less than 700 (1939 Census) about a century later.

Even in the absence of detailed historic data about delta settlement patterns in the decades after contact, Fienup-Riordan constructs a vivid account of the cumulative impact of disease epidemics on the population and social organization of the Yukon delta region settlements over the first century of contact. Fienup-Riordan writes:

The period between 1833 and 1919 saw a change in both intra- and interregional relations on the Yukon delta, due to dramatic population fluctuations by and large associated with the effects of epidemic diseases in the population of western Alaska. Major epidemics occurred in 1838-39 (smallpox), 1852-53 (influenza), 1861 (influenza), 1900 (measles and influenza) and 1919 (Spanish influenza). The effects of these epidemics varied widely. Some village groups were reduced by over one-half of their precontact population very early in the period (e.g. Pastolik reduced in 1838-39 from 250 to 116 individuals [Zagoskin 1967:281;30]). On the other hand, the inhabitants of some coastal settlements were missed altogether. The net effect, however, was a tremendous dispersal and shift in the population, with many individuals, and individual family groups, seeking refuge with kinsmen or partners in other areas. By 1891, interregional marriage was not unusual, especially between related families in different confederations.

Overall population figures as well as reference to the precise effects of specific epidemics are scattered and often unreliable for this period. However, some idea of the magnitude of the change endured during the historic period can be gathered from a comparison of the population figures given by Robaut for 1891 and in a subsequent Catholic census conducted in 1927-28 after both the epidemics of 1900 and 1918-19 had run their course (Coastal Census 1927-28). The most noticeable feature of the second census is the faithful recording of numerous small camps and villages. Altogether 47 distinct populations are noted, ranging in size from 4 to 180, in opposition to Robaut's 19 village groups. Also, the total population is 600, less than half of

the 1,505 recorded as the total for the same area in 1891. Whereas Robaut's detailed census puts the vast majority of the population in the context of a family group consisting of parents, grandparents and children, the 1928-28 census notes numerous irregular groupings, consisting of widowed and single men and women with and without children. Finally, although none of the groups that Robaut mentions is missing completely from the latter census, many of them are markedly reduced. Robaut's Alaranaramiut, for example, are reduced from 70 to 27, and the inhabitants of Kashunok from 195 to 88. These figures offer support to the contention that although the Yukon delta as a whole lost approximately 25 percent of its population during the great sickness of 1900, the losses were as much as 50 percent along the coast proper. The area also sustained losses up to 25 percent during the 1918-19 epidemic of Spanish influenza. Fienup-Riordan (1986), pp. 41-43.

Fienup-Riordan reports that Yupik Eskimos have lived in the Alakanuk area since pre-historic times. In general, Yupik residents of the Yukon delta had earlier contact with Westerners than traditional peoples of the coastal lowlands south of the Yukon River. Explorers, missionaries, fur buyers, traders and travelers en route up the Yukon River visited the delta camps and settlements and introduced the aboriginal residents to the commercial economy, imported goods, alien diseases and other novelties.

Fienup-Riordan cites an 1891 census of the Yukon-Kuskokwim delta which reported 70 Alaranaramiut (see previous quote) living in the vicinity of today's Alakanuk, but epidemics and other adversities apparently greatly reduced this settlement group. Fienup-Riordan reports that only five families, totaling 27 persons, used Alakanuk as a winter camp as late as 1927. Hrdlicka's survey (Anthropological Survey in Alaska, 1930) of coastal villages of Western Alaska makes reference to Alakanuk as a "small settlement". The modern village did not begin to take form until the 1930s which saw the start of a local commercial salmon fishery, along with

more commercial fur business. Alakanuk was first recorded in the 1939 Census, with a population of 61 persons. In the early 1940s, a cannery was established by the mouth of Alakanuk Slough and following years saw construction of a school, church, post office and other community fixtures.

The next two decades witnessed an abrupt fit of sedentarization and village consolidation throughout the Wade Hampton census division, triggered by government programs and facilities being made available at a few fixed locations. The 1939 Census recorded 65 villages -- many no more than a few family camps clustered together -- in the Wade Hampton division. By the 1950 Census, these 63 settlements had imploded into 14 villages and, by 1960, into the 13 villages which survive today. Between 1939 and 1985, Wade Hampton's population increased by 129 percent while the size of the average village grew from 38 to 430 persons. It is interesting to note that none of the four Yukon delta permanent villages which survive today were among the delta's largest villages in 1939.

Alakanuk's early improvements -- cannery, school, etc. -- helped the village survive through the 1939-1950 period of village consolidation. Of the 17 Yukon delta villages counted in the 1939 Census, only three were intact by the 1970 Census, plus the "new" village of Sheldon Point. By 1960, Alakanuk's population reached 278 persons and, by 1970, 414 persons. By the latter date, Alakanuk was firmly established, along with Emmonak, as one of the Yukon delta's permanent villages.

TABLE 249  
NUMBER AND POPULATION OF VILLAGES  
WADE HAMPTON CENSUS DIVISION  
1939 - 1985

<u>Year</u>	<u>Number of Villages</u>	<u>Total Population</u>	<u>Average Population Per Village</u>
1939	65	2,441	38
1950	20	2,443	122
1960	14	3,128	223
1970	13	3,917	301
1980	13	4,665	359
1985	13	5,591	430

Sources: U.S. Bureau of the Census (1929-1980).  
Alaska Department of Labor (1985).

The trend toward consolidation into permanent year-round settlements fed the growth of Alakanuk and other surviving villages at the expense of now vacated sites. At the same time, better health care and improved environmental health conditions lowered mortality rates and boosted rates of natural increase.

Alakanuk's population grew during each decade from the 1939 Census (61 persons) to the 1980 Census (522 persons). However, the community's rate of growth has slowed considerably from its peak (1939-1950: +102 percent; 1950-1960: +99 percent) during the period of consolidation. Between 1960 and 1970, Alakanuk's population growth rate (+49 percent or about 4 percent annually) slowed to slightly more than what could be expected from natural increase alone; migration apparently was no longer the positive growth factor it had been in prior years. Since 1980, Alaska Department of Labor and Department of Community and Regional Affairs population figures



TABLE 250

POPULATION OF YUKON DELTA VILLAGES  
1939 - 1985

<u>Present Villages</u>	<u>1939</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1985</u>
Alakanuk	61	140	278	414	522	536
Emmonak	42	67	358	439	567	613
Kotlik	35	44	57	228	293	409
Sheldon Point		43	110	125	103	124
Sub-Total	138	294	803	1,206	1,485	1,682
<u>Abandoned Villages</u>						
Akulurak	162	197				
Buggomuivuk	29					
Chaneliak	92	100	93			
Elutuc	25					
Etokmute	12					
Fish Village	27					
Hamilton	54	43	35			
Kawignulic	13					
New Hamilton	15	27				
Old Hamilton	54					
Old Pastolik	11					
Pastolik	18					
Sunshine Bay	10					
Takshak	18	39				
Sub-Total	540	406	128			
<u>TOTAL</u>	<u>678</u>	<u>700</u>	<u>931</u>	<u>1,206</u>	<u>1,485</u>	<u>1,682</u>

Note: The 1939 Census listed 65 villages in the Wade Hampton census division. Most are now abandoned. The location of many is uncertain or encrypted in enigmatic orthography. Therefore, it is likely that the above table undercounts the number of villages and residents in the Yukon delta in 1939. Also, later censuses for the Wade Hampton census area show a small residual population living outside the listed villages, some of which may have lived in the Yukon delta.

Sources: U.S. Bureau of the Census (1929-1980).  
Alaska Department of Labor (1985).

TABLE 251

POPULATION ESTIMATES  
ALAKANUK  
1891 - 1987

<u>Year</u>	<u>Census</u>	<u>Other Estimates</u>	<u>Sources of Other Estimates</u>
1891		70	Robaut (per Fienup-Riordan)
1927-28		27	Coastal Census (per Fienup-Riordan)
1939	61		
1950	140		
1957		238	Ray, 1959
1958		296	Alaska Rural Development Board
1960	278	280	Ak. Department of Labor (July)
1961		332	BIA school census
1962		213	Arctic Health Research Center
1962		343	BIA school census
1963		362	BIA school census
1967		447	Federal Field Committee - 437 Native; 10 non-Native
1968		500	Alaska Area Native Health Service - Natives only
1969		440	Federal Field Committee - 430 Native; 10 non-Native
1970	414	420	Ak. Department of Labor (July)
1975		524	U.S. Census Bureau
1976		550	U.S. Census Bureau
1980	522		
1980	530*	527	Dept. Community/Regional Affairs
1981	534*	534	Dept. Community/Regional Affairs
1982		548	U.S. Census Bureau (July)
1982	546*	546	Dept. Community/Regional Affairs
1983	494*	546	Dept. Community/Regional Affairs
1984	515*	564	Dept. Community/Regional Affairs
1985	536*	555	Dept. Community/Regional Affairs
1986		555	Dept. Community/Regional Affairs
1987		571	Dept. Community/Regional Affairs

\* Alaska Department of Labor estimates of July 1 population derived using U.S. Census methodology. Where these figures are the same as those cited by the Department of Community and Regional Affairs, the Department of Labor accepted local censuses or estimates.

Sources: U.S. Census (1939 - 1980 figures).  
Alaska Department of Labor (1980 - 1985 figures).

TABLE 252  
 POPULATION TRENDS  
 ALAKANUK  
1939 - 1985

<u>Year</u>	<u>Population</u>	<u>Percent Change</u>	
		<u>Decennial</u>	<u>Annual</u>
1939	69		
1950	140	102.9	
1960	278	98.6	
1970	414	48.9	
1980	522	26.1	
1981	534		2.3
1982	546		2.2
1983	494		-9.5
1984	515		4.3
1985	536		4.1

Sources: U.S. Census (1939 - 1980 figures).  
 Alaska Department of Labor (1981 - 1985 figures).

indicate only minor growth and this conclusion is supported by Department of Revenue Permanent Fund dividend recipient data. The Department of Labor's 1985 population estimate was 555 persons, while the Department of Community and Regional Affairs' most recent estimate was 571 persons for 1987.

Alaska Department of Labor data on components of population change for the Wade Hampton census division as a whole since 1970 are consistent with, though not directly confirmatory of, the supposition that Alakanuk's recent growth accrues mainly from natural increase, with migration a null or perhaps even a negative factor. Between 1970 and 1985, natural increase accounted for all the census division's net population growth. The regionwide birth rate per 1,000 rose steadily from 27.0 for the 1970 to 1980 decade to 37.1 for 1985, suggesting that the rate of natural increase is rising. Reportedly, there was a slight net loss from inter-regional migration. If the 1980 and later population estimates for Alakanuk are accurate, the community's growth rate has lagged behind the region's recent rate of natural increase. This suggests that Alakanuk may now be losing population through emigration. It should be noted that Alakanuk's growth rate (29 percent) over the 1970 to 1985 period was well below the regional average (43 percent).

Fienup-Riordan notes, and this was a matter of necessity during the process of village growth by sedentarization, that the initial settlers of today's Alakanuk came from dispersed locations throughout the Yukon delta and lower Yukon River. Despite this original diversity, Fienup-Riordan observes that

TABLE 253

COMPONENTS OF POPULATION CHANGE  
WADE HAMPTON CENSUS DIVISION  
1970 - 1985

Population at End of Period	Population Change	July 1 to July 1			Average Annual Rate of Change				
		Births	Rate Per 1,000	Deaths		Rate Per 1,000	Natural Increase	Net Migrants	
1970*	3,917								
1970 - 1980*	4,665	1,194	27.0 <sup>1</sup>	230	5.9	964	-216	1.74	
1980 - 1981	4,853	144	30.9	22	4.7	122	-139	-0.37	
1981 - 1982	5,121	161	33.2	21	4.3	140	128	5.37	
1982 - 1983	5,363	181	35.3	22	4.3	159	83	4.62	
1983 - 1984	5,500	200	37.3	31	5.8	169	-31	2.52	
1984 - 1985	5,591	204	37.1	46	8.4	158	-66	1.64	
1980 - 1985	5,591	890		142		748	-28	2.75	

\* AS of April 1.

<sup>1</sup> Corrected from erroneous calculation in source table.

Source: Alaska Department of Labor, Alaska Population Overview, 1985 Estimates.

an increasing tendency toward local intermarriage is knitting the different village groups together. She notes that:

The picture of the contemporary village as a collection of fragmented village groups is also being undercut by the marriage choices made by young villagers over the past 10 years. In Alakanuk, for example, the majority of young people (60 percent) are again choosing spouses from within the village qua village group. Alaranarmiut are marrying Alaranarmiut, which is as it should be. Also, they are, by and large, staying in the village. Of the 30 marriages contracted over the last 10 years, only 12 were to outsiders. Of these 12, one-half left the village to join their spouses, while the other half brought their spouses to live in Alakanuk, using it as a base from which to exploit territory marked out by her parents and their parents' parents before them. Fienup-Riordan (1986), p 76.

Despite the demographic turmoil which prevailed across the Yukon delta lowlands during the nineteenth and early twentieth centuries, Fienup-Riordan attributes a greater degree of territorial stability to this region's traditional social groups than other scholars have noted for the Kotzebue Sound, Seward Peninsula or inner Norton Sound villages undergoing similar demographic stresses. In her comparative study of three contemporary Yukon delta villages (Alakanuk, Sheldon Point and Scammon Bay) Fienup-Riordan credits the contemporary vitality of these villages to the perpetuation, and even a rebirth, of traditional territorial and social organization and coherence.

In conclusion, at present a rough village typology depicts increasing village viability as correlating with the increasing resemblance of the modern village, in social structural terms, to the traditional group, with its prescriptions for marriage within the group and resources exploitation within a relatively fixed range. Fienup-Riordan (1986), p. 78.

Fienup-Riordan concludes her assessment of the local effects of serious harvest disruptions upon Alakanuk, Scammon Bay and Sheldon Point with this appraisal:

The disruption would not occur in a socially moribund area. . . The villages under consideration (Alakanuk, Scammon Bay, Sheldon Point) are coherent, stable communities which show evidence of beginning to develop the cultural, as well as social, integrity of the traditional village groups and regional confederations. As such, they are beginning to demonstrate both practical flexibility and ideological self-sufficiency. Fienup-Riordan (1986), p. 320.

## B. POPULATION COMPOSITION

Alakanuk's racial make-up was virtually unchanged between 1970 (93 percent Alaska Native) and 1980 (94 percent Alaska Native). There are no available data to determine whether post-1980 population changes have altered the town's racial composition.

On the topic of interracial marriage, Fienup-Riordan (1986) observes of Yukon delta marriage patterns generally that "(inter-ethnic marriages) are still relatively infrequent, however, accounting for only three percent of current delta marriages". Presumably, similar circumstances apply to Alakanuk which has only a small non-Native population (about 6 percent in 1980).

The 1974 ANCSA data comparing place of enrollment and place of residence for Alaska Natives tends to confirm the notion that the prior influx of newcomers to Alakanuk was primarily from now abandoned nearby villages. These enrollment data show that only 2 percent of the Alaska Natives

living in Alakanuk in 1974 were enrolled to another village corporation. This figure seems surprisingly low, since most adult Native residents must have originated from other villages, but may be explained by the villages' later demise and omission from the eligible villages listed in the Alaska Native Claims Settlement Act. The enrollment data also show that a comparatively small share (8 percent) of Alakanuk enrollees were living outside the community in 1974.

Overall, the 1974 ANCSA enrollment data suggest that, at least until then, Alakanuk remained a relatively homogeneous and cohesive town. It drew its immigrants primarily from nearby depopulating villages and apparently experienced only a modest emigration of its own Native residents.

The 1980 Census statistics on previous place of residence for Alakanuk residents indicated an unusually low rate of population turnover. The Census reported that 97 percent of Alakanuk's residents in 1980 had lived in the same census division (88 percent in the same house!) five years previously. Only 3 percent of the community's residents had lived outside the Wade Hampton census division five years before.

Alakanuk's median age in 1970 was 14.9 years, tying it with Deering for the lowest median age among the 21 study communities. (Note that Alakanuk's 1970 population was originally reported as 265 persons, later revised to 414, but age-specific data are only available for 265 respondents). The median age for males was an extraordinarily low 13.8 years, with 70 percent of the population being under 25 years of age.



During the next decade, consistent with the trend throughout rural Alaska, Alakanuk's median age rose. Nevertheless, according to the 1980 Census, Alakanuk's median age of 17.9 was the lowest among the 21 study communities, followed by Scammon Bay (19.0). The Department of Revenue's Permanent Fund dividend recipient data indicate that the community's median age has continued to rise, reaching 21.4 years in 1985.

The distribution of population by age group for Alakanuk according to 1980 Census and 1985 Department of Revenue data indicate a modest drop in the number of children being born. However, this drop does not necessarily portend a slowing rate of natural increase as the fall in the number of births is possibly the echo of an unusually small corresponding adult cohort. Furthermore, as the unusually large age groups now reaching the family formation and childbearing years begins to reproduce, the sheer force of numbers may produce another "baby boom" at Alakanuk, especially if the post-1980 rise in birth rate noted for the region also persists here.

At the time of the 1970 Census, Alakanuk's population was symmetric in age and sex distribution. This changed by 1980 in one important respect. While the overall population was about evenly divided between males and females, there was a substantial excess (1.55:1.00) of single males over females. Comparison of 1970 and 1980 age cohorts indicates that this is the net result of a selective immigration of males rather than emigration of females. In any case, this lack of parity may put a brake on Alakanuk's rate of natural increase by inhibiting new family formation.

TABLE 254  
POPULATION COMPOSITION  
ALAKANUK  
1970

<u>Age Range</u>	<u>Alaska Native</u>			<u>Non-Native</u>		
	Male	Female	Total	Male	Female	Total
Under 5 years	23	19	42	3	0	3
5 - 14	42	38	80	5	3	8
15 - 24	15	26	51	0	0	0
25 - 34	10	8	18	3	2	5
35 - 44	20	18	38	0	1	1
45 - 54	8	6	14	1	0	1
55 - 64	5	4	9	0	0	0
65 and over	2	3	5	0	0	0
<u>TOTAL</u>	<u>125</u>	<u>122</u>	<u>247</u>	<u>12</u>	<u>6</u>	<u>18</u>
<u>Median Age</u>	<u>14.5</u>	<u>16.7</u>	<u>15.4</u>			

<u>Age Range</u>	<u>Total</u>		
	Male	Female	Total
Under 5 years	26	19	45
5 - 9	31	20	51
10 - 14	16	21	37
15 - 19	10	18	28
20 - 24	5	8	16
25 - 29	6	4	10
30 - 34	7	6	13
35 - 39	9	14	23
40 - 44	11	5	16
45 - 49	6	5	11
50 - 54	3	1	4
55 - 59	3	4	7
60 - 64	2	0	2
65 and over	2	3	5
<u>TOTAL</u>	<u>137</u>	<u>128</u>	<u>265</u>
<u>Median Age</u>	<u>13.8</u>	<u>16.3</u>	<u>14.9</u>

Note: Native is defined as Aleut, Eskimo, Indian and others, excluding White and Negro.

Source: U.S. Census.

TABLE 255

POPULATION COMPOSITION  
ALAKANUK  
1980

Age Range	Alaska Native		Non-Native		Total	
	Male	Female	Male	Female	Male	Female
Under 5 years	33	34	2	1	35	35
5 - 9	26	39	1	1	27	40
10 - 14	38	42	1	0	39	42
15 - 19	36	27	2	2	38	29
20 - 24	20	17	0	2	20	19
25 - 29	14	15	2	1	16	16
30 - 34	18	13	2	1	20	14
35 - 39	8	5	1	2	9	7
40 - 44	10	10	3	2	13	12
45 - 49	16	15	1	1	17	16
50 - 54	13	6	0	0	13	6
55 - 59	9	8	0	2	9	10
60 - 64	2	4	1	0	3	4
65 - 69	1	4	0	0	1	4
70 - 74	2	0	0	0	2	0
75 and over	2	4	0	0	2	4
<u>TOTAL</u>	<u>248</u>	<u>243</u>	<u>16</u>	<u>15</u>	<u>264</u>	<u>258</u>
<u>Median Age</u>	<u>18.8</u>	<u>16.3</u>			<u>18.7</u>	<u>17.0</u>
						<u>17.9</u>

Source: U.S. Census.

TABLE 256  
 PERMANENT FUND DIVIDEND RECIPIENTS  
 ALAKANUK  
 1982 - 1985

<u>Age Group</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
0 - 4		56	57	56
5 - 9			67	56
10 - 14			65	62
15 - 19			71	70
20 - 24			60	54
25 - 29			44	42
30 - 34			33	37
35 - 39			26	25
40 - 44			17	15
45 - 49			26	22
50 - 54			27	28
55 - 59			17	18
60 - 64			12	13
65 - 69			6	7
70 - 74			8	7
75 & over			5	5
Unknown	1	1	2	0
<u>TOTAL</u>	<u>527</u>	<u>538</u>	<u>543</u>	<u>517</u>

Note: 1982 age breakdown: 0-17 - 251; 18-27 - 92; 28-37 - 62; 38-47 - 45; 48-57 - 46; 58-67 - 19; 68-77 - 9; 78+ - 2; Unknown - 1; Total - 527.

1983 age breakdown: 0-4 - 56; 5-17 - 182; 18-27 - 112; 28-37 - 65; 38-47 - 38; 48-57 - 50; 58-67 - 21; 68-77 - 9; 78+ - 4; Unknown - 1; Total - 538.

Source: Alaska Department of Revenue.

TABLE 257

MARITAL STATUS, BY SEX  
PERSONS 15 YEARS AND OLDER  
ALAKANUK  
1980

<u>Marital Status</u>	<u>Male</u>	<u>Female</u>
Single	73	47
Married	79	78
Separated	5	1
Widowed	6	13
Divorced	0	2
<u>TOTAL</u>	<u>163</u>	<u>141</u>

Source: 1980 Census.

TABLE 258

HOUSEHOLD TYPE AND RELATIONSHIP  
ALAKANUK  
1980

<u>Household Type and Relationship</u>	<u>Number</u>	<u>Percent</u>
In Family Household		
Householder	95	18.2%
Spouse	76	14.6
Other Relatives	332	63.6
Non-Relative	6	1.1
Sub-Total	509	97.5
In Non-Family Household		
Male Householder	7	1.3
Female Householder	3	.6
Non-Relative	3	.6
Sub-Total	13	2.5
In Group Quarters		
Inmate of Institution		
Other		
Sub-Total		
<u>TOTAL</u>	<u>522</u>	<u>100.0%</u>

Source: 1980 Census.

During the mid-1980s, Alakanuk suffered a suicide epidemic of tragic and demographically significant proportions. Fienup-Riordan reports these facts:

At the same time that Alakanuk has been experiencing a minor baby boom, it has also been subject to a remarkably high death rate. Over the period 1982 to 1987, an alarming number of violent deaths have occurred within the village. The majority occurred as suicides over a 16 month period in 1985 and 1986. During this period, seven persons (five men and two women) successfully committed suicide. Another nine attempted suicides have been reported, and it is likely that a significant number of attempts have gone unreported. These suicides and attempted suicides occurred among young adult residents between the ages of 18 and 30. All of the successful suicides were believed to be alcohol and drug related. Fienup-Riordan (1987), p.3-22.

While all may hope that the suicide epidemic was a singular episode and not harbinger of a trend, it did underscore the profound impact of substance abuse and related pathological behavior on the community's wellbeing and long term demographic vitality. Fienup-Riordan also notes high accidental and violent death rates at Alakanuk, often alcohol-related.

### C. TRENDS IN WAGE AND SALARY EMPLOYMENT

As a preface to documenting wage and salary employment conditions at Alakanuk, some perspective on the continuing importance of subsistence activities and on the limits of available data sources is needed. The scope of subsistence in Alakanuk's economy was well described by Wolfe in these terms:

Conventional economic indices miss the real base of the (Yukon delta) region's economic system, however. Yukon delta communities have successfully perdured and grown through a strong and flexible economic system based upon fishing and hunting for local use. The economy has been termed a "mixed economy,"

referring to the fact that production within the community is a combination of fishing, hunting, gathering, and trapping for local use, and remunerative employment activities such as the commercial sale of fish, seasonal wagework, commercial fur trapping, and cottage industries. The economic system also has been termed a "subsistence-based economy" in recognition that the most stable and reliable economic base of the community is the harvest of renewable wild resources for local use and not the market or wage sector. Wolfe (1983), p.37.

As for available employment data sources, reliable wage and salary data for Alakanuk date from 1980. The Alaska Department of Labor's covered employment data series for the Alakanuk area also includes employment at Emmonak and Sheldon Point. The combined population (737 persons in 1985) of the latter two villages exceeds that of Alakanuk (536 persons). Thus, the Department of Labor data do not provide accurate information on total employment at Alakanuk, although they may suggest employment trends, if Alakanuk is assumed to be representative of the area as a whole.

Several other qualifications limit the comprehensiveness of Department of Labor data for Alakanuk. Commercial fishing is not covered nor is out-of-area employment locally recorded, although both forms of employment are important modes of work for Alakanuk's labor force. Alakanuk residents held 79 commercial set net permits in 1985 (down from 112 in 1976). In 1981-82, commercial fishing accounted for roughly 21 percent of earned household income (Fienup-Riordan, 1986).

There are four other sources of recent employment data at Alakanuk apart from that developed by the Alaska Department of Labor: the 1980 Census, a 1981-82 inventory of employment and income compiled by Fienup-Riordan

(1986), a 1982 employment survey compiled by Orth & Associates (1983) and a 1986 employment inventory conducted by Fienup-Riordan (Impact Assessment, Inc., 1987a [Draft]).

The 1980 Census reported Alakanuk's total employment at 78 persons. As the Census was taken in April, it did not capture summer employment such as commercial fishing or fish processing. Three-quarters of the employment which the Census did report was in the services/public administration categories, with the remainder shared among the trade, communications and transportation sectors.

Fienup-Riordan compiled an inventory of opportunities for local cash employment available to permanent local residents between June 1981 and May 1982. A cross-check of Fienup-Riordan's findings with other sources (see discussion of the Orth survey below) suggests that her inventory did not include certified positions in the Lower Yukon School District's Alakanuk School. Also, this inventory did not include self-employment in the commercial salmon or herring fisheries, nor non-local cannery or other non-local employment held by village residents. Fienup-Riordan counted a total of 81 full-time and part-time local job opportunities. Seventy-nine percent of these jobs were with public employers. Thus, the findings of the 1980 Census and Fienup-Riordan's inventory are roughly in agreement, with some similar omissions, nearly identical total employment counts and similar public sector percentages.



TABLE 259  
 SELECTED LABOR FORCE DATA  
 ALAKANUK  
 1980

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LABOR FORCE STATUS, PERSONS OVER 16 YEARS, 1980

<u>Labor Force Status</u>	<u>Alaska Natives*</u>		<u>All Races</u>		
	Male	Female	Male	Female	Total
Armed Forces			0	0	0
Civilian Employed			38	40	78
Civilian Unemployed			28	3	31
Not in Labor Force			92	109	201
Labor Force Participation Rate			41.0%	28.0%	35.0%
Unemployment Rate: 1980			42.4%	7.0%	28.4%
1970			0%	0%	0%

EMPLOYMENT BY INDUSTRY, 1970 AND 1980

<u>Industry</u>	<u>1970</u>	<u>1980</u>
Construction	0	0
Manufacturing	5	0
Transportation	0	3
Communications	0	7
Trade	11	10
Finance, Insurance & Real Estate	0	0
Services	5	52
Public Administration	0	6
Other	10	0
<u>TOTAL</u>	<u>21</u>	<u>78</u>

\* Data missing or suppressed.

Source: U.S. Census, 1980.

TABLE 260  
 OPPORTUNITIES FOR CASH INCOME  
 ALAKANUK  
JUNE 1981 - MAY 1982

<u>Employment Source</u>	<u>Jobs</u>
Health Aides	4
Bureau of Indian Affairs	11
Lower Yukon School District	10
Kuskokwim Community College	1
Headstart	5
Public Safety	4
Power Plant	2
City Offices	22
Private Trade & Services	8
Transportation	3
Post Office	2
IRA Council	2
Village Corporation	6
National Guard <sup>1</sup>	1
<u>TOTAL</u>	<u>81</u>

<sup>1</sup> Thirty-four 34 part-time Guard employees not included.

Source: Riordan (1986).

TABLE 261  
 MEAN HOUSEHOLD CASH INCOME, BY SOURCE  
 ALAKANUK  
JUNE 1981 - MAY 1982

<u>Source of Income</u>	<u>Mean House- hold Income</u>	<u>Percent</u>
Commercial fishing	\$ 3,936.00	21
Full-time employment	8,340.50	46
Seasonal employment	1,653.00	9
Transfer payments	4,515.60	24
<u>TOTAL</u>	<u>\$17,939.60</u>	<u>100</u>

Note: The above numbers, which are exactly reproduced from the source, appear to incorporate minor arithmetic error(s).

Source: Fienup-Riordan (1986).

As part of her inventory, Fienup-Riordan collected data on mean household cash income from the following four sources: commercial fishing (21 percent of mean household income), full-time employment (46 percent), seasonal employment (9 percent) and transfer payments (24 percent).

The findings of Orth's survey of 1982 Alakanuk employment indicate a higher level of employment than was reported by either the 1980 Census or Fienup-Riordan. Orth reported 71 full-time jobs and 42 to 47 part-time jobs. According to Orth's survey, over 80 percent of the full-time jobs and about two-thirds of the part-time jobs were in the public sector. It should be noted that these numbers were inflated by the City of Alakanuk's sponsorship of some services (pool hall, taxi, sauna) which are usually provided by the private sector. The City of Alakanuk (24 full-time and 19 part-time employees) and the Lower Yukon School District (31 full-time and 8 part-time employees) together accounted for nearly all public employment. Orth's 1982 survey reported that the Lower Yukon School District had 18 certified (i.e. teaching) staff and 13 classified staff, compared with Fienup-Riordan's 1981-82 count of 10 jobs locally available through the School District. Like other employment counts discussed above, the Orth survey did not cover commercial fishing or fish processing employment.

The findings of Fienup-Riordan's inventory of Alakanuk's 1986 local jobs are presented according to the same employer classification scheme used by Orth. This permits ready comparison of recent employment changes. According to Fienup-Riordan's findings, the number of full-time jobs had dropped from 71 in 1982 to 60 in 1986. There was a net loss of 11 jobs in

TABLE 262  
COMPOSITION OF EMPLOYMENT  
ALAKANUK  
1982 AND 1986

Employer	1982		1986	
	Full-time	Part-time	Full-time	Part-time
<b>Local Administration</b>				
City Office	5	0	3	1
Police Officers	5	0	3	0
Road Maintenance	2	0	2	0
Taxi Drivers	0	2	0	1
Pool Hall Clerks	2	1	0	2
AVEC Operators	0	2	0	2
Clinic Custodian	1	0	0	1
Sauna Operators	9	2	5	0
Librarian	0	1	0	1
Miscellaneous	0	11	0	5
Sub-Total	<u>24</u>	<u>19</u>	<u>13</u>	<u>13</u>
<b>Lower Yukon School District</b>				
Certified Staff	18	0	15	0
Classified Staff				
Educational Aides	7	1	8	1
Food Service Personnel	4	0	3	0
Maintenance	2	0	2	0
Custodians	0	2	1	1
Cultural Heritage Staff	0	2	1	0
Part-time	0	3	0	0
Sub-Total	<u>31</u>	<u>8</u>	<u>30</u>	<u>2</u>
<b>Federal</b>				
Tribal Office Personnel	1	0	1	0
Post Office	1	1	1	1
YKHC Health Aides	2	2	2	3
Sub-Total	<u>4</u>	<u>3</u>	<u>4</u>	<u>4</u>
<b>Private Sector</b>				
Alakanuk Corporation				
Store Manager	1	0	1	1
Store Employees	6	5	5	6
Corporate Administration	3	3	3	6
Alstrom's store	1	1-6	1	4
Dan's Store	1	1	3	2
United Utilities	0	1	0	1
Airline Employees	0	1	0	0
Sub-Total	<u>12</u>	<u>12-17</u>	<u>13</u>	<u>20</u>
<b>TOTAL</b>	<u>71</u>	<u>42-47</u>	<u>60</u>	<u>39</u>

Sources: Orth and Associates, 1983.  
Impact Assessment, Inc., (draft) 1987a.

local government, an early reflection of the retrenchment in local government operations resulting from reduced federal and State revenues. In addition, some part-time jobs were also lost from local government and school district staff. In sum, by 1986, it appears that employment conditions at Alakanuk were already beginning to show the effects of a deteriorating public sector economy.

We previously noted several reasons why Department of Labor covered employment data were of limited value for describing employment at Alakanuk. The findings of Fienup-Riordan's household income survey, together with other documentation which she and Wolfe (1982; 1983) present about the extent of subsistence activities at Alakanuk, further qualify the Department of Labor's data series. Commercial fishing accounted for 21 percent of earned income reported by Alakanuk households in Fienup-Riordan's survey and subsistence still makes a major contribution to the economic livelihood of Alakanuk households. For these reasons, it is clear that Department of Labor covered employment data present only a selective glimpse of employment conditions at Alakanuk.

Acknowledging these qualifications, the 1980-1986 covered employment data series for the Alakanuk area (which includes Alakanuk, Emmonak and Sheldon Point), shows two trends which may reflect wage employment conditions at Alakanuk as well as throughout the larger area.

First, the figures show a generally flat employment trend, with some year to year fluctuations. Annual employment for 1980 and 1985 was identical at

184 jobs, rising to 224 jobs in 1986, apparently due to heavy summertime fish processing employment, not necessarily at Alakanuk. The employment trend for the Alakanuk area as a whole is somewhat different from the 1982-1986 trend in Orth's and Fienup-Riordan's data, but that may be due to different geographic coverage.

Second, the public sector was the largest single employer, accounting for between 27 percent and 47 percent of annual employment. This level of public sector employment falls below the level noted by Fienup-Riordan, Orth and the 1980 Census. It is also below the level generally prevailing in Native communities in Western and Northern Alaska. However, the difference appears to be that the Department of Labor's tally of local government employees for the Alakanuk area omits school district employees, whose jobs were instead attributed to district headquarters at Mountain Village. Such an error would explain the improbably low percentage and absolute local government employment figures reported by the Department of Labor. It would also explain why local government employment did not rise to offset the loss of federal employment as Bureau of Indian Affairs schools were transferred to school district management.

Public employment aside, Department of Labor tabulations suppressed specific employment data for most industrial classifications, with the exception of the trade sector. The figures for trade show a steady growth, with employment doubling between 1980 and 1986.

Overall, the Orth (1983) and Fienup-Riordan 1986 surveys appear to provide the most complete and plausible accounts of wage and salary employment at Alakanuk in recent years. Because of the disparities in the data sources, it is imprudent to infer any employment trends except from the Department of Labor data which, as noted, appear flawed because of significant omissions. Mindful of these shortcomings, the Department of Labor employment data for the Alakanuk area nevertheless show a comparatively static wage economy, with only minor changes in employment levels and employment distribution between 1980 and 1986.

TABLE 263  
COVERED INDUSTRY EMPLOYMENT  
ALAKANUK AREA\*\*  
1980 - 1986

<u>Industry Classification</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
Mining	*	*	0	0	0	0	0
Construction	*	*	0	0	0	0	0
Manufacturing	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*
Trade	26	29	31	39	42	46	56
Finance, Insurance and Real Estate	*	*	*	*	*	*	*
Services	5	7	*	*	*	*	18 <sup>a</sup>
Government	80	94	75	51	84	68	83
Federal	37	42	25	12	18	10	5
State	0	0	0	0	0	0	0
Local	43	52	50	39	66	58	78
Miscellaneous	0	0	0	*	*	*	*
<u>TOTAL</u>	<u>184</u>	<u>227</u>	<u>191</u>	<u>186</u>	<u>179</u>	<u>184</u>	<u>224</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Alakanuk area also includes Emmonak and Sheldon Point.

<sup>a</sup> Prorated from nine months of data.

Source: Alaska Department of Labor.



TABLE 264

COVERED INDUSTRY EMPLOYMENT  
ALAKANUK AREA\*\*  
1980

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	*	*	*	*	*	*	*	*	*
Construction	*	*	*	0	0	0	*	*	*	0	0	0
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*	*	*	16	16	17
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	17	22	17	23	25	31	44	34	33	25	21	22
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	5	5	5	5	5	5	4	5	5	4	4	4
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	42	44	42	42	42	33	31	30	133	34	34	33
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	29	26	70	97	28	28	22	29	103	83	35	27
<u>TOTAL</u>	<u>129</u>	<u>131</u>	<u>157</u>	<u>209</u>	<u>162</u>	<u>181</u>	<u>283</u>	<u>287</u>	<u>414</u>	<u>218</u>	<u>140</u>	<u>130</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Alakanuk area also includes Emmonak and Sheldon Point.

Source: Alaska Department of Labor.

TABLE 265

COVERED INDUSTRY EMPLOYMENT  
ALAKANUK AREA\*\*  
1981

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	*	*	*	*	*	*	*	*	*
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	26	26	28	27	25	34	21	20	24	26	22	69
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	8	9	12	8	7	8	7	9	0	7	7	7
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	43	44	44	42	42	40	40	39	45	41	41	46
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	69	26	24	25	27	67	43	62	94	66	67	59
<u>TOTAL</u>	<u>187</u>	<u>133</u>	<u>150</u>	<u>175</u>	<u>162</u>	<u>257</u>	<u>330</u>	<u>344</u>	<u>329</u>	<u>229</u>	<u>196</u>	<u>229</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Alakanuk area also includes Emmonak and Sheldon Point.

Source: Alaska Department of Labor.

TABLE 266

COVERED INDUSTRY EMPLOYMENT  
ALAKANUK AREA\*\*  
1982

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	21	20	22	23	29	32	37	47	41	38	33	33
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	4	4	5	6	2	1	*	*	*	*	*	*
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	41	40	45	39	39	31	12	12	12	11	11	11
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	45	46	49	53	52	52	54	59	56	52	45	40
<u>TOTAL</u>	<u>167</u>	<u>148</u>	<u>152</u>	<u>147</u>	<u>159</u>	<u>155</u>	<u>322</u>	<u>333</u>	<u>285</u>	<u>159</u>	<u>140</u>	<u>124</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Alakanuk area also includes Emmonak and Sheldon Point.

Source: Alaska Department of Labor.

TABLE 267

COVERED INDUSTRY EMPLOYMENT  
ALAKANUK AREA\*\*  
1983

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	42	33	31	41	42	39	38	50	40	40	38	36
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	11	11	11	12	11	10	11	11	12	14	14	14
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	36	37	37	29	35	43	29	35	43	53	50	44
<u>TOTAL</u>	<u>125</u>	<u>116</u>	<u>110</u>	<u>148</u>	<u>166</u>	<u>266</u>	<u>331</u>	<u>316</u>	<u>252</u>	<u>141</u>	<u>136</u>	<u>124</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Alakanuk area also includes Emmonak and Sheldon Point.

Source: Alaska Department of Labor.

TABLE 268

COVERED INDUSTRY EMPLOYMENT  
ALAKANUK AREA\*\*  
1984

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	35	36	32	36	40	47	48	57	46	40	38	48
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	22	20	20	18	18	17	20	17	17	14	15	15
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	33	32	35	76	67	81	52	87	79	102	80	63
<u>TOTAL</u>	<u>106</u>	<u>104</u>	<u>107</u>	<u>148</u>	<u>138</u>	<u>182</u>	<u>367</u>	<u>311</u>	<u>167</u>	<u>196</u>	<u>162</u>	<u>157</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Alakanuk area also includes Emmonak and Sheldon Point.

Source: Alaska Department of Labor.

TABLE 269

COVERED INDUSTRY EMPLOYMENT  
ALAKANUK AREA\*\*  
1985

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	45	43	35	37	43	51	57	50	66	47	36	42
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	15	12	11	12	11	9	9	8	7	7	7	6
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	61	59	53	44	64	61	60	61	51	65	57	55
<u>TOTAL</u>	<u>142</u>	<u>140</u>	<u>119</u>	<u>119</u>	<u>147</u>	<u>208</u>	<u>407</u>	<u>328</u>	<u>163</u>	<u>159</u>	<u>140</u>	<u>139</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Alakanuk area also includes Emmonak and Sheldon Point.

Source: Alaska Department of Labor.

TABLE 270

COVERED INDUSTRY EMPLOYMENT  
ALAKANUK AREA\*\*  
1986

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	42	41	45	43	52	99	92	79	55	46	40	41
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	15	13	18	15	18	7	*	*	*	27	23	22
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	6	6	7	2	4	3	3	5	7	8	6	5
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	52	57	63	60	67	82	88	112	97	101	95	64
<u>TOTAL</u>	<u>147</u>	<u>149</u>	<u>162</u>	<u>153</u>	<u>174</u>	<u>217</u>	<u>438</u>	<u>383</u>	<u>303</u>	<u>225</u>	<u>188</u>	<u>153</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Alakanuk area also includes Emmonak and Sheldon Point.

Source: Alaska Department of Labor.

## SCAMMON BAY

### A. PAST POPULATION TRENDS

Scammon Bay is a small, traditional Yupik Eskimo community located on the coastal lowlands between the Yukon and Kuskokwim River deltas, about 80 miles southwest of St. Mary's and about 150 miles northwest of Bethel. Even today, Scammon Bay residents rely heavily on the harvest of the area's richly varied subsistence resources: spring and fall sea mammal hunts, summer herring runs, waterfowl, salmon fishing in the Black River area and freshwater fish from tundra lakes and streams.

Scammon Bay first appeared in the 1939 decennial Census, about two decades after its founding as a permanent contemporary settlement. The village is sited on the Kun River at the foot of Askinuk Mountain. Although Scammon Bay is not close to other permanent villages (Chevak is 22 air miles away; Hooper Bay, 30 miles; and Sheldon Point, 52 miles), its residents have traditionally made overlapping use of upland subsistence resources with residents of these villages. Scammon Bay families also have important kinship ties to other Yukon River delta and coastal lowland villages.

Partly because of their traditional seasonally nomadic lifestyle and partly because of their homeland's lack of commercial economic attractions, the historic record for the Yukon delta/coastal lowlands peoples in traditional and early post-contact times is unusually sketchy. As characterized by the authors of Alaska Natives and the Land:



. . . the pre-history of the Yukon-Kuskokwim delta Eskimos is a confusing haze. Recorded history of the area is itself very brief; attention by ethnographers and anthropologists must be regarded as slight despite investigations since the 1930's. Before recorded history there are only traditional tales to go by. Alaska Natives and the Land (1968), p. 178.

Alaska Natives and the Land then goes on to identify seven distinct population sub-groups of Yupik-speaking Eskimos in the Yukon-Kuskokwim delta region. Scammon Bay residents are classified with the Magemiut, inhabitants of the delta lake country from Cape Romanzof northward almost to the Yukon. According to Oswalt (1968), the Magemiut people numbered about 400 persons at the time of European contact.

For the Yukon delta/coastal lowland region alone, Fienup-Riordan (1986) identified 116 separate historic settlement or occupancy sites. Both she and Wolfe (1982) describe a somewhat fluid territorial and social mingling of Magemiut people with the Kuigpagmiut people living in the delta proper to the north over the first century of contact.

Even in the absence of detailed historic data about the fate of individual territorial groups such as the Scammon Bay people, Fienup-Riordan constructs a vivid account of the cumulative impact of disease epidemics on the population and social organization of Yukon delta settlements over the first century of contact. Fienup-Riordan writes:

The period between 1833 and 1919 saw a change in both intra- and interregional relations on the Yukon delta, due to dramatic population fluctuations by and large associated with the effects of epidemic diseases in the population of western Alaska. Major epidemics occurred in 1838-39 (smallpox), 1852-53 (influenza), 1861 (influenza), 1900 (measles and influenza) and 1919 (Spanish influenza). The effects of these epidemics varied widely. Some

village groups were reduced by over one-half of their precontact population very early in the period (e.g. Pastolik reduced in 1838-39 from 250 to 116 individuals [Zagoskin 1967:281;30]). On the other hand, the inhabitants of some coastal settlements were missed altogether. The net effect, however, was a tremendous dispersal and shift in the population, with many individuals, and individual family groups, seeking refuge with kinsmen or partners in other areas. By 1891, interregional marriage was not unusual, especially between related families in different confederations.

Overall population figures as well as reference to the precise effects of specific epidemics are scattered and often unreliable for this period. However, some idea of the magnitude of the change endured during the historic period can be gathered from a comparison of the population figures given by Robaut for 1891 and in a subsequent Catholic census conducted in 1927-28 after both the epidemics of 1900 and 1918-19 had run their course (Coastal Census 1927-28). The most noticeable feature of the second census is the faithful recording of numerous small camps and villages. Altogether 47 distinct populations are noted, ranging in size from 4 to 180, in opposition to Robaut's 19 village groups. Also, the total population is 600, less than half of the 1,505 recorded as the total for the same area in 1891. Whereas Robaut's detailed census puts the vast majority of the population in the context of a family group consisting of parents, grandparents and children, the 1928-28 census notes numerous irregular groupings, consisting of widowed and single men and women with and without children. . . These figures offer support to the contention that although the Yukon delta as a whole lost approximately 25 percent of its population during the great sickness of 1900, the losses were as much as 50 percent along the coast proper. The area also sustained losses up to 25 percent during the 1918-19 epidemic of Spanish influenza. Fienup-Riordan (1986), pp. 41-43.

Fienup-Riordan identified at least seven traditional sites regularly occupied by Scammon Bay area residents during their seasonal rounds. She summarized the typical settlement pattern along the coastal lowlands around the close of the nineteenth century as follows:

. . . During a normal year, a regular rotation occurred between the spring coastal camps where sea mammals were sought, the summer fish camps at the river mouths, the fall whitefish, tom cod and blackfish harvest on the tundra flats, and winter ice fishing on the frozen lakes and ponds that dotted the delta. Fienup-Riordan (1986), p.32.

Alaska Natives and the Land identified two traditional village sites in the vicinity of Scammon Bay. These were Mariak, a settlement at the foot of Askinuk Mountain near the bank of the Kun River, which is the site of today's Scammon Bay; and Kutmiut, first reported in 1870 by Dall and now an abandoned site, on the bank of the Kun River about 3 miles east of Scammon Bay. Hrdlicka's survey (Anthropological Survey in Alaska, 1930) of coastal villages of Western Alaska identified Kutmiut but not Scammon Bay, perhaps indicating that, at the time of his survey, Scammon Bay was not yet recognized as a distinct permanent settlement.

Fienup-Riordan (1986) recounts an 1863 report by Netsvetov of a small winter village called Keggatmiut about three miles east of present day Scammon Bay which appears to locate it at or near the village site identified by Dall in 1870 as Kutmiut. According to Fienup-Riordan, after repeated floods made their original village uninhabitable, Keggatmiut settlers relocated around 1920 to the village site traditionally known as Mariak, later officially renamed Scammon Bay after Captain Charles M. Scammon who served as marine chief of the Western Union Telegraph expedition from 1856 to 1867. Within a few years, a Catholic church, a Covenant mission and a trading post were built and by the 1930s, a small but growing permanent village began to take form.

Scammon Bay was first recorded by the Census in 1939, with a population of 88, although Fienup-Riordan cites the Catholic Church's earlier 1927-28 coastal census population figure of 27. At the time of the 1939 Census,

the population of the Wade Hampton census area was still dispersed among many small, seasonally mobile settlement groups. That year's Census identified 65 settlements in the census area, with an average population of 38. The next two decades witnessed an abrupt fit of sedentarization and village consolidation triggered by government programs and facilities being made available at a few fixed locations. By 1960, the 65 villages recorded by the 1939 Census had collapsed into the 13 villages which survive today. Between 1939 and 1985, Wade Hampton's population increased by 129 percent while the average village size grew from 38 to 430 persons.

Scammon Bay's growth was boosted by this trend toward consolidation into permanent settlements. Natural increase, amplified by better health care and improved environmental health conditions, also sustained population growth. Scammon Bay has grown in every decade since 1939, reaching 250 persons by the 1980 Census and 304 persons by the Department of Labor's 1985 estimate.

Alaska Department of Labor data on components of population change for the Wade Hampton census division as a whole since 1970 are generally consistent with, although not directly confirmatory of, the supposition that Scammon Bay's recent growth derives almost wholly from intra-regional migration and natural increase. Between 1970 and 1985, natural increase accounted for all of the census division's net population growth. The regionwide birth rate per 1,000 rose steadily from 27.0 for the 1970 to 1980 decade to 37.1 by 1985, suggesting a rising rate of natural increase. Reportedly, there was a slight net loss from inter-regional migration, which suggests that a

TABLE 271

NUMBER AND POPULATION OF VILLAGES  
WADE HAMPTON CENSUS DIVISION  
1939 - 1985

<u>Year</u>	<u>Number of Villages</u>	<u>Total Population</u>	<u>Average Population Per Village</u>
1939	65	2,441	38
1950	20	2,443	122
1960	13	3,128	241
1970	13	3,917	301
1980	13	4,665	359
1985	13	5,591	430

Sources: U.S. Bureau of the Census (1929-1980).  
Alaska Department of Labor (1985).

TABLE 272

POPULATION OF SCAMMON BAY AREA VILLAGES  
1929 - 1985

	<u>1929</u>	<u>1939</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1985</u>
<u>Present Villages</u>							
Chevak		43	230	315	387	466	532
Hooper Bay	209	299	307	460	490	627	686
Scammon Bay		88	103	115	166	250	304
<u>Abandoned Villages</u>							
Black River		15					
Chowhoctolik		60	98				
Kashunuk <sup>1</sup>	163	89					
New Knock Hock			122				
<u>TOTAL</u>	<u>372</u>	<u>579</u>	<u>860</u>	<u>890</u>	<u>1,043</u>	<u>1,343</u>	<u>1,522</u>

<sup>1</sup> Many residents of now-abandoned Kashunuk reportedly relocated to Chevak (Alaska Natives and the Land, 1968).

Note: The 1939 Census listed 65 villages in the Wade Hampton census division, most of which are now abandoned. The location and territorial affiliation of many is uncertain or is encrypted in enigmatic orthography. Therefore, it is likely that this table undercounts the number of villages and residents in the Scammon Bay area in 1939. Also, later censuses for the Wade Hampton census area show a small residual population living outside the listed villages, some of which may have lived in the Scammon Bay area.

Sources: U.S. Bureau of the Census (1929-1980).  
Alaska Department of Labor (1985).

TABLE 273

POPULATION ESTIMATES  
SCAMMON BAY  
1927 - 1987

<u>Year</u>	<u>Census</u>	<u>Other Estimates</u>	<u>Sources of Other Estimates</u>
1927-28		27	Coastal Census (per Fienup-Riordan), recorded as Mariagarmut
1939	88		
1950	103		
1957		110	Ray, 1959
1958		115	Alaska Rural Development Board
1960	115	120	Ak. Department of Labor (July)
1961		165	BIA school census
1962		163	BIA school census
1963		169	BIA school census
1963		154	Arctic Health Research Center
1966		163	Gazaway (per Tussing, 1969)
1967		190	Federal Field Committee - 188 Native; 2 non-Native
1968		185	Alaska Area Native Health Service
1969		185	Federal Field Committee - 180 Native; 5 non-Native
1970	166	170	Ak. Department of Labor (July)
1975		165	U.S. Census Bureau
1976		192	U.S. Census Bureau
1980	250		
1980	250*	259	Dept. Community/Regional Affairs
1981	249*	249	Dept. Community/Regional Affairs
1982		275	U.S. Census Bureau (July)
1982	251*	251	Dept. Community/Regional Affairs
1983	286*	251	Dept. Community/Regional Affairs
1984	296*	297	Dept. Community/Regional Affairs
1985	304*	303	Dept. Community/Regional Affairs
1986		303	Dept. Community/Regional Affairs
1987		326	Dept. Community/Regional Affairs

\* Alaska Department of Labor estimates of July 1 population derived using U.S. Census methodology. Where these figures are the same as those cited by the Department of Community and Regional Affairs, the Department of Labor accepted local censuses or estimates.

Sources: U.S. Census (1939 - 1980 figures).  
Alaska Department of Labor (1980 - 1985 figures).

TABLE 274  
 POPULATION TRENDS  
 SCAMMON BAY  
1939 - 1985

<u>Year</u>	<u>Population</u>	<u>Percent Change</u>	
		<u>Decennial</u>	<u>Annual</u>
1939	88		
1950	103	17.0	
1960	115	11.7	
1970	166	44.3	
1980	250	51.5	
1981	249		-0.4
1982	251		.8
1983	286		13.9
1984	296		3.5
1985	304		2.7

Sources: U.S. Census (1939 - 1980 figures).  
 Alaska Department of Labor (1981 - 1985 figures).



TABLE 275

COMPONENTS OF POPULATION CHANGE  
WADE HAMPTON CENSUS DIVISION  
1970 - 1985

	Population at End of Period	Population Change	July 1 to July 1			Average Annual Rate of Change			
			Births	Rate Per 1,000	Deaths		Rate Per 1,000	Natural Increase	Net Migrants
1970*	3,917								
1970 - 1980*	4,665	748	1,194	27.0 <sup>1</sup>	230	5.9	964	-216	1.74
1980 - 1981	4,853	-18	144	30.9	22	4.7	122	-139	-0.37
1981 - 1982	5,121	268	161	33.2	21	4.3	140	128	5.37
1982 - 1983	5,363	242	181	35.3	22	4.3	159	83	4.62
1983 - 1984	5,500	137	200	37.3	31	5.8	169	-31	2.52
1984 - 1985	5,591	91	204	37.1	46	8.4	158	-66	1.64
1980 - 1985	5,591	720	890		142		748	-28	2.75

\* As of April 1.

<sup>1</sup> Corrected from erroneous calculation in source table.

Source: Alaska Department of Labor, Alaska Population Overview, 1985 Estimates.

perhaps modest influx of non-Natives into Wade Hampton was offset by a comparable emigration of Alaska Natives from the region. Scammon Bay's growth rate (83 percent) over this fifteen year period was almost double the regional average (43 percent). Assuming that Scammon Bay's birth and natural increase rates are about the same as the regional average, it appears that about half of Scammon Bay's recent population growth is due to a net gain from intra-regional migration.

Fienup-Riordan notes, and this was a matter of necessity during the process of village growth by sedentarization, that the initial settlers of today's Scammon Bay village came from dispersed locations throughout the Yukon delta and the coastal lowlands south to Hooper Bay and Chevak. Today, now that Scammon Bay's population base has reached adequate size and diversity, Fienup-Riordan notes an increasing tendency to marry locally. She notes further that about three-quarters of today's spouses who have married into Scammon Bay families have come from Hooper Bay. For these reasons, Fienup-Riordan characterizes Scammon Bay as increasingly "centered", that is, becoming socially more self-sufficient and territorially more definite with subsistence harvest patterns bounded by specific social groups and territory.

Despite the demographic turmoil which prevailed across the Yukon delta lowlands during the nineteenth and early twentieth century, Fienup-Riordan attributes a greater degree of territorial stability to this region's traditional social groups than other scholars have noted for the Kotzebue Sound, Seward Peninsula or inner Norton Sound villages undergoing similar

demographic stresses. In fact, in her comparative study of three modern Yukon delta villages (Alakanuk, Sheldon Point and Scammon Bay) Fienup-Riordan credits the contemporary vitality of these villages to the perpetuation, even renaissance, of traditional territorial and social organization and coherence.

In conclusion, at present a rough village typology depicts increasing village viability as correlating with the increasing resemblance of the modern village, in social structural terms, to the traditional group, with its prescriptions for marriage within the group and resources exploitation within a relatively fixed range. Fienup-Riordan (1986), p. 78.

Fienup-Riordan caps her assessment of the local effects of serious harvest disruptions with this appraisal of Scammon Bay's vitality:

The disruption would not occur in a socially moribund area. . . . The villages under consideration (Alakanuk, Scammon Bay, Sheldon Point) are coherent, stable communities which show evidence of beginning to develop the cultural, as well as social, integrity of the traditional village groups and regional confederations. As such, they are beginning to demonstrate both practical flexibility and ideological self-sufficiency. Fienup-Riordan (1986), p. 320.

## B. POPULATION COMPOSITION

Various demographic indicators consistently show that Scammon Bay is at present a vigorous traditional Yupik community.

The 1970 Census reported that entire population of Scammon Bay was Alaska Native. In the 1980 Census, Scammon Bay was reported as 96.4 percent Native, second only to Kivalina among the 21 study communities in its proportion of Alaska Native residency.

Another index of Scammon Bay's demographic stability is the relatively close match of adult males and females. This is unusual among rural Native communities, the demographic balance of which is typically skewed by an excess of unmarried males. In Scammon Bay, the ratio of unmarried single males 15 years and older to unmarried females is 1.17:1.0, lowest among all 21 study communities except for Nikolski. This near match probably reflects Scammon Bay's ability to hold its young adults and removes one of the critical inhibitions to new family formation and natural increase.

Fienup-Riordan studied the composition of households in Alakanuk, Scammon Bay and Sheldon Point. She classified households as focal (both spouses original village residents), central (one spouse an original village resident) or marginal (neither spouse an original village resident). She also counted the number of families in each class with extended family living elsewhere in the region or outside the region.

Based on her research findings, Fienup-Riordan concluded that:

Unlike Alakanuk and Sheldon's Point, Scammon Bay has very few marginal families. It has the least historic diversity and is perhaps the most closed community of the three, made up of a core of strong focal families surrounded by central households representing their offspring who have successfully brought in spouses from outside the village and sometimes outside the region. As in Alakanuk, the addition of outsiders is responsible for family extension beyond the village, rather than immigration away from the village. Again, ties outside the village reflect growth, not depletion. Finally, as in Alakanuk, at present the village is not experiencing either marked emigration or immigration. Although many individual as well as households leave the community temporarily, the majority return. Fienup-Riordan (1986), p. 214.

TABLE 276

MARITAL STATUS, BY SEX  
PERSONS 15 YEARS AND OLDER  
SCAMMON BAY  
1980

<u>Marital Status</u>	<u>Male</u>	<u>Female</u>
Single	34	29
Married	39	38
Separated	1	0
Widowed	3	2
Divorced	1	0
<u>TOTAL</u>	<u>78</u>	<u>69</u>

Source: 1980 Census.

TABLE 277

HOUSEHOLD TYPE AND RELATIONSHIP  
SCAMMON BAY  
1980

<u>Household Type and Relationship</u>	<u>Number</u>	<u>Percent</u>
In Family Household		
Householder	42	16.8%
Spouse	37	14.8
Other Relatives	165	66.0
Non-Relative	1	.4
Sub-Total	245	98.0
In Non-Family Household		
Male Householder	5	2.0
Female Householder	0	0.0
Non-Relative	0	0.0
Sub-Total	5	2.0
In Group Quarters		
Inmate of Institution		
Other		
Sub-Total		
<u>TOTAL</u>	<u>250</u>	<u>100.0%</u>

Source: 1980 Census.

Thus, Scammon Bay does not appear to be losing its young adults to emigration. On the contrary, it is successfully recruiting marriage partners from surrounding villages into Scammon Bay families.

On the topic of interracial marriage, Fienup-Riordan (1986) observes of Yukon delta marriage patterns generally that "(inter-ethnic marriages) are still relatively infrequent, however, accounting for only three percent of current delta marriages". Presumably, similar circumstances apply to Scammon Bay which has a negligible non-Native population and is more isolated than the typical Yukon delta village.

ANCSA enrollment data further confirm this picture of a relatively closed but stable community. These 1974 enrollment data show that a relatively small share (7 percent) of Scammon Bay's enrolled Native residents were enrolled elsewhere, while a similarly low share (12 percent) of Scammon Bay enrollees were residing elsewhere. That is, in 1974, few Natives who were affiliated with Scammon Bay's village corporation lived elsewhere and few Natives living in Scammon Bay were affiliated with another village corporation. This pattern anticipates Fienup-Riordan's later (1986) observation, previously quoted, that Scammon Bay is experiencing relatively little immigration or permanent out-migration.

Scammon Bay's median age in 1970 was relatively low (16.3), with little difference between median ages for males (17.5) and females (16.0). During the next decade, Scammon Bay's median age figure rose, but less than in most study communities, reaching 19.0 according to the 1980 Census. Again,

there was only a slight spread between the median ages of males (20.4) and females (18.4). The upward movement of this demographic trend continued in following years, rising to 21.6 years in 1985 according to the Alaska Department of Revenue Permanent Fund dividend recipient data.

### C. TRENDS IN WAGE AND SALARY EMPLOYMENT

Employment data for Scammon Bay are limited and frequently unreliable. The value of the Alaska Department of Labor's covered employment data series is depreciated by the fact that the Scammon Bay area includes employment data not only for Scammon Bay but also for Chevak and Hooper Bay, each of which has a larger population (1987 populations of 582 and 776 persons respectively) than Scammon Bay. Also, commercial fishing is not counted in the Department of Labor employment data, although it is an especially important source of employment at Scammon Bay. Reportedly, Scammon Bay residents held 40 gill net permits in 1978 (Darbyshire, 1979) and commercial fishing accounted for roughly 45 percent of local earned income in 1981-82 (Fienup-Riordan, 1986).

The 1970 Census reported a total of 12 employed persons in Scammon Bay, all working in public administration and public or private services. An Alaska Department of Labor survey compiled the following year (1971) put Scammon Bay's employment at 15 persons, all in the public sector except for four jobs in retail sales and one job in air transportation. Both of these employment counts apparently omitted the local labor force's seasonal work

TABLE 278  
POPULATION COMPOSITION  
SCAMMON BAY  
1970

<u>Age Range</u>	<u>Alaska Native</u>			<u>Non-Native</u>		
	Male	Female	Total	Male	Female	Total
Under 5 years	13	18	31	0	0	0
5 - 14	28	20	48	0	0	0
15 - 24	15	13	0	0	0	0
25 - 34	11	14	25	0	0	0
35 - 44	6	5	11	0	0	0
45 - 54	3	4	7	0	0	0
55 - 64	4	2	6	0	0	0
65 and over	6	4	10	0	0	0
<u>TOTAL</u>	<u>86</u>	<u>80</u>	<u>166</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>Median Age</u>	<u>17.5</u>	<u>16.0</u>	<u>16.3</u>			

<u>Age Range</u>	<u>Total</u>		
	Male	Female	Total
Under 5 years	13	18	31
5 - 9	17	14	31
10 - 14	11	6	17
15 - 19	5	12	17
20 - 24	10	1	11
25 - 29	6	12	18
30 - 34	5	2	7
35 - 39	3	3	6
40 - 44	3	2	5
45 - 49	2	0	2
50 - 54	1	4	5
55 - 59	2	0	2
60 - 64	2	2	4
65 and over	6	4	10
<u>TOTAL</u>	<u>86</u>	<u>80</u>	<u>166</u>
<u>Median Age</u>	<u>17.5</u>	<u>16.0</u>	<u>16.3</u>

Note: Native is defined as Aleut, Eskimo, Indian and others, excluding White and Negro.

Source: U.S. Census.



TABLE 279

POPULATION COMPOSITION  
SCAMMON BAY  
1980

Age Range	Alaska Native		Non-Native		Total	
	Male	Female	Male	Female	Male	Female
Under 5 years	23	16	0	0	23	16
5 - 9	18	18	0	0	18	18
10 - 14	12	16	0	0	12	16
15 - 19	11	16	0	0	11	16
20 - 24	12	13	0	0	12	13
25 - 29	8	7	0	0	8	7
30 - 34	11	6	0	0	11	6
35 - 39	7	6	0	0	7	6
40 - 44	6	3	0	0	6	3
45 - 49	3	4	0	0	3	4
50 - 54	5	3	0	0	5	3
55 - 59	2	3	0	0	2	3
60 - 64	3	3	0	0	3	3
65 - 69	2	1	0	0	2	1
70 - 74	3	1	0	0	3	1
75 and over	5	3	0	0	5	3
<u>TOTAL</u>	<u>131</u>	<u>119</u>	<u>0</u>	<u>0</u>	<u>131</u>	<u>119</u>
<u>Median Age</u>	<u>20.4</u>	<u>18.4</u>			<u>20.4</u>	<u>18.4</u>
						<u>19.0</u>

Source: U.S. Census.

TABLE 280  
 PERMANENT FUND DIVIDEND RECIPIENTS  
 SCAMMON BAY  
 1982 - 1985

<u>Age Group</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
0 - 4		32	40	35
5 - 9			33	36
10 - 14			36	29
15 - 19			30	31
20 - 24			26	22
25 - 29			28	28
30 - 34			20	21
35 - 39			15	16
40 - 44			15	14
45 - 49			7	17
50 - 54			10	3
55 - 59			4	7
60 - 64			4	2
65 - 69			3	6
70 - 74			3	2
75 & over			9	6
Unknown	0	1	0	4
<u>TOTAL</u>	<u>267</u>	<u>264</u>	<u>283</u>	<u>279</u>

Note: 1982 age breakdown: 0-17 - 125; 18-27 - 50; 28-37 - 30; 38-47 - 27; 48-57 - 13; 58-67 - 9; 68-77 - 6; 78+ - 7; Unknown - 0; Total - 267.  
 1983 age breakdown: 0-4 - 32; 5-17 - 80; 18-27 - 57; 28-37 - 34; 38-47 - 27; 48-57 - 12; 58-67 - 8; 68-77 - 6; 78+ - 7; Unknown - 1; Total - 264.

Source: Alaska Department of Revenue.

involvement in Bristol Bay and Lower Yukon salmon processing plants. Likewise, neither the Census nor the Alaska Department of Labor records any local self-employment in commercial fishing, which was then less widespread than it has since become. Despite these qualifications, it remains clear that job opportunities and wage and salary employment were minimal in Scammon Bay at the start of the 1970s.

TABLE 281  
ESTIMATED EMPLOYMENT  
SCAMMON BAY  
1971

<u>Employer</u>	<u>Number</u>
General stores	4
Wien Consolidated Airlines	1
BIA School	5
U.S. Post Office	1
Public Health Service	1
Neighborhood Youth Corps	3
<u>TOTAL</u>	<u>15</u>

Source: Alaska Department of Labor, per  
Alaska Planning & Management,  
1972.

The 1980 Census count of employment by industry at Scammon Bay is unarguably, if unaccountably, wrong. To begin with, the Census's report of the number of persons of workforce age (16 years and over) exceeds the total population for this age group. Also, the Census reported that employed women outnumbered employed men by a count of 59 to 31, a very unlikely division of labor. In fact, the 1980 Census reported that every female in the local labor force (59 females altogether) was employed, at

TABLE 282  
 SELECTED LABOR FORCE DATA  
 SCAMMON BAY  
 1980

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LABOR FORCE STATUS, PERSONS OVER 16 YEARS, 1980

<u>Labor Force Status</u>	<u>Alaska Natives*</u>		<u>All Races</u>		
	Male	Female	Male	Female	Total
Armed Forces			0	0	0
Civilian Employed			31	59	90
Civilian Unemployed			13	0	13
Not in Labor Force			25	17	42
Labor Force Participation Rate			63.0%	77.0%	71.0%
Unemployment Rate: 1980			29.5%	0%	12.6%
1970			0%	0%	0%

EMPLOYMENT BY INDUSTRY, 1970 AND 1980

<u>Industry</u>	<u>1970</u>	<u>1980</u>
Construction	0	0
Manufacturing	0	0
Transportation	0	11
Communications	0	2
Trade	0	14
Finance, Insurance & Real Estate	0	0
Services	6	37
Public Administration	6	26
Other	0	0
<u>TOTAL</u>	<u>12</u>	<u>90</u>

\* Data missing or suppressed.

Source: U.S. Census, 1980.

the same time that it reported a total of only 48 females between 20 and 64 years of age. Lastly, the Census count of 90 jobs in 1980 for this remote, undeveloped village of 250 persons is not credible in view of the rudimentary status of its wage economy. In sum, the 1980 Census should be dismissed as a source of employment data for Scammon Bay.

Fienup-Riordan compiled an inventory of opportunities for local cash employment between June 1981 and May 1982 (Fienup-Riordan, 1986). This inventory focused on cash employment opportunities normally open to permanent local residents. That is, it did not include school faculty or similar professional positions held by temporary residents. Neither did it include self-employment in the commercial salmon or herring fisheries, nor non-local cannery or other non-local employment held by village residents. Fienup-Riordan enumerated a total of 40 full-time and part-time local job opportunities. Three-quarters of these jobs were with public employers.

As part of the same inventory, Fienup-Riordan collected data on household cash income from four sources: commercial fishing (37.8 percent of mean household income), full-time employment (44.0 percent), seasonal employment (4.8 percent) and transfer payments (13.4 percent).

We noted at the outset of this section reasons why the Alaska Department of Labor covered employment data for Scammon Bay were of limited use. The findings of Fienup-Riordan's household income survey, together with other documentation she presents about the extent of local subsistence activities, impose additional qualifications upon the Department of Labor's

TABLE 283  
 OPPORTUNITIES FOR CASH INCOME  
 SCAMMON BAY  
JUNE 1981 - MAY 1982

<u>Employment Source</u>	<u>Jobs</u>
Health Aides	2.5
Bureau of Indian Affairs	9
Lower Yukon School District	6
Headstart	2
Public Safety	2
Power Plant	1
City Offices	5
Private Trade & Services	4
Transportation	2
Post Office	1
IRA Council	0.5
Village Corporation	4
National Guard <sup>1</sup>	1
<u>TOTAL</u>	<u>40</u>

<sup>1</sup> Seven part-time Guard employees not included.

Source: Riordan (1986).

TABLE 284  
 MEAN HOUSEHOLD CASH INCOME, BY SOURCE  
 SCAMMON BAY  
JUNE 1981 - MAY 1982

<u>Source of Income</u>	<u>Mean House- hold Income</u>	<u>Percent</u>
Commercial fishing	\$ 7,028	37.8
Full-time employment	8,197	44.0
Seasonal employment	890	4.8
Transfer payments	2,495	13.4
<u>TOTAL</u>	<u>\$18,610</u>	<u>100.0</u>

Source: Riordan (1986).

data series. Commercial fishing accounted for more than 40 percent of earned income reported by Scammon Bay households in Fienup-Riordan's survey and, she reports, subsistence still makes a major contribution to the economic livelihood of Scammon Bay households. From these facts, it is clear that Alaska Department of Labor covered employment data necessarily present a distorted account of the world of work at Scammon Bay.

All these qualifications notwithstanding, the covered employment data for the Scammon Bay area, which also includes Chevak and Hooper Bay, exhibit several trends which are probably typical of aspects of wage employment conditions at Scammon Bay. Foremost is that, for the Scammon Bay area as a whole, government accounted directly for most local employment, about 85 percent each year between 1983 and 1986, with local government providing nine out of ten government sector jobs. (This is roughly consistent with Fienup-Riordan's finding that the public sector provided about 75 percent of local cash employment). Most of the area's limited private employment was in trade, plus a few jobs in services. There was virtually no basic private sector wage employment reported for the Scammon Bay area.

The Department of Labor data show relatively strong employment growth (46.5 percent) for the three village area between 1980 and 1986, but nearly all of this growth was in local government. Since almost all local government employment is funded by State or federal intergovernmental transfers, this trend, together with the exceptional overall level of dependence on public sector employment, suggests that these communities may be vulnerable to severe employment losses as State and federal transfers shrink.

TABLE 285  
COVERED INDUSTRY EMPLOYMENT  
SCAMMON BAY AREA\*\*  
1980 - 1986

<u>Industry Classification</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
Mining	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*
Manufacturing	*	*	*	0	0	0	*
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*
Trade	84	131	83	55	65	74	67
Finance, Insurance and Real Estate	0	0	0	0	0	0	0
Services	*	*	*	*	23	8 <sup>a</sup>	18
Government	367	397	412	435	502	527	551
Federal	39	44 <sup>b</sup>	29	20	20	21	22
State	12	16	15	17	21	24	20
Local	316	337	368	398	461	482	509
Miscellaneous	0	0	0	0	0	0	0
<u>TOTAL</u>	<u>439</u>	<u>563</u>	<u>530</u>	<u>513</u>	<u>598</u>	<u>612</u>	<u>643</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Scammon Bay area also included Chevak and Hooper Bay.

<sup>a</sup> Prorated from six months of data.

<sup>b</sup> Prorated from nine months of data.

Source: Alaska Department of Labor.



TABLE 286

COVERED INDUSTRY EMPLOYMENT  
SCAMMON BAY AREA\*\*  
1980

Industry Classification	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	0	0	0	*	*	*	*	*	*
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	0	0	0	0	0	0	*	*	*	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	53	48	45	51	54	141	101	114	90	112	104	92
Finance, Insurance and Real Estate	0	0	0	0	0	0	0	0	0	0	0	0
Services	*	*	*	*	*	*	*	*	*	38	39	33
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	34	35	36	47	45	39	33	29	33	46	46	42
State	14	9	15	10	10	10	17	10	16	12	11	13
Local	334	331	331	340	356	319	91	172	370	389	377	386
<b>TOTAL</b>	<b>466</b>	<b>462</b>	<b>461</b>	<b>340</b>	<b>356</b>	<b>319</b>	<b>249</b>	<b>331</b>	<b>539</b>	<b>600</b>	<b>579</b>	<b>569</b>

\* Figures withheld to comply with disclosure regulations.

\*\* Scammon Bay area also includes Chevak and Hooper Bay.

Source: Alaska Department of Labor.

TABLE 287

COVERED INDUSTRY EMPLOYMENT  
SCAMMON BAY AREA\*\*  
1981

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	0	0	0	0	0	0	*	*	*
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	99	84	90	116	119	126	277	223	98	128	111	103
Finance, Insurance and Real Estate	0	0	0	0	0	0	0	0	0	0	0	0
Services	*	*	*	*	*	*	*	*	*	48	52	46
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	45	47	49	42	41	38	43	46	42			
State	16	15	14	18	12	19	15	17	16	17	14	16
Local	387	399	395	382	387	177	117	215	368	390	428	396
<u>TOTAL</u>	<u>580</u>	<u>577</u>	<u>581</u>	<u>591</u>	<u>593</u>	<u>395</u>	<u>464</u>	<u>515</u>	<u>572</u>	<u>625</u>	<u>650</u>	<u>607</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Scammon Bay area also includes Chevak and Hooper Bay.

Source: Alaska Department of Labor.

TABLE 288

COVERED INDUSTRY EMPLOYMENT  
SCAMMON BAY AREA\*\*  
1982

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	90	91	86	87	87	90	111	104	79	54	54	57
Finance, Insurance and Real Estate	0	0	0	0	0	0	0	0	0	0	0	0
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	44	42	41	41	42	35	16	17	19	20	17	15
State	14	17	15	14	17	14	14	20	14	15	13	15
Local	368	385	377	399	385	264	147	312	459	442	444	435
<u>TOTAL</u>	<u>562</u>	<u>579</u>	<u>561</u>	<u>588</u>	<u>577</u>	<u>448</u>	<u>290</u>	<u>486</u>	<u>611</u>	<u>540</u>	<u>562</u>	<u>561</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Scammon Bay area also includes Chevak and Hooper Bay.

Source: Alaska Department of Labor.

TABLE 289

COVERED INDUSTRY EMPLOYMENT  
SCAMMON BAY AREA\*\*  
1983

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	0	0	0	0	0	0	0	0	0	0	0	0
Transportation, Communication and Public Utilities	0	0	0	0	0	0	0	0	0	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	50	52	62	46	50	56	52	56	56	57	57	61
Finance, Insurance and Real Estate	0	0	0	0	0	0	0	0	0	0	0	0
Services	*	*	*	*	*	*	*	*	*	55	50	54
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	15	14	19	17	21	22	25	21	21	21	22	21
State	15	19	17	14	18	21	16	19	23	13	14	16
Local	448	458	440	460	457	130	140	356	483	497	478	434
<u>TOTAL</u>	<u>531</u>	<u>546</u>	<u>541</u>	<u>540</u>	<u>550</u>	<u>233</u>	<u>242</u>	<u>469</u>	<u>631</u>	<u>651</u>	<u>629</u>	<u>591</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Scammon Bay area also includes Chevak and Hooper Bay.

Source: Alaska Department of Labor.

TABLE 290

COVERED INDUSTRY EMPLOYMENT  
SCAMMON BAY AREA\*\*  
1984

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	0	0	0	0	0	0	0	0	0	0	0	0
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	65	62	64	58	63	69	63	70	65	70	64	65
Finance, Insurance and Real Estate	0	0	0	0	0	0	0	0	0	0	0	0
Services	58	63	56	15	12	14	8	13	10	8	11	10
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	14	15	20	21	22	24	21	22	23	20	19	20
State	13	13	16	16	14	36	32	31	29	17	19	15
Local	456	478	492	533	526	246	225	420	598	552	509	497
<b>TOTAL</b>	<b>611</b>	<b>635</b>	<b>654</b>	<b>649</b>	<b>647</b>	<b>405</b>	<b>356</b>	<b>569</b>	<b>733</b>	<b>673</b>	<b>629</b>	<b>612</b>

\* Figures withheld to comply with disclosure regulations.

\*\* Scammon Bay area also includes Chevak and Hooper Bay.

Source: Alaska Department of Labor.

TABLE 291

COVERED INDUSTRY EMPLOYMENT  
SCAMMON BAY AREA\*\*  
1985

Industry Classification	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	0	0	0	0	0	0	0	0	0	0	0	0
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	78	76	72	83	89	85	66	74	68	67	68	61
Finance, Insurance and Real Estate	0	0	0	0	0	0	0	0	0	0	0	0
Services	*	*	*	*	*	*	9	9	8	8	8	8
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	23	22	22	20	21	20	16	19	20	23	22	21
State	17	16	21	12	13	30	31	40	35	25	29	16
Local	516	543	562	538	517	220	205	371	542	622	585	562
<b>TOTAL</b>	<b>647</b>	<b>669</b>	<b>689</b>	<b>674</b>	<b>650</b>	<b>367</b>	<b>331</b>	<b>515</b>	<b>675</b>	<b>747</b>	<b>714</b>	<b>668</b>

\* Figures withheld to comply with disclosure regulations.

\*\* Scammon Bay area also includes Chevak and Hooper Bay.

Source: Alaska Department of Labor.

TABLE 292

COVERED INDUSTRY EMPLOYMENT  
SCAMMON BAY AREA\*\*  
1986

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	0	0	0	0	0	0	*	*	*	*	*	*
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	58	59	48	75	75	66	67	76	68	71	72	71
Finance, Insurance and Real Estate	0	0	0	0	0	0	0	0	0	0	0	0
Services	22	20	23	25	24	13	10	9	13	18	19	21
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	23	23	23	23	23	24	21	22	22	19	18	18
State	15	14	20	15	16	30	36	37	24	17	11	10
Local	591	608	583	617	593	267	212	409	546	567	555	561
<b>TOTAL</b>	<b>709</b>	<b>724</b>	<b>697</b>	<b>755</b>	<b>731</b>	<b>402</b>	<b>349</b>	<b>553</b>	<b>678</b>	<b>727</b>	<b>698</b>	<b>689</b>

\* Figures withheld to comply with disclosure regulations.

\*\* Scammon Bay area also includes Chevak and Hooper Bay.

Source: Alaska Department of Labor.

## ANIAK

### A. PAST POPULATION TRENDS

Aniak is located below the confluence of the Aniak and Kuskokwim Rivers, about 90 miles upriver from Bethel. Details on the community's early history are sketchy. Oswalt (1980) is the standard source of information about the village's origins and its post-contact development. Aniak was reportedly the site of a large pre-historic Eskimo village which was abandoned before the Russians first explored the Kuskokwim drainage in the 1830s.

Oswalt summarized the modern demographic history of the entire Kuskokwim River drainage (defined as extending from the Kuskokwim's headwaters above McGrath and Nikolai to the mouth of the Johnson River just below Bethel), of which the Aniak or Middle Kuskokwim sub-region (defined as extending from Lower Kalskag upriver to Stony River and Lime Village) is a minor part, in the following terms:

The earliest Kuskokwim population estimate is "up to seven thousand inhabitants" in the 1790s (Davydov, 1977,201), and there were reportedly "not less than 7,000 souls" in 1830 (Wrangell, 1970, 17). The figure of 7,000 was challenged by Lavrentiy A. Zagoskin (1967, 308), who thought it inordinately high. Zagoskin did not visit any settlements farther down the river than "Old" Kalskag, however, and he offered no alternative estimate for the aboriginal population. A reasonable estimate of the inhabitant number for the Kuskokwim drainage in early historic times is perhaps 4,000.

Population estimates for widely dispersed villages and census reports for the Russian era are uncommon. The primary source for population figures is the United States decimal censuses. The following numbers summarize the census report and are supplemented by other reliable counts or estimates from



contemporary observers. For any particular span either an average for the period or the highest reliable figure is accepted.

1880-89	2,743
1890-99	1,014
1900-09	597
1910-19	514
1920-29	938
1930-39	2,089
1940-49	1,143
1950-59	2,714
1960-69	4,084
1970-79	5,937

The 1880-89 figure seems reliable, and there is no reasonable ground for questioning the accuracy of the 1890-99 figure, even though the population decline of about 1,700 from the previous decade cannot be fully explained. There is no evidence of major emigration, and thus we must assume that the drop resulted from exotic diseases. Moravian mission accounts for 1890-00 include mention of numerous epidemics and a considerable number of deaths, but the frequency and intensity of these epidemics seems insufficient to explain a drop of this magnitude. There clearly was a dramatic population decline following the epidemics of 1900 and 1901. The figures for 1910-19 are again incomplete, but it seems apparent that the number of persons living along the river reached its lowest historic level between 1900 and 1920. A steady rise has occurred since 1920; the 1940-49 figures are quite clearly incomplete. How much of the increase since 1920 can be attributed to an influx of outsiders, whites, Eskimos and Indians alike, cannot be determined from these data.

It is striking that by the late 1970s, of the 5,937 population total, 3,377 were living in Aniak, Bethel and McGrath #2. For the communities from Lower Kalskag to Stony River in 1978 the non-native total was 211, and the "native" population was 847. This suggests that locally-born whites and white migrants to the area have begun to constitute a significant proportion of the total population. Oswalt, 1980, pp. 17-18.

Oswalt's account underlines the historic point that, despite the modest influx of Euro-American newcomers, human occupancy in the Kuskokwim River region was unusually scanty from the 1890s until the post-War population revival, the traditional occupants having been reduced by disease to well below pre-contact levels.

Rumors of gold brought prospectors to the Middle Kuskokwim River sub-region in the early 1900s and to the Aniak River area about 1912. At that time, the settlement at Aniak consisted only of a few cabins. A post office was established in 1914, but for the next dozen years or so, Aniak comprised little more than a homestead, bunkhouse and store operated by a trader named Johnson. By the mid-1930s, the settlement began to grow. A second store, partly owned by the first Eskimo family to resettle at Aniak, was established in 1936, a territorial school opened in the same year and construction of a paved airfield was begun in 1938). At the time of Aniak's first appearance in the U.S. Census in 1939, its reported population had grown to 122 persons.

As an incipient sub-regional center, Aniak's subsequent prosperity and growth was tied to the economic and demographic vitality of its hinterland. Some of the sub-region's once important mining settlements (Napaimute and Georgetown, both now virtually abandoned, and Red Devil, now greatly reduced in size from its peak population) flourished and declined with the fortunes of gold and mercury mining activity. Other surviving communities (Crooked Creek and Sleetmute), once important as staging areas for prospecting and mining, reverted to a mainly subsistence/transfer payment economy. None of the sub-region's hinterland communities have developed a private economic base. Only Aniak, as government and commercial center for the sub-region, has developed a core of public and support sector employment.

As late as 1939, the population of the Middle Kuskokwim sub-region was small and scattered, numbering about 800 persons. That year's U.S. Census enumerated twelve villages with an average population of 49 persons; plus another 204 persons at isolated sites scattered throughout the sub-region. Even so, Aniak with only 122 residents had already taken a commanding position as the most populous community of this thinly settled sub-region. Over the next four and a half decades, Aniak became steadily more dominant, although the extent of its growth and dominance were limited by its hinterland's still modest population and economic base and Aniak's own limitations as a sub-regional rather than fully fledged regional center.

Population data show little growth at Aniak during the fifteen years after the 1939 Census, followed by a period of rapid growth in the late 1950s. The community's population more than doubled from 142 persons in 1950 to 308 by 1960. Aniak's superior airport facilities proved the key to town growth as government programs and services increasingly penetrated the region. Construction of a White Alice radar-relay facility in 1956 was a pivotal event. According to Oswalt, this project generated job opportunities which drew residents to Aniak from nearby villages, especially from Upper Kalskag and the now vacated village of Napaimute.

During the 1960s decade, if Census figures are accurate, Aniak's population ebbed, falling to 205 persons at the time of the 1970 Census. (We have not found an explanation for the population decline reported by the Census, as it is not corroborated by school enrollment trends). Then, in the next decade, Aniak's potential as an air transportation and government center

TABLE 293

POPULATION OF ANIAK SUB-REGION VILLAGES  
1939 - 1975

	<u>1939</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1985</u>
<u>Present Villages</u>						
Aniak	122	142	308	205	341	481
Chuathbaluk	--	--	--	94	105	124
Crooked Creek	48	43	92	59	108	126
Lime Village	38	29	32	25	48	48
Lower Kalskag	70 <sup>1</sup>	88	122	183	246	281
Red Devil	--	--	152	81	39	42
Sleetmute	86	120	122	109	107	130
Stony River	--	--	--	74	62	92
Upper Kalskag	76	139	147	122	129	154
<u>Abandoned Villages</u>						
Kashegaluk	10					
Krella	17					
Napaimiut	75	44				
Nose	14					
Nugammute	23					
Parks	11					
Balance of Region	204	170	n/a	185 <sup>2</sup>	90	64
<u>TOTAL</u>	<u>794</u>	<u>775</u>	<u>n/a</u>	<u>1,137<sup>2</sup></u>	<u>1,301</u>	<u>1,557</u>
Aniak as % of Region	15.4%	18.3%	n/a	18.0%	26.2%	30.9%

<sup>1</sup> Recorded in 1939 Census as Old Kalskag.

<sup>2</sup> Estimated by proration from Kuskokwim Census Division total population.

Sources: U.S. Census Bureau (1939-1980).  
Alaska Department of Labor (1985).

TABLE 294  
POPULATION ESTIMATES  
ANIAK  
1939 - 1987

<u>Year</u>	<u>Census</u>	<u>Other Estimates</u>	<u>Sources of Other Estimates</u>
1939	122		
-----			
1950	142		
1958		244	Alaska Rural Development Board
-----			
1960	308		
1967		240	Federal Field Committee - 185 Native; 55 non-Native
1968		125	Alaska Area Native Health Service; apparent undercount
1969		210	Federal Field Committee - 160 Native; 50 non-Native
-----			
1970	205		
1975		276	U.S. Census Bureau
1976		302	U.S. Census Bureau
-----			
1980	341		
1980	340*	355	Dept. Community/Regional Affairs
1981	338*	338	Dept. Community/Regional Affairs
1982		391	U.S. Census Bureau (July)
1982	351*	351	Dept. Community/Regional Affairs
1983	458*	459	Dept. Community/Regional Affairs
1984	476*	483	Dept. Community/Regional Affairs
1985	481*	475	Dept. Community/Regional Affairs
1986		518	Dept. Community/Regional Affairs
1987		518	Dept. Community/Regional Affairs

\* Alaska Department of Labor estimates of July 1 population derived using U.S. Census methodology. Where these figures are the same as those cited by the Department of Community and Regional Affairs, the Department of Labor accepted local censuses or estimates.

Sources: U.S. Census (1939 - 1980 figures).  
Alaska Department of Labor (1980 - 1985 figures).

TABLE 295  
 POPULATION TRENDS  
 ANIAK  
1939 - 1985

<u>Year</u>	<u>Population</u>	<u>Percent Change</u>	
		<u>Decennial</u>	<u>Annual</u>
1939	122		
1950	142	16.4	
1960	308	116.9	
1970	205	-33.4	
1980	341	66.3	
1981	338		-0.9
1982	351		3.8
1983	458		30.5
1984	476		3.9
1985	481		1.1

Sources: U.S. Census (1939 - 1980 figures).  
 Alaska Department of Labor (1981 - 1985 figures).

TABLE 296

FINAL ENROLLMENT BY GRADE  
 ANIAK  
1956/57 - 1986/87

<u>Year</u>	<u>Kind</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>Ung/ Spec</u>	<u>Tot</u>
1956/57		18	9	9	8	6	11	3	5						69
1957/58		12	10	10	7	6	6	4	7						62
1958/59		13	8	12	8	6	6	6	6						65
1959/60		15	12	8	9	8	4	5	7	6	2				76
1960/61		5	11	5	7	10	8	3	3	3					55
1961/62		6	5	10	1	9	5	3	2						41
1962/63		12	11	11	11	7	7	5	2						66
1963/64		13	4	8	8	7	6	2	4						52
1964/65		15	9	10	10	7	10	5	6						72
1965/66		16	9	9	7	10	7	6	3						67
1966/67		20	12	9	10	7	11	6	5						80
1967/68		12	10	8	7	7	6	5	6						61
1968/69		11	12	11	11	7	6	7	5						70
1969/70		10	10	10	10	10	7	7	8						72
1970/71		17	8	9	5	10	4	2	3						58
1971/72		9	9	7	8	9	7	5	7						61
1972/73		7	7	9	8	9	5	9	7	4	1	1			67
1973/74		9	6	10	11	8	11	11	8	6	2		1		83
1974/75		7	7	7	10	13	10	9	11	10	9	4	5		102
1975/76		10	5	9	6	8	12	9	11	17	5	6	4		102
1976/77															
1977/78															
1978/79	5	2	6	9	3	4	5	8	9	10	8	8	4		81
1979/80	12	7	2	9	11	5	3	7	8	8	13	7	7		99
1980/81	10	12	5	1	4	9	5	3	6	7	10	8	8		88
1981/82	5	11	10	5	2	4	9	5	5	5	6	9	11		87
1982/83															
1983/84															
1984/85															
1985/86	17	17	13	14	6	10	7	6	2	11	11	5	4		123
1986/87	19	15	17	14	14	9	7	7	9	3	11	12	6		143

Source: Alaska Department of Education, Educational Finance and Support Services.

TABLE 297  
 PERMANENT FUND DIVIDEND RECIPIENTS  
 ANIAK  
 1982 - 1985

<u>Age Group</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
0 - 4		67	71	79
5 - 9			58	64
10 - 14			37	39
15 - 19			28	34
20 - 24			56	48
25 - 29			53	67
30 - 34			54	58
35 - 39			35	43
40 - 44			25	26
45 - 49			22	24
50 - 54			11	13
55 - 59			17	13
60 - 64			9	11
65 - 69			7	9
70 - 74			5	6
75 & over			1	5
Unknown	1	4	0	1
<u>TOTAL</u>	<u>489</u>	<u>479</u>	<u>489</u>	<u>540</u>

Note: 1982 age breakdown: 0-17 - 174; 18-27 - 110; 28-37 - 99; 38-47 - 42; 48-57 - 28; 58-67 - 24; 68-77 - 10; 78+ - 1; Unknown - 1; Total - 489.

1983 age breakdown: 0-4 - 67; 5-17 - 109; 18-27 - 101; 28-37 - 89; 38-47 - 47; 48-57 - 29; 58-67 - 24; 68-77 - 7; 78+ - 2; Unknown - 4; Total - 479.

Source: Alaska Department of Revenue.



for the Middle Kuskokwim River sub-region began to materialize in full force. The 1980 Census put Aniak's population at 341 persons. As a government, commercial and distribution center, Aniak continued to thrive during the early 1980s period of heavy public expenditures. The Department of Labor estimated Aniak's 1985 population at 481 persons, while the Department of Community and Regional Affairs' 1987 official population figure was 518 persons. In this regard, Aniak's count of Permanent Fund dividend recipients (1982 - 489 persons; 1983 - 479; 1984 - 489; 1985-540) confirm substantial post-1980 population growth, with a sharp jump in population around 1985.

Aniak's increasing dominance of its sub-region is evident in its steadily increasing share of the sub-regional population which rose from 18 percent in 1970, to 26 percent in 1980 to 31 percent by 1985.

#### B. POPULATION COMPOSITION

During the mining era, the Aniak sub-region's non-Native population was substantial but transient. By the 1970 Census, the first for which detailed data on the racial composition of this sub-region are available, the area's mining industry had foundered and most non-Native miners had departed. At Aniak and all other communities in the sub-region (except for Red Devil) Alaska Natives were in the majority, accounting for about 83 percent of the population of both Aniak and the sub-region as a whole.

ANCSA enrollment data, however, suggest that migration to and through Aniak by residents of nearby villages was relatively high for some years prior to 1974. According to these data, 42 percent of the Alaska Natives then living in Aniak were enrolled to another village corporation. This was by far the highest proportion among the twenty-one study communities (Bethel was second highest at 31 percent) which averaged 16 percent of Native residents enrolled elsewhere. Aniak also had a relatively high proportion (29 percent) of locally enrolled Natives living elsewhere. Together, these figures suggest intensive intra-regional migration to and through Aniak by Native residents of surrounding villages for some years prior to 1974.

Migration data from the 1980 Census are consistent with a relatively high rate of population immigration to Aniak, particularly among non-Native residents. At the time of the 1980 Census, a substantial share (16 percent) of Aniak's residents had lived outside the region and elsewhere in Alaska five years previously, while a further 14 percent had lived in another state. Presumably, most of these newcomers to Aniak from outside the region or State were non-Natives.

The racial composition of Aniak and, to a lesser extent, the sub-region shifted during the spurt of rapid growth which took place after 1970. Between 1970 and 1980, the sub-region as a whole grew by an estimated 14 percent, but almost all of that growth took place in Aniak and in the non-Native share of population. (Note that the 1970 figures for total population and race of sub-region residents were derived, in part, by proration of Census data). Outside Aniak, the total population and racial

make-up of the sub-region were virtually static, suggesting that some net emigration of Alaska Natives helped offset natural population increase.

Over the 1970 to 1980 decade, Aniak's Native population grew modestly by 28 percent from 170 to 218 persons, but its non-Native population increased by 251 percent from 35 to 123 persons. By 1980, non-Natives made up 36 percent of Aniak's total population compared with 17 percent in 1970. Among the twenty-one communities covered in this study, only Unalaska experienced a greater shift in racial composition during the 1970-1980 decade. These figures indicate strongly that Aniak's growth stemmed almost wholly from immigration of non-Natives. The modest growth of the Native population can largely be accounted for by natural increase, with perhaps a slight net gain from immigration.

Alaska Department of Labor population estimates show that Aniak grew substantially after 1980, increasing from 341 persons (1980 Census) to an estimated 481 persons in 1985. During the same period, the remainder of the sub-region grew from 960 to 1,076 persons. A later City of Aniak census count, accepted by the Alaska Department of Community and Regional Affairs, placed the town's population at 518 persons in 1986.

Unfortunately, there are no available data on the racial composition of recent population change. However, these growth figures support an inference that Aniak's growth continued to derive mainly from an influx of non-Natives from outside the sub-region and only to a lesser extent on intra-regional migration.

TABLE 298  
POPULATION COMPOSITION, BY RACE  
CITY OF ANIAK  
1970 AND 1980

	<u>1970</u>		<u>1980</u>		<u>Percent Change 1970 - 1980</u>
	Number	Percent	Number	Percent	
Alaska Native	170	82.9%	218	63.9%	+28.2%
Non-Native	35	17.1	123	36.1	+251.4
<u>TOTAL</u>	<u>205</u>	<u>100.0</u>	<u>341</u>	<u>100.0</u>	<u>+66.3</u>

Source: U.S. Bureau of the Census.

TABLE 299  
POPULATION COMPOSITION, BY RACE  
ANIAK SUB-REGION  
1970 AND 1980

	<u>1970</u>		<u>1980</u>		<u>Percent Change 1970 - 1980</u>
	Number <sup>1</sup>	Percent	Number	Percent	
Alaska Native	947	83.3%	1,009	77.6%	+6.5%
Non-Native	190	16.7	292	22.4	+53.7
<u>TOTAL</u>	<u>1,137<sup>1</sup></u>	<u>100.0</u>	<u>1,301</u>	<u>100.0</u>	<u>+14.4</u>

<sup>1</sup> The 1970 population for the sub-region was estimated by proration from Kuskokwim Census Division total population. The estimated 185 residents (16.3 percent of total) dwelling outside enumerated villages, whose race is not reported, were prorated in proportion to residents of known race.

Source: U.S. Bureau of the Census.

A longitudinal comparison of age cohorts for Aniak's 1980 and 1985 population indicates that the town's post-1980 growth spurt was due partly to immigration and partly to rising birth rates and natural increase. Matching 1980 Census data against 1985 Alaska Department of Revenue Permanent Fund recipient data, it appears that all age 5-year cohorts under 50 years of age increased in size between 1980 and 1985 but not all age cohorts grew apace. The most marked increase was in the (1980) 25-29 year age group, which grew by 81 percent compared with an overall increase of 58 percent. Although most other age cohorts increased at a lesser rate, the pervasive increases can only be explained by substantial immigration at all age levels. Unfortunately, the Alaska Department of Revenue data do not identify the sex of dividend recipients, so it is not possible to draw inferences about differential migration patterns according to sex.

The Department of Revenue 1985 data also counted 79 Aniak residents under five years of age, an 84 percent increase over that age group's size (43 persons) as recorded by the 1980 Census. The rate of increase in the number of children under 5 years of age was substantially in excess (84 percent compared to 58 percent) of the town's 1980 to 1985 overall growth rate, suggesting that rising birth rates account for part of the community's recent growth.

Finally, the Aniak population's median age changed little between 1980 (24.1 years) and 1985 (25.4 years), again suggesting relatively balanced growth throughout the population's age structure, rather than growth skewed

TABLE 300  
AGE COHORT COMPARISON  
CITY OF ANIAK  
1980 AND 1985

<u>1980 Age Cohort</u>	<u>Size of Age Cohort 1980:1985</u>	<u>Percent Change 1980 to 1985</u>
Under 5 years	43:64	48.8
5 - 9	27:39	44.4
10 - 14	25:34	36.0
15 - 19	40:48	20.0
20 - 24	45:67	34.9
25 - 29	32:58	81.3
30 - 34	29:43	48.3
35 - 39	24:26	8.3
40 - 44	14:24	71.4
45 - 49	11:13	18.2
50 - 54	15:13	-13.3
55 - 59	17:11	-35.3
60 - 64	10: 9	-10.0
65 - 69	4: 6	50.0
70 and over	5: 5	0.0
Born after 1980	:79	
Age unknown	: 1	
<u>TOTAL</u>	<u>341:540</u>	<u>58.4</u>

Median Age: 1980 - 24.1 years  
1985 - 25.4 years

Sources: U.S. Bureau of the Census (1980).  
Alaska Department of Revenue (1985).

TABLE 301  
POPULATION COMPOSITION  
ANIAK  
1970

<u>Age Range</u>	<u>Alaska Native</u>			<u>Non-Native</u>		
	Male	Female	Total	Male	Female	Total
Under 5 years	12	10	22	4	1	5
5 - 14	29	25	54	4	9	13
15 - 24	12	9	21	1	2	3
25 - 34	12	11	23	2	2	4
35 - 44	13	10	23	2	2	4
45 - 54	4	4	8	1	1	2
55 - 64	8	8	8	2	0	2
65 and over	2	1	3	2	0	2
<u>TOTAL</u>	<u>92</u>	<u>78</u>	<u>170</u>	<u>18</u>	<u>17</u>	<u>35</u>
<u>Median Age</u>	<u>19.6</u>	<u>19.4</u>	<u>19.5</u>			

<u>Age Range</u>	<u>Total</u>		
	Male	Female	Total
Under 5 years	16	11	27
5 - 9	18	17	35
10 - 14	15	17	32
15 - 19	3	7	10
20 - 24	10	4	14
25 - 29	2	5	7
30 - 34	12	8	20
35 - 39	9	11	20
40 - 44	6	1	7
45 - 49	5	3	8
50 - 54	0	2	2
55 - 59	6	0	6
60 - 64	4	8	12
65 and over	4	1	5
<u>TOTAL</u>	<u>110</u>	<u>95</u>	<u>205</u>
<u>Median Age</u>	<u>21.8</u>	<u>15.2</u>	<u>18.5</u>

Note: Native is defined as Aleut, Eskimo, Indian and others, excluding White and Negro.

Source: U.S. Census.





by selective migration according to age group or by radical changes in birth or death rates.

However, according to the 1980 Census, Aniak then exhibited an extreme case of rural communities' typical imbalance in the number of single males compared versus single females 15 years of age and older. For Aniak, the ratio of single males aged 15 or more (63) to single females (28) was 2.25:1, highest among all study communities except Unalaska. Reference to 1980 Census data by age and sex and race indicates that this gross imbalance is due mainly to an excess of immigrant adult white males and, to a lesser degree, to an excess of adult Native males in a Native population depleted by selective emigration of young adult Native females.

Between 1970 and 1980, the age and sex structure of Aniak's Alaska Native population was comparatively stable. Age group comparisons indicate little change attributable to net migration, but some natural increase due to rising birth rates. The median age for Native males and females rose slightly, but less than in most Native communities. On the other hand, the 1980 median ages for white males, especially, and females was significantly higher than for Natives, reflecting a population distribution distorted by immigration of adult white males. Again, this discrepancy is symptomatic of a sub-population whose dynamics are governed more by migration trends than natural increase.

TABLE 303

MARITAL STATUS, BY SEX  
PERSONS 15 YEARS AND OLDER  
ANIAK  
1980

<u>Marital Status</u>	<u>Male</u>	<u>Female</u>
Single	63	28
Married	61	59
Separated	2	2
Widowed	4	9
Divorced	12	6
<u>TOTAL</u>	<u>142</u>	<u>104</u>

Source: 1980 Census.

TABLE 304

HOUSEHOLD TYPE AND RELATIONSHIP  
ANIAK  
1980

<u>Household Type and Relationship</u>	<u>Number</u>	<u>Percent</u>
In Family Household		
Householder	71	20.8%
Spouse	58	17.0
Other Relatives	154	45.2
Non-Relative	5	1.5
Sub-Total	288	84.5
In Non-Family Household		
Male Householder	34	10.0
Female Householder	6	1.7
Non-Relative	13	3.8
Sub-Total	53	15.5
In Group Quarters		
Inmate of Institution		
Other		
Sub-Total		
<u>TOTAL</u>	<u>341</u>	<u>100.0%</u>

Source: 1980 Census.

### C. TRENDS IN WAGE AND SALARY EMPLOYMENT

Published sources of wage and salary employment data for Aniak are limited mainly to the Alaska Department of Labor's covered employment data series. The Department's Aniak sub-area unfortunately groups employment data for the nearby settlements of Chuathbaluk and Lower and Upper Kalskag together with that of Aniak. Further, there are numerous data omissions due to disclosure regulations and other reasons. Thus, these data do not give a full and accurate count of the number of employed persons in Aniak.

Notwithstanding these qualifications, because Aniak dominates this labor area's wage economy, the Alaska Department of Labor figures probably yield a generally accurate picture of local employment trends. For the same reason, the structure of employment depicted in the Department's figures may fairly closely resemble Aniak's employment structure, with one very crucial exception. The Kuspuk School District, which operates schools in eight communities of the Aniak sub-region, is headquartered in Aniak. Examination of the employment data suggests that all school district employment is imputed to Aniak, resulting in a unrealistically high count of local government employment at Aniak.

Covered employment in the Aniak sub-area grew by about 22 percent between 1980 and 1985 from 242 to 295 jobs. By comparison, the Department of Labor's 1985 population estimate for Aniak (481 persons) reflected a 41 percent rise over 1980, while its estimate for the four village sub-area over the same period reflected about a 27 percent increase. Acknowledging

the lack of data on the local distribution of employment within the sub-area, it nevertheless appears that any improvements in Aniak's local employment conditions may have been more than offset by population growth.

The Department of Labor employment data series shows a significant shift in the Aniak sub-area's employment structure between 1980 and 1986. Even in 1980, local government was the dominant employer, accounting for 56 percent of covered employment. This proportion grew steadily in the following years, rising to fully 72 percent of the sub-area's covered employment by 1986. During the same period, the absolute number of jobs outside local government (that is, private sector plus federal and State government) actually dropped from 106 jobs in 1980 to 81 in 1986. Apparently, the general improvement in local public sector employment opportunities during the first half of the 1980s was not matched by a broadening of the private sector employment base. To the contrary, the Department of Labor data suggest a substantial deterioration in employment conditions outside the local government sector.

These trends may foretell a serious economic crunch for Aniak as State and federal government cutbacks in transfers to local governments shrink the revenues which support local government services and programs.

TABLE 305  
 SELECTED LABOR FORCE DATA  
 ANIAK  
 1980

LABOR FORCE STATUS, PERSONS OVER 16 YEARS, 1980

<u>Labor Force Status</u>	<u>Alaska Natives</u>		<u>All Races</u>		
	Male	Female	Male	Female	Total
Armed Forces	0	0	0	0	0
Civilian Employed	29	25	75	56	131
Civilian Unemployed	3	3	6	5	11
Not in Labor Force	54	29	68	37	105
Labor Force Participation Rate	37.0%	49.0%	54.0%	62.0%	57.0%
Unemployment Rate: 1980	9.4%	10.7%	7.4%	8.2%	7.7%
1970	*	*	100.0%	0%	73.7%

EMPLOYMENT BY INDUSTRY, 1970 AND 1980

<u>Industry</u>	<u>1970</u>	<u>1980</u>
Construction	0	5
Manufacturing	0	4
Transportation	0	13
Communications	0	7
Trade	0	14
Finance, Insurance & Real Estate	0	0
Services	0	65
Public Administration	0	20
Other	10	3
<u>TOTAL</u>	<u>10</u>	<u>131</u>

\* Data missing or suppressed.

Source: U.S. Census, 1980.

TABLE 306  
 AVERAGE MONTHLY EMPLOYMENT  
 ANIAK SUB-AREA  
 1985 - 1986

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	<u>Average Monthly Employment</u>	<u>Percent Dif- ference from Annual Average</u>
January	293	+0.7%
February	300	+3.1
March	307	+5.5
April	323	+11.0
May	302	+3.8
June	253	-13.1
July	194	-33.3
August	265	-8.9
September	318	+9.3
October	328	+12.7
November	297	+2.1
December	314	+7.9
Annual Average	291	

Source: Alaska Department of Labor.

TABLE 307  
COVERED INDUSTRY EMPLOYMENT  
ANIAK AREA\*\*  
1980 - 1986

<u>Industry Classification</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
Mining	*	0	0	0	0	0	0
Construction	*	0	0	0	*	*	*
Manufacturing	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	23	23	19	22	33 <sup>a</sup>	19	13
Trade	11	12	11	14	20	21	20
Finance, Insurance and Real Estate	*	*	*	*	*	*	*
Services	*	*	*	*	35 <sup>a</sup>	38 <sup>a</sup>	37
Government							
Federal	30	33	20	15	12	10	8
State	2	1	3	2	2 <sup>a</sup>	1 <sup>a</sup>	*
Local	136	150	155	183	180	196	206
Miscellaneous	0	*	*	*	*	*	*
<u>TOTAL</u>	<u>242<sup>a</sup></u>	<u>256</u>	<u>239</u>	<u>277</u>	<u>*</u>	<u>295</u>	<u>287</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Aniak area also includes Chuathbaluk, Lower Kalskag, Napaimiut and Upper Kalskag.

<sup>a</sup> Prorated from nine months of data.

Source: Alaska Department of Labor.

TABLE 308

COVERED INDUSTRY EMPLOYMENT  
ANIAK AREA\*\*  
1980

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing			1	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	16	16	18	19	21	34	26	24	26	25	26	28
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	16	14	12	7	11	13	11	12	10	9	8	9
Finance, Insurance and Real Estate	0	0	0	0	0	0	0	0	0	*	*	*
Services	*	*	*	*	*	*	33	32	34	*	*	*
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	32	33	31	28	28	24	23	23	26	37	37	34
State	3	3	3	3	3	1	1	1	1	2	2	3
Local	118	130	127	145	138	145	68	69	169	172	172	175
<u>TOTAL</u>	—	—	—	229	235	252	176	171	271	283	283	276

\* Figures withheld to comply with disclosure regulations.

\*\* Aniak area also includes Chuathbaluk, Lower Kalskag, Lower Kalskag, Napaimiut and Upper Kalskag.

Source: Alaska Department of Labor.



TABLE 309

COVERED INDUSTRY EMPLOYMENT  
ANIAK AREA\*\*  
1981

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	26	25	30	20	20	22	23	27	33	19	18	17
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	11	12	13	11	10	10	11	12	12	11	14	16
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	0	0	0	*	*	*	*	*	*	*	*	*
Government												
Federal	35	36	35	35	35	31	34	33	31	29	29	28
State	2	2	2	2	2	1	0	0	1	0	0	1
Local	182	185	201	199	231	234	30	23	89	90	137	194
<u>TOTAL</u>	<u>289</u>	<u>292</u>	<u>314</u>	<u>306</u>	<u>336</u>	<u>345</u>	<u>136</u>	<u>149</u>	<u>218</u>	<u>193</u>	<u>221</u>	<u>274</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Aniak area also includes Chuathbaluk, Lower Kalskag, Napaimiut and Upper Kalskag.

Source: Alaska Department of Labor.

TABLE 310

COVERED INDUSTRY EMPLOYMENT  
ANIAK AREA\*\*  
1982

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	20	19	18	20	18	18	24	23	16	24	17	16
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	10	10	10	10	9	11	9	11	12	14	12	13
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	32	30	34
Miscellaneous	*	*	*	*	*	*	*	*	*	0	0	0
Government												
Federal	28	28	26	27	28	20	10	14	13	15	15	16
State	1	1	2	2	2	2	2	2	4	4	5	4
Local	83	142	195	201	203	226	59	64	125	198	177	189
<u>TOTAL</u>	—	—	—	<u>286</u>	<u>284</u>	<u>301</u>	<u>125</u>	<u>134</u>	<u>202</u>	<u>290</u>	<u>258</u>	<u>274</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Aniak area also includes Chuathbaluk, Lower Kalskag, Napaimiut and Upper Kalskag.

Source: Alaska Department of Labor.

TABLE 311

COVERED INDUSTRY EMPLOYMENT  
ANIAK AREA\*\*  
1983

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	17	15	15	18	18	20	30	29	24	23	25	27
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	12	12	12	14	14	15	13	15	12	14	17	20
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	34	32	63	*	*	*
Miscellaneous	0	0	0	0	0	0	0	0	0	*	*	*
Government												
Federal	14	16	17	16	14	15	15	15	15	15	15	15
State	4	3	3	3	2	1	1	0	1	1	2	2
Local	188	183	174	174	172	182	155	182	193	193	199	201
<u>TOTAL</u>	<u>252</u>	<u>257</u>	<u>249</u>	<u>174</u>	<u>172</u>	<u>182</u>	<u>253</u>	<u>278</u>	<u>314</u>	<u>287</u>	<u>292</u>	<u>300</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Aniak area also includes Chuathbaluk, Lower Kalskag, Napaimiut and Upper Kalskag.

Source: Alaska Department of Labor.

TABLE 312

COVERED INDUSTRY EMPLOYMENT  
ANIAK AREA\*\*  
1984

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	*	*	*	*	*	*
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	34	29	40	34	33	34	30	35	25	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	17	17	17	27	24	27	19	19	20	19	20	19
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	19	31	40	*	*	*	25	41	41	38	42	36
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	14	14	14	14	14	16	10	9	8	10	10	10
State	0	2	2	2	2	0				3	3	3
Local	179	179	190	190	195	137	116	157	204	212	207	190
<u>TOTAL</u>	<u>264</u>	<u>274</u>	<u>307</u>	—	—	—	—	—	—	—	—	—

\* Figures withheld to comply with disclosure regulations.

\*\* Aniak area also includes Chuathbaluk, Lower Kalskag, Napaimiut and Upper Kalskag.

Source: Alaska Department of Labor.

TABLE 313

COVERED INDUSTRY EMPLOYMENT  
ANIAK AREA\*\*  
1985

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	17	16	17	18	17	18	27	26	24	19	13	10
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	25	22	22	21	23	22	19	19	20	19	21	21
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	25	39	50	48	43	34	31	29	40	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	7	7	7	11	11	12	12	11	11	12	12	12
State	2	1	2	2	1	0	2	1	0			
Local	210	189	201	206	195	155	107	210	225	219	219	218
<u>TOTAL</u>	<u>288</u>	<u>290</u>	<u>314</u>	<u>317</u>	<u>302</u>	<u>251</u>	<u>201</u>	<u>299</u>	<u>326</u>	<u>322</u>	<u>318</u>	<u>314</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Aniak area also includes Chuathbaluk, Lower Kalskag, Napaimiut and Upper Kalskag.

Source: Alaska Department of Labor.

TABLE 314

COVERED INDUSTRY EMPLOYMENT  
ANIAK AREA\*\*  
1986

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	13	15	13	11	10	12	11	12	14	13	13	17
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	20	19	21	20	18	20	21	25	20	21	19	21
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	36	44	40	41	42	39	26	29	31	42	35	38
Miscellaneous	*	*	*	0	0	0	*	*	*	*	*	*
Government												
Federal	7	9	9	9	9	9	9	9	8	7	7	6
State							0	0	0	0	0	0
Local	220	221	214	246	220	172	116	152	234	246	198	229
<u>TOTAL</u>	<u>299</u>	<u>310</u>	<u>299</u>	<u>330</u>	<u>303</u>	<u>256</u>	<u>186</u>	<u>230</u>	<u>311</u>	<u>334</u>	<u>276</u>	<u>314</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Aniak area also includes Chuathbaluk, Lower Kalskag, Napaimiut and Upper Kalskag.

Source: Alaska Department of Labor.



## DILLINGHAM

### A. PAST POPULATION TRENDS

Dillingham is located at the northern end of Nushagak Bay on its west bank, at the confluence of the Wood and Nushagak Rivers. Although the Dillingham area has a long history of settlement, the community owes its modern origins to development of the Bristol Bay commercial salmon fishery near the end of the nineteenth century. This industry, together with the 1918-1919 influenza epidemic and locational decisions by government agencies and others have been the major forces contributing to changes in the population dynamics of the Nushagak Bay and Nushagak River areas.

Throughout its recorded history, the Nushagak region has been occupied by Yupik speaking Eskimos. According to VanStone (1971), Yupik penetration of the Nushagak River system took place at some unknown time during the prehistoric period when people moved inland from the Bering Sea coast. VanStone identified two Eskimo sub-groups in this area: the Aglegmiut who lived around Nushagak Bay and the Kiatagmiut who occupied the Nushagak and the lower Mulchatna River areas and areas to the west. VanStone noted that although the territory of the Aglegmiut had an estimated population of 1,900 at the beginning of the historic period, probably no more than 500 persons lived around the shores of Nushagak Bay. The population of the Kiatagmiut at the time of contact was estimated to be about 400.



TABLE 315  
 POPULATION TRENDS  
 DILLINGHAM AND VICINITY  
 1890 - 1985

Year	Population			Percent Change	
	Dillingham	Kanakanak	Total	Decennial	Annual
1890	166	53	219		
1900	145	50*	195	-11.0	
1910	165	50*	215	10.3	
1920	182	36	218	1.4	
1929	85	177	262	20.2	
1939	278	113	391	49.2	
1950	577	54	631	61.4	
1960	424	**	800**	26.8	
1970			914***	14.2	
1980			1,563	71.0	
1981			1,670		6.8
1982			1,791		7.2
1983			1,896		5.9
1984			2,073		9.3
1985			2,141		3.3

\* Estimates by Rogers (1955) based upon history of cannery operations and other data.

\*\* No population for Kanakanak was recorded by the 1960 Census. The Alaska State Housing Authority (June 1971) estimated the population of the immediate Dillingham area at that time to be approximately 800.

\*\*\* Kanakanak and Wood River Village were included within Dillingham's corporate limits upon its incorporation in 1963.

Sources: U.S. Census (1890 - 1980 figures).  
 Rogers, 1955.  
 Alaska State Housing Authority, June 1971.  
 Alaska Department of Labor (1981 - 1985 figures).

TABLE 316  
 POPULATION ESTIMATES  
 DILLINGHAM  
 1890 - 1987

<u>Year</u>	<u>Census</u>	<u>Other Estimates</u>	<u>Sources of Other Estimates</u>
1890	219*		
1900	195*		
1910	215*		
1920	218*		
1929	262*		
1939	391*		
1950	631*		
1957		850	Ray, 1959
1960	800*		
1967		1,200	Bureau of Indian Affairs - includes 500 non-Natives
1967		1,200	Federal Field Committee - includes 500 non-Natives
1968		1,000	Alaska Area Native Health Service - includes 150 non- Natives
1969		1,000	Federal Field Committee - includes 150 non-Natives
1970	914	960	Alaska State Housing Authority (Oct. estimate)
1975		1,160	U.S. Census Bureau
1976		1,207	U.S. Census Bureau
1979		1,400	Policy Analysts, Inc.
1980	1,563	1,656	Dept. Community/Regional Aff.
1981	1,656**	1,670	Dept. Community/Regional Aff.
1982	1,791**	1,841	Dept. Community/Regional Aff.
1982		1,689	U.S. Census Bureau
1983	1,896**	1,896	Dept. Community/Regional Aff.
1984	2,073**	2,026	Dept. Community/Regional Aff.
1985	2,141**	2,100	Dept. Community/Regional Aff.
1986		2,153	Dept. Community/Regional Aff.
1987		2,153	Dept. Community/Regional Aff.

- 
- \* Estimates of total population of Dillingham vicinity developed by Rogers and others.
  - \*\* Alaska Department of Labor estimates derived using U.S. Census methodology. Where these figures are the same as Department of Community and Regional Affairs estimates, the Department of Labor accepted local censuses undertaken by the City of Dillingham.

Sources: U.S. Census (1880 - 1980 figures).  
Rogers, 1955.  
Alaska State Housing Authority, June 1971.  
Alaska Department of Labor (1981 - 1985 figures).

The first outsider to visit Bristol Bay was Captain Cook in 1778 who gave the bay its name but did not land there. Russian penetration into the Nushagak region reportedly dates back to the 1790s, first by Bocharov and subsequently by plunderers from a rival trading company. In 1818, a party of Russian-American Company employees was sent from Kodiak Island to explore the territory north of Bristol Bay. During these explorations, a trading post, Alexandrovski Redoubt, was established at the mouth of the Nushagak River. It was the first Company post north of the Alaska Peninsula and served as a base of operations for further exploration not only in Bristol Bay but also in the Lower Kuskokwim region where Kolmakovski Redoubt (near Aniak) was established in 1841.

VanStone (1984) notes that the most obvious change wrought by the Russians on the region's aboriginal inhabitants was the modification of traditional subsistence cycles. In order to obtain trade goods, Eskimos placed greater emphasis on fur trapping activities. By spending more time pursuing game with little or no food value, the Eskimos thus became increasingly dependent on the trading posts.

In 1841, the first Russian Orthodox church north of the Alaska Peninsula was established at Alexandrovski Redoubt and missionaries began to penetrate the Nushagak River country. Vanstone (1971) indicated that since missionaries were seldom able to visit the many villages in the region more than twice a year, it is likely that residents were marginal participants in the newly introduced faith. Nevertheless, the establishment of a church

at Alexandrovski and the construction of chapels at certain interior villages did play an important role in changing settlement patterns.

Another impact of the Russians (and later, of the Americans) on Eskimos of this area was exposure of the Native population to new diseases. During the early years, two smallpox epidemics swept through the region, the first some time before 1832 and a second in 1838-39 (VanStone, 1967). Although the number of deaths is uncertain, several hundred persons in the Bristol Bay area perished during the second epidemic and casualties from the first were described as "considerable" in Russian-American Company records. Survivors of these epidemics were also exposed to a range of other Western diseases which adversely affected their general health.

For some time after the U.S. purchase of Alaska in 1867, little exploration was undertaken in the Nushagak region except for the activities of missionaries and occasional trappers and traders. The Alaska Commercial Company eventually took over the assets of the Russian-American Company and maintained the post at Alexandrovski, then called Nushagak. This company dominated trade in the region throughout the remainder of the nineteenth century and well into the twentieth. In addition, the Russian Orthodox church continued to send priests to the region and remains the major religious influence here today. The Moravians established a mission and school called Carmel at the village of Kanulik near Nushagak in 1886 but its influence was never great and the mission was abandoned in 1906.

The 1880 Census listed no settlements on the west side of Nushagak Bay, presumably because that area was not visited since it was certainly inhabited at the time. Except where noted, all of the people counted in the following places were Eskimo:

<u>Settlement</u>	<u>Location</u>	<u>Population</u>
Igushek	Igushik River	74
Anagnak	Wood River	87
Nushegak (Alexandrovsk)	Nushagak Bay (E. shore)	178*
Kanulik	Nushagak Bay (E. shore)	142
Ekuk	Nushagak Bay (E. shore)	112
Agivivak	Nushagak River	52
Kakuak	Nushagak River	104
Akulvikchuk	Nushagak River	72
Kalignak	Nushagak River	91
Akuliakhpuk	Tikchik Lakes	83
Molchatna villages	Molchatna River	180**
<u>Total</u>		<u>1,175</u>

\* Population of Nushegak included 1 white, 86 creoles and 91 Eskimos.

\*\* Population all listed as Athabascan Indians.

Of far greater significance for the acculturation of the people of the Nushagak region than either Christianity or the fur trade was the commercial salmon industry which first became established in Bristol Bay during the 1880s. At first, salmon taken here were salted, but the invention of the canning process soon enabled the salmon runs to be more fully utilized.

Between 1884 and 1903, ten canneries were constructed at various points on Nushagak Bay. These included Alaska Packers' "Scandinavian" cannery a mile south of the old village of Chogiung (within Dillingham's present corporate limits) in 1885 and the Bristol Bay Canning Company cannery built at

Bradford, near modern day Kanakanak (also within Dillingham's present corporate boundaries) in 1886. In 1890, a fish trap was constructed at Wood River and, in 1901, another two canneries were built in the immediate Dillingham area.

The 1890 Census listed the following places in the Nushagak region, including Bradford and Kanakanak in the immediate Dillingham area:

<u>Settlement</u>	<u>Location</u>	<u>Population</u>
Nushagak	Nushagak Bay (E. shore)	268
Carmel	Nushagak Bay (E. shore)	189
Kanulik	Nushagak Bay (E. shore)	54
Yekuk	Nushagak Bay (E. shore)	65
Bradford	Nushagak Bay (W. shore)	166
Kanakanak	Nushagak Bay (W. shore)	53
Stugarok	Nushagak Bay (W. shore)	7
Agivavik	Nushagak River	30
Akgulurigiglak	Nushagak River	61
Kakwok	Nushagak River	45
Agulukpukmiut	Tikchik Lakes	22
Akakhpuk	Nushagak region	9
<u>Total</u>		<u>969</u>

Early Census population statistics for the Nushagak region in general and the immediate Dillingham area in particular are not always reliable or complete. Furthermore, Census counts were not always taken at the same time of year, making comparisons misleading given the extreme seasonality of fishing and fish processing activities in this region which resulted not only in major differences in total population but also the location of that population. The 1890 Census appears to have been undertaken, at least in part, during the summer as it includes some cannery populations, most notably at Bradford where the 167 residents included 83 whites, 1 Indian and 83 Mongolians (i.e. Chinese laborers). Finally, confusion over place

names makes it difficult in some cases to ascertain which groups of people or what places were actually being counted. For example, population figures given for Kanakanak sometimes appear to refer to the traditional village of Kanakanak, at others to New Kanakanak or Bradford (but now called Kanakanak), and yet at others to the traditional village of Chogiung (the site of the present town of Dillingham) or to some combination of these settlements. VanStone (1971) considers that such confusion makes the official 1900, 1910 and 1920 Census figures for the Dillingham area particularly questionable.

In 1899-1900, a major epidemic of influenza and measles struck the Bristol Bay area. At Carmel, every child under the age of two died and the Orthodox Church reported 111 deaths among its parishioners in 1899, about four times the usual number (VanStone, 1967). Many local residents blamed the spread of disease on the 1900 Census, an association which is believed to have been another factor adversely affecting that Census' accuracy. Famine followed the epidemic and Eskimos in the region were observed to be still in a destitute condition as late as 1902. The 1900 Census listed only three settlements in the Nushagak region: Carmel with 381 people, "Knakanak" village with 145 people and Nushagak village with 324 people. Other villages in the region were doubtless counted, but their populations were not listed separately by this Census.

By 1905, Bradford was called New Kanakanak (as opposed to the traditional village of Kanakanak about one mile to the south). VanStone considers it likely that the population of New Kanakanak varied between 140 and 170



during the 1900 to 1910 period. Rogers (1955), however, estimates the combined population of the New Kanakanak and Chogiung areas to have been closer to 195 in 1900 and about 215 in 1910. (Rogers included Bradford as well as Chogiung in his estimates for Dillingham and based his estimates for New Kanakanak on cannery and other data). Regardless of which estimate is the more accurate, the fishing and fish processing industry continued to dominate the economy of the region. About ten canneries operated on Nushagak Bay during this period, with the heaviest concentration of population at the time being on the east side of Nushagak Bay. VanStone (1967) notes that the years 1908-1910 can be considered a high point of the fishing industry in this area.

Perhaps the most serious period of illness ever to occur in the Nushagak region was the 1918-1919 influenza epidemic. The Moravians reported that 200 people living around Nushagak Bay, including both whites and Eskimos, had died (VanStone, 1967). Certainly, many small villages on Nushagak Bay and along the Nushagak River were either wiped out or were abandoned by the few survivors. Every person in the large villages of Igushik and Kanakanak either died or moved away and only 8 persons are said to have survived at Chogiung. The Wood River area appears to have been especially hard hit as its Eskimo population was virtually wiped out and people did not begin to move back into the area until the late 1920s (VanStone, 1967). VanStone estimates the total population of the entire Nushagak Bay area after the epidemic as being not more than 500. He further notes that the 1918-1919 epidemic was probably the single most important factor affecting contemporary settlement patterns in the Nushagak River region.

In 1918, a Bureau of Education building at New Kanakanak was enlarged and remodeled for use as a hospital and, in the following year, construction was begun on an orphanage to care for orphans created by the influenza epidemic. This facility further impacted regional settlement patterns as, after leaving the orphanage, many young men and women chose to remain in the Nushagak region rather than return to their original homes. The Kanakanak hospital subsequently became associated with the Alaska Native Health Service, an association which has remained to the present day.

The 1920 Census listed 182 persons at Chogiung village (i.e. Dillingham) and another 36 at Dillingham village (i.e. New Kanakanak) for a total of 218, representing a 1.4 percent increase over the total number estimated by Rogers (1955) to live in the area in 1910. Although the accuracy of both censuses is questionable, it seems likely that the impact of the influenza epidemic on the immediate Dillingham area was partially masked by the influx of hospital patients, orphans and others to the newly constructed facilities at New Kanakanak. Whereas Nushagak suffered a precipitous decline in population between 1910 and 1920, Dillingham (Dillingham and New Kanakanak) was now the clearly dominant population center on Nushagak Bay.

In the meantime, the fishing and fish processing industry continued as the major economic activity in the region although the industry had changed since the early years when most fishing was done by migrant whites and the canneries used hand labor which was largely provided by imported Chinese workers. Canneries had become increasingly mechanized, first with the

"Iron Chink" which was introduced in 1903 and was in general use between 1911 and 1913, and later with the introduction of high speed cannery lines during the 1920s. This mechanization reduced the necessary labor by about three-quarters (VanStone, 1967). Filipino and Mexican workers outnumbered Chinese by 1918, primarily because of the indefinite extension of the Chinese Exclusion Act in 1904. Also, despite considerable prejudice against them and their abilities as workers, increasing numbers of Eskimos were able to obtain employment in the canneries, particularly at the peak of the season. However, as late as 1937, only 194 Eskimos out of a total workforce of 4,328 were employed as cannery workers in Southwest Alaska (VanStone, 1967).

Although some improvements in cannery employment opportunities had been realized, Eskimo participation in commercial fishing remained minimal. As late as 1929, there were only 28 resident boats in the whole of Bristol Bay and these were owned by whites or mixed bloods (VanStone, 1967). Shortly after 1929, a few Eskimos began using sailboats and gear supplied by the canneries but it was not until after World War II that Eskimos participated fully in the industry.

The 1930 Census counted 85 people at Dillingham and 177 at Kanakanak, for a total of 262, representing a 20.2 percent increase over the number counted here in 1920. Another 55 persons were counted at Wood River village which is within Dillingham's present corporate limits. If this settlement is included, the population of the Dillingham vicinity rose 45.4 percent between 1920 and 1930.

During the 1930s, fishing was periodically curtailed for conservation purposes. This was reflected in fluctuations in the numbers of operating canneries from season to season and in the consolidation of plants. For example, only one shore cannery and two floating canneries operated in Nushagak Bay in 1935. The number rose to eight in 1936, fell to two in 1938 and rose again to six in 1939 (VanStone, 1967).

The 1939 Census counted 278 people in Dillingham and another 113 at Kanakanak for a total of 391. No separate listing for Wood River village was given and it is unknown if it was included in the figure for Dillingham.

World War II brought significant change to the Bristol Bay region in general and to the Nushagak Bay area in particular. Manpower shortages resulted in the fish processing industry having to draw more and more on resident, mostly Alaska Native, sources of labor. The heaviest recruitment came from areas adjacent to the various canneries although people from outside the region were also attracted here. Although there was a partial return to the reliance on Outside labor following World War II, the proportion of Alaska residents remained higher than before the war and in some districts remained at about the wartime level (Rogers, 1955).

The 1950 Census counted 577 persons at Dillingham village and another 54 at Kanakanak village, for a combined total of 631. This represented a significant 61.4 percent increase in population since 1940. Rogers (1955)

notes that slightly over three-quarters (78.6 percent) of the new residents were Alaska Natives, primarily drawn to Dillingham from other sections of the Bristol Bay region. Aside from the salmon industry, Rogers ascribes Dillingham's increasing dominance to the greater availability of government facilities and services and for the tendency of people to concentrate at strategic points.

During the 1950s, changes in fishing regulations finally permitted the use of power boats on Bristol Bay. In 1951, 631 of the 717 boats fishing in Bristol Bay were sailboats. By 1954, power boats accounted for 697 of the 712 vessels fishing in Bristol Bay. Changes in ownership of gear also occurred during this period. Previously, the canneries had owned all fishing gear except for beach set nets. With the conversion of their boats to power, the canneries inaugurated a program of sale and rental of boats and gear to independent fishermen. In 1952, there were 20 independently owned boats fishing here. This number had increased to 150 by 1955 (Rogers, 1955).

The combination of greater numbers of residents employed in canneries and increased ownership of gear by independent fishermen had the effect of keeping a larger share of income derived from the fishery within the local area. (It should be noted, however, that declines in the salmon catch following World War II were reflected in corresponding declines in total income to fishermen). In addition, the higher proportion of independent fishermen promoted greater interest in diversification of fishing effort. Also during this period, floating freezer vessels became increasingly

important in the Bristol Bay area although at this time their product was subsequently canned.

The 1960 Census counted 424 persons at Dillingham but listed no population for Kanakanak. However, the Alaska State Housing Authority (June 1971) concluded that probably close to 800 persons lived within Dillingham's present corporate limits at that time.

During the 1960s, Eskimo participation in the Nushagak salmon fishery underwent a major increase (VanStone, 1967). Also during this period, Dillingham formally incorporated as a city with boundaries encompassing a 22 square mile area which included Kanakanak, Nelsonville (Olsonville) and Wood River village as well as the Dillingham townsite, thus ending the ambiguity of Census results for the community. The 1970 Census counted 914 persons within Dillingham's corporate limits, representing only a modest increase from the 800 persons estimated by the Alaska State Housing Authority to have lived in the same area in 1960.

During the 1970s, several events of significance to Dillingham's population and economic growth occurred. Since passage of the Alaska Native Claims Act in 1971, Dillingham has functioned as a center of activities for the Bristol Bay Native Corporation, the Choggiung, Ltd. village corporation and regional non-profit Native corporations. In addition, Dillingham's importance as a regional center was further strengthened by increased State spending in rural Alaska during the 1970s through the mid-1980s, including the selection of Dillingham as

headquarters for the Southwest Region REAA (Rural Education Attendance Area). Major changes in the region's fisheries have also occurred. These include institution of a limited entry permit system for the salmon fisheries in 1974, a shift in emphasis by the salmon industry from a canned to a frozen product, and a recovery in red salmon catches beginning in the late 1970s. The inauguration of a large scale commercial herring sac roe fishery in the Togiak district in 1977 also had an impact on Dillingham.

The 1980 Census counted 1,563 persons in Dillingham, a 71 percent increase over the 914 persons counted here in 1970. Much of this increase was due to in-migration by non-Natives. Subsequent population estimates by the Alaska Department of Labor indicate further healthy rates of population growth, with the 1985 estimate of 2,141 persons being 37 percent greater than the number counted by the 1980 Census.

#### B. POPULATION COMPOSITION

Unlike other communities on Nushagak Bay, Dillingham's population is fairly evenly divided among Alaska Native and non-Natives. Historically, the immediate Dillingham area was occupied by several Eskimo villages. The first major influx of non-Natives, initially a combination of whites plus Chinese laborers, came during the 1880s when the first canneries were constructed here. Epidemics in 1900 and 1918-1919 greatly reduced the number of Native residents. However, the construction of government orphanage facilities (subsequently converted to a regional hospital) at Kanakanak and, later, opportunities for participation in the fishing and

fish processing industry and the greater availability of government facilities and services, attracted Natives from other areas of Bristol Bay to Dillingham. More recently, expanded State and local government services have served to increase the proportion of non-Natives in the community.

Detailed population composition data over time for Dillingham are not available, except for information contained in the 1970 and 1980 Censuses and Alaska Permanent Fund dividend statistics. According to the 1970 Census, non-Natives accounted for slightly over one-third of Dillingham's population. At that time, non-Natives aged between 25 and 34 outnumbered Natives and, although Natives in all other adult age groups outnumbered non-Natives, it was apparent that there was a significant and permanent non-Native presence in the community. The greatest disparity between ethnic groups was in the under 25 age ranges, where 72.4 percent of the population were Alaska Natives.

In 1980, non-Natives made up 43 percent of Dillingham's population. However, non-Natives accounted for 56 percent of the community's adult population between the ages of 25 and 54. Natives predominated among persons aged 55 and older (63.7 percent) and those under the age of 25 (62.4 percent). Nevertheless, it was apparent that Dillingham could no longer be considered a primarily Native community.

Dillingham's racial composition also varies seasonally. During the commercial salmon season, i.e. the summer months, there is an influx of Alaska Natives from elsewhere in the region and adjoining regions plus an



even greater influx of non-Natives from other areas of Alaska and the nation. The racial composition of these temporary residents is not reflected in current Census statistics.

As elsewhere in rural Alaska, the age characteristics of Dillingham's Alaska Native and non-Native populations are dissimilar. In 1970, the median age for Alaska Native males was 16.6 and that for females was 17.1. By contrast the median age for non-Native males and females in the same year was 28.2 and 32.0 respectively. The major factor in the low median age of Alaska Natives was high birth rates, with 43.2 percent of the population then being under the age of 15. However, there were indications that birth rates had begun to decline by 1970 as the under 5 age range was slightly less well represented than the 5 to 9 and 10 to 14 age groups. As elsewhere in the State, the widespread introduction of birth control measures by the U.S. Public Health Service during the 1960s is believed to have been a major factor in declining birth rates at that time.

By 1980, the median age of Dillingham's Alaska Native population had risen to 20.9 for males and 21.4 for females. On the other hand, the median age of the non-Native population was 29.9 for males and 27.8 for females, largely unchanged from that recorded for non-Natives here in 1970.

The proportion of Alaska Natives in the very young age groups fell significantly between 1970 (when 14.3 percent were under the age of 5) and 1980 (when children under the age of 5 accounted for 9.7 percent of the community's Alaska Native population). In 1980, the number of Alaska

Natives in the under 5 and 5 to 9 age ranges was significantly less than those aged between 10 and 14 and between 15 and 19. However, the size of the 10 to 19 age range in 1980 (accounting for 28.2 percent of Dillingham's Alaska Native population in that year) has implications for future population growth as many of these people are now in their childbearing years. This is borne out by Permanent Fund Dividend statistics which show an increasing number of young children in the community.

Household densities are another indicator of population change. The 1970 Census recorded an average of 3.8 persons per unit in Dillingham, low by rural Alaska standards at the time. In 1980, the Census found the average number of persons per unit in the community had fallen slightly to 3.3. However, it is likely that most of the change was due to increases in the number of non-Natives who typically have fewer dependents.

#### C. TRENDS IN WAGE AND SALARY EMPLOYMENT

The commercial fishing and fish processing industry has been important in the Dillingham area since the 1880s. However, the community's modern economy dates from the World War II period which marked the first time that local residents were able to participate to a significant extent in that industry, first in seafood processing and, later, in commercial fishing activities.

TABLE 317

POPULATION COMPOSITION  
DILLINGHAM  
1970

Age Range	Alaska Native		Non-Native		Total	
	Male	Female	Male	Female	Male	Female
Under 5 years	42	42	16	13	58	55
5 - 9	92)	78)	41)	42)	69	60
10 - 14	(49	(62	(16	(11	64	60
15 - 19	(	(111	(	(27	43	40
20 - 24	(38)	(	(34)	(	22	33
25 - 29	(	66)	(	37)	37	34
30 - 34	(35	(	(18	(	35	31
35 - 39	(17)	(29	(13	(	29	22
40 - 44	(	(64	(	(36	24	25
45 - 49	(	(43	(	23)	17	21
50 - 54	(17	(	(21	(	13	28
55 - 59	(	(35	(	(32	20	19
60 - 64	(	(	(	(	18	10
65 - 69	8)	(	8)	(	14	6
70 - 74	(	15)	(	4)	1	2
75 and over	(	(	(	(	1	3
<b>TOTAL</b>	<b>298</b>	<b>290</b>	<b>167</b>	<b>159</b>	<b>465</b>	<b>449</b>
<b>Median Age</b>	<b>16.6</b>	<b>17.1</b>	<b>28.2</b>	<b>32.0</b>	<b>19.9</b>	<b>21.5</b>
						<b>20.8</b>

Source: U.S. Census.

TABLE 318

POPULATION COMPOSITION  
DILLINGHAM  
1980

Age Range	Alaska Native		Non-Native		Total	
	Male	Female	Male	Female	Male	Female
Under 5 years	43	43	30	36	73	79
5 - 9	52	36	31	31	83	67
10 - 14	55	56	25	18	80	74
15 - 19	61	79	28	18	89	97
20 - 24	48	44	25	27	73	71
25 - 29	38	39	45	41	83	80
30 - 34	28	27	56	43	84	70
35 - 39	23	24	45	28	68	52
40 - 44	25	23	22	20	47	43
45 - 49	19	15	23	15	42	30
50 - 54	9	18	17	11	26	29
55 - 59	13	16	2	3	15	19
60 - 64	8	15	5	10	13	25
65 - 69	4	7	2	2	6	9
70 - 74	6	6	8	0	14	6
75 and over	7	4	3	2	10	6
<b>TOTAL</b>	<b>439</b>	<b>452</b>	<b>367</b>	<b>305</b>	<b>806</b>	<b>757</b>
<b>Median Age</b>	<b>20.9</b>	<b>21.4</b>	<b>29.9</b>	<b>27.8</b>	<b>25.3</b>	<b>24.4</b>
						<b>1,563</b>
						<b>24.9</b>

Source: U.S. Census.

TABLE 319  
 PERMANENT FUND DIVIDEND RECIPIENTS  
 DILLINGHAM  
 1982 - 1985

<u>Age Group</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
0 - 4		181	213	205
5 - 9			176	193
10 - 14			156	173
15 - 19			160	149
20 - 24			192	198
25 - 29			239	231
30 - 34			229	257
35 - 39			165	183
40 - 44			128	140
45 - 49			82	87
50 - 54			72	72
55 - 59			48	57
60 - 64			32	33
65 - 69			26	26
70 - 74			17	19
75 & over			24	29
Unknown	3	6	3	5
<u>TOTAL</u>	<u>1,843</u>	<u>1,885</u>	<u>1,962</u>	<u>2,057</u>

Note: 1982 age breakdown: 0-17 - 623; 18-27 - 407; 28-37 - 368; 38-47 - 209; 48-57 - 127; 58-67 - 66; 68-77 - 32; 78+ - 8; Unknown - 3; Total - 1,843.  
 1983 age breakdown: 0-4 - 181; 5-17 - 427; 18-27 - 383; 28-37 - 432; 38-47 - 211; 48-57 - 131; 58-67 - 64; 68-77 - 36; 78+ - 14; Unknown - 6; Total - 1,885.

Source: Alaska Department of Revenue.

Rogers (1955) noted that prior to World War II, almost all of the personnel connected with the operations of the fishing and fish processing industry in the Bristol Bay region were imported from outside Alaska. The acute labor shortages created by the War caused the industry to draw increasingly on resident sources of labor (mostly Alaska Natives). After the War, there was a partial return to the former reliance on Outside labor but the proportion of residents continued at a level higher than that before the War and, in some districts, remained at about the wartime level. Rogers noted that the PAF cannery in Dillingham (the only local cannery operating at the time of his visit to the community) used increasing proportions of residents during 1942, 1943 and 1944 and that, by 1945, was using all residents except for a half dozen or so key personnel. Rogers further noted that the same company continued to rely on local residents for all but these few key positions.

The second major change in the fishing and fish processing industry following World War II were changes in gear and ownership of that gear. In 1951, the fishing regulations were changed to permit the use of power boats in this area and these vessels rapidly displaced the sail boats which had been used here. (The number of power boats rose from 86 to 697 between 1951 and 1954, while the number of sail boats dropped from 631 to 15 during the same period). At the same time, a change in the ownership of gear also took place. Previously, the canneries had owned all fishing gear except for beach set nets. However, with the conversion of their boats to power, they also inaugurated a program of sale and rental of boats and gear to

independent fishermen. In 1952, there were twenty independently owned boats fishing. This number had increased to 150 by 1955 (Rogers, 1955).

Aside from fishing and fish processing, Rogers (1955) reported that the principal government payroll in the immediate Dillingham area was provided by the Kanakanak Alaska Native Service hospital which had 40 to 45 employees and was planning to increase that number to between 45 and 50 personnel. Of the hospital jobs, about 26 were filled by local residents, with the remaining 24 being in the professional and technical categories and were filled from outside the region. Other government employment at the time included the Alaska Road Commission which employed a full-time road superintendent and a maintenance crew of 3 to 4 men plus a seasonal construction crew of between 10 and 12 men. A third major source of government employment was the Dillingham Territorial School which then had 10 teachers (with an 11th planned to be added).

The only other industry then bringing money into the Dillingham area was a small cinnabar mining operation near Aleknagik. Local businesses noted by Rogers included two local airlines, three general stores, a hardware and appliance store, two restaurants, a bakery, a petroleum products agency, two movie houses and a taxi operator.

In 1971, the Alaska State Housing Authority found that about one-third of the people it surveyed in Dillingham listed fishing as their occupation. However, it was also noted that close to half of these people were unemployed for much of the remainder of the year. Total employment at the

U.S. Public Health Service's hospital at Kanakanak in 1971 was 52. At that time, there were also reportedly 41 State employees in the general Dillingham area (although not necessarily based in Dillingham). In addition, the transportation sector was noted as being significant in the local economy, with Wien Consolidated Airlines, Western Alaska Airlines and freight lighterage operations being the major employers.

Alaska Consultants, Inc. (January 1982) conducted a field count of employment in Dillingham for the U.S. Minerals Management Service in October 1980. Each employer in the community was contacted to obtain average annual full-time employment information and the results were then categorized by Standard Industrial Classification (SIC) code.

In addition, the Alaska Department of Fish and Game provided information on the number of units of drift gill net and set gill net gear for the 1980 Nushagak district salmon season and on the number of units of seine gear and gill net gear registered for the 1980 Bristol Bay herring fishery. The number of gear units were then multiplied by average crew sizes to obtain an estimate of the total number of fishermen. Finally, the number of months fished were taken into account to derive an annual average full-time employment figure for salmon and herring fishermen based out of Dillingham. No attempt was made to allocate fishing and fish processing employment between local and non-local residents. However, at that time, the Nushagak District was primarily fished by State residents (normally about 85 percent), most of whom lived in the Nushagak watershed area.



Other fisheries-related employment in the Dillingham area, including that on board floating processors during the 1980 salmon and herring seasons, plus fish buyers and persons engaged in flying the product out of the region was also estimated with the assistance of the Alaska Department of Fish and Game and was converted to average annual full-time employment equivalents.

Overall, Dillingham was found to have a total of 828 jobs on an average annual full-time basis in 1980. One-third of these jobs were directly associated with fishing and fish processing, while some other fisheries-related employment was associated with the transportation, communication and public utilities sector (flying fish out of the region) and the trade sector (fish buyers).

After fishing and fish processing, the government sector was the next largest in Dillingham in 1980, with an annual average of 180 full-time job equivalents. By October 1980, the federal government had become a minor direct employer in Dillingham (responsibility for operation of the Kanakanak hospital was contracted out to the Bristol Bay Area Health Corporation effective October 1, 1980) with a total of only 16 jobs, of which the Federal Aviation Administration and the Post Office were the major employers. The State accounted for 44 jobs, the largest number of which were associated with the Department of Fish and Game and the Department of Public Safety.

Employment in the service sector was also well represented in Dillingham in 1980 with an annual average of 144 jobs. Three major employers in this sector were the Bristol Bay Area Hospital, the Bristol Bay Native Association and the Bristol Bay Area Health Corporation which perform regional health and social service functions. Other significant employers in the service sector in 1980 included two hotels, a regional housing authority and a fishermen's cooperative organization.

The trade sector employed an annual average of 101 persons in 1980, closely followed by the transportation, communication and public utilities sector with 96 jobs. The contract construction sector was estimated to employ an annual average of 34 full-time job equivalents, with the major project at the time being construction of a new elementary school. Finally, 18 jobs were counted in the finance, insurance and real estate sector. These jobs consisted of employment with the Bristol Bay Corporation (the main office of which is located in Anchorage) and Choggiung, Ltd. (the local ANCSA village corporation) and a bank.

An attempt was made by Alaska Consultants, Inc. to compare the average annual full-time employment counted in the field in October 1980 with covered employment data for the Dillingham, Kanakanak, Aleknagik and Manokotak area compiled by the Alaska Department of Labor for the 1970 to 1979 period. However, because of differences in definition (e.g. covered employment excludes almost all fishermen), changes in unemployment insurance coverage (e.g. few local government employees were covered by unemployment insurance before the late 1970s and were therefore excluded

from covered employment statistics), disclosure regulations and apparent misallocations of employment (e.g. the Department of Labor counted all employees of the Southwest Region Schools REAA as being in Dillingham), meaningful comparisons were somewhat tenuous.

In addition to the 1980 Alaska Consultants, Inc. field count of employment in Dillingham, 1980 Census labor force and employment information for the community (including some comparisons with 1970) were examined. It should be noted that Census data are collected from individuals rather than employers. It should also be noted that fisheries-related employment in Dillingham is highly seasonal and that a significant share of jobs in that industry are held by temporary residents who are not present in the community at the time of the Census. Given those qualifications, the total local labor force figure of 656 for the community recorded by the 1980 Census is understandable although it does not provide an accurate picture of actual employment conditions. However, the Census breakdown of employment by industry for 1980 (and also for 1970) appears to be grossly inaccurate. Labor force participation rates quoted by the 1980 Census also seem suspect.

Impact Assessment, Inc. (August 1984) noted that Dillingham residents held 201 drift gillnet permits and 109 set gillnet permits in 1983 but local employment statistics cited in Technical Report No. 123 were all derived from the 1980 report by Alaska Consultants, Inc. Several other reports prepared in the early 1980s, including the community profile (DOWL

Engineers, January 1982) and a Corps of Engineers small boat harbor study (May 1985) also used 1980 data developed by Alaska Consultants, Inc.

More recently, the Subsistence Division of the Alaska Department of Fish and Game (Fall et al., December 1986) undertook a comprehensive examination of Dillingham's cash and subsistence economies. The authors noted that persons with Dillingham addresses held a total of 343 limited entry permits (224 drift gillnet permits and 119 set gillnet permits) in 1984, up slightly from 1983. However, they also noted that non-Alaska residents hold a very large portion of the jobs and earn most of the income generated by the commercial fishing industry in Dillingham and other Southwest Alaska communities. In 1984, for example, 73.8 percent of the employees in the manufacturing sector (almost entirely fish processing) of the Dillingham census district (i.e. the Bristol Bay region excluding the Bristol Bay Borough) were non-Alaska residents. These non-residents earned almost three-quarters (73.2 percent) of the wages paid to manufacturing employees in the region.

Fall et al (December 1986) further noted that Limited Entry permit data indicates that participation by Bristol Bay residents in commercial fishing is declining, even though the number of permits held by Dillingham residents increased between 1979 and 1984. (However, they appear to have decreased since 1984 as the October 1987 profile by the Southwest Alaska Municipal Conference listed 315 Dillingham residents as holding commercial salmon fishing permits, down from 343 in 1984). All told, Bristol Bay residents lost 220 permits between 1975 and 1983. In addition, Limited

Entry permit data indicates that non-local residents earn considerably more than local fishermen, possibly because of superior gear and vessels. For example, non-residents fishing with drift gear in Bristol Bay in 1982 had an average gross income of \$42,956, compared with \$32,124 for local fishermen.

Aside from the salmon fishery, Dillingham residents continue to participate in the Togiak herring fishery. Fall et al (December 1986) noted that Dillingham residents held 176 Bristol Bay herring permits in 1984. Of this total figure, 151 fished with drift gill nets and the remaining 25 with purse seines. Thirteen other Dillingham residents held herring permits for the Norton Sound or the Kuskokwim districts in 1984.

In 1986, the Division of Subsistence (Fall et al, December 1986) updated employment figures for the government sector and portions of the service sector of Dillingham's economy (see Table). A comparison of these figures with those compiled by Alaska Consultants, Inc. in 1980 indicates that virtually no change occurred in federal and State government employment in Dillingham between 1980 and 1986 and that increases in the local government and service sectors were probably modest.

Fall et al (December 1986) also briefly described the remaining employment sectors although no detailed count was provided. They noted that Choggiung, Ltd., the local village ANCSA corporation, had a total of about 70 year-round and another 45 seasonal employees spread among a number of different businesses in 1986. Aside from its central office, those

businesses included a lumber yard and hardware supply company, a hotel and restaurant, a construction company and a cable television franchise. Other businesses in the community in 1986 included two banks, another hotel, three additional restaurants, two supermarkets, three auto service stations, another lumber yard, two fuel companies and several snowmachine and outboard motor dealers. Four local air taxi services also employed local residents, as did one major airline. Fall et al also noted the existence of a number of smaller businesses, including a travel agency, three gift shops, a beauty shop, a janitorial service, two video rental stores, an alterations and fabric sales shop, an electronics store, a trash collection service and several local taxi companies, as well as a weekly newspaper and a number of self-employed skilled laborers and tradesmen.

Alaska Department of Labor monthly covered employment statistics for the Dillingham area between 1980 and 1986 were examined and checked against counts by Alaska Consultants, Inc. and Fall et al to see if they provide a reliable source of community employment information. However, because covered employment data excludes almost all fishermen, the value of this data series is seriously diminished in a region such as Bristol Bay with an economy heavily dependent on the fishing and fish processing industry. In addition, it appears that the Department of Labor has counted all Southwest Region REAA employment in Dillingham. This seriously distorts Department of Labor data on local government employment. Similarly, Department of Labor figures for federal government employment are too high, possibly because employment associated with the Kanakanak hospital may not have been transferred to the service sector when operation of this facility was

assumed by the Bristol Bay Area Health Corporation. However, employment counted by the Department of Labor in the service sector also appears to be much too high and may also include non-profit corporation employment elsewhere in the region.

After making allowances for omissions in State figures resulting from the exclusion of self-employed persons and other groups such as religious organizations, the Department of Labor data series does have some value in measuring changes in employment in the immediate Dillingham area. In particular, it does indicate the extreme seasonality of manufacturing (i.e. fish processing) employment. However, the series should be used with caution in view of the limitations cited above.

Dillingham has a relatively complex economy. Unfortunately, except for the 1980 count by Alaska Consultants, Inc., together with partial updates by Fall et al in 1986, reliable information on employment in the community has not been compiled in recent years. Ideally, a new field count of employment should be undertaken, preferably one which attempted to measure average annual full-time employment, before any other data series such as that produced by the Department of Labor, could be used with any degree of confidence. Major changes in the Bristol Bay fishing and fish processing industry have taken place during the last ten years. While changes in the industry in general have been extensively documented, the impacts of those changes on employment in communities such as Dillingham are less well known.

TABLE 320  
 SELECTED LABOR FORCE DATA  
 DILLINGHAM  
 1980

LABOR FORCE STATUS, PERSONS OVER 16 YEARS, 1980

<u>Labor Force Status</u>	<u>Alaska Natives</u>		<u>All Races</u>		
	Male	Female	Male	Female	Total
Armed Forces	0	0	0	0	0
Civilian Employed	149	110	391	265	656
Civilian Unemployed	8	23	14	26	40
Not in Labor Force	99	179	118	241	359
Labor Force Participation Rate	61.0%	42.0%	77.0%	54.0%	65.0%
Unemployment Rate: 1980	5.1%	17.3%	3.5%	8.9%	5.7%
1970	*	*	16.5%	5.7%	11.5%

EMPLOYMENT BY INDUSTRY, 1970 AND 1980

<u>Industry</u>	<u>1970</u>	<u>1980</u>
Construction	10	44
Manufacturing	0	15
Transportation	43	56
Communications	13	26
Trade	41	79
Finance, Insurance & Real Estate	0	51
Services	109	258
Public Administration	27	97
Other	26	30
<u>TOTAL</u>	<u>269</u>	<u>656</u>

\* Data missing or suppressed.

Source: U.S. Census, 1980.



TABLE 321

AVERAGE ANNUAL FULL-TIME EMPLOYMENT  
DILLINGHAM AND IMMEDIATE VICINITY  
1980

<u>Industry Classification</u>	<u>Number</u>	<u>% of Total</u>	<u>% Basic</u>	<u>Basic Number</u>	<u>Secondary Number</u>
Agriculture, Forestry and Fishing	100	12.1	100	100	0
Mining	0	0.0	---	0	0
Contract Construction	34	4.1	29	10	24
Manufacturing	155	18.7	97	151	4
Transportation, Communication & Public Utilities	96	11.6	58	56	40
Trade	101	12.2	46	46	55
Finance, Insurance & Real Estate	18	2.2	56	10	8
Service	144	17.4	69	99	45
Government	180	21.7	26	47	133
Federal	( 16)	( 1.9)	(44)	( 7)	( 9)
State	( 44)	( 5.3)	(32)	(14)	(30)
Local	(120)	(14.5)	(22)	(26)	(94)
<u>TOTAL</u>	<u>828</u>	<u>100.0</u>	<u>63</u>	<u>519</u>	<u>309</u>

Note: Figures include self-employed personnel.

Source: Alaska Consultants, Inc., January 1982.

TABLE 322

GOVERNMENT AND NON-PROFIT CORPORATION EMPLOYMENT  
CITY OF DILLINGHAM  
1986

	<u>Number of Employees</u>	
	Full-Time	Seasonal
<u>Federal Government</u>		
U.S. Army Corps of Engineers	0	5
U.S. Fish and Wildlife Service	6	1
U.S. Post Office	5	0
U.S. Federal Aviation Administration	5	0
<u>State Government</u>		
Alaska Court System	3	0
Dept. of Commerce & Economic Dev.	1	0
Dept. of Community & Reg. Affairs	3	0
Dept. of Fish and Game	9	50
Dept. of Health & Social Services	7	0
Dept. of Labor (Employment Center)	1	1
Dept. of Law (District Attorney's Off.)	3	0
Dept. of Public Safety		
Alaska State Troopers	1	0
Div. of Fish & Wildlife Protection	1	2
Div. of Motor Vehicles (contracted to City of Dillingham)		
Dept. of Transportation & Pub. Fac.	6	2
Legislative Affairs Office	0	2
University of Alaska		
Cross-Cultural Education Dev.	2	0
Marine Advisory Program	2	0
Rural Development Program	2	0
Rural Education Center	1	2
<u>Local Government</u>		
Bristol Bay Coastal Resource Area Prog.	2	0
City of Dillingham	40*	5
Dillingham City Schools	80	0
Southwest Region Schools	18**	0
<u>Non-Profit Corporations</u>		
Alaska Legal Services	2	0
Bristol Bay Area Health Corporation	100***	0
Bristol Bay Area Housing Authority	6	1
Bristol Bay Native Association	25	0
Naanuaq Day Care Center	2	8
<u>TOTAL</u>	<u>333</u>	<u>80</u>

\* Includes 10 part-time positions

\*\* Dillingham office only; includes one part-time position.

\*\*\* Includes 5 part-time staff.

Source: Fall et al., December 1986.

TABLE 323

COVERED INDUSTRY EMPLOYMENT  
DILLINGHAM AREA\*\*  
1980

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	13	12	10	13	23	42	66	76	61	54	42	25
Manufacturing	82	151	119	77	131	181	749	448	311	568	326	180
Transportation, Communication and Public Utilities	62	64	65	61	76	75	64	72	73	76	77	81
Wholesale Trade	4	4	3	*	*	*	*	*	*	*	*	*
Retail Trade	76	83	92	91	97	103	96	100	94	75	56	69
Finance, Insurance and Real Estate	31	28	28	30	27	25	26	28	32	15	26	17
Services	202	230	182	302	281	216	282	293	217	277	266	278
Miscellaneous	0	0	0	*	*	*	*	*	*	*	*	*
Government												
Federal	85	84	87	97	102	97	99	101	96	96	90	84
State	52	52	53	53	56	56	58	56	61	55	57	55
Local	307	310	316	323	329	232	108	99	261	313	316	317
<u>TOTAL</u>	<u>914</u>	<u>1,018</u>	<u>955</u>	<u>1,052</u>	<u>1,128</u>	<u>1,037</u>	<u>1,594</u>	<u>1,318</u>	<u>1,229</u>	<u>1,541</u>	<u>1,266</u>	<u>1,116</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Dillingham area also includes Aleknagik, Clarks Point and Manokotak.

Source: Alaska Department of Labor.

TABLE 324

COVERED INDUSTRY EMPLOYMENT  
DILLINGHAM AREA\*\*  
1981

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	25	32	33	36	48	55	47	46	27
Manufacturing	106	176	269	332	420	468	942	485	442	166	61	34
Transportation, Communication and Public Utilities	63	64	70	83	83	106	100	104	100	108	81	71
Wholesale Trade	3	3	5	*	*	*	*	*	*	*	*	*
Retail Trade	69	66	69	70	84	94	87	91	91	72	74	81
Finance, Insurance and Real Estate	18	18	18	20	16	21	20	25	23	19	21	23
Services	318	377	385	409	395	384	284	257	200	186	163	139
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	82	82	84	82	79	80	81	79	77	68	65	62
State	58	51	59	62	67	63	75	66	63	59	65	66
Local	329	341	342	337	330	220	169	189	323	335	338	347
<u>TOTAL</u>	<u>1,073</u>	<u>1,203</u>	<u>1,324</u>	<u>1,432</u>	<u>1,516</u>	<u>1,481</u>	<u>1,807</u>	<u>1,357</u>	<u>1,388</u>	<u>1,069</u>	<u>922</u>	<u>859</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Dillingham area also includes Aleknagik, Clarks Point and Manokotak.

Source: Alaska Department of Labor.

TABLE 325

COVERED INDUSTRY EMPLOYMENT  
DILLINGHAM AREA\*\*  
1982

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	31	32	40	33	38	38	50	70	76	72	65	45
Manufacturing	32	30	71	269	303	376	1,370	822	336	129	47	45
Transportation, Communication and Public Utilities	57	58	62	64	68	89	87	87	89	83	61	74
Wholesale Trade	*	*	*	3	4	5	*	*	*	3	4	4
Retail Trade	67	75	75	77	73	76	75	88	80	79	84	84
Finance, Insurance and Real Estate	21	23	23	20	21	25	26	28	25	25	26	26
Services	206	220	205	301	281	241	265	265	230	214	222	232
Miscellaneous	*	*	*	16	17	69	*	*	*	8	9	9
Government												
Federal	59	60	57	63	61	54	55	54	54	52	53	56
State	64	64	71	79	75	72	77	72	73	74	85	77
Local	323	341	359	356	426	269	181	214	339	372	370	374
<u>TOTAL</u>	<u>871</u>	<u>911</u>	<u>975</u>	<u>1,281</u>	<u>1,367</u>	<u>1,314</u>	<u>2,203</u>	<u>1,772</u>	<u>1,310</u>	<u>1,111</u>	<u>1,026</u>	<u>1,026</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Dillingham area also includes Aleknagik, Clarks Point and Manokotak.

Source: Alaska Department of Labor.

TABLE 326

COVERED INDUSTRY EMPLOYMENT  
DILLINGHAM AREA\*\*

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1983

Industry Classification	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	33	32	37	29	36	41	49	48	49	40	28	19
Manufacturing	42	44	44	34	201	239	972	408	140	44	38	38
Transportation, Communication and Public Utilities	62	61	70	70	74	80	77	87	77	76	81	89
Wholesale Trade	5	4	5	*	*	*	*	*	*	*	*	*
Retail Trade	81	91	101	94	102	116	*	*	*	114	111	106
Finance, Insurance and Real Estate	32	34	28	30	32	30	34	33	34	33	31	31
Services	208	250	242	244	245	244	335	288	259	203	208	187
Miscellaneous	7	8	12	*	*	*	56	47	46	*	*	*
Government												
Federal	54	55	55	58	57	58	56	52	52	58	55	57
State	76	79	81	77	69	62	57	56	56	55	63	57
Local	366	402	383	394	377	340	171	199	371	381	393	382
<b>TOTAL</b>	<b>966</b>	<b>1,060</b>	<b>1,058</b>	<b>1,041</b>	<b>1,205</b>	<b>1,224</b>	<b>1,909</b>	<b>1,313</b>	<b>1,173</b>	<b>1,012</b>	<b>1,018</b>	<b>977</b>

\* Figures withheld to comply with disclosure regulations.

\*\* Dillingham area also includes Aleknagik, Clarks Point and Manokotak.

Source: Alaska Department of Labor.

TABLE 327

COVERED INDUSTRY EMPLOYMENT  
DILLINGHAM AREA\*\*  
1984

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	*	*	*	*	*	*
Construction	13	9	11	13	16	20	30	33	26	32	26	13
Manufacturing	22	21	19	177	405	597	1,549	1,215	829	103	39	35
Transportation, Communication and Public Utilities	72	72	68	78	77	85	100	118	112	126	103	106
Wholesale Trade	4	4	3	4	3	6	7	5	5	4	5	4
Retail Trade	104	97	105	102	120	148	140	126	117	112	108	108
Finance, Insurance and Real Estate	32	31	31	42	37	36	39	42	43	51	46	42
Services	165	168	172	257	271	285	334	311	295	279	267	274
Miscellaneous	6	5	5	4	4	1	*	*	*	*	*	*
Government												
Federal	55	62	58	61	59	57	63	66	63	64	61	57
State	55	64	74	76	79	75	85	81	66	62	66	61
Local	393	410	399	392	400	342	163	176	374	383	389	380
<u>TOTAL</u>	<u>921</u>	<u>943</u>	<u>945</u>	<u>1,206</u>	<u>1,471</u>	<u>1,652</u>	<u>2,512</u>	<u>2,177</u>	<u>1,935</u>	<u>1,218</u>	<u>1,112</u>	<u>1,082</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Dillingham area also includes Aleknagik, Clarks Point and Manokotak.

Source: Alaska Department of Labor.

TABLE 328

COVERED INDUSTRY EMPLOYMENT  
DILLINGHAM AREA\*\*  
1985

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	*	*	*	*	*	*
Construction	11	7	7	8	20	35	51	54	62	45	40	33
Manufacturing	41	38	88	187	249	501	1,183	485	313	82	38	38
Transportation, Communication and Public Utilities	92	86	96	82	91	110	143	159	145	109	100	98
Wholesale Trade	4	4	4	5	3	5	6	5	4	4	3	2
Retail Trade	96	94	98	102	114	134	117	114	114	116	111	117
Finance, Insurance and Real Estate	36	39	39	41	48	68	71	65	77	67	75	94
Services	253	257	264	282	285	305	312	334	306	282	258	261
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	60	59	57	58	63	59	57	57	56	55	53	51
State	58	60	79	84	87	88	87	75	66	64	78	77
Local	391	410	403	406	392	258	141	152	346	376	406	382
<u>TOTAL</u>	<u>1,042</u>	<u>1,054</u>	<u>1,135</u>	<u>1,255</u>	<u>1,352</u>	<u>1,566</u>	<u>2,170</u>	<u>1,503</u>	<u>1,492</u>	<u>1,209</u>	<u>1,169</u>	<u>1,157</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Dillingham area also includes Aleknagik, Clarks Point and Manokotak.

Source: Alaska Department of Labor.



TABLE 329

COVERED INDUSTRY EMPLOYMENT  
DILLINGHAM AREA\*\*

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1986

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	*	*	*	*	*	*
Construction	12	3	9	10	19	28	26	36	44	36	16	8
Manufacturing	40	42	128	285	430	478	927	699	360	35	27	62
Transportation, Communication and Public Utilities	89	97	84	112	116	110	107	112	104	121	103	97
Wholesale Trade	*	*	*	1	1	0	*	*	*	*	*	*
Retail Trade	105	107	118	133	147	161	148	157	147	138	125	120
Finance, Insurance and Real Estate	72	72	80	58	59	65	58	64	65	89	98	76
Services	262	262	274	276	270	297	393	367	325	274	261	255
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	56	54	53	49	49	52	55	55	59	55	53	52
State	68	65	80	81	82	90	82	73	67	62	65	65
Local	377	391	409	412	400	304	171	185	332	371	364	363
<u>TOTAL</u>	<u>1,097</u>	<u>1,106</u>	<u>1,248</u>	<u>1,428</u>	<u>1,584</u>	<u>1,596</u>	<u>1,973</u>	<u>1,756</u>	<u>1,510</u>	<u>1,187</u>	<u>1,120</u>	<u>1,106</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Dillingham area also includes Aleknagik, Clarks Point and Manokotak.

Source: Alaska Department of Labor.

## TOGIAK

### A. PAST POPULATION TRENDS

Although the Togiak Bay area has a long history of settlement, it remained relatively isolated from outsiders for much longer than other coastal areas in the Bristol Bay region. Captain Cook passed through Bristol Bay in 1778 and reportedly sent a party ashore at Cape Newenham, but did not visit Togiak Bay. The Togiak area was also bypassed by Russian fur seal and sea otter hunters who began their push northward beyond the Alaska Peninsula after decimating the herds in the Aleutians and Pribilof Islands. The first recorded visit of outsiders to Togiak Bay occurred in 1818 in connection with the establishment of Fort Alexandrovsk at Nushagak. At that time, a party continued around the coast to the Togiak River and on to Cape Newenham and the mouth of the Kuskokwim, before returning to Nushagak.

During the next several years, further surveys were made in the Bristol Bay area. Under Yanovski, the third governor of Russian America, the shores of Bristol Bay and the Bering Sea north to the mouth of the Kuskokwim were explored. From 1822 to 1824 the area between Norton Sound and Bristol Bay received further detailed investigation by the party of Kramchenko, Etolin and Wassilief under the direction of Muravief. By 1826, when Sarichef published his atlas of Alaska, the bay, river, lake and village all bearing the name Togiak had been recorded.

POPULATION TRENDS  
TOGIAK  
1880 - 1985

<u>Year</u>	<u>Population</u>	<u>Percent Change</u>	
		<u>Decennial</u>	<u>Annual</u>
1880	276*		
1890	94*	-65.9	
1920	91	- 3.2**	
1929	71	-22.0	
1939	56***	-21.1	
1950	108	92.9	
1960	220	103.7	
1970	383	74.1	
1980	470	22.7	
1981	511		8.7
1982	507		0.8
1983	531		4.7
1984	554		4.3
1985	556		0.4

\* 1880 and 1890 population listed for Togiagamute (Togiagamiut).

\*\* Increase recorded for 1890 to 1920 period.

\*\* The 1939 Census listed Togiak with a population of 10 and Togiak Bay with a population of 46.

Sources: U.S. Census (1880 - 1980 figures).  
Alaska Department of Labor (1981 - 1985 figures).

TABLE 331  
POPULATION ESTIMATES  
TOGIAK  
1880 - 1987

<u>Year</u>	<u>Census</u>	<u>Other Estimates</u>	<u>Sources of Other Estimates</u>
1880	276*		
1890	94*		
1900	Not listed		
1910	Not listed	93	Bureau of Indian Affairs
1920	91		
1929	71		
1937 1939	56**	56	Bureau of Indian Affairs
1945		71	Orth, 1967
1950 1957	108	174	Ray, 1959
1960	220		
1963		314	Bureau of Indian Affairs
1966		409	Bureau of Indian Affairs - includes Twin Hills
1967		423	Bureau of Indian Affairs - includes 5 whites
1967		381	Federal Field Committee - includes 5 whites
1968		400	Alaska Area Native Health Service
1969		400	Federal Field Committee - includes 5 whites
1970 1973	383	375	U.S. Dept. of the Interior - includes 6 whites
1975 1976		492 567	U.S. Census Bureau U.S. Census Bureau
1980	470	487	Dept. Community/Regional Aff.
1981	511***	511	Dept. Community/Regional Aff.
1982	507***	545	Dept. Community/Regional Aff.
1982		493	U.S. Census Bureau
1983	531***	545	Dept. Community/Regional Aff.

1984	554***	554	Dept. Community/Regional Aff.
1985	556***	556	Dept. Community/Regional Aff.
1986		623	Dept. Community/Regional Aff.
1987		646	City of Togiak

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- \* 1880 and 1890 population listed for Togiagamute (Togiagamiut).
- \*\* The 1939 Census listed Togiak with a population of 10 and Togiak Bay with a population of 46.
- \*\*\* Alaska Department of Labor estimates derived using U.S. Census methodology. Where these figures are the same as Department of Community and Regional Affairs estimates, the Department of Labor accepted local censuses undertaken by the City of Togiak.

Sources: U.S. Census (1880 - 1980 figures).  
 Alaska Department of Labor (1981 - 1985 figures).

According to Kowta (1963), the people of Togiak were not described separately in the literature prior to Petroff's account undertaken as part of the 1880 Census. However, VanStone (1967) considers it likely that a Russian Orthodox chapel had been established here by the 1870s. Petroff described residents of the Togiak area as leading a totally nomadic lifestyle, with people living upriver never having seen white men before his visit. He ascended the Togiak River, noting the presence of six villages along its course as well as others along the coast between between Cape Newenham and Cape Constantine, as follows:

<u>Settlement</u>	<u>Location</u>	<u>Population</u>
Aziavigamute	Hagemeister Strait	132
Togiagamute	Togiak River	276
Ikaliukha	Togiak River	192
Tunniakhpuk	Togiak River	137
Kassianmute	Togiak River	615
Nulatok	Togiak River	211
Kissaiakh	Togiak River	181
Annugannok	Togiak River	214
Togiak Station	Togiak Bay	24
Ooallikh	Togiak Bay	68
Kulluk	Kulukak Bay	65
<u>Total</u>		<u>2,115</u>

During the 1880s, the commercial salmon industry became established in the Bristol Bay region with the opening of the first cannery in 1884 at Kanulik on Nushagak Bay. In the same year, Moravian missionaries made a difficult overland crossing from Goodnews Bay to Nushagak only to find both the Nushagak and Togiak areas already claimed by the Russian Orthodox priest at Nushagak. However, early salmon industry and missionary activities in the region largely bypassed the Togiak area.

Elliott noted in 1887, apparently based on the findings of the 1880 Census, that no other region of Alaska was as densely settled as the Togiak River. By 1890, a branch trading post of Fort Alexandrovsk had been established on Togiak Bay but the area remained largely isolated from the outside world. However, despite probable inaccuracies in enumeration (both overcounting by the 1880 Census and undercounting by the 1890 Census), a major decline in population of the area evidently took place between 1880 and 1890. The 1890 Census recorded only the following settlements between Cape Newenham and Cape Constantine:

<u>Settlement</u>	<u>Location</u>	<u>Population</u>
Aziavigamiut	Hagemeister Strait	90
Ikalinkamiut	Togiak River	60
Kassiachamiut	Togiak River	50
Togiagamiut	Togiak River	94
Togiak	Togiak Bay	14
<u>Total</u>		<u>308</u>

In 1897, a U.S. Geological Survey party led by Spurr and Post descended the Togiak River from the lake to the coast, noting the presence of four native villages and Togiak station. Spurr and Post claimed to be the first whites to traverse the river since Petroff. However, in the years following, the Togiak area became increasingly influenced by outside forces, with the Moravians erecting a small chapel and stationing a missionary couple here in 1899. Reportedly, 276 new people were immediately enrolled to the Moravian church as a result of these activities.

The Togiak area was not listed separately by the 1900 or the 1910 Censuses (although the Bureau of Indian Affairs' estimate of 93 persons at Togiak in

1910 probably derives from the 1910 Census) and details relating to events during this period are sketchy although a government school was established at Togiak by 1910, indicating that a significant population remained in the area. According to Henkelman and Vitt (1985), Togiak was hit by a serious influenza epidemic in 1900. Later, the 1918-1919 influenza epidemic devastated the Bristol Bay region, presumably also affecting Togiak. Many small villages in the region simply disappeared during this period due to a combination of deaths from influenza and the moving away of survivors. Togiak saw an influx of residents from the Yukon-Kuskokwim region following the epidemic although it is not clear exactly when these people arrived. The 1920 Census listed only 91 persons at Togiak village and another 83 persons at Kulukak village on Kulukak Bay.

The 1929 Census recorded 71 persons at Togiak, 22 percent less than the number given by the 1920 Census. Three other settlements between Cape Newenham and Cape Constantine were also listed in 1929. These were Uzavigiakamut village (believed to be the same village as Aziavigamute and Aziavigamiut cited by the 1880 and 1890 Censuses respectively) with 63 persons, Kulukak with a population of 28 and Tokelung (presumably referring to the former village of Tuklung on the east shore of Kulukak Bay) with 39 people.

The 1939 Census counted only 10 people at Togiak but recorded another 46 persons at Togiak Bay. Other settlements in the area between Cape Newenham and Cape Constantine at that time were Kulukak with a population of 55 and



Kashiagamut (formerly recorded as Kassianmute and Kassiachamiut in 1880 and 1890 respectively) with a population of 33.

The listing of population at Togiak and Togiak Bay in 1939 reflected the movement of village people from Old Togiak to a new site on the west bank of the Togiak River. Reportedly, heavy winter snowfalls made wood gathering difficult at Old Togiak and people gradually moved to a new site on the opposite bank of the river where snow tended only to make deep drifts on the beach and a trail made the task of gathering wood much easier. In addition, a slough behind the new site provided a good shelter for boats. According to DOWL Engineers (January 1982), there were only 2 or 3 people left in Old Togiak by 1940.

During the mid-1940s, the founding of Manokotak (located on the Igushik River, 25 miles southwest of Dillingham) resulted in some out-migration from Togiak. This new settlement also attracted migrants from other villages in the Togiak area, including Tuklung and Kulukak (DOWL Engineers, January 1982).

DOWL Engineers noted that the Bureau of Indian Affairs school at Togiak, presumably at the Old Togiak site, was closed in 1938 and that there was no school in the village until 1950. The 1950 Census recorded 108 persons living in Togiak, a 92.9 percent increase over the number counted at Togiak/Togiak Bay in 1939 despite some out-migration. Another 30 persons were counted at Tuklung on Kulukak Bay.

In 1960, Togiak was the only community listed by the Census in the area between Cape Newenham and Cape Constantine. At that time, a total of 220 people were counted in the community, a healthy 103.7 percent increase over the number counted in 1950. In part, this increase resulted from immigration encouraged by the Bureau of Indian Affairs following the construction of a school at Togiak in 1950. The village saw some construction activity during the late 1950s when a permanent 2-classroom school was completed and a National Guard armory was built. A post office was established in the community in 1959. However, the most significant economic event of the 1950 to 1960 decade was the establishment of the Togiak Fisheries cannery near the community in 1954.

Togiak experienced severe flooding in October 1964 which caused much damage in the community and also destroyed the Togiak Fisheries cannery. The cannery was rebuilt but 3 or 4 Togiak households established the nearby community of Twin Hills in 1965, reportedly to avoid the recurrent flooding problems (DOWL Engineers, January 1982).

In 1970, Togiak and Twin Hills were the only communities listed by the Census in the area between Cape Newenham and Cape Constantine. Togiak's population then numbered 383, a 74.1 percent growth since 1960 despite some out-migration during the decade to Twin Hills. During the 1970s, major improvements in community infrastructure were undertaken, including the construction of 30 houses by the Alaska State Housing Authority in 1974 and a major upgrading and expansion of the Togiak school in 1973 and 1974.

Between 1970 and 1980, Togiak's population rose another 22.7 percent to 470, despite some further out-migration. Impact Assessment, Inc. (August 1984) noted that Manokotak is believed to have absorbed a significant portion of the 46 persons who out-migrated from Togiak during the 1970 to 1980 decade. However, high rates of natural increase in Togiak during this period resulted in a net gain in community population.

Since 1980, Togiak's population has continued to grow. The Alaska Department of Labor estimated the community's 1985 population at 556, an 18.3 percent increase. The community population estimate submitted to the Alaska Department of Community and Regional Affairs in 1986 indicated a total population of 623 persons, while a 1987 census conducted by the City of Togiak counted a total of 646 people.

Aside from permanent and quasi-permanent (school teachers, etc.) residents of Togiak, the community experiences a major influx of commercial fishermen and some processing plant workers (working offshore and onshore) from outside the local area during the short but intense salmon and herring fishing seasons. According to City of Togiak estimates, the total population of the Togiak Bay area (including floating processors) at the peak of the season is close to 2,600. This number has grown during the past ten years as a result of increased interest by Bristol Bay fishermen in the Togiak salmon fishery and since large scale exploitation of Togiak Bay herring resources began in 1977.

## B. POPULATION COMPOSITION

The outstanding feature of Togiak's population is that most residents are Yupik Eskimos. Historically, the only non-Natives living in Togiak have been teachers and missionaries plus an occasional trader. This is still essentially true although the number of non-Natives has increased from around 5 in the 1960s to 27 at the time of the 1980 Census. In 1970, Alaska Natives made up 98.4 percent of Togiak's population. Despite a significant increase in the number of non-Natives between 1970 and 1980, mainly because of the establishment of a local high school program, Alaska Natives still accounted for 94.3 percent of the community's residents at the time of the 1980 Census.

The population characteristics of Togiak's Alaska Native and non-Native residents are dissimilar. According to the 1980 Census, the non-Native population was almost exclusively made up of young and middle aged adults plus a small number of young children. The median age of the non-Native population in 1980 was 32.5 for males and 28.8 for females, much older than that for Togiak Natives, although it is reasonably typical of rural Alaska schoolteachers and is comparable with national norms.

In addition to the 1970 and 1980 Censuses, detailed population surveys in Togiak have been undertaken by the Bureau of Indian Affairs in 1966 and by Wolfe et al in 1983. Using these data, supplemented by Permanent Fund dividend and other statistics, a review of changes in the age and sex

characteristics of Togiak's Alaska Native population was undertaken to ascertain changes which have occurred since the 1960s.

In 1966, the Bureau of Indian Affairs found the median age of Togiak males and females to be 14.3 and 13.8 respectively. The major factor in the extreme youth of the local population appears to have been high birth rates although higher rates of infant survival were undoubtedly also a factor. Togiak males outnumbered females in 1966 but only by a small margin (50.6 to 49.4 percent).

By the time of the 1970 Census, the median age of the community's Alaska Native population had risen to 16.3 for males and 15.8 for females. The widespread introduction of birth control measures by the U.S. Public Health Service during the 1960s is believed to have been the major reason for the increased median age as the community's under 5 age group in 1970 was slightly less well represented than the 5 to 9 and 10 to 14 age ranges. Alaska Native males outnumbered females by a 53.6 to a 46.4 percent margin in 1970. This male to female ratio was more unbalanced than that recorded by the Bureau of Indian Affairs four years earlier, although it is not known if the Bureau derived its data by use of a community survey or by other means.

The 1980 Census confirmed the trend to a higher median age of Togiak's population. By this time, the median age of Alaska Native males had risen to 22.8 and that of females to 20.9 (with the community as a whole registering a slightly higher median age of 23.5 for males and 21.4 for

females). In 1980, Alaska Natives under the age of 5 accounted for 7.8 percent of Togiak's total Native population, substantially less than the 14.9 percent recorded for the same age group by the 1970 Census. In 1980, the largest single age groups in the community were the 15 to 19 and 20 to 24 age ranges, i.e. persons born before the Public Health Service's birth control campaign in the mid-1960s. The male to female ratio, however, was more even than was the case for Alaska Natives in the community in 1970. In 1980, males outnumbered females only slightly by a 50.9 to a 49.1 percent margin.

In the near future, the childbearing and migration decisions made by Togiak's largest population group, i.e. young adults, will determine future rates of community growth. As is indicated by Wolfe et al's 1983 survey, the under 5 age range is again increasing both in number and as a proportion of total village population (up to 10 percent). Alaska Permanent Fund dividend statistics for 1985 indicate that the proportion of Togiak's population under the age of 5 rose even further to 12.1 percent. This trend is likely to continue simply because of the relatively large number of young adults in the community rather than any increase in birth rates. Furthermore, according to Togiak's city manager, few young adults currently leave the community and, when local residents do marry persons from outside the village, their spouses tend to migrate to Togiak. If this situation persists, the number of young children in the village is even more likely to continue to increase, at least during the next five years.

The other notable change in Togiak's population composition between 1980 and 1983 was an increase in the proportion of males who accounted for 53.8 percent of the community's "permanent" (i.e. excluding most school teachers) in 1983. The principal reasons for this change appear to be some out-migration of young adult females aged between 20 and 24 plus a much higher proportion of males than females in the under 5 age range.

Household densities are another indicator of population change. However, although family sizes have doubtless declined, comparisons of household size over time in Togiak and most other rural Alaska communities are misleading. In 1966, the Bureau of Indian Affairs found the mean household size in Togiak (including four families who had recently moved to Twin Hills) to be 5.6. This was similar to the 5.8 persons per unit cited by the 1970 Census. However, the construction of new housing during the 1970s by the Alaska State Housing Authority and the Bristol Bay Housing Authority (using HUD funds) has served to increase the number of available units. Thus, the 1980 Census found an average of 4.6 persons per unit in Togiak. In 1983, Wolfe et al found the average household size in the community to have risen to 5.3 but this apparent increase is again misleading since it is probably due in large part to Wolfe's exclusion of most school teachers rather than to any significant change in family size.

The influence of strong family and other ties among Togiak residents continues to be a major factor in the stability of the community's Eskimo population. As part of their 1983 work in the community, Wolfe et al ascertained the birthplaces of heads of household. In Togiak's case, it

would have been useful to also know the age of the heads of household since this would have provided better definition of the various periods of immigration from locations such as Osviak and the Kuskokwim River. However, the following list of birth places does indicate that most Togiak residents originated from either the Togiak Bay or Lower Kuskokwim areas.

<u>Location</u>	<u>Percentage</u>
New Togiak	20
Old Togiak	6
Osviak (Aziavigamute)	16
Togiak River	12
Tundra villages	3
Bristol Bay	10
Kuskokwim River	11
Central Bering Sea coast	13
Other	9
<u>TOTAL</u>	<u>100</u>

#### C. TRENDS IN WAGE AND SALARY EMPLOYMENT

There is no published information available which documents the extent of participation by Togiak area residents in the regional cash economy in the early years of the commercial fishing and fish processing industry. However, it is assumed to have been minimal since Alaska Natives were generally excluded from the harvesting sector of the Bristol Bay fishery until after World War II by strong unions controlled by fishermen from California and Seattle (Wolfe et al, February 1984). Moreover, prior to World War II, few Natives were employed by the canneries as the processors relied heavily on Chinese and, later, on Filipino and Mexican contract labor which was seen as being more reliable. According to VanStone (1967), out of 4,328 cannery workers in Southwest Alaska in 1937, only 194 were



TABLE 332  
POPULATION COMPOSITION  
TOGIAK  
1966

<u>Age Range</u>	<u>Number</u>		
	<u>Male</u>	<u>Female</u>	<u>Total</u>
Under 14 years	103	103	206
14 - 24	37	37	74
25 - 34	22	23	45
35 - 44	21	21	42
45 - 64	21	15	36
65 and over	3	3	6
<u>TOTAL</u>	<u>207</u>	<u>202</u>	<u>409</u>
<u>Median Age</u>	<u>14.3</u>	<u>13.8</u>	<u>13.9</u>

Source: Bureau of Indian Affairs, 1966.

TABLE 333

POPULATION COMPOSITION  
TOGIAK  
1970

Age Range	Alaska Native		Non-Native		Total	
	Male	Female	Male	Female	Male	Female
Under 5 years	33	23	0	0	33	23
5 - 9	63	62	0	0	29	33
10 - 14	(42)	(36)	(0)	(1)	34	29
15 - 19	(17)	(14)	(2)	(1)	31	25
20 - 24	(21)	(18)	(0)	(2)	11	12
25 - 29	(14)	(12)	(0)	(0)	9	9
30 - 34	(14)	(12)	(0)	(0)	10	6
35 - 39	(6)	(6)	(0)	(0)	9	12
40 - 44	(6)	(6)	(0)	(0)	12	8
45 - 49	(6)	(6)	(0)	(0)	7	8
50 - 54	(6)	(6)	(0)	(0)	7	4
55 - 59	(6)	(6)	(0)	(0)	4	3
60 - 64	(6)	(6)	(0)	(0)	2	3
65 - 69	(6)	(6)	(0)	(0)	2	2
70 - 74	(6)	(6)	(0)	(0)	2	0
75 and over	(6)	(6)	(0)	(0)	2	2
<b>TOTAL</b>	<b>202</b>	<b>175</b>	<b>2</b>	<b>4</b>	<b>204</b>	<b>179</b>
<b>Median Age</b>	<b>16.3</b>	<b>15.8</b>	<b>30.0</b>	<b>34.9</b>	<b>16.0</b>	<b>16.0</b>
					<b>16.0</b>	<b>16.0</b>
						<b>383</b>
						<b>16.0</b>

Source: U.S. Census.

TABLE 334

POPULATION COMPOSITION  
TOGIAK  
1980

Age Range	Alaska Native		Non-Native		Total	
	Male	Female	Male	Female	Male	Female
Under 5 years	15	20	2	1	17	21
5 - 9	18	22	0	1	18	23
10 - 14	33	27	0	0	33	27
15 - 19	31	35	0	1	31	36
20 - 24	30	33	1	1	31	34
25 - 29	28	18	3	4	31	22
30 - 34	11	6	3	1	14	7
35 - 39	4	11	4	2	8	13
40 - 44	9	7	0	0	9	7
45 - 49	10	11	1	1	11	12
50 - 54	13	7	0	1	13	8
55 - 59	10	11	0	0	10	11
60 - 64	7	3	0	0	7	3
65 - 69	3	4	0	0	3	4
70 - 74	2	3	0	0	2	3
75 and over	3	1	0	0	3	1
<b>TOTAL</b>	<b>227</b>	<b>219</b>	<b>14</b>	<b>13</b>	<b>241</b>	<b>232</b>
<b>Median Age</b>	<b>22.8</b>	<b>20.9</b>	<b>32.5</b>	<b>28.8</b>	<b>23.5</b>	<b>21.4</b>
		<b>21.8</b>		<b>29.9</b>		<b>473</b>
						<b>22.4</b>

Source: U.S. Census.

TABLE 335

POPULATION COMPOSITION  
TOGIKAK  
1983

<u>Age Range</u>	<u>Alaska Native</u>		<u>Non-Native</u>		<u>Total</u>	
	Male	Female	Male	Female	Male	Female
Under 5 years						
5 - 9	31	22	22	20	53	42
10 - 14	22	20	28	34	57	66
15 - 19	29	32	30	35	72	67
20 - 24	42	32	15	7	44	16
25 - 29	32	29	9	10	19	19
30 - 34	29	9	10	11	21	21
35 - 39	9	16	9	9	25	15
40 - 44	6	9	6	10	15	15
45 - 49	9	8	10	10	18	18
50 - 54						
55 - 59						
60 - 64						
65 and over						
<u>TOTAL</u>	<u>285</u>	<u>245</u>	<u>23.5</u>	<u>23.2</u>	<u>530</u>	<u>23.3</u>
<u>Median Age</u>						

Note: Population figures exclude "temporary" village residents, a definition which includes most school teachers. Total village population in 1983 was estimated by the City of Togiak to total 545 persons.

Source: Wolfe et al., February 1984.

TABLE 336  
 PERMANENT FUND DIVIDEND RECIPIENTS  
 TOGIAK  
 1982 - 1985

<u>Age Group</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
0 - 4		52	65	69
5 - 9			45	47
10 - 14			55	50
15 - 19			57	61
20 - 24			69	67
25 - 29			65	66
30 - 34			50	58
35 - 39			24	29
40 - 44			22	24
45 - 49			21	19
50 - 54			18	21
55 - 59			16	16
60 - 64			19	21
65 - 69			9	8
70 - 74			8	5
75 & over			3	6
Unknown	0	2	1	4
<u>TOTAL</u>	<u>524</u>	<u>547</u>	<u>547</u>	<u>571</u>

Note: 1982 age breakdown: 0-17 - 193; 18-27 - 126; 28-37 - 80; 38-47 - 44; 48-57 - 38; 58-67 - 27; 68-77 - 14; 78+ - 2; Unknown - 0; Total - 524.  
 1983 age breakdown: 0-4 - 52; 5-17 - 138; 18-27 - 138; 28-37 - 87; 38-47 - 47; 48-57 - 37; 58-67 - 30; 68-77 - 14; 78+ - 2; Unknown - 2; Total - 547.

Source: Alaska Department of Revenue.

Alaska Natives. Native residents of the Bristol Bay region maintained largely traditional lifestyles based on hunting, fishing and trapping until World War II when conscription reduced the "Outside" fishing and fish processing labor force and canneries became more reliant on local workers.

At some point during the early years of the twentieth century, reindeer herding was established in the Bristol Bay area. However, this reportedly ended in the 1940s as a result of a combination of poor herding techniques, severe winter weather and other factors (U.S. Department of the Interior, Alaska Planning Group, 1974). The reindeer industry was reactivated in the late 1960s when reindeer were loaned to three individuals from Togiak to enable them to start a privately owned herd on Hagemeister Island (Bureau of Indian Affairs, August 1966). This herd numbered approximately 435 head by 1972 (U.S. Department of the Interior, Alaska Planning Group, 1974) and today there are around 700 to 800 animals on the island (U.S. Fish and Wildlife Service, personal communication). However, it is now owned by a single individual who purchased it from the local village corporation during the late 1970s (Wolfe et al, February 1984).

The Togiak salmon fishery did not develop as a commercial fishery until after World War II when buying scows from canneries near Dillingham began coming over to Togiak Bay. According to Wolfe et al (February 1984), these early buying efforts were haphazard. During this period, many Togiak families traveled by boat to Dillingham each season and camped on the

beaches below town where they put up fish for their own consumption and did wage labor for the canneries.

Togiak's modern economy dates from 1954 when the first cannery was established in the Togiak Bay area (Wolfe et al, February 1984). This provided a stable local buyer of fish and allowed the development of a local fishery. Village participation in commercial salmon fishing activities increased rapidly thereafter and the seasonal movement to Dillingham ceased almost immediately. Togiak men and their sons did the harvesting while many of the wives and daughters went to work in the cannery. The National Guard also became a significant source of cash income for many village households and construction of an armory in Togiak was undertaken in 1959 (Kowta, 1963).

The earliest comprehensive report on wage and salary employment in the Togiak area was undertaken by the Bureau of Indian Affairs in 1966. This report noted that only 3 local men and one woman were employed full-time. The remainder of the labor force was employed on the annual salmon run, with a few also engaged by the commercial salmon industry during the winter months, presumably in maintenance or caretaker occupations. The labor force at that time was broken down as follows:

	<u>Male</u>	<u>Female</u>	<u>Total</u>
In labor force (over 14)	82	31	113
Not in labor force (over 14)	11	48	59
<u>Total</u>	<u>93</u>	<u>79</u>	<u>172</u>

Although some villagers fished for canneries in the Dillingham area, most fished for Togiak Fisheries located just across the mouth of the Togiak River. That company was seen as the main reason for Togiak's rapid population growth and its relative prosperity. However, there was no village store at the time and subsistence activities remained a major focus of village existence.

The 1970s marked another period of major economic change for Togiak. After passage of the Alaska Native Claims Settlement Act in 1971, Togiak Natives, Ltd. became a significant force in the local economy. A high school program was added in the mid-1970s which not only enabled students to complete their education in their home town but also increased the number of non-Natives in the village and provided some additional job opportunities for local residents. Although it was a significant source of temporary employment in some rural areas of the State, construction of the Trans Alaska Pipeline project had little economic impact on Togiak. According to Alyeska Pipeline Service Company records (Alaska Review of Social and Economic Conditions, February 1978), only 4 Togiak residents (or 1 percent of the number enrolled to Togiak Natives, Ltd.) worked at least temporarily on this project at some point between 1974 and 1977.

The major economic event of the 1970s in Togiak was the dramatic expansion of the commercial herring sac roe fishery in this area in 1977 which resulted in a major influx of processors, purse seiners and non-local gillnetters into Togiak Bay. Local fishermen were slow to enter this



fishery, instead focusing their efforts on the herring roe-on-kelp fishery which requires much less initial investment in gear.

The Alaska Planning Group, U.S. Department of the Interior (1974) estimated that about 225 Togiak residents bought commercial fishing licenses in 1972, and additional persons were employed by fish processing plants in the area, while still others traveled outside the local area to work in processing plants elsewhere in the Bristol Bay region. Virtually all adult residents of the community were said to derive income from some aspect of the commercial fishing industry. Trapping was the only other significant local industry relying on a natural resource, with Togiak residents contributing heavily to the Dillingham beaver round-up.

Most wage employment in the Togiak area in 1972 continued to be seasonal, with opportunities greatest during the summer. In addition to fishing and fish processing, lighterage operations employed significant numbers of people when the barges arrived with the yearly supply of groceries, fuel and other goods. Village housing or other construction projects also periodically provided summer employment, while some people traveled to other areas of the State for construction jobs.

The 1972 report also noted that Togiak area residents were sometimes employed on an emergency basis by the Bureau of Land Management to fight forest fires, but that no one had been employed in that capacity in either 1971 or 1972. The Army National Guard was another source of part-time

employment and a few people were noted to be employed full-time, mostly by the school, post office and health agencies and by village stores.

1980 Census labor force and employment information for Togiak (including some comparisons with 1970) were examined for this report. Total 1980 employment data for Togiak appear to be reasonably accurate when compared with subsequent (1983) analyses undertaken by Wolfe et al (February 1984). However, unemployment rates are misleading for a community like Togiak which has a highly seasonal economy. Had the Census been taken in July rather than April, for example, recorded unemployment rates for Togiak would have been minimal. Furthermore, Census Bureau allocations of employment by industry in Togiak for 1970 and 1980 do not accurately reflect the situation in the community, even allowing for differences in industry definition.

In a community profile of Togiak, DOWL Engineers (1982) noted the community's heavy dependence on subsistence activities, with the cash economy continuing to center around the commercial fishing and fish processing industry. However, that industry had broadened as a result of the institution of a large scale commercial herring fishery in Togiak Bay in 1977. At the time of the DOWL report, three fish processing facilities were located near Togiak. Togiak Fisheries, located on the opposite shore from the community, continued to be the major employer. Kachemak Seafoods had a plant at the edge of the town and the local village corporation was in the process of constructing a new cannery, Togiak Eskimo Seafoods, near the Kachemak Seafoods plant.

Participation by Togiak residents in commercial fishing activities continued to be high. According to DOWL Engineers, 50 set net permits and 100 to 150 drift net permits were held by Togiak residents. Very few local persons were said to participate in the herring sac roe fishery, but about 200 people were estimated to be involved in harvesting herring roe on kelp.

Non-fisheries employment in Togiak in 1981 included 16 persons (probably not all of them full-time) employed in a wide variety of municipal functions; 2 health aides; 16 full-time school instructors and 5 part-time teacher aides. The village also had a cooperative store (established in 1970 with financing from the Community Enterprise Development Corporation), a National Guard armory, two churches (Moravian and Seventh Day Adventist) and a transportation company office.

Wolfe et al. (February 1984) undertook a comprehensive analysis of wage and salary employment in Togiak in 1983. (Other reports published at about the same time - Payne and Braund, November 1983; and Impact Assessment, Inc., August 1984; were also reviewed but Wolfe's data were the most complete). The results of that work have been further analyzed for this report and converted into estimated average annual full-time employment. The major omission in terms of average annual full-time employment (although a deliberate one) is that Wolfe's count excludes non-Togiak residents who participate in the local commercial salmon and herring fisheries and who contribute to the local economy. The scale of the local fishing and fish processing industry is therefore greatly understated. In addition, most

school teachers were excluded on the basis that they were not "permanent" community residents. However, the breakdown of employment by industry and employer does provide considerable insight into changes in the local economy which have occurred during the past twenty years, especially when viewed in conjunction with estimated sources of income for the same year (also compiled by Wolfe et al).

According to Wolfe, 136 Togiak residents participated in the area's salmon fishery during 1982. Although salmon begin entering Togiak Bay in mid-June and continue through August, effort by most Togiak-based fishermen is concentrated in July, with few fishing more than five days per week. When converted to average annual full-time employment, the Togiak salmon fishery represents only about 11 jobs. Also during 1982, 19 Togiak residents participated in the herring sac roe fishery, while 53 local persons were engaged in the herring roe-on-kelp fishery. The length of season for these fisheries is of even shorter duration than the salmon fishery, with herring sac roe being taken during a two-week period and the two or three herring roe-on-kelp openings being limited to a few days. Together, the herring fisheries were estimated to employ an annual average full-time equivalent of 1 local person.

Although Togiak's commercial salmon and herring fisheries are estimated to employ an average annual full-time equivalent of only about 12 persons, the fishing industry is by far the greatest source of cash income in the village. Wolfe (February 1984) estimated that income from this industry in 1982 represented two-thirds of total village cash income or, if transfer

and dividend payments are excluded, for 77.9 percent of total wage and salary income. Thus, the importance of the fishing industry to Togiak is far greater than that indicated by average annual full-time employment equivalent statistics. Furthermore, the opportunities afforded by commercial fishing in this area not only enable Togiak residents to earn significant amounts of cash income in a very short period but also provide them with large blocks of time for subsistence pursuits.

The share of the total Togiak salmon fishery earned by local fishermen has steadily declined since 1976, due primarily to increased participation by non-local fishermen. In 1976, village fishermen delivered 70.7 percent of the total value of salmon caught in the Togiak district. By 1982, this had fallen to 53.2 percent. Wolfe also noted that the number of permits fished by Togiak residents decreased from a peak of 125 in 1979 to 116 in 1982, primarily because of revocation of interim-use permits and transfers of permits out of the community. He further noted that another six locally held interim-use drift gillnet permits were lost through adjudication and revocation between 1982 and 1983.

Fish processing employment accounted for an annual equivalent of only 6 full-time jobs for Togiak residents in 1983. According to Wolfe (February 1984), Kachemak Seafoods employed approximately 40 local persons (mostly teenagers and young adults but no adult men) during the peak of the salmon season and 8 local women worked at the nearby Togiak Fish cannery.

Local participation in fish processing activities by Togiak residents has declined over the years. Wolfe noted that few males now work in seafood processing as fishing is seen as more rewarding, both economically and socially. In addition, adult women have increasingly become involved in fishing and made up over 20 percent of the local permit holders in 1982. However, while Togiak males primarily hold drift permits, the females primarily hold set gillnet permits.

The government sector was the major source of full-time employment in Togiak in 1983, with the largest employers being the Southwest Region Schools and the City of Togiak. Wolfe's employment figures for Southwest Region Schools are understated as they exclude almost all teachers on the basis that they are not "permanent" community residents. Employment in the government sector has increased markedly over the past twenty years, primarily because of increased State spending for education and local government support programs.

Employment by Togiak Natives, Ltd., the local ANCSA village corporation, accounted for an estimated average annual equivalent of 6.5 persons in 1983, spread among the contract construction, trade and the finance, insurance and real estate sectors. Other employment in the community in 1983 amounted to an equivalent of 8.5 full-time jobs in 1983, mainly in the trade and service sectors.

In its profile of Togiak (October 1987), the Southwest Alaska Municipal Conference included some employment data. These data are not directly

comparable with earlier statistics compiled by Wolfe and others because they do not take employment seasonality into account. The number of locally held commercial salmon fishery permits in 1986 was the same as in 1983, although it is not known how many of those permits were fished in the latter year. In general, the composition of employment in Togiak in 1986 appears to have changed little from that described by Wolfe et al. However, the plant formerly operated by Kachemak Seafoods is now operated by T.E.A.M. Seafoods which also leases the buildings constructed by Togiak Natives, Ltd. According to the city manager, these shore facilities were not utilized for seafood processing during 1987 but will be used for that purpose during the 1988 season. The nearby Togiak Fisheries plant continues to operate in the same manner as in prior years.

Finally, Alaska Department of Labor monthly employment statistics for the Togiak area (which includes the nearby village of Twin Hills) were examined to see if they could provide a reliable time series by which trends in employment in the community could be assessed. For Togiak, this data series has a serious limitation in that covered employment excludes fishermen, the major source of community employment and income. In addition, local employment by the Southwest Region Schools appears to be counted at Dillingham, the school district headquarters, while that for most other sectors is not available because of disclosure regulations. Within these limitations, however, the series does have some value in that it provides a degree of insight into the total scale of fish processing operations in the Togiak area.

TABLE 337  
 SELECTED LABOR FORCE DATA  
 TOGIAK  
 1980

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LABOR FORCE STATUS, PERSONS OVER 16 YEARS, 1980

<u>Labor Force Status</u>	<u>Alaska Natives</u>		<u>All Races</u>		
	Male	Female	Male	Female	Total
Armed Forces	0	0	0	0	0
Civilian Employed	13	18	27	33	60
Civilian Unemployed	81	57	81	57	138
Not in Labor Force	50	68	53	68	121
Labor Force Participation Rate	65.0%	52.0%	67.0%	56.0%	62.0%
Unemployment Rate: 1980	86.2%	76.0%	75.0%	63.3%	69.7%
1970	*	*	19.2%	0.0%	11.6%

EMPLOYMENT BY INDUSTRY, 1970 AND 1980

<u>Industry</u>	<u>1970</u>	<u>1980</u>
Construction	0	3
Manufacturing	0	0
Transportation	0	3
Communications	5	4
Trade	6	0
Finance, Insurance & Real Estate	0	2
Services	22	36
Public Administration	5	10
Other	0	2
<u>TOTAL</u>	<u>38</u>	<u>60</u>

\* Data missing or suppressed.

Source: U.S. Census, 1980.



TABLE 338

AVERAGE ANNUAL FULL-TIME EMPLOYMENT BY EMPLOYER\*  
TOGIAK  
1983

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<u>Industry Classification</u>	<u>Number</u>
Agriculture, Forestry and Fishing (136 fishermen/1 month plus herring fishery)	12.0 (12.0)*
Mining	0.0
Contract Construction (Togiak Natives Ltd.)	2.0 ( 2.0)*
Manufacturing (Togiak Fish Cannery) (Kachemak Seafoods)	6.0 ( 1.0)* ( 5.0)*
Transportation, Communication and Public Utilities (AVEC) (United Utilities)	1.0  ( 0.5) ( 0.5)
Trade (Togiak Natives Store) (Co-op Store) (Fuel Custodian) (6 Family Stores)	9.0 ( 4.5) ( 2.0) ( 0.5)* ( 2.0)*
Finance, Insurance and Real Estate (Togiak Natives Ltd.)	2.0 ( 2.0)
Service (Bristol Bay Area Health Corporation)	3.0 ( 3.0)
Government	31.5
Federal (Post Office)	 ( 1.5)
State	
Local (City of Togiak) (Southwest Region Schools) (Village Public Safety Officers)	 (14.0) (14.0)** ( 2.0)
<u>TOTAL</u>	<u>66.5</u>

\* Estimated. Fishing and fish processing employment includes Togiak residents only. Fishing employment data are for 1982.

\*\* Teachers (excluding aides) counted as full-time employees.

Note: Other local employment and income was derived from airport maintenance, Food Stamp fee processing, weather observation and National Guard activities.

Source: Wolfe et al. February 1984.

TABLE 339  
ESTIMATED CASH INCOME BY SOURCE  
TOGIAK  
1982

<u>Source of Income</u>	<u>Without Transfer and Dividend Payments</u>		<u>With Transfer and Dividend Payments</u>	
	<u>Income</u>	<u>Percentage</u>	<u>Income</u>	<u>Percentage</u>
Commercial fishery	\$3,061,000	77.9	\$3,061,000	66.6
State and federal employment	398,000	10.1	398,000	8.7
City of Togiak	171,000	4.4	171,000	3.7
Togiak Natives, Ltd.	86,000	2.2	86,000	1.9
Commercial trapping	10,000	0.2	10,000	0.2
Cannery employment	60,000	1.5	60,000	1.3
Other employment**	141,000	3.6	141,000	3.1
Transfer payments***			138,000	3.0
Dividend payments			530,000	11.5
<u>TOTAL</u>	<u>\$3,927,000</u>	<u>100.0</u>	<u>\$4,595,000</u>	<u>100.0</u>

\* Excludes income from non-resident teachers, family-operated stores and temporary employment.

\*\* Includes employment by AVEC, Cooperative Store, United Utilities, airline agents, airline pilots and private fuel distributor.

\*\*\* Includes public assistance, food stamps and energy assistance.

Source: Wolfe et al. February 1984.

TABLE 340

COVERED INDUSTRY EMPLOYMENT  
TOGIAK AREA\*\*  
1980

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	*	*	*	14	36	54	116	146	80	18	5	9
Transportation, Communication and Public Utilities	*	*	*	0	0	0	*	*	*	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	0	0	0	0	0	0	0	0	0	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	2	2	2	0	0	0	0	0	0	0	0	0
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	13	19	17	17	20	18	15	12	21			
<u>TOTAL</u>	<u>23</u>	<u>28</u>	<u>27</u>	<u>35</u>	<u>61</u>	<u>86</u>	<u>148</u>	<u>174</u>	<u>112</u>	<u>38</u>	<u>26</u>	<u>29</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Togiak area also includes Twin Hills.

Source: Alaska Department of Labor.

TABLE 341

COVERED INDUSTRY EMPLOYMENT  
TOGIAK AREA\*\*  
1981

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	8	4	5	*	*	*	125	142	82	11	4	5
Transportation, Communication and Public Utilities	*	*	*	*	*	*	25	25	30	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	0	0	0	0	0	0	0	0	0	0	0	0
State	0	0	0	0	0	0	0	0	0	0	0	0
Local												
<u>TOTAL</u>	<u>24</u>	<u>20</u>	<u>19</u>	<u>37</u>	<u>132</u>	<u>87</u>	<u>153</u>	<u>170</u>	<u>125</u>	<u>58</u>	<u>52</u>	<u>37</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Togiak area also includes Twin Hills.

Source: Alaska Department of Labor.

TABLE 342

COVERED INDUSTRY EMPLOYMENT  
TOGIK AREA\*\*  
1982

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	4	5	3	4	14	108	99	127	103	11	4	6
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*	*	*	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	0	0	0	0	0	0	0	0	0	0	0	0
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	24	20	21	22	23	28	22	26	40	49	34	24
<u>TOTAL</u>	<u>24</u>	<u>20</u>	<u>21</u>	<u>35</u>	<u>53</u>	<u>147</u>	<u>140</u>	<u>174</u>	<u>162</u>	<u>83</u>	<u>60</u>	<u>50</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Togiak area also includes Twin Hills.

Source: Alaska Department of Labor.

TABLE 343

COVERED INDUSTRY EMPLOYMENT  
TOGIK AREA\*\*  
1983

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	1	1	7	214	245	244	*	*	*	23	23	11
Transportation, Communication and Public Utilities	*	*	*	*	*	*	0	0	0	0	0	0
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	0	0	0	0	0	0	0	0	0	*	*	*
Government												
Federal	0	0	0	0	0	0	0	0	0	0	0	0
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	26	18	29	22	22	17	19	19	39	39	33	31
<u>TOTAL</u>	<u>32</u>	<u>35</u>	<u>51</u>	<u>249</u>	<u>292</u>	<u>285</u>	<u>107</u>	<u>142</u>	<u>84</u>	<u>81</u>	<u>72</u>	<u>59</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Togiak area also includes Twin Hills.

Source: Alaska Department of Labor.

TABLE 344

COVERED INDUSTRY EMPLOYMENT  
TOGIK AREA\*\*  
1984

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	20	11	5	4	2	3
Manufacturing	*	*	*	13	47	37	113	104	67	20	7	9
Transportation, Communication and Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	0	0	0	0	0	0	0	0	0	0	0	0
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	19	18	18	31	23	24	21	18	19	21	20	22
<u>TOTAL</u>	<u>42</u>	<u>38</u>	<u>53</u>	<u>59</u>	<u>84</u>	<u>94</u>	<u>165</u>	<u>145</u>	<u>109</u>	<u>61</u>	<u>47</u>	<u>52</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Togiak area also includes Twin Hills.

Source: Alaska Department of Labor.

TABLE 345

COVERED INDUSTRY EMPLOYMENT  
TOGIAK AREA\*\*  
1985

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	*	*	*	*	*	155	100	54	11	8	17	
Transportation, Communication and Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	*	*	*	*	*	*	0	0	0	0	0	0
Government												
Federal	0	0	0	0	0	0	0	0	0	0	0	0
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	16	15	14	15	15	17	20	31	48	30	34	30
<u>TOTAL</u>	<u>39</u>	<u>34</u>	<u>36</u>	<u>176</u>	<u>346</u>	<u>418</u>	<u>190</u>	<u>144</u>	<u>117</u>	<u>57</u>	<u>59</u>	<u>74</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Togiak area also includes Twin Hills.

Source: Alaska Department of Labor.



TABLE 346

COVERED INDUSTRY EMPLOYMENT  
TOGIAK AREA\*\*  
1986

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	17	17	19	35	198	149	167	124	81	*	*	*
Transportation, Communication and Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	0	0	0	0	0	0	0	0	0	0	0	0
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	22	23	22	26	25	36	25	25	24	29	35	34
<u>TOTAL</u>	<u>59</u>	<u>52</u>	<u>59</u>	<u>81</u>	<u>246</u>	<u>200</u>	<u>202</u>	<u>167</u>	<u>127</u>	<u>68</u>	<u>75</u>	<u>68</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Togiak area also includes Twin Hills.

Source: Alaska Department of Labor.

## UNALASKA

### A. PAST POPULATION TRENDS

Unalaska is located on Unalaska Island in the Fox Islands group in the eastern Aleutian Islands, about 800 miles southwest of Anchorage. As eighteenth century Russian explorers and fur traders progressed eastward along the Aleutian Island chain in their quest for commercially valuable furs, the numerous traditional Aleut villages throughout the Fox Islands were inevitably drawn into the sphere of Russian influence. Reportedly, the Russian explorer Chirikof was the first European to sight Unalaska Island in 1741 (Bancroft, 1886), although the first landing by Russians did not take place until 1762. These first contacts led to hostile confrontations with the Aleut occupants and to forcible pacification, with many Aleut deaths (Bancroft, 1886). Around 1765, the Russian merchant Glotov established a permanent settlement at Iliuliuk on Unalaska Bay as the center for the region's fur hunting operations. The disruption of traditional Aleut settlement patterns in this area then began in earnest.

The aboriginal Aleut population can be subdivided into two broad sub-areas, based on dialectic differences: the western Atka district made up of the Andreanof, Rat and Near Islands; and the eastern Unalaska district made up of the Fox Islands group, the Pribilof Islands (settled after 1786 by Aleuts relocated mainly from the Unalaska district), the Shumagin Islands and the lower Alaska Peninsula. For purposes of describing the historic evolution of Unalaska village itself, it is helpful to use a smaller sub-

region which includes the settlements of Unalaska Island and nearby Sidanak Island.

Estimates of the aboriginal Aleut population prior to Russian contact are debatable. Laughlin (1980) accepts an estimated pre-contact population of about 16,000 Aleuts overall, of whom 10,000 to 11,000 lived in the Unalaska district.

The post-contact population of Unalaska and other nearby settlements has been relatively well documented. Within decades of Russian contact, the Aleut population declined precipitously. Military oppression, resettlement, disease and seafaring hazards each played a part. The Russian overlords also impressed Aleut men into service as hunters and laborers for their ventures in Kodiak, Sitka, Yakutat and even California. In the early 1800s, the Russians sent many Aleut families, mainly from the Unalaska area, to colonize the Pribilof Islands. Veniaminov put the 1781 Aleut population of the Unalaska district at 1,900 persons, already less than a fifth of the pre-contact level. An 1818 Russian census of the Aleut population (Petroff, 1883) recorded a total Aleut population of 1,469 persons, the majority of whom (1,022) lived in the Fox Islands group.

Baron Wrangell (Petroff, 1884), reported three settlements (Iliuliuk, Biorka and Chernovsky) on Unalaska Island in 1825, with a total combined population of 403 persons, the largest of which was Iliuliuk with 333 people. "Iliuliuk", a former name for Unalaska, possibly encompassed a number of small settlements on the shore of Unalaska Bay. (Biorka, which

was actually on nearby Sidanak Island, was often included with Unalaska Island settlements). Veniaminov's more painstaking 1831 census counted 11 villages in the Unalaska sub-region, for a total area population of 516 persons. Unalaska, with 196 residents, was the largest settlement. Based on these censuses, it appears that in this era the Unalaska sub-region's Aleut population ranged between 500 and 600 persons. Of course, by this time, traditional Unalaska area settlement patterns had already been shattered by massive depopulation and forced resettlement under Russian control. It is also noteworthy that these early censuses consistently enumerated more female than male Aleuts, a circumstance that may be due to the risks which male fur seal hunters encountered at sea.

Finally, a census of the inhabitants of Russian America conducted in 1863, shortly before Alaska's purchase by the United States, counted a total of 2,428 Aleuts, unfortunately not allocated by place. This figure is only slightly higher than the 1825 census of all Aleuts (1,851 persons, not including perhaps 400 Pribilof Islanders) and Veniaminov's 1841 estimated total Aleut population of 2,247 persons. The consistency of these data suggest that there was no major change in the overall size of the Aleut population between 1825 and the United States' purchase of Alaska, although there probably were significant intra-regional population shifts.

The first official United States census of Alaska (1880) recorded 783 persons at five Unalaska Island villages, of which Unalaska village (406 persons) was largest. By that date, Unalaska's role as a meeting place between the region's traditional Aleut communities and Indo-European

outlanders had put its signature on the population. The 1880 Census classified nearly half of Unalaska village's population as "creole" or "white", while the more traditional villages were still almost wholly unmixed Aleut.

A distinguishing feature of Unalaska's post-contact history has been its unique suitability to further the fickle economic and territorial ambitions of extra-regional interests. The main reason for Unalaska's periodic but passing conscription into national and international schemes has been its superior natural harbor close to Unimak Pass, the major North Pacific shipping route between the American Northwest and Asia's North Pacific ports and Alaska's arctic waters and ports. The Russian fur hunters first chose Unalaska as the command center for their fur harvest and shipping operations in the eastern Aleutian Islands. Later, under American rule, Unalaska became a supply depot, coaling station and port of refuge for whaling and pioneer fishing fleets sailing arctic waters. Similarly, by the last quarter of the nineteenth century, Unalaska was the port of entry for all of Western Alaska. It served as a marshalling area for gold rush era miners, supplies and construction materials en route, first to the Klondike via the Yukon River and later to Nome and the Seward Peninsula gold fields. (Note: Unalaska's 1900 Census population of 428 persons was not exceeded until World War II). For a time, Unalaska was one of the busiest ports on America's West coast. After the gold rush era waned, several small salteries and canneries for herring, salmon and whale meat operated for a time around Unalaska (Martinson, 1973). Unalaska also

TABLE 347

POPULATION OF UNALASKA ISLAND VILLAGES  
1825

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<u>Village</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Iliuliuk	152	181	333
Biorka	11	16	27
Chernovsky	22	21	43
<u>TOTAL</u>	<u>184</u>	<u>219</u>	<u>403</u>

Source: Wrangell, per Petroff (1884).

TABLE 348

POPULATION OF UNALASKA ISLAND VILLAGES  
1831

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<u>Village</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Unalaska Island			
Iliuliuk	90	106	196
Natuikinak	6	9	15
Pestriakaf	18	21	39
Vesselovsky	7	8	15
Makushin	15	20	35
Koshigin	18	23	41
Chernovsky	20	24	44
Imaguak	15	17	32
Kalekhta	6	8	14
Bobrovskuia	21	20	41
Sub-Total	<u>216</u>	<u>256</u>	<u>472</u>
Sidanak Island			
Biorka	17	27	44
<u>TOTAL</u>	<u>233</u>	<u>283</u>	<u>516</u>

Source: Veniaminov, per Petroff (1884).

TABLE 349  
 RACIAL COMPOSITION OF POPULATION  
 UNALASKA ISLAND VILLAGES  
 1880

<u>Village</u>	<u>Aleut</u>	<u>Creole</u>	<u>White</u>	<u>Total</u>
Unalaska	230	162	14	406
Biorka	133	6	1	140
Chernovsky	94	4	3	101
Kashega	73	--	1	74
Makushin	31	30	1	62
<u>2TOTAL</u>	<u>561</u>	<u>202</u>	<u>20</u>	<u>783</u>

Source: Petroff (1884).

TABLE 350

HISTORIC POPULATION  
UNALASKA ISLAND  
1880 - 1985

<u>Village</u>	<u>1880</u>	<u>1890</u>	<u>1900</u>	<u>1910</u>	<u>1920</u>	<u>1929</u>	<u>1939</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1985</u>
Unalaska	406	317	428	281	299	226	298	173	218	342	1,322	1,331
Biorka	140	57	48		46	22	20					
Chernovsky	101	78	61		51	38	26					
Dutch Harbor Village						17	52					
Kashega	74	46	52		51	38	26					
Makushin	62	51	71				10					
<u>TOTAL</u>	<u>783</u>	<u>549</u>	<u>660</u>	<u>281</u>	<u>447</u>	<u>341</u>	<u>406</u>	<u>173</u>	<u>218</u>	<u>342</u>	<u>1,322</u>	<u>1,331</u>

Sources: U.S. Bureau of the Census.  
Jones (1973).



became a supply and trading center for the fox farming enterprises which flourished briefly in the region during the 1910s and 1920s.

Unalaska's strategic military significance for modern North Pacific naval and air operations and as a "back door" route to Eastern Europe was recognized even before the outbreak of World War II. Faulkner (1987) provides a concise account of the military operations around Unalaska/Dutch Harbor, including the United States' local build-up of naval, army and air installations before and during the War.

As the War ended and the military installations were decommissioned, there was a lull as Unalaska regrouped as a community. Then, in the early 1960s, exploitation of the king crab commercial fishery propelled Unalaska toward its next transformation: as a major port for landing, processing and transshipment of North Pacific seafoods. However, Unalaska's new fishing economy suffered a series of booms and busts as the commercial fishing industry harvested, then over-harvested, newly exploited king and tanner crab, shrimp and halibut grounds. These events underlined the cyclic instability of Unalaska's economic role in a poorly managed commercial fishery. More recently, with implementation of the 1976 Fishery Conservation and Management Act, Unalaska has re-emerged as a support center and transshipment point for a growing domestic Bering Sea groundfish fishery, with uncertain potential for an enlarged role in certain processing operations. And, for the time being, Unalaska's role as a major support base for OCS oil and gas operations remains prospective,

pending the outcome of exploration for commercial petroleum reserves in the Bering Sea offshore region.

After 1880, the population figures for the Unalaska sub-region's Aleut population show two significant trends. First, the sub-region's total Aleut population follows a generally downward trend, although the true pace of decline is obscured by incomplete Census coverage in 1910, 1920 and, perhaps, 1929. Unalaska suffered repeatedly from epidemics. A measles outbreak killed a third of the town's residents in 1890 and the 1919 influenza epidemic took about a fourth of the population (Surla, 1970). Second, except for Unalaska, all of the sub-region's traditional villages were slowly dwindling in population even before the War, with many of their residents relocating to Unalaska. Jones (1973) cites a 1940 household census of the six Unalaska Island villages which found that 35 of 37 migrants from Chernovsky, Makushin, Biorka and Kashega had moved to Unalaska. Jones (1969) attributes Unalaska's attraction for nearby villages' residents to its superior employment and community services. For example, Unalaska had a school since 1890 (only one other Unalaska sub-region village, Kashega, had its own school for a few years), a resident doctor around 1900 and a Bureau of Indian Affairs-operated hospital in 1934.

The wartime evacuation and government resettlement policies brought this prolonged process of village abandonment to a sudden climax. Whereas in 1939 there were six occupied villages and 406 persons on Unalaska Island, by 1950 there was a single settlement at Unalaska with 173, mostly Aleut,

TABLE 351  
POPULATION ESTIMATES  
UNALASKA  
1805 - 1987

<u>Year</u>	<u>Census</u>	<u>Other Estimates</u>	<u>Sources of Other Estimates</u>
1805		360	Per Jones, 1969
1825		333	Wrangell, per Petroff
1831		196	Veniaminov, per Petroff
1834		196	Per Jones, 1969
1879		304	Per Jones, 1969
1880	406		
1890	317		
1897		250	Per Jones, 1969
1900	428	269	Hooper, per Jones, 1969
1910	281		
1920	299		
1929	243*		
1939	350**		
1950	173		
1960	218	220	Ak. Department of Labor (July)
1967		254	City of Unalaska files
1967		246	Per Jones, 1969
1967		320	Federal Field Committee - 182 Native; 138 non-Native
1967		500	ASHA, 1967
1969		350	Federal Field Committee - 225 Native; 125 non-Native
1970	342	350	Ak. Department of Labor (July)
1970		306	Jones, 1969
1970		475	Jones & Jones, per Surla, 1970
1972		548	City of Unalaska census, per Impact Assessment Inc., 1983
1973		510	City of Unalaska census, per Impact Assessment Inc., 1983
1975		417	U.S. Census Bureau
1976		510	U.S. Census Bureau

1977		725	Alaska Consultants, Inc., 1981
1977		1,971	Tryck, Nyman and Hayes, 1977
-----			
1980	1,322		
1980	1,380***	1,310	Dept. Community/Regional Affairs
1981	1,944***	1,944	Dept. Community/Regional Affairs
1982		2,255	U.S. Census Bureau (July)
1982	1,922***	1,922	Dept. Community/Regional Affairs
1983	1,677***	1,922	Dept. Community/Regional Affairs
1984	1,447***	1,922	Dept. Community/Regional Affairs
1985	1,331***	1,922	Dept. Community/Regional Affairs
1986		1,922	Dept. Community/Regional Affairs
1987		1,331	Dept. Community/Regional Affairs

\* Includes 17 residents of Dutch Harbor Village.

\*\* Includes 52 residents of Dutch Harbor Village.

\*\*\* Alaska Department of Labor estimates derived using U.S. Census methodology. Where these figures are the same as those cited by the Department of Community and Regional Affairs, the Department of Labor accepted local censuses or estimates.

Sources: U.S. Census (1880 - 1980 figures).

Alaska Department of Labor (1980 - 1985 figures).

TABLE 352  
POPULATION TRENDS  
UNALASKA  
1880 - 1985

<u>Year</u>	<u>Population</u>	<u>Percent Change</u>	
		<u>Decennial</u>	<u>Annual</u>
1880	406		
1890	317	-21.9	
1900	428	35.0	
1910	281	-34.3	
1920	299	6.4	
1930	226	-24.4	
1939	298	31.9	
1950	173	-41.9	
1960	218	26.0	
1970	342	56.9	
1980	1,322	286.5	
1981	1,944		47.0
1982	1,922		-1.1
1983	1,677		-12.7
1984	1,447		-13.7
1985	1,331		-8.0

Sources: U.S. Census (1880 - 1980 figures).  
Alaska Department of Labor (1981 - 1985 figures).

residents. Unfortunately, the demographic snapshots logged by the decennial Censuses took place before and after the War years and, thus, do not fully reflect the traumatic events of the 1940s: the wholesale evacuation of the Unalaska sub-region's Aleut population to Southeast Alaska in the summer of 1942; the rapid establishment and decommissioning of a 10,000+ person army, naval and air garrison on Unalaska Island; and the 1945 resettlement of part of the Island's evacuated pre-war Aleut population exclusively to Unalaska. In any case, the 1950 Census count of 173 residents at Unalaska marked a contemporary low point in the community's demographic and economic history.

Jones (1973) juxtaposed the voluntary process of pre-War village population shifts with the coercive manner of the wartime dislocations:

The now deserted villages of Biorka, Kashega, Chernovsky, and Makushin did not have local economies sufficient to support their populations after sea otter hunting ended. . . In the prewar period, members of these villages were moving to Unalaska, the nuclear village, which offered the best job opportunities and community services in the Unalaska village complex.

This migration was interrupted early in World War II when the federal government evacuated all Unalaska Aleuts to southeastern Alaska. When the evacuation ended in 1945, the government completed the consolidation process; it returned evacuees to Unalaska Village, and officials informed them that no government services would be provided to the other villages. Jones (1973), pp. 17-18.

Although Unalaska's Aleut residents were all evacuated in June 1942 due to World War II (non-Natives were allowed to remain) and replaced by a 10,000+ military garrison, the community managed, remarkably, to regain its Aleut identity after the war. Once hostilities abated, the military quickly decommissioned most of its facilities and departed (Faulkner, 1987). The

submarine facilities were decommissioned in May 1945 and the air station reduced in June 1945. The naval base was decommissioned and all naval personnel gone by 1947. When the apparent danger of Japanese invasion was dispelled, the federal government returned most Unalaska Aleuts to their home community. However, the government allowed residents of the Island's outlying communities (Makushin, Kashega, Biorka) to resettle only to Unalaska. This policy was the death knell for the Island's other fading villages. Some of their residents returned to Unalaska, while others were dispersed to other parts of the State and nation.

Thus, the ironic aftermath of the Wartime evacuation and garrisoning was to consolidate Unalaska's status as the sub-region's primary Aleut community, though at the expense of the rest of the Island's traditional communities and with substantial loss in the size of the sub-region's total Aleut population.

Following World War II, the community's Aleut population began a steady rebound, until sudden development of the king crab fisheries overwhelmed the traditional population. After the wartime demise of the other Unalaska Island villages, Unalaska's superior economic and living conditions attracted some Aleut residents from other Aleutian villages as well as returning emigres from outside the region. For example, a 1969 survey by Jones (Surla, 1970) tallied 43 Native immigrants to Unalaska between 1967 and 1969, 25 of whom relocated from other Aleutian villages and 14 who returned from outside the region (Anchorage, Kodiak and Seattle).

TABLE 353  
NUMBER AND ORIGIN OF NATIVE IMMIGRANTS  
UNALASKA  
JULY 1967 - DECEMBER 1969

<u>Place of Origin</u>	<u>Persons</u>	<u>Families</u>
Aleutian Villages		
Nikolski	6	2
Atka	4	2
Akutan	2	1
False Pass	13	3
Other Alaska Native Villages	4	2
Anchorage	4	1
Kodiak	8	2
Seattle	2	1
<u>TOTAL</u>	<u>43</u>	<u>14</u>

Source: Dorothy M. Jones, December 1969 survey, cited in Surla (1970).

However, other data suggest that the extent of ongoing immigration to Unalaska from other villages may have been less than Jones' figures imply. For instance, data on ANCSA enrollment patterns as of 1974 indicate that only 22 of 181 enrolled Alaska Natives then living in Unalaska were enrolled to other village corporations, suggesting that only a small share of Unalaska's Native residents retained strong ties to other villages. On the other hand, over 40 percent of the persons enrolled to Unalaska's village corporation actually lived elsewhere. Together, these enrollment figures suggest, though inconclusively, that Unalaska had experienced a net out-migration of Aleut residents in the years prior to 1974. On the other hand, comparison of the 1970 Census count of Unalaska's Native residents (113 persons) and the 1974 enrollment figure (181 persons) appear to imply



a sudden influx of Natives. But this latter inference is debatable, since this pre-ANCSA Census appears to have classified as non-Native many persons who would be regarded as Alaska Native under ANCSA's terms.

As recently as the 1970 Census, Unalaska was still a small (178 residents, 164 transients), mostly Aleut (63 percent) village. Thereafter, the community's character changed rapidly. The development of the king crab commercial fishing and processing industry brought a flood of newcomers and transients. The October 1977 census conducted by Tryck, Nyman and Hayes (1977) as part of a City comprehensive plan registered an almost six-fold increase in population to 1,971 persons (615 residents, 1,256 transients).

After 1970, interpretation of population (and employment) trends for Unalaska becomes complicated by the prominent role that seasonal and non-resident workers have come to play in the town's population and workforce. According to official Census figures, Unalaska's population climbed from 342 persons in 1970 to 1,322 persons in 1980, about equally divided between residents and non-residents. Six hundred persons were living in group quarters (e.g. bunkhouses, dormitories and commercial fishing vessels) and thus, most likely, were transient. However, city officials believed that the 1980 decennial Census substantially undercounted the community's population and arranged for a special State Department of Labor-assisted and certified municipal census in 1981. This latter census recorded 469 dwelling units, compared with the 1980 Census' 323 dwelling units, convincing evidence that the official Census was indeed faulty.

The 1981 census population count was 1,944 persons (1,054 residents, 890 transients). According to the Department of Labor (Alaska Population Overview, 1981), the discrepancy in transient population figures for 1977, 1980 and 1981 is at least partly due to seasonal variations in the timing of the population counts. However, the Department of Labor attributes the 1980 Census undercount of permanent residents to careless Census procedures which resulted in many local households being overlooked. In sum, the 1980 Census total population figure for Unalaska is very likely wrong and the detailed population data warrants cautious analysis.

The population data indicate that Unalaska has characteristically had a core of transient workers in recent years, but the data do not reflect the turnover rate of this transient component of the local population.

TABLE 354  
RESIDENTS AND NON-RESIDENTS  
CITY OF UNALASKA  
1970 - 1981

<u>Year</u>	<u>Residents</u>		<u>Non-Residents</u>		<u>Total Number</u>
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	
1970 <sup>1</sup>	178	52.0	164	48.0	342
1972 <sup>2</sup>	430	78.5	118	21.5	548
1977 <sup>3</sup>	615	31.2	1,256	68.8	1,971
1980 <sup>1</sup>	722	54.6	600	45.4	1,322
1981 <sup>4</sup>	1,054	54.2	890	45.8	1,944

<sup>1</sup> U.S. Bureau of the Census.

<sup>2</sup> City of Unalaska census, per Impact Associates, Inc., 1983.

<sup>3</sup> Tryck, Nyman and Hayes, 1977.

<sup>4</sup> Alaska Department of Labor, 1981 Alaska Population Overview.

Source: Adapted from Impact Assessment, Inc., 1983.

Post-1980 population estimates compiled for Unalaska by the Alaska Department of Labor, the Department of Community and Regional Affairs and the U.S. Bureau of the Census differ widely from each other and from year to year. This variability testifies to the volatility of Unalaska's employment base and to the impermanence of the transient element of its workforce.

Two current data series which better reflect trends within the permanent resident population are school enrollments and Permanent Fund dividend recipients. Alaska Department of Education final enrollment figures for Unalaska peaked at 186 students in 1980/81, dropped to 128 students in 1984/85 and rebounded to 154 students in 1986/87. According to the Alaska Department of Revenue, the number of Permanent Fund dividend recipients at Unalaska fell from 1,211 in 1982 to 939 in 1985, similarly indicating a downward trend in the permanent population during the 1982 to 1985 period. Thus, these data series suggest that Unalaska's permanent resident population has fluctuated since 1980, with perhaps a modest overall decline as of 1985.

#### B. POPULATION COMPOSITION

The racial composition of Unalaska's population has shifted drastically with the resurgence of the commercial fishing and fish processing industry here in the 1960s. Three population counts by race since 1970 show that the number of Unalaska's Alaska Native residents rose from 113 in 1970, to 178 in 1977, and to 200 in 1980. (As earlier noted, the 1970 Census may

TABLE 355  
FINAL ENROLLMENT BY GRADE  
UNALASKA  
1956/57 - 1986/87

Year	Kind	1	2	3	4	5	6	7	8	9	10	11	12	Ung/ Spec	Tot
1956/57		9	9	6	1	7	2	7	4						45
1957/58		11	5	8	6	4	5	0	6						45
1958/59		12	6	5	9	5	3	5	0						45
1959/60		9	12	5	6	8	5	3	5						53
1960/61		8	7	10	6	4	7	4	2	2					50
1961/62		10	5	8	9	6	5	6	2						51
1962/63		7	9	6	6	8	6	5	6						53
1963/64		8	8	8	6	6	9	5	6	3					59
1964/65		6	7	7	7	8	3	9	4					1	52
1965/66		7	9	9	8	8	11	6	11	7	1	1			78
1966/67		8	6	5	7	8	7	11	2	2	1				57
1967/68		8	7	8	8	10	6	11	10	1	6	2			77
1968/69		11	10	5	10	8	8	6	8	6	1	3			76
1969/70	8	7	7	8	8	8	6	7	7	6	5	2	1		80
1970/71	11	11	8	10	13	8	9	6	8	14	5	7	2		112
1971/72	11	11	12	8	9	10	9	11	7	8	11	6	6		119
1972/73	7	8	9	9	9	12	10	9	9	9	6	9	7		113
1973/74	2	7	7	9	8	7	12	10	12	12	7	5	5		103
1974/75	8	5	8	8	11	5	8	13	11	16	12	7	5		117
1975/76	10*	7	8	5	7	12	7	9	12	15	14	9	7		122
1976/77	10*	12	6	6	12	6	11	13	8	14	9	6	4		117
1977/78	12*	10	10	4	12	18	5	16	13	6	12	9	6		133
1978/79	10*	17	16	9	8	9	15	6	13	12	7	10	10		142
1979/80	11	10	15	17	14	9	13	16	10	17	15	9	10		166
1980/81	14	10	11	20	17	16	13	15	18	10	15	17	10		186
1981/82	14*	13	5	12	18	15	12	11	14	12	8	16	17		167
1982/83	15	14	14	8	11	15	17	13	6	11	13	5	15		157
1983/84	10	14	10	9	5	11	10	18	14	5	11	5	9		131
1984/85	8	11	14	11	8	1	10	12	16	10	6	15	6		128
1985/86	16	9	15	12	12	6	4	14	9	17	11	5	11		141
1986/87	16	19	19	17	9	11	8	4	13	14	15	6	3		154

\* Figures may include Pre-Elementary age children.

Source: Alaska Department of Education, Educational Finance and Support Services.

TABLE 356  
 PERMANENT FUND DIVIDEND RECIPIENTS  
 UNALASKA/DUTCH HARBOR  
 1982 - 1985

<u>Age Group</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
0 - 4		62	54	66
5 - 9			39	58
10 - 14			50	44
15 - 19			42	41
20 - 24			105	96
25 - 29			158	156
30 - 34			139	135
35 - 39			114	130
40 - 44			61	83
45 - 49			31	38
50 - 54			24	27
55 - 59			34	34
60 - 64			14	15
65 - 69			4	4
70 - 74			5	5
75 & over			2	4
Unknown	0	3	1	3
<u>TOTAL</u>	<u>1,211</u>	<u>918</u>	<u>877</u>	<u>939</u>

Note: 1982 age breakdown: 0-17 - 221; 18-27 - 347; 28-37 - 378; 38-47 - 132; 48-57 - 90; 58-67 - 35; 68-77 - 6; 78+ - 2; Unknown - 0; Total - 1,211.  
 1983 age breakdown: 0-4 - 62; 5-17 - 126; 18-27 - 232; 28-37 - 288; 38-47 - 111; 48-57 - 61; 58-67 - 28; 68-77 - 5; 78+ - 2; Unknown - 3; Total - 918.

Source: Alaska Department of Revenue.

understate the number of Alaska Natives and the 1980 Census under-reported total population). According to 1974 ANCSA enrollment data, Unalaska then had 181 Alaska Native residents, not including infants born after the 1971 passage of the Claims Act. However, post-1970 increases in the non-Native and transient populations have outstripped Native population growth. While Natives made up 63 percent of the 1970 Census population, by the 1980 Census they accounted for only 15 percent. Although both the 1970 and 1980 Censuses were flawed, these data nevertheless suggest the extent of change in racial composition which overtook the community in the 1970-1980 decade.

TABLE 357

POPULATION BY RACE  
CITY OF UNALASKA  
1970 - 1980

	<u>1970*</u>		<u>1977**</u>		<u>1973***</u>	
	#	%	#	%	#	%
Native	113	63.4	178	28.9	200	15.1
Non-Native	56	31.0	387	62.9	848	64.1
Other	9	4.6	50	8.1	274	20.8
<u>TOTAL</u>	<u>178</u>	<u>100.0</u>	<u>615</u>	<u>100.0</u>	<u>1,322</u>	<u>100.0</u>

Sources: \* U.S. Bureau of the Census (note: transients not included).  
 \*\* Tryck, Nyman and Hayes, 1977.  
 \*\*\* U.S. Bureau of the Census.

The growing role of transient workers is visible in population figures for Unalaska for the past decade. First, three independent population counts in 1977, 1980 and 1981 found a high ratio of transients, ranging from 68.8 percent (Tryck, Nyman and Hayes, 1977), to 45.4 percent (1980 Census), to 45.8 percent (1981 special municipal census). The detailed population

composition data compiled by the 1980 Census are heavily skewed by the presence of non-Native males in the 20-34 age group. This age group bulge reflects the presence of a large, predominantly young adult male transient workforce employed in the local commercial fishing and seafood processing industry.

Unalaska's skewed age and sex population distribution undermine the significance of 1980 Census median age figures for its non-Native and total population. Likewise, the already existing flaws in the 1980 Census put the validity of 1980 detailed population data altogether in doubt. Still, the detailed population data show the skewed characteristics appropriate to a large, non-Native, mostly young male adult transient workforce. That is, the age/sex distribution is distorted toward a heavy over-representation of non-Natives between 20-39 years of age and, within that age group, a heavy over-representation of males. The imbalance of non-Native males and females is evident by comparing the number of single males over 15 years of age (400 persons) and single females (159 persons). Unalaska exhibits the most extreme imbalance of all 21 study communities in this case.

Otherwise, the Census data suggest that the median age of the Native population remained relatively stable, but that an imbalance in the relative size of the Native male and female sub-populations widened substantially from 1970 to 1980.

TABLE 358  
POPULATION COMPOSITION  
UNALASKA  
1970

<u>Age Range</u>	<u>Alaska Native</u>			<u>Non-Native</u>		
	Male	Female	Total	Male	Female	Total
Under 5 years	6	7	13	3	1	4
5 - 14	15	16	31	4	4	8
15 - 24	10	11	21	5	4	9
25 - 34	4	5	9	12	6	18
35 - 44	15	8	23	2	0	2
45 - 54	7	4	11	6	5	11
55 - 64	6	5	11	2	2	4
65 and over	1	2	3	0	0	0
<u>TOTAL</u>	<u>64</u>	<u>58</u>	<u>122</u>	<u>34</u>	<u>22</u>	<u>56</u>
<u>Median Age</u>	<u>27.5</u>	<u>20.9</u>	<u>23.3</u>	<u>29.6</u>	<u>29.2</u>	<u>29.2</u>

<u>Age Range</u>	<u>Total</u>		
	Male	Female	Total
Under 5 years	9	8	17
5 - 9	8	12	20
10 - 14	11	8	19
15 - 19	8	7	15
20 - 24	7	8	15
25 - 29	11	5	16
30 - 34	5	6	11
35 - 39	10	5	15
40 - 44	7	3	10
45 - 49	8	5	13
50 - 54	5	4	9
55 - 59	5	6	11
60 - 64	3	1	4
65 and over	1	2	3
<u>TOTAL</u>	<u>98</u>	<u>80</u>	<u>178</u>
<u>Median Age</u>	<u>29.1</u>	<u>23.4</u>	<u>26.3</u>

Note: Native is defined as Aleut, Eskimo, Indian and others, excluding White and Negro.

Source: U.S. Census.



TABLE 359  
POPULATION COMPOSITION  
UNALASKA  
1977

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<u>Age Range</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
0 - 4	23	18	41
5 - 12	28	40	68
13 - 17	28	19	47
18 - 24	46	46	92
25 - 34	107	56	163
35 - 44	42	23	65
45 - 54	40	22	62
55 - 64	19	14	33
65 - 74	4	2	6
75 and over	1	0	1
Unknown	22	15	37
<u>TOTAL</u>	<u>360</u>	<u>255</u>	<u>615</u>
<u>Median Age</u>	<u>30.2</u>	<u>25.9</u>	<u>28.7</u>

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Note: Permanent residents only; does not include 1,256 non-residents present in Unalaska at the time of the census.

Source: City of Unalaska census, September 26 to October 8, 1977, conducted by Tryck, Nyman and Hayes and the City of Unalaska (Tryck, Nyman and Hayes, 1977).

TABLE 360

POPULATION COMPOSITION  
UNALASKA  
1980

Age Range	Alaska Native		Non-Native		Total	
	Male	Female	Male	Female	Male	Female
Under 5 years	8	3	21	14	29	17
5 - 9	13	9	13	19	26	28
10 - 14	6	12	12	18	18	30
15 - 19	16	10	44	29	60	39
20 - 24	17	11	176	111	193	122
25 - 29	11	10	173	80	184	90
30 - 34	18	8	139	41	157	49
35 - 39	3	5	56	21	59	26
40 - 44	5	2	30	12	35	14
45 - 49	7	1	25	12	32	13
50 - 54	7	4	22	12	29	16
55 - 59	4	2	16	7	20	9
60 - 64	2	0	7	6	9	6
65 - 69	2	1	2	2	4	3
70 - 74	0	1	1	0	1	1
75 and over	1	1	1	0	2	1
<b>TOTAL</b>	<b>120</b>	<b>80</b>	<b>738</b>	<b>384</b>	<b>858</b>	<b>464</b>
<b>Median Age</b>	<b>25.2</b>	<b>23.0</b>	<b>28.0</b>	<b>25.1</b>	<b>27.8</b>	<b>24.8</b>
						<b>1,322</b>
						<b>26.8</b>

Source: U.S. Census.

TABLE 361

MARITAL STATUS, BY SEX  
PERSONS 15 YEARS AND OLDER  
UNALASKA  
1980

<u>Marital Status</u>	<u>Male</u>	<u>Female</u>
Single	400	159
Married	241	166
Separated	36	7
Widowed	8	9
Divorced	100	48
<u>TOTAL</u>	<u>785</u>	<u>389</u>

Source: 1980 Census.

TABLE 362

HOUSEHOLD TYPE AND RELATIONSHIP  
UNALASKA  
1980

<u>Household Type and Relationship</u>	<u>Number</u>	<u>Percent</u>
In Family Household		
Householder	156	11.8%
Spouse	116	8.8
Other Relatives	213	16.1
Non-Relative	23	1.7
Sub-Total	508	38.4
In Non-Family Household		
Male Householder	112	8.5
Female Householder	36	2.7
Non-Relative	66	5.0
Sub-Total	214	16.2
In Group Quarters		
Inmate of Institution	2	.2
Other	598	45.2
Sub-Total	600	45.4
<u>TOTAL</u>	<u>1,322</u>	<u>100.0%</u>

Source: 1980 Census.

### C. TRENDS IN WAGE AND SALARY EMPLOYMENT

The first modern seafood processing plant at Unalaska was established in 1962. By 1967, there were five processing plants and, by 1976, there were eight. Since passage of the Fishery Conservation and Management Act in 1976, the preferential access of domestic fishing vessels to fisheries resources within the 200-mile conservation zone has fostered the emergence of a significant domestic Bering Sea groundfish industry. It has also caused a reorientation of Unalaska's economic support functions for the region's commercial fishing industry and pursuit of some role in shore-based processing of groundfish. For example, in January 1987, Alyeska Seafoods, Inc. began operation of its new \$20 million processing and surimi production plant at Unalaska.

Unalaska's commitment to enlarge its role in the groundfish industry has accelerated in recent years and is not fully reflected in employment data ending in 1986. Recent, pending and proposed private investment related to the groundfish industry includes the construction of new docks, fuel tank farms, shipyard facilities and dry docks, warehouses, surimi plants, additional seafood processing plant capacity, hotels, bunkhouses and recreational facilities (Alaska Construction & Oil, July 1987). These improvements are geared to capitalize on the economic opportunities represented by growing domestic involvement in the Bering Sea commercial fishery which, in 1987, reportedly brought some 800 fishing/processing vessels to make about 4,000 calls at the port of Unalaska to purchase various types of support services (Anchorage Times, May 23, 1988).

The growth trend of wage and salary employment at Unalaska over the past two decades can be documented from various sources of employment data. (Note: the 1970 Census' employment count of 59 persons is clearly in error and is ignored in the following analysis). Even as early as 1967, about five years after the inauguration of Unalaska's modern seafood industry, the distinctive features of the community's present economic structure were already emerging. These structural features include: a strong export sector dominated by the commercial fishing and fish processing industry; a correspondingly weak support sector, especially in its trade and services components; an economy dominated by private sector activities, with a relatively modest, though not necessarily deficient, public sector; a proneness to annual and long-term economic and employment cycles; and a heavy reliance on transient labor.

Three separate employment surveys, conducted in 1967 (Alaska State Housing Authority), 1976 (Tryck, Nyman and Hayes) and 1980 (Alaska Consultants, Inc.) consistently show that:

- o commercial fishing and seafood processing accounted for between 82 and 90 percent of total employment; all of this employment may be attributed to basic or export industries.
- o support sector employment accounted for between 7 and 12 percent of total employment. The employment multiplier was about 10:1, i.e. 10 basic jobs generated only 1 non-basic job.
- o the private sector consistently accounted for about 95 percent of total employment; the public sector, mainly local government, for

about 5 percent. By comparison, the public sector accounted for about 32 percent of Statewide employment in 1980.

- o the level of economic and employment activity fluctuated in step with seasonal and periodic cycles in resource harvest levels. (See discussion of Alaska Department of Labor monthly employment data for 1981 to 1986 below).

Data previously presented from five population censuses taken between 1970 and 1981 show that non-residents accounted for between 22 and 69 percent of Unalaska's population. It can be inferred from detailed population composition data that this non-resident population is chiefly made up of transient young adult males.

Surla (1970) observed that the make-up of Unalaska's commercial fishing fleet provides an interesting contrast to the fleets at King Cove and Sand Point. Surla commented on the minimal participation of Unalaska's Aleut men in the commercial fishery and contrasted this situation with the very successful enterprise of Aleut commercial fishermen in King Cove (Sand Point offers another example).

From 1980 through 1986, Unalaska's employment levels have been prone to decided annual and seasonal fluctuations. For example, Alaska Department of Labor covered employment figures show that Unalaska's average annual employment swung from 1,415 jobs in 1980, up to 1,595 in 1981, down to 969 by 1985 and up again to 1,072 in 1986. (Note that the Department's employment data for the Unalaska area also include Akutan). Most of this

TABLE 363

ESTIMATED EMPLOYMENT  
CITY OF UNALASKA  
1967 - 1986

<u>Year</u>	<u>Employment</u>	<u>Source; Scope of Coverage</u>
1967	323	ASHA, 1967; average annual employment.
1969	326	Alaska Planning and Management, 1972; Alaska Department of Labor wage & salary employment estimate.
1970	59	U.S. Census Bureau; total employment.
1976	989	Tryck, Nyman and Hayes, 1977; average annual employment.
1980	1,003	U.S. Census Bureau; total employment.
1980	1,415*	Alaska Department of Labor; average annual nonagricultural wage & salary employment.
1980	1,600	Alaska Consultants, Inc., 1981; average annual employment.
1981	1,595*	Alaska Department of Labor; average annual nonagricultural wage & salary employment.
1982	1,274*	"
1983	1,221*	"
1984	969*	"
1985	995*	"
1986	1,072*	"

\* Data are for the Unalaska area, including Akutan.

TABLE 364

BASIC AND NON-BASIC EMPLOYMENT  
CITY OF UNALASKA  
1967, 1976 AND 1980

<u>Year</u>	<u>Employment</u>					
	<u>Basic</u>		<u>Non-Basic</u>		<u>Total</u>	
	Number	Percent	Number	Percent	Number	Percent
1967	299	92.6	24	7.4	323	100.0
1976	875	88.5	114	11.5	989	100.0
1980	1,442	90.1	158	9.9	1,600	100.0

Sources: Alaska State Housing Authority, 1967.  
Tryck, Nyman and Hayes, 1977.  
Alaska Consultants, Inc., 1981.

TABLE 365  
ANNUAL AVERAGE EMPLOYMENT  
UNALASKA - DUTCH HARBOR  
DECEMBER 1967

	<u>Employment</u>		<u>Total</u>	<u>Percent</u>
	<u>Basic</u> <sup>1</sup>	<u>Service</u> <sup>2</sup>		
Fishing	140	0	140	43.3
Fish Processing	150	0	150	46.4
Transportation, Communi- cations and Utilities	7	4	11	3.4
Retail Trade	0	12	12	3.7
Government	2	8	10	3.1
<u>TOTAL</u>	<u>299</u>	<u>24</u>	<u>323</u>	<u>100.0</u>

<sup>1</sup> Employment generated by export industries and other sources of outside money.

<sup>2</sup> Employment depending upon money circulating within the community.

Source: Alaska State Housing Authority (1967).

TABLE 366  
ESTIMATED EMPLOYMENT  
CITY OF UNALASKA  
1969

<u>Industry</u>	<u>Number</u>
Agriculture	2
Mining	0
Construction	1
Manufacturing	290
Trans., Commun., Util.	11
Trade	12
Finance	0
Services	0
Government	10
<u>TOTAL</u>	<u>326</u>

Source: Alaska Planning and Management, 1972.



TABLE 367  
 AVERAGE ANNUAL EMPLOYMENT<sup>1</sup>  
 CITY OF UNALASKA  
 1976

<u>Industry</u>	<u>Number</u>	<u>Percent</u>	<u>Percent Basic</u>	<u>Basic Number</u>	<u>Secondary Number</u>
Fishing	44	4.4	100	44	0
Mining	2	0.2	100	2	0
Contract Construction	0	0.0	--	--	--
Manufacture <sup>2</sup>	815	82.4	100	815	0
Transportation, Communi- cation & Public Utilities	16	1.6	37	6	10
Trade	29	2.9	21	6	23
Finance, Insurance & Real Estate	1	0.1	0	0	1
Service	25	2.5	0	0	25
Government	57	5.7	3.5	2	55
Federal	(18)	(1.8)	(0)	(0)	(18)
State	(3)	(0.3)	(67)	(2)	(1)
Local	(36)	(3.6)	(0)	(0)	(36)
<u>TOTAL</u>	<u>989</u>	<u>100.0</u>	<u>89</u>	<u>875</u>	<u>114</u>

<sup>1</sup> This table shows the average annual total employment in Unalaska by industry type for the year 1976 and the portion of the economy which is basic and secondary. The table is based on Alaska Department of Labor data, plus some fairly extensive field work by the consultant (Tryck, Nyman and Hayes) to arrive at the "true" employment picture in Unalaska. The Department of Labor data has some acknowledged shortcomings, such as not covering self-employed individuals and making only estimates of State and local government employment.

<sup>2</sup> Includes seafood processing.

Source: Tryck, Nyman and Hayes (1977).

TABLE 368  
 AVERAGE ANNUAL FULL-TIME EMPLOYMENT  
 UNALASKA  
 1980

<u>Classification</u>	<u>Number</u>	<u>% of Total</u>	<u>% Basic</u>	<u>Basic Number</u>	<u>Secondary Number</u>
Agriculture, Forestry and Fishing	150	9.4	100	150	0
Mining	2	0.1	100	2	0
Contract Construction	12	0.8	42	5	7
Manufacturing	1,166	72.9	100	1,166	0
Transportation, Communication & Public Utilities	57	3.6	60	34	23
Trade	60	3.8	60	32	28
Finance, Insurance & Real Estate	27	1.7	74	20	7
Service	44	2.8	61	27	17
Government	82	5.1	7	6	76
Federal	( 9)	(0.6)	(44)	(4)	( 5)
State	(10)	(0.6)	(20)	(2)	( 8)
Local	(64)	(4.0)	( 0)	(0)	(64)
<u>TOTAL</u>	<u>1,600</u>	<u>100.0</u>	<u>90</u>	<u>1,442</u>	<u>158</u>

Note: Figures include self-employed persons and military personnel.

Source: Alaska Consultants, Inc., May 1981.

TABLE 369

DISTRIBUTION OF EMPLOYMENT BY SECTOR  
STATE OF ALASKA AND CITY OF UNALASKA  
1980

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<u>Industry</u>	<u>State of Alaska</u>	<u>City of Unalaska</u>
Agriculture, Forestry and Fishing	0.3%	9.4%
Mining	3.9	0.1
Contract Construction	6.3	0.8
Manufacturing	8.2	72.9
Transportation, Communi- cation & Public Utilities	10.0	3.6
Trade	17.3	3.8
Finance, Insurance & Real Estate	4.5	1.7
Service	17.5	2.8
Government	31.8	5.1
Federal	(10.4)	( 0.6)
State	( 9.0)	( 0.6)
Local	(12.3)	( 4.0)
Miscellaneous	0.2	--
<u>TOTAL</u>	<u>100.0%</u>	<u>100.0%</u>

Note: State of Alaska data cover civilian non-agricultural wage and salary employment only; City of Unalaska data include self-employed and military personnel.

Sources: Alaska Department of Labor, Statistical Quarterly for State of Alaska data.  
Alaska Consultants, Inc., 1981, for City of Unalaska data.

TABLE 370  
 SELECTED LABOR FORCE DATA  
 UNALASKA  
 1980

LABOR FORCE STATUS, PERSONS OVER 16 YEARS, 1980

<u>Labor Force Status</u>	<u>Alaska Natives</u>		<u>All Races</u>		
	Male	Female	Male	Female	Total
Armed Forces	0	0	0	3	3
Civilian Employed	61	26	718	285	1,003
Civilian Unemployed	21	0	25	5	30
Not in Labor Force	17	24	26	81	107
Labor Force Participation Rate	82.0%	52.0%	96.0%	78.0%	90.0%
Unemployment Rate: 1980	25.6%	0%	3.4%	1.7%	2.9%
1970	*	*	0%	0%	0%

EMPLOYMENT BY INDUSTRY, 1970 AND 1980

<u>Industry</u>	<u>1970</u>	<u>1980</u>
Construction	0	25
Manufacturing	18	630
Transportation	0	47
Communications	5	3
Trade	16	80
Finance, Insurance & Real Estate	0	20
Services	7	76
Public Administration	0	52
Other	13	70
<u>TOTAL</u>	<u>59</u>	<u>1,003</u>

\* Data missing or suppressed.

Source: U.S. Census, 1980.

year to year volatility can be traced to the cyclic ups and downs of the seafood processing industry.

In recent years, Unalaska's employment has also shown marked seasonal variations, although not as extreme as fisheries economies (e.g. Bristol Bay) dominated by a few highly seasonal species such as red salmon. Over the six year period from 1981 to 1986, monthly employment at Unalaska was well above average for the months of May through August, and well below average for the winter months of November through February. In some years, peak month employment was more than double off-month employment. Again, the source of this volatility can be traced to the seafood processing industry. This seasonality has persisted despite the relative diversity and extended harvest season of seafood species processed at or supported from Unalaska.

Circumstantial evidence suggests that the labor force participation rate at Unalaska is high and the unemployment rate exceptionally low. According to Alaska Department of Labor official unemployment data, the Aleutian Islands census area consistently shows the lowest unemployment rate of all of the State's twenty-three census areas. Over the three year period from 1985 to 1987, the Aleutian Islands' annual unemployment rate (2.6 percent, 3.4 percent and 3.6 percent respectively) was less than half that of the next lowest census area and less than a third of the Statewide average. The most plausible explanation for the census area's chronically low unemployment is the transient, work-oriented nature of the bulk of its fishing and seafood processing workforce. Unlike permanent residents whose

family and social ties keep them in their communities even when work is short, these transient workers come to work and, when work is unavailable, leave to pursue employment in other labor markets. Few remain in the region to swell the unemployment rolls or depress the labor force participation rate. Unalaska, of course, illustrates in an extreme way this transient quality of the Aleutian Islands labor force.

TABLE 371  
 COVERED INDUSTRY EMPLOYMENT  
 UNALASKA AREA\*\*  
 1980 - 1986

<u>Industry Classification</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
Mining	0	0	*	*	*	*	*
Construction	*	12 <sup>a</sup>	*	16 <sup>a</sup>	23 <sup>a</sup>	13	14
Manufacturing	1,056	1,241	893	842	616	644	730
Transportation, Communications and Public Utilities	37	67	86	100	72	69	75
Trade	63	73	68	61	55	60	65
Finance, Insurance and Real Estate	30 <sup>a</sup>	39 <sup>a</sup>	46	28	31	29	31
Services	19	19 <sup>a</sup>	9 <sup>a</sup>	7 <sup>a</sup>	8	11	8 <sup>a</sup>
Government	108	135	143	154	136	141	133
Federal	21	21	17	16	13	15	15
State	2	5	7	11	13	11	7
Local	85	109	119	127	110	115	111
Miscellaneous	*	*	*	*	*	*	*
<u>TOTAL</u>	<u>1,415</u>	<u>1,595</u>	<u>1,274</u>	<u>1,221</u>	<u>969</u>	<u>995</u>	<u>1,072</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Unalaska area also included Akutan.

<sup>a</sup> Prorated from nine months of data.

Source: Alaska Department of Labor.

TABLE 372  
 AVERAGE MONTHLY EMPLOYMENT  
 CITY OF UNALASKA  
 1981 - 1986

	<u>Average Monthly Employment</u>	<u>Percent Dif- ference from Annual Average</u>
January	892	-24.0%
February	1,049	-10.6
March	1,271	+8.3
April	1,255	+6.9
May	1,293	+10.1
June	1,346	+14.7
July	1,393	+18.7
August	1,355	+15.4
September	1,205	+2.6
October	1,166	-0.7
November	1,003	-14.6
December	854	-27.3
Annual Average	1,174	

Source: Alaska Department of Labor.

TABLE 373  
 AVERAGE ANNUAL UNEMPLOYMENT<sup>1</sup>  
 SELECTED CENSUS AREAS  
 1985 - 1987

<u>Census Area</u>	<u>Annual Unemployment Rate</u>		
	<u>1985</u>	<u>1986</u>	<u>1987</u>
Aleutian Islands	2.6%	3.4%	3.6%
Dillingham	7.1	8.0	8.8
Anchorage Borough	7.2	8.4	8.5
Juneau Borough	7.9	8.5	7.3
Kodiak Island Borough	8.4	7.9	6.1
North Slope Borough	8.8	6.0	5.9
Statewide Average	9.6	10.9	10.8

<sup>1</sup> This table displays average annual unemployment rates for the 6 census areas of the State's 23 census areas which had the lowest unemployment rates during the 1985-1987 period.

Source: Alaska Department of Labor, Alaska Economic Trends, March 1988.



TABLE 374

COVERED INDUSTRY EMPLOYMENT  
UNALASKA AREA\*\*  
1980

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	2	2	5	7	8	4	*	*	*
Manufacturing	471	879	1,083	1,168	1,180	1,089	1,010	776	1,067	1,500	1,365	1,085
Transportation, Communication and Public Utilities	25	29	29	27	28	29	31	33	33	57	58	59
Wholesale Trade	*	*	*	*	*	*	*	*	*	*	*	*
Retail Trade	44	59	63	57	63	63	55	63	71	74	74	66
Finance, Insurance and Real Estate	21	20	23	20	23	28	37	56	45	*	*	*
Services	24	21	21	18	16	21	22	24	18	12	14	14
Miscellaneous	0	0	0	*	*	*	*	*	*	*	*	*
Government												
Federal	21	24	24	21	22	20	18	20	18	18	21	23
State	2	2	2	2	2	1	1	1	2	4	4	2
Local	76	77	98	81	86	59	74	74	90	102	104	101
<u>TOTAL</u>	<u>694</u>	<u>1,118</u>	<u>1,350</u>	<u>1,404</u>	<u>1,430</u>	<u>1,323</u>	<u>1,261</u>	<u>1,062</u>	<u>1,352</u>	<u>1,820</u>	<u>1,687</u>	<u>1,395</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Unalaska area also includes Akutan.

Source: Alaska Department of Labor.

TABLE 375

COVERED INDUSTRY EMPLOYMENT  
UNALASKA AREA\*\*  
1981

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	3	6	9	10	19	18	20	10	11
Manufacturing	680	787	1,219	1,346	1,364	1,550	1,390	1,238	1,571	1,631	1,241	871
Transportation, Communication and Public Utilities	59	53	66	57	55	54	98	106	90	57	56	55
Wholesale Trade	*	*	*	*	*	*	*	*	*	*	*	*
Retail Trade	80	84	85	79	80	71	67	64	69	67	71	57
Finance, Insurance and Real Estate	34	32	35	38	34	41	45	39	49	*	*	*
Services	13	13	13	15	17	20	25	26	32	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	24	20	20	23	23	24	24	24	20	18	18	18
State	2	3	5	7	8	4	3	6	3	5	6	6
Local	91	85	102	119	116	120	106	107	70	130	137	120
<u>TOTAL</u>	<u>992</u>	<u>1,086</u>	<u>1,553</u>	<u>1,697</u>	<u>1,713</u>	<u>1,901</u>	<u>1,776</u>	<u>1,637</u>	<u>1,930</u>	<u>1,998</u>	<u>1,630</u>	<u>1,223</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Unalaska area also includes Akutan.

Source: Alaska Department of Labor.

TABLE 376

COVERED INDUSTRY EMPLOYMENT  
UNALASKA AREA\*\*  
1982

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	*	*	*	*	*	*	*	*	*
Construction	*	*	*	19	28	26	29	36	34	*	*	*
Manufacturing	519	786	1,053	1,034	1,041	1,113	1,156	982	1,210	793	564	459
Transportation, Communication and Public Utilities	57	58	65	80	79	87	110	106	105	100	96	87
Wholesale Trade	*	*	*	7	7	6	*	*	*	*	*	*
Retail Trade	65	58	58	74	73	76	67	72	78	68	66	61
Finance, Insurance and Real Estate	60	54	61	58	60	48	37	40	34	34	33	31
Services	9	7	7	9	8	8	11	13	9	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	17	16	17	17	16	17	17	18	19	19	19	17
State	5	9	12	11	11	3	2	4	6	9	8	8
Local	124	122	131	113	113	81	91	104	139	138	138	130
<u>TOTAL</u>	<u>866</u>	<u>1,123</u>	<u>1,422</u>	<u>1,422</u>	<u>1,436</u>	<u>1,466</u>	<u>1,526</u>	<u>1,381</u>	<u>1,639</u>	<u>1,231</u>	<u>959</u>	<u>817</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Unalaska area also includes Akutan.

Source: Alaska Department of Labor.

TABLE 377

COVERED INDUSTRY EMPLOYMENT  
UNALASKA AREA\*\*  
1983

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	*	*	*	*	*	*
Construction	2	10	21	9	16	19	*	*	*	33	23	10
Manufacturing	571	872	1,134	846	902	901	910	1,115	1,102	674	558	520
Transportation, Communication and Public Utilities	88	91	88	85	92	96	110	107	116	118	112	94
Wholesale Trade	*	*	*	*	*	*	*	*	*	*	*	*
Retail Trade	62	58	55	57	61	65	61	61	64	62	62	65
Finance, Insurance and Real Estate	27	28	29	31	25	27	25	27	32	25	28	27
Services	6	5	5	*	*	*	7	6	9	10	7	7
Miscellaneous	0	0	0	*	*	*	*	*	*	*	*	*
Government												
Federal	16	16	15	16	16	16	15	18	16	16	17	18
State	8	11	15	15	9	1	5	5	14	21	11	12
Local	131	124	129	134	132	134	103	105	130	129	136	136
<u>TOTAL</u>	<u>917</u>	<u>1,221</u>	<u>1,497</u>	<u>1,205</u>	<u>1,277</u>	<u>1,287</u>	<u>1,283</u>	<u>1,474</u>	<u>1,510</u>	<u>1,102</u>	<u>971</u>	<u>902</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Unalaska area also includes Akutan.

Source: Alaska Department of Labor.

TABLE 378

COVERED INDUSTRY EMPLOYMENT  
UNALASKA AREA\*\*  
1984

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	*	*	*	*	*	*
Construction	*	*	*	14	14	19	18	34	31	36	29	9
Manufacturing	490	551	629	657	773	841	942	845	560	426	398	274
Transportation, Communication and Public Utilities	115	117	131	43	62	55	57	52	57	61	61	52
Wholesale Trade	*	*	*	*	*	*	*	*	*	*	*	*
Retail Trade	53	55	53	59	53	58	56	57	55	53	54	53
Finance, Insurance and Real Estate	27	29	30	35	33	34	32	35	31	30	28	30
Services	9	11	10	9	7	8	8	7	6	7	7	6
Miscellaneous	*	*	*	*	*	*	0	0	0	0	0	0
Government												
Federal	15	15	14	14	14	15	11	12	13	14	13	11
State	8	12	18	17	15	12	7	3	6	18	22	22
Local	130	123	117	109	114	103	76	88	119	117	110	117
<u>TOTAL</u>	<u>860</u>	<u>925</u>	<u>1,023</u>	<u>996</u>	<u>1,129</u>	<u>1,185</u>	<u>1,248</u>	<u>1,176</u>	<u>918</u>	<u>800</u>	<u>757</u>	<u>609</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Unalaska area also includes Akutan.

Source: Alaska Department of Labor.

TABLE 379

COVERED INDUSTRY EMPLOYMENT  
UNALASKA AREA\*\*  
1985

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	*	*	*	*	*	*
Construction	6	5	5	10	10	7	13	21	20	28	24	11
Manufacturing	376	486	577	640	629	727	1,012	1,038	885	524	444	386
Transportation, Communication and Public Utilities	49	64	52	66	76	85	83	82	66	73	69	67
Wholesale Trade	*	*	*	*	*	*	*	*	*	*	*	*
Retail Trade	53	45	48	48	57	64	66	81	69	63	66	63
Finance, Insurance and Real Estate	30	29	26	26	25	26	37	33	33	26	31	30
Services	13	11	10	10	13	12	12	11	9	11	10	9
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	12	10	7	10	8	11	14	16	20	23	25	26
State	11	12	20	20	10	4	2	2	4	10	19	17
Local	114	112	110	116	123	96	101	105	130	118	129	130
<b><u>TOTAL</u></b>	<b><u>694</u></b>	<b><u>802</u></b>	<b><u>875</u></b>	<b><u>967</u></b>	<b><u>983</u></b>	<b><u>1,062</u></b>	<b><u>1,368</u></b>	<b><u>1,415</u></b>	<b><u>1,265</u></b>	<b><u>903</u></b>	<b><u>843</u></b>	<b><u>760</u></b>

\* Figures withheld to comply with disclosure regulations.

\*\* Unalaska area also includes Akutan.

Source: Alaska Department of Labor.

TABLE 380

COVERED INDUSTRY EMPLOYMENT  
UNALASKA AREA\*\*  
1986

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	*	*	*	*	*	*
Construction	9	5	10	13	12	19	18	18	20	18	15	5
Manufacturing	692	800	892	904	855	842	840	738	630	599	493	479
Transportation, Communication and Public Utilities	57	68	73	83	95	77	67	68	65	79	86	77
Wholesale Trade	*	*	*	*	*	*	*	*	*	*	*	*
Retail Trade	54	57	56	51	63	70	65	65	82	85	73	64
Finance, Insurance and Real Estate	37	35	34	32	33	30	37	28	26	26	26	27
Services	9	10	10	9	8	8	6	6	7	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	23	27	20
Government												
Federal	23	21	19	11	14	17	15	14	13	13	11	12
State	7	8	11	12	11	8	2	2	4	7	4	4
Local	124	126	126	115	117	99	101	102	98	102	110	109
<u>TOTAL</u>	<u>1,023</u>	<u>1,138</u>	<u>1,258</u>	<u>1,243</u>	<u>1,217</u>	<u>1,176</u>	<u>1,157</u>	<u>1,049</u>	<u>970</u>	<u>964</u>	<u>858</u>	<u>810</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Unalaska area also includes Akutan.

Source: Alaska Department of Labor.

## SAND POINT

### A. PAST POPULATION TRENDS

Sand Point is located about 570 miles southwest of Anchorage on the north coast of Popof Island, part of the Shumagin Island group off the southern flank of the Alaska Peninsula. Popof Island is named after Sila and Ivan Popof who hunted and traded furs here in 1762-63. "Sand Point" derives from the designation assigned by a passing U.S. Coast Guard vessel in 1872 to the general area where the community eventually developed.

Today, Sand Point is the largest community in the newly established (1987) Aleutians East Borough which encompasses the lower Alaska Peninsula and nearby islands as far west as Akutan Pass. While there were many traditional settlement sites in the Shumagin Islands, Sand Point apparently was not an important historic village. For example, Alaska Natives and the Land does not list Sand Point as an historic village site. Instead, Sand Point's recent emergence as the region's dominant community is the climax of a two-century long process of economic and demographic change within the region.

The aboriginal Aleut population was generally subdivided into two sub-areas, based on dialectic differences: the western Atka district made up of the Andreanof, Rat and Near Islands; and the Unalaska district made up of the Fox, Pribilof (settled after 1786 by Aleuts relocated mainly from the Unalaska district) and Shumagin Islands and the lower Alaska Peninsula.



Some scholars, e.g. Laughlin (1980), further split the western district into two distinct dialectic sub-districts.

For purposes of describing the historic evolution of the Sand Point community, it is useful to divide the Unalaska district into three sub-groups centered around the Fox Islands, the Pribilof Islands and the lower Alaska Peninsula with its adjacent islands, including the Shumagin, Krenitzin and Sanak Island groups. The latter sub-group coincides with today's Aleutians East region, within which Sand Point is the most prominent community.

Estimates of the aboriginal Aleut population prior to Russian contact are debatable. Laughlin (1980) accepts an estimated pre-contact population of about 16,000 Aleuts overall, of whom 10,000 to 11,000 lived in the Unalaska district. Within decades of Russian contact, the native Aleut population declined precipitously. Veniaminov put the 1781 Aleut population of the Unalaska district at 1,900, about a fifth of the pre-contact level. An 1818 Russian census of the Aleut population (Petroff, 1883) recorded a total Aleut population of 1,469 persons. Another census in 1825 recorded some 787 Aleuts in the Aleutians East region and another 1,064 Aleuts in the rest of the Aleutians, but did not include the Pribilof Islands with a population then estimated at about 400 persons.

Next, Veniaminov's 1831 census enumerated twelve villages with a total population of 680 Aleuts in what is today termed the Aleutians East region. Veniaminov reported one settlement each on the islands of Akutan (13

persons), Avatanok (49), Unalga (23), Tigalda (97) Unimak (91) and Unga (116), and three on the island of Akouna (85), plus three villages (Belkofski - 102; Pavlov - 59; and Morzhovoi - 45) on the Alaska Peninsula mainland. Of course, by this date, traditional settlement patterns had already been obliterated by massive depopulation and forced resettlement under Russian control.

A later population estimate by Veniaminov put the 1841 Aleut population of the Unalaska and Atka districts at 1,497 and 750 persons respectively. Neither Veniaminov nor the 1818 or 1825 censuses identified any contemporary settlement at Sand Point or elsewhere on Popof Island.

There are discrepancies between the 1825 and 1831 censuses for the Aleutians East region. For example, Veniaminov omits some large villages enumerated in the 1825 census, but records substantially larger populations for some other villages. Still, taken as a whole, these various censuses support a conclusion that the Native population of the Aleutians East region numbered 900 to 1,000 persons in the 1830s.

Finally, a census of the inhabitants of Russian America conducted in 1863 shortly before the U.S. purchase counted a total of 2,428 Aleuts, unfortunately not allocated by place. This figure is only slightly higher than the 1825 census (1,851 persons, not including perhaps 400 Pribilof Islanders) and Veniaminov's 1841 estimate (2,247). The consistency of these data suggests that there was no major change in the overall size of the Aleut population between 1825 and the United States' purchase of

Alaska, although there probably were significant intra-regional population shifts.

The modern Sand Point community originated in 1887 as a cod fishing station (with a post office established in 1891) to supply and service the pioneering Bering Sea codfish industry. During the late 1800s and early 1900s, the Shumagin Islands saw a variety of unsuccessful commercial enterprises. A coal mine/coaling station operated at Coal Harbor from about 1870 to 1890. Gold was discovered on Unga Island and, later, on Popof Island and supported a number of small mining operations. In addition, trapping for fur-bearers and fox farming were minor industries until fur prices collapsed in the 1930s.

During this era, Sand Point remained a minor settlement, exceeded in size by numerous other traditional, fishing and mining communities. Sand Point was first noted by the Census in 1890, when it was included among Popof Island's 146 residents. The 1900 Census reported 16 residents at Sand Point. At the turn of the century and for some time thereafter, the traditional villages of Unga and Belkofski continued to be the premier communities in the Shumagin Island group and on the nearby Alaska Peninsula mainland respectively, as they had been at the time of Veniaminov's 1830 census.

Sand Point grew slowly after 1900 and, as late as 1939, was still a minor community of 99 residents. Sand Point and the other communities of the eastern Aleutians/western Alaska Peninsula were unaffected by the wartime

relocations which disrupted some of the more westerly communities of the Aleutian chain. However, during the post-War period, the region's settlements tended to consolidate into the few communities which enjoyed a more secure economic base. Many of the traditional villages had poor harbors, a circumstance which impaired their viability in the developing commercial fishing industry.

The economic foundation of Sand Point's future growth - commercial fishing and seafood processing - was laid even before World War II when the Alaska Pacific Salmon Co. established a salmon cannery here in the 1930s and Aleutian Cold Storage built a halibut processing plant in 1946. In 1955, Wakefield Fisheries leased part of Aleutian Cold Storage's plant to process king crab, then bought and converted the plant to crab processing in 1957.

The local king crab fishery boomed in the early 1960s but crashed in 1967 due to overharvesting. After the State imposed king crab harvest quotas, Wakefield Fisheries shifted to processing tanner crab and shrimp. The cycle of overharvest and decline was repeated with the commercial shrimp fishery, resulting in closure of that fishery until stocks recover. Nevertheless, Sand Point has been fortunate in having access to a diverse marine resource base - salmon, shrimp, crab, halibut and groundfish - and has gradually developed a balanced and diversified commercial fishing and seafood processing industry.

TABLE 381

HISTORIC POPULATION CHANGE  
ALEUTIANS EAST REGION  
1880 - 1986

<u>Village Group<sup>a</sup></u>	<u>1880</u>	<u>1890</u>	<u>1900</u>	<u>1910</u>	<u>1920</u>	<u>1929</u>	<u>1939</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1986</u>	<u>1987</u>
<b>Stumagin Village Complex</b>													
Sand Point			16	108	60	69	99	107	254	360	625	890	890
Unga	185	159	175	313	313	150	152	107	43	0*			
Unga I. (ex.village)							79						
Popof Island		146											
Pirate Cove	7				98								
Vosnesaensky	22	43	20*							2*			
Coal Harbor		15											
Apollo Village			87										
Squaw Harbor							79*	45		65 <sup>b</sup>			
Semeonovsky		3					13						
Korovin		41											
Sub-Total	214	404	301	108	471	219	409	272	297	424	625	890	890
<b>North Peninsula Village Complex</b>													
Port Moller							45	33				7	n/a
Nelson Lagoon							13			43	59	62	n/a
Herendeen Bay					51		58	33		43	59	69	n/a
Sub-Total					51								
<b>South Peninsula Village Complex</b>													
King Cove							135	162	290	283	460	547	713
Cold Bay									86	256	228	250	157
Belkofski	268	185	147		129	123	140	119	57	59			
Morzhovoi	100 <sup>c</sup>	68	81*		60	22	17						
Nikolaievsky	43												
Thin Point		231											
Ozernoi		45											
Sub-Total	411	529	228	189	189	145	292	281	433	598	688	797	870

<u>Village Group<sup>a</sup></u>	<u>1880</u>	<u>1890</u>	<u>1900</u>	<u>1910</u>	<u>1920</u>	<u>1929</u>	<u>1939</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1986</u>	<u>1987</u>
<b>Unimak Village Complex</b>													
False Pass					59*	88*	42	41	62	70	75	n/a	
Pauloff Harbor				62	52	61	68	77	39 <sup>d</sup>				
Sanak	132					39							
Ikatan							29						
Company Harbor			14*		45	22*							
Unimak Village						59	88						
Sub-Total	132		14	107	192	276	139	110	101	70	75	n/a	
<b>Isolated Village/Akutan Complex</b>													
Akutan	65	80	60*	66	71	80	86	107	101	169	189	274	
Akoon (Akun)	55												
Avatanok	19												
Sub-Total	139	80		66	71	80	86	107	101	169	189	274	
<u>TOTAL</u>	<u>764</u>	<u>1,145</u>	<u>543</u>	<u>108</u>	<u>884</u>	<u>627</u>	<u>1,115</u>	<u>811</u>	<u>955</u>	<u>1,267</u>	<u>1,611</u>	<u>2,020</u>	<u>2,091</u>

Note: The early (1880-1930) Census counts for the region were incomplete and inconsistent and are best taken as a minimum population count for some villages or islands. The 1910 Census, which recorded only 108 residents at Unga for the entire region, was especially incomplete. Also, totals and subtotals may understate actual population since the sum of enumerations by place may omit persons living outside named places.

a Definition of village groups adapted from Jones (1973).

b According to Jones (1973), population declined to 21 persons by 1971.

c Listed as Protossof.

d According to Jones (1973), population declined to 3 persons by 1971.

Sources: U.S. Census, except asterisked (\*) figures are from Jones (1973); 1986 and 1987 figures are from Alaska Department of Community and Regional Affairs.

TABLE 382  
POPULATION ESTIMATES  
SAND POINT  
1900 - 1987

<u>Year</u>	<u>Census</u>	<u>Other Estimates</u>	<u>Sources of Other Estimates</u>
1900	16		
1920	60		
1929	69		
1939	99		
1950	107		
1960	254	260	Ak. Department of Labor (July)
1967		353	Federal Field Committee - 289 Native; 64 non-Native
1968		375	Alaska Area Native Health Service - 310 Natives
1969		375	Federal Field Committee - 310 Native; 65 non-Native
1970	360	360	Ak. Department of Labor (July)
1975		429	U.S. Census Bureau
1976		448	U.S. Census Bureau
1980	625		
1980	650*	794	City of Sand Point (June)
1981	697*	846	City of Sand Point (June)
1982		697	U.S. Census Bureau (July)
1982	797*	795	City of Sand Point (June)
1983	889*	889	City of Sand Point (June)
1984	632*	870	City of Sand Point (June)
1985	671*	896	City of Sand Point (June)
1985		900	Dept. Community/Regional Affairs
1986		890	Dept. Community/Regional Affairs
1987		890	Dept. Community/Regional Affairs

\* Alaska Department of Labor estimates of July 1 population derived using U.S. Census methodology. Where these figures are the same as those cited by the City of Sand Point, the Department of Labor accepted local censuses or estimates.

Sources: U.S. Census (1900 - 1980 figures).  
Alaska Department of Labor (1980 - 1985 figures).

TABLE 383  
 POPULATION TRENDS  
 SAND POINT  
 1900 - 1985

<u>Year</u>	<u>Population</u>	<u>Percent Change</u>	
		<u>Decennial</u>	<u>Annual</u>
1900	16		
1920	60		
1930	69	15.0	
1939	99	43.5	
1950	107	8.1	
1960	254	137.4	
1970	360	41.7	
1980	625	73.6	
1981	697		11.5
1982	797		14.3
1983	889		11.5
1984	632		-28.9
1985	671		6.2

Sources: U.S. Census (1920 - 1980 figures).  
 Alaska Department of Labor (1981 - 1985 figures).



Sand Point grew substantially during every post-War decade from 107 persons in 1950 to 254 persons in 1960, 360 persons in 1970, and 625 persons in 1980. The Department of Community and Regional Affairs' most recent (1987) population estimate for Sand Point was 890 persons.

Much of Sand Point's pre-1980 growth accrued from immigration of Aleut residents from nearby communities (Unga, Squaw Harbor, Belkofski and Pauloff Harbor) whose economic decline coincided with Sand Point's economic advance. (Sand Point has a residential area locally known as Little Sanak, named for relocatees from Sanak Island). Sand Point was a progressive community, receptive to and economically able to absorb emigrants from these now depopulated villages. By one report (Division of Community Planning, 1983), almost the entire membership of the Sanak Corporation (Pauloff Harbor, 25 members) and Unga Corporation (45 members) now live in Sand Point, reflecting the general migration from those traditional villages into Sand Point.

The City's 1981 Comprehensive Plan makes a similar point:

Migration trends to Sand Point from other communities in the area are very apparent. Many residents of Sand Point came from Unga, King Cove, Squaw Harbor, Sanak and other Aleutian communities. In fact, there has been relatively little permanent migration into Sand Point from outside the Alaska Peninsula, as reflected by the fact that slightly over 87% of its 1978 population is of Aleut origin due to migration in the community. The Aleut population in 1970 was 74.4%. This migration trend has attributed to much of Sand Point's rapid increase in population. It differs drastically from current trends of the Aleutian Islands as a whole where there has been a negative migration of over 700 people since 1970. City of Sand Point Community Comprehensive Plan, January 1981.

During the early stages of Sand Point's development as a commercial fishing port, its resident Aleut and mixed Aleut-Scandinavian population kept and expanded its participation in the prosperous locally-based commercial fishing fleet. For the most part, transients rather than residents filled the less remunerative positions in the seafood processing workforce. This enabled Sand Point to retain its identity as a predominantly Aleut fishing community, even as it prospered and grew.

The seasonal presence of transient fishermen and processing workers injects some confusion into local population figures. For example, the April 1980 Census counted 625 residents (577 household residents, 48 persons living in group quarters). Two months later, the City's own census counted 794 residents (587 household residents, 96 persons in group quarters and 109 persons living on boats in the harbor), with the difference almost wholly attributable to the seasonal rise in transients.

In the years between 1980 and 1985, the City's June census count of transients ranged from 205 to 273 persons. The discrepancies in 1980 and later years between Alaska Department of Labor and City of Sand Point population figures may be explained by seasonal variations and decisions about whether to include or exclude transients from the City's official population. The implications of these seasonal population variations are further discussed in the next section on population composition.

Sand Point's modest spurt in its number of household residents is largely the result of an intensive local housing construction program. Between

1978 and 1986, 41 publicly-assisted housing units were built, with an additional 20 homes scheduled for construction in the Meadow Creek subdivision by the Aleutian Housing Authority. The City's annual censuses show that the post-1980 growth in household residents from 587 persons to 640 persons by 1985 kept pace with an increase in the number of households allowed by the supply of new homes. Thus, between 1980 and 1985, the City's figures show an 19 percent increase in the number of households and a 9 percent increase in permanent residents.

In assessing city population trends since 1980, it is noteworthy that, despite some year to year fluctuations, school enrollment, Permanent Fund dividend recipients and covered employment levels showed little net change between 1980 and 1985 or 1986. This again suggests that the large spread between the 1980 Census count of 625 residents and the City's own much higher annual census figures in 1980 and later years is chiefly due to different census methods, not massive population changes. Apart from the above-noted increase in household residents, it appears likely that Sand Point's permanent population grew little between 1980 and 1986.

#### B. POPULATION COMPOSITION

Sand Point retained its predominantly Aleut ethnic character through 1970, partly due to the intra-regional pattern of migration into the community. The 1970 Census indicated that 72 percent of the community's residents were Alaska Native. A subsequent study (Impact Assessment, Inc., 1987) reported

TABLE 384  
SAND POINT POPULATION  
1980

	<u>U.S. Census</u> <u>April 1980</u>	<u>City Census</u> <u>June 1980</u>
Residents in households	577	587
Number of households	186	171
Persons/household	3.1	3.4
Persons in transit	none	2
Persons in group quarters	48	96
Persons living on boats in harbor	none	109
Number of boats in harbor used for residence	none	44
Total persons counted	625	794

Sources: U.S. Census.  
City of Sand Point census.

TABLE 385  
TRENDS IN SAND POINT POPULATION  
1980 - 1985

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
Residents in households	587	581	584	616	N/A	640
Number of households	171	178	177	192	N/A	203
Persons/household	3.4	3.3	3.3	3.2	N/A	3.1
Persons in transit	2	2	0	0	N/A	5
Persons in group quarters	96	103	53	99	N/A	59
Persons living on boats	109	160	158	174	N/A	192
Total persons counted	794	846	795	889	870	896

Source: City of Sand Point census, conducted annually in June.

TABLE 386

FINAL ENROLLMENT BY GRADE  
SAND POINT  
1956/57 - 1986/87

Year	Kind	1	2	3	4	5	6	7	8	9	10	11	12	Ung/ Spec	Tot
1956/57		11	6	5	4	4	6	5	5						46
1957/58		9	8	7	5	5	4	6	4						48
1958/59		10	7	7	7	6	5	5	5						52
1959/60		6	8	6	6	7	6	4	5	2					50
1960/61		6	6	10	7	7	7	5	4			1			53
1961/62		9	3	7	9	9	6	7	5						55
1962/63		7	9	3	6	9	9	5	6						54
1963/64		9	10	9	4	6	8	7	3	2	3				61
1964/65		16	7	13	9	3	6	8	8						70
1965/66		13	15	6	11	8	3	4	8						68
1966/67		11	9	15	5	10	7	3	5						65
1967/68		12	11	8	17	6	8	7	3						72
1968/69		10	11	9	7	16	6	6	7						72
1969/70															
1970/71		12	21	7	14	10	4	22	8						98
1971/72	13	10	15	19	8	16	10	5	20	9					125
1972/73	14	12	10	12	18	9	17	12	3	16	9	1			133
1973/74	14	9	11	12	13	14	10	14	11	4	12	6	2		132
1974/75	4	15	9	11	11	12	16	9	15	10	5	8	5		130
1975/76	11*	7	16	11	10	11	13	17	8	15	8	3	10		140
1976/77															
1977/78															
1978/79	8*	9	10	8	5	11	8	11	11	12	15	8	15		131
1979/80**	17	7	5	9	8	6	14	12	11	9	10	15	8		131
1980/81	8	14	4	8	9	3	6	13	8	11	9	9	12		114
1981/82	15	12	12	7	7	8	3	7	15	8	10	6	8		118
1982/83	13	15	6	12	4	7	5	5	6	14	6	9	6		108
1983/84	9	11	12	6	11	6	7	5	5	5	14	6	9		106
1984/85	9	6	11	13	9	11	7	8	5	6	7	12	5		109
1985/86	19*	8	8	12	11	7	12	6	11	7	5	7	11		123
1986/87	16	16	7	7	13	10	7	12	7	9	10	6	6		126

\* Figures may include Pre-Elementary age children.

\*\* 1979/80 final enrollment figures include 11 students enrolled at Sand Point Christian.

Source: Alaska Department of Education, Educational Finance and Support Services.

TABLE 387  
 PERMANENT FUND DIVIDEND RECIPIENTS  
 SAND POINT  
 1982 - 1985

<u>Age Group</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
0 - 4		60	67	54
5 - 9			41	53
10 - 14			38	40
15 - 19			37	47
20 - 24			59	45
25 - 29			65	66
30 - 34			63	48
35 - 39			44	53
40 - 44			40	38
45 - 49			26	29
50 - 54			25	26
55 - 59			21	22
60 - 64			13	13
65 - 69			13	13
70 - 74			6	6
75 & over			4	5
Unknown	0	1	0	0
<u>TOTAL</u>	<u>603</u>	<u>550</u>	<u>562</u>	<u>558</u>

Note: 1982 age breakdown: 0-17 - 175; 18-27 - 128; 28-37 - 134; 38-47 - 78; 48-57 - 46; 58-67 - 31; 68-77 - 10; 78+ - 1; Unknown - 0; Total - 603.  
 1983 age breakdown: 0-4 - 60; 5-17 - 107; 18-27 - 117; 28-37 - 113; 38-47 - 64; 48-57 - 49; 58-67 - 26; 68-77 - 11; 78+ - 2; Unknown - 1; Total - 550.

Source: Alaska Department of Revenue.

that by 1978, Aleuts made up 87 percent of the local population, allegedly due to the continuing influx of Native villagers and, perhaps, a stronger post-ANCSA inclination to assert Native origins. However, according to the 1980 Census, the Native share of the community's population had fallen to 57 percent. Clearly, one or both of these counts of Aleuts is substantially in error.

In this regard, it may be noted that according to ANCSA enrollment data, there were 328 Alaska Natives residing in Sand Point in 1974. Two hundred and sixty of these residents were enrolled to the Shumagin Village Corporation (i.e. Sand Point) and 68 were enrolled to other village corporations. These data, along with 1980 Census data, fall short of confirming a picture of wholesale relocation of village populations to Sand Point in the early and mid-1970s. However, ANCSA enrollments by village do not necessarily reflect village origins as enrollees may choose to enroll to their new home community.

A plausible and consistent interpretation of the various data is that (1) the 1970 Census understated Sand Point's Alaska Native population; (2) the apparent percentage increase in Native residents by 1974 is for the most part a nominal result of the ANCSA enrollment criteria rather than an actual increase; (3) that some relocated villagers enrolled to the Shumagin Village Corporation rather than the corporation of their home village; (4) that Sand Point's percentage of non-Native residents increased during the period of rapid growth which occurred from 1970 to 1980 (average annual

rate: 5.7 percent); and (5) that the claim of 87 percent Alaska Native residency as late as 1978 is mistaken.

Coincidentally, the 1974 ANCSA enrollment data indicate that 140 enrollees of the Shumagin Village Corporation lived outside Sand Point at that time. Comparison of this figure with the number of non-local enrollees (68) then living at Sand Point suggests that Sand Point's net migration of Aleut residents was negative up to that time.

The 1980 Census data on place of residence five years previously also fail to confirm an above-average rate of immigration into Sand Point. The share (75 percent) of 1980 residents who had lived in the same census division in 1975 was near the median for the 22 study communities. Unfortunately, the Census does not distinguish between intra-city and intra-regional changes in residency. However, recent newcomers to Sand Point from outside the region were much more likely to have come from outside Alaska (17 percent) than from elsewhere in Alaska (8 percent). This statistic may be an indicator of Sand Point's strong economic ties to the Pacific Northwest states.

A 1983 survey of the length of residence of a sample of Sand Point citizens offers another possible indication of the rate of population migration and turnover at Sand Point. According to this survey, 46 percent of Sand Point's 1983 population had lived there for more than 20 years and another 28 percent for 6 to 20 years. Only 26 percent were reported to have moved to Sand Point within the last five years. However, the relatively low



population turnover implied by these data is not consistent with the growth and immigration rates observed over the past two decades. Possibly, the survey sample was not a representative cross-section of the community's population.

The 1970 Census data indicate that Sand Point's Native and non-Native populations were then statistically distinct but were both comparatively balanced in sex distribution and symmetric in age profile. Apart from a very large number of infant males, the total population was about evenly divided by sex and age. However, there was a large spread in the median age for Alaska Native residents, which was very young (16.8 years), and a much older non-Native population (31.6 years).

TABLE 388

LENGTH OF RESIDENCE  
CITY OF SAND POINT  
1983

<u>Years of Residence</u>	<u>Number</u>	<u>Percent</u>
0 - 5	27	26.0
6 - 10	14	13.5
11 - 15	10	9.6
16 - 20	5	4.8
20 years +	48	46.1
<u>TOTAL</u>	<u>104</u>	<u>100.0</u>

Note: Based on random sample of 104 householders from a total of 196 households.

Source: Aleutians East CRSA, undated.

By the time of the 1980 Census, the demographic picture had become more complex. By then, a substantial imbalance had developed in the number of young adult (20 to 34 years) males and females for both Alaska Natives (60 males, 38 females) and non-Natives (74 males, 55 females) alike. In the case of non-Natives, this imbalance was probably a result of selective immigration of adult males; in the case of Natives, probably a combination of selective immigration of adult males and emigration of young adult females. The age distribution of Alaska Natives was slightly pinched in for the youngest age groups, suggesting that birth rates had fallen during the preceding decade. On the other hand, the age profile of the non-Native population was very distorted. About half of the non-Native residents were concentrated in the 20 to 34 age group, suggesting a large influx of unattached or childless young adults. Seasonal transients not counted by the Census but included in the City's censuses would probably magnify this distortion.

Changes in median age for both Natives and non-Natives between 1970 and 1980 show sign of some demographic trends noted above. Overall, the median age rose from 21.1 to 24.1 years. For Alaska Natives, the median age jumped from 16.8 to 23.0 years, consistent with slowing birth rates and the progressive aging of an earlier baby-boom cohort. On the other hand, the non-Native median age fell from 31.6 to 25.2 years, consistent with the hypothesis of a disproportionate immigration of young adults. Age data for Sand Point Permanent Fund dividend recipients (1985 median age - 28.1 years) suggest that the aging trend for the population as a whole continued after 1980.

The City of Sand Point's own census, conducted annually in June, illustrates another important feature of the community's population composition - the number of seasonal transients. Where the April 1980 U.S. Census counted 625 residents (577 household residents and 48 persons in group quarters), the City's June 1980 census counted 794 persons (587 household residents, 96 persons in group quarters and 109 persons living on boats in the harbor). The City's census figures reflect both the seasonal increase in temporary processing plant workers and the passing presence of the transient commercial fishing fleet.

Furthermore, year to year comparisons of City census data between 1980 and 1985 indicate that the resident household population has been relatively stable, mainly growing with the availability of new housing. The same data indicate that the community's transient population fluctuates with the changing fortunes of the commercial fishing industry.

City censuses establish another point about the different make-up of the resident and transient populations. They show that the permanent resident population is about evenly divided between males and females but that the transient fishing and fish processing workforce is overwhelmingly (ranging from 84 to 94 percent) male.

The inclusion of persons living in group quarters in the 1980 Census city population count may distort the data on male/female ratios. Company policies in force at that time meant that group quarters residents were

TABLE 389  
POPULATION COMPOSITION  
SAND POINT  
1970

<u>Age Range</u>	<u>Alaska Native</u>			<u>Non-Native</u>		
	Male	Female	Total	Male	Female	Total
Under 5 years	34	16	50	4	2	6
5 - 14	35	41	76	4	7	11
15 - 24	23	25	48	8	11	19
25 - 34	17	19	36	9	7	16
35 - 44	18	12	30	3	5	8
45 - 54	7	7	14	11	5	16
55 - 64	4	6	10	6	6	12
65 and over	1	3	4	3	1	4
<u>TOTAL</u>	<u>139</u>	<u>129</u>	<u>268</u>	<u>48</u>	<u>44</u>	<u>92</u>
<u>Median Age</u>	<u>15.4</u>	<u>18.2</u>	<u>16.8</u>	<u>34.4</u>	<u>28.6</u>	<u>31.6</u>

<u>Age Range</u>	<u>Total</u>		
	Male	Female	Total
Under 5 years	38	18	56
5 - 9	22	32	54
10 - 14	17	16	33
15 - 19	11	18	29
20 - 24	20	18	38
25 - 29	17	13	30
30 - 34	9	13	22
35 - 39	13	10	23
40 - 44	8	7	15
45 - 49	11	3	14
50 - 54	7	9	16
55 - 59	7	6	13
60 - 64	3	6	9
65 and over	4	4	8
<u>TOTAL</u>	<u>187</u>	<u>173</u>	<u>360</u>
<u>Median Age</u>	<u>23.8</u>	<u>20.8</u>	<u>21.1</u>

Note: Native is defined as Aleut, Eskimo, Indian and others, excluding White and Negro.

Source: U.S. Census.

TABLE 390

POPULATION COMPOSITION  
SAND POINT  
1980

Age Range	Alaska Native		Non-Native		Total	
	Male	Female	Male	Female	Male	Female
Under 5 years						
5 - 9	15	19	10	13	25	32
10 - 14	22	18	6	7	28	25
15 - 19	17	15	10	5	27	20
20 - 24	20	28	17	14	37	42
25 - 29	25	17	29	21	54	38
30 - 34	16	14	31	26	47	40
35 - 39	19	7	14	8	33	15
40 - 44	11	11	10	10	21	21
45 - 49	10	10	7	6	17	16
50 - 54	9	4	6	2	15	6
55 - 59	11	8	5	3	16	11
60 - 64	4	3	2	0	6	3
65 - 69	5	6	3	2	8	8
70 - 74	4	3	1	0	5	3
75 and over	0	3	0	0	0	3
	1	2	0	0	1	2
<u>TOTAL</u>	<u>189</u>	<u>168</u>	<u>151</u>	<u>117</u>	<u>340</u>	<u>285</u>
<u>Median Age</u>	<u>24.2</u>	<u>21.3</u>	<u>25.6</u>	<u>24.8</u>	<u>24.9</u>	<u>23.1</u>
						<u>24.1</u>
						<u>625</u>

Source: U.S. Census.

TABLE 391

POPULATION COMPOSITION BY RESIDENCY AND SEX<sup>a</sup>  
SAND POINT  
1980 - 1985

Residency	1980		1981		1982		1983		1985	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Resident										
Male	302	52	302	52	314	54	329	53	350	55
Female	285	48	279	48	270	46	287	47	290	45
Transient										
Male	174	84	227	86	198	94	252	92	241	94
Female	33	16	38	14	13	6	21	8	15	6
<u>TOTAL</u>	<u>794</u>		<u>846</u>		<u>795</u>		<u>889</u>		<u>896</u>	
By Residency										
Residents	587	74	581	69	584	73	616	69	640	71
Transients	207	26	265	31	211	27	273	31	256	29
By Sex										
Male	476	60	529	63	512	64	581	65	591	66
Female	318	40	317	37	283	36	308	35	305	34

<sup>a</sup> Detailed data not available for 1984.

Source: City of Sand Point annual census.

TABLE 392

MARITAL STATUS, BY SEX  
PERSONS 15 YEARS AND OLDER  
SAND POINT  
1980

<u>Marital Status</u>	<u>Male</u>	<u>Female</u>
Single	108	64
Married	127	119
Separated	6	6
Widowed	3	7
Divorced	16	12
<u>TOTAL</u>	<u>260</u>	<u>208</u>

Source: 1980 Census.

TABLE 393

HOUSEHOLD TYPE AND RELATIONSHIP  
SAND POINT  
1980

<u>Household Type and Relationship</u>	<u>Number</u>	<u>Percent</u>
In Family Household		
Householder	126	20.2%
Spouse	106	17.0
Other Relatives	259	41.4
Non-Relative	5	.8
Sub-Total	496	79.4
In Non-Family Household		
Male Householder	48	7.7
Female Householder	12	1.9
Non-Relative	21	3.4
Sub-Total	81	13.0
In Group Quarters		
Inmate of Institution	0	0.0
Other	48	7.6
Sub-Total	48	7.6
<u>TOTAL</u>	<u>625</u>	<u>100.0</u>

Source: 1980 Census.

mostly unattached adult males. That factor accounts for the excess (1.69:1.0) of single males over single females aged 15 or more age noted by the 1980 Census.

#### C. TRENDS IN WAGE AND SALARY EMPLOYMENT

The numerous federal, State, city and private employment surveys done over the past 15 years for Sand Point differ in many respects but concur on some key points. First, commercial fishing and seafood processing consistently account for most employment, ranging from 75 to 90 percent depending upon the time of year and annual catch levels. Second, the resident workforce is committed to and successful at commercial fishing. On the other hand, most processing employment and part of the Sand Point-serviced commercial fishing fleet is staffed by transients. Third, the local economy is robust. While the prosperity of some individual fisheries is shaky, this is offset by the diverse commercial fishing opportunities open to the Sand Point fleet.

An early employment survey by Alaska Consultants (1970) estimated Sand Point's average annual full-time employment at 148 positions in 1967. At that time, commercial fishing (80 jobs) and manufacturing, i.e. seafood processing (50 jobs), dominated the local economy, providing 88 percent of that year's employment.

Similarly, the Corps of Engineers (1974) and Bomhoff & Associates (1976) both estimated that fishing-related employment accounted for over 80



percent of employment at Sand Point. According to Bomhoff & Associates, worker turnover in the seafood processing industry was very high; Bomhoff reported that Pacific Pearl employed 350 persons to fill 80 positions in its Sand Point plant in 1976.

A June 1980 city employment survey counted 538 jobs at Sand Point, of which about 87 percent were related to commercial fishing (52 percent) or seafood processing (35 percent). However, that survey requires two qualifications. First, the reported level of commercial fishing employment suggests that the survey may have counted transient commercial fishermen as part of Sand Point's employment base. Second, June is a month of above-average fishing and transient processing employment at Sand Point. Thus, the total employment counted by this survey (538 jobs) is not necessarily representative of the employment situation of Sand Point's resident workforce, nor does it accurately measure annual average employment.

Those conclusions are supported by both the 1980 Census and Alaska Department of Labor employment data series. The April 1980 Census enumerated a total of 276 employed persons at Sand Point, including fishermen and other self-employed persons. By comparison, the Alaska Department of Labor's average annual covered employment series, which excludes self-employed persons, counted 243 employees for the Sand Point area that year. (Note that the Sand Point area also includes a minor amount of employment reported for Port Moller and Nelson Lagoon).

These different survey results underline the critical importance of standards for definitions (who is a resident?), timing (when was the survey conducted and for what period of work?) and coverage (are self-employed persons included?) for employment surveys. This is especially true for an economy such as Sand Point's which characteristically engages a large transient workforce on a seasonal basis and has many self-employed residents in an industry subject to seasonal and annual cycles.

Alaska Department of Labor data suggest the intensity of Sand Point's annual and seasonal wage employment fluctuations. Between 1980 and 1986, annual covered employment has averaged between 191 and 256 workers, reflecting the ups and downs of processing activity which itself is a result of fluctuating harvest activity and catch landings. The monthly employment data over the same period illustrate the seasonality of the local seafood processing industry. For the 1980-1986 period, monthly employment during July, August and September was 42 percent to 63 percent above the annual average, while monthly employment for November through April was 21 percent to 29 percent below the annual average. As an extreme example, between June and July 1980, manufacturing (i.e. seafood processing) employment jumped from about 50 jobs to 471 jobs. Under the circumstances, Sand Point is fortunate to be able to tap a short-term transient labor force as needed to meet its seasonal labor demands.

Finally, the Alaska Department of Labor covered employment series offers some signs of trends in the size and composition of Sand Point's economy. There is no conclusive overall growth trend. According to Department of

Labor data, between 1980 and 1986, employment dipped in poor fishing years and rose in good years. For many specific employment sectors, the data are spotty or missing due to disclosure limitations. Still, it is clear that local government was a strong growth sector: local public sector employment tripled from 20 jobs in 1980 to 62 jobs in 1986. Even so, government employment accounted for only about a quarter of total employment (less, if self-employed persons were counted), a relatively low share when compared with most rural Alaska communities. The recent formation of the Aleutians East Borough may further boost Sand Point's local government employment.

Department of Labor figures for trade employment are also spotty, but suggest there was some recent expansion in that sector. A recent report by Impact Assessment, Inc. (1987) also indicates an impression of trade sector growth. Nevertheless, despite the community's relative affluence, trade, services and other support sector employment remains low when compared with total employment. The transient nature of much of Sand Point's workforce partly explains the local economy's low employment multiplier.

TABLE 394  
 AVERAGE ANNUAL FULL-TIME EMPLOYMENT  
 SAND POINT  
 1967

<u>Industry Classification</u>	<u>Number</u>	<u>Percent</u>
Agriculture, Forestry and Fishing	80	54.0
Mining	0	0.0
Contract Construction	2	1.4
Manufacturing	50	33.7
Transportation, Communication and Public Utilities	1	0.7
Trade	4	2.7
Finance, Insurance and Real Estate	0	0.0
Service	2	1.4
Government	9	6.1
Federal	(2)	(1.4)
State	(6)	(4.1)
Local	(1)	(0.7)
<u>TOTAL</u>	<u>148</u>	<u>100.0</u>

Note: Figures for contract construction, trade and government sectors estimated based on partial information.

Source: Alaska Consultants, 1970.

TABLE 395  
COMPOSITION OF EMPLOYMENT  
SAND POINT  
1974 AND 1976

<u>Industry</u>	<u>1974</u>	<u>1976</u>
Commercial Fishing	53	65 <sup>a</sup>
Seafood Processing	71	81 <sup>a</sup>
Domestic & Services	12	19
Government	3	6
Transportation	1	6
<b><u>TOTAL</u></b>	<b><u>150</u></b>	<b><u>177</u></b>

<sup>a</sup> Bomhoff & Associates estimate. Seafood processing includes 16 resident and 65 transient workers.

Note: The Bomhoff study says its 1977 employment survey found the Pacific Pearl plant employed 350 persons over the year, but a majority were transients who stayed only one to three months. Eighty employees were required for operation of the Pacific Pearl plant and 15-20 persons for the New England Fish Company plant.

Sources: Corps of Engineers, 1974.  
Bomhoff & Associates, 1977.

TABLE 396  
 COMPOSITION OF EMPLOYMENT  
 SAND POINT  
 JUNE 1980

<u>Industry</u>	<u>Number</u>	<u>Percent</u>
Commercial Fishing	279	51.9
Seafood Processing	189	35.1
Commercial Services	17	3.2
Construction	4	.7
Transportation	7	1.3
Education	18	3.3
Technical/Professional Services	2	.4
Federal Government	3	.6
State Government	5	.9
Local Government	8	1.5
Corporations/Non-Profit Organizations	6	1.1
<u>TOTAL</u>	<u>538</u>	<u>100.0</u>

Source: City of Sand Point survey, June 1980.

TABLE 397  
 SELECTED LABOR FORCE DATA  
 SAND POINT  
 1980

LABOR FORCE STATUS, PERSONS OVER 16 YEARS, 1980

<u>Labor Force Status</u>	<u>Alaska Natives</u>		<u>All Races</u>		
	Male	Female	Male	Female	Total
Armed Forces	0	0	0	12	12
Civilian Employed	62	19	195	81	276
Civilian Unemployed	8	4	8	4	12
Not in Labor Force	64	80	73	102	175
Labor Force Participation Rate	52.0%	22.0%	42.0%	22.0%	31.0%
Unemployment Rate: 1980	11.4%	17.4%	3.7%	7.6%	5.0%
1970	*	*	39.4%	37.5%	39.2%

EMPLOYMENT BY INDUSTRY, 1970 AND 1980

<u>Industry</u>	<u>1970</u>	<u>1980</u>
Construction	4	6
Manufacturing	46	41
Transportation	8	25
Communications	0	10
Trade	0	53
Finance, Insurance & Real Estate	0	0
Services	18	56
Public Administration	0	19
Other	28	74
<u>TOTAL</u>	<u>104</u>	<u>276</u>

\* Data missing or suppressed.

Source: U.S. Census, 1980.

TABLE 398  
 AVERAGE MONTHLY EMPLOYMENT  
 SAND POINT AREA\*\*  
 1980 - 1986

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	<u>Average Monthly Employment</u>	<u>Percent Dif- ference from Annual Average</u>
January	169	-24.6%
February	165	-26.3
March	160	-28.6
April	178	-20.5
May	197	-12.1
June	236	+5.4
July	333	+48.7
August	365	+62.9
September	318	+42.0
October	229	+2.2
November	177	-21.0
December	167	-25.4
Annual Average	224	

Source: Alaska Department of Labor.



TABLE 399  
COVERED INDUSTRY EMPLOYMENT  
SAND POINT AREA\*\*  
1980 - 1986

<u>Industry Classification</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
Mining	0	0	0	0	0	0	*
Construction	*	*	0	*	*	*	0
Manufacturing	*	*	125 <sup>a</sup>	106 <sup>a</sup>	*	*	106 <sup>a</sup>
Transportation, Communication and Public Utilities	10	9	9	12	14	16	19
Trade	17 <sup>a</sup>	17 <sup>a</sup>	22	26 <sup>a</sup>	*	*	*
Finance, Insurance and Real Estate	0	*	*	*	*	*	*
Services	*	*	*	*	*	*	*
Government	27	27	35	45	61	70	66
Federal	2	2	2	2	2	3	2
State	5	4	4	3	3	3	2
Local	20	21	29	40	56	64	62
Miscellaneous	*	*	*	*	*	*	*
<u>TOTAL</u>	<u>243</u>	<u>220</u>	<u>191</u>	<u>192</u>	<u>222</u>	<u>256</u>	<u>248</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Sand Point area also includes Nelson Lagoon, Port Moller, Squaw Harbor and Unga.

<sup>a</sup> Prorated from nine months of data.

Source: Alaska Department of Labor.

TABLE 400

COVERED INDUSTRY EMPLOYMENT  
SAND POINT AREA\*\*  
1980

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	*	*	*	*	*	*	*	*	*
Manufacturing	*	*	*	*	*	*	471	446	314	176	126	101
Transportation, Communication and Public Utilities	12	6	7	9	9	12	11	11	11	9	12	11
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	17	18	18	19	19	18	16	16	16
Finance, Insurance and Real Estate	0	0	0	0	0	0	0	0	0	*	*	*
Services	0	0	0	*	*	*	*	*	*	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	3	3	4	2	2	2	2	2	2	2	2	2
State	1	8	7	6	4	2	2	1	4	7	6	7
Local	9	9	9	34	35	33	22	24	35	11	12	12
<u>TOTAL</u>	<u>143</u>	<u>131</u>	<u>152</u>	<u>160</u>	<u>151</u>	<u>183</u>	<u>529</u>	<u>505</u>	<u>392</u>	<u>233</u>	<u>179</u>	<u>153</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Sand Point area also includes Nelson Lagoon, Port Moller, Squaw Harbor and Unga.

Source: Alaska Department of Labor.

TABLE 401

COVERED INDUSTRY EMPLOYMENT  
SAND POINT AREA\*\*  
1981

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	0	0	0	0	0	0	0	0	0
Manufacturing	*	*	*	134	152	183	246	215	220	340	207	140
Transportation, Communication and Public Utilities	10	10	11	12	10	7	7	9	9	10	8	9
Wholesale Trade	0	0	0	*	*	*	*	*	*	*	*	*
Retail Trade	14	14	14	*	*	*	18	21	18	18	19	19
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	2	2	2	2	2	3	2	2	2	2	2	2
State	5	3	6	5	6	3	2	2	1	3	4	6
Local	15	11	11	11	10	11	11	12	14	49	47	48
<u>TOTAL</u>	<u>103</u>	<u>82</u>	<u>85</u>	<u>182</u>	<u>199</u>	<u>226</u>	<u>289</u>	<u>264</u>	<u>266</u>	<u>425</u>	<u>290</u>	<u>227</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Sand Point area also includes Nelson Lagoon, Port Moller, Squaw Harbor and Unga.

Source: Alaska Department of Labor.

TABLE 402

COVERED INDUSTRY EMPLOYMENT  
SAND POINT AREA\*\*  
1982

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	*	*	*	70	73	139	190	190	224	124	55	59
Transportation, Communication and Public Utilities	6	7	7	7	9	7	8	7	8	13	12	13
Wholesale Trade	*	*	*	*	*	*	*	*	*	*	*	*
Retail Trade	20	21	21	22	23	23	22	22	23	24	23	24
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	2	2	2	2	2	2	1	1	1	2	3	2
State	2	6	5	6	3	2	0	2	4	6	6	6
Local	12	15	15	36	38	36	13	12	40	49	45	39
<b>TOTAL</b>	<b>145</b>	<b>159</b>	<b>151</b>	<b>151</b>	<b>154</b>	<b>215</b>	<b>240</b>	<b>241</b>	<b>306</b>	<b>227</b>	<b>153</b>	<b>153</b>

\* Figures withheld to comply with disclosure regulations.

\*\* Sand Point area also includes Nelson Lagoon, Port Moller, Squaw Harbor and Unga.

Source: Alaska Department of Labor.

TABLE 403

COVERED INDUSTRY EMPLOYMENT  
SAND POINT AREA\*\*  
1983

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	*	*	*	*	*	*	*	*	*
Manufacturing	*	*	*	59	99	165	209	156	168	48	24	38
Transportation, Communication and Public Utilities	10	11	10	8	12	11	10	16	17	15	15	14
Wholesale Trade	*	*	*	*	*	*	0	0	0	0	0	0
Retail Trade	27	23	22	24	29	30	28	26	25	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	3	2	2	2	2	2	1	3	3	2	3	3
State	3	6	4	4	3	1	0	1	2	2	2	5
Local	37	37	38	40	41	44	29	25	45	50	43	55
<u>TOTAL</u>	<u>138</u>	<u>133</u>	<u>166</u>	<u>151</u>	<u>202</u>	<u>270</u>	<u>291</u>	<u>242</u>	<u>275</u>	<u>162</u>	<u>125</u>	<u>150</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Sand Point area also includes Nelson Lagoon, Port Moller, Squaw Harbor and Unga.

Source: Alaska Department of Labor.

TABLE 404

COVERED INDUSTRY EMPLOYMENT  
SAND POINT AREA\*\*  
1984

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	*	*	*	*	*	*	337	307	228	*	*	*
Transportation, Communication and Public Utilities	16	14	13	12	14	14	13	15	13	15	15	14
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	2	2	2	3	3	3	3	2	1	2	2	2
State	1	1	3	6	6	0	0	0	2	3	4	4
Local	65	66	58	63	62	54	37	30	46	62	66	65
<u>TOTAL</u>	<u>130</u>	<u>143</u>	<u>172</u>	<u>140</u>	<u>181</u>	<u>271</u>	<u>432</u>	<u>393</u>	<u>328</u>	<u>186</u>	<u>144</u>	<u>142</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Sand Point area also includes Nelson Lagoon, Port Moller, Squaw Harbor and Unga.

Source: Alaska Department of Labor.

TABLE 405

COVERED INDUSTRY EMPLOYMENT  
SAND POINT AREA\*\*

1985

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	*	*	*
Construction	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	*	*	*	*	*	*	179	364	228	*	*	*
Transportation, Communication and Public Utilities	14	15	14	16	16	17	15	10	16	20	20	21
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	2	2	3	3	3	2	3	3	3	3	3	3
State	1	4	5	7	2	1	0	0	2	5	6	2
Local	60	60	53	57	56	49	51	61	69	76	81	89
<b>TOTAL</b>	<b>230</b>	<b>225</b>	<b>217</b>	<b>239</b>	<b>230</b>	<b>219</b>	<b>300</b>	<b>490</b>	<b>365</b>	<b>187</b>	<b>183</b>	<b>183</b>

\* Figures withheld to comply with disclosure regulations.

\*\* Sand Point area also includes Nelson Lagoon, Port Moller, Squaw Harbor and Unga.

Source: Alaska Department of Labor.

TABLE 406

COVERED INDUSTRY EMPLOYMENT  
SAND POINT AREA\*\*  
1986

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	*	*	*	*	*	*	*	*	*	*	*	*
Construction	0	0	0	0	0	0	0	0	0	*	*	*
Manufacturing	*	*	*	62	99	132	132	291	152	42	25	22
Transportation, Communication and Public Utilities	20	19	19	18	19	18	17	20	22	18	15	19
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	42	46	38	42	42	34
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	2	2	2	2	3	3	3	2	2	2	3	3
State	1	1	3	4	4	3	0	1	1	1	1	1
Local	76	77	79	87	85	54	48	51	71	72	66	69
<u>TOTAL</u>	<u>293</u>	<u>283</u>	<u>178</u>	<u>222</u>	<u>260</u>	<u>267</u>	<u>252</u>	<u>420</u>	<u>294</u>	<u>186</u>	<u>164</u>	<u>159</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Sand Point area also includes Nelson Lagoon, Port Moller, Squaw Harbor and Unga.

Source: Alaska Department of Labor.





## NIKOLSKI

### A. PAST POPULATION TRENDS

Nikolski is located on Umnak Island in the Fox Island group of the Aleutian Islands, about 100 miles west of Unalaska. Along with Gambell on St. Lawrence Island and St. Paul in the Pribilof Islands, Nikolski lies at the very western perimeter of Alaska's civilian settlements.

Nikolski is endowed with an exceptionally productive subsistence habitat but is burdened by its shallow, poorly protected natural harbor on Nikolski Bay. Nikolski is an ancient settlement site. Laughlin estimated its human habitation to date back 4,000 years. Archaeological evidence confirms it as one of the earliest sites for Aleut-Eskimo occupation. Because of the community's interest to archaeologists, ethnographers and historians, Nikolski's past and contemporary history are relatively well documented.

Nikolski (aboriginal name Chaluka) was presumably first sighted by Chirikof in 1741, but it was not known to be visited by Europeans until the Russian fur hunter Glotov "discovered" Umnak Island in 1759. Then, as throughout the Aleutians under the oppressive reign of the fur traders, life at Nikolski got grim. This was the start of an era which saw the Aleuts, once Alaska's most numerous aboriginal group, decline from an estimated 15,000 to 20,000 before contact to about 2,250 by 1834 (Veniaminov), to about 1,400 by 1848 and, in another year, after a smallpox epidemic, to an estimated 900 people. Scholars disagree about the exact size of the Aleut

population at contact and about later censuses, but all concur that the first, few decades of Russian penetration dealt irreparable damage to Aleut society and family life.

Berreman summarized the post-contact fate of Nikolski, in a few harsh words: "Thereafter, the people were killed, exploited, forced to work for the Russians, and genetically mixed with the Russians". In short order, Glotov's massacres, disease and the risks of fur hunting reduced Umnak Island's original twenty-two original villages and 2,000 to 2,500 Aleuts to three villages with a total population of perhaps 700 to 750 persons.

By the time of Bishop Veniaminov's visit to the Island in 1826, the results of Russian domination were even more apparent. Only two villages remained with a total combined population of 109 persons, Nikolski (83 residents, including 38 males and 45 females) and a second smaller village, now defunct. Today, even the outlook for Nikolski, the last surviving village on Umnak Island, seems unsure.

Berreman speculates that Nikolski's total population remained fairly constant for a century after Veniaminov's visit. The 1890 Census counted a total of 94 residents (47 males and 47 females) on Umnak Island, noting that the Island's population was by then concentrated in a single settlement. Hooper's 1897 census noted a population of 98 persons (44 males and 54 females). It is possible that the 1890 and Hooper's censuses were incomplete as Berreman cites local informants who alleged a population of around 120 persons during the 1900 to 1910 period.

TABLE 407  
 POPULATION ESTIMATES  
 NIKOLSKI  
 1826 - 1987

<u>Year</u>	<u>Census</u>	<u>Other Estimates</u>	<u>Sources of Other Estimates</u>
1826		83	Veniaminov
1880	127		
1890	94		
1897		98	Hooper (per Berreman)
1900-1910		120	Berreman
1920	83		
1929	109		
1938		85	Laughlin and Marsh
1939	97		
1940		92	BIA (per Jones)
1942		72	Berreman
1950	64	59	Banks
1952		56	Berreman
1957		64	Ray, 1959
1960	92		
1967		65	Federal Field Committee - 61 Native; 4 non-Native
1968		70	Alaska Area Native Health Service
1969		65	Federal Field Committee - 60 Native; 5 non-Native
1970	57	62	Jones
1980	50		
1983	41*		
1984	45*		
1985	46*		

\* Alaska Department of Labor estimates of July 1 population derived using U.S. Census methodology.

Sources: U.S. Census (1880 - 1980 figures).  
 Alaska Department of Labor (1983 - 1985 figures).

TABLE 408  
 POPULATION TRENDS  
 NIKOLSKI  
1880 - 1985

<u>Year</u>	<u>Population</u>	<u>Percent Change</u>	
		<u>Decennial</u>	<u>Annual</u>
1880	127		
1890	94	-26.0	
1920	83		
1930	109	31.3	
1939	97	-11.0	
1950	64	-34.0	
1960	92	43.8	
1970	57	-38.0	
1980	50	-12.3	
1983	41		
1984	45		9.8
1985	46		2.2

Sources: U.S. Census (1880 - 1980 figures).  
 Alaska Department of Labor (1983 - 1985 figures).

Apart from church buildings, the Russian era and the first decades of American jurisdiction seemingly brought few material benefits or developments to Nikolski. Then as now, shallow and exposed Nikolski Bay discouraged marine industries. Before the Alaska Commercial Company opened the first store here around 1900, residents generally subsisted on local resources, plus staples periodically obtained in trade with passing vessels. For decades, that store and later stores seem to have been barely marginal operations, reflective of Nikolski's poor commercial economy. Nikolski never became host for a local commercial fishery and the sea otter harvest was outlawed under American jurisdiction. For a while, fox trapping yielded minor income. Then, when fox pelt prices rose in the mid-1920s, the village prospered until eight hunters perished in a shipwreck.

The first local school was built in 1922; previously, children had to go to a church school in Unalaska for education. In 1926, ranching operations, first sheep and later also cattle, were started near Nikolski, providing occasional paid work for local residents as ranch hands.

The 1920, 1930 and 1939 Censuses recorded populations of 83, 109 and 97 persons respectively, indicating a period of comparative demographic stability. Then, Japan invaded the western Aleutians and the entire population of Nikolski was evacuated to Wards Lake near Ketchikan in Southeast Alaska. An American military outpost, subsequently used as a White Alice site and later as an Alascom communications site until 1977, was installed on Black Hill overlooking the village.

During their stay in Southeast Alaska, Nikolski residents were newly exposed to urban comforts and attractions and to well paid work in that region's timber, fishing and other industries. Still, even in exile, village cohesion remained strong. All but six of the surviving exiles chose to return to Nikolski when the chance arose in late 1945. Unhappily, thirteen persons - 16 percent of the original eighty evacuees - died during the three years at Wards Lake (Berreman, 1963).

For a time after the return to Nikolski, it was common for perhaps fifteen village men and boys to go to the Pribilofs during the summer months to work at sealing. A smaller number sought seasonal work outside the village in fisheries-related occupations. But at Nikolski, the only paid jobs open to local residents were that of the postmaster and ranch work, plus handicrafts. Still, Kozely (1963) found cause to praise the industriousness of local men and the progressiveness of the village in looking after community needs.

Between 1950 and 1980, all of the population counts fell within a range of 50 to 70 persons, except for the 1960 Census which reported a puzzlingly high 92 residents. However, changes in population composition over that period, further discussed below, foretold imminent population decline. Indeed, the population figures after the late 1960s show a generally downward trend, falling to 50 residents by the 1980 Census and fewer still in subsequent Alaska Department of Labor estimates.

## B. POPULATION COMPOSITION

There are good historic demographic data available for Nikolski, including breakdowns by age and sex for 1897, 1942 and 1952, as well as the 1970 and 1980 Censuses.

Except for the period when the military installation was operational, there have never been more than a few whites resident at Nikolski. That remains the case today. The 1970 Census counted five non-Natives, the 1980 Census only two. While the misfortunes of history mean that most modern Aleuts are of mixed racial stock, Berreman cites local informants who insisted vigorously that little mixing occurred at Nikolski.

Nikolski's changing sex ratio reflects the changing circumstances of local life. Population counts from the Russian era consistently show a prevalence of females, probably the result of male conscription and fatalities from fighting and hunting. After the United States assumed jurisdiction, the opposite pattern asserted itself. Certainly, by 1942 and thereafter, males predominated, sometimes by a wide margin. Berreman notes that out-migration, especially by young women leaving to be married, was high before 1942. Between 1942 and 1952, there were seventeen emigrants; all but two of those relocated outside the region. Berreman (1963) also observed that not a single youngster who had gone outside the village for education had yet returned to live there.



Ironically, Kozely, in his 1963 community survey, saw a core of youthful industrious people, determined to stay and make a better life for their children at Nikolski. But the more perceptive Berreman, also writing in 1963, already saw the premonitory signs of a community in decline. Berreman documents the substantial excess of deaths over births and emigrants over immigrants between 1942 and 1952. The absolute birth rate was low, too low to replace the losses to emigration and mortality. Berreman attributes the low birth rate partly to disease and poor nutrition, partly to out-marriage of women because of an imbalanced sex ratio and partly to prohibitions on inter-marriage among the community's few family groups. Commenting on the 1952 population figures, Berreman even then sees "an impressive lack of children under ten years of age".

The climax of these trends is plain in the population composition data for 1970 and 1980. In 1970, the median age for males was 45.8 years, for females 32.5 years. By 1980, the medians were 47.5 and 32.5 respectively and Permanent Fund data for 1985 shows a median age of 50.8 for the total population. These are the highest medians among the twenty-one study communities. In all these years, there is an increasingly "impressive lack of children under ten years of age". This is reflected in school enrollments, which declined from 12 students in the Spring of 1980 to 5 in the Spring of 1987. Department of Community and Regional Affairs staff report that, in order to keep the elementary school open for the two local school children, it has been necessary to recruit a teacher with three school-age children.

TABLE 409

POPULATION COMPOSITION  
NIKOLSKI  
1897, 1942 AND 1952

Age Range	1897		1942		1952	
	Male	Female	Male	Female	Male	Female
Under 5 years						
5 - 9	2	7	5	3	1	1
10 - 14	6	3	6	3	2	3
15 - 19	3	5	4	5	5	2
20 - 24	8	3	7	4	5	2
25 - 29	4	6	1	3	2	1
30 - 34	4	8	5	1	3	3
35 - 39	6	4	2	3	1	2
40 - 44	4	5	5	2	3	0
45 - 49	3	6	1	2	2	2
50 - 54	3	2	1	2	5	3
55 - 59	0	1	1	0	2	1
60 - 64	0	2	2	1	0	0
65 and over	0	1	2	0	2	1
<b>TOTAL</b>	<u>44</u>	<u>54</u>	<u>44</u>	<u>28</u>	<u>34</u>	<u>22</u>
<b>Median Age</b>	<u>24.4</u>	<u>27.2</u>	<u>22.5</u>	<u>19.4</u>	<u>29.2</u>	<u>29.2</u>
						<u>56</u>
						<u>28.8</u>

Sources: 1897 data collected by Hooper (per Berreman, 1963); 1942 and 1952 data, Berreman, 1963.

TABLE 410  
POPULATION COMPOSITION  
NIKOLSKI  
1970

<u>Age Range</u>	<u>Alaska Native</u>			<u>Non-Native</u>		
	Male	Female	Total	Male	Female	Total
Under 5 years	1	3	4	0	0	0
5 - 14	2	7	9	0	0	0
15 - 24	3	0	3	0	1	1
25 - 34	5	4	9	0	0	0
35 - 44	4	3	7	0	0	0
45 - 54	6	2	8	0	0	0
55 - 64	6	3	9	1	2	3
65 and over	1	2	3	1	0	1
<u>TOTAL</u>	<u>28</u>	<u>24</u>	<u>52</u>	<u>2</u>	<u>3</u>	<u>5</u>
<u>Median Age</u>	<u>43.8</u>	<u>31.3</u>	<u>37.1</u>			

<u>Age Range</u>	<u>Total</u>		
	Male	Female	Total
Under 5 years	1	3	4
5 - 9	1	3	4
10 - 14	1	4	5
15 - 19	1	0	1
20 - 24	2	1	3
25 - 29	1	3	4
30 - 34	4	1	5
35 - 39	2	1	3
40 - 44	2	2	4
45 - 49	3	1	4
50 - 54	3	1	4
55 - 59	4	1	5
60 - 64	3	4	7
65 and over	2	2	4
<u>TOTAL</u>	<u>30</u>	<u>27</u>	<u>57</u>
<u>Median Age</u>	<u>45.8</u>	<u>32.5</u>	<u>39.9</u>

Note: Native is defined as Aleut, Eskimo, Indian and others, excluding White and Negro.

Source: U.S. Census.

TABLE 411

POPULATION COMPOSITION  
NIKOLSKI  
1980

Age Range	Alaska Native		Non-Native		Total	
	Male	Female	Male	Female	Male	Female
Under 5 years	0	0	0	0	0	0
5 - 9	3	2	0	0	3	2
10 - 14	3	3	0	0	3	3
15 - 19	0	4	0	0	0	4
20 - 24	0	2	0	0	0	2
25 - 29	1	0	0	0	1	0
30 - 34	2	1	0	0	2	1
35 - 39	0	2	0	0	0	2
40 - 44	3	2	0	0	3	2
45 - 49	3	1	0	0	3	1
50 - 54	3	1	0	0	3	1
55 - 59	1	1	0	0	1	1
60 - 64	1	1	0	0	1	1
65 - 69	4	2	0	0	4	2
70 - 74	1	1	0	0	1	1
75 and over	2	0	0	0	2	0
<b>TOTAL</b>	<b>27</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>27</b>	<b>23</b>
<b>Median Age</b>	<b>47.5</b>	<b>32.5</b>			<b>47.5</b>	<b>32.5</b>
						<b>50</b>
						<b>40.7</b>

Source: U.S. Census.

TABLE 412

MARITAL STATUS, BY SEX  
PERSONS 15 YEARS AND OLDER  
NIKOLSKI  
1980

<u>Marital Status</u>	<u>Male</u>	<u>Female</u>
Single	3	5
Married	10	10
Separated	1	1
Widowed	4	1
Divorced	3	1
<u>TOTAL</u>	<u>21</u>	<u>18</u>

Source: 1980 Census.

TABLE 746

HOUSEHOLD TYPE AND RELATIONSHIP  
NIKOLSKI  
1980

<u>Household Type and Relationship</u>	<u>Number</u>	<u>Percent</u>
In Family Household		
Householder	11	22.0%
Spouse	10	20.0
Other Relatives	17	34.0
Non-Relative	0	0.0
Sub-Total	38	76.0
In Non-Family Household		
Male Householder	10	20.0
Female Householder	2	4.0
Non-Relative	0	0.0
Sub-Total	12	24.0
In Group Quarters		
Inmate of Institution		
Other		
Sub-Total		
<u>TOTAL</u>	<u>50</u>	<u>100.0%</u>

Source: 1980 Census.

Jones (1973) characterized Nikolski as an isolated village, without strong social or economic ties to any other Aleutian communities. She observed that, despite the practice of seasonal commuting to St. Paul, Cold Bay, Unalaska and other spots for temporary work, the lures of work and more comfortable living conditions were not strong enough to attract Nikolski men to relocate permanently. This is unlike several other, less isolated small Aleutian villages whose populations have gravitated to nearby larger settlements such as Unalaska or Sand Point.

The cross-tabulations of 1974 residence and enrollment data for ANCSA enrollees fit this picture of a community in slow decline. At that time, none of the 53 enrolled Natives living at Nikolski were enrolled to another village, suggesting virtually no immigration of Natives into Nikolski from elsewhere. On the other hand, about 28 percent of the enrollees to Nikolski were then living in other communities. However, the 1980 Census reported that 34 percent of Nikolski residents had lived elsewhere in Alaska five years earlier. This was by far the highest rate of intra-State migration counted for any of the study villages and, in view of other contradictory data, appears to be in error.

In sum, Nikolski appears unable to hold its young people or to attract newcomers, with too few marriageable young adults to sustain itself over the long run. After four millennia of near continuous human settlement, Nikolski appears bound for gradual abandonment.

TABLE 414  
 PERMANENT FUND DIVIDEND RECIPIENTS  
 NIKOLSKI  
 1982 - 1985

<u>Age Group</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
0 - 4		1	0	1
5 - 9			0	2
10 - 14			2	0
15 - 19			5	4
20 - 24			2	3
25 - 29			1	3
30 - 34			0	0
35 - 39			1	0
40 - 44			1	2
45 - 49			6	4
50 - 54			4	3
55 - 59			2	4
60 - 64			2	1
65 - 69			4	3
70 - 74			4	3
75 & over			3	3
Unknown	0	0	0	0
<u>TOTAL</u>	<u>44</u>	<u>41</u>	<u>37</u>	<u>36</u>

Note: 1982 age breakdown: 0-17 - 10; 18-27 - 3; 28-37 - 3; 38-47 - 8; 48-57 - 6; 58-67 - 6; 68-77 - 7; 78+ - 1; Unknown - 0; Total - 44.  
 1983 age breakdown: 0-4 - 1; 5-17 - 8; 18-27 - 3; 28-37 - 1; 38-47 - 9; 48-57 - 5; 58-67 - 5; 68-77 - 8; 78+ - 1; Unknown - 0; Total - 41.

Source: Alaska Department of Revenue.

TABLE 415  
FINAL ENROLLMENT BY GRADE  
NIKOLSKI  
1956/57 - 1986/87

<u>Year</u>	<u>Kind</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>Ung/ Spec</u>	<u>Tot</u>
1956/57		1	1	2	0	4	0	2	0						10
1957/58		1	1	3	3	0	4	0	2						14
1958/59		1	1	1	3	3	0	4	1						14
1959/60		1	1	1	1	4	0	0	3						11
1960/61		1	1	2	1	1	4	1	2						13
1961/62		3	0	1	1	0	1	2	0						8
1962/63		3	2	0	1	0	0	1	2						9
1963/64		1	3	2	0	1	1	0	1						9
1964/65		0	1	2	2	0	1	1	0						7
1965/66		1	0	2	0	2	0	1	0						6
1966/67		2	1	0	2	1	3	0	1						10
1967/68		1	2	1	0	2	1	3	0						10
1968/69		1	1	2	1	0	2	1	3						11
1969/70															
1970/71		2	3	0	1	3	2	0	2						13
1971/72		1	1	2	0	1	2	1	0	2					10
1972/73		2	1	1	0	1	1	2	1						9
1973/74		0	2	1	1	2	1	1	1						9
1974/75		3	0	2	1	1	3	0	1						11
1975/76		1	1	0	3	1	1	2	0						9
1976/77															
1977/78															
1978/79		2	2	2	2	2	1	2	1						14
1979/80	1	0	1	2	1	2	1	1	2	1					12
1980/81		1	0	0	2	1	2	1	1	2	1				11
1981/82		0	0	0	0	2	1	2	1	1	2				9
1982/83															
1983/84															
1984/85															
1985/86	1	1	0	0	0	0	0	0	0	0	2	1	1		6
1986/87	0	1	1	0	0	0	0	1	1	0	0	1	0		5

Source: Alaska Department of Education, Educational Finance and Support Services.



### C. TRENDS IN WAGE AND SALARY EMPLOYMENT

The data on labor force and employment for Nikolski are spotty and of limited value. The 1970 Census reported a total of 23 employed persons: 11 in public administration, 7 in manufacturing and 5 in services, but these numbers seem high in light of other circumstantial information about the dearth of local employment. The 1980 Census reported 14 employees in six categories of industry. Due to disclosure limitations, the Alaska Department of Labor has released only total average annual employment data for Nikolski for 1985 (10 employees) and 1986 (9 employees).

The 1980 Census indicated a low labor force participation rate for males (53 percent) and females (33 percent) alike, consistent with an older population with many retirees.

In the absence of local commercial resources, Chaluka Corporation, the village ANCSA corporation, has not been able to stimulate economic development although it has taken over operation of the sheep ranch.

TABLE 416  
 SELECTED LABOR FORCE DATA  
 NIKOLSKI  
 1980

LABOR FORCE STATUS, PERSONS OVER 16 YEARS, 1980

<u>Labor Force Status</u>	<u>Alaska Natives</u>		<u>All Races</u>		
	Male	Female	Male	Female	Total
Armed Forces	*	*	0	0	0
Civilian Employed	*	*	8	6	14
Civilian Unemployed	*	*	0	0	0
Not in Labor Force	*	*	7	12	19
Labor Force Participation Rate	*	*	53.0%	33.0%	42.0%
Unemployment Rate: 1980	*	*	0.0%	0.0%	0.0%
1970	*	*	0.0%	0.0%	0.0%

EMPLOYMENT BY INDUSTRY, 1970 AND 1980

<u>Industry</u>	<u>1970</u>	<u>1980</u>
Construction	0	0
Manufacturing	7	1
Transportation	0	2
Communications	0	1
Trade	0	0
Finance, Insurance & Real Estate	0	2
Services	5	6
Public Administration	11	0
Other	0	2
<u>TOTAL</u>	<u>23</u>	<u>14</u>

\* Data missing or suppressed. Note that no non-Natives were counted at Nikolski by the 1980 Census.

Source: U.S. Census, 1980.

TABLE 417  
COVERED INDUSTRY EMPLOYMENT  
NIKOLSKI AREA  
1980 - 1986

<u>Industry Classification</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
Mining	*	*	*	*	*	*	*
Construction	*	*	*	*	*	*	*
Manufacturing	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	*	*	*	*	*	*	*
Trade	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*
Government	*	*	*	*	*	*	*
Federal	*	*	*	*	*	*	*
State	*	*	*	*	*	*	*
Local	*	*	*	*	*	*	*
Miscellaneous	*	*	*	*	*	*	*
<u>TOTAL</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>10</u>	<u>9</u>

\* Figures withheld to comply with disclosure regulations.

Source: Alaska Department of Labor.

## ST. PAUL

### A. PAST POPULATION TRENDS

St. Paul's commercial origins and colonial history, together with those of St. George, are unique among today's rural Alaska Native villages.

By the last quarter of the eighteenth century, the Aleutian Islands sea otter stocks were already suffering from the effects of intensive harvesting promoted by the Russian fur traders. Depletion of this prime fur-bearing species encouraged a search for the hitherto undiscovered breeding grounds of the northern fur seal, another potential source of valuable pelts. St. Paul Island, then as now the world's major breeding grounds for the northern fur seal, was "discovered" by Russian voyagers in 1786. At the time, the Island was uninhabited and archaeological research to date has found signs of only passing human use prior to "discovery".

News of the abundant fur seal stocks on the Pribilofs prompted several fur traders to set up harvest operations the very next year. Since the Islands were unpopulated and remote from other settlements, there was no indigenous labor supply to be impressed to harvest and butcher the fur seals, as was the custom elsewhere under the reign of the promyshleniki. Therefore, the fur merchants brought Aleut hunters to the Pribilofs to carry out this work.

At first, Aleut work crews were brought to the Pribilofs only seasonally, but eventually year-round settlements were established on both St. Paul and St. George. The settlements' economies were founded exclusively on the fur sealing industry. From the start, subsistence played a supplemental role, augmenting commercial goods supplied by the merchants in exchange for labor. But the availability of subsistence resources was fortuitous and not a pre-condition for St. Paul's origin, as would be the case for a traditional community.

According to Veniaminov, the first Aleut relocatees to St. Paul came from Atka and Siberia, later augmented, according to Petroff, by more transplants from Unalaska and Atka. However, these villages are not necessarily the true homes of the relocatees since, by the 1780s, the fur traders' policy of centralizing the aboriginal population of the eastern Aleutian Islands had already commingled the residents of the scores of original scattered villages into a few settlements, including Unalaska and Atka.

Indeed, the Russians' resettlement of Aleuts to the Pribilofs to work in the fur industry was just another example of the pervasive disruption of traditional settlement patterns promoted by the Russians to facilitate centralization and control over the Aleuts. Following this policy, the Russians also resettled Aleut hunters and laborers to Kodiak, Southeast Alaska, California and the Russian-owned Commander Islands at the far western end of the Aleutian Chain. The Russian era was only the first episode in an unfortunate history of involuntary relocations which prompted

one researcher (Stein, 1977) to comment that, "the Aleuts have been relocated perhaps earlier, more often, and more recently than any other North American Native group."

Once settled on the Islands, the relocatees were virtually at the mercy of the fur entrepreneurs for their survival. Isolation inhibited unapproved travel, since the Pribilofs are about 240 miles from the Aleutian Chain and about 300 miles from the Alaska mainland. The Islands' limited subsistence resource base necessitated some household reliance upon imported foodstuffs and, thus, some family dependency upon wage labor in the seal harvesting industry.

Early censuses for the Pribilof Islands include a reported population of 379 persons (188 males and 191 females) in 1819 (Kostlivtsov, per Petroff, 1883) and 182 persons (88 males and 94 females) in 1831 (Veniaminov, per Petroff, 1883). An 1825 census put the population for St. Paul alone at 130 persons (Dmytryshyn, per Jones, 1969).

Longevity data indicate that aboriginal Aleuts had a relatively long natural life expectancy. Nevertheless, Laughlin (1980) cites vital statistics data showing that, in the latter part of the nineteenth century, Pribilovians' life expectancy was decidedly shorter than that of Aleuts in the Aleutian Islands. Laughlin attributes this difference mainly to nutritional deficiencies suffered by the Pribilof Islanders.

For most of the period of Russian ownership, St. Paul was managed by the Russian American Company. After the sale of Alaska to the U.S. in 1867, there followed a couple of years of chaotic management. To settle matters, the U.S. government awarded exclusive twenty year leases to private firms to manage the Islands' commercial and community affairs, first to the Alaska Commercial Company, and later to the North American Commercial Company. However, excessive harvests led to a decline in the fur seal population, a depressed industry and an extended period of poverty for Pribilof Islanders. With passage of the Fur Seal Act of 1910, the federal government put an end to the practice of private leasing. Nevertheless, the essential dependency of the Islanders was perpetuated by substituting direct federal control, specifically by the Bureau of Commercial Fisheries (later, the National Marine Fisheries Service). For many years, the federal government proved no more generous a taskmaster than private commerce.

Like residents of other outlying Aleut communities, the residents of St. Paul (and St. George) were evacuated during World War II. Without advance notice, a U.S. naval ship arrived in June 1942 to transport 294 St. Paul Islanders to a relocation camp at Funter Bay on Admiralty Island near Juneau in Southeast Alaska. Most St. Paul Islanders were returned home in 1944, when it became evident that the Pacific War posed no threat to the Island.

Federal administration of the Pribilof Island communities continued until terminated by the Fur Seal Act Amendments adopted in 1983. That

legislation mandated termination of federal administration, turnover of ownership and management of community facilities and services to local entities, and creation of a trust fund of \$20 million (\$12 million for St. Paul and \$8 million for St. George) to develop an alternative economy. Coincidentally, execution of the Indian Claims Commission settlement of 1979 resulted in the award of a further \$8.5 million to the two Pribilof communities in 1983 as partial compensation for historic inequities at the hands of the federal government. At about the same time, St. Paul embarked on a series of concurrent capital projects for community and economic development including breakwater/harbor development, federally-aided housing and sanitation facilities and power generation.

The first official federal Census of the Pribilof Islands in 1880 counted 390 persons, of whom 298 were St. Paul residents. From that time to the present, St. Paul has continued to be the more populous of the two Pribilof Island communities. After 1880, St. Paul's population declined slowly, then revived again, slowly regaining its 1880 level by about the 1939 Census. Thereafter, the town's population has grown every decennial Census, reaching 551 persons by 1980.

Since 1980, various annual population estimates have ranged from a high of 595 persons to a low of 466 persons (Department of Community and Regional Affairs 1987 official count). Differences among the various population estimates leave uncertain whether there was a definite downward trend after 1980. The Department of Revenue's data on the number of local Permanent Fund dividend recipients are similarly ambiguous.



TABLE 418  
 POPULATION ESTIMATES  
 ST. PAUL  
 1825 - 1987

<u>Year</u>	<u>Census</u>	<u>Other Estimates</u>	<u>Sources of Other Estimates</u>
1825		130	Dmytryshyn - Colonial Russian America
1870		239	Elliott (includes 8 whites)
1872		235	Elliott, 1898
1876		243	St. Paul Community Study
1880	298		
1887		237	U.S. Treasury Dept., 1889
1888		227	U.S. Treasury Dept., 1889
1890	241	213	U.S. Treasury Dept., 1898
1892		196	U.S. Treasury Dept., 1898
1894		204	U.S. Treasury Dept., 1898
1895		207	U.S. Treasury Dept., 1898
1910	201		
1920	212		
1926		202	BCF (St. Paul Community Study)
1927		189	BCF (St. Paul Community Study)
1929	247		
1930		222	BCF (St. Paul Community Study)
1931		232	BCF (St. Paul Community Study)
1932		232	BCF (St. Paul Community Study)
1933		230	BCF (St. Paul Community Study)
1934		233	BCF (St. Paul Community Study)
1935		227	BCF (St. Paul Community Study)
1936		256	BCF (St. Paul Community Study)
1937		256	BCF (St. Paul Community Study)
1938		253	BCF (St. Paul Community Study)
1939	299	259	BCF (St. Paul Community Study)
1940		261	BCF (St. Paul Community Study)
1942		189	BCF (St. Paul Community Study)
1943		241	BCF (St. Paul Community Study)
1944		254	BCF (St. Paul Community Study)
1945		257	BCF (St. Paul Community Study)
1946		275	BCF (St. Paul Community Study)
1947		287	BCF (St. Paul Community Study)
1948		291	BCF (St. Paul Community Study)
1949		291	BCF (St. Paul Community Study)

1950	359	308	BCF (St. Paul Community Study)
1951		311	BCF (St. Paul Community Study)
1952		323	BCF (St. Paul Community Study)
1953		322	BCF (St. Paul Community Study)
1954		326	BCF (St. Paul Community Study)
1955		340	BCF (St. Paul Community Study)
1956		326	BCF (St. Paul Community Study)
1957		334	BCF (St. Paul Community Study)
1958		319	BCF (St. Paul Community Study)
1959		345	BCF (St. Paul Community Study)
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1960	378	380	Ak. Department of Labor (July)
1960		350	BCF (St. Paul Community Study)
1961		337	BCF (St. Paul Community Study)
1962		340	BCF (St. Paul Community Study)
1963		330	BCF (St. Paul Community Study)
1964		355	BCF (St. Paul Community Study)
1965		347	BCF (St. Paul Community Study)
1966		380	BCF (St. Paul Community Study)
1967		453	St. Paul Community Study
1967		433	Federal Field Committee - 409 Native; 24 non-Native
1969		435	Federal Field Committee - 410 Native; 25 non-Native
-----			
1970	478	480	Ak. Department of Labor (July)
1970		455	AEIDC
1975		540	U.S. Census Bureau
1976		588	U.S. Census Bureau
1979		567	Management & Planning Services - 509 Native; 58 non-Native
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1980	551		
1980	580*	567	Dept. Community/Regional Affairs
1981	591*	591	Dept. Community/Regional Affairs
1982	595*	595	U.S. Census Bureau (July)
1982			Dept. Community/Regional Affairs
1983	528*	595	Dept. Community/Regional Affairs
1984	491*	595	Dept. Community/Regional Affairs
1985	466*	595	Dept. Community/Regional Affairs
1986		595	Dept. Community/Regional Affairs
1986		473	Impact Assessment, Inc. - "effective" residents
1987		466	Dept. Community/Regional Affairs

\* Alaska Department of Labor estimates of July 1 population derived using U.S. Census methodology. Where these figures are the same as those cited by the Department of Community and Regional Affairs, the Department of Labor accepted local censuses or estimates.

Sources: U.S. Census (1880 - 1980 figures).  
Alaska Department of Labor (1980 - 1985 figures).

TABLE 419  
POPULATION TRENDS  
ST. PAUL  
1880 - 1985

<u>Year</u>	<u>Population</u>	<u>Percent Change</u>	
		<u>Decennial</u>	<u>Annual</u>
1880	298		
1890	241	-19.1	
1910	201		
1920	212	5.5	
1930	247	16.5	
1939	299	21.1	
1950	359	20.1	
1960	378	5.3	
1970	478	26.5	
1980	551	15.3	
1981	591		7.3
1982	595		0.7
1983	528		-11.3
1984	491		-7.0
1985	466		-5.1

Sources: U.S. Census (1880 - 1980 figures).  
Alaska Department of Labor (1981 - 1985 figures).

TABLE 420  
PRIBILOF ISLANDS POPULATION  
1880 - 1980

<u>Year</u>	<u>Saint Paul</u>	<u>Saint George</u>	<u>Pribilof Islands</u>
1880	298	92	390
1890	244	93	337
1900	n/a	n/a	n/a
1910	201	90	291
1920	212	138	350
1929	247	153	400
1939	299	183	482
1950	359	187	546
1960	378	n/a	n/a
1970	478	163	671
1980	551	158	709

Source: U.S. Census.

For most of the twentieth century, it appears that selective out-migration has played a key role in dampening the rate of St. Paul's growth. The St. Paul Community Study compiled data on net migration and the destinations and reasons for departure of permanent emigrants from St. Paul for the 1926-1966 period. Over that time, it appears that net migration was a null factor in population growth.

However, the demographic picture takes on different meaning when sex and age traits of migrants are considered. Twice as many females (110) as males (56) left St. Paul permanently between 1926 and 1966. Traditional marriage patterns played a key part in this difference. Marital considerations (marriage, loss of spouse by divorce or death, reunion of family) were the motive for 70 percent of female emigrants whose reasons were known. On the other hand, employment and military service were the primary motives of male emigrants; marital considerations were of concern to only 4 percent of emigrant males.

The loss of young adult females who left for reasons related to marriage was partly offset by an immigration of females, mainly from St. George and other Aleutian communities. Still, there was a net loss of 35 females in the 15-34 year age group. The resulting sex imbalance presumably depressed rates of family formation and natural increase.

Nevertheless, natural increase appears to account for most of the town's 1970-1980 population growth from 478 persons (1970 Census) to 551 persons (1980 Census). According to the Alaska Bureau of Vital Statistics, natural

increase contributed 59 of a total net increase of 73 new residents over that period.

There were some shifts in this pattern of population change between 1980 and 1986. Overall, based on the 1986 population survey conducted by Impact Assessment, Inc., there appeared to be little net change due to migration in the number of Alaska Native males and females between 1980 and 1986. In fact, once mortality losses are considered, the data suggest a modest net immigration. (Parenthetically, however, we should note that the Impact Assessment, Inc. survey used a slightly more inclusive social definition of community residency [persons who "belonged" to the permanent community, regardless of place of residence] rather than the Census's standard of physical residency at the time of the Census). However, a cohort comparison pinpoints a noteworthy but puzzling loss of teenage (1986 age group: 15 to 19 years) males (minus 14 persons) and females (minus 14 persons). The 1985 distribution by age of Permanent Fund dividend recipients was examined to check this discrepancy. The Permanent Fund records belied the loss of young adults noted in the Impact Assessment, Inc. survey. Lacking more compelling documentation, any recent trends in migration patterns among young adults are regarded as inconclusive.

As will be more fully discussed later, mobility for seasonal employment to and from St. Paul has traditionally been high. Some St. Paul men have habitually traveled to Aleutian and Bristol Bay communities for temporary work in seafood processing, longshoring and other seasonal jobs.

TABLE 421  
 DESTINATION AND REASON FOR PERMANENT DEPARTURES FROM ST. PAUL  
 1926 - 1966

<u>Destination</u>	<u>Male</u>	<u>Female</u>	<u>Reason for Departure</u>	<u>Male</u>	<u>Female</u>
St. George	8	22	Marriage	0	51
Aleutians and Alaska Peninsula	4	30	Widowed	1	5
Anchorage Area	3	7	Divorced	0	5
Bristol Bay	3	1	Bachelor	1	0
Southeast Alaska	9	19	Accompanying or joining spouse	1	8
California	3	8	Adopted	5	5
Other States	3	5	Military	9	0
Unknown	17	13	Work	13	0
			School	3	0
			Unknown	10	12
<u>TOTAL</u>	<u>56</u>	<u>110</u>	<u>TOTAL</u>	<u>56</u>	<u>110</u>

Source: St. Paul Community Study, 1968.

TABLE 422

SUMMARY OF PERMANENT ARRIVALS AND DEPARTURES, BY AGE GROUP  
ST. PAUL  
1926 - 1966

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	Age Group					
	<u>0-14</u>	<u>15-34</u>	<u>35-49</u>	<u>50 +</u>	<u>Unknown</u>	<u>Total</u>
<u>Departed</u>						
Male	17	24	9	2	4	56
Female	20	74	11	1	4	110
Total	37	98	20	3	8	166
<u>Arrived</u>						
Male	34	24	10	7	1	76
Female	31	39	9	5	4	88
Total	65	63	19	12	5	164
<u>Difference</u>						
Male	+17	0	+1	5	-3	+20
Female	+11	-35	-2	+4	0	-22
Total	28	-35	-1	+9	-3	-2

Source: St. Paul Community Study, 1968.

TABLE 423  
 NATURAL INCREASE  
 ST. PAUL  
1970 - 1984

<u>Year</u>	<u>Births</u>	<u>Deaths</u>	<u>Increase</u>
1970	10	1	+9
1971	8	2	+6
1972	6	4	+2
1973	12	3	+9
1974	10	8	+2
1975	9	2	+7
1976	18	2	+16
1977	9	4	+5
1978	10	2	+8
1979	1	6	-5
1980	14	5	+9
1981	8	8	0
1982	15	7	+8
1983	13	5	+8
1984	20	8	+12
<u>TOTAL 1970-1984</u>	<u>163</u>	<u>67</u>	<u>+96</u>

Source: Bureau of Vital Statistics, Alaska Department of Health and Social Services.



TABLE 424  
CHANGE IN ALASKA NATIVE POPULATION COMPOSITION  
ST. PAUL  
1980 - 1986

<u>Age Range</u>	<u>Male</u>			<u>Female</u>		
	<u>1980</u>	<u>1986</u>	<u>Change 1980-86</u>	<u>1980</u>	<u>1986</u>	<u>Change 1980-86</u>
Under 5 years	33	29	+29	22	23	+23
5 - 9	26	25	-8	21	21	-1
10 - 14	37	22	-4	27	21	0
15 - 19	30	23	-14	29	13	-14
20 - 24	18	27	-3	21	23	-6
25 - 29	20	24	+6	18	20	-1
30 - 34	26	23	+3	13	14	-4
35 - 39	14	24	-2	10	18	+5
40 - 44	13	11	-3	13	13	+3
45 - 49	11	13	0	8	13	0
50 - 54	10	9	-2	3	10	+2
55 - 59	15	9	-1	9	4	+1
60 - 64	9	8	-7	8	4	-5
65 - 69	8	8	-1	7	8	0
70 - 74	2	3	-5	2	5	-2
75 and over	0	2	0	0	1	-1
<u>TOTAL</u>	<u>272</u>	<u>260</u>	<u>-12</u>	<u>211</u>	<u>211</u>	<u>0</u>

Sources: 1980 U.S. Census.  
Impact Assessment, Inc., 1987.

TABLE 425  
 PERMANENT FUND DIVIDEND RECIPIENTS  
 ST. PAUL  
 1982 - 1985

<u>Age Group</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
0 - 4		40	36	48
5 - 9			41	50
10 - 14			43	46
15 - 19			43	45
20 - 24			28	46
25 - 29			18	46
30 - 34			33	35
35 - 39			37	43
40 - 44			24	28
45 - 49			21	26
50 - 54			18	18
55 - 59			11	14
60 - 64			14	15
65 - 69			12	11
70 - 74			12	13
75 & over			3	3
Unknown	1	1	1	1
<u>TOTAL</u>	<u>494</u>	<u>439</u>	<u>395</u>	<u>488</u>

Note: 1982 age breakdown: 0-17 - 190; 18-27 - 73; 28-37 - 90; 38-47 - 58; 48-57 - 36; 58-67 - 31; 68-77 - 15; 78+ - 0; Unknown - 1; Total - 494.  
 1983 age breakdown: 0-4 - 40; 5-17 - 120; 18-27 - 64; 28-37 - 77; 38-47 - 59; 48-57 - 32; 58-67 - 30; 68-77 - 15; 78+ - 1; Unknown - 1; Total - 439.

Source: Alaska Department of Revenue.

Conversely, men from other Aleutian communities such as Nikolski and Unalaska frequently went to St. Paul to work in the fur seal harvest.

## B. POPULATION COMPOSITION

At the time of the first official Census in 1880, St. Paul's population was overwhelmingly Aleut (95 percent) in its racial composition. The 1970 Census reported exactly the same percentage of Aleuts. St. Paul's long-term racial stability may be regarded as unusual inasmuch as it was settled as a commercial enterprise and was not truly a traditional community. Most non-traditional communities founded primarily for commercial purposes were predominantly non-Native and were vacated once their commercial reason for being waned. That St. Paul is still mostly Aleut is partly a measure of the Pribilofs' remoteness and partly a result of the closed society which developed under protective federal management. Possibly, it is also a sign that the living, working and wage conditions prevailing under Russian and federal management were unattractive to outsiders except for short-term employment, perhaps even necessitating the controlled labor market which prevailed during much of the period of federal management.

The number of non-Natives at St. Paul tripled between 1970 and 1980 from 22 to 68 persons. This change reflected the increased involvement of educational and other government personnel in the delivery of local community services and in fur seal management activities. It is possible that this trend has reversed since the turnover of management of community affairs to local entities in 1983, but there are no confirmatory data.

In 1970, the median age of St. Paul's Native residents was comparatively high at 21.1 years. The median age for males (23.2 years) was higher than that for females (19.2 years). Among the study communities, only Unalaska and Nikolski, both special cases, showed higher median ages in 1970. Speculatively, the relatively high age of St. Paul's population may be accounted for by the comparative stability of its isolated population and by the absence of a birth rate "spike" which affected most rural Native villages in the 1950s.

The picture had changed little by the 1980 Census. In 1980, the overall median age of St. Paul's Alaska Native residents was 22.2, with the median being 22.9 for males and 21.7 for females. In this regard, St. Paul departed from the prevailing trend for the 1970-1980 decade which saw the median age for most Native villages climb by about five years.

The distribution of St. Paul's Alaska Native population by sex has been chronically and markedly asymmetric for many decades. The explanation rests with the longstanding inclination of young adult females to emigrate at a much higher rate than males. This tendency was documented in the earlier discussion of historic reasons for emigration from St. Paul. The demographic stamp of this differential emigration is visible in the general excess of marriage-age males in every age/sex distribution since 1936 and, more specifically, in the excess of single males who regularly outnumbered single females by twofold to fivefold.

In 1970, the Census reported a slight surplus of Alaska Native males (226) over females (202). At that time, the statistically significant discrepancy was almost wholly concentrated in the 35 to 44 year age group in which males (30) outnumbered females (14). By the 1980 Census, the gross discrepancy was greater (272 Alaska Native males versus 211 females). However, the difference was partly a matter of chance, since it stemmed from an excess (+26 persons) of males over females under 15 years of age. This latter imbalance does not reflect selective migration, but it may become a factor in the community's population dynamics as that age group matures to childbearing age.

Among older residents, however, differential migration does appear to have been a factor. When the 1970 age group cohorts between 15 and 64 years of age are compared with their 1980 counterparts (25 to 74), the pattern indicates a substantial immigration of young adult males (1980 age group: 25 to 34 years) offset by modest declines in older age groups, probably attributable to natural mortality. The pattern of change among female cohorts was significantly different: all cohorts lost population, but the loss was most marked in the youngest cohort (1980 age group: 15 to 24 years). This loss confirms the supposition of an exodus of young females during that period.

According to the 1980 Census, the number of single males 15 years and older (89 persons) was double that of single females (45 persons). While almost all of the study communities were imbalanced in this respect, few were as extreme as St. Paul. Eventually, the imbalance is likely to inhibit family

formation and childbearing rates and, in due time, to depress the rate of natural population increase.

The St. Paul Community Study provides substantial background on the temporary and permanent emigration patterns of St. Paul Natives during the middle third of the twentieth century. During this period, there was significant circulation of St. Paul residents to areas outside the Pribilofs for such purposes as temporary employment, military service, education and marriage. However, most of these persons were sojourners who maintained close ties with and usually returned to St. Paul.

Except for an apparent influx of St. George Islanders during the 1950s and 1960s, St. Paul does not appear to have ever attracted much immigration from other Alaska Native communities. Presumably, the remoteness of the Pribilofs accounts for this. According to ANCSA enrollment data, ninety-nine percent of St. Paul's Native residents in 1974 belonged to the St. Paul (Tanadgusix) village corporation. On the other hand, about 23 percent of enrollees to the Tanadgusix Corporation lived outside the community.

St. Paul may now be entering a period of population volatility, especially among the more mobile and economically aspiring young adults. It is plausible that the community's economy will experience some short term duress as construction projects taper off and the trust and transfer funds, which have been used in recent years to support local public sector employment, dwindle. There is a chance that private sector employment in fisheries and/or petroleum support activities may eventually offset some of



TABLE 427  
POPULATION COMPOSITION  
ST. PAUL  
1970

<u>Age Range</u>	<u>Alaska Native</u>			<u>Non-Native</u>		
	Male	Female	Total	Male	Female	Total
Under 5 years	31	25	56	4	0	4
5 - 14	53	61	114	2	0	2
15 - 24	36	37	73	0	1	1
25 - 34	28	25	53	2	4	6
35 - 44	30	14	44	1	0	1
45 - 54	23	21	44	4	4	8
55 - 64	19	15	34	0	0	0
65 and over	6	4	10	0	0	0
<u>TOTAL</u>	<u>226</u>	<u>202</u>	<u>428</u>	<u>13</u>	<u>9</u>	<u>22</u>
<u>Median Age</u>	<u>23.2</u>	<u>19.2</u>	<u>21.1</u>			

<u>Age Range</u>	<u>Total</u>		
	Male	Female	Total
Under 5 years	35	25	60
5 - 9	33	37	70
10 - 14	22	24	46
15 - 19	25	22	47
20 - 24	11	16	27
25 - 29	17	12	29
30 - 34	13	17	30
35 - 39	16	8	24
40 - 44	15	6	21
45 - 49	12	12	24
50 - 54	15	13	28
55 - 59	12	10	22
60 - 64	7	5	12
65 and over	6	4	10
<u>TOTAL</u>	<u>239</u>	<u>211</u>	<u>450</u>
<u>Median Age</u>	<u>22.3</u>	<u>19.5</u>	<u>20.5</u>

Note: Native is defined as Aleut, Eskimo, Indian and others, excluding White and Negro.

Source: U.S. Census.





TABLE 429  
POPULATION COMPOSITION  
ST. PAUL  
1985

<u>Age Range</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Under 5 years	31	29	60
5 - 9	35	25	60
10 - 14	23	23	46
15 - 19	33	26	59
20 - 24	34	25	59
25 - 29	23	23	46
30 - 34	23	17	40
35 - 39	24	20	44
40 - 44	16	9	25
45 - 49	9	14	23
50 - 54	11	8	29
55 - 59	15	3	18
60 - 64	7	8	15
65 and over	10	14	24
<u>TOTAL</u>	<u>294</u>	<u>244</u>	<u>538</u>
<u>Median Age</u>	<u>23.9</u>	<u>23.9</u>	<u>23.8</u>

Source: City of St. Paul household census (per Braund, 1986).

TABLE 430  
 POPULATION COMPOSITION  
 ST. PAUL  
 1986

<u>Age Range</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Under 5 years	29	23	52
5 - 9	25	21	46
10 - 14	22	21	43
15 - 19	23	13	36
20 - 24	27	23	50
25 - 29	24	20	44
30 - 34	23	14	37
35 - 39	24	18	42
40 - 44	11	13	24
45 - 49	13	13	26
50 - 54	9	10	19
55 - 59	9	4	13
60 - 64	8	4	12
65 and over	13	14	27
<u>TOTAL</u>	<u>260</u>	<u>211</u>	<u>471</u>
<u>Median Age</u>	<u>25.9</u>	<u>26.3</u>	<u>26.0</u>

Source: Impact Assessment, Inc., 1987.

TABLE 431  
 MARITAL STATUS, BY SEX  
 PERSONS 15 YEARS AND OLDER  
 ST. PAUL  
 1926 - 1966

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	Marital Status			Total
	<u>Married</u>	<u>Widowed</u>	<u>Single</u>	
<u>1926</u>				
Male	33	7	6	46
Female	31	12	2	45
Total	64	19	8	91
<u>1936</u>				
Male	38	3	13	54
Female	34	10	1	45
Total	72	13	14	99
<u>1946</u>				
Male	46	8	22	76
Female	45	10	6	61
Total	91	18	28	137
<u>1956</u>				
Male	58	8	42	108
Female	54	12	13	79
Total	112	20	55	187
<u>1966</u>				
Male	74	12	49	135
Female	72	10	10	92
Total	146	22	59	226

Source: St. Paul Community Study.

TABLE 432

MARITAL STATUS, BY SEX  
PERSONS 15 YEARS AND OLDER  
ST. PAUL  
1980

<u>Marital Status</u>	<u>Male</u>	<u>Female</u>
Single	89	45
Married	100	90
Separated	4	3
Widowed	11	13
Divorced	10	6
<u>TOTAL</u>	<u>241</u>	<u>157</u>

Source: 1980 Census.

TABLE 433

HOUSEHOLD TYPE AND RELATIONSHIP  
ST. PAUL  
1980

<u>Household Type and Relationship</u>	<u>Number</u>	<u>Percent</u>
In Family Household		
Householder	113	20.5%
Spouse	84	15.2
Other Relatives	300	54.4
Non-Relative	8	1.5
Sub-Total	505	91.7
In Non-Family Household		
Male Householder	11	2.0
Female Householder	2	.4
Non-Relative	9	1.6
Sub-Total	22	4.0
In Group Quarters		
Inmate of Institution	0	0.0
Other	24	4.3
Sub-Total	24	4.3
<u>TOTAL</u>	<u>551</u>	<u>100.0%</u>

Source: 1980 Census.

the public sector employment shrinkage, but that eventuality is an uncertain and distant prospect.

### C. TRENDS IN WAGE AND SALARY EMPLOYMENT

Due to St. Paul's commercial origins in a setting with limited subsistence opportunities, the town's residents have long been dependent upon wage labor and the cash economy. The St. Paul Community Study provides a general history of St. Paul residents' working conditions under federal management. Based on records of the Bureau of Commercial Fisheries, which was virtually the only local employer, that study also presents a detailed account of local employment and earnings for the 1956-1967 period.

The employment figures indicate that through the 1950s, the level of employment at St. Paul was exceptionally high for a rural Alaska community. For example, in 1956, the Bureau of Commercial Fisheries provided 97 permanent and 21 temporary jobs for St. Paul residents, mostly in the sealing industry. At that time, the total male population between 20 and 64 years old was 103 persons and the corresponding female population was 76 persons. By rural Alaska standards, this employment/workforce ratio represented an exceptionally high level of workforce participation and employment. The Bureau of Commercial Fisheries data also show that a substantial non-resident workforce was engaged to supplement the resident workforce in the sealing industry at that time.

By the mid-1960s, the fur seal industry had declined and employment levels slumped. The number of permanent jobs for residents fell by more than half between 1956 and 1966, although temporary employment increased. The number of jobs held by non-residents dropped even more steeply.

St. Paul employment patterns for the 1980 to 1986 period have been documented by the Bureau of the Census, the Alaska Department of Labor and in several special employment surveys. The 1980 Census counted 113 persons who worked at St. Paul. This figure is comparable with a field survey of average annual full-time employment in St. Paul conducted in 1980 by Alaska Consultants, Inc. That survey found a total of 122.5 full-time job equivalents, slightly over three-quarters of which were in the government sector.

The Alaska Department of Labor covered employment data series unfortunately combines data for both St. Paul and St. George into a single Pribilof Islands area. Thus, it is not possible to isolate employment specifically for St. Paul. Nevertheless, the Department of Labor data for the 1980-1986 period do show the dominant role of the federal government in local employment in the Pribilofs prior to the termination of federal administration in 1983. After 1983, local government became the primary employer of record in place of the federal government. The federal and local governments' extensive sponsorship of commercial activities which would ordinarily operate in the private sector also detracts from the usefulness of Department of Labor data, since much employment related to

trade, services, transportation, etc. is artificially classified as government employment.

It also appears that the Department of Labor data understate actual employment levels. For example, its data series shows no construction employment for the two islands during a period of extraordinary construction activity which employed many local residents. A likely explanation for this omission is that contractors based outside the area reported their St. Paul employment to their headquarters jurisdictions. Lastly, internal discrepancies in the Department's monthly employment figures raise questions about the utility of the data for trend analysis.

In addition to the 1980 Census and 1980 Alaska Consultants, Inc. survey, four other surveys of St. Paul resident employment have been compiled since 1980. These are the Institute of Social and Economic Research for 1980 employment; C.W. Smythe for 1982 employment; Braund & Associates for 1985; and Impact Assessment Inc. for 1986. Because these four surveys were compiled under different auspices according to different standards, care should be taken in drawing conclusions about apparent changes in employment conditions. Nevertheless, longitudinal comparison of the employment data compiled from these sources clearly shows the significance of the switch-over from federal to local management of most of the community's public and commercial enterprises. National Marine Fisheries Service employment fell from 173 positions in 1982 to 3 positions in 1986. Coincidentally, suspension of the commercial harvest of fur seals is reflected in a drop of employment in related harvest and processing



TABLE 434

COMPOSITION OF BUREAU OF COMMERCIAL FISHERIES WORKFORCE  
 ST. PAUL  
 1956 - 1967

Year	Saint Paul Residents			Estimated Total Non-Residents	Total Workforce
	Permanent	Temporary	Total		
1956	97	21	118	109	227
1957	93	35	128	95	223
1958	94	17	111	81	191
1959	98	31	129	94	223
1960	91	40	131	103	234
1961	94	37	131	69	200
1962	96	n/a	n/a	77	n/a
1963	53	n/a	n/a	69	n/a
1964	50	76	126	57	183
1965	42	86	128	46	174
1966	44	102	146	36	182
1967	42	83	125	34	159

Source: St. Paul Community Study, 1968.

TABLE 435  
 SELECTED LABOR FORCE DATA  
 ST. PAUL  
 1980

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LABOR FORCE STATUS, PERSONS OVER 16 YEARS, 1980

<u>Labor Force Status</u>	<u>Alaska Natives</u>		<u>All Races</u>		
	Male	Female	Male	Female	Total
Armed Forces	0	0	54	0	54
Civilian Employed	70	27	78	35	113
Civilian Unemployed	3	3	3	3	6
Not in Labor Force	143	109	143	114	257
Labor Force Participation Rate	33.0%	21.0%	36.0%	25.0%	31.0%
Unemployment Rate: 1980	4.1%	10.0%	3.7%	7.9%	5.0%
1970	*	*	39.4%	37.5%	39.2%

EMPLOYMENT BY INDUSTRY, 1970 AND 1980

<u>Industry</u>	<u>1970</u>	<u>1980</u>
Construction	0	3
Manufacturing	0	0
Transportation	0	0
Communications	0	0
Trade	5	1
Finance, Insurance & Real Estate	0	6
Services	9	27
Public Administration	62	74
Other	0	2
<u>TOTAL</u>	<u>76</u>	<u>113</u>

\* Data missing or suppressed.

Source: U.S. Census, 1980.

TABLE 436  
 AVERAGE ANNUAL FULL-TIME EMPLOYMENT  
 ST. PAUL  
 1980

<u>Industry Classification</u>	<u>Number</u>	<u>% of Total</u>	<u>% Basic</u>	<u>Basic Number</u>	<u>Secondary Number</u>
Agriculture, Forestry and Fishing	1.0	0.8	50	0.5	0.5
Mining	0.0	0.0	---	0.0	0.0
Contract Construction	0.0	0.0	---	0.0	0.0
Manufacturing	1.0	0.8	100	1.0	0.0
Transportation, Communication & Public Utilities	1.5	1.2	0	0.0	1.5
Trade	18.5	15.1	22	4.0	14.5
Finance, Insurance & Real Estate	5.0	4.1	100	5.0	0.0
Services	3.5	2.9	43	1.5	2.0
Government	92.0	75.1	61	56.0	36.0
Federal	(60.5)	(49.4)	(93)	(56.0)	( 4.5)
State	( 1.0)	( 0.8)	( 0)	( 0.0)	( 1.0)
Local	(30.5)	(24.9)	( 0)	( 0.0)	(30.5)
<u>TOTAL</u>	<u>122.5</u>	<u>100.0</u>	<u>56</u>	<u>68.0</u>	<u>54.5</u>

Note: Figures include self-employed persons and 25 military personnel.

Source: Alaska Consultants, Inc., May 1981.

TABLE 437  
COVERED INDUSTRY EMPLOYMENT  
PRIBILOF ISLANDS AREA\*\*  
1980 - 1986

<u>Industry Classification</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
Mining	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0
Manufacturing	*	0	0	*	*	*	*
Transportation, Communication and Public Utilities	0	0	0	0	*	*	0
Trade	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*
Services	69	62 <sup>a</sup>	*	*	*	*	*
Government	156	157	179	181	192	160	165
Federal	122	120	118	113	77	24	23
State	0	0	0	0	0	0	0
Local	34	37	61	68	115	136	142
Miscellaneous	*	*	*	0	0	0	0
<u>TOTAL</u>	<u>231</u>	<u>304</u>	<u>291</u>	<u>311</u>	<u>380</u>	<u>315</u>	<u>313</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Pribilof Islands area includes both St. Paul and St. George.

<sup>a</sup> Prorated from six months of data.

Source: Alaska Department of Labor.

operations. Meanwhile, City of St. Paul employment rose from 11 positions in 1982 to 75 in 1986.

Comparison of total employment recorded by the four surveys suggests that local employment, measured in full-time equivalents, peaked at 240 jobs in 1985. This peak coincided with the busiest period of local public works construction and with fulfillment of the City's policy to provide employment opportunities to bridge the transition from federal administration to a more fully developed private business sector. Again, it is worth noting that this level of employment (240 full-time equivalent jobs for a population estimated variously from 466 to 595 persons) implies atypically high labor force participation and employment rates for a rural Alaska village.

Comparison of the full-time equivalent employment for 1965 (240.5 positions according to Braund & Associates, 1986) and for 1986 (148.5 positions according to Impact Assessment, Inc., 1987) indicates that employment conditions abruptly deteriorated in 1986. A good share of the City of St. Paul's employment is funded by declining intergovernmental transfers and non-recurring revenues borrowed from the St. Paul Trust Fund. Likewise, one-time federal and State capital grants to build port improvements designed to foster independent private economic development also boosted resident employment. The employment drop from 1985 to 1986 probably portends further deterioration in the local employment situation, unless the community's hopes to achieve a substantial support role in the Bering Sea groundfish industry or other marine-related industries are realized.

TABLE 438

ST. PAUL NATIVE EMPLOYMENT  
1980

Employer	Number Employed		Average Number of Weeks Per Part-time Worker	Total Weeks Per Year Part-time Workers	Total Number Employed	Percent of Total Employment
	Full-time <sup>a</sup>	Part-time				
NMFS	17	22 <sup>b</sup>	28	616	135	55.3
Clinic	2	96 <sup>c</sup>	8	768	4	1.6
School	13	2	40	80	13	5.3
City	7	3	25	75	10	4.1
TDX Corporation	6				6	2.5
Seal By-Products		6	4	24	6	2.5
Seal Fur Processing		14	6	84	14	5.7
Reindeer Antler Processing	15	3	45	15	6.1	
Hotel		4	12	48	4	1.6
Restaurant		15	12	180	15	6.1
Store	10				10	4.1
Tavern	3				3	1.2
Gas Station	1				1	0.4
Reeve/PO	1	1	12	12	2	0.8
Alaska Tours & Marketing		2	12	24	2	0.8
Coast Guard	2				2	0.8
Weather Service	2				2	0.8
<b>TOTAL</b>	<b>64</b>	<b>180</b>	<b>NA</b>	<b>1,956</b>	<b>244</b>	<b>99.7</b>

<sup>a</sup> Includes near full-time workers such as school personnel hired for 9 or 10 months of the year.

<sup>b</sup> "Part-time indefinites" who worked more than 6 months of the year.

<sup>c</sup> Includes "temporaries" and "part-time indefinites" who worked less than 6 months of the year.

Source: ISER, undated.

TABLE 439  
ST. PAUL EMPLOYMENT  
1982

<u>Employer</u>	<u>Full-Time</u>	<u>Part-Time</u>
NMFS	15	158
Public Health Service	1	2
School District	12	6
	(12)	
Store and Tavern	9	6
Community Council	1	0
City	8	3
Village Public Safety	2	2
U.S. Postal Service	1	1
Aleutian/Pribilof Island Assoc.	0	2
Reeve Aleutian Airways	0	2
TDX Corporation Management	5	0
King Eider Hotel	0	7
Restaurant	0	16
Seal By-products	0	7
Small Boat Fishery	0	6
Fish Processing Plant	0	4
U.S. Coast Guard	2	0
	(1)	
U.S. Weather Service	3	0
	(2)	
The Shelter	2	4
Summer Youth Program	0	10
<u>TOTAL</u>	<u>61</u>	<u>226</u>

Note: Numbers in parentheses indicate non-Native employment.

Source: Smythe, 1983, cited in Dames and Moore, 1983.

TABLE 440

ST. PAUL EMPLOYMENT  
1980 - 1986

Employer	1980 <sup>1</sup>	1980 <sup>2</sup>	1982 <sup>3</sup>	1985 <sup>4</sup>	1985 <sup>4</sup>	1985 <sup>5</sup>	1986 <sup>5</sup>
	Total Empl.	F.T.E. Empl.	Total Empl.	Total Empl.	F.T.E. Empl.	Total Empl.	F.T.E. Empl.
National Marine Fisheries Service	135	91.0	173	3	1.0	3	2.0
U.S. Post Office	2	1.5	4	2	2.0	2	2.0
National Oceanic & Atmospheric Admin.	2	2.0	3	3	1.0	3	1.0
Federal District Court	NA	NA	NA	1	0.5	1	0.5
Fish and Wildlife Service	NA	NA	NA	3	1.0	3	0.5
Federal Aviation Administration	NA	NA	NA	3	3.0	3	0.5
Coast Guard	2	2.0	2	2	2.0	2	2.0
City of St. Paul	10	8.5	11	72	72.0	75	58.0
IRA Community Council	NA	NA	1	8	8.0	4	4.0
Gas Station	1	1.0	1	1	1.0	1	1.0
Store and Tavern	13	13.0	15	15	15.0	15	15.0
Seal Harvest	NA	NA	NA	30	4.0	0	0
Tanadgnusix Corporation	6	6.0	5	20	20.0	12	12.0
Hotel	4	1.0	7	7	2.5	7	2.0
Seal Processing	20	2.0	7	20	4.0	0	0
Antler Processing	15	1.0	NA	NA	NA	NA	NA
Restaurant	NA	NA	NA	9	3.5	10	3.0
Auto Shop	NA	NA	NA	3	2.0	2	1.5
Catering	0	0	0	7	7.0	5	4.0
Aleutian/Pribilof Islands Assoc.	NA	NA	2	1	1.0	1	1.0
Clinic	4	3.5	3	6	6.0	6	5.0
Public Safety	NA	NA	4	4	3.5	4	2.0
Pribilof School District	13	13.0	18	32	31.0	22	15.0



SAINT PAUL EMPLOYMENT  
(cont.)

Tourism	NA	NA	2	2	1.0	NA	NA
Airlines	NA	NA	2	5	4.5	6	4.0
Restaurants	15	3.5	16	7	3.0	6	2.5
OCS	NA	NA	NA	25	19.0	NA	NA
Construction	NA	NA	NA	50	19.0	24	10.0
Other	NA	NA	21	5	2.0	NA	NA
<u>TOTAL</u>	<u>242</u>	<u>149.0</u>	<u>287</u>	<u>346</u>	<u>240.5</u>	<u>217</u>	<u>148.5</u>

- 
- 1 ISER undated.
  - 2 Computation of F.T.E. (full-time equivalent) from ISER undated and Dames and Moore, 1983.
  - 3 Smythe (1983), as cited in Braund, 1986.
  - 4 Braund, 1986.
  - 5 Impact Assessment, Inc. survey.

Source: Impact Assessment, 1987.

TABLE 441

COVERED INDUSTRY EMPLOYMENT  
PRIBILOF ISLANDS AREA\*\*  
1980

Industry Classification	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	68	68	72	60	52	94	92	88	81	60	66	32
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	108	111	112	115	120	125	123	144	144	114	119	124
State	0	0	0	0	0	1	1	1	1	0	0	0
Local	45	43	44	48	46	28	7	8	6	43	46	47
<b>TOTAL</b>	<b>264</b>	<b>260</b>	<b>266</b>	<b>126</b>	<b>83</b>	<b>87</b>	<b>323</b>	<b>296</b>	<b>285</b>	<b>253</b>	<b>273</b>	<b>247</b>

\* Figures withheld to comply with disclosure regulations.

\*\* Pribilof Islands area includes both St. Paul and St. George.

Source: Alaska Department of Labor.

TABLE 442

COVERED INDUSTRY EMPLOYMENT  
PRIBILOF ISLANDS AREA\*\*  
1981

Industry Classification	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0	0	0	0	0	0	0
Transportation, Communication and Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	63	65	59	56	66	61	*	*	*	*	*	*
Miscellaneous	*	*	*	*	*	*	*	*	*	*	*	*
Government												
Federal	112	116	120	117	117	123	131	135	138	109	109	114
State	1	1	1	1	1	1	0	0	0	0	0	0
Local	11	11	12	51	46	51	25	35	48	54	51	52
<b>TOTAL</b>	<b>216</b>	<b>225</b>	<b>228</b>	<b>270</b>	<b>278</b>	<b>316</b>	<b>524</b>	<b>390</b>	<b>356</b>	<b>282</b>	<b>270</b>	<b>290</b>

\* Figures withheld to comply with disclosure regulations.

\*\* Pribilof Islands area includes both St. Paul and St. George.

Source: Alaska Department of Labor.

TABLE 443

COVERED INDUSTRY EMPLOYMENT  
PRIBILOF ISLANDS AREA\*\*  
1982

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0	0	0	0	0	0	0
Transportation, Communication and Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	49	59	65	*	*	*	*	*	*	*	*	*
Miscellaneous	*	*	*	0	0	0	0	0	0	0	0	0
Government												
Federal	114	108	117	112	113	117	129	125	122	123	116	116
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	52	51	57	63	64	57	46	70	68	68	64	68
<u>TOTAL</u>	<u>245</u>	<u>249</u>	<u>272</u>	<u>290</u>	<u>301</u>	<u>311</u>	<u>299</u>	<u>328</u>	<u>302</u>	<u>311</u>	<u>285</u>	<u>294</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Pribilof Islands area includes both St. Paul and St. George.

Source: Alaska Department of Labor.

TABLE 444

COVERED INDUSTRY EMPLOYMENT  
PRIBILOF ISLANDS AREA\*\*  
1983

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0	0	0	0	*	*	*
Transportation, Communication and Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	109	113	109	109	106	109	110	110	111	127	123	125
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	70	66	68	70	74	37	27	45	60	73	118	113
<u>TOTAL</u>	<u>290</u>	<u>298</u>	<u>293</u>	<u>293</u>	<u>302</u>	<u>305</u>	<u>278</u>	<u>271</u>	<u>244</u>	<u>340</u>	<u>415</u>	<u>398</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Pribilof Islands area includes both St. Paul and St. George.

Source: Alaska Department of Labor.

TABLE 445

COVERED INDUSTRY EMPLOYMENT  
PRIBILOF ISLANDS AREA\*\*  
1984

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	0	0	0	0	0	0	0	0	0	*	*	*
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	72	79	78	*	*	*
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	122	127	128	125	121	119	27	24	30	30	32	36
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	127	128	123	119	121	79	78	104	111	131	126	128
<u>TOTAL</u>	<u>412</u>	<u>432</u>	<u>429</u>	<u>411</u>	<u>417</u>	<u>410</u>	<u>378</u>	<u>403</u>	<u>296</u>	<u>310</u>	<u>312</u>	<u>346</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Pribilof Islands area includes both St. Paul and St. George.

Source: Alaska Department of Labor.

TABLE 446

COVERED INDUSTRY EMPLOYMENT  
PRIBILOF ISLANDS AREA\*\*  
1985

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	*	*	*	*	*	*	0	0	0	0	0	0
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	25	25	21	25	24	29	23	23	21	21	22	25
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	129	137	145	146	141	124	115	129	124	141	148	149
<u>TOTAL</u>	<u>293</u>	<u>292</u>	<u>301</u>	<u>315</u>	<u>305</u>	<u>332</u>	<u>368</u>	<u>394</u>	<u>286</u>	<u>294</u>	<u>292</u>	<u>303</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Pribilof Islands area includes both St. Paul and St. George.

Source: Alaska Department of Labor.

TABLE 447

COVERED INDUSTRY EMPLOYMENT  
PRIBILOF ISLANDS AREA\*\*  
1986

<u>Industry Classification</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Mining	0	0	0	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*
Transportation, Communication and Public Utilities	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale Trade	0	0	0	0	0	0	0	0	0	0	0	0
Retail Trade	*	*	*	*	*	*	*	*	*	*	*	*
Finance, Insurance and Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Services	*	*	*	*	*	*	*	*	*	*	*	*
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0
Government												
Federal	24	27	24	22	20	20	20	19	23	22	23	26
State	0	0	0	0	0	0	0	0	0	0	0	0
Local	141	144	154	150	149	113	110	122	143	153	159	169
<u>TOTAL</u>	<u>299</u>	<u>302</u>	<u>311</u>	<u>317</u>	<u>325</u>	<u>313</u>	<u>336</u>	<u>336</u>	<u>310</u>	<u>296</u>	<u>299</u>	<u>312</u>

\* Figures withheld to comply with disclosure regulations.

\*\* Pribilof Islands area includes both St. Paul and St. George.

Source: Alaska Department of Labor.





APPENDIX

TABLE A-1

PLACE OF RESIDENCE AND ANCSA ENROLLMENT  
ALASKA NATIVE POPULATION OF STUDY COMMUNITIES, 1974

<u>Community</u>	<u>Enrolled Natives, 1974</u>					
	<u>By Current Residence</u>			<u>By Place Enrolled To</u>		
	<u>Total</u>	<u>Enrolled At Current Residence</u>	<u>Enrolled Elsewhere</u>	<u>Total</u>	<u>Residing Where Enrolled</u>	<u>Residing Elsewhere</u>
Alakanuk	437	428	9	467	428	39
Anaktuvuk Pass	124	114	10	132	114	18
Aniak	306	178	128	250	178	72
Barrow	1,936	1,594	342	2,041	1,594	447
Bethel	1,960	1,363	597	1,726	1,363	363
Deering	131	111	20	159	111	48
Dillingham	659	592	67	925	592	333
Gambell	336	332	4	429	332	97
Kaktovik	108	101	7	112	101	11
Kivalina	179	173	6	191	173	18
Kotzebue	1,561	1,464	97	1,983	1,464	519
Nikolski	53	53	0	74	53	21
Nome	1,683	1,249	434	2,060	1,249	811
Point Hope	372	352	20	500	352	148
Saint Paul	429	425	4	549	425	124
Sand Point	328	260	68	400	260	140
Scammon Bay	182	169	13	192	169	23
Togiak	383	375	8	400	375	25
Unalakleet	474	439	35	839	439	400
Unalaska	181	159	22	268	159	109
Wainwright	344	308	36	371	308	63
<b><u>TOTAL</u></b>	<b><u>12,166</u></b>	<b><u>10,239</u></b>	<b><u>1,927</u></b>	<b><u>14,068</u></b>	<b><u>10,239</u></b>	<b><u>3,829</u></b>
<b><u>PERCENT</u></b>	<b><u>100.0%</u></b>	<b><u>84.2%</u></b>	<b><u>15.8%</u></b>	<b><u>100.0%</u></b>	<b><u>72.8%</u></b>	<b><u>27.2%</u></b>

Source: Robert R. Nathan Associates, Inc., n.d.

TABLE A-2

RESIDENCY AND ANCSA ENROLLMENT  
ALASKA NATIVE POPULATION OF STUDY COMMUNITIES, 1974

<u>Community</u>	<u>Percent Enrolled Native Residents Enrolled Elsewhere</u>	<u>Percent Locally Enrolled Native Residing Elsewhere</u>
Alakanuk	2.1	8.4
Anaktuvuk Pass	8.1	13.6
Aniak	41.8	28.8
Barrow	17.7	21.9
Bethel	30.5	21.0
Deering	15.3	30.2
Dillingham	10.2	36.0
Gambell	1.2	22.6
Kaktovik	6.5	9.8
Kivalina	3.4	9.4
Kotzebue	6.2	26.2
Nikolski	0.0	28.4
Nome	25.8	39.4
Point Hope	5.4	29.6
Saint Paul	.9	22.6
Sand Point	20.7	35.0
Scammon Bay	7.1	12.0
Togiak	2.1	6.3
Unalakleet	7.4	47.7
Unalaska	12.2	40.7
Wainwright	10.5	17.0
<u>AVERAGE</u>	<u>15.8</u>	<u>27.2</u>

Source: Robert R. Nathan Associates, Inc., n.d.

TABLE A-3

RESIDENCE IN 1975, PERSONS 5 YEARS OF AGE AND OLDER  
PERCENT DISTRIBUTION

<u>Community</u>	<u>Same Census Division</u>			<u>Same State</u>	<u>Different State</u>	<u>Abroad</u>
	<u>Total</u>	<u>Same House</u>	<u>Other House</u>			
Atakanuk	97.4%	87.6%	9.8%	--	2.7%	--
Anaktuvuk Pass	97.6	65.5	32.1	--	2.4	--
Aniak	69.5	44.0	25.5	15.9	13.9	.7
Barrow	77.5	51.2	26.3	11.5	10.4	.5
Bethel	66.8	39.1	27.7	12.5	19.4	1.3
Deering	60.9	37.0	23.9	15.2	23.9	--
Dillingham	67.9	33.6	34.3	14.0	17.6	.5
Gambell	96.2	82.3	13.9	3.8	--	--
Kaktovik	91.5	55.1	36.4	7.3	1.2	--
Kivalina	89.4	79.8	9.6	10.6	--	--
Kotzebue	80.9	37.4	43.5	6.2	15.7	.2
Nikolski	65.9	54.5	11.4	34.1	--	--
Nome	70.1	48.0	22.1	10.3	18.7	1.0
Point Hope	84.35	41.9	42.6	5.8	8.5	1.2
Saint Paul	82.2	56.0	26.2	8.2	9.2	.5
Sand Point	74.7	44.1	30.6	8.2	17.1	--
Scammon Bay	84.1	60.8	23.3	5.8	10.1	--
Togiak	89.6	82.8	6.8	4.0	6.4	--
Unalakleet	83.8	67.0	16.8	11.9	4.0	.2
Unalaska	22.4	16.2	6.2	13.8	53.1	10.7
Wainwright	95.3	67.5	27.8	--	4.7	--

Source: U.S. Bureau of the Census.

TABLE A-4

ALASKAN NATIVE PIPELINE WORKERS  
STUDY COMMUNITIES

<u>Community</u>	<u>No. of Jobs Held by Natives</u>	<u>No. of Individual Natives Hired</u>	<u>1976 Native Mem- bership</u>	<u>% of Native Membership Working on Pipeline</u>
Alakanuk	*	*	*	*
Anaktuvuk Pass	15	8	132	6.1
Aniak	21	16	249	6.4
Barrow	308	117	2,029	5.8
Bethel	185	87	1,724	5.0
Deering	10	4	162	2.5
Dillingham	111	46	925	4.9
Gambell	9	4	427	.9
Kaktovik	35	10	112	8.9
Kivalina	68	31	185	16.8
Kotzebue	333	130	1,976	6.6
Nikolski	*	*	*	*
Nome	338	140	2,041	6.9
Point Hope	106	38	498	7.6
Saint Paul	7	5	540	.9
Sand Point	7	4	401	1.0
Scammon Bay	8	4	190	2.1
Togiak		10	4	399
1.0				
Unalakleet	120	52	827	6.3
Unalaska	26	9	268	3.4
Wainwright	24	14	369	3.8
<u>Subtotal</u>	<u>1,741</u>	<u>723</u>	<u>13,454</u>	<u>5.4</u>
Balance	13,306	5,047	65,050	7.7
<u>TOTAL</u>	<u>15,047</u>	<u>5,770</u>	<u>78,504</u>	<u>7.3</u>

\* None or data not available.

Source: Alaska Native Hire on the Trans-Alaska Oil Pipeline Project, ISER.

TABLE A-5

MARITAL STATUS OF MALES, 15 YEARS OF AGE AND OLDER  
STUDY COMMUNITIES, 1980

<u>Community</u>	<u>Single</u>	<u>Married</u>	<u>Separated</u>	<u>Widowed</u>	<u>Divorced</u>	<u>Total</u>
Alakanuk	73	79	5	6	0	163
Anaktuvuk Pass	30	38	1	1	0	70
Aniak	63	61	2	4	12	142
Barrow	434	363	10	20	57	884
Bethel	582	576	47	25	72	1,272
Deering	22	23	1	0	3	49
Dillingham	212	298	6	9	45	570
Gambell	91	66	1	7	1	166
Kaktovik	38	27	0	0	2	67
Kivalina	36	40	0	0	4	80
Kotzebue	317	337	9	17	46	726
Nikolski	3	10	1	4	3	21
Nome	400	381	19	17	54	871
Point Hope	88	73	1	5	6	173
Saint Paul	89	100	4	11	10	214
Sand Point	108	127	6	3	16	260
Scammon Bay	34	39	1	3	1	78
Togiak	91	73	1	3	5	173
Unalakleet	118	97	6	5	9	235
Unalaska	400	241	36	8	100	785
Wainwright	71	68	2	9	1	151
<u>TOTAL</u>	<u>3,300</u>	<u>3,117</u>	<u>129</u>	<u>157</u>	<u>447</u>	<u>7,150</u>

Source: U.S. Bureau of the Census.

TABLE A-6

MARITAL STATUS OF FEMALES, 15 YEARS OF AGE AND OLDER  
STUDY COMMUNITIES, 1980

<u>Community</u>	<u>Single</u>	<u>Married</u>	<u>Separated</u>	<u>Widowed</u>	<u>Divorced</u>	<u>Total</u>
Alakanuk	47	78	1	13	2	141
Anaktuvuk Pass	22	36	0	5	1	64
Aniak	28	59	2	9	6	104
Barrow	265	336	10	33	58	702
Bethel	464	554	19	73	77	1,187
Deering	15	23	3	1	2	44
Dillingham	156	290	13	36	42	537
Gambell	41	65	0	12	1	119
Kaktovik	26	27	0	3	2	58
Kivalina	30	38	0	2	4	74
Kotzebue	225	326	10	43	43	647
Nikolski	5	10	1	1	1	18
Nome	251	371	20	65	67	774
Point Hope	53	71	2	7	1	134
Saint Paul	45	90	3	13	6	157
Sand Point	64	119	6	7	12	208
Scammon Bay	29	38	0	2	0	69
Togiak	72	72	1	11	2	158
Unalakleet	70	99	5	14	9	197
Unalaska	159	166	7	9	48	389
Wainwright	42	68	4	6	2	119
<u>TOTAL</u>	<u>2,109</u>	<u>2,936</u>	<u>104</u>	<u>365</u>	<u>386</u>	<u>5,900</u>

Source: U.S. Bureau of the Census.



TABLE A-7

NUMBER OF FEDERAL INCOME TAX RETURNS FILED  
SELECTED ALASKA COMMUNITIES  
1977, 1978, 1981 AND 1982

<u>Community</u>	<u>1977</u>	<u>1978</u>	<u>1981</u>	<u>1982</u>
Alakanuk	111	103	110	105
Anaktuvuk Pass	43	74	81	88
Aniak	152	151	167	178
Barrow	898	985	1,139	1,187
Bethel	1,362	1,436	1,668	1,795
Deering	33	34	39	56
Dillingham	510	562	677	813
Gambell	91	93	113	128
Kaktovik	100	93	126	128
Kivalina	71	73	71	66
Kotzebue	826	832	918	1,022
Nikolski	21	21	21	21
Nome	1,122	1,171	1,330	1,431
Point Hope	99	150	163	173
Saint Paul	190	189	227	226
Sand Point	197	206	223	240
Scammon Bay	47	51	52	56
Togiak	179	159	159	174
Unalakleet	266	282	234	274
Unalaska*	364	407	595	562
Wainwright	134	171	176	190

\* Data for Unalaska and Dutch Harbor combined.

Source: Alaska Department of Revenue (from Internal Revenue Service data).

TABLE A-8

COMPONENTS OF POPULATION CHANGE  
STATE OF ALASKA AND SELECTED CENSUS DIVISIONS  
1970 - 1985

Census Area	Population at End of Period	Population Change	July 1 to July 1					Average Annual Rate of Change	
			Births	Rate Per 1,000	Deaths	Rate Per 1,000	Natural Increase		Net Migrants
<u>Alaska</u>									
1970	302,583								
1970 - 1980	401,851	99,268	77,760	25.7	15,390	5.1	62,370	36,898	2.82
1980 - 1981	433,800	14,000	9,911	24.7	1,703	4.2	8,208	5,792	3.28
1981 - 1982	465,200	31,400	10,781	24.9	1,755	4.0	9,026	22,374	6.99
1982 - 1983	497,600	32,400	11,723	25.2	1,850	4.0	9,873	22,527	6.73
1983 - 1984	522,000	24,400	12,307	24.7	1,933	3.9	10,374	14,026	4.79
1984 - 1985	539,600	17,600	12,693	24.3	2,030	3.9	10,663	6,938	3.32
1980 - 1985	539,600	119,800	57,415		9,271		48,144	71,656	4.99
<u>North Slope Borough</u>									
1970	3,451								
1970 - 1980	4,199	748	823	23.8	242	7.0	581	167	1.96
1980 - 1981	4,593	181	133	31.7	27	6.4	106	75	4.02
1981 - 1982	4,798	205	147	32.0	25	5.4	122	83	4.37
1982 - 1983	5,064	266	158	32.9	28	5.8	130	136	5.39
1983 - 1984	5,313	249	172	34.0	26	5.1	146	103	4.80
1984 - 1985	5,510	197	179	33.7	28	5.3	151	46	3.64
1980 - 1985	5,510	1,098	789		134		655	443	4.43
<u>Northwest Arctic Borough</u>									
1970	4,048								
1970 - 1980	4,831	783	1,207	29.8	276	6.8	931	-148	1.76
1980 - 1981	4,965	-65	158	32.7	34	7.0	124	-188	-1.30
1981 - 1982	5,177	212	163	32.8	37	7.5	126	86	4.18
1982 - 1983	5,500	323	185	35.7	40	7.7	145	178	6.05
1983 - 1984	5,683	183	201	36.5	39	7.1	162	21	3.27
1984 - 1985	5,790	107	192	33.8	41	7.2	151	-43	1.87
1980 - 1985	5,790	760	899		191		708	52	2.81

Census Area	Population at End of Period	Population Change	July 1 to July 1				Average Annual Rate of Change		
			Births	Rate Per 1,000	Deaths	Rate Per 1,000		Natural Increase	Net Migrants
<u>Nome</u>									
1970	5,749								
1970 - 1980	6,537	788	1,563	27.2	528	9.2	1,035	-247	1.28
1980 - 1981	6,925	104	194	29.7	57	8.7	137	-32	1.51
1981 - 1982	7,116	191	196	28.3	61	8.8	135	56	2.72
1982 - 1983	7,546	430	217	30.5	55	7.7	162	268	5.87
1983 - 1984	7,778	232	234	31.0	49	6.5	185	47	3.03
1984 - 1985	7,815	37	228	29.3	55	7.1	173	-135	0.47
1980 - 1985	7,815	994	1,069		277		792	202	2.72
<u>Made Hampton</u>									
1970	3,917								
1970 - 1980	4,665	748	1,194	30.5	230	5.9	964	-216	1.74
1980 - 1981	4,853	-18	144	30.9	22	4.7	122	-139	-0.37
1981 - 1982	5,121	268	161	33.2	21	4.3	140	128	5.37
1982 - 1983	5,363	242	181	35.3	22	4.3	159	83	4.62
1983 - 1984	5,500	137	200	37.3	31	5.8	169	-31	2.52
1984 - 1985	5,591	91	204	37.1	46	8.4	158	-66	1.64
1980 - 1985	5,591	720	890		142		748	-28	2.75
<u>Bethel</u>									
1970	8,917								
1970 - 1980	10,999	2,082	2,451	27.5	549	6.2	1,902	180	2.09
1980 - 1981	11,551	76	316	28.7	56	5.1	260	-183	0.66
1981 - 1982	12,023	472	349	30.2	56	4.8	293	179	4.00
1982 - 1983	12,490	467	382	31.8	66	5.5	316	151	3.81
1983 - 1984	12,797	307	391	31.3	86	6.9	305	2	2.43
1984 - 1985	12,906	109	393	30.7	84	6.6	309	-199	0.85
1980 - 1985	12,906	1,431	1,831		348		1,483	-52	2.35

Census Area	Population at End of Period	Population Change	July 1 to July 1					Average Annual Rate of Change	
			Births	Rate Per 1,000	Deaths	Rate Per 1,000	Natural Increase		Net Migrants
<u>Dillingham</u>									
1970	3,892		891	22.9	256	6.6	635	89	1.70
1980 - 1980	4,616	724	120	26.0	22	4.8	98	-145	-1.00
1981 - 1981	4,772	-48	135	28.3	29	6.1	106	183	5.88
1982 - 1982	5,061	289	159	31.4	35	6.9	124	194	6.09
1983 - 1983	5,379	318	154	28.6	28	5.2	126	100	4.12
1984 - 1984	5,605	226	160	28.5	26	4.6	134	-31	1.80
1985 - 1985	5,707	102							
1980 - 1985	5,707	887	728		140		588	299	3.37
<u>Aleutian Islands</u>									
1970	7,834		1,232	15.7	197	2.5	1,035	-1,101	-0.08
1980 - 1980	7,768	-66	161	20.7	29	3.7	132	192	3.90
1981 - 1981	8,477	324	173	20.4	32	3.8	141	-182	-0.50
1982 - 1982	8,435	-42	183	21.7	34	4.0	149	-217	-0.82
1983 - 1983	8,366	-69	173	20.7	31	3.7	142	14	1.85
1984 - 1984	8,522	156	156	18.3	30	3.5	126	413	6.13
1985 - 1985	9,061	539							
1980 - 1985	9,061	908	846		156		690	218	2.11

Source: Alaska Department of Labor, Research and Analysis, 1987.





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.

