Occupations: 2000

Census 2000 Brief

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By

and

"What do you do for a living?" is a question frequently asked in contexts ranging from social conversation to scientific research. A person's occupation has often been a defining characteristic, so much so that many of today's surnames reflect the occupation of a long ago relative.

Census 2000 counted 281.4 million people in the United States on April 1, 2000, of whom 129.7 million were employed civilians aged 16 and over (Table 1).¹ The census classifies occupations at various levels, from the leastdetailed summary level — six occupational groups — to the most detailed level — 509

Figure 1. Reproduction of the Questions on Occupation from Census 2000

28 Occupation

a. What kind of work was this person doing? (For example: registered nurse, personnel manager, supervisor of order department, auto mechanic, accountant)



activities or duties? (For example: patient care, directing hiring policies, supervising order clerks, repairing automobiles, reconciling financial records)



occupation categories. This Census 2000 Sample Brief examines occupations of the employed civilian population 16 years old and older.

Census 2000 occupation classifications were based on the government-wide 2000 Standard Occupation Classification (SOC) system, whereas the 1990 census occupations were based on the 1980 SOC. The SOC was overhauled in 1998 (with additional revisions in 2000) to create a classification system that more accurately reflected the occupational structure in the United States at the time of the revisions. As a result, comparisons of occupation data from the 1990 census and Census 2000 are not recommended and therefore are not attempted in this report.

At the least-detailed summary level, the highest proportion of civilian workers 16 and older, 33.6 percent, were in

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¹ The text of this report discusses data for the United States, including the 50 states and the District of Columbia. Data for the Commonwealth of Puerto Rico are shown in Table 6 and Figure 3 only.

management, professional, and related occupations, followed by 26.7 percent in sales and office occupations.² The occupational group made up of farming, fishing, and forestry occupations had the lowest proportion of workers (0.7 percent).³ The proportion of workers in the other summary level occupational groups were: service occupations, 14.9 percent; production, transportation, and material moving occupations, 14.6 percent; and construction, extraction, and maintenance occupations, 9.4 percent.

This report is part of a series that presents population and housing data collected by Census 2000, and highlights the occupations of American workers in 2000 for the United States, regions, states, metropolitan areas, and counties. Because of the importance of occupation data in understanding the economy and the changes taking place in society, the Census Bureau has asked questions on occupation in every decennial census since 1850. In Census 2000, two questions on occupation (Figure 1) were asked of everyone 15 or older (with responses tabulated for those 16 and older). The first question (28a) focused on the kind of work done, while the second (28b) asked about the duties of the job. Both questions allowed respondents to write a description of their occupation

³ This surprisingly low percentage requires further explanation. Prior to the overhaul of the SOC, farm and ranch owners and renters were classified in the farming, fishing, and forestry occupations group. After the reclassification, they were put into the management, professional, and related occupations group. and its duties. The descriptions provided in these two questions, along with the answers to the questions on type of industry and whether an occupation was with the government, a private for-profit organization, a nonprofit organization, or a family business enabled the Census Bureau to classify the responses into one of 509 occupation categories.

Differences still exist in the jobs held by men and women.

Despite the movement into nontraditional occupations, men and women still showed differences in the types of jobs they held in 2000. For example, 36.7 percent of women but only 17.9 percent of men worked in sales and office occupations. The proportions of men and women were also substantially different in construction, extraction, and maintenance occupations where 17.1 percent of men and only 0.7 percent of women were employed; production, transportation, and material moving occupations where 20.5 percent of men and 8.0 percent of women worked; and service occupations where 12.1 percent of men were employed compared with 18.0 percent of women.

Approximately 31.4 percent of all employed men 16 and older worked in management, professional, and related occupations. The next highest categories were production, transportation, and material moving occupations with 20.5 percent; sales and office occupations at 17.9 percent; and construction, extraction, and maintenance occupations with 17.1 percent. Only 1.1 percent of men were employed in farming, fishing, and forestry occupations.

More than one-third (36.7 percent) of women 16 and older worked in sales and office occupations in

2000, closely followed by management, professional, and related occupations (36.2 percent). The only other group employing more than 10 percent of women was service occupations, at 18.0 percent. Construction, extraction, and maintenance occupations and farming, fishing, and forestry occupations employed the lowest percentage of women at 0.7 percent and 0.3 percent, respectively.

Tables 2 and 3 present the ten occupations employing the most men and the most women, based on occupations at the most detailed level available from Census 2000 — 509 occupation categories. Once again differences appear in the type of jobs held by men and women 16 and older. Only one occupation, retail salespersons, appears on both lists.

The top occupations for men included drivers/sales workers and truck drivers; first-line supervisors/managers of retail sales workers; retail salespersons; laborers and freight, stock, and material movers; carpenters; and janitors and building cleaners. For women, the top occupations included secretaries and administrative assistants; elementary and middle school teachers; registered nurses; cashiers; and retail salespersons.

The diversity of the ten most popular occupations was greater for men than for women. For men, five of the six major occupational groups are represented on their top ten list with only farming, fishing, and forestry occupations not included. In contrast, only three of the six major occupational groups are represented on the women's list of the ten most popular occupations: management, professional, and related occupations; service occupations; and sales and related occupations.

² The estimates in this report are based on responses from a sample of the population. As with all surveys, estimates may vary from the actual values because of sampling variation or other factors. All statements in this report have undergone statistical testing and are significant at the 90-percent confidence level unless otherwise noted.

Table 1. Selected Occupational Groups and Subgroups by Sex for the United States: 2000

(Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

	Total		Men		Women	
Occupational groups and subgroups	Number	Percent	Number	Percent	Number	Percent
Total population	281,421,906	-	137,916,186	-	143,505,720	-
Employed civilian population 16 years and over	129,721,512	100.0	69,091,443	100.0	60,630,069	100.0
Management, professional, and related occupations Management, business, and financial operations	43,646,731	33.6	21,708,758	31.4	21,937,973	36.2
occupations Management occupations, except farmers and farm	17,448,038	13.5	10,131,223	14.7	7,316,815	12.1
	11,115,046	8.6	6,910,883	10.0	4,204,163	6.9
Farmers and farm managers	773,218	0.6	661,288	1.0	111,930	0.2
Business and financial operations occupations	5,559,774	4.3	2,559,052	3.7	3,000,722	4.9
Business operations specialists	2,718,121	2.1	1,248,755	1.8	1,469,366	2.4
Financial specialists	2,841,653	2.2	1,310,297	1.9	1,531,356	2.5
Professional and related occupations	26,198,693	20.2	11,577,535	16.8	14,621,158	24.1
Architecture and engineering eccupations	3,100,447	2.4	2,218,400	3.2	950,047	1.0
Architectore surveyors, cartographers, and engineers	2,009,290	1.5	1 702 234	2.5	224 455	0.0
Drafters, engineering, and manning technicians	732 609	0.6	500 710	0.9	132 890	0.4
Life physical and social science occupations	1 203 443	0.0	709 392	1.0	494 051	0.2
Community and social services occupations	1,953,184	1.5	787.587	1.1	1.165.597	1.9
Legal occupations	1.412.737	1.1	747.170	1.1	665.567	1.1
Education, training, and library occupations	7,337,276	5.7	1,930,948	2.8	5,406,328	8.9
occupations	2,484,201	1.9	1,302,419	1.9	1,181,782	1.9
Healthcare practitioners and technical occupations Health diagnosing and treating practitioners and	5,980,107	4.6	1,579,666	2.3	4,400,441	7.3
technical occupations	4,144,065	3.2	1,210,571	1.8	2,933,494	4.8
Health technologists and technicians	1,836,042	1.4	369,095	0.5	1,466,947	2.4
Service occupations	19,276,947	14.9	8,346,408	12.1	10,930,539	18.0
Healthcare support occupations	2,592,815	2.0	305,247	0.4	2,287,568	3.8
Protective service occupations Fire fighting, prevention, and law enforcement	2,549,906	2.0	2,041,698	3.0	508,208	0.8
workers, including supervisors	1,536,287	1.2	1,300,671	1.9	235,616	0.4
Other protective service workers, including supervisors	1,013,619	0.8	741,027	1.1	272,592	0.4
Food preparation and serving related occupations	6,251,618	4.8	2,663,418	3.9	3,588,200	5.9
Building and grounds cleaning and maintenance	4 05 4 065		0.565.000	0.7	1 600 400	0.0
Personal care and service occupations	4,254,365 3,628,243	2.8	770,112	3.7 1.1	2,858,131	2.8 4.7
Sales and office occupations	34 621 390	26.7	12 341 968	17 9	22 279 422	36.7
Sales and related occupations	14,592,699	11.2	7,364,006	10.7	7,228,693	11.9
Office and administrative support occupations	20.028.691	15.4	4.977.962	7.2	15.050.729	24.8
Farming, fishing, and forestry occupations	951,810	0.7	750,915	1.1	200,895	0.3
Construction extraction and maintenance occupa-						
tions	12.256.138	9.4	11.802.699	17.1	453,439	0.7
Construction and extraction occupations	7.149.269	5.5	6.937.857	10.0	211,412	0.3
Supervisors, construction and extraction workers	911,013	0.7	886,001	1.3	25,012	0.0
Construction trades workers	6,116,087	4.7	5,933,117	8.6	182,970	0.3
Extraction workers	122,169	0.1	118,739	0.2	3,430	0.0
Installation, maintenance, and repair occupations	5,106,869	3.9	4,864,842	7.0	242,027	0.4
Production, transportation, and material moving						
occupations	18,968,496	14.6	14,140,695	20.5	4,827,801	8.0
Production occupations	11,008,625	8.5	7,437,071	10.8	3,571,554	5.9
Transportation and material moving occupations	7,959,871	6.1	6,703,624	9.7	1,256,247	2.1
Supervisors, transportation and material moving						
workers	237,902	0.2	193,527	0.3	44,375	0.1
Aircraft and traffic control occupations	158,481	0.1	147,143	0.2	11,338	0.0
NINITIAN PROVIDENT	3,852,820	3.0	3,394,798	4.9	458,022	0.8
nall, water and other transportation occupations	400,826	0.3	352,303	0.5	48,523	0.1
waterial moving workers	3,309,842	2.0	2,010,003	3.8	093,989	1.1

- Not applicable.

Source: U.S. Census Bureau, Census 2000, Summary File 3.

Management, professional, and related occupations paid the most to both men and women.

At the least-detailed summary level (six occupational groups) for employed civilian men and women 16 and older, management, professional, and related occupations paid the most. The median 1999 earnings⁴ in these occupations were \$50,034 for men and \$35,654 for women (Figure 2 and Table 4). The second highest paying occupational group for men, with a median of \$35.079. was sales and office occupations; followed by construction, extraction, and maintenance occupations at \$32,000; production, transportation, and material moving occupations at \$30,992; and service occupations at \$26,000. The lowest paying occupational group for men was farming, fishing, and forestry occupations, with a median of only \$20,000 in 1999 earnings.

The second highest paying occupational group for women was construction, extraction, and maintenance occupations, where the median earnings were \$29,000. This category was followed by sales and office occupations at \$24,497; production, transportation, and material moving occupations at \$20,850; and service occupations at \$17,805. As with men, the lowest paying occupational group for women was farming, fishing, and forestry occupations, with a median earnings of only \$15,996.

Women earned less than men in all occupations, but construction, extraction, and maintenance occupations was closest to parity.

In each of the summary level occupational groups, men earned more

Table 2. **The Ten Occupations¹ Employing the Most Men for the United States: 2000**

(Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

Occupations	Number	Percent
Employed civilian males 16 years and over	69,091,443	100.0
Driver/sales workers and truck drivers	2,925,936	4.2
First-line supervisors/managers of retail sales workers	1,606,310	2.3
Retail salespersons	1,605,860	2.3
Laborers and freight, stock, and material movers, hand	1,448,035	2.1
Carpenters	1,317,690	1.9
Janitors and building cleaners	1,308,889	1.9
Managers, all other	1,253,965	1.8
Construction laborers	1,066,404	1.5
Sales representatives, wholesale and manufacturing First-line supervisors/managers of production and	1,026,745	1.5
operating workers	1,008,876	1.5

¹Based on the most detailed level of occupations available in Census 2000 - 509 occupations.

Note: Confidence intervals are not displayed because they round to the percentages shown in the table.

Source: U.S. Census Bureau, Census 2000, Sample Edited Detail File.

Table 3. **The Ten Occupations¹ Employing the Most Women for the United States: 2000**

(Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

Occupations	Number	Percent
Employed civilian females 16 years and over	60,630,069	100.0
Secretaries and administrative assistants Elementary and middle school teachers Registered nurses	3,597,535 2,442,104 2,065,238 2,030,805 1,775,889 1,526,803 1,469,736 1,396,105 1,253,306 1,228,977	5.9 4.0 3.4 3.3 2.9 2.5 2.4 2.3 2.1 2.0

¹Based on the most detailed level of occupations available in Census 2000 – 509 occupations.

Note: Confidence intervals are not displayed because they round to the percentages shown in the table.

Source: U.S. Census Bureau, Census 2000, Sample Edited Detail File.

than women as measured by median earnings in 1999. The occupational group closest to parity was the traditional "blue collar" group, represented by construction, extraction, and maintenance occupations, where women earned 90.6 percent of men's earnings (Table 4). In farming, fishing, and forestry occupations, women earned 80.0 percent of their male counterparts' pay. However, both these occupational groups employed very few women in 2000. Of all employed civilians 16 and older employed in construction, extraction, and maintenance

⁴ Earnings is calculated for year-round, full-time workers, defined as employed civilians 16 years and older who worked 50 weeks or more in 1999 and usually 35 hours or more a week.



occupations in 2000, 96.3 percent were men and only 3.7 percent were women, representing about 0.7 percent of all employed women. Similarly, only about 0.3 percent of employed women were in farming, fishing, and forestry occupations. In the occupational groups employing the most women — sales and office occupations and management, professional, and related occupations — women earned 69.8 percent and 71.3 percent compared with their male colleagues, respectively.

The occupational group where women earned the least compared to men was production, transportation, and material moving occupations, where the median earnings for women were only 67.3 percent of men's earnings.

Asians and non-Hispanic Whites (who reported no other race) were more often in management, professional, and related occupations than people reporting other races.

Census 2000 allowed respondents to choose more than one race. With the exception of the Two or more races group, all race groups discussed in this report refer to people who indicated *only one* racial identity among the six major categories:

Table 4.Median 1999 Earnings of Men and Women and Women's Earnings as a Percentage of Men'sEarnings by Selected Occupation Groups for the United States: 2000

(Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

	Men	Women			
Occupational groups	Median earnings	Median earnings	Percent of men's earnings		
Management, professional, and related occupations	\$50,034 \$26.000	\$35,654 \$17.805	71.3 68.5		
Sales and office occupations	\$35,079	\$24,497	69.8		
Construction, extraction, and maintenance occupations Production, transportation, and material moving occupations	\$20,000 \$32,000 \$30,992	\$15,996 \$29,000 \$20,850	80.0 90.6 67.3		

Note: Confidence intervals are not displayed because they round to the percentages shown in the table. Source: U.S. Census Bureau, Census 2000, Sample Edited Detail File.

Table 5.Selected Occupational Groups by Race and Hispanic Origin for the United States: 2000

(Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

	Occupational groups						
Race and Hispanic or Latino Origin	Employed civilian population 16 years and over	Management, professional, and related occupations	Service	Sales and office	Farming, fishing, and forestry	Construc- tion, extraction, and main- tenance	Production, transporta- tion, and material moving
Total	129,721,512	33.6	14.9	26.7	0.7	9.4	14.6
White alone	102,324,962	35.6	13.4	27.0	0.6	9.8	13.6
Black or African American alone	13,001,795	25.2	22.0	27.3	0.4	6.5	18.6
American Indian and Alaska Native alone .	914,484	24.3	20.6	24.0	1.3	12.9	16.8
Asian alone	4,786,782	44.6	14.1	24.0	0.3	3.6	13.4
Native Hawaiian and Other Pacific							
Islander alone	157,119	23.3	20.8	28.8	0.9	9.6	16.5
Some other race	5,886,427	14.2	22.7	21.7	3.5	14.0	24.0
Two or more races	2,649,943	26.7	19.8	27.1	0.9	9.8	15.7
Hispanic or Latino (of any race)	13,347,876	18.1	21.8	23.1	2.7	13.1	21.2
White alone, not Hispanic or Latino	95,834,018	36.6	12.8	27.2	0.5	9.6	13.2

U.S. Census Bureau, Census 2000, Sample Edited Detail File.

White, Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and Some other race.⁵ The use of the single-race population in this report does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches.⁶

The percentage of workers employed in management, professional, and related occupations was higher (44.6 percent) for Asians (who reported no other race) than for people reporting any other race group shown in Table 5. Non-Hispanic Whites (who reported no other race) had the second highest percentage of workers in this occupational group (36.6 percent), followed by people who reported Black or African American only (25.2 percent), American Indian and Alaska Native only (24.3 percent), and Native Hawaiian and Other Pacific Islander only (23.3 percent).⁷⁸ About

Because Hispanics may be of any race, data in this report for Hispanics overlap with data for racial groups. Based on Census 2000 sample data, the proportion Hispanic was 8.0 percent for Whites, 1.9 percent for Blacks, 14.6 percent for American Indians and Alaska Natives, 1.0 percent for Asians, 9.5 percent for Pacific Islanders, 97.1 percent for those reporting Some other race, and 31.1 percent for those reporting Two or more races.

⁸ The difference between American Indian and Alaska Natives and Native Hawaiian and Other Pacific Islanders was not statistically significant. 18.1 percent of Hispanics were employed in management, professional, and related occupations.

Blacks (who reported no other race) were prominent in production, transportation, and material moving occupations.

About 18.6 percent of Black workers (who reported no other race) were employed in production, transportation, and material moving occupations. This percentage was higher than for people reporting any other race group except Some other race only (24.0 percent), a residual category used in the census to classify individuals who did not identify themselves as being in one of the other race groups. Approximately one-fifth (21.2 percent) of Hispanics were employed in production, transportation, and material moving occupations. In contrast, only 13.2 percent of non-Hispanic Whites were in this group.

⁵ For further information on each of the six major race groups and the Two or more races population, see reports from the Census 2000 Brief series (C2KBR/01), available on the Census 2000 Web site at www.census.gov/population/www/cen2000 /briefs.html

⁶ This report draws heavily on Summary File 3, a Census 2000 product that can be accessed through American FactFinder, available from the Census Bureau's Web site, *www.census.gov*. Information on people who reported more than one race, such as "White *and* American Indian and Alaska Native" or "Asian *and* Black or African American" is forthcoming in Summary File 4, which will also be available through American FactFinder in 2003. About 2.6 percent of people reported more than one race.

⁷ Hereafter this report uses the term Black to refer to people who are Black or African American, the term Pacific Islander to refer to people who are Native Hawaiian and Other Pacific Islander, and the term Hispanic to refer to people who are Hispanic or Latino.

Blacks were also well represented in sales and office occupations, where 27.3 percent were employed in 2000. This was second only to Pacific Islanders at 28.8 percent, and about the same as non-Hispanic Whites at 27.2 percent. Sales and office occupations employed 23.1 percent of Hispanic workers.

Hispanics led in farming, fishing, and forestry occupations.

Although the percentage of people working in farming, fishing, and forestry occupations was much smaller than in the other summary level occupational groups, the percentage of each race and ethnic group in this category is interesting. These occupations claimed a higher percentage of Hispanic workers, 2.7 percent, than any of the race groups examined in this brief (except the residual Some other race category, which had 3.5 percent). This percentage was about double that of American Indians and Alaska Natives, 1.3 percent; and was far higher than the percentage of Pacific Islanders, 0.9 percent; non-Hispanic Whites, 0.5 percent; Blacks, 0.4 percent; and Asians 0.3 percent.

THE GEOGRAPHIC DISTRIBUTION OF OCCUPATIONS

The following discussion focuses on the employed civilian population 16 and over.

The four regions did not differ greatly in the distribution of occupations.

Table 6 shows occupational groups for the four census regions, the 50 states, and the District of Columbia.⁹ In each region the pattern was similar: the highest percentages of workers were in management, professional and related occupations, followed by sales and office occupations. Construction, extraction, and maintenance occupations and farming, fishing, and forestry occupations had the lowest percentage of workers. The only regional differences involved service occupations and production, transportation and material moving occupations. The percentage of workers in service occupations in the Northeast and West was higher than the percentage for production, transportation and material moving occupations, while in the Midwest and the South, the opposite was true.

The District of Columbia had the highest percentage of workers in management, professional, and related occupations.

Over half (51.1 percent) the workers in the District of Columbia were in management, professional, and related occupations in 2000, followed at some distance behind by the state of Maryland, where 41.3 percent of workers were in that occupational group. These high percentages in the District of Columbia and Maryland likely reflect the large presence of federal workers and related support occupations in those areas. Another state with a high percentage of workers in management, professional, and related occupations was Massachusetts (41.1 percent).¹⁰ The state with the lowest percentage of workers in this occupational group was Nevada with 25.7 percent.

Nevada and Hawaii, two states that cater to vacation and recreation travelers, led all states in the percentage of workers employed in service occupations with 24.6 percent and 20.9 percent, respectively. New Hampshire, with only 13.0 percent, had the lowest proportion of workers in this occupational group.

The range between the states with the highest and the lowest percentage values was smaller for sales and office occupations than for any other occupational group.¹¹ Florida led in sales and office occupations, with 29.5 percent of workers employed in this area. Only 22.8 percent of the workers in the District of Columbia were employed in these occupations.

Seven out of the ten states with the highest percentage of workers in production, transportation, and material moving occupations were in the South, although the state with the highest percentage was Indiana (21.4 percent) in the Midwest. The seven southern

⁹ The Northeast region includes the states of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. The Midwest region includes the states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. The South region includes the states of Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia, and the District of Columbia, a state equivalent. The West region includes the states of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wvomina.

¹⁰ The difference between Maryland and Massachusetts was not statistically significant.

¹¹ Except for the farming, fishing, and forestry occupational group, which had so few workers that it is not included.

Table 6.Selected Occupational Groups as a Percentage of the Employed Civilian Population16 Years and Over for the United States, Regions, States, and for Puerto Rico: 2000

(Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

	Occupational groups						
Area	Employed civilian population 16 years and over	Management, professional, and related occupations	Service	Sales and office	Farming, fishing, and forestry	Construction, extraction, and maintenance	Production, transportation, and material moving
United States	129,721,512	33.6	14.9	26.7	0.7	9.4	14.6
Region Northeast Midwest. South West.	24,904,791 31,185,231 45,226,189 28,405,301	36.5 32.1 32.4 34.8	15.1 14.4 14.7 15.4	27.0 26.3 26.7 26.8	0.4 0.6 0.7 1.2	8.0 9.0 10.6 9.4	13.0 17.6 14.9 12.3
State Alabama	1,920,189 281,532 2,233,004 1,173,399 14,718,928 2,205,194 1,664,440 376,811 263,108 6,995,047	29.5 34.4 32.7 27.7 36.0 37.4 39.1 35.3 51.1 31.5	13.5 15.6 16.2 14.1 14.8 13.9 14.3 14.6 16.1 16.9	25.9 26.1 28.5 25.1 26.8 27.2 26.5 27.6 22.8 29.5	0.8 1.5 0.6 1.5 1.3 0.6 0.2 0.5 0.1 0.9	11.3 11.6 11.0 10.6 8.4 10.5 8.0 9.5 4.8 10.3	19.0 10.8 10.9 21.0 12.7 10.5 12.0 12.5 5.2 10.8
Georgia	3,839,756 537,909 599,453 5,833,185 2,965,174 1,489,816 1,316,283 1,798,264 1,851,777 624,011	32.7 32.2 31.4 34.2 28.7 31.3 33.9 28.7 29.9 31.5	13.4 20.9 15.6 13.9 14.2 14.8 14.4 14.3 16.7 15.3	26.8 28.1 25.3 27.6 25.3 25.9 25.8 25.4 26.8 25.4 26.8 25.9	0.6 1.3 2.7 0.3 0.4 1.1 1.0 0.9 0.8 1.7	10.8 8.6 10.8 8.2 10.0 8.9 9.9 11.0 11.7 10.3	15.7 8.9 14.2 15.7 21.4 18.1 15.0 19.7 14.1 15.3
Maryland	2,608,457 3,161,087 4,637,461 2,580,046 1,173,314 2,657,924 425,977 877,237 933,280 650,871	41.3 41.1 31.5 35.8 27.4 31.5 33.1 33.0 25.7 35.8	13.9 14.1 14.8 13.7 14.9 15.0 17.2 14.6 24.6 13.0	26.4 25.9 25.6 26.5 24.9 25.5 26.4 27.6 26.6	0.3 0.2 0.5 0.7 1.2 0.6 2.2 1.6 0.3 0.3 0.4	8.6 7.5 9.2 8.4 11.2 9.8 10.7 9.3 11.4 9.4	9.5 11.3 18.5 14.9 20.4 16.3 11.2 15.1 10.4 14.8
New Jersey. New Mexico New York. North Carolina. North Dakota. Ohio Oklahoma Oregon Pennsylvania. Bhode Island	3,950,029 763,116 8,382,988 3,824,741 316,632 5,402,175 1,545,296 1,627,769 5,653,500 500,731	38.0 34.0 36.7 31.2 33.3 31.0 30.3 33.1 32.6 33.9	13.6 17.0 16.6 13.5 16.7 14.6 15.5 15.3 14.8 15.7	28.5 25.9 27.1 24.8 26.1 26.4 26.6 26.1 27.1	0.2 1.0 0.3 0.8 1.7 0.3 0.9 1.7 0.5 0.3	7.8 11.4 7.6 11.0 9.8 8.7 11.3 9.1 8.9 7.7	12.0 10.7 11.7 12.4 19.0 15.4 14.7 16.3 15.2
South Carolina South Dakota Tennessee. Texas Utah Vermont. Virginia Washington West Virginia. Wisconsin Wyoming. Puerto Rico	1,824,700 374,373 2,651,638 9,234,372 1,044,362 317,134 3,412,647 2,793,722 732,673 2,734,925 241,055 930,865	29.1 32.6 29.5 33.3 32.5 36.3 38.2 35.6 27.9 31.3 30.0 27.4	14.7 15.6 13.7 14.6 14.0 14.6 13.7 14.9 16.6 14.0 16.7 16.2	25.2 26.5 26.1 27.2 28.9 24.5 25.5 25.9 26.1 25.2 24.2 24.2 28.0	0.6 1.9 0.6 0.7 0.5 1.3 0.5 1.6 0.7 0.9 1.5 1.5	11.5 9.1 10.3 10.9 10.6 9.3 9.6 9.4 12.3 8.7 14.8 12.1	19.0 14.2 19.9 13.2 13.5 14.0 12.5 12.7 16.4 19.8 12.8 12.8 15.2

Source: U.S. Census Bureau, Census 2000, Summary File 3.

states were Arkansas, Mississippi, Tennessee, Kentucky, Alabama, South Carolina, and North Carolina. The District of Columbia with 5.2 percent had the lowest percentage of production, transportation and material moving workers.

Wyoming (14.8 percent) had the highest percentage of workers in the traditional "blue collar" occupational group: construction, extraction, and maintenance occupations, followed by West Virginia at 12.3 percent. Once again, the District of Columbia had the lowest percentage of workers in this occupational group (4.8 percent). Five of the next six states with the lowest percentage were Massachusetts, New York, Rhode Island, New Jersey, and Connecticut, all in the Northeast.

Sales and office occupations were predominant in more counties than any other occupational group.

Figure 3, a graphical representation of occupations throughout the United States and Puerto Rico, shows which of the least detailed summary-level occupational groups¹² employed the most civilian workers 16 and over in each state and county in the country.

At the county level, sales and office occupations (yellow) were the primary occupational group in more counties than any other group and every state had at least one county where this group was primary. This occupational group was most predominant in the Northeast and the West and less so in the Midwest and parts of the South.

Production, transportation and material moving occupations (brown) tended to be popular in nonmetropolitan counties in the Midwest and the South, particularly in Indiana, Ohio, Tennessee, and Arkansas. Service occupations (red) were the primary group in a small number of widely scattered counties throughout the United States. Interestingly, several of these counties were in the upper Midwest along or near the border with Canada, and in Texas and New Mexico along or near the border with Mexico, suggesting that considerable employment in these counties was in services related to our nearest neighbors.

Figure 3 also shows that professional and related occupations (purple) were predominant in several isolated counties or small groups of counties throughout the United States, many where universities or colleges are located. Examples are Dane County, Wisconsin (University of Wisconsin), Tippecanoe and Monroe Counties, Indiana (Purdue and Indiana University), and Centre County, Pennsylvania (Pennsylvania State University).

A second interesting pattern from Figure 3 appears with management, business, and financial operations occupations (blue). That this group would predominate in several rural and sparsely populated counties in states such as Montana, the Dakotas, and Nebraska might seem odd, but the pattern becomes more understandable given the overhaul of the Standard Occupation Classification system in 1998 that moved farm and ranch owners to this group (see footnote 3).

The Washington-Baltimore and San Francisco-Oakland-San Jose metropolitan areas led in management, professional, and related occupations.

Among the ten metropolitan areas with the highest percentage of their workers in management, professional, and related occupations in 2000, two — Washington-Baltimore, DC-MD-VA-WV, and San Francisco-Oakland-San Jose, CA, — had more than 3 million employed civilians 16 and over. (Table 7).¹³ Six of the remaining eight were "college towns": Corvallis, OR; Charlottesville, VA; Raleigh-Durham-Chapel Hill, NC; Madison, WI; Gainsville, FL; and Iowa City, IA.

About 26.7 percent of the workers in the Las Vegas, NV, metropolitan area were employed in service occupations in 2000, the highest percentage for any metropolitan area in the country. Several of the ten metropolitan areas shown in Table 7 with high percentages of service occupation workers cater to tourists and vacationers. These include not only Las Vegas, but also the Punta Gorda, Naples, and Panama City, FL; Reno, NV; Myrtle Beach, SC; and Honolulu, HI metropolitan areas.

Three metropolitan areas in Florida, Jacksonville, Tampa-St. Petersburg-Clearwater, and Miami-Fort Lauderdale, were among the ten with the highest percentage of sales and office occupation workers. Each of the metropolitan

¹² The highest level or least detailed summary level comprises six occupational groups: management, professional, and related occupations: service occupations: sales and office occupations; farming, fishing, and forestry occupations; construction, extraction, and maintenance occupations; and production, transportation, and material moving occupations. However, Figure 3 shows seven groups. The management, professional, and related occupations group was split into two sub-groups: management, business, and financial operations occupations and professional and related occupations. This was done to present a more representative picture.

¹³ Because of sampling error, the estimates for the metropolitan areas shown in Table 7 may not be significantly different from one another or from metropolitan areas not shown.



Table 7.Ten Metropolitan Areas With the Highest Percentage of Civilians Employed in SelectedOccupational Groups: 20001

(Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

Metropolitan areas	Total employed civilian population 16 years and over in area	Percent in occupation group	90-percent confidence interval
Management, professional, and related occupations			
Corvallis, OR Washington-Baltimore, DC-MD-VA-WV Charlottesville, VA Santa Fe, NM. Rochester, MN Raleigh-Durham-Chapel Hill, NC Gainesville, FL Madison, WI San Francisco-Oakland-San Jose, CA Jowa City, IA	38,356 3,843,329 78,424 74,586 66,973 627,772 105,293 246,064 3,495,883 64,255	46.9 45.4 45.2 44.5 44.3 44.0 43.6 43.3	45.7 - 48.1 45.3 - 45.5 44.6 - 46.3 44.3 - 46.1 43.7 - 45.3 44.1 - 44.6 43.3 - 44.7 43.2 - 44.0 43.5 - 43.7 42.5 - 44.7
Service occupations	,		
Las Vegas, NV-AZ. Punta Gorda, FL Biloxi-Gulfport-Pascagoula, MS Myrtle Beach, SC New London-Norwich, CT-RI Naples, FL Reno, NV Brownsville-Harlingen-San Benito, TX Panama City, FL Honolulu, HI	710,179 50,690 155,970 97,577 141,736 105,436 171,723 108,904 64,883 383,148	26.7 20.9 20.1 20.0 19.9 19.9 19.8 19.7 19.8	26.5 - 27.0 20.0 - 21.8 19.6 - 20.6 19.5 - 20.7 19.5 - 20.5 19.3 - 20.5 19.4 - 20.4 19.2 - 20.4 19.0 - 20.5 19.3 - 19.9
Sales and office occupations			
Sioux Falls, SD	96,177 519,840 1,079,627 1,680,147 65,512 648,104 244,649 116,592 112,867 368,142	32.2 31.4 31.1 31.0 30.8 30.8 30.6 30.3 30.1 30.1	31.6 - 32.8 31.1 - 31.7 30.9 - 31.3 30.9 - 31.3 30.1 - 31.5 30.5 - 31.1 30.2 - 31.1 29.7 - 30.9 29.6 - 30.7 29.8 - 30.4
Construction, extraction, and maintenance occupations	,		
Houma, LA Jacksonville, NC Lake Charles, LA Fort Myers-Cape Coral, FL Casper, WY Beaumont-Port Arthur, TX Victoria, TX Myrtle Beach, SC Biloxi-Gulfport-Pascagoula, MS	78,613 49,020 79,408 186,417 33,213 155,964 38,464 97,577 155,970 113,579	14.3 14.1 13.9 13.5 13.5 13.4 13.4 13.4 13.3 13.2 13.1	13.8 - 14.9 13.4 - 14.9 13.4 - 14.4 13.1 - 13.9 12.7 - 14.3 13.1 - 13.8 12.6 - 14.2 12.8 - 13.8 12.8 - 13.6 12.7 - 13.6
Production transportation and material maying ecoupations	110,090	13.1	12.7 - 15.5
Hickory-Morganton-Lenoir, NC Elkhart-Goshen, IN Sheboygan, WI Danville, VA Mansfield, OH Kokomo, IN Janesville-Beloit, WI Lima, OH.	176,415 93,074 59,454 49,261 79,992 47,717 76,336 71,550	34.3 32.7 29.8 28.7 27.7 26.8 26.8 26.8 26.8 26.8	33.8 - 34.8 32.0 - 33.4 29.0 - 30.6 27.9 - 29.5 27.1 - 28.3 26.0 - 27.6 26.2 - 27.5 25.6 - 27.0
Fort Smith, AR-OK	92,135	25.6	24.9 - 26.3 24.8 - 26.0

¹Farming, fishing, and forestry occupations are not shown in this table because of the small number of employed people in this group.

Note: Because of sampling error, the estimates in this table may not be significantly different from one another or from rates for other geographic areas not listed in this table.

Source: U.S. Census Bureau, Census 2000, Summary File 3.

Table 8.Occupational Groups by Industry Groups for the United States: 2000

(Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

	Occupational groups						
Industry groups	Employed civilian population 16 years and over	Manage- ment, profes- sional and related occupa- tions	Service	Sales and office	Farming, fishing, and forestry	Con- struction, extrac- tion, and mainte- nance	Produc- tion, transpor- tation, and material moving
Totals	129,721,512	100.00	100.00	100.00	100.00	100.00	100.00
Agriculture, forestry, fishing and hunting, and mining	2,426,053	2.2	0.4	0.4	82.2	1.9	1.2
Construction	8,801,507	2.9	0.4	1.9	0.4	51.4	2.6
Manufacturing	18,286,005	10.3	1.6	7.5	2.9	10.6	50.5
Wholesale trade	4,666,757	1.9	0.3	6.8	6.2	2.3	5.7
Retail trade	15,221,716	4.1	2.9	30.0	2.4	6.1	9.0
Transportation and warehousing, and utilities	6,740,102	2.0	1.5	5.5	0.7	5.3	15.8
Information	3,996,564	4.5	0.4	3.9	0.0	3.3	1.0
Finance, insurance, real estate, and rental and leasing . Professional, scientific, management, administrative,	8,934,972	8.0	1.6	13.8	0.0	1.6	0.7
and waste management services	12,061,865	14.3	9.9	8.5	2.3	2.3	3.6
Educational, health and social services	25,843,029	36.7	28.4	10.1	0.5	2.3	3.0
food services	10,210,295	4.2	33.5	4.0	0.6	1.2	2.0
Other services (except public administration)	6,320,632	3.3	9.7	3.0	0.3	9.9	4.0
Public administration	6,212,015	5.5	9.4	4.6	1.5	1.9	0.9

Source: United States Census 2000, Sample Edited Detail File.

areas in the ten highest had about 3 out of 10 workers employed in sales and office occupations.

Nine out of ten metropolitan areas with the highest percentage of construction, extraction, and maintenance workers were in the South.

Nine out of ten metropolitan areas with the highest percentage of workers in construction, extraction, and maintenance occupations were in the South in 2000. The only area not in the South was Casper, WY, which was in the West. All of the ten were relatively small, with none having more than 200,000 workers.

Similarly, each of the ten metropolitan areas with the highest percentage of workers in production, transportation, and material moving occupations in 2000 was small: only one had more than 100,000 workers. The leading metropolitan areas in this group were Hickory-Morganton-Lenoir, NC, and Elkhart-Goshen, IN, with 34.3 percent and 32.7 percent¹⁴ of their workforce in production, transportation, and material moving occupations.

ADDITIONAL FINDINGS

How does occupation differ from industry?

People often confuse industry and occupation data. Industry refers to the kind of business conducted by a person's employing organization; occupation describes the kind of work that person does on the job.

Some occupation groups are related closely to certain industries. Operators of transportation

equipment, farm operators and workers, and health care providers account for major portions of their respective industries of transportation, agriculture, and health care. However, the industry categories include people in other occupations. For example, people employed in agriculture include truck drivers and bookkeepers; people employed in transportation include mechanics, freight handlers, and payroll clerks; and people in the health care industry include occupations such as security guard and secretary.

The industry classification system used during Census 2000 was developed for the census and consists of 265 categories classified into 13 major industry groups. The Census 2000 industry classification was developed from the 1997

¹⁴ The difference between these two metropolitan areas was not statistically significant.

North American Industry Classification System (NAICS), which is an industry description system that groups establishments into industries based on activities in which they are primarily engaged. Several census data products use the aggregation structure shown in this report, while others, such as Summary File 3 and Summary File 4, use more detail.

Some occupational groups have a closely related industry counterpart.

About 82.2 percent of farming, fishing, and forestry workers were employed in agriculture, forestry, fishing and hunting, and mining industries. A little more than half (51.4 percent) of construction, extraction, and maintenance occupation workers were in the construction industry. Similarly, over half (50.5 percent) of workers in production, transportation, and material moving occupations were in manufacturing industries. Service occupations was the only occupational group to have a substantial percent of workers in two industry areas - arts, entertainment, recreation, accommodation and food service, with 33.5 percent; and educational, health and social services, with 28.4 percent. More than one-third (36.7 percent) of workers in management, professional and related occupations worked in the educational, health and social services industries. About 30.0 percent of sales and office workers worked in retail trade industries.

ABOUT CENSUS 2000

Why Census 2000 asked about occupation.

The study of occupations is important because it facilitates a better understanding of the economy by tracking labor force trends and identifying new and emerging occupations, such as those related to computers or the Internet. It also provides a window on changes taking place in society, reflected by the work people do.

Specifically, information on occupations is used by a number of federal agencies to distribute funds, to develop policy, and to measure compliance with laws and regulations. For example, occupation data are required by the Bureau of Economic Analysis to develop state per capita income estimates, which are used in the allocation formulas or eligibility criteria of more than 20 federal programs. Data are used to help the Environmental Protection Agency, under the Toxic Substances Control Act, to identify occupations that expose people to harmful chemicals and that adversely affect the environment. They are also used by the Equal **Employment Opportunity** Commission, under the Civil Rights and Equal Pay Acts, to monitor compliance with federal law and to investigate complaints where employment discrimination is alleged. Occupation data are used by the Department of Labor to formulate policies and programs for employment, career development, and training.

Accuracy of the Estimates

The data contained in this product are based on the sample of households who reported to the Census 2000 long form. Nationally, approximately 1 out of every 6 housing units was included in this sample. As a result, the sample estimates may differ somewhat from the 100-percent figures that would have been obtained if all housing units, people within those housing units, and people living in group quarters had been enumerated using the same questionnaires, instructions, enumerators, and so forth. The sample estimates also differ from the values that would have been obtained from different samples of housing units, people within those housing units, and people living in group quarters. The deviation of a sample estimate from the average of all possible samples is called the sampling error.

In addition to the variability that arises from the sampling procedures, both sample data and 100percent data are subject to nonsampling error. Nonsampling error may be introduced during any of the various complex operations used to collect and process census data. Such errors may include: not enumerating every household or every person in the population, failing to obtain all required information from the respondents, obtaining incorrect or inconsistent information, and recording information incorrectly. In addition, errors can occur during the field review of the enumerators' work, during clerical handling of

the census questionnaires, or during the electronic processing of the questionnaires.

Nonsampling error may affect the data in two ways: (1) errors that are introduced randomly will increase the variability of the data and, therefore, should be reflected in the standard errors; and (2) errors that tend to be consistent in one direction will bias both sample and 100-percent data in that direction. For example, if respondents consistently tend to underreport their incomes, then the resulting estimates of households or families by income category will tend to be understated for the higher income categories and overstated for the lower income categories. Such biases are not reflected in the standard errors.

While it is impossible to completely eliminate error from an operation as large and complex as the decennial census, the Census Bureau attempts to control the sources of such error during the data collection and processing operations. The primary sources of error and the programs instituted to control error in Census 2000 are described in detail in *Summary File 3* Technical Documentation under Chapter 8, "Accuracy of the Data," located at www.census.gov /prod/cen2000/doc/sf3.pdf.

All statements in this Census 2000 Brief have undergone statistical testing and all comparisons are significant at the 90-percent confidence level, unless otherwise noted. The estimates in tables, maps, and other figures may vary from actual values due to sampling and nonsampling errors. As a result, estimates in one category may not be significantly different from estimates assigned to a different category. Further information on the accuracy of the data is located at www.census.gov/prod /cen2000/doc/sf3.pdf. For further information on the computation and use of standard errors, contact the Decennial Statistical Studies Division at 301-763-4242.

For More Information.

The Census 2000 Summary File 3 data are available from the American Factfinder on the Internet (*factfinder.census.gov*). They were released on a state-by-state basis during 2002. For information on confidentiality protection, nonsampling error, sampling error, and definitions, also see www.census.gov/prod/cen2000 /doc/sf3.pdf or contact the Customer Services Center at 301-763-INFO (4636).

Information on population and housing topics is presented in the Census 2000 Brief series, located on the Census Bureau's Web site at *www.census.gov/population/www /cen2000/briefs.html.* This series, which will be completed in 2003, presents information on race, Hispanic origin, age, sex, household type, housing tenure, and social, economic, and housing characteristics, such as ancestry, income, and housing costs.

For additional information on occupations in the United States, including reports and survey data, visit the Census Bureau's Internet site at www.census.gov /hhes/www/occupation.html.

To find information about the availability of data products, including reports, CD-ROMs, and DVDs, call the Customer Services Center at 301-763-INFO (4636), or e-mail *webmaster@census.gov*.