

Census data covers broad range of topics in detail at various geographic levels

Users of census data will be happy to know that the long-awaited Census 2000 Summary File 3 (SF3) has been released by the U.S. Census Bureau.

Because of its broad range of topics and geographical coverage, SF3 is sought by decennial census users for a wide variety of applications. The detailed social, economic, and housing characteristics serve as benchmarks for state and local planners. The income and poverty data support grant proposals, while government agencies, non-profits, and businesses use the data to identify small geographic areas of low-income people where services such as child care centers, emergency shelters, and health programs for the elderly may be needed. The journey-to-work data is used to identify commuting patterns. Education and training planners access educational attainment data by sex and age to establish community profiles in order to design adult literacy, and vocational and training programs.

Knowing what exactly is contained in SF3 requires a careful study of the many tables. Three different data sets will be presented in this article to introduce some of the variety available in the file. But first, exactly what is SF3 and how does it compare to past census releases?

SF3 is based on sample data

In 2000, as in past censuses, both short and long form questionnaires were used.

Questions on the short form are referred to as “100 percent” questions because they were asked of the entire population. Census products based on 100 percent data were released in 2001 as Redistricting Summary File (Public Law 94-171), Summary File 1 (SF1), Summary File 2 (SF2), and as one-page Demographic Profiles.

Sample data, the backbone of SF3, was collected from the one in five Alaska households asked to

Percent Difference in Population Totals 1 100 percent data vs. sample data

Size of Place	Alaska Places	Percent Difference							Avg. Diff	Avg. % Diff
		0 to .9	1 to 4.9	5 to 9.9	10 to 24.9	25 to 49.9	50 to 99.9	100 and over		
Places less than 500	239	22	46	60	74	19	15	3	15	15.2
Places 501–2499	77	21	39	14	3	.	.	.	27	2.6
Places 2500–9999	27	20	7	.	.	.	.	.	36	0.5
Places 10,000 or more	4	4	.	.	.	.	.	.	21	0.0

For a list of places where the difference between the 100 percent data and sample data is 25 percent or more, visit the R&A website, click on Census Information/Comparison of 100% vs. Sample Population Totals.

Source: U.S. Census Bureau, 2000 Census of Population & Housing, Summary File 3
Produced by: Alaska Department of Labor and Workforce Development, Research and Analysis Section

complete the long form questionnaire. (In some census tracts the ratio was one in eight, and in rural Alaska as many as one in two households.) This data is called sample data because it was collected from a sample of the population. The long form asked the same questions as the short form plus additional questions about topics such as education, employment, income, ancestry, and homeowner costs.

Demographic Profiles containing some sample data were released in May 2002. The full release of SF3 provides a wider variety of information for a larger geographical set. It is important to note that due to sample weighting, there may be some differences between the population counts shown in the 100 percent SF1 and SF2 and the totals shown in the sample based SF3. For example, SF1 lists the total population of Fairbanks city at 30,224 and Haines city at 1,811, while SF3 has them at 30,259 and 1,794 respectively. (See Exhibit 1 for a comparison of differences in 100 percent and sample data population totals for the state's places.)

Differences between the two censuses

Making comparisons over time has become an important function of a decennial census. Comparisons, however, are not always easy. Topics of interest, data collection methods, sampling procedures, and even boundaries within the state change from one census to the next. So, while many of the types of sample data collected remain the same from 1990 to 2000, there are also differences.

Some information never before collected in a decennial census found its way into Census 2000. For example, data on nativity by language, ability to speak English, grandparents as caregivers, and age by ratio of income to poverty were gathered for the first time.

Another difference is that some long form questions were designed to gather more information and others to collect greater detail than in the past. Examples of new features in 2000 include:

- respondents had the option of self-selecting one or more races.
- ancestry categories increased from 36 in 1990 to 109 in 2000.
- instead of the seven levels of educational attainment available at the block group level in 1990, 2000 offers 17.
- SF3 offers detailed disability data by race that was not included in 1990.

Another change is that certain questions found on the short form in 1990 were moved to the long form in 2000. In 1990, marital status and some housing detail questions, including value of home and number of rooms in a housing unit, were asked on the 100 percent questionnaire. In 2000, these were collected only from the sample population. Sample data is inherently less accurate than 100 percent data, so care should be taken when comparing 1990 with 2000.

2 Grandparents as Caregivers for Grandchildren Census 2002

	U.S.		Alaska	
	Persons	Percent	Persons	Percent
Total Population over 30 years of age	158,881,037		326,384	
Living with own grandchildren under 18 years of age	5,771,671	100%	10,423	100%
Grandparent responsible for own grandchildren under age 18	2,426,730	42.0%	5,419	52.0%
<i>Length of time</i>				
Less than 6 months	293,045	12.1%	737	13.6%
6 to 11 months	262,623	10.8%	641	11.8%
1 or 2 years	563,403	23.2%	1,290	23.8%
3 or 4 years	374,251	15.4%	664	12.3%
5 years or more	933,408	38.5%	2,087	38.5%

Source: U.S. Census Bureau, 2000 Census of Population & Housing, Summary File 3
Produced by: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Some population and housing questions included in the 1990 census were not included at all in 2000. Population questions about fertility and year last worked were dropped. Housing questions related to source of water, sewage disposal, and condominium status were also discontinued.

The form of release for some sample data also changed. In 1990, country of birth information was included in a separate data release. In 2000, it was moved to SF3.

Has Alaska's geography changed?

Not really, but the boundaries of some boroughs and census areas did change during the decade; two new boroughs incorporated; and that is enough to complicate comparisons of 1990 and 2000 data for some areas.

The Denali Borough was incorporated in 1990, but not until after the 1990 Census was completed. Prior to this, the area was included in Yukon-Koyukuk Census Area. By 2000, although the Yukon-Koyukuk Census Area retained the same name, with Denali gone its geography was significantly different, making direct comparisons between 1990 and 2000 information difficult.

A similar situation occurs in the Skagway-Yakutat-Angoon Census Area, which included Yakutat until 1992, when Yakutat formed its own borough. The remaining area reorganized to form Skagway-Hoonah-Angoon Census Area. There are no 1990 Yakutat Borough data to compare with 2000, and conversely, no 2000 Skagway-Yakutat-Angoon data to compare with 1990.

Examples of SF3 information

SF3 has more than 800 tables of data. This extensive quantity of information offers a variety of opportunities for study and analysis. Following are three examples of the types of information included in SF3.

Grandparents as caregivers

For the first time, Census 2000 collected data on grandparents as primary caregivers for their grandchildren. Information was collected on

whether a grandchild lived in the household, whether the grandparent had responsibility for the basic needs of the grandchild, and the duration of that responsibility. Because very few people under 30 years of age are grandparents, this data was shown only for those over 30.

Fifty-two percent of Alaska's grandparents who live with their grandchildren are also the primary caregivers. (See Exhibit 2.) Nationally, this number is 42 percent. Alaska more closely mirrors the national numbers though, when one looks at substate data for the more densely populated areas. Five of the most populous areas of the state are below the state average. Kenai is the lowest at 44.4 percent, followed by Anchorage at 44.7,

Civilian Veterans 3 Census 2000 Persons age 18 and over

	Population	Veterans	Percent Veterans
Southeast Fairbanks	3,963	815	20.6%
Denali	1,324	271	20.5%
Fairbanks North Star	51,743	10,468	20.2%
Matanuska-Susitna	39,854	7,741	19.4%
Haines	1,773	340	19.2%
Bristol Bay	865	161	18.6%
Valdez-Cordova	7,060	1,251	17.7%
Anchorage	176,148	30,920	17.6%
Ketchikan Gateway	9,922	1,705	17.2%
Kenai Peninsula	34,684	5,941	17.1%
Alaska	419,320	71,552	17.1%
Wrangell-Petersburg	4,695	773	16.5%
Yakutat	586	95	16.2%
Kodiak Island	8,591	1,367	15.9%
Prince of Wales-Outer Ketchikan	4,248	653	15.4%
Sitka	6,251	931	14.9%
Skagway-Hoonah-Angoon	2,507	362	14.4%
Yukon-Koyukuk	4,247	609	14.3%
Nome	5,765	781	13.5%
Northwest Arctic	4,224	564	13.4%
Lake and Peninsula	1,131	144	12.7%
United States	208,130,352	26,403,703	12.7%
Juneau	22,096	2,749	12.4%
Bethel	9,586	1,140	11.9%
Aleutians West	4,468	502	11.2%
Dillingham	3,015	306	10.1%
North Slope	4,561	438	9.6%
Aleutians East	2,264	210	9.3%
Wade Hampton	3,749	315	8.4%

Source: U.S. Census Bureau, 2000 Census of Population & Housing, Summary File 3
Produced by: Alaska Department of Labor and Workforce Development, Research and Analysis

Mat-Su at 45.4, Juneau at 47.7, and Fairbanks at 51.3 percent.

The length of time Alaska's grandparents found themselves in the primary caregiver role also paralleled national numbers fairly closely. About 12 percent of grandparents in the U.S. and 13.6 percent in Alaska were in that role for less than six months. At the other end of the time spectrum, 38.5 percent in both the state and nation cared for their grandchildren for five years or more.

Alaska has nation's highest percentage of civilian veterans

Several Census 2000 long form questions pertained to veteran status.

Service members who served in Alaska and stayed after retirement or returned after their discharge comprise most of the state's veterans. At 17.1 percent, Alaska has the nation's highest percentage of civilian veterans to civilian population age 18 and over. The national average is 12.7 percent.

A high percentage of the state's veterans are Vietnam era veterans who came to the state after their service. Individuals who served solely during

the Vietnam era account for 36.5 percent of the state's veterans. Alaska leads all other states in this category; the national average is 28.8 percent.

Within Alaska, Southeast Fairbanks Census Area, Denali Borough, and Fairbanks North Star Borough led in this category with more than 20 percent civilian veterans. Wade Hampton Census Area and the Aleutians East and North Slope Boroughs trailed with less than 10 percent. (See Exhibit 3.) Exhibit 4 depicts veteran distribution statewide.

Gas and oil are main heating sources

An important feature of decennial census data is that they allow historic comparisons. The long forms for both the 1990 and 2000 censuses include a question about house heating fuel. The question asks which fuel was used "most" for heating the housing unit.

Utility gas led all fuel types in both years with 42.8 percent in 1990 and 45.9 percent in 2000. (See Exhibit 5.) Combustible liquid fuels such as fuel oil, kerosene, and alcohol followed with 32.3 percent in 1990 and 35.8 percent in 2000. Combined with bottled, tank, or LP gas, the three liquid and gas fuels supplied heating to almost 77

4 Veterans By borough or census area



Source: U.S. Census Bureau, 2000 Census of Population & Housing, Summary File 3
Produced by: Alaska Department of Labor and Workforce Development, Research and Analysis

percent of Alaska's housing units in 1990 and almost 84 percent in 2000.

Utility gas was the leading source of heat in Anchorage, Kenai, Mat-Su and the North Slope, while combustible liquid fuels led in all other boroughs and census areas. Anchorage, Kenai, and Mat-Su get their gas from Cook Inlet. Almost all of North Slope's utility gas use is in Barrow, which is supplied from nearby gas fields. Population growth in Anchorage, Kenai, and Mat-Su and the extension of existing gas lines in those areas account for much of the gas use growth since 1990.

Only 371 more units used electricity as a main fuel source in 2000 than in 1990. This is an increase of only 1.7 percent for the decade. The low growth rate is most likely due to electricity's high cost compared to gas and oil.

Wood as the primary source of heat declined in every borough and census area between 1990 and 2000. In 1990, over 14,500, or 7.7 percent of total housing units in the state, used wood as the primary heating source. By 2000, this had declined to just over 8,200, or 3.7 percent of total occupied housing units. Wood is likely a secondary source of heat in some houses, but no questions captured this data on either census. Relatively inexpensive gas or oil alternatives, changing stove emission and pollution standards, and an aging population unwilling or unable to do the hard work associated with gathering and burning wood as fuel are probable reasons contributing to the decline of wood burning as a main source of heat.

The Yukon-Koyukuk Census Area, however, was an exception to this trend, with 42.0 percent of its housing units using mostly wood. This area trailed all boroughs and census areas in median household income in 1999; its residents may assign other priorities for their available cash. Another factor is that many of Yukon-Koyukuk's populated areas have a ready supply of wood nearby.

How to find SF3 data

SF3 covers a broad range of topics and provides extensive, detailed census information.

The entire body of sample data is available on the U.S. Census Bureau's web site. AKDOL's web site offers an easy to use interactive database of selected tables. The tables chosen are based on types of information most requested from the department in the past.

To access the information on AKDOL's website, or to read the four-page Demographic Profiles, click on Census Information at the Research and Analysis homepage at <http://almis.labor.state.ak.us/>

Access the U.S. Census Bureau's SF3 files and the extensive collection of other census data at <http://www.census.gov/>. Find summary file and other information by clicking on American Factfinder.

For assistance with either of these sites or other census related questions, contact CGIN at (907) 465-2439, or e-mail Census@labor.state.ak.us

View the Census 2000 questionnaires at:

Short Form - <http://www.census.gov/dmd/www/pdf/d61a.pdf>

Long Form - <http://www.census.gov/dmd/www/pdf/d02p.pdf>

House Heating Fuel in Alaska 5 Census 1990 and 2000

	1990		2000		1990-2000 Change	
		Percent		Percent		Percent
Total Occupied Housing Units	188,915		221,600		32,685	17.3%
Gas and liquid fuels	145,338	76.9%	186,005	83.9%	40,667	28.0%
Utility gas	80,775	42.8%	101,703	45.9%	20,928	25.9%
Fuel oil, kerosene, etc.	60,926	32.3%	79,429	35.8%	18,503	30.4%
Bottled, tank, or LP gas	3,637	1.9%	4,873	2.2%	1,236	34.0%
Electricity	22,326	11.8%	22,697	10.2%	371	1.7%
Wood	14,570	7.7%	8,202	3.7%	-6,368	-43.7%
Coal or coke	3,198	1.7%	1,090	0.5%	-2,108	-65.9%
Solar energy	56	0.0%	44	0.0%	-12	-21.4%
Other fuel	2,533	1.3%	2,416	1.1%	-117	-4.6%
No fuel used	894	0.5%	1,146	0.5%	252	28.2%

Source: U.S. Census Bureau, 2000 Census of Population & Housing, Summary File 3
Produced by: Alaska Department of Labor and Workforce Development, Research and Analysis