

# ALASKA

## REVIEW OF SOCIAL AND ECONOMIC CONDITIONS

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### Changes in Rural Alaska Settlement Patterns

As falling oil prices reduce government revenues needed to support services and facilities throughout Alaska, it is important to understand how migration and natural population growth are changing the size and number of Alaska settlements. Of particular concern is the extent of migration from Alaska's smallest settlements to its regional centers and urban areas.

To help determine the extent and patterns of migration in the state, this *ARSEC* examines changes in Alaska settlement trends over the last thirty-five years, focusing in particular on rural population changes. Using census and vital statistics data, it shows that a general movement from small rural places to larger places in the nineteen fifties and sixties slowed and in some cases even reversed in the seventies and early eighties. The report also shows that the combined flow of Natives and non-Natives into rural Alaska during the seventies and early eighties resulted in most small rural places increasing their populations.

While the authors do not attempt to offer a comprehensive explanation for changes in the migration patterns, they do offer some evidence that establishing secondary school programs in Alaska's smallest places played some part in the observed changes.

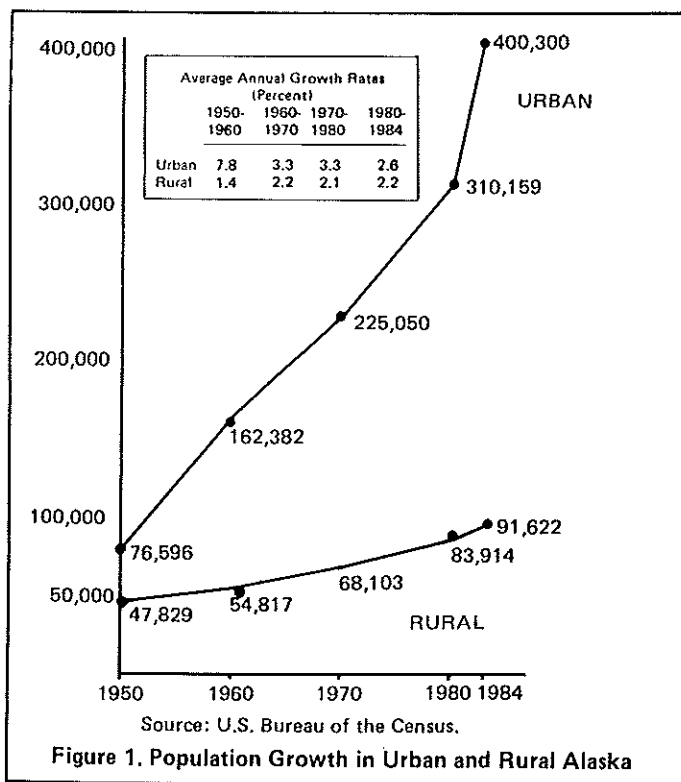
#### Comparing Urban and Rural Growth

The most obvious change in Alaska settlement patterns since 1950 has been the phenomenal growth of urban Alaska (see Figure 1). For the purposes of this article, we defined as urban Alaska the Anchorage Municipality, the boroughs of Fairbanks, Mat-Su, Kenai, Juneau, Ketchikan, and Sitka. Since these jurisdictions did not exist throughout the analysis period, we had to estimate population, births and deaths on the basis of reports for the closest matching census districts and/or groups of places. Over the

entire 34-year period, the population of urban Alaska, including the major military installations, increased by an estimated 423 percent. This represents an annual average growth rate of 5 percent per year. In comparison, the growth of rural Alaska, the entire area outside of urban Alaska,<sup>1</sup> has been considerably slower.

During the same period that the population of

<sup>1</sup>This excludes the population enumerated at military sites, including Adak, Shemya, Kodiak Station, Fort Greely, and a number of smaller installations.



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## FEATURE

Jack Kruse and Karen Foster      Changes in Rural Alaska Settlement Patterns

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urban Alaska more than quadrupled, the state's rural population less than doubled. Over the last 35 years, the population of rural Alaska has increased at an average annual rate of only 1.9 percent.

### Components of Rural Population Change

Changes in the quality and quantity of census and vital statistics data over the last three decades make it impossible to apply a uniform method of analysis to track the components of rural population change. We applied the best methods that could be supported with the data available in each decade.

During most of the 1950s, births and deaths in Alaska were recorded only by place of occurrence. Thus, children born of rural residents who temporarily moved to an urban area to obtain medical care were reported as an increase in the urban population. Use of these data would overstate the rate of natural increase in urban Alaska (i.e. excess in births over deaths) and greatly understate the rate of natural increase in rural Alaska. It is therefore not possible to directly estimate the natural increase in rural and urban populations during the 1950s. We can, however, estimate natural population increases by applying either statewide rates of natural increase or rates of natural increase among Alaska Natives.<sup>2</sup>

While neither the statewide nor Native rates of natural increase directly apply to rural Alaska, we believe it is safe to assume that the rural rate of natural increase during the 1950s fell between the two. Applying the Native rates of natural increase over the 1950s to the 1950 rural population estimate of 47,829, we estimate that the rural population would have increased by about 18,000 had there been no net migration (see Table 1). In fact, however, the rural population increased by only 6,988 (excluding the populations of remote military sites). These figures suggest a net out-migration of approximately 11,000 people from rural Alaska between 1950 and 1960.

However, this estimate is probably high since non-Native rates of natural increase were lower than Native rates of natural increase in all but the first years of the 1950s. A low estimate can be made by applying the statewide estimates of natural increase to the 1950 rural population. This approach yields an estimated natural increase in rural Alaska of approximately 15,000. Again calculating the difference between natural increase and actual population increase, we estimate that the net out-migration from rural Alaska during the 1950s was at least 7,000.

We can be more confident about the causes of population changes during the 1960s. Over the course of the decade, 70,925 people were born and 13,250 people died in Alaska. By comparing the natural

<sup>2</sup>Native women made up about 60 percent of the female population of rural Alaska as defined in this article.

increase of 57,675 with the actual population increase of 75,954, we can conclude that the net in-migration to Alaska was about 18,400. During the same period, the population of urban Alaska experienced a natural increase of 44,091 and a total population increase of 62,668. Thus, the net in-migration to urban Alaska during the 1960s was about 18,600. The fact that the estimated number of in-migrants to urban Alaska approximately equalled the number of in-migrants to Alaska as a whole is merely a coincidence, since urban in-migrants include both residents who are new to the state and rural residents who moved to urban areas.

Since we are primarily interested in understanding the relationship between changes in rural and urban settlement patterns in Alaska, we would like to be able to distinguish between urban in-migrants from rural Alaska and urban in-migrants from outside the state. We have already estimated that the net in-migration for the state as a whole during the 1960s totalled about 18,400. To estimate the proportion of in-migrants who settled in urban Alaska, we reviewed data from the 1960 and 1970 decennial censuses and calculated the number of persons 5 years old or older in each census who reported that they had lived in another state 5 years previously. After making the same calculations for urban residents alone, we could estimate the percentages of in-migrants from outside Alaska who were living in urban Alaska in 1960 and 70. Our calculations yielded 82 percent in both cases. Assuming that this percentage was applicable throughout the 1960s, the estimated number of people moving to urban Alaska from outside the state was 82 percent of 18,400, or about 15,100.

Having already estimated the net number of in-migrants to urban Alaska from rural areas and outside the state at 18,600, we can infer that 18,600 minus 15,100 (our estimate of the net number of urban in-migrants from outside Alaska), or 3,500, represents the net migration of people from rural to urban Alaska between 1960 and 1970. Thus, 21 percent of the potential increase in Alaska's rural population in the 1960s was lost to urban Alaska. This migration from rural to urban Alaska is evidenced by the fact that the percentage of Alaska Natives living in Anchorage, Fairbanks, Juneau, Ketchikan, and Sitka grew from less than 5 percent in 1950 to 13 percent in 1960 and 21 percent in 1970.

While we have already estimated the net migration between rural and urban Alaska, we have not calculated the net migration between rural Alaska and outside the state. The federal government reported 18,182 births and 4,598 deaths among Alaska's rural population during the 1960s, for a total natural increase of 13,584. The observed increase in the rural population was 13,286 (excluding rural military installations). The net out-migration from

rural Alaska totaled less than 200 people during the 1960s. Since we estimated that the net out-migration from rural to urban Alaska was about 3,500, however, we can conclude that there was a net in-migration to rural Alaska of about 3,300 from outside the state, most of whom were non-Native. In both 1950 and 1960, 68 percent of the population living outside of Anchorage, Fairbanks, Juneau, Ketchikan, or Sitka (i.e., rural Alaska plus the Mat-Su and Kenai boroughs) was Native. In 1970, however, the Native population comprised only 59 percent of the population of this area.

We have seen so far that rural Alaska experienced a substantial net loss in population during the 1950s. During the 1960s, the net out-migration from rural Alaska as a whole was negligible, but only because a continuing out-migration of rural residents was equalled by an in-migration of people from outside Alaska.

	1950-60	1960-70	1970-80
Natural Increase	15,000-18,000	13,584	12,084
Net In- (Out-) Migration	(7,000-11,000)	(200)	3,700
Net Flow Rural-to-Urban	NA	3,500	4,327
Net Flow Out-of-State to Rural	NA	3,300	8,027

Sources: Federal Vital Statistics, U.S. Bureau of the Census, and Alaska Department of Labor.

Turning now to the 1970s, we see an accentuation of the trend observed in the 60s. A total of 16,463 births and 4,379 deaths were recorded in rural Alaska during the 1970s for a total natural increase of 12,084. During the same period, the rural population grew by 15,811. Thus, an apparent net in-migration of approximately 3,700 occurred in rural Alaska in the 1970s. Looking further at available data, it appears that, as in the 1960s, a continued out-migration of rural residents to urban Alaska was accompanied by an in-migration of people from out of state. The difference between the two decades is that the in-migration from outside to rural Alaska in the 1970s far surpassed the out-migration of rural residents to urban areas.

Between 1970 and 1980, the state experienced a natural increase of 56,175 and a total estimated net in-migration of 44,745. Still assuming that 82 percent of these in-migrants settled in urban Alaska, an

assumption supported by 1980 census figures, we would expect that 36,691 of the net in-migration to urban Alaska during the decade was attributable to new residents from out of state. By subtracting the observed natural increase in urban Alaska of 44,091 from the actual population increase of 85,109, we see that urban Alaska experienced a total net in-migration of 41,018. Thus 41,018 minus 36,691 (4,327) is the estimated net out-migration of rural residents to urban Alaska during the 1970s. Since rural Alaska experienced a total net in-migration of about 3,700, the estimated net in-migration to rural Alaska of people from out of state is 3,700 plus 4,327, or 8,054. Indicative of this trend is the fact that the proportion of the total rural population comprised of Native residents dropped from 59 percent in 1970 to 56 percent in 1980.

Table 1 summarizes the overall pattern of rural Alaska migration between 1950 and 1980. As a whole, rural Alaska experienced a substantial net out-migration during the fifties, virtually no net change in population due to migration during the sixties, and a significant net in-migration during the seventies, a trend we expect is continuing today. Underlying these changes appear to be two migration flows, one of rural residents to urban Alaska, and one from outside the state to rural Alaska.

### Regional Differences

At this point we should enter the first of several important caveats to the general trends in population change described above. Not all regions of rural Alaska have experienced the same magnitudes of population change. To provide a basis for identifying regional differences, we constructed four rural regions: Southeast (excluding the Juneau, Ketchikan, and Sitka boroughs), Southwest, Copper River/Wrangell, and North/West/Interior (see Figure 2). During the 1950s, the average annual rate of population increase in rural Alaska as a whole was 1.4 percent per year. Rates of population change among the identified rural Alaska regions ranged from an average loss in population of 0.9 percent per year in the Southwest to an average gain in population of 3 percent per year in the Copper River/Wrangell region (see Table 2).

The reported loss in population in Southwest Alaska may in part reflect changes in the military population that we were not able to identify with available information. The populations of both Kodiak and Unalaska grew significantly during the fifties, although the population of Dillingham was actually reported to decline.

Effects of military activity may also account for some of the change in the Copper River/Wrangell region population. Fort Greely population grew from 280 in 1950 (it was Big Delta Air Force Base then) to

1,536 in 1960. Although we excluded the Fort Greely population itself from the 1950 and 1960 regional population estimates, attendant off-base population growth may have occurred.

Aside from the effects of military activity, regional differences in population change during the 1950s may reflect differences in the regional rates of natural increase. We suspect that the rate of natural increase during the fifties was highest in the region made up of North, West, and Interior Alaska (see Figure 2) where Natives comprise the highest proportion of the population. This region experienced an average growth in population of 2.4 percent per year between 1950 and 1960, and we think that the actual rate of natural increase more closely approximated the statewide decade average rate of natural increase among Natives of 3.3 percent per year. Thus, the region probably experienced substantial net out-migration. While the rate of natural increase in rural southeast Alaska was likely lower due to a larger non-Native population, the reported annual average population increase of 0.8 percent indicated net out-migration as well.

During the 1960s, the population of rural Alaska averaged a 2.2 percent increase per year. As we reported earlier, the increase in the rate of population growth in rural Alaska in the sixties appeared primarily attributable to a flow of people into rural Alaska from outside the state. Looking at population changes during the sixties on a regional basis makes it appear that there was less regional variation in growth rates during the 1960s than during the preceding decade. This may suggest that the in-migration of out-of-state residents to rural Alaska was evenly spread across rural regions. On the other hand, differences in regional rates of natural increase make it difficult to test this idea, and available census data on the number of in-migrants to each region include many military personnel whom we would like to exclude from the analysis. It is therefore necessary to limit our conclusions to say only that a combination of factors led to a convergence of rural regional growth rates in the sixties.

The population of rural Alaska increased at an average rate of 2.1 percent per year in the 1970s. We have already concluded that rural Alaska as a whole experienced a net in-migration of some 3,700 people during the decade. Looking at population growth on a regional basis, however, it appears that the only region apparently experiencing net in-migration was the Copper River/Wrangell region (see Table 2). The relatively rapid growth of this region is not surprising, given its location on the Alaska road system, the presence of the trans-Alaska pipeline in the region (Valdez alone experienced an increase of 2,074), and the state's efforts to promote agricultural development in the northern part of the region.

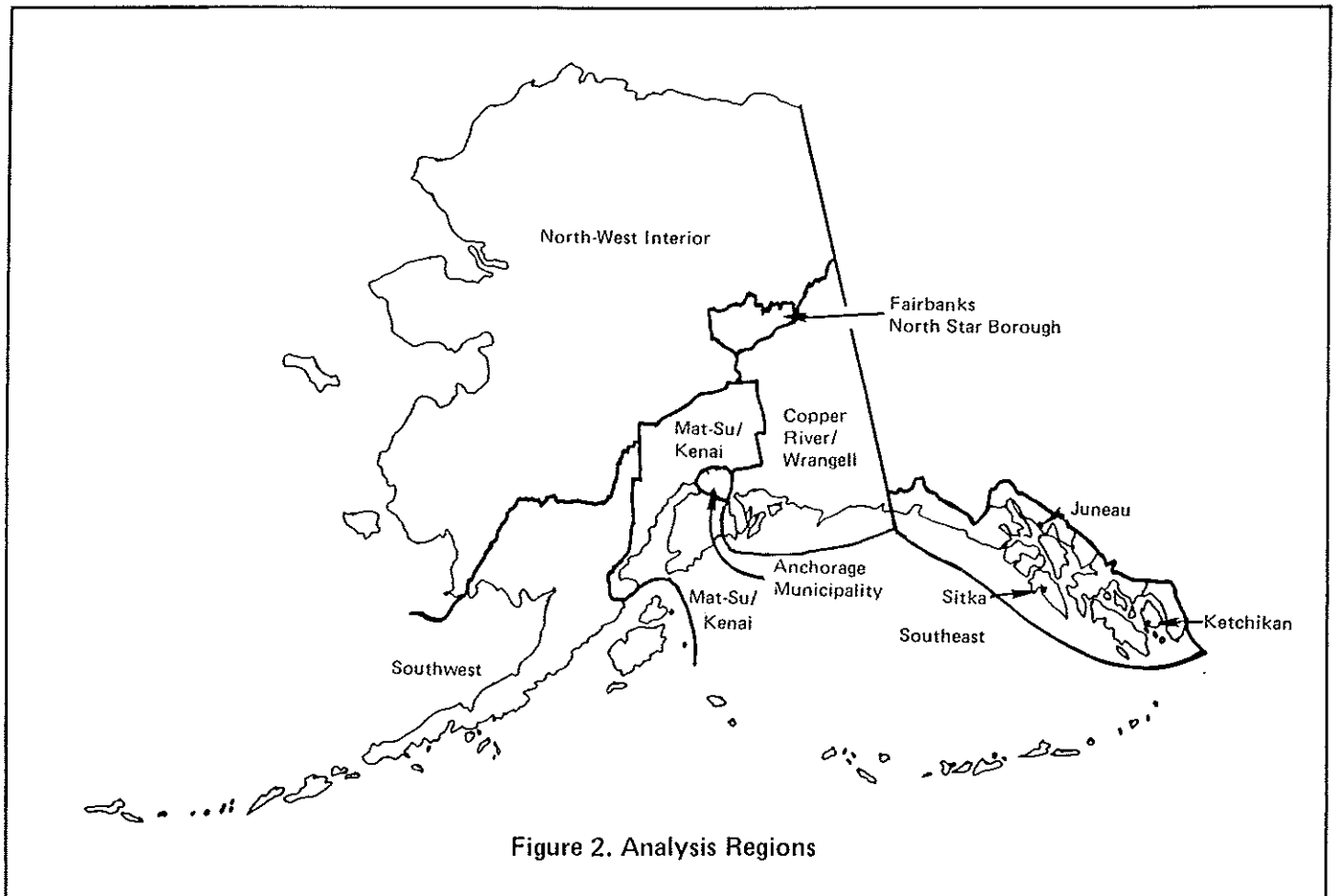


Figure 2. Analysis Regions

Our analysis thus far suggests that rural Alaska as a whole and most regions within rural Alaska have lost residents to urban Alaska throughout the last 35 years. During the sixties and the seventies, however, this loss in residents was partly, or in the case of the Copper River/Wrangell region in the seventies; wholly, offset by an apparent in-migration of non-Natives to rural Alaska.

#### Rural Migration Patterns by Size of Community

We next address whether rural Alaska itself has experienced an internal migration from smaller to larger places, particularly those communities seen as regional transportation and service centers. While we might expect such a trend to accompany a general rural to urban migration, it does not have to. In fact, we will see that in the seventies it did not. To track the fate of the state's villages, it is necessary to examine population trends by place as well as by region.

Comparisons of population data from places in Alaska over time present some difficult analytical

problems. Although the U.S. Bureau of the Census goes to greater lengths to identify small places in Alaska than it does anywhere else, it still does not separately report population counts for settlements with less than 25 residents. It is thus impossible to track the growth or decline of some of Alaska's smallest places at the beginning or end of their existence. The Census Bureau has also used different names for some Alaska villages. In constructing a place data file, we took these name changes into account and attempted to match census figures for villages occupied by the same people, even if the location of the village changed. Because we are primarily interested in civilian settlement patterns, we eliminated remote military sites from the analysis file. Our final rural Alaska analysis file included 281 places with populations of at least 25 or more in at least one census count (see Appendix A). The reader should keep in mind that the definition of rural applied in this paper excludes all settlements located in the Anchorage Municipality (e.g. Girdwood) and the Fairbanks, Mat-Su, Kenai, Juneau, Ketchikan,

Table 2  
Regional Differences in Population Growth

A. Population					
	1950	1960	1970	1980	1984
<b>Rural Alaska*</b>					
North, West, & Interior	21,497	27,233	32,438	38,686	39,982
Southwest	12,189	11,089	15,305	17,692	22,175
Copper River/Wrangell	4,447	5,975	7,465	12,389	13,265
Southeast	9,696	10,520	12,895	15,147	16,200
Total Rural	47,829	54,817	68,103	83,914	91,622
<b>Urban Alaska</b>					
Anchorage Municipality	31,487	82,833	126,385	174,431	226,700
Fairbanks North Star Borough	18,369	40,425	45,864	53,983	62,300
Mat-Su, Kenai Boroughs	8,233	14,241	23,095	43,098	67,300
Juneau, Ketchikan, Sitka Boroughs	18,507	24,883	29,706	38,647	44,000
Total Urban	76,596	162,382	225,050	310,159	400,300
Statewide*	128,643	217,054	293,153	394,073	
B. Average Annual Percent Growth					
	1950-60	1960-70	1970-80	1980-84	
<b>Rural Alaska</b>					
North, West, & Interior	2.4	1.8	1.8	0.8	
Southwest	-0.9	3.3	1.5	5.8	
Copper River/Wrangell	3.0	2.3	5.1	1.7	
Southeast	0.8	2.0	1.6	1.7	
Rural	1.4	2.2	2.1	2.2	
<b>Urban Alaska</b>					
Anchorage Municipality	10.2	4.3	3.3	6.8	
Fairbanks North Star Borough	8.2	1.3	1.6	3.6	
Mat-Su, Kenai Boroughs	5.6	5.0	6.4	11.8	
Juneau, Ketchikan, Sitka Boroughs	3.0	1.8	2.7	3.3	
Urban	7.8	3.3	3.3	6.6	

\*Excluding rural military installations.

Sources: U.S. Bureau of the Census decennial, census counts, and July 1984 population estimates.

and Sitka boroughs.

Since we want to test the idea that rural residents may be moving from smaller to larger settlements, we have defined three village size classes: 25-99, 100-499, and 500 or more. We would like to see whether the smallest places are more likely to lose population than the larger places. To track the fate of villages over a decade, we must hold the place/size

classification of each village constant. If places were permitted to change their size classification as they grew, we might erroneously conclude that the population living in small places declined when in fact the population increased but was only partially included in the definition of the place/size class. We therefore classified places according to their size at the beginning of each decade.

It was also important to consider the treatment of places which "disappear" over the course of a decade and places which are identified for the first time at the end of a decade. We tried to verify actual village abandonments and believe that the disappearance of a village from one census to the next in our data file actually reflects the abandonment of the village, or at least a decline in population below twenty-five residents. We treated settlements which were first identified separately in a decennial census after 1950 in two ways. First, we ignored them and compared the aggregate population of a constant set of places. Places identified separately only at the beginning of a decade were assumed to have zero population at the end of the decade. This approach avoids the problems of possibly assuming that a new village was formed when in fact it might have existed previously but had been missed in the Census Bureau's list of places. It is thus the most direct test of the hypothesis that the residents of small villages are more likely to leave their community than the residents of larger settlements.

The second approach taken to compare population changes by village size includes the populations of apparently new communities (i.e., communities first identified in the decennial census serving as the end-of-decade point of comparison). All new places were categorized in the smallest size class, 25-99 population at the beginning of the decade, regardless of their size at the end of the decade. This approach serves to test the idea that small communities may come and go. If the rate of village abandonment is matched or exceeded by the rate of village formation, the number of small settlements and the size of the rural population living within them may stay constant or even grow.

#### Population Changes in the Fifties

In 1950, the population of rural Alaska was contained in 218 identified places. Almost half of these places, 102, had populations between 25 and 99. An equal number of places had between 100 and 499 residents. Only 14 places in rural Alaska had populations of 500 or more in 1950. All but 29 percent of the rural population lived in one of 204 villages of less than 500 inhabitants.

Not counting the population living in places first identified by the Census Bureau in 1960, the number of people living in Alaska's smallest rural places declined between 1950 and 1960 from 6,125 to 5,616 (see Table 3). No comparison with rates of natural increase is needed to conclude that settlements beginning the decade with populations between 25 and 99 generally lost population through out-migration during the fifties. Even when we

include the new communities, the rate of population growth (0.5 percent per year, on average) is well below the probable (but unknown) rate of natural increase for the population.

Also clearly illustrating an out-migration trend from small settlements is the apparent disappearance of 36 of the 102 places separately identified in 1950 with populations of 25 to 99. These places included mining communities such as Ellamar, trading posts like New Hamilton, canneries such as Port Moller, and Native villages such as King Island.

In the villages with 1950 populations of 100 to 499, we detected a small absolute increase in population over the decade (the average annual rate of increase was 1.2 percent). While we do not know the precise rate of natural increase for this population, we can safely assume that it at least equalled the average statewide rate of natural increase for the fifties of 2.7 percent per year. Based on this assumption, rural communities with 1950 populations between 100 and 499 generally experienced a net loss in population due to migration over the course of the decade. Nine communities in this size class apparently declined in population below 25 residents or were abandoned.

Observed population changes for both communities of under 100 population and communities of 100-499 population document an overall trend of out-migration from small places in rural Alaska during the 1950s. Our next question is whether this trend applies to the fourteen larger rural Alaska settlements as well. Taking all communities with 1950 populations of 500 or more together, the answer appears to be yes. Their aggregate population increased from 13,754 in 1950 to 16,682 in 1960, for an overall average annual rate of increase of 1.9 percent. Again assuming that the rate of natural increase for Alaska as a whole represents a conservative estimate of the rate of natural increase for this population, net out-migration occurred over the course of the decade.

Unfortunately, we cannot tell whether the out-migrants from both large and small rural communities moved directly to urban Alaska or whether there was a two-step shift from small to large rural communities, and from large rural communities to urban areas. Both forms of migration doubtless occurred to some degree. The important point, however, is that a general trend of out-migration occurred in all three sizes of communities in the fifties, and the largest places grew more rapidly, on average, than the smallest places.

There were some important exceptions to the general trend of out-migration in rural Alaska's largest places during the fifties, however. Several places we now consider to be regional centers experienced net

Table 3  
Rural Population Changes by Size of Community\*

A. Number of Places						
Size of Place at Beginning of Decade	1950s		1960s		1970s	
	1950	1960	1960	1970	1970	1980
25 to 99	102	66	65	56	70	65
100 to 499	102	93	117	115	123	123
500 or larger	14	14	16	16	16	16
New places	—	25	—	22	—	19
Total	218	198	198	209	209	223

B. Population						
Size of Place at Beginning of Decade	1950s		1960s		1970s	
	1950	1960	1960	1970	1970	1980
25 to 99	6,125	5,616	3,789	4,432	4,300	5,327
100 to 499	18,621	21,016	23,796	26,623	27,819	35,645
500 or larger	13,754	16,682	18,104	22,753	24,862	32,250
New Places	—	2,375	—	3,173	—	1,482
Unallocated Pop.	9,329	9,128	9,128	11,122	11,122	9,210
Total	47,829	54,817	54,817	68,103	68,103	83,914

C. Average Annual Percent Change in Population			
Size of Place at Beginning of Decade	1950-60	1960-70	1970-80
25 to 99	-0.9	1.6	2.2
100 to 499	1.2	1.1	2.5
500 or larger	1.9	2.3	2.6
25 to 99 incl. new places	2.7	7.2	4.7
Unallocated places	-0.2	2.0	-1.9
Statewide annual average percent natural increase	2.7	2.3	1.8

\*Excluding rural military installations.

Source: U.S. Bureau of the Census.

in-migration. Kotzebue's population grew at an average annual rate of 7.6 percent. Other places apparently experiencing net in-migration were: Bethel (6.8 percent per year), Kodiak (4.4 percent per year), and possibly Barrow (3.3 percent per year).

#### Rural Population Trends in the Sixties

Although Alaska's smallest places did not experience absolute population declines in the sixties as they did in the fifties, they generally did not grow fast enough to match their probable rate of natural

increase. Not counting new places, the population living in settlements with populations of 25 to 99 in 1960 grew at an average rate of 1.6 percent per year while the statewide rate of natural increase was 2.3 percent per year (see Table 3). Seven of the 65 villages identified in 1960 apparently declined below 25 population by 1970.

The addition of the population living in places identified for the first time in 1970 has had the apparent dramatic effect of raising the rate of population increase to 7.2 percent per year. Recall, however,



that during the sixties, rural Alaska as a whole apparently experienced a net out-migration of rural residents to urban areas of the state and a net in-migration of people from out-of-state to rural areas. Apparently, many of these non-Native in-migrants settled along Alaska's road system, expanding small settlements previously not identified as separate communities. Included in this group of places are Big Delta (an old telegraph station), Delta Junction (literally the junction between the Alaska and Richardson Highways), Paxson (a roadhouse), and Anderson (a subdivided homestead). Other destinations for non-Natives included lumber camps (e.g., Thorne Bay), and oil development sites (e.g., Prudhoe, Deadhorse).

Not all the "new" settlements were non-Native, however. Several old villages appeared to have increased in population above 25 and were thus separately enumerated (e.g., Igiugig, Lime Village [Hungry], Grayling, and Kongiganek). Other villages appeared to be new settlements (e.g., Nelson Lagoon and Twin Hills). Finally, some villages had been missed in previous censuses. The Kuskokwim village of Chuathbaluk, for example, had been called "Russian Mission" and unfortunately had been repeatedly missed, because it was confused with the nearby Yukon River village, Russian Mission. The problem with missed communities does not appear to have been substantial since the population living in unidentified places and remote areas increased at an average rate of 2 percent per year in the sixties, near the statewide rate of natural increase.

The observed increases in primarily non-Native settlements is consistent with the general migration flow of non-Natives to rural Alaska. The clear net out-migration of population from small places in general fits the overall pattern of rural out-migration to urban areas. At the same time, however, the re-emergence of several Native settlements and the appearance of a few new, primarily Native, settlements suggests that the notion of a gradual disappearance of small places is too simple. Even if we ignore the new non-Native places, the population living in Alaska's smallest places (including new Native places) increased at an average rate of 2.9 percent per year in the sixties. What the observed pattern does suggest is that the existence of these small places was not highly stable in the sixties; some villages disappeared while others took their places.

The fate of settlements in the 100-to-499 population range in 1960 was not as bright. The average annual increase in population for these places during the sixties was only 1.1 percent. Meanwhile, the population living in the state's largest rural places grew at 2.3 percent per year, on average, equalling the statewide rate of natural increase.

The growth of regional centers during the 60s had three likely sources: natural increase, in-migrants from smaller places, and non-Native in-migrants from outside rural Alaska. Unfortunately, the data needed to distinguish among these three sources is not available. It would also be interesting to know if some of the growth in small places resulted from an in-migration of non-Natives. We do not have population counts by race for places in 1960. We do know, however, that even when we exclude eighteen primarily non-Native places with populations of 25 to 99 persons in 1960, that 18 percent of the population in the remaining small places in 1970 was non-Native. To be sure, many places like Diomedea, Anaktuvuk Pass, and Chevak were over 95 percent Native in 1970, but the significant presence of non-Natives in many of the state's smallest places suggests that they were the destinations for some on the non-Native in-migrants of the sixties.

#### Rural Population Changes in the Seventies

Our analysis of overall migration trends in rural Alaska for the seventies found that the out-migration of rural residents continued while the in-migration of non-Natives accelerated, for a net in-migration of some 3,700 over the decade. Turning now to the place data, we see that the apparent rates of increase in the population living in all community-size classes exceeded the statewide annual rate of natural increase of 1.8 percent (see Table 3). When new places (often resettlements near old village sites) such as Nuiqsut, Atkasook, Point Lay, and Atmautluak are included, the average annual rate of population increase for the smallest size class was 4.7 percent, well above the statewide rate of natural increase. It should be noted, however, that part of the apparent appearance of a significant population in new settlements resulted from greater efforts by the Census Bureau to identify settlements. Included in the list of "new" places, for example, are several settlements located along the Richardson Highway: Lower Tonsina, Slana, Tazlina, and Tonsina. The improvement of place definition accounts for the observed decline in the unallocated population over the decade of 1.9 percent per year.

At this point in our analysis, we can take advantage of birth, death, and race data by place not available for previous decades to take a closer look at migration trends in the seventies. We first matched state vital statistics summaries by place with our own place file containing census data. By adding births and subtracting deaths from the 1970 population of each place and then comparing the resulting natural increase with the actual 1980 population, we can calculate net migration by place. Potential errors in both census and vital statistics data may lead to

erroneous conclusions for a few communities, but it is unlikely that the errors are large or systematic enough to jeopardize the validity of the analyses for groups of places.

Table 4 breaks down the observed increase in population within each place size class into births, deaths, and calculated net number of in-migrants. Ignoring newly identified places, we see that 356 of the total population increase in the smallest size classes (25 to 99) was due to net in-migration. In other words, 35 percent of the increase in the number of people living in the state's smallest communities was due to in-migration.

Comparisons for places with populations of 100 to 499 residents at the beginning of the seventies yield similar results. Almost a third of their aggregate population growth was due to in-migration. Finally, net in-migration accounted for 26 percent of the total increase in population in rural Alaska's largest places. In sum, we find no place/size class which experienced net out-migration during the seventies, even when we use place-specific vital statistics to calculate net migration.

It is interesting to note that the rate of natural increase was lower in the two smallest size classes of communities than in the largest size class of rural places, and lower than the rate of natural increase for urban Alaska. We commonly think of birth rates being higher among rural populations, and this result

**Table 4**  
**Rural Net Migration by Size of Place in the 70s**

A. Counts				
Size of Place in 1970	Births	Deaths	Total Population Increase	Net No. of In-migrants
25 to 99	1,064	393	1,027	356
100 to 499	7,465	2,045	7,826	2,406
500 or larger	7,553	2,111	7,388	1,946
New places by 1980	252	64	1,482	811

B. Average Annual Rates of Increase			
Size of Place in 1970	Rate of Natural Increase	Rate of In-migration	Rate of Total Pop. Increase
25 to 99	1.5	0.8	2.2
100 to 499	1.8	0.8	2.5
500 or larger	2.0	0.7	2.6

**Table 5**  
**Factors Affecting Natural Increase by Size of Place**

Size of Place in 1970	Number of Children per Married Female, age 35 to 44		Females, Aged 18 to 34, as Percent of Total Population	
	1970	1980	1970	1980
<b>Rural</b>				
25 to 99	5.9	3.7	10%	14%
100 to 499	6.3	4.4	11	15
500 or larger	4.4	3.3	12	17
<b>Urban</b>	3.1	2.6	19	18

Size of Place in 1970	Annual Percent Decrease in Population due to Deaths	Annual Percent Natural Increase
<b>Rural</b>		
25 to 99	4.2%	1.5%
100 to 499	2.9	1.8
500 or larger	3.3	2.0
<b>Urban</b>	1.3	2.0

seems counter-intuitive. The reasons for the lower rates of natural increase are identified in Table 5. As commonly thought, women living in small, rural communities in 1970 had, on the average, more children than women living in larger places. The same held true in 1980. What caused the lower rates of natural increase, however, was first, a higher death rate, and second, a lower proportion of women in their child-bearing years.

The observed general in-migration trend in the seventies did not hold for all communities (see Table 6). Sixty-two percent of the 90 places with populations of 25 to 99 in 1970 or places which appeared for the first time in 1980 experienced net in-migration. The number of places in the next larger size class that experienced net out-migration and net in-migration were almost equal. In the largest size class of rural places, actually more communities experienced net out-migration than in-migration. These results suggest that the acceleration of in-migration to rural areas in the seventies was especially felt in the state's smallest places.

**Table 6**  
Variations in Net Migration

Size of Place in 1970	No. of Places Experiencing Net Out-Migration <sup>a</sup>	No. of Places Experiencing Net In-Migration <sup>b</sup>	Percent of Places Net In-Migration
25 to 99	34	56	62%
100 to 499	61	63	51
500 or larger	10	6	38

**Native vs. Non-Native In-migration to Rural Alaska**

Our regional analysis clearly showed that both the sixties and the seventies were marked by an out-migration of rural residents and an in-migration of people from out of state. The rural-to-urban migration trend had the effect of redistributing the Native population. Whereas in 1960 only 16 percent of the Native population lived in urban Alaska, as we have defined it, 24 percent lived in urban Alaska in 1970 and 31 percent lived in urban Alaska in 1980. We have just seen that the populations living in all size classes of rural communities experienced net in-migration during the seventies. Putting these two facts together, we might expect that essentially all the in-migration to places in rural Alaska has involved non-Natives.

In fact, however, the smallest places in rural Alaska experienced a rate of Native population increase during the seventies that equaled the rate of Native population increase for the state as a whole (2.4 percent per year, not counting new places—see Table 7). This suggests that the net out-migration of rural Natives may have been generally from places with populations of 100 or more in 1970, and particularly from regional centers.

We can use population counts by age, race, and size of place to explore the differences in Native migration patterns further. We grouped Native and non-Native population counts for 1970 into five-year age intervals (commonly called age cohorts, see Table 8). We would expect to find that the number of Natives counted in any given age interval in 1970 (e.g., 10-14) minus the estimated deaths in the cohort over the decade should match the number of Natives counted in the age interval reflecting a ten-year increase in age in 1980 (e.g., 20-24), if no migration occurred. The apparent migration can be expressed as the percent increase or decrease in population in each age cohort from that expected based on 1970 population counts.

Before interpreting the results of Table 8, we should note two limitations in the analysis. First, the 1980 census summary tapes upon which the analysis is partly based do not include detailed age breakdowns by race for non-Native places of under 1,000 population. It only includes such data for villages of that size that were identified as Native under the terms of the Alaska Native Claims Settlement Act. While we would prefer to include all small places in our analysis, the group of places we can compare probably most closely correspond to most people's conception of rural Alaska. Second, the 1970 census age tabulations we used for the Native population include Asian and Pacific Islanders. This overstatement of the Native population is not significant in rural places.

Looking first at the percentage change in Native age cohorts in Native villages of 25-to-99 population in 1970, we observe that there are more Natives than we would expect with no migration in all but three of the four oldest age cohorts. Thus, there is evidence of an in-migration of a broad age range of Natives to small places. The in-migration was concentrated in the 15-19 and 30-34-year-old age cohorts. Note also

**Table 7**  
Changes in Native and Non-Native Population by Size of Place

Size of Place in 1970	1970 Native Population	1980 Native Population	Annual Percent Increase	1970 Non-Native Population	1980 Non-Native Population	Annual Percent Increase	1970 Percent Native	1980 Percent Native
<b>Rural</b>								
25 to 99	2,579	3,273	2.4%	1,369	2,143	4.6%	66%	60%
100 to 499	22,366	26,716	1.8	4,861	8,741	6.0	83	75
500 or larger	10,854	12,121	1.1	14,008	20,129	3.7	44	38
<b>Urban</b>	12,410	19,631	4.7	210,797	290,528	3.3	6	6

Source: U.S. Bureau of the Census.

that the in-migration of non-Natives to the smallest places during the seventies was heavily concentrated in the 30-to-34-age cohort. Together, these facts suggest a possible relationship between the expansion of secondary education opportunities to small villages with both Native and non-Native in-migration. We will present more evidence on this point later.

A much different Native migration pattern is evident for the 100 to 499 size class of villages during the seventies. It appears that the young family and elderly subpopulations experienced net out-migration. The migration pattern of non-Natives in this size class is similar to that for the smallest places, but more evenly spread across the young adult age cohorts.

The out-migration of Natives is most evident in rural Alaska's largest places. While many of the Native individuals and families leaving rural Alaska's regional centers apparently moved to urban Alaska, some of these people may have instead moved to rural Alaska's smallest places, perhaps returning with their children to villages in which they grew up.

In sum then, our analysis of migration trends in the seventies by age and race suggests that more Native families with children at or near high school age moved into than out of the state's smallest communities. This net in-migration trend was accompanied by a larger increase in young, non-Native adults. The in-migration trend of Native families with teenagers in places of 25 to 99 population at the

beginning of the decade is not apparent for larger rural communities. Rather, we see large percentage increases in the population of young, non-Native adults.

We can obviously not explain migration patterns in the state during the seventies as a general movement from smaller places to larger places. Rather, we see a reversed flow of Native families to Alaska's smallest places and counter flows of Natives and non-Natives in the two larger-size classes of communities. While urban Alaska continued to draw substantial numbers of Natives from rural Alaska, the major sources of rural out-migrants were the larger rural communities. Small rural places clearly became more attractive to Native residents in the seventies than they had been in the two previous decades.

#### Causes of Recent Migration Trends

Small places may have always held an attraction for Natives accustomed to basing much of their livelihood on the resources surrounding such communities. The addition of new or expanded public services (including high schools); amenities such as television, telephones, and housing; new employment opportunities; and increased disillusionment with urban life may have tipped the scales for significant numbers of Native families in favor of remaining in or returning to small villages.

While we have insufficient data to attempt a comprehensive explanation of shifting migration

Table 8

Estimated Net Migration Rates, 1970 to 1980, by Age, Race, and Size of Place  
[Percent Increase or (Decrease)]

Age in 1980	Native				Non-Native				
	25 to 99	Rural 100 to 499	500 or Larger	Urban	Age in 1980	25 to 99	Rural 100 to 499	500 or larger	Urban
10-14	70%	10	(7)	41	10-14	(3)%	(22)	(8)	9
15-19	65	(04)	(13)	32	15-19	(29)	(16)	(2)	(5)
20-24	19	(18)	(23)	39	20-24	35	240	66	45
25-29	38	(18)	(11)	45	25-29	270	708	149	100
30-34	63	14	8	34	30-34	1,050	218	100	24
35-39	18	8	(3)	22	35-39	56	53	29	21
40-44	6	6	(13)	15	40-44	36	54	22	3
45-49	17	3	(10)	6	45-49	113	44	15	(7)
50-54	(12)	(11)	(6)	7	50-54	116	54	1	(4)
55-59	27	3	(17)	23	55-59	(17)	35	(10)	(15)
60-64	(13)	2	(10)	20	60-64	(25)	6	(26)	(23)
65-69	(03)	8	(2)	18	65-69	(33)	(32)	(23)	(26)

Sources: U.S. Bureau of the Census and Alaska Vital Statistics.

Table 9

Changes in Rural Housing, by Size of Place:  
1970-1980

Size of Place in 1970	Percent Living in House Built in Last 5 Years		Percent Living in House Worth at Least	
	1970	1980	\$15,000 in 1970	\$50,000 in 1980
25-99	6%	29%	4%	25%
100-499	20	29	5	28
500 or larger	22	32	43	59

trends, we can present some limited information that at least suggests some of the major reasons for the increased attractiveness of small places to Alaska Natives. In 1970, only 3 out of every 50 houses located in places with 25 to 99 residents had been constructed in the last 5 years (see Table 9). By 1980, more than one in four houses were less than 6 years old. Only 4 percent of all rural households lived in housing valued at \$15,000 or more in 1970, while 25 percent lived in housing valued at \$50,000 or more in 1980.

Most striking, however, is the relationship between the existence of a village high school and in-migration. We calculated the average net in-migration for small communities, grouping them according to whether they had an operational high school program by 1980, whether a high school was under construction by 1980, or whether the community had declined to participate in the village high school program. The results are displayed in Table 10.

Virtually all communities in the 100-to-499 range and even most of those in the 25-to-99 range were listed in a consent decree signed to by state to provide high school programs in rural Alaska. The average small village in which a high school was under construction by 1980 added 9 people to its popula-

tion from in-migration. If a village already had an operational high school program by 1980, however, the average net in-migration jumped to 27. The relationship between high schools and migration is also evident in the next larger size class of communities. The presence of a high school in 1980 was associated with an average net in-migration of 40, while villages in which a high school was only planned or under construction by 1980 had an average net out-migration of 5. While more data and analyses are required to establish the relative importance of the myriad of possible causes for increasing numbers of Native families choosing to live in Alaska's smallest places, the village high school program must have played an important role.

## Future Migration Patterns

In 1976, in a report to the Federal-State Land Use Planning Commission for Alaska, entitled "The Evolving Pattern of Village Alaska," William Alonso and Edgar Rust analyzed population trends in northern and western Alaska. They concluded:

The process of village consolidation can be expected to continue, for much the same reasons that propelled it historically. Government policy in almost every field now underwrites this trend by withholding services from the smallest places. In short, we expect a general redistribution of population from the smallest villages—under 100, for example—to ones now in the 300 to 500 range, and to the regional centers. In the smallest size class, many villages can be expected to be abandoned in the next decades.

Our analysis of rural population trends in the fifties and, to a lesser extent, the sixties would lead to a similar conclusion if these trends were assumed to continue. We found that rural Alaska's smallest places indeed experienced net out-migration. In the fifties, 36 of the 102 places beginning the decade with populations of 25 to 99 either were abandoned or fell

Table 10

## Average Net Migration by High School Status, by Size of Place

Size of Place in 1970	High School in Operation by 1980	Average Net Migration		All Communities
		High School under Construction or Planned by 1980	Village Declined High School	
25-99	27	9	1	14
100-499	40	-5	-59	14
No. of Communities:	67	64	12	143

below 25 population. In the sixties, 7 of the 65 places in the smallest size class met the same fate. While we found that even the population living in the largest rural places also experienced net out-migration in the fifties, key regional centers like Kotzebue and Bethel experienced net in-migration. In the sixties, the largest size class of communities tended to grow at or above the probable rate of natural increase.

We also observed a continuing redistribution of the rural Native population to urban Alaska. While only 16 percent of the Native population lived in urban Alaska (as we defined it) in 1960, 31 percent lived in urban Alaska in 1980. We estimated that the net flows of rural, primarily Native, residents to urban Alaska was between 7,000 and 11,000 in the fifties, 3,500 in the sixties, and 4,300 in the seventies.

Taken alone, these results lend support to Alonso and Rust's prediction that village consolidation and a general movement to urban Alaska will continue. However, Alonso and Rust could not have foreseen the magnitude of state spending in rural Alaska in the last ten years. Contrary to Alonso and Rust's expectations, small rural communities did receive expanded services. They may have also underestimated the effects of the Alaska Native Claims Settlement Act, and the underlying desire of many Native families to live in small communities. Armed with more recent census data, we found that rural Alaska's smallest places tended to experience a net in-migration of Native families in the seventies.

We also observed a substantial flow of non-Natives into rural Alaska during the sixties and seventies. We estimated this flow at 3,300 in the sixties and 8,000 in the seventies. The combined flow of Natives and non-Natives resulted in 62 percent of all small places in rural Alaska experiencing net in-migration and 81 percent of all small rural places experiencing an absolute increase in population over the decade. During the 70s, at least, the predicted pattern of village consolidation did not materialize. In fact, the number of small places increased from 70 in 1970 to 94 in 1980.

If the trends in the seventies were to continue, we would expect a persistent net flow of Natives from larger rural places to urban Alaska and, to a lesser extent, to smaller rural places. Thus, small villages might continue to maintain or even increase their populations at the same time that urban Alaska

expands its share of the Alaska Native population. Increasingly, the population of rural Alaska as a whole would become a mixture of Native and non-Native residents.

Faced with declining oil revenues and federal budget cuts, however, we cannot assume that the forces behind migration patterns in the seventies will continue. The question is, will the trend of village consolidation so evident in the fifties reassert itself? In large part, we think that the answer will depend on the state's allocation of its reduced revenues. If small communities are increasingly faced with the necessity of paying for the operation and maintenance of local services, the quality of services may seriously decline and lead to renewed out-migration. Even if existing services are maintained in Alaska's smallest communities, however, residents are still likely to face declines in job opportunities as the pace of construction activity slows. They may decide that their economic circumstances are nevertheless better where they are than they would be in urban centers where job competition is greatest and where subsistence activities are more difficult. On the other hand, expanded personal income demands associated with new housing and changing expectations may cause many to seek temporary employment outside their village or to move their families to urban Alaska.

An alternative solution would be to develop local employment opportunities with private industry. No doubt this will prove possible in some rural areas of the state. In the long run, however, it may well be necessary for the state and its residents to consider the costs and benefits of small-community living and to construct components of an overall state policy toward rural settlement.

At one extreme, it makes little sense to slow a historical rural-to-urban migration if such a policy increases the public cost of providing services. At the other extreme, withdrawing public services only recently put in place could severely wrench the lives of residents who made living choices partly on the basis of these services. In between, one can imagine a more satisfactory policy which continues to provide some level of basic services but which encourages those who want the equivalent of urban services in rural communities to lower their expectations or move to urban Alaska.

## APPENDIX

## ISER Village Data File

Name	1950 Popu- lation	1960 Popu- lation	1970 Popu- lation	1980 Popu- lation	70-80 Net Migration	1970 Native Population	1980 Native Population
Akhiok	72	84	115	105	-31	113	101
Akiachak	179	229	312	438	51	300	398
Akiak	168	187	171	198	-2	169	191
Akolmiut	236	571	526	641	115	505	620
Akulurak	197						
Akutan	86	107	101	169	66	90	67
Alakanuk	140	278	265	522	150	247	491
Aleknagik	153	181	128	154	4	97	138
Allakaket (Alatna)	79	115	174	163	-39	168	158
Ambler		70	169	192	-21	159	155
Anaktuvuk Pass	66	35	99	203	75	97	191
Anderson			362	517	102	6	16
Angoon	429	395	400	465	0	377	412
Aniak	142	308	205	341	85	170	218
Annette	302	337	195	139	-115	19	54
Anvik	99	120	83	114	14	75	91
Arctic Village	53	110	85	111	4	82	98
Atka	85	119	88	93	-1	86	90
Atkasook				107		0	99
Atmautluak				219		0	206
Barrow	951	1314	2104	2267	-213	1905	1720
Beaver	101	101	101	66	-41	86	65
Belkofski	119	57	59				
Bessie No. 5	54						
Bethel	651	1258	2416	3576	451	1853	2417
Big Delta	155		250	285	23	0	6
Birch Creek		40		32		0	31
Boswell Bay		32					
Brevig Mission	109	77	123	138	-8	118	138
Buckland (Elephant Pt.)	108	87	104	177	42	103	161
Candle	105	103					
Chaneliak	100						
Cantwell	67	85	62	89	20	40	28
Cape Pole		92	123	29	-102	15	0
Central	41	28	26	36	1	0	1
Chalkyitsik		57	130	100	-48	123	96
Cheeching	54						
Chefornak	106	133	146	230	33	141	221
Chenega	91						
Cheneliak		93					
Chevak	230	315	387	466	-5	376	445
Chicken	34			37		0	1
Chiftak	50						
Chignik	253	99	83	178	83	67	95
Chignik Lagoon		108	45	48	-14	0	41
Chignik Lake		107	117	138	6	115	123
Chistochina	31	28	33	55	19	17	27
Chitina	92	31	38	42	-1	6	20
Chowhoolik	98						
Chuathbaluk			94	105	2	90	93
Chuktaktoolik	59						
Circle	83	41	54	81	13	32	60
Clark's Point	128	138	95	79	-25	66	70
Coffman Cove				193		0	0
Cold Bay		86	256	228	-49	26	10
Copper Center	90	151	206	213	-81	92	85

## ISER Village Data File

Name	1950 Popu- lation	1960 Popu- lation	1970 Popu- lation	1980 Popu- lation	70-80 Net Migration	1970 Native Population	1980 Native Population
Cordova	1165	1128	1164	1879	510	162	286
Council	41						
Craig	374	273	272	527	211	153	170
Crooken Creek	43	92	59	108	45	55	91
Deadhorse			163	64	-99	0	9
Deering	174	95	85	150	48	83	138
Delta Junction			703	945	-79	7	27
Dillingham	577	424	914	1563	482	582	891
Diomedea	103	88	84	139	46	82	136
Dot Lake		56	42	67	12	29	38
Dunbar				50		0	8
Eagle	55	92	90	110	3	4	7
Eek	141	200	186	228	19	167	220
Egegik	119	150	148	75	-72	74	57
Ekuk		40	51				
Ekwok	131	106	103	77	-40	94	71
Ellamar	46						
Elfin Cove	65		49	28	-14	2	2
Elim	154	145	174	211	-3	168	203
Emmonak	67	358	439	567	16	421	517
Evansville	47	77	57	94	24	14	27
Eyak				47		0	1
False Pass	42	41	62	70	10	58	60
Flat	95	27					
Fort Yukon	446	701	448	619	68	376	442
Fortuna Ledge (Marshall)	95	166	175	262	28	169	246
Gakona	50	33	88	87	-48	23	14
Galena	176	261	302	515	148	265	350
Gambell	309	358	372	445	18	356	425
Glennallen	142	169	363	511	25	37	39
Golovin	94	59	117	87	-37	111	85
Goodnews Bay (Mumtrak)	100	154	218	168	-58	210	161
Grayling			139	209	41	0	129
Gulkana	65	32	53	104	47	52	43
Gustavus	82	107	64	98	22	4	2
Haines	338	392	1504	1680	-2	230	214
Healy	102	67	79	334	211	10	16
Healy Lake	102			33		0	29
Holikachuk	98	122					
Holy Cross	157	256	199	241	4	192	221
Hoonah	563	686	748	680	-189	534	543
Hooper Bay	307	460	490	627	8	477	598
Hughes	49	69	85	73	-20	73	71
Huslia	65	168	159	188	-11	151	178
Hydaburg	353	251	214	298	51	189	253
Hyder	30	32	49	77	29	0	1
Igiugig			36	33	-5	34	25
Igloo	64						
Ikatan	29						
Iliamna	44	47	58	94	13	23	38
Ivanof Bay			48	40	-15	46	37
Kaguyak		36	59				
Kake	376	455	448	555	27	401	467
Kakhonak	39	57					
Kaktovik		120	123	165	31	107	148
Kaltag	121	165	206	247	6	193	236
Karluk	144	129	98	96	-21	95	96
Kasaan	47	36	30	25	-4	8	14



Name	ISER Village Data File						
	1950 Popu- lation	1960 Popu- lation	1970 Popu- lation	1980 Popu- lation	70-80 Net Migration	1970 Native Population	1980 Native Population
Kiana	181	253	278	345	-4	268	325
King Cove	162	290	342	460	53	305	367
King Island		49					
King Salmon		227	202	545	301	12	32
Kipnuk	185	221	325	371	-30	320	358
Kivalina	117	142	188	241	12	183	237
Kokrines	68						
Klawock	404	251	213	318	84	195	210
Klukwan	91	112	103	135	21	92	113
Kobuk	38	54	165	62	-120	160	59
Kodiak	1710	2628	3798	4756	-296	563	666
Kokhanok	39	57	88	83	-20	0	80
Koliganek	90	100	142	117	-43	134	112
Kongiganak			190	239	8	183	231
Kotlik	44	57	228	293	20	224	280
Kotzebue	623	1290	1696	2054	-92	1337	1574
Koyuk	134	129	122	188	39	121	180
Koyukuk	79	128	124	98	-41	121	91
Kupreanof			36	47	11	2	2
Kwethluk	242	325	408	454	-26	390	441
Kwigillingok	245	344	148	354	173	145	343
Larsen Bay	53	72	109	168	41	91	120
Levelock	76	88	74	79	-12	50	69
Lime Village (Hungry)	29		25	48	18	25	39
Lower Kalskag	88	122	183	246	26	177	237
Lower Tonsina				40		0	21
Manley Hot Springs	29	72	34	61	17	11	12
Manokotak	120	149	214	294	40	205	273
McGrath	175	241	279	355	26	110	165
McKinley Park	59	28	28	32	-13	0	1
Medfra	25						
Mekoryuk	156	242	249	160	-117	234	153
Mentasta Lake		40	68	59	-23	64	55
Metlakatla	817	798	1050	1056	-185	847	904
Meyers Chuck	51		37	50	14	2	0
Minto	152	161	168	153	-42	159	141
Mountain Village	221	300	419	583	29	394	539
Naknek	174	249	178	318	92	38	161
Nanvarnarluk	116						
Napainmuit	44						
Napakiak	139	190	259	262	-37	255	254
Napaskiak	121	154	259	244	-62	255	239
Nelson Lagoon			43	59	15	39	55
Nenana	242	286	362	470	57	142	214
New Hamilton	27						
New Knock Hock	122						
New Stuyahok	88	145	216	331	53	208	311
Newtok (Chiftak)	69	129	114	131	-12	111	124
Newhalen	48	63	88	87	-13	83	82
Nightmute	27	237	127	119	-33	122	116
Nilikluguk	40						
Nikolai	88	85	112	91	-36	101	82
Nikolski	64	92	57	50	-11	52	48
Noatak	326	275	293	273	-49	286	259
Nome	1876	2316	2488	2301	-576	1517	1347
Nondalton	103	205	184	173	-48	182	161
Noorvik	248	384	462	492	-48	443	467
North Whale Pass				90		0	0

Name	ISER Village Data File						
	1950 Popu- lation	1960 Popu- lation	1970 Popu- lation	1980 Popu- lation	70-80 Net Migration	1970 Native Population	1980 Native Population
Northway		196	152	73	-119	10	10
Nuiqsut				208		0	181
Nulato	176	283	308	350	7	297	329
Nunachuk	44						
Nyak	64						
Ohagamiut	27						
Old Harbor	121	193	290	340	-7	269	315
Ophir	68						
Oscarville	27	51	41	56	5	38	56
Ouzinkie	177	214	160	173	-14	143	163
Paingakmeut	44						
Pauloff Village	68	77	39				
Paxson			24	30	0	0	1
Pedro Bay	44	53	65	33	-43	51	31
Pelican	180	135	133	180	25	27	33
Perkinsville				33		0	13
Perryville		111	94	111	-6	90	103
Petersburg	1619	1502	2042	2821	473	242	312
Pile Bay	48						
Pilot Point	67	61	68	66	-7	58	57
Pilot Station	52	219	290	325	-46	287	306
Pitkas Point	84	28	70	88	0	67	82
Platinum	72	43	55	55	-5	48	44
Point Baker	81		19	90	73	0	5
Point Hope	264	324	386	464	6	369	434
Point Lay	75			68		0	63
Port Alexander	22	18	36	86	41	0	5
Port Clarence				29		0	0
Port Heiden		74	66	92	20	58	59
Port Lions (Afognak)	158	190	227	215	-36	177	158
Port Moller	33						
Portage Creek				48		0	44
Prudhoe Bay			49	50	1	0	2
Quinhagak	194	228	340	412	-13	332	402
Rampart	94	49	36	50	13	21	47
Red Devil		152	81	39	-50	14	18
Ruby	132	179	145	197	29	134	171
Russian Mission	55	102	146	169	-34	138	159
Sand Point	107	254	360	625	185	260	357
Savoonga	249	299	364	491	58	354	463
Scammon Bay	103	115	166	250	36	166	241
Selawik	273	348	429	535	3	418	352
Shageluk	100	155	167	131	-50	158	120
Shaktolik	127	187	151	164	-21	144	159
Sheldon Point	43	125	125	103	-41	121	98
Shishmaref	194	217	267	394	53	249	369
Shungnak	141	135	165	202	0	54	179
Skagway	758	659	675	768	-19	40	35
Slana				49		0	8
Sleetmute	120	122	109	107	-15	95	95
Soloman	93						
South Naknek		142	154	145	-19	85	124
Squaw Harbor	45			65			
St. George	187	264	163	158	-25	155	153
St. Mary's		225	384	382	-72	350	336
St. Michael	157	205	207	239	-41	192	227
St. Paul	359	378	450	551	26	428	483
Stebbins	115	158	231	331	2	223	316

Name	ISER Village Data File						
	1950 Popu- lation	1960 Popu- lation	1970 Popu- lation	1980 Popu- lation	70-80 Net Migration	1970 Native Population	1980 Native Population
Stevens Village	84	102	74	96	14	72	61
Stony River			74	62	-22	61	56
Suntrana	130	81	67	56	-11	11	6
Takotna	42	40	40	48	4	0	25
Takshak	39						
Tanacross	137	102	84	117	19	77	101
Tanana	228	349	120	388	190	7	307
Tatitlek	89	96	111	68	-51	107	53
Tazlina				31		0	4
Telida				33		0	32
Teller	160	217	220	212	-30	192	196
Tenakee Springs	140	109	86	138	71	6	7
Tetlin	73	122	114	107	-23	108	104
Thorne Bay			443	320	-166	7	9
Tikikluk	49						
Togiak	108	220	383	470	12	377	443
Tok	104	129	214	589	293	26	90
Toksook Bay			257	333	5	251	312
Tonsina				135		0	26
Tuklung	30						
Tuluksak	116	137	195	236	-2	190	228
Tuntutuliak	68	144	158	216	16	154	209
Tununak	112	183	274	298	-23	270	283
Twin Hills			67	70	-4	66	67
Ugashik	48	36					
Umkamute	99						
Unalakleet	469	574	434	623	125	403	546
Unalaska	173	218	178	1322	1119	113	200
Unga	107	43					
Upper Kalskag (Kalskag)	139	147	122	129	-8	106	108
Usibelli Mine	28	30	65	53	-39	0	2
Valdez	554	555	1005	3079	1744	150	175
Venetie	81	107	112	132	-7	108	129
Wainwright	227	253	315	405	31	307	372
Wales	141	128	131	133	-11	121	122
White Mountain	129	151	87	125	23	84	116
Whittier	627	809	130	198	47	5	17
Wrangell	1263	1315	2029	2184	-178	380	390
Yakutat	298	230	190	449	183	156	279

## INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH

The University of Alaska's Institute of Social and Economic Research (ISER) studies the population and economy of Alaska to help public and private agencies and individuals better understand social and economic change in Alaska and enable them to make more informed decisions about Alaska's future.

Alaska's size, geographic isolation, resource-based economy, small population, young political institutions, urban-rural differences, and other characteristics make it unique among the states, but similar to other northern regions. For that reason, ISER examines not only those issues unique to Alaska but those relevant to other northern areas as well. ISER research provides specific information needed by policymakers and others as well as broad-based knowledge of Alaska's social, economic, and political processes.

As part of the University of Alaska, Anchorage, ISER shares that institution's mission of serving the higher educational needs of the state's largest population, business, and government center. ISER's faculty and staff produce and disseminate knowledge about Alaska by carrying out a wide variety of research projects, by teaching, by involving students in research, and through many public service activities.

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