



# Research Summary

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## Can We Count on the Census?

The 1990 federal census in Alaska may have missed about two percent of Alaskans, but on the whole it is accurate and is much better than the 1980 census.

These are among the findings of a recent ISER report prepared for the Alaska State Reapportionment Board, which uses census figures as a basis for re-drawing election districts. Thousands of other government agencies and private organizations throughout the United States also rely on the census, so its accuracy is crucial.

Below we summarize ISER's findings about the 1990 census in Alaska, based on interviews with the census bureau's district staff in Anchorage and with field workers.

### Findings

*In Alaska there was no substantial undercount of people or housing in 1990. But census takers likely missed about 2 percent of the population, largely because they were unable to reach some houses and because they sometimes had to rely on second-hand information.*

*Housing most likely to be missed was not in the most remote parts of Alaska, but rather in outlying areas of more populated regions.*

Field workers told ISER that inadequate transportation probably kept them from counting some but not many isolated houses in southeast Alaska and in parts of the Mat-Su Borough in particular.

*Census takers sometimes had to rely on second-hand information, because Alaskans move around a lot and are frequently away from home.*

Census takers counted houses and people over a period of several weeks in 1990. After six unsuccessful attempts to reach the occupants of a given house, census workers could turn to neighbors for information. Of course

such second-hand information is less accurate, and likely meant some Alaskans weren't counted. Census workers relied on second-hand information for an estimated 4 percent of occupied housing units.

*Inadequate and inaccurate maps proved the biggest headache to Alaska census takers.*

Poor information about roads was a particular short-coming of census maps—except in Anchorage, where census workers rated the maps as good. Some census maps were outdated by as much as 20 years, and in many of the more remote areas of the state, census workers had to rely partly on hand-drawn maps. But while poor maps were a nuisance and added expense to the census, most census workers ISER interviewed said they didn't significantly reduce the accuracy of the census.

*Census takers in Anchorage and Fairbanks had much more work than anticipated, because barely half the households in Anchorage and Fairbanks mailed in their census forms—the lowest rate in the country.*

The census bureau assumed that census workers would have to visit relatively few households in Anchorage and Fairbanks. But because tens of thousands of households failed to mail in their forms, census workers had to visit many more households than anticipated. Still, census workers told ISER that the additional work slowed the census and made it more expensive but did not make it substantially less accurate.

*Counts of vacant housing units in villages may have included some structures that in fact aren't suitable for habitation.*

In bush Alaska, shortages of affordable housing sometimes force people to live in refrigeration containers and other unlikely places. Census workers had to judge whether unoccupied buildings were adequate for people

to live in, and in some but not many cases may have counted structures that in fact aren't suitable for habitation.

*Census employment information may not be directly comparable for different regions of Alaska, because it was not collected at the same time.*

The census long form asked people to supply information about their employment "last week." Census enumeration was staggered over a period of several weeks in urban areas and 14 weeks in remote areas. So Alaskans in different communities may have answered employment questions as early as February or as late as May. Employment conditions might have changed over the course of the enumeration.

*Census information on net income among commercial fishermen is likely to be substantially overstated.*

Self-employed persons like commercial fishermen were asked to report their net incomes (income after expenses are deducted). But census workers told ISER that many commercial fishermen apparently reported their gross incomes, without netting out expenses.

*Overall census procedures in 1990 were much better than in 1980. Improvements included use of experienced supervisors rather than political appointees; better pay and training for field workers; and the addition of traveling team leaders to work with local enumerators in bush Alaska.*

The 1990 census got off to a better start because the regional census bureau office overseeing operations in Alaska prepared and got advance approval at the Washington level for a budget recognizing transportation and other special costs inherent in counting people and houses in the huge but sparsely populated state of Alaska.

Another major improvement was that the top three census workers in Alaska during the 1990 census were permanent census bureau employees with years of experience. By contrast, in 1980 the top census jobs in Alaska went to political appointees. In 1990 the census bureau again received instructions to fill the top census jobs with political referrals—but those instructions didn't come until the jobs in the Anchorage district office had already been filled with experienced workers.

And traveling team leaders were added in remote areas in 1990; those team leaders significantly improved the census in remote villages by helping local enumerators and hiring new workers when needed. Finally, better pay and training for field workers meant less turnover and better understanding of sampling techniques in 1990.

## **Recommendations for 2000**

Even though the 1990 census procedures were much better than those used ten years earlier, there were problems. ISER's recommendations for improving the census in 2000 are:

*Retain both team leaders and local enumerators for the census in remote areas.*

*Produce and maintain accurate maps, through a combination of federal, state, and local efforts.*

*Use professional staff from the census bureau rather than political appointees to fill top census positions in Alaska.*

*Continue sampling one in two households in Alaska Native villages and other communities with populations below 2,500, to maintain reliability of the data.*

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