# Occupational Employment and Wages, 2001



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### Preface

his bulletin provides occupational employment and wage data from the Occupational Employment Statistics (OES) survey. It includes national, State, and Metropolitan Statistical Area (MSA) estimates across all industries, as well as by industry. The tables present crossindustry national estimates for Standard Occupational Classification (SOC) detailed occupations, as well as selected industry-specific national estimates and cross-industry State and MSA estimates for some detailed occupations in each SOC major occupational group. Additional estimates are available on the Internet at http://www.bls.gov/oes/. The estimates are based on data collected during 1999, 2000, and 2001 surveys and are adjusted to full universe counts for the fourth-quarter 2001 reference period, based on information from the Bureau of Labor Statistics (BLS) Covered Employment and Wages program.

For many years, the OES survey has been a major source of detailed occupational employment data by industry for the Nation, for States, and for metropolitan areas. The OES survey is an annual mail survey collecting occupational employment and its distribution by wage interval for wage and salary workers in nonfarm establishments by industry. The survey samples approximately 400,000 establishments per year, taking 3 years to fully collect data from the sample of 1.2 million establishments. Therefore, 3 years of employment and wage data have been combined to produce this year's results.

This annual survey is part of the Federal-State cooperative program of occupational employment statistics, which provides information for many data users, including individuals and organizations engaged in planning vocational education programs, higher education, and employment and training programs. OES data also are used to prepare information for career counseling, for job placement activities performed at State Employment Security Agencies, and for personnel planning and market research conducted by private enterprises.

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## Introduction

The Occupational Employment Statistics (OES) survey collects data on occupational employment and wages of wage and salary workers by industry in nonfarm establishments. The program is a Federal-State cooperative effort between the State Employment Security Agencies (SESAs) and the Bureau of Labor Statistics (BLS). BLS provides technical assistance and the statistical procedures for the survey; the SESAs collect the data.

The tables in this bulletin present national, State, Metropolitan Statistical Area (MSA), and industry employment and wage data for detailed occupations. The industry data are identified based on the 1987 Standard Industrial Classification (SIC) system. The occupational data are identified based on the Standard Occupational Classification (SOC) system. Under the SOC system, workers are classified in 1 of more than 760 occupations. For each detailed occupation, table 1 shows cross-industry national estimates of employment, hourly mean wage, annual mean wage, and percentile wages.

Table 2 presents a sample of the data available from the OES survey, including national industry-specific and State and MSA cross-industry employment and wage data for the five largest occupations in each SOC major group. The industry data are national industry-specific data for both the five industries with the greatest employment and the five industries with the highest wages for a given occupation. This differs from the national estimates in table 1, which are based on data from all industries. The employment ranks and wage ranks for the industry data refer to the industry's employment or wage estimate for a given occupation relative to comparable data for the same occupation in other industries. In other words, the industry with employment rank 1 has the largest number of workers in the designated occupation; that with employment rank 2 has the second-largest number of workers, and so forth. Likewise, the industry with a wage rank of 1 is the highest paying industry for workers in the designated occupation; a wage rank of 4 represents the fourthhighest paying industry for the occupation. In addition, table 2 presents State and MSA employment and wage estimates for the five areas with the highest relative employment and the five areas in which workers in the given occupation earn the highest wages. The relative employment is the percentage of the total State employment found in the occupation. This measure provides more information than does total employment, which usually parallels population—the largest States and MSAs usually have the largest numbers of workers, regardless of the occupation.

In 2001, all 50 States, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands participated in the survey. Data for the territories are not included in the national estimates. Industry-specific occupational employment and wage estimates for each participating State and territory are available from the SESAs listed on the inside back cover of this bulletin.

Occupational employment estimates are based on survey results adjusted to reflect total industry employment. Mean wage is the estimated total wages for an occupation divided by the occupation's weighted survey employment. Occupations or industries with fewer than 50 workers, or with an employment relative error greater than 50 percent, are not shown. Wage estimates with a relative error greater than 30 percent are not shown. Employment totals for all industries surveyed reflect employment levels in each industry for the survey reference months listed in appendix B. Appendix B provides more complete definitions of terms and statistical concepts.

National, State, and MSA data across surveyed industries are available on the OES Web site at **http://www.bls.gov/ oes/**. National occupational employment data for all occupations at the two-digit and more detailed three-digit SIC levels also are available on the Web site. Additional information about the structure of the OES classification system is provided in appendix A of this bulletin. Definitions for all occupations are available on the Standard Occupational Classification Web site at **http://www.bls.gov/soc/**.

## Employment and Wages by Major Occupational Group and Industry

#### Fatemeh Hajiha

Since 1996, the Occupational Employment Statistics (OES) program has collected occupational employment and wage information from all industries each year. The OES survey covers 400 detailed industries and more than 760 occupations, and collects employment and wage data for 400,000 establishments each year, or 1.2 million establishments over the full 3-year sampling period. This survey design permits estimation and analysis of wage distributions by occupation across all industries as well as within individual industries, and by detailed geographic areas.

The following analysis examines employment and wages by major occupational group across all industries, and wages

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for detailed occupations in selected industries. Following the articles in this bulletin, table 1 shows national employment, hourly mean wage, annual mean wage, and percentile wages for each detailed occupation. Table 2 presents a sample of the data available from the OES survey, including national industry-specific and State and MSA cross-industry employment and wage data for the five largest occupations within each major group of the Standard Occupational Classification (SOC). (For a description of the SOC system used by Federal agencies, see appendix A.).

# Employment and wages by major occupational group

The OES program collects and publishes data for 22 of the 23

Fext table 1. Percentile wages	by major	occupational	group
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			Hourly	/ earnings	i		
Major occupational group	Employment	10th percen- tile	25th percen- tile	50th percen- tile	75th percen- tile	90th percen- tile	Mean wage
Total	127,980,370	\$6.76	\$8.72	\$13.01	\$20.31	\$30.23	\$16.35
Management Legal Computer and mathematical Architecture and engineering Business and financial operations Healthcare practitioner and technical Life, physical, and social science Arts, design, entertainment, sports, and media Education, training, and library Construction and extraction	7,212,360 909,370 2,825,870 2,489,070 4,676,680 6,118,970 1,067,730 1,508,790 7,658,480 6,239,430	14.62 12.76 14.95 14.36 12.65 10.97 11.54 7.26 7.68 8.84	20.84 17.36 20.26 19.09 16.47 15.05 15.52 10.52 11.46 11.29	30.88 27.03 27.72 25.78 21.98 20.56 21.53 16.19 17.41 15.57	44.77 47.77 36.66 33.97 29.67 27.65 29.97 24.14 24.14 21.56	66.62 (1) 45.62 42.76 39.74 41.87 40.71 34.35 31.94 27.89	34.04 33.19 29.02 27.08 24.32 24.01 23.90 19.12 18.81 17.05
Installation, maintenance, and repair Community and social services	5,323,070 1,523,890 2,957,990 13,418,240 11,270,210 22,798,590 9,410,660 3,122,870 2,802,050 4,275,340 453,050 9,917,660	8.85 8.83 7.16 6.15 7.27 7.47 6.57 6.91 5.97 6.18 6.26 5.71	$\begin{array}{c} 11.58\\ 11.38\\ 9.14\\ 7.16\\ 8.95\\ 9.32\\ 8.09\\ 8.06\\ 6.76\\ 7.13\\ 6.68\\ 6.29\end{array}$	15.92 15.12 13.66 9.63 11.81 12.04 10.96 9.85 8.28 8.71 7.76 7.13	21.14 20.35 20.58 16.35 15.93 15.63 12.32 11.04 11.39 10.62 8.85	26.44 26.28 27.32 27.21 21.87 20.31 21.02 15.48 16.80 15.19 15.44 11.59	16.81 16.44 13.91 13.27 13.09 12.77 10.53 10.10 9.80 9.44 8.04

<sup>1</sup> Represents a wage above \$70 per hour.



major occupational groups in the SOC. The OES survey does not cover military specific occupations. Chart 1 displays employment, the percentage of total employment, and the mean wage for each of these groups. The chart is arrayed by mean wage, with the highest paying occupational group on the top and the lowest paying group on the bottom. Total employment for all occupational groups in 2001 was approximately 128 million workers.

In terms of employment and wages, the 22 occupational groups fall into three broad categories. The first consist of five groups with the largest employment. They are sales and related; production; office and administrative support; transportation and material moving; and food preparation and serving related. These groups together account for more than one-half of total employment, or about 67 million workers. Of the five, the office and administrative support group, with about 22.8 million workers, is the largest, and the transportation and material moving group, with more than 9.4 million workers, is the smallest. The mean wage in each of these five major groups is less than the mean wage for all workers across occupational groups (\$16.35). The food preparation and serving related group has a mean wage of \$8.04 per hour, the lowest among all occupational groups.

A second category consists of five occupational groups with midsize employment. Accounting for more than onequarter of total employment, or 32.6 million workers, these groups are management; healthcare practitioner and technical; education, training, and library; construction and extraction; and installation, maintenance, and repair. The mean wage in each of these groups is greater than the mean wage for all workers across occupational groups. The management group, with about 7.2 million workers, has the second largest employment among the midsize occupational groups and the highest mean wage among all occupational groups. The installation, maintenance, and repair group, with 5.3 million workers, has the smallest employment and lowest mean wage among the midsize occupational groups. Still, the mean wage of \$16.81 per hour for this group is higher than the mean wage for all workers across occupational groups.

The remaining 12 occupational groups account for 22.4 percent of total employment, or 28.6 million workers. Among these, the business and financial operations group, with around 4.7 million workers, has the largest employment, and the farming, fishing, and forestry occupations, with fewer than 0.5 million, the smallest. Four of the twelve smallest occupational groups—legal; computer and mathematical; architecture and engineering; and business and financial operations—have the second-, third-, fourth-, and fifth-highest mean wage, respectively, among all occupational groups. Another four—farming, fishing, and forestry; building and grounds cleaning and maintenance; personal care and service; and healthcare support—have the second-, third-,

fourth-, and fifth-lowest mean wage.

#### Percentile wages by occupational group

In addition to total employment and mean wage by major occupational group, text table 1 also displays the 10th-, 25th-, 50th-, 75th-, and 90th-percentile wages for each of the 22 major occupational groups. A percentile wage shows the percentage of workers in an occupation who earn less than a given wage and the percentage who earn more. For example, the 50th-percentile wage, or median wage, is the pay level at which 50 percent of workers earn more and 50 percent earn less. Likewise, 10 percent of workers earn less than the 10thpercentile wage and 90 percent of workers earn less than the 90th-percentile wage. The middle 80 percent of workers in an occupational group earn wages between these two endpoints.

As indicated earlier, the lowest paid occupational group is the food preparation and serving related occupations. This is clearly indicated by the fact that, for each percentile wage shown, the food preparation and serving related group wage is lower than that for any of the other groups. In addition to being the lowest paid occupational group, the food preparation and serving related occupations have the narrowest distribution of wages among all occupational groups. Ten percent of workers in this group, or approximately 1 million, earn less than \$5.71 per hour, while ninety percent of the workers earn less than \$11.59 per hour, a difference of only \$5.88 per hour.

In addition to having the highest mean wage, the management occupations have the second widest distribution of wages between the 10th- and the 90th-percentile wage. Ten percent of workers in this group earn less than \$14.62 per hour, while ninety percent earn less than \$66.62 per hour, a difference of \$52.00 per hour. However, the management group does not have the highest wages in all percentile wage categories. The group ranks second in the 10th- and 90thpercentile categories. The largest distribution of wages is among legal occupations, which has a difference of at least \$57.24 between the 10th- and 90th-percentile wages.

As shown in text table 1, the mean wage in every occupational group is higher than the 50th-percentile, or median, wage for that group, suggesting that the top half of workers has a wider wage distribution than does the lower half. In other words, the distribution of wages in each occupational group is skewed towards the higher end of the wage range.

Chart 2 uses the percentile wages from text table 1 to graphically display the wage distribution for each major occupational group. Combined, the portions of the bars represent the middle 80 percent of the distribution for each group. The left endpoint of the bar indicates the 10th-percentile wage--10 percent of workers in the occupational group earn less than that wage. The right endpoint of the bar indicates



				Ind	ustry			
Occupation		General building contrac- tors	Food and kindred products (mfg.)	Electric, gas, and sanitary services	Food stores	Deposi- tory institu- tions	Personal services	Health services
Financial managers	\$28.10 22.05	\$32.18 23.80	\$37.88 23.72	\$40.58 25.89	\$35.09 20.18	\$31.81	\$32.04 22.41	\$32.52 21.45
Computer programmers	24.14	29.81	26.16	29.22	23.82	29.50	26.49	26.20
products Secretaries, except legal, medical, and	21.31	23.08	22.47	24.22	17.96	21.89	14.51	20.23
executive	11.10	11.52	13.14	14.80	10.98	13.60	10.50	12.14
housekeeping workers	8.85	8.74	10.47	11.80	8.36 8.57	8.49	9.18	9.26
Machinery maintenance workers	10.09	13.80	15.18	21.18	14.27	18.36	16.29	14.83

#### Text table 2. Mean wages for selected OES occupations and two-digit SIC industries

the 90th-percentile wage—10 percent of workers in the occupational group earn more than that wage. Similarly, the inner bar segment between the 25th and 75th percentiles shows the middle 50 percent of the distribution for each of the occupational groups.

As shown in chart 2, the width of the wage distributions for both the middle 80 percent and middle 50 percent of workers in an occupational group generally declines with the mean wage of that group. Wages for the middle 50 percent of workers are skewed, to varying degrees, toward the lower end of the pay distribution for all occupational groups. Most noticeable in this regard are the farming, fishing, and forestry; personal care and service; and sales and related groups. By contrast, wages for the middle 50 percent of workers in computer and mathematical; architecture and engineering; education, training, and library; and installation, maintenance, and repair groups are comparatively less skewed toward the lower end of the pay distribution.

In addition to cross-industry estimates for the 22 major occupational groups, the OES program produces detailed occupational wages across all industries. These estimates show that wages for detailed occupations can vary substantially within a major occupational group. This is due to the fact that occupational groups incorporate data from as many as 75 specific occupations into the mean hourly wages. For example, the legal occupations group includes occupations such as lawyers and legal secretaries. The wages and employment for both are included in the overall wage and employment estimates for legal occupations, even though the mean hourly wage of lawyers is almost 3 times that of legal secretaries. The shares of employment accounted for by these occupations will affect the wages for the entire legal occupations group. Because of these variations, comparative wages for detailed occupations in different major occupational groups might not follow the overall pattern of wage difference noted between their respective major groups. Table 1 of this publication shows these variations.

#### Occupational wages by two-digit SIC industry

The OES program also produces detailed occupational wages

by industry major groups at the two-digit level within the Standard Industrial Classification (SIC) system. Text table 2 shows the mean wage for eight selected OES occupations in eight selected two-digit industries. Wages for detailed occupations vary according to industry, as illustrated in the table. For example, while financial managers have high overall wages compared with other detailed occupations, the mean wage for financial managers itself varies depending on the industry in which they are employed.

In fact, among the occupations for which data are shown in text table 2, financial managers show the largest variation in wages, with \$12.48 separating the highest paying industry from the lowest. The mean wage for financial managers ranges from \$40.58 per hour in the electric, gas, and sanitary services industry to \$28.10 per hour in the agricultural services industry. Another large difference between industries, \$11.09, occurs for the occupation of machinery maintenance workers. The hourly mean wages for these workers range from \$21.18 per hour in the electric, gas, and sanitary services industry to \$10.09 per hour in agricultural services. The occupation of janitors and cleaners, except maids and housekeeping cleaners, exhibits a smaller variation among the selected industries, with \$3.44 separating the highest wage from the lowest. The mean wage of this occupation across the eight selected industries ranges from \$11.80 per hour in electric, gas, and sanitary services to \$8.36 per hour in food stores.

Similarly, mean wages vary across occupations in an industry. The electric, gas, and sanitary services industry has the highest wages among industries shown for all occupations except computer programmers, for which it has the third highest wage. It is interesting that, while the highest wages for each occupation are fairly concentrated in this single industry, the lowest wages are found in three industries agricultural services, food services, and personal services. Because text table 2 shows only a sample of industries and occupations, it may not reflect the overall wage pattern for a given industry. Detailed information about industries and occupational employment and wage estimates at the twodigit industry level are available on the OES Web site at http://www.bls.gov/oes/.

## High-Tech Occupations by Metropolitan Statistical Area

#### Patrick Kilcoyne

The term *high-tech* has always denoted a very ambiguous and amorphous concept. An industry or an occupational field that is commonly known as high-tech one year could be using technology or skills that are considered to be standard only a few years later. Low-skilled workers can be found in industries known as high-tech, and most people would not consider these workers to be employed in high-tech occupations. Similarly, workers who perform highly skilled functions using the latest technology could be employed in very low-tech, older industries.

However high-tech occupations are defined, practical knowledge would lead us to expect to find these occupations grouped together, either by wage rate, industry, or geographical area. This article uses criteria based on the level of technology utilization to identify high-tech occupations. It then provides a statistical summary by metropolitan statistical area (MSA) of the wage and employment estimates for technologically oriented occupations. According to the 2001 Occupational Employment Statistics (OES) survey, there were dramatic differences in these estimates by MSA.

#### **Defining high-tech**

Previous studies have identified high-tech occupations by the level of education that an individual must have in order to be employed in a given field. By this standard, many professional occupations are termed high-tech, even though the incumbents may be performing their duties using technology that has been available for generations. In other words, the educational attainment criterion may be useful for identifying high-wage, or high-potential, jobs but is not directly related to high technology as a concept.

Other researchers have attempted to define high-tech occupations as consisting of workers in industries that utilize new technologies. The logic of this classification is that, because the processes being used in these industries are technically advanced, their employees, to a certain extent, must be also. However, as with all industries, not all of the people employed at firms in these industries are producing technical products or making use of advanced technology to perform their duties. Therefore, many unskilled workers

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and persons not using any cutting-edge technology in their work would be incorrectly identified as high-tech workers.

Out of consideration for these factors, high-tech occupations are defined for the purposes of this ariticle as consisting of workers who typically or necessarily utilize new technologies—those that are changing the ways in which people live and work—in order to perform their duties. Using this criterion and the occupational definitions from the 2000 Standard Occupation Classification (SOC) system, occupations were selected for inclusion in a high technology subgroup. A list was compiled of the 36 occupations determined to be utilizing new technologies to the greatest extent, and they will be referred to in this article as "high-tech occupations." This list of high-tech occupations, shown below, may change in the future as new technologies become standard, and others are brought into the workplace.

SOC code	SOC title
15-1011	Computer and information scientists, research
15-1021	Computer programmers
15-1031	Computer software engineers, applications
15-1032	Computer software engineers, systems software
15-1051	Computer systems analysts
15-1061	Database administrators
15-1081	Network systems and data communications analysts
17-2011	Aerospace engineers
17-2031	Biomedical engineers
17-2041	Chemical engineers
17-2061	Computer hardware engineers
17-2071	Electrical engineers
17-2072	Electronics engineers, except computer
17-2151	Mining and geological engineers
17-2161	Nuclear engineers
17-2171	Petroleum engineers
17-3021	Aerospace engineering and operations technicians
17-3023	Electrical and electronic engineering technicians
17-3024	Electro-mechanical technicians
19-1021	Biochemists and biophysicists
19-1022	Microbiologists
19-1041	Epidemiologists
19-1042	Medical scientists, except epidemiologists
19-2011	Astronomers
19-2012	Physicists
19-2021	Atmospheric and space scientists
19-2031	Chemists

## Text table 1. Employment shares and wage rates for the 10 metropolitan areas with the largest shares of high-tech workers, 2001

#### (Shares in percent)

	High	tech	Non-	Technolo	Non- technology		
MSA	Employ- ment share	Annual wage	high-tech wage	Employ- ment share	Annual wage	group wage	
San Jose, CA PMSA	10.68	\$79,800	\$45,210	19.92	\$73,460	\$43,190	
Boulder-Longmont, CO PMSA	9.81	68,630	37,750	20.26	60,260	36,080	
Melbourne-Titusville-Palm Bay, FL MSA	7.15	48,120	30,780	17.88	49,830	28,390	
Huntsville, AL MSA	6.80	62,710	32,800	16.33	56,070	31,310	
Lowell, MA-NH PMSA	6.43	71,560	39,120	15.53	62,480	37,410	
Raleigh-Durham-Chapel Hill, NC MSA	6.20	65,330	34,730	16.48	55,960	32,900	
Washington, DC-MD-VA-WV PMSA	6.16	67,830	41,030	14.72	63,340	39,250	
Seattle-Bellevue-Everett, WA PMSA	5.71	69,880	39,830	14.48	63,890	37,910	
Boise City, ID MSA	5.67	49,940	31,340	13.69	48,730	29,910	
Austin-San Marcos, TX MSA	5.30	66,370	33,650	14.26	55,420	32,140	

## Text table 2. Employment shares and wage rates for the 10 metropolitan areas with the smallest shares of high-tech workers, 2001

(Shares in percent)

	High	tech	Non-	Technolo	Non- technology		
MSA	Employ- ment share	Annual wage	high-tech wage	Employ- ment share	Annual wage	group wage	
Yuba City, CA MSA	0.61	\$54,980	\$32,800	7.41	\$55,750	\$31,140	
McAllen-Edinburg-Mission, TX MSA	.62	39,870	24,410	5.94	44,830	23,230	
Jonesboro, AR MSA	.63	38,500	26,120	8.68	41,370	24,770	
Brownsville-Harlingen-San Benito, TX MSA	.67	46,610	24,590	6.05	44,550	23,480	
Punta Gorda, FL MSA	.68	43,790	27,430	11.86	43,990	25,350	
Vineland-Millville-Bridgeton, NJ PMSA	.68	50,220	31,960	6.52	49,430	30,880	
Gadsden, AL MSA	.69	40,310	26,180	8.65	43,870	24,620	
Jacksonville, NC MSA	.72	41,680	24,620	5.83	42,140	23,680	
Stockton-Lodi, CA MSA	.73	51,240	32,400	5.86	54,520	31,190	
Yuma, AZ MSA	.73	51,790	24,630	6.19	46,520	23,420	

- 19-2042 Geoscientists, except hydrologists and geographer
- 19-4021 Biological technicians
- 19-4031 Chemical technicians
- 19-4041 Geological and petroleum technicians
- 19-4051 Nuclear technicians
- 27-1014 Multi-media artists and animators
- 29-2011 Medical and clinical laboratory technologists
- 29-2033 Nuclear medicine technologists
- 29-2034 Radiologic technologists and technicians

The criterion used in the selection of these occupations does not always lead to a clear stratification according to the SOC. For example, although most of the occupations from the major group Computer and mathematical science occupations (15-0000), are included as high-tech occupations, some, such as Computer support specialists (15-1041), were not included because of the nontechnological aspects of their job duties. Conversely, only one occupation, Multimedia artists and animators (27-1014), was included from the major group Arts, design, entertainment, sports, and media occupations (27-0000). None of the management and supervisory occupations was included in this list because of the OES coding principle that these individuals must spend at least 80 percent of their time supervising workers rather than performing work that might be considered high-tech. Also, residual occupations (those with titles ending in the phrase, "all other") were excluded from this list.

A different method of classifying workers as high-tech is to identify major groups in the SOC among whom the use of technology is prevalent. The four major groups usually considered be the most technologically oriented are: Computer and mathematical science occupations (15-0000), Architecture and engineering occupations (17-0000), Life, physical, and social science occupations (19-0000), and Healthcare practitioner and technical occupations (29-0000). The rationale for including all of the occupations in these groups as high-tech is that even those workers who are not making use of cutting-edge technology to perform their tasks are probably associated with other workers who are, thereby achieving higher productivity in their own occupation. When all of the workers from these major groups are included, the list of high-tech occupations increases from 36 to more than 100. The workers in these groups will be referred to in this article as employed in "technology group occupations."

#### **Metropolitan Statistical Areas (MSAs)**

The Occupational Employment Statistics (OES) program collected occupational employment and wage data in 337 metropolitan statistical areas (MSAs) in 2001. Text table 1 shows the 10 MSAs with the largest estimates for high-tech workers as a percentage of total MSA employment, and text table 2 shows the MSAs with the lowest estimates. These tables list the average annual wages for both the high-tech and technology group occupations, as well as those of all workers outside of these classifications. The map on the following page displays the percentage of high-tech workers for all MSAs.

In text table 1, the wages for high-tech workers is higher than the wages for technology group workers in 9 out of the 10 MSAs with the highest percentages of high-tech workers. Conversely, text table 2 shows that the wage estimate for technology group workers is higher than the wage estimate for high-tech workers in 7 out of the 10 MSAs with the lowest percentages of high-tech workers. Not surprisingly, there is a connection between the percentage of high-tech workers in a area and the percentage of workers in technology group occupations. From these tables, it is also clear that there is a correlation between the percentage of hightech workers in an area and the level of wages of both hightech and *non*-high-tech workers in the same area.

#### Interpreting the results

A correlation coefficient is a number between -1 and 1 that measures the degree to which two variables are linearly related. If there is perfect linear relationship with positive slope between the two variables, we have a correlation coefficient of 1; if there is positive correlation, whenever one variable has a high (low) value, so does the other. For all MSAs, the correlation coefficient between the percentage of high-tech workers in an MSA and the annual wages paid to those workers in that area is 0.658, while the correlation coefficient between the percentage of technology group workers in an MSA and the annual wages paid to those workers in that area is only 0.481. This would seem to indicate that technology-oriented workers tend to be clustered in communities that are, generally speaking, technological centers that are willing to pay more than other areas for workers who possess advanced technical skills. The relationship between the percentage of employment and wages is much stronger for the high-tech workers than for the technology group workers.

The correlation coefficient between the percentage of

high-tech workers in an MSA and the annual wages paid to all *other* workers in that MSA is 0.604, while the correlation coefficient between the percentage of technology group workers in an MSA and the annual wages paid to all other workers in that MSA is only 0.418.

This demonstrates that, once again, the more specialized class of technology workers appears to have a greater effect on both their own wages and area wages in general than does the technology group, and that this effect is not accounted for by the relatively higher incomes of the high-tech workers.

A number of empirical studies have documented that unskilled labor and capital are substitutes, while skilled labor and capital are complements. Similarly, high-tech workers, as defined in this article, are performing work that is both highly skilled and capital intensive, which not only leads to increased wages but requires fewer unskilled workers. Because of the relatively lower demand for unskilled workers in high-tech areas, productivity gains and greater demand for tech workers tend to result in a wage distribution that is more positively skewed than those in other areas. This would appear to support the theory of a skill-biased technological difference between MSAs.

According to this theory, technological advancements that are introduced into the workplace decrease the demand for unskilled workers and increase the demand for skilled workers. Because a decrease in the demand for certain workers will lower their relative wages if the supply of workers is held constant, technology improvements result in greater wage inequality between highly skilled and unskilled workers in the labor market. The data presented in this article indicate that the wages paid to non-high-tech workers within high-tech MSAs tend to be higher, possibly caused by rent sharing,<sup>1</sup> increased productivity of non-high-tech workers due to their high-tech environment, or a substitution of higher skilled workers for unskilled labor.

<sup>&</sup>lt;sup>1</sup>The rent-sharing hypothesis of wage behavior applies to situations in which employers, for any of a number of reasons, feel compelled to share some of their profits with their employees.

## Employment and Wages in Elementary and Secondary Schools

#### Chakinna Brewington

The number of people working directly in the education industries demonstrates the importance of investment in education in the United States. With 11.5 million workers, or about 9 percent of total employment, educational services (Standard Industrial Classification 82) is one of the largest employing industries in the Nation. The Standard Industrial Classification (SIC) divides SIC 82 into five three-digit industries: Elementary and secondary schools (SIC 821); colleges, universities, professional schools and junior colleges (SIC 822); libraries (SIC 823); vocational schools (SIC 824); and schools, and educational services, not elsewhere classified (SIC 829).

Drawing on 2001 data from the Bureau of Labor Statistics' Occupational Employment Statistics survey (OES), this article focuses on the staffing and wages of teachers, teacher

Chakinna Brewington is an economist in the Division of Occupational and Administrative Statistics, Bureau of Labor Statistics. support workers, and administrative workers in elementary and secondary schools (SIC 821) and highlights the variation in the staffing and wages among States. Table 1 shows the distribution of employment and annual mean wages for the detailed occupations in the three occupational groups. These occupations, combined, account for 5.1 million workers, or about two-thirds of employment in the Nation's elementary and secondary schools (SIC 821). Teachers are 46 percent of employment in elementary and secondary schools, while teacher support occupations make up 14 percent and administrative workers account for 4 percent. Elementary school teachers, with 1.4 million workers, is the largest detailed occupation within the three occupation groups discussed here, and is also one of the largest occupations in the United States. Other dominant occupations in this industry are secondary school teachers and teacher assistants, with around 1 million employees each, followed by middle school teachers with about 570,000 employees.

Text table	1. Employment	and annua	I mean wa	age for th	ree categories	of occupations	in elementary	and secondary	schools
(SIC 821),	2001			-	-	-	-	-	

Occupation	Employment	Annual mean wage
Total employment in elementary and secondary schools	7,985,850	\$36,020
Teachers	3,662,320 150,760 1,435,620 569,140 18,240 975,100 103,870 203,180 85,490 120,920	44,120 42,400 43,370 43,550 43,420 45,390 44,970 45,230 43,160 45,860
Teacher support Librarians Library technicians Audio-visual collections specialists Instructional coordinators Teacher assistants Administrative Managerial Business Financial	1,073,650 61,790 25,600 5,600 32,100 948,560 318,120 287,560 19,580 10,980	22,180 46,110 23,290 36,540 53,220 19,450 66,690 59,460 46,040 48,690
Other occupations	2,931,760	32,930

As one might expect, about half of those employed by elementary and secondary schools are teachers. However, the teachers' proportion of school employment and their salary levels are not consistent across all States. For example, teachers' share of industry employment varies from 33 percent in Kentucky to 56 percent in Missouri. In the case of earnings, annual mean wages for teaching occupations vary from \$59,615 in New York to \$31,847 in Montana.

The next section of this article discusses employment of the teacher, teacher support worker, and administrative worker groups with regard to various characteristics. The following section focuses on wages for these occupations.

#### Employment

There are about 3.6 million teachers in elementary and secondary schools nationwide. Text table 2 shows the share of employment in teaching occupations that is found in elementary and secondary schools for each of the 50 States and the District of Columbia. In Delaware, Pennsylvania, Nevada, Oklahoma, and Wisconsin, teachers represent more than 50 percent of industry employment, while they account for only 33 percent in Kentucky and 36 percent in Michigan.

While some States have higher shares of teachers overall, they may have different concentrations of specific types of teachers. Elementary school teachers account for the highest share of elementary and secondary school employment in Nevada (27 percent) and North Dakota (26 percent). This contrasts with Maine and Rhode Island, which have the smallest shares, or 13 percent each. States with the highest shares of such teachers include New Mexico (26 percent) and Louisiana (25 percent) and those with the lowest share of special education teachers include Indiana (12 percent) and Texas (11 percent).

As in the case of teachers, the representation of teacher support occupations varies by State. These support occupations include librarians, library technicians, audio-visual collections specialists, instructional coordinators, and teacher assistants. Chart 1 shows the States in which support workers' shares of industry employment are greatest. The States with the smallest shares of teacher support workers include West Virginia (7 percent) and Nevada (8 percent). Missouri, which has the largest share of industry employment for teachers, has the third lowest share of employment in teacher support occupations (9 percent).

There are 948,560 teacher assistants in elementary and secondary schools, or 12 percent of the industry's employment. This single occupation accounts for about 90 percent of the employment in teacher support occupations. In most States, teacher assistants dominate employment in teacher support occupations. The occupation's share of employment ranges from 19 percent in Vermont to 6 percent in West Virginia.

The final group of workers examined in this study is administrative employees. Administrative workers, a group that accounts for 4 percent of employment in elementary and secondary schools, includes all managerial, business, and financial occupations. Clerical workers are not included in this group. By State, the share of industry employment attributable to administrative occupations varies from under 3 percent in Utah to 5 percent in Arizona, the District of Colum-

Text lable 2. Share of employment in teaching occupations as a percent of Sic ozi employment, zo	Text table 2.	Share of employment	nt in teaching occu	pations as a percen	t of SIC 821 er	nployment, 2001
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State	Percent of industry employment	State	Percent of industry employment
Mianouri	56	Georgia	16
Delawara	55	Arkansas	46
Delaware	53	North Carolina	45
Novada	52	New Hampshire	45
Wisconsin	51	Mississinni	45
Oklahoma	51	Maryland	45
Nebraska	50	Louisiana	45
West Virginia	10	Idaho	45
South Dakota	43	Colorado	45
South Carolina	43	Virginia	40
Oregon	40	Montana	44
North Dakota	40	Arizona	44
New Jersev	40	Vermont	43
New York	48	Kansas	43
Massachusetts	48	Florida	43
lowa	48	Alabama	43
Illinois	48	Utah	42
Connecticut	48	Hawaii	42
Alaska	48	California	42
Texas	47	New Mexico	41
Maine	47	Wyoming	40
		Indiana	40
United States	46	Washington	39
		District of Columbia	37
Tennessee	46	Rhode Island	36
Ohio	46	Michigan	36
Minnesota	46	Kentucky	33
			1



bia, West Virginia, Alaska, and Delaware. The largest detailed occupation in the administrative worker group is elementary and secondary school administrators, which includes school principals. While these administrators account for just over 2 percent of industry employment in elementary and secondary schools, they are reported in 85 percent of all establishments in this industry.

The occupations outside of the three major categories discussed here account for about one-third of total employment in elementary and secondary schools. The largest of these are janitors, school bus drivers, food service workers, and clerical workers. While these other occupations account for smaller portions of total employment, they are found in most schools in all States.

#### Wage rates

Wage rates for the three major occupational groups in the education industry are quite different. Nationally, administrative workers earn \$66,690 per year. On average, teachers earn \$44,120 per year, or about two-thirds of the administrative workers' salary, and teacher support occupations earn \$22,180 or about one-third of the administrative wage. Just as employment for these occupations differs from State to State, so do wages among workers in these groups. Text table 3 displays teachers' annual salaries by State for 2001. Mean annual salaries for teachers range from \$31,847 in Montana to \$59,615 in New York.

Relative wages for specific types of teachers also vary by State. While special education teachers earn wages, that are 4 percent higher on average, than those of non-special education teachers, States premium for special education teachers range from 13 percent in Colorado and 9 percent in Maryland to -9 percent in Hawaii and -6 percent in Missouri and New Hampshire. Although Colorado has the highest relative wages for special education teachers, the share of teachers accounted for by special education teachers is less than 13 percent. Nationally, 16 percent of all teachers are special education teachers.

On average, teacher support workers earn half as much as teachers. Yet, the differences in wages between the two groups also depend on where the jobs are located. While teachers in New York earn the highest wages nationwide, teacher support workers in the State earn less than half of the teachers' pay. Other States, such as Connecticut and New Jersey, that pay teachers high wages also pay teacher support workers less than half of what teachers earn. On the other hand, 33 States, including Maine and Iowa, pay teacher support workers more than half the wage of teachers, as shown in chart 2. In Nevada and the District of Columbia, teacher support workers earn three-quarters of the teachers' wage.

While they represent a small share of industry employment, administrative workers have earnings that far exceed those earnings of teachers and teacher support workers. In all States, administrative workers earn more than do teachers. Education administrator is the most commonly reported occupation in elementary and secondary schools. With an annual salary of over \$71,000 per year, this is among the top wage-earning occupations in elementary and secondary schools. Other high-paying occupations in this group include chief executives (\$95,510) and computer and information systems managers (\$69,420).

ALMOST 8 MILLION PEOPLE are directly or indirectly involved with educating students in elementary and secondary schools. Besides elementary school teachers, teacher assistants, and school principals, other occupations that are found in nearly all schools include counselors, school bus drivers, food service workers, and janitors. The staffing and wages for these occupations may vary greatly by State. An understanding of the typical staffing in elementary and secondary schools may be useful to those interested in employment in this industry.

#### Text table 3. Wage rates for teachers, by State, 2001

State	Mean wage	State	Mean wage
Pennsylvania	\$48,552	New Mexico	\$36,835
Alaska	49,647	lilinois	46,484
	38,189		39,709
West Virginia	36,671	Iennessee	35,662
Rhode Island	48,986	Maryland	44,345
Alabama	39,323	Kentucky	39,067
Massachusetts	46,496	Louisiana	34,144
Florida	41,718	Connecticut	52,624
Wyoming	36,450	Colorado	40,053
Ohio	43,237	Oregon	42,757
Virginia	42,481	Arizona	37,564
North Dakota	32,300	New York	59,615
Delaware	52,672	Oklahoma	33,188
South Carolina	38,676	Montana	31,847
Vermont	40,380	Arkansas	34,683
New Hampshire	38,418	Wisconsin	42,247
Georgia	44,141	Nebraska	37,885
California	49,881	Utah	39,857
Michigan	47,976	Mississippi	32,043
Texas	40.142	Kansas	35,460
Indiana	43.279	Washington	42,864
	-, -	District of Columbia	46,987
United States	44,122	South Dakota	32,155
	,.==	lowa	34,791
Minnesota	42,389	Nevada	40.937
Idaho	38 622	New Jersev	51,201
North Carolina	37 577	Missouri	35 441
	01,011		00,441



## New and Emerging Occupations in the 2000 Occupational Employment Survey

#### Jerome Pikulinski

The Occupational Employment Statistics (OES) survey conducted by the U.S. Bureau of Labor Statistics (BLS) is an important source of information about new and emerging occupations. Jobseekers, curriculum planners, and students are among those interested in knowing where the future job opportunities are going to be. Labor market analysts at the national, State and local levels estimate current employment for occupations and also project future employment for occupations, as well as openings due to the need to replace workers currently in an occupation. The process for developing the current and future employment for an occupation is systematic-starting with collecting information on the current workforce and concluding with analysis leading to projections of this employment. In addition to measuring employment for existing occupations, many of the aforementioned consumers of data also want information on new occupations.

#### Background

The identification of new occupations is problematic. By the time that one can conclusively confirm that there indeed is a new occupation in the workforce, the occupation is often no longer new. Complicating the process is the distinction between an occupation and a job title. An occupation is a broader concept that generally includes numerous job titles. When a new title emerges in the workforce, it usually relates to activities that fall under the definition of an already existing occupation. Conversely, the occupation title sometimes stays the same, but the core activities that define the occupation change. In the former case there is not a new occupation. In the latter case, a determination must be made as to whether a new occupation has arisen. These situations describe most of what occurs in the attempt to determine whether there is a new occupation. Occasionally, a new occupation appears that has a new title and clearly includes duties that do not fall within the definition of any existing occupation. (Typically, these new occupations are coded into one of the residual classifications of the Standard Occupational Classification. See appendix A.) In addition to the above, some occupations, although not new, are emerging in industries in which they were not previously found.

#### Methodology

The observations in this report were obtained from establishments responding to the OES survey. This survey is conducted by the State Employment Security Agencies in cooperation with BLS. The responding establishment is initially provided with a limited list of occupations and their definitions. Establishment respondents are asked to indicate on the survey questionnaire how many workers they have in these occupations, by specific wage intervals. They are further asked to enter the occupation title and definition for any worker not covered by the provided occupations and definitions.

Labor market analysts in the State agency take the respondent entries for occupations not included in the survey form and determine the occupation classification in which the associated data should be placed. The occupation classification structure used in the OES survey is the 2000 Standard Occupational Classification (SOC) system. (See appendix A for a description of the SOC system.) Entries that cannot be assigned to a specific detailed occupation in the SOC are usually assigned to 'all other' categories in some of the occupational divisions. These entries form a potential pool for identifying new occupations.

Sometimes, the respondent entry is such that the decision as to which occupation it relates to is not clear. In such cases, the State agency analyst tries to determine whether the entry falls within the core definition for any occupation existing in the SOC. If the State analyst determines that the entry does not appear to relate to any occupation in the SOC, including the 'all other' categories, he or she may opt to seek assistance from a BLS coding expert. These inquiries form another potential pool for identifying new occupations.

The information in this report was obtained from the 2000 OES survey. States forwarded the relevant survey entries dealing with potentially new occupations to BLS for review. At BLS, the information submitted by all States is reviewed and grouped by potential occupation. There is a great deal of judgment that must be exercised at every stage of this process. As a result, there are no corresponding employ-

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ment estimates for these occupations. Nonetheless, the information provided should be useful in the overall effort to identify new occupations.

#### Patterns of new and emerging occupations

The 230 selections of potential new and emerging (N&E) occupations were analyzed as a group with respect to a variety of distributions. These are establishment-size, industry, wage, regional, and SOC classification distributions.

*Establishment size.* Chart 1 shows that more than 50 percent of the N&E occupations were reported by establishment units having fewer than 50 employees. This compares with about

40 percent of the employed workforce being in establishments with fewer than 50 employees. It appears that small firms have an edge in the creation of N&E occupations. These surveyed units could have been either small firms or special operating units within larger firms. The smallest percentage of N&E occupations was reported by firms with more than 1,000 employees.

*Industry*. New and emerging occupations arise in a number of industries. More than 40 percent arise in services. This dominant major group consists of several sectors, including health, social services, legal assistance, and education, as well as personal, business, and amusement and recreation





services. Within manufacturing, the durable goods sector is the primary source of N&E occupations. As indicated in chart 2, a variety of other industries account for the remaining occupations.

Almost one-half of the new and emerging occupations are found in the group of wage ranges from \$8.50 to \$16.99. Most of the remaining occupations are found in ranges that start at \$17 and higher. The number of N&E jobs in the highest wage category reflects new positions for emergency medical physicians at a number of hospitals.

*Region.* While the chart 4 suggests that some regions may account for larger percentages of N&E occupations, no one State dominates in this regard. The number of new and emerging occupations is relatively high in Western States, propor-

tional in the Central States, and low in Southern and Northeastern States when compared with total employment in each region.<sup>1</sup>

<sup>1</sup> The following States and areas constitute the regions for which data are presented in chart 4: **Northeast**—Connecticut, Delaware, District of Columbia, Maine, Massachusetts, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; **South**—Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; **Midwest**—Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; and **West**—Alaska, Arizona, California, Colorado, Guam, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.



SOC classification. From an occupational classification perspective, the pattern of N&E occupations consists of a complex distribution that cuts across previously noted industry patterns. Study and experience show that, within industry classifications, many positions fall into occupational patterns that cut across industry lines. For example, the healthcare industry obviously requires healthcare support workers, but it also needs managers; installation, maintenence, and repair personnel; transportation workers; and personnel to staff business and financial operations. These occupations, in turn, are common to many other industries. Further detail on these occupations is presented in the next section.

#### Developments in selected occupational groups

This section highlights and briefly discusses specific occupations flagged as new or emerging, based on the results of the 2000 OES survey round.

Occupations in the field of information technology

- GIS project managers
- GIS analysts-map production
- GIS analysts—land use

The pivotal role of visual information in land use decisionmaking at the local government level continues to generate emerging Geographical Information System (GIS) occupations. Local government infrastructure investments and land-use regulations require systemic development plans and other land use data in visual form. Among other uses, GIS information and models aid in discussions and negotiations between local governments and various private entities, including developers.

#### Manufacturing processes.

- Senior engineers—operations due diligence
- Quality control crew leaders—production line

The concept of "due diligence" typically refers to a profound review of financial and accounting documents in the acquisition of a firm or in the process of investing in a firm. The concept also applies to the engineering and production activities, for which functional plans and systems may assume equal importance with the financial picture of a firm. Industry adoption of the International Standards Organization (ISO) 9000 procedures is closely related to the creation of a variety of management and technical positions that certify the efficacy of the engineering and production functions. Positions intended to certify manufacturing standards and quality production through use of well-documented procedures and processes continue to emerge.

#### Healthcare.

- Credentialing positions
- Eligibility, necessity, and utilization reviewers
- · Selected medical specialties
- Adjuvant therapists

In the health field, N&E occupations have addressed concerns with legal liabilities, responses to advancing medical technologies, administrative adjustments to rising costs, and alternative medical approaches. As a consequence, increased attention has been directed toward establishing and updating the credentials and certifications of medical personnel. New technologies and related certifications have created or changed work content in emergency medicine, endoscopy, enterostomal therapy, sonography, and retinal angiography, to list only some areas. Rising costs have created the need for additional cost-containment positions that determine the necessity of treatment, the form of treatment, the duration and location of treatment, and approved providers, among other cost control measures. Adjuvant, or "helping," therapies of alternative varieties have created additional occupational opportunities as insurers extend coverage options. Included among providers of adjuvant therapies are acupuncturists, cultural healers, biofeedback clinicians, and sleep technicians.

#### Human service occupations.

- Death and burial management
- · Chaplains and religious educators
- Bereavement specialists
- Behavioral modification and adaptation

The aging of the American population continues to create occupations related to deaths and burials. Some associated occupations include "death-call drivers," who handle initial disposition of human remains. Others are cemetery personnel, who handle grave preparation and graveside arrangements. Other positions exist for persons who help in the management of bereavement and subsequent grief management.

Chaplain occupations and others dealing with religious education have been reported in nontraditional areas such as home healthcare services, residential care facilities, other health and allied services, labor unions and similar labor organizations, and some units of local government. The need for behavior modification and adaptation by other means has created demand for habilitation specialists, alcohol education instructors, Americorp volunteers, victim-witness coordinators, and interpreters for the deaf. For example, aggressive enforcement and control efforts, including rehabilitation, have necessitated education and training programs for persons convicted of driving while intoxicated.

#### Transportation.

- Aircraft line and support technicians
- Armored car drivers
- · Aircraft interior refurbishers
- Ship container placement planners

N&E transportation occupations are aircraft-line personnel, armored car drivers, and ship container placement planners. Aircraft occupations are associated with corporate aircraft ownership. These aircraft owners require line technicians to move, fuel, and clean airplanes. The growth in the number of corporate aircraft has led to demand for interior refurbishers to maintain and renew interior accommodations. The continued growth of various convenience stores and fast-food outlets, among other factors, has created a need for armored car drivers to collect receipts and deliver operating funds. Finally, international trade and current ship container technology have resulted in occupations for specialists who plan the loading and placement of containers aboard ships.

#### Security.

- · Security screeners
- Crisis response specialists-telephone
- Surveillance analysts
- Construction traffic control officers
- 9-1-1 coordinators
- Alarm monitoring center operators

In 2000, a variety of airport screening occupations appeared. These included managers and assistant managers of airport screeners, screening supervisors, and screeners. Similar occupations were created for work in the lobbies and public areas of commercial and government buildings. Camera surveillance of retail sites created the need for analysts to review videotapes and reports. The need for telephone companies to support 9-1-1 call systems required the use of various coordinators to oversee the installation and maintenance of required switches. The expansion of telephone call centers of 9-1-1 type systems required increased staffing of crisis response specialists. The management of traffic around construction and utility repair sites called for the employment of specialized traffic control personnel. Finally, an ex-

panded reliance upon silent alarm systems at businesses and homes supported the need for alarm monitoring personnel at central alarm locations, partly due to local police complaints about having to respond to false alarms.

#### Management support.

- Total quality management
- Bankruptcy coordinators
- · Governmental affairs specialists
- Disaster business plan specialists
- Regulatory specialists
- Supply chain and process control managers
- · Overseas operations specialists
- Conflict of interest specialists

The total quality management label denotes a number of related occupations that incorporate integrated management functions: Total quality manager of process and International Standards Organization (ISO) compliance; ISO management representative in human resources, data processing, and safety; document control/safety manager, ISO Procedures; and safety director/quality control, among others. These integrated managerial positions have resulted from widespread adoption of the process improvement approach to management. The positions of governmental affairs specialist and manager of environmental affairs were created to address conditions outside of internal operations. Other regulatory specialist functions are more internal, such as those performed by regulatory compliance managers; directors, regulatory affairs and quality assurance; compliance representatives, software sales; regulatory specialists, branch level; and compliance/document control specialists.

Global business opportunities and requirements have spurred demand for international sales managers, senior managers of international affairs, overseas operations specialists, directors of international accounting, and export/ import trade representatives. Domestically, business failures and personal credit problems have created the need for bankruptcy coordinators at a variety of loan and consumer finance establishments. At another level, concerns about business disruptions resulting from natural and other disasters have provided opportunities for specialists who prepare contingency plans that address possible risks.

Modern systems development and related processes have created an entirely new set of integrated operations management functions. These require managers of supply chains, resource managers of material or manufacturing resources planning (MRP), supply chain managers, and process and inventory control managers.

Law firms have increasingly found themselves in need of protection against conflict of interest charges. As a result, growing numbers of such firms have added conflict of interest specialists to their administrative staffs.

#### Technology-specific.

- Satellites
- Wheelchair and scooter maintenance
- Environmental care
- Nonmetallic technicians
- Underground operations
- Salvage technicians

The extensive development of satellite technology has created occupations such as satellite engineers, satellite tracking technicians, field engineers for satellite uplink systems, satellite tracking equipment repairers, telecommunications switch technicians, and cable/satellite technicians. Increased attention to environment management and care has led to growth in the numbers of restoration cleaning technicians, fire and water damage restoration technicians, mine cleanup technicians, waste water technicians dealing with disposal to city systems, and reverse osmosis repair and service technicians. The expanded use of underground routings of various pipeline and cable systems has boosted demand for underground utility locators, underground directional boring specialists and operators, and cathodic protection specialists. The mobility needs of an expanding senior population have driven increases in the numbers of wheelchair and scooter repair and service technicians. The prevalence of nonmetallic materials in everyday products has created positions for laminator/welders of fiberglass tanks and pipes, plastic welders, and laminators. Finally, the high intrinsic value of components and materials going into high-technology products has resulted in an increase in salvage activities and in the growth of occupations engaged in the salvage of such goods as automobile parts and materials in x-ray units.

#### Summary and conclusions

The data from the supplemental sheet of the 2000 OES survey questionnaire have yielded a number of observations about potentially new and emerging occupations. However, as indicated in the earlier discussion of study methodology, the methods used to analyze the data more closely resemble case-study techniques than standard statistical procedures. No claim is made about statistical significance and reliability; however, comparisons with total employment patterns suggest the reasonableness of the observations. A number of occupations have been highlighted here to substantiate patterns with specific details.

If any conclusions are possible, they are that new and emerging occupations are appearing throughout the economy, in many industries in many States. Increasing human needs and new technology serve as the engine and fuel for the creation and expansion of these jobs.

## Concentration of Entertainment-related Employment by Metropolitan Area

Jillian Kerr

Music, sports, art, drama—all Americans enjoy some form of entertainment. Entertainment workers serve many functions, from athletes and coaches in the sports arena to actors and set designers in the theater industry to fine artists and animators in the art world. This article uses employment data from the Occupational Employment Statistics (OES) program to locate those metropolitan areas (MSAs) in which entertainment is created. What are the entertainment hotspots in the United States? The answer to this question can be found by examining the concentration of entertainment, and sources of the entertainment.

The workers discussed in this article produce entertainment. This definition includes artists, actors, musicians, athletes, and models, as well as their agents and business managers. Employees of movie theaters, casinos, and bowling allies, who contribute to the enjoyment of entertainment but do not create entertainment, are not among the entertainment workers discussed in this article. OES data, which measure employment by occupation, show that Los Angeles, CA; New York City, NY; Orlando, FL; and Nashville, TN, are among the metropolitan areas with the highest concentrations of entertainment-related workers. Text table 1 shows the employment in entertainment occupations, the total MSA employment, and the entertainment share of total employment for each of these four metropolitan areas.

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#### Entertainment

With almost 18 out of every 1,000 workers in entertainment occupations, Los Angeles has the highest concentration of entertainment workers in the country. This should come as no surprise, considering the fame of Hollywood and Los Angeles's "fashion district." In New York City, home to the theater district, Broadway, and art-savvy Soho, 14 out of every 1,000 people are employed in entertainment services second only to Los Angeles. Orlando, the home of many enormous amusement parks, and Nashville, the home of country music, also are among the MSAs with the largest concentrations of entertainment-related services in the United States. These four metropolitan areas are the foci of this study.

Entertainment can be divided into four subcategories: Drama, art, music and sports. The concentration of employment for these four types of entertainment is different in Los Angeles, New York, Orlando, and Nashville, reflecting each area's unique character. Text tables 2 through 5 show the employment, share of the MSA employment, and rank among MSAs for each entertainment subcategory in each area. Rank refers to how the metropolitan area's concentration of subcategory employment compares with those of the other 336 metropolitan areas in the United States.

#### Drama

Drama services account for the largest share of entertainment employment in all four metropolitan areas. The drama subcategory of entertainment includes the following occupations: Set and exhibit designers, actors, producers and

Text table 1. MSAs with large shares of entertainment service employment, 2001

MSA	Entertain- ment employment	MSA employment	Entertain- ment share of total
Los Angeles-Long Beach, CA New York, NY Orlando, FL Nashville, TN	72,030 56,150 8,400 4,890	4,073,150 4,056,640 871,750 638,970	1.77 1.38 .96 .77

Text table 2. Drama-related employment by MSAs with high concentrations of entertainment employment, 2001

MSA	Drama- related employment	Drama- related share of total	Rank among MSAs
Los Angeles-Long Beach, CA New York, NY Orlando, FL Nashville, TN	44,380 37,070 2,560 1,420	1.09 .91 .29 .22	2 3 5 9

directors, dancers, choreographers, film and video editors, and theatrical and performance makeup artists. Text table 2 presents the drama-related employment data for Los Angeles, New York, Orlando, and Nashville.

Los Angeles has the second largest share of drama-related workers among the 337 metropolitan areas in the United States. More than 1 out of every 100 hundred people employed in Los Angeles is employed in a drama-related occupation. Eighty-one percent of the more than 44,000 people employed in such occupations are employed by the motion picture industry. The motion picture industry has a huge presence in Los Angeles, accounting for 3 percent of the entire workforce.

Almost 1 percent of New York City's workforce is employed in drama-related occupations. This city of more than 4 million workers ranks third in the Nation for its concentration of drama-related workers. As in Los Angeles, the motion picture industry employs the largest portion of drama service workers, 77 percent. The producers, orchestras, and entertainers industry, which includes Broadway theater companies and casting agencies, is the second largest employer of drama services, with 9 percent of the area's workers. Radio and television broadcasting stations are third, employing more than 5 percent of New York drama service workers.

Some of the main attractions at Orlando's many amusement parks are the live performances. Orlando is fifth in the country for share of drama workers. Fifty-one percent of its drama-related workers are in the miscellaneous amusement and recreation service industry, which includes amusement parks. Other large employers of drama-service occupations are the motion picture production and service industry and the business services industry.

Nashville ranks ninth nationally for its concentration of drama-related services. Most of the drama-related employment is found in the motion picture production and services industry; the radio, television, and broadcasting industry; and the producers, orchestras, and entertainers industry.

#### Art

Art occupations include fine artists, painters, sculptors, illustrators, multimedia artists, animators, and fashion designers. Text table 3 presents art-related employment data for the four metropolitan areas with high concentrations of entertainment employment.

Text table 3. Art-related employment in MSAs with high concentrations of entertainment employment, 2001

MSA	Art-related employment	Art-related share of total	Rank among MSAs
Los Angeles-Long Beach, CA New York, NY Orlando, FL Nashville, TN	5,330 5,630 740 660	0.13 .14 .09 .10	10 6 26 14

Los Angeles has the tenth largest share of art-related workers in the United States. The motion picture industry not only employs drama-related workers but also many artistic workers. Thirty-one percent of the MSA's artists, such as fine artists and animators, are found in this industry. The wholesale trade of nondurable goods industry, which includes men's, women's, and children's fashions, footwear, and accessories, employs art workers such as designers and illustrators. Seventeen percent of workers employed in artrelated occupations in Los Angeles are employed in this fashion industry, the second largest employer of art-related workers in the area.

Advertising is the dominant industry employing art-related service workers in New York City. More than 22 percent of New York City's art-related employees are found in this industry. With 5,630 people employed in art-related jobs, New York City is sixth in the country for its share of artrelated workers. Other industries that employ more than 5 percent of art-service workers in this metropolitan area are apparel, piece goods, and notions; printing and publishing; motion picture production and services; and radio and television broadcasting.

Orlando's art employment is not dominated by any industry. However, art employment in Orlando is concentrated in several industries. The amusement and recreation services industry; the engineering and architectural services industry; and the motion picture production and services industry are all significant employers of the area's art-related workers.

Nashville ranks 14th in the country in art-related employment. Art-related employment in Nashville is found in the business services industry and the motion picture industries.

#### Music

The music subcategory consists of music directors, composers, musicians, singers, musical instrument repairers and tuners. Text table 4 displays employment data for the music subcategory in Los Angeles, New York, Orlando, and Nashville.

Los Angeles has the 12th largest share of music employees in the country. The industry comprising theatrical producers, bands, orchestras, and entertainers employs 52 percent of these workers in Los Angeles. Religious organizations employ another 10 percent of music service-related workers.

Text table 4.	Music	-related	employ	yment	in M	SAs	with	high
concentratio	ns of	entertai	nment	emplo	ymei	nt, 20	001	

MSA	Music- related employment	Music- related share of total	Rank among MSAs
Los Angeles-Long Beach, CA New York, NY Orlando, FL Nashville, TN	5,610 8,780 580 840	.14 .22 .07 .13	12 5 64 14

New York has a larger music community than Los Angeles: 8,800 versus 5,600. More than 2 out of every 1,000 workers in New York City and almost 16 percent of entertainment service workers in New York City are involved with music services. These figures make New York City the area with the fifth highest concentration of music service workers in the Nation. Eighty-nine percent of area workers with musicrelated occupations are employed in the producers, orchestras, and entertainers industry.

In Orlando, many music-related workers are employed by membership organizations and repair services. Membership organizations include religious services as well as other civil and social organizations. These workers would include the musicians, who perform at church services, and the musical instrument repairers and tuners, who work behind the scenes.

Nashville, famous for country music, is ranked 14th nationally in terms of employment in music-related services. The producers, orchestras, and entertainers industry employs the most music-related services in this area.

#### Sports

The sports subcategory is unique among the entertainment subcategories. The sports category contains athletes and sports competitors, coaches, scouts, umpires, referees, and athletic trainers. None of the four metropolitan areas already discussed in this article has a high concentration of sportsrelated workers. In fact, Nashville, which has the highest share of sports-related workers among the four areas discussed, ranks 86th among all MSAs in terms of employment of such workers. Text table 5 shows that, in the sports subcategory, Los Angeles is ranked 221st; New York City, 226th; Orlando, 118th; and Nashville, 86th.

Because this article focuses on subcategories of entertainment employment as a share of overall employment, smaller cities stand out in sports-related employment due to affiliations with schools, semiprofessional sports teams, and other sports organizations. Text table 6 shows that the areas with the highest concentrations of sports-related occupations are Great Falls, MT; Grand Forks, ND; Kenosha, WI; Saint Joseph, MO; and Bellingham, WA. These five metropolitan areas all are among the 100 areas in the United States with the smallest employment.

Los ANGELES, NEW YORK CITY, ORLANDO, AND NASHVILLE are clearly hotspots of American entertainment. Each metropolitan area employs entertainers in different industries, which gives each area a unique character. Los Angeles and New York City have a flare for fashion and the dramatic arts. Entertainment in Orlando thrives through its amusement parks. Country music influences Nashville culture. The sports entertainment field has a unique niche in American life, very different from that of the other forms of entertainment. The products of the American entertainment industry are enjoyed worldwide but their production is concentrated in a small number of population centers.

Text table 5. Sports-related employment by MSA with high concentrations of entertainment employment, 2001

MSA	Sports- related employment	Sports- related share of total	Rank among MSAs
Los Angeles-Long Beach, CA New York, NY Orlando, FL Nashville, TN	2,233 1,771 813 732	0.06 .4 .9 .16	221 256 118 86

Text table 6. MSAs with the highest shares of sports service employment, 2001

MSA	Sports- related employment	Sports- related share of total	Rank among MSAs
Great Falls, MT	120	0.39	1
Grand Forks, ND-MN	170	.37	2
Kenosha, WI	180	.36	3
St. Joseph, MO	160	.37	4
Bellingham, WA	230	.36	5

## An Examination of the Employment and Wages of FAA-certified and FAA-noncertified Aircraft Mechanics and Service Technicians, 2001

#### Michael Soloy

In 2001, aircraft mechanics and service technicians certified by the Federal Aviation Administration (FAA) earned an average \$21.14 per hour, according to the Bureau of Labor Statistics' Occupational Employment Statistics survey. Aircraft mechanics and service technicians without FAA certification averaged \$16.45 per hour, over \$4 less than their FAA-certified counterparts. Total employment for aircraft mechanics and service technicians in all industries in 2001 was 135,250. Because the Federal Government may use Federal certification types other than FAA for its aircraft mechanics, only data for private industry are discussed here. Private industry employed 114,300 aircraft mechanics and service technicians in 2001. Of this total, almost 82 percent were FAA certified. Over 95 percent of the private industry employment for aircraft mechanics and service technicians could be found in seven industries: Aircraft and parts manufacturing; air transportation, scheduled; air transportation, nonscheduled; airports, flying fields, and services; machinery, equipment, and supplies, wholesale trade; personnel supply services; and management and public relations. (Two of these industries, personnel supply services and management and public relations, have been combined for this summary.) Employment and wage data for aircraft mechanics and service technicians in these industries are presented in text table 1. The industries are as defined at the three-digit level of the U.S. Office of Management and Budget's 1987 Standard Industrial Classification (SIC).

The mean wage for FAA-certified aircraft mechanics and service technicians was higher than the mean wage for their FAA-noncertified counterpart in each of the six three-digit

SIC code	SIC name	Certification	Employment	Mean wage
372	Aircraft and parts manufacturing	FAA-certified FAA-noncertified	8,150 6,850	\$20.98 18.35
451	Air transportation, scheduled	FAA-certified FAA-noncertified	54,900 1,240	22.23 17.62
452	Air transportation, nonscheduled	FAA-certified FAA-noncertified	5,530 860	20.53 16.58
458	Airports, flying fields, and services	FAA-certified FAA-noncertified	18,410 7,860	18.33 14.54
508	Machinery, equipment, and supplies, wholesale trade	FAA-certified FAA-noncertified	1,930 380	16.90 14.73
736 and 874	Personnel supply services and management and public relations	FAA-certified FAA-noncertified	1,330 1,400	20.63 17.18

Text table 1. Employment and mean wages for aircraft mechanics and service technicians in selected industries, by FAA certification status, 2001

NOTE: SIC is the industry's 1987 Standard Industrial Classification, as defined by the U.S. Office of Management Budget.

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industries. (See chart 1.) The highest industry mean wage for FAA-certified aircraft mechanics was found in air transportation, scheduled, at \$22.23 per hour. The highest industry mean wage for FAA-noncertified workers was found in aircraft and parts manufacturing, at \$18.35 per hour.

As indicated earlier, total private sector employment of aircraft mechanics and service technicians was split 82 percent to 18 percent between certified and noncertified workers. There was wide variation among the six industries, however, in the pattern of employing certified versus noncertified mechanics. (See chart 2.) The highest percentage of FAAcertified aircraft mechanics was in air transportation, scheduled, which had 98 percent of its aircraft mechanics so classified. The lowest percentage of FAA-certified aircraft mechanics was found in personnel supply services and management and public relations, in which, taken together, only 49 percent were certified.

The percentages of aircraft mechanics and service technicians classified as FAA certified varied by State. Of the 49 States reporting aircraft mechanics and service technicians, 16 reported over 95 percent of their employment for this occupation as FAA certified. An additional 20 States reported over 80 percent of their employment as FAA certified. A total of 47 States reported over 50 percent of their employment for this occupation as FAA certified. However, an examination of the data at both the area and industry levels shows that industry has a much larger effect on the share of aircraft mechanics and service technicians who are FAA certified than does area. In States with high percentages of aircraft mechanics and service technicians classified as FAA certified, most of the employment for this occupation tended to be found in the scheduled air transportation and unscheduled air transportation industries. States with lower percentages classified as FAA certified generally had more employment for this occupation in the personnel supply services; management and public relations; and aircraft and parts manufacturing industries. Within a given industry, the percentages of aircraft mechanics and service technicians classified as FAA certified were very similar across States.

The percentage of each type of mechanic also varied by the size of the employing establishment. On average, establishments with higher total employment had higher percentages of aircraft mechanics and service technicians classified as FAA certified. Among establishments that employed at least one worker in the occupation, those with fewer than 50 total employees had, on average, 69 percent of their aircraft mechanics and service technicians classified as FAA certified. Establishments with between 50 and 250 total employees reported an average 77 percent of such workers as FAA certified, while in establishments with 250 or more total employees an average 87 percent of aircraft mechanics were certified.

Individual establishments can be classified into three groups based upon the type of aircraft mechanics and ser-



vice technicians they employed: Those that reported only FAA-certified aircraft mechanics and service technicians, those that reported only FAA-noncertified workers, and those that reported both types. Of the establishments surveyed that reported aircraft mechanics and service technicians, approximately 64 percent reported only the FAA-certified type, 19 percent reported only FAA-noncertified workers, and 17 percent reported both types. For the establishments that reported both types, about 57 percent of the total employment was FAA certified.

As with the employment percentages, these establishment-type percentages also vary by industry. Within the scheduled air transportation industry, 88 percent of establishments reported only FAA-certified aircraft mechanics, 3 percent reported only FAA-noncertified workers, and 9 percent reported both types. For the combined personnel supply services and management and public relations industry group, 58 percent of establishments reported only FAA-certified aircraft mechanics, 28 percent reported only FAAnoncertified personnel, and 14 percent reported both types.

Additional information about aircraft mechanics and service technicians can be found in the Bureau of Labor Statistics' *Occupational Outlook Handbook*. This *Handbook* includes a detailed description of the working environment, training requirements, and employment growth outlook for aircraft mechanics and service technicians. The *Handbook* is available online at http://www.bls.gov/oco/home.htm or may be purchased from the U.S. Government Printing Office.

#### Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, 2001

		Mear	n wages	Percentiles				
Occupation	Employment	Hourly	Annual <sup>1</sup>	10th	25th	50th (Median)	75th	90th
Management occupations								
Chief executives	455,930	\$51.77	\$107,670	\$23.52	\$36.93	\$57.91	(2)	(2)
General and operations managers	2,064,220	35.37	73,570	14.99	20.81	31.25	48.22	(2)
Legislators	67,400	13.54	28,170	5.69	6.17	7.05	17.00	31.20
Advertising and promotions managers	85,850	31.23	64,960	14.04	18.45	26.90	40.96	60.52
Marketing managers.	189,140	37.70	78,410	18.14	25.06	35.75	49.57	60.61
Public relations managers	64 920	30.90	64 280	15 12	20.28	27 50	39.20	54 28
	0 1,020	00.00	0.,200		20.20	21.00	00.20	020
Administrative services managers	311,600	26.67	55,460	12.10	16.41	23.95	34.26	45.82
Computer and information systems managers	267,310	40.33	83,890	22.31	30.03	39.65	51.03	64.95
Financial managers	570,110	36.26	75,430	18.05	24.17	33.75	46.26	65.72
Human resources managers	194,470	31.89	68 310	16.69	21.91	29.75	40.65	52.40
Purchasing managers	107 130	29 44	61 250	14 79	19.85	27 24	36.93	48 60
Transportation, storage, and distribution managers	108,590	29.48	61,330	15.96	20.88	27.52	36.18	46.20
Farm, ranch, and other agricultural managers	5.720	22.41	46.610	11.25	15.09	20.27	27.10	37.04
Construction managers	213,960	31.82	66,190	17.66	22.58	29.35	38.74	52.15
Education administrators, preschool and child care center/program	52,640	17.78	36,980	9.18	11.54	15.32	21.32	30.60
Education administrators, elementary and secondary school	. 200,440	(3)	71,130	47510 <sup>3</sup>	56950 <sup>3</sup>	69240 <sup>3</sup>	84790 <sup>3</sup>	101070 <sup>3</sup>
Education administrators, postsecondary	94,120	32.09	66,760	16.18	21.40	29.66	40.87	54.15
Engineering managers	214,700	42.74	38 200	20.78	33.57 12.51	42.00	5∠.69 21 10	00.23 20.58
Funeral directors	25,300	23.27	48,400	11.16	15.41	20.20	27.24	39.86
Gaming managers	3,470	28.38	59,020	14.01	19.35	25.70	34.42	47.84
Lodging managers	31,040	17.71	36,830	9.56	12.14	15.80	20.97	27.62
Medical and health services managers	227,410	31.03	64,550	17.58	22.36	28.47	36.92	50.17
Natural sciences managers	42,650	39.88	82,940	21.38	28.21	38.66	51.46	67.03
Postmasters and mail superintendents	26,640	22.50	46,810	16.92	18.64	21.39	26.55	31.66
Social and community service managers	100 810	21.19	44,080	0.52	14.97	17.45	26.42	40.15
	100,010	21.11	-1,010	11.00	14.07	10.04	20.21	01.01
Business and financial operations occupations								
Agents and business managers of artists, performers, and athletes	10,270	30.04	62,480	12.88	18.16	26.71	36.91	58.89
Purchasing agents and buyers, farm products	17,640	21.70	45,130	11.16	14.59	18.60	25.57	37.17
Purchasing agents, except wholesale, retail, and farm products.	131,670	21.25	44,200	10.82	13.69	18.55	25.75	35.45
Claims adjusters examiners and investigators	228,300	22.10	40,090	12.00	15.08	20.79	26.66	33.82
Insurance appraisers, auto damage	12,110	20.37	42,360	13.00	16.28	20.10	24.50	28.08
Compliance officers, except agriculture, construction, health and safety	,		,					
and transportation	136,580	22.23	46,250	12.79	15.89	20.50	26.87	34.41
Cost estimators	188,840	24.25	50,450	13.69	17.30	22.58	29.43	37.64
Emergency management specialists	10,720	21.70	45,260	10.88	15.10	20.08	27.40	35.52
Compensation benefits and job analysis specialists	81 450	22.09	45,950	12 72	16.02	20.83	26.64	33 79
Training and development specialists	186,780	21.54	44,800	11.60	15.05	20.09	26.87	34.13
Management analysts	363,890	31.00	64,470	16.84	21.43	27.87	37.61	52.70
Meeting and convention planners	29,560	19.08	39,680	11.18	13.79	17.57	22.68	29.45
Accountants and auditors	881,390	24.37	50,690	14.08	17.23	21.82	28.65	38.42
Appraisers and assessors of real estate	59,630	20.39	42,420	9.89	13.36	18.72	25.62	33.62
Budget analysts	60,620	25.50	53,040	15.90	19.35	24.29	30.55	37.35
Financial analysis	157 770	22.00	47,170 62,440	12.03	20.36	20.02	27.09	51.00
Personal financial advisors.	83.820	33.32	69.310	12.77	17.47	27.75	47.66	(2)
Insurance underwriters	92,780	23.45	48,770	13.33	16.42	21.19	28.14	36.90
Financial examiners	24,570	28.78	59,860	14.96	19.31	26.46	35.79	47.92
Loan counselors	29,710	17.19	35,760	10.77	12.32	15.13	19.79	27.65
Loan officers	213,450	24.07	50,070	12.09	15.29	20.78	29.21	41.79
Tax examiners, collectors, and revenue agents	59,520	15.73	45,180 32,710	7.05	8.82	13.31	20.20 19.25	27.85
Computer and mathematical operations occupations								
Computer and information scientists, research	25,620	37.01	76,970	20.48	27.55	36.12	45.82	57.28
Computer programmers	501,550	30.23	62,890	17.01	22.19	28.90	37.42	46.34
Computer software engineers, applications	361,690	34.79	72,370	21.34	26.54	33.76	42.34	52.48
Computer soliware engineers, systems soliware	201,520	20.16	14,490 41 020	22.03	21.14	30.23 18.54	43.49 24 72	33.24 33.52
Computer systems analysts	448.270	30.63	63.710	18.69	23.48	29.80	37.01	44.81
Database administrators	104,250	28.08	58,420	14.75	19.34	26.37	36.10	44.37
Network and computer systems administrators	227,840	27.14	56,440	16.26	20.37	25.85	32.84	41.30
Network systems and data communications analysts	126,060	28.99	60,300	16.56	21.24	27.63	35.25	44.07
Actuaries	13,210	35.92	74,720	18.66	23.67	32.75	46.42	63.76
Marienaucians.	3,080	35.21	73,230	17.91	26.91	35.96	43.84	52.93
Statisticians	57,520 17 040	20.49 27 44	57 080	14 14	18 57	20.07	35.20	44.00
Mathematical technicians	1.720	21.35	44,410	11.13	13.79	17.58	24.89	40.07
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#### Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, 2001 - Continued

		Mean wages Percentiles		Mean wages Percentiles		Percentiles		
Occupation	Employment	Hourly	Annual <sup>1</sup>	10th	25th	50th (Median)	75th	90th
Architecture and engineering occupations								
Architects, except landscape and naval	84,980	\$28.65	\$59,590	\$17.08	\$20.94	\$26.67	\$34.78	\$42.90
Landscape architects	17,980	24.83	51,640	13.77	17.01	22.46	30.56	38.26
Cartographers and photogrammetrists	7,810	20.84	43,350	12.05	15.06	19.95	25.88	31.75
Surveyors	54,650	19.96	41,510	10.45	13.73	18.87	25.01	31.66
Aerospace engineers	74,380	34.32	71,380	23.46	27.79	33.83	41.05	47.70
Agricultural engineers	2,550	26.11	54,300	15.83	18.79	23.59	32.83	41.57
Biomedical engineers	6,960	30.45	63,330	18.29	22.73	28.75	36.75	45.21
Chemical engineers	31,710	34.99	72,780	22.83	27.29	33.74	41.82	51.29
Civil engineers.	205,370	29.33	61,000	18.76	22.68	28.09	34.71	42.94
Electrical engineers.	151 300	32.99	68 630	22.00	25.78	32 16	39.95	47.32
Electronics engineers, except computer	123,210	33.52	69,710	21.93	26.53	32.86	40.40	48.00
Environmental engineers	48,700	30.11	62,640	18.50	22.98	29.45	36.51	43.46
Health and safety engineers, except mining safety engineers and inspectors	36,420	28.41	59,090	17.74	22.34	27.68	34.07	41.31
Industrial engineers	161,540	29.78	61,940	19.13	23.72	29.22	35.25	42.66
Marine engineers and naval architects	4,860	32.18	62 840	19.60	24.85	32.12	39.79	46.05
Mechanical engineers	204.310	30.54	63,530	19.54	23.90	29.54	36.65	44.12
Mining and geological engineers, including mining safety engineers	6,090	31.43	65,370	17.80	23.35	29.89	38.34	47.67
Nuclear engineers	14,180	38.56	80,200	27.94	32.11	38.50	43.92	52.57
Petroleum engineers	11,420	39.33	81,800	23.41	30.13	39.14	49.22	58.41
Architectural and civil drafters	99,160	18.55	38,580	11.71	14.39	17.79	21.45	26.73
Electrical and electronics drafters	39,300	20.77	43,200	12.08	15.04	19.27	25.21	32.33
Mechanical drafters	69,150	20.07	41,750	12.12	15.04	19.05	24.20	29.80
Aerospace engineering and operations technicians	15,570	24.75	51,470	15.98	19.91	24.27	28.73	34.38
Civil engineering technicians.	220,800	18.54	38,550 43,220	10.93	13.88	20.26	22.50	27.16
Electro-mechanical technicians.	42,130	19.18	39.890	11.45	14.63	18.34	22.30	27.65
Environmental engineering technicians	17,970	18.82	39,140	10.99	13.71	17.59	22.70	29.27
Industrial engineering technicians	59,500	21.15	43,980	12.89	15.60	19.70	25.51	32.62
Mechanical engineering technicians.	54,430	20.51	42,650	13.13	15.89	19.67	24.34	29.34
Surveying and mapping technicians	50,450	14.01	30,610	0.01	10.72	13.50	17.90	22.00
Life, physical, and social science occupations								
Agricultural and food scientists	13,470	25.15	52,310	13.79	17.24	23.28	31.54	41.03
Biochemists and biophysicists	16,130	29.66	61,680	16.31	19.97	27.45	37.70	46.98
Zoologists and wildlife biologists	12,950	20.20	47 400	13.77	17 13	23.90	26.94	33 54
Conservation scientists	12,750	23.78	49,460	14.69	18.69	23.54	27.95	33.59
Foresters	10,480	22.65	47,110	13.94	17.39	22.16	26.68	33.03
Epidemiologists	3,970	26.72	55,590	17.49	21.74	25.34	30.50	38.21
Medical scientists, except epidemiologists	46,430	30.12	62,650	14.22	18.96	26.90	38.56	53.73
Astronomers	900	36.73	76,390	19.24	24.83	37.29	48.21	55.11
Physicists	10,880	40.26	83,750	23.71	31.35	40.23	50.14	59.24
Atmospheric and space scientists	6,770	29.55	55 880	15.10	20.40	29.58	37.05	44.64
Materials scientists	8.360	31.18	64.850	15.69	21.63	30.17	40.30	49.99
Environmental scientists and specialists, including health	. 57,430	24.38	50,700	14.26	17.52	22.75	29.94	37.65
Geoscientists, except hydrologists and geographers	23,030	30.83	64,120	15.94	21.06	28.01	38.89	52.65
Hydrologists	7,340	28.16	58,570	17.72	21.50	27.11	33.56	41.47
Economists	13,390	34.78	72,350	18.12	23.84	32.24	43.55	57.51
Market research analysts	108,940	27.99	58,230	13.70	18.41	25.70	35.80	46.62
Survey researchers	20,690	15.70	32,660	7.34	8.29	11.17	21.04	31.19
Clinical, counseling, and school psychologists	95,640	25.72	53,500	14.27	18.11	24.24	31.50	39.72
Industrial-organizational psychologists	1,380	33.63	56 560	18.64	24.76	26.38	40.96	54.88 43.34
Urban and regional planners	31,130	24.24	50,300	14.88	18.34	23.33	29.08	35.69
Anthropologists and archeologists	4,190	20.10	41,800	11.18	13.45	18.70	25.11	32.05
Geographers	750	24.10	50,130	15.32	18.71	23.28	29.42	33.79
Historians	2,010 4 220	21.56 37.94	44,850 78 920	10.98 18.95	14.87 27.81	20.64 39.11	27.58 49.48	33.92 56.08
	-1,220	0.104	. 5,520	. 5.00	2	33.11	.5.40	00.00
Agricultural and food science technicians	17,310	14.30	29,750	8.08	10.36	13.24	17.04	22.34
Chemical technicians	43,560	18.30	34,030	9.81	12.22	15.52	19.75	∠4.59 27 1 <i>4</i>
Geological and petroleum technicians	11.930	19.85	41.300	9.30	14.31	18.53	24.73	30.94
Nuclear technicians	5,230	29.56	61,490	18.87	23.78	28.70	34.91	43.42
Environmental science and protection technicians, including health	25,750	17.62	36,650	10.10	13.06	16.68	21.49	26.69
Forensic science technicians	6,730	19.38	40,300	11.68	14.48	18.45	23.64	28.93
Forest and conservation technicians	16,430	15.44	32,110	9.45	11.57	14.64	18.35	21.42

Table 1.	National emplo	vment and wage	data from the	Occupational	Employment Sta	atistics survev b	v occupation.	2001 - Continued
		,						

		Mean	anew o	Percentiles				
Occupation	Employment	wica	i wages					
Occupation	Employment	Hourly	Annual <sup>1</sup>	10th	25th	50th	75th	90th
						(Median)		
Community and social convice ecourations								
Substance abuse and behavioral disorder counselors	61 580	\$15.09	\$31 300	\$9.47	\$11.67	\$14.36	\$17.72	\$21.41
Educational vocational and school courselors	201,500	21 00	45 540	11 QR	15.88	20.90	26.88	33 32
Marriage and family therapists	201,500	16.94	35 230	9.58	12.05	15 73	20.00	26.09
Mental health counselors	72 590	15 37	31 970	9.30	11 10	13.06	18.45	23.60
Rehabilitation counselors	105 450	13 74	28 570	7 90	9.60	12 31	16.42	21.00
Child family and school social workers	257 080	16.91	35 180	10.13	12.58	15.84	20.23	25.53
Medical and public health social workers	103,490	18.29	38.050	11.35	13.99	17.50	21.83	26.61
Mental health and substance abuse social workers	85,550	16.34	33,980	9.87	12.20	15.42	19.81	24.56
Health educators	43,890	18.29	38.040	10.21	12.88	16.94	22.43	28.47
Probation officers and correctional treatment specialists	78,640	19.74	41.070	12.35	14.83	18.64	24.14	29.42
Social and human service assistants	283.060	11.85	24,660	7.31	8.86	11.09	13.95	17.63
Cleray	32,940	17.46	36.320	8.07	11.79	16.27	21.52	28.10
Directors, religious activities and education	12,120	15.09	31,400	7.00	9.80	13.18	18.82	25.70
Legal occupations								
Lawyers	490,000	44.19	91,920	20.67	28.99	42.67	64.20	(2)
Administrative law judges, adjudicators, and hearing officers	30,520	27.30	56,780	15.59	18.83	24.14	33.05	46.31
Arbitrators, mediators, and conciliators	5,060	26.13	54,340	10.97	15.29	22.43	34.11	50.09
Judges, magistrate judges, and magistrates	27,890	38.24	79,540	9.36	20.33	41.95	55.19	66.89
Paralegals and legal assistants	183,550	18.86	39,220	11.40	13.98	17.63	22.42	27.48
Court reporters	15,300	20.45	42,530	9.42	13.62	19.43	25.53	34.07
Law clerks	40,340	15.52	32,280	9.18	11.35	14.51	18.52	21.76
Title examiners, abstractors, and searchers	42,720	17.12	35,610	9.42	11.69	15.28	20.61	27.12
Education, training, and library occupations								
Business teachers, postsecondary <sup>3</sup>	65,050	(3)	59,090	26,610	38,130	54,280	76,920	100,010
Computer science teachers, postsecondary <sup>3</sup>	29,690	(3)	53,790	26,020	35,670	49,050	68,410	90,290
Mathematical science teachers, postsecondary <sup>3</sup>	38,480	(3)	53,770	27,300	37,330	49,420	66,860	88,680
Architecture teachers, postsecondary <sup>3</sup>	4,960	(3)	58,070	31,920	42,390	54,480	70,690	89,980
Engineering teachers, postsecondary <sup>3</sup>	28,360	(3)	69,620	36,090	49,740	67,310	87,850	111,960
Agricultural sciences teachers, postsecondary <sup>3</sup>	11,590	(3)	65,080	34,010	47,430	64,500	81,930	99,140
Biological science teachers, postsecondary <sup>3</sup>	38,580	(3)	64,410	31,240	41,400	57,230	82,660	114,080
Forestry and conservation science teachers, postsecondary <sup>3</sup>	1,950	(3)	65,170	38,610	47,370	63,430	81,570	98,830
Atmospheric, earth, marine, and space sciences teachers, postsecondary <sup>3</sup>	7,630	(3)	64,210	32,740	44,850	60,240	81,960	105,890
Chemistry teachers, postsecondary <sup>3</sup>	16,610	(3)	58,390	31,700	41,220	53,750	71,790	93,450
Environmental science teachers, postsecondary <sup>3</sup>	3,630	(3)	61,240	32,760	43,820	57,170	76,980	95,940
Physics teachers, postsecondary <sup>3</sup>	11,830	(3)	65,050	34,650	45,750	61,300	82,680	105,850
	1.040	(2)	C4 000	22.000	45 400	50.000	70 700	00.000
Anthropology and archeology teachers, postsecondarys	4,240	(3)	61,230	32,990	45,460	58,990	76,730	93,320
Area, etnnic, and cultural studies teachers, postsecondarys	5,070	(3)	59,650	32,650	42,920	54,650	74,770	96,140
Economics teachers, postsecondary <sup>3</sup>	11,600	(3)	65,620	32,990	46,680	62,820	82,590	105,780
Geography teachers, postsecondarys	3,600	(3)	58,200	33,090	42,590	55,240	73,090	89,380
Political science teachers, postsecondary <sup>3</sup>	11,230	(3)	59,110	31,400	41,330	54,930	73,070	95,420
Psychology teachers, postsecondarys	24,850	(3)	57,140	29,530	40,200	53,120	70,580	92,770
Sociology teachers, postsecondary <sup>3</sup>	12,890	(3)	54,600	28,170	38,780	51,120	67,590	87,700
Health specialities teachers, postsecondary <sup>3</sup>	85,220	(3)	66,850	26,800	40,370	59,100	88,140	74,240
Nursing instructors and teachers, postsecondary <sup>3</sup>	34,390	( <sup>3</sup> )	51,290	31,150	39,330	49,470	60,850	74,310
Education teachers, postsecondary <sup>3</sup>	40,480	( <sup>3</sup> )	50,680	27,290	36,510	47,060	61,190	81,050
Library science teachers, postsecondarys	4,040	(3)	53,520	29,980	39,460	51,050	64,930	84,100
Criminal justice and law enforcement teachers postsecondarua	8 060	(3)	47 720	22 990	32 650	43 770	57 210	78 000
Law teachers nosteecondary <sup>3</sup>	9,660	()	79 120	31 120	47 500	77 910	#######	141 670
Social work teachers postsecondary <sup>3</sup>	6 250	()	53 400	31 020	39 550	50 250	64 200	85 630
Art drama and music teachers, postsecondary <sup>3</sup>	55 540	(3)	51 100	24 750	35 480	47 080	63 360	84 190
Communications teachers postsecondary <sup>3</sup>	18 110	(3)	50 460	27 590	36 110	47 120	61 870	80 410
English language and literature teachers, postsecondary <sup>3</sup>	51 370	()	49 770	25 390	34 130	45 590	61 250	81 770
Foreign language and literature teachers, postsecondary <sup>3</sup>	18 590	(3)	49 130	25,810	34,130	45,030	59,980	80 260
History teachers, postsecondary <sup>3</sup>	16 710	(3)	54 010	29,630	39,080	50,400	66 870	86 480
Philosophy and religion teachers, postsecondary <sup>3</sup>	14.000	(3)	52.080	27,890	37,030	47,740	64,170	84.340
Graduate teaching assistants <sup>3</sup>	133 690	(3)	24,360	12 760	14 920	22 150	31 530	38 840
Home economics teachers, postsecondarv <sup>3</sup>	4.350	(3)	51.730	24,520	36.650	48,040	64,490	85.610
Recreation and fitness studies teachers postsecondary <sup>3</sup>	14 700	(3)	44 320	18 490	29,690	42 140	55,900	71 390
Vocational education teachers, postsecondary.	116.890	20.05	41.710	10.84	14.18	18.53	24.61	32.24
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Preschool teachers, except special education	377,540	10.07	20,940	6.33	7.37	8.96	11.58	15.61
Kindergarten teachers, except special education <sup>3</sup>	161,610	(3)	41,100	24,060	30,850	38,740	49,560	61,810
Elementary school teachers, except special education <sup>3</sup>	1,452.160	(3)	43.320	27,000	32,830	41,080	52,110	64.280
Middle school teachers, except special and vocational education <sup>3</sup>	571.100	(3)	43.570	27,790	33,090	41,220	52,120	64.270
Vocational education teachers, middle school <sup>3</sup>	18.530	(3)	43.340	28,470	33,990	41,460	50,940	62.890
Secondary school teachers, except special and vocational education <sup>3</sup> .	980.730	(3)	45.370	27,980	34,050	43,280	54,750	67.940
Vocational education teachers, secondary school <sup>3</sup>	107,680	(3)	45,050	29,440	35,120	43,590	54,200	65,130
Special education teachers, preschool, kindergarten, and elementary school <sup>3</sup>	211.240	(3)	44,900	27,920	33,560	42,120	53,900	67,360
Special education teachers, middle school <sup>3</sup>	87.330	(3)	43,040	27,600	32,550	40,010	50,680	63,540
Special education teachers, secondary school <sup>3</sup>	123.570	(3)	45.670	28,560	34,210	42,780	54,760	68.810
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#### Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, 2001 - Continued

		Mean wages		Percentiles					
Occupation	Employment	Hourly	Annual <sup>1</sup>	10th	25th	50th (Median)	75th	90th	
Education, training, and library occupations - Continued Adult literacy, remedial education, and GED teachers and instructors	58,310	\$19.34	\$40,230	\$9.59	\$12.59	\$16.93	\$23.22	\$33.42	
Self-enrichment education teachers	130,440	15.47	32,180	7.24	9.73	13.89	19.28	26.00	
Archivists, curators, and museum technicians	19,970	18.35	38,160	9.09	12.05	16.44	22.58	30.71	
Librarians	150,280	21.04	43,750	11.89	16.02	20.52	25.74	31.37	
Library technicians.	108,580	12.05	25,060	6.82	8.71	11.44	14.83	17.99	
Audio-visual collections specialists	10,320	10.23	33,750	7.82	10.71	14.35	21.25	27.15	
Instructional coordinators	88,340	23.39	48 650	12.34	16 40	22 41	29.58	36.62	
Teacher assistants <sup>3</sup>	1,188,910	(3)	19,430	12,620	14,450	18,070	22,840	28,410	
Art, design, entertainment, sports and media occupations	20.880	31 52	65 570	15 33	21.03	28.75	30.78	54 65	
Fine artists, including painters, sculptors, and illustrators.	9,710	18.43	38,330	7.59	10.71	15.80	21.59	30.87	
Multi-media artists and animators.	30,530	22.45	46,700	11.83	15.31	20.32	27.34	36.71	
Commercial and industrial designers	33,600	25.20	52,410	13.85	18.25	23.95	31.35	38.31	
Fashion designers	8,890	27.09	56,340	11.20	16.26	23.81	35.87	49.60	
Floral designers	69,660	9.85	20,490	6.33	7.50	9.27	11.21	14.32	
Graphic designers	136,470	19.07	39,670	10.43	13.42	17.32	22.71	29.35	
Interior designers	39,340	20.71	43,080	7.03	14.23	19.03	25.00	33.28	
Set and exhibit designers.	7,840	17.29	35,960	7.81	11.51	16.08	21.56	28.53	
Actors <sup>3</sup>	94 470	(3)	36 790	12 440	13 900	20 540	42 120	100 040	
Producers and directors <sup>3</sup>	52.130	(3)	57.160	22.810	31,390	45,090	70,540	140.070	
Athletes and sports competitors <sup>3</sup>	10,520	(3)	71,070	13,610	22,910	43,730	(2)	(2)	
Coaches and scouts <sup>3</sup>	68,670	(3)	34,690	13,410	18,190	29,030	43,390	62,560	
Umpires, referees, and other sports officials <sup>3</sup>	8,750	(3)	26,600	13,450	15,980	20,650	29,810	38,170	
Dancers	17,010	13.83	28,770	6.35	7.14	11.11	17.10	27.24	
Choreographers	12,660	15.75	32,750	6.64	9.11	13.78	20.50	26.91	
Music directors and composers <sup>3</sup> Musicians and singers <sup>3</sup>	7,020	( <sup>3</sup> ) ( <sup>3</sup> )	39,330 46.690	13,760	21,770	33,720 40.320	49,080 60.860	68,060 93,960	
Announcers	50,420	13 27	27 590	6.07	7.07	9.74	14 54	23.97	
News analysts, reporters and correspondents	64,130	18.17	37,800	8.33	10.63	14.45	22.24	32.70	
Public relations specialists	132,390	21.75	45,240	11.50	14.83	19.72	26.58	35.05	
Editors	105,130	21.59	44,910	11.10	14.30	19.21	26.41	35.32	
Technical writers	45,900	24.83	51,650	14.30	18.48	23.73	29.91	37.18	
Writers and authors	40,980	23.13	48,120	9.89	14.05	20.41	27.71	39.99	
Interpreters and translators	18,900	16.68	34,680	9.21	11.83	15.38	20.00	25.69	
Audio and video equipment technicians	32,960	17.16	35,690	8.15	10.58	14.50	20.84	29.34	
Broadcast technicians	31,100	16.13	33,550	0.93	9.01	15.34	21.40	30.43	
Sound engineering technicians	9,200	20.34	42 300	8.57	11.40	16.89	20.41	38.28	
Photographers	61.250	13.43	27.940	6.86	8.30	11.08	16.29	23.10	
Camera operators, television, video, and motion picture	22,040	16.43	34,180	7.08	9.54	13.93	21.89	29.85	
Film and video editors	13,750	20.20	42,010	9.34	12.43	17.74	25.58	34.84	
Healthcare practitioners and technical occupations	(0.000							(2)	
Uniropractors	18,060	36.96	76,870	12.42	21.06	32.89	54.13	(2)	
Definision	01,810 43.200	53.27 10 7/	41 070	24.08 12.12	30.53	10 /2	(*) 23.27	(*) 27 3/	
Optometrists.	24,230	42.30	87,980	21.13	29.21	41.14	56.82	(2)	
Pharmacists	223,630	35.02	72,830	25.92	31.11	36.00	40.98	44.38	
Anesthesiologists	24,700	63.31	131,680	46.45	63.06	(²)	(²)	(2)	
Family and general practitioners	135,290	52.89	110,020	22.45	44.11	56.92	(2)	(2)	
Internists, general	53,310	61.03	126,930	40.75	57.25	(2) (2)	(2) (2)	(2)	
Obstetricians and gynecologists	17,230	04.15 56.02	133,430	47.31 34.4F	06.75	(*) 60.70	(²) (2)	(2)	
Psvchjatrists	24,130	54 60	113 570	28.32	46.36	60.79	( <sup>-</sup> ) (2)	( <sup>-</sup> ) (2)	
Surgeons	48,920	65.89	137,040	53.27	(2)	(2)	(2)	(2)	
Physician assistants	56,200	30.00	62,410	15.67	23.90	30.75	36.73	43.04	
Podiatrists	7,620	45.43	94,500	19.42	30.14	45.86	65.27	(2)	
Registered nurses	2,217,990	23.19	48,240	15.92	18.85	22.44	26.88	32.30	
Audiologists	11,040	23.89	49,700	15.41	18.50	22.55	27.64	34.06	
Occupational therapists	//,080	25.10	52,210	16.24	20.32	24.70	29.14	35.21	
r riyələar tirerapists Radiation therapists	120,450	28.43	53 480	19.20	23.13	27.20	33.23	40.84	
Recreational therapists	26 830	14 92	31 020	8.63	11.02	14 44	18 14	22 00	
Respiratory therapists	82.930	19.17	39.870	14.28	16.17	18.93	21.68	25.47	
Speech-language pathologists	83,110	24.20	50,330	15.43	18.85	23.32	28.34	34.60	
Veterinarians	41,240	33.25	69,150	18.03	23.16	29.81	40.88	58.93	
		Mear	wages			Percentiles			
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Occupation	Employment		Ŭ			50th			
·		Hourly	Annual <sup>1</sup>	10th	25th	(Median)	75th	90th	
						(modian)			
Healthcare practitioners and technical occupations - Continued									
Medical and clinical laboratory technologists	145,400	\$20.70	\$43,060	\$14.58	\$17.24	\$20.31	\$24.01	\$27.68	
Medical and clinical laboratory technicians	146,920	14.52	30,200	9.28	11.22	13.85	17.12	21.05	
Dental hygienists	149,880	27.30	56,770	17.13	21.81	26.30	32.25	39.35	
Cardiovascular technologists and technicians	40,990	17.55	36,510	9.70	12.31	16.83	21.88	26.66	
Diagnostic medical sonographers	32,990	23.08	48,010	16.21	19.17	22.59	26.44	31.17	
Nuclear medicine technologists	17,360	24.65	51,270	16.57	19.44	22.79	26.85	32.86	
Radiologic technologists and technicians	168,240	18.68	38,860	12.64	15.09	18.12	21.71	26.03	
Emergency medical technicians and paramedics	170,690	12.24	25,450	7.19	8.87	11.14	14.51	18.77	
Provide the share the state of	00.040	44.00	00.000	0.70	0.00	40.40	40.00	40.00	
Dietetic technicians	28,940	11.23	23,360	6.72	8.00	10.48	13.63	16.69	
Pharmacy technicians	207,140	10.82	22,510	7.28	8.52	10.40	12.82	15.27	
Psychiatric technicians	59,750	12.94	26,920	0.04	9.51	16.07	10.90	19.55	
Surgical technologiste	20,700	14.77	35,220	10.10	13.00	10.27	19.71	23.52	
Veterinary technologists and technicians	51 790	11 36	23 620	7.65	9.07	10.78	13.10	15 97	
Licensed practical and licensed vocational purses	683 790	15.14	31 490	10.77	12 45	14 75	17.31	20.63	
Medical records and health information technicians	142 170	12 20	25,370	7 80	9.28	11.70	14.36	17 80	
Opticians, dispensing	63,120	13.49	28,060	7.98	9.72	12.55	16.31	20.67	
Orthotists and prosthetists	4,480	24.77	51,510	10.78	15.28	22.65	31.77	40.99	
Occupational health and safety specialists and technicians	38,800	22.21	46,190	12.00	16.11	21.56	27.33	33.53	
Athletic trainers	12,580	(3)	35,380	19,330	26,420	33,450	41,970	54,440	
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Healthcare support ocupations									
Home health aides	560,190	8.90	18,510	6.33	7.32	8.46	10.09	11.93	
Nursing aides, orderlies, and attendants	1,307,600	9.54	19,850	6.76	7.81	9.27	11.01	13.13	
Psychiatric aides	59,640	11.42	23,760	7.45	8.94	11.08	13.84	16.15	
Occupational therapist assistants	17,520	17.39	36,170	12.12	14.66	17.23	20.20	22.62	
Occupational therapist aides	7,560	11.70	24,340	7.09	8.37	10.37	14.28	18.56	
Physical therapist assistants	47,810	17.18	35,740	11.34	14.37	16.96	20.21	23.04	
Physical therapist aides	35,250	10.45	21,730	7.20	8.18	9.76	11.61	14.29	
Massage therapists	26,440	15.93	33,130	0.02	8.73	13.48	22.22	29.40	
Dental assistants	267,840	13.29	27,650	8.35	10.23	12.85	16.28	19.48	
Medical assistants	345,930	11.71	24,300	0.23	9.57	10.01	13.40	10.14	
Medical transcriptionists	94 090	12.00	23,490	0.02	9.10	10.01	15.10	17.51	
Pharmacy aides	58 130	9.22	19 170	6.20	7 25	8.66	10.73	13.26	
Veterinary assistants and laboratory animal caretakers	60.050	8.93	18,570	6.18	7.08	8.40	10.22	12.57	
Protective service occupations									
First-line supervisors/managers of correctional officers	32,090	22.13	46,040	13.96	16.26	21.46	27.10	32.73	
First-line supervisors/managers of police and detectives	113,970	28.82	59,940	16.86	21.79	28.51	35.31	42.61	
First-line supervisors/managers of fire fighting and prevention workers	61,260	26.38	54,880	15.77	20.25	25.68	32.21	39.23	
Fire fighters	275,500	17.25	35,880	8.03	12.01	16.67	22.00	27.26	
File Inspectors and investigators and provention apopialists	12,160	21.10	44,050	0.16	12.03	20.01	20.00	32.30	
	1,030	17.19	35,700	9.10	13.04	10.00	20.92	20.01	
Bailiffs	16.330	15.67	32,590	8.37	11.14	15.09	20.28	24.42	
Correctional officers and jailers	401,250	16.24	33,770	10.22	12.24	15.39	19.78	24.58	
Detectives and criminal investigators	87,030	25.07	52,150	14.64	18.43	24.50	31.16	37.56	
Fish and game wardens	7,790	22.68	47,180	12.48	15.59	19.82	24.57	32.62	
Parking enforcement workers	9,160	13.21	27,480	8.03	10.07	12.89	16.23	19.17	
Police and sheriff's patrol officers	599,550	20.17	41,950	11.78	15.05	19.70	24.96	29.74	
Transit and railroad police	6,750	21.63	44,990	11.20	15.72	20.72	27.30	33.74	
Animal control workers.	9,360	12.34	25,670	7.15	9.20	11.66	14.93	18.38	
Private detectives and investigators.	31,330	15.61	32,470	8.38	10.35	13.64	19.33	25.89	
Gaming surveillance oncers and gaming investigators	9,470	11.27	23,430	6.98	8.90	10.64	13.11	16.45	
Crossing guards	69 990	9.04	20,400	6.08	6.91	0.94 8.55	11.14	14.56	
	03,330	3.03	20,020	0.00	0.51	0.55	11.15	14.10	
Food preparation and serving related occupations									
Chefs and head cooks	114,930	14.58	30,330	7.46	9.41	12.88	17.98	24.63	
First-line supervisors/managers of food preparation and serving workers	659,380	12.47	25,930	7.36	8.89	11.35	14.71	18.96	
Cooks, fast food	601,570	6.99	14,530	5.58	6.02	6.70	7.81	8.82	
Cooks, institution and cafeteria	418,180	9.02	18,760	6.01	6.92	8.53	10.62	13.03	
Cooks, restaurant	674,050	9.24	19,230	6.31	7.40	8.88	10.63	12.82	
Cooks, short order	228,710	7.98	16,590	5.79	6.43	7.57	9.22	10.82	
Food preparation workers	855,800	8.07	16,780	5.82	6.51	7.65	9.15	11.10	
Barrenders	427,010	7.96	16,550	5.69	6.27	7.03	8.71	11.67	
Combined tood preparation and serving workers, including fast food	2,054,250	7.13	14,830	5.65	6.13	6.79	7.90	9.10	
Waiters and waitresses	428,780	7.50	15,010	5.76	0.35	7.10	0.20 7 74	10.05	
Food servers nonrestaurant	101 020	1.30 2.06	10,310	5.59	6.25	0.00	0.22	10.71	
Dining room and cafeteria attendants and bartender beloers	380 580	7 21	15,700	5.60	6.21	6.80	3.22 7 Q/	0.40	
Dishwashers	488 180	7 25	15 080	5 72	6.28	6 98	8 10	9.49	
Hosts and hostesses, restaurant, lounge, and coffee shop	286 750	7.57	15,750	5.77	6.36	7.17	8.39	10.08	
	200,700			5.77	5.00		5.00	.0.00	

See footnotes at end of table.

Coopailin         Employment         Fault         Annual         Toth         Zohd         Son         Addition           Building and grounds cleaning and maintenance accupations         202.000         \$14.16         202.000			Mean wages			Percentiles			
Particip and generate densing and maintenance coupation         Data         Data <thdata< th=""> <thdata< th=""></thdata<></thdata<>	Occupation	Employment	Hourly	Annual <sup>1</sup>	10th	25th	50th (Median)	75th	90th
Difference         202.88         14.18         32.9.20         43.17         10.04         13.08         13.17         53.2175           Tristifies supervisorsmarging of unserving lum serving.         194.30         16.52         34.80         24.10         15.30         16.21         25.30         16.3         13.00         13.01	Duilding and seconds sharing and maintenance commetions								
Tries the supervises many proteins         Tries the supervises         Tries the supervises many proteins         Tries the supervises         Tries the supervises	Einst-line supervisors/managers of housekeeping and ianitorial workers	202 880	\$14 18	\$29 500	\$8.17	\$10.04	\$13.08	\$17.15	\$21.70
genungskeping vorker, instruktion and broukekeping cleares.         94.830 (16.2)         16.20 (16.2)         42.900 (16.2)         52.00	First-line supervisors/managers of landscaping, lawn service, and	202,000	ψ14.10	φ20,000	ψ0.17	ψ10.04	ψ10.00	ψ17.10	Ψ21.75
Janitos and Jeamiers, except mads and housekeeping cleaners.         2071;309         9.52         19.800         6.10         71.00         81.11         11.16         14.56           Maids and Nousekeeping Geners.         777         10.24         80.800         6.60         77.1         10.11         11.12	groundskeeping workers	94.930	16.82	34.990	9.54	12.01	15.43	20.12	26.09
Maids and housekeeping cleaners.         917.50         8.12         16.000         5.00         6.20         7.17         9.08         11.13         14.14           Landscapping and provides.         722.00         10.01         25.00         7.62         7.64         0.05         11.33         14.15         17.4           The thirms and privates.         742.00         10.21         25.00         7.62         7.64         0.05         11.33         14.15         11.43         11.45         11.43         11.45         11.43         11.45         11.43         11.45         11.43         11.65         12.43         11.67         12.43         11.67         12.43         11.67         12.43         11.67         12.43         11.67         12.43         11.67         12.43         11.67         12.43         11.67         12.43         11.67         13.18         32.41         13.44	Janitors and cleaners, except maids and housekeeping cleaners	2,071,920	9.52	19,800	6.10	7.02	8.61	11.18	14.56
Pets conclusions         Figs. 70	Maids and housekeeping cleaners	917,930	8.12	16,900	5.90	6.62	7.71	9.08	11.14
Landscripting and groundskeeping workers	Pest control workers	56,570	12.03	25,020	7.46	9.05	11.13	14.15	17.64
Periodic handlers, sprayers, and applicators, vegetation.         22,12         12,19         25,380         7,76         9,40         11,62         14,517           Personal care and service occupations         24,805         12,43         25,800         7,76         9,40         11,62         12,43         25,800         7,76         9,40         11,63         14,63         19,21         13,81         7,75         9,40         11,68         12,72         14,33         18,87         23,44         7,73         12,62         11,66         24,200         7,41         8,60         11,16         12,72         14,33         11,653         24,220         7,71         16,000         11,63         24,200         7,71         16,000         11,633         24,220         7,78         9,67         13,77         9,99         13,12         24,200         7,78         9,67         13,23         13,41         13,33         14,410         13,43         14,44         14,417         13,41         14,417         13,42         14,417         13,42         14,51         13,44         14,41         13,44         14,413         13,44         14,413         13,44         14,413         13,44         14,413         13,44         14,413         13,44         14,45<	Landscaping and groundskeeping workers	772,800	10.04	20,880	6.60	7.64	9.19	11.52	14.82
Tree timmes and prohes.       44.89       12.43       12.86       7.62       9.12       11.81       14.83       19.01         Caming supervices.       25.109       19.21       39.960       10.72       14.31       18.87       23.84       7.23       18.87       23.84       17.82       24.38         Soft Key persions       86.750       15.09       19.21       39.960       10.72       14.31       18.87       23.84       13.88       17.22       24.38         Soft Key persions       86.750       15.09       15.09       5.97       6.73       12.77       19.92       13.92       23.97       13.92       24.38       3.87       13.92       24.38       3.87       13.97       16.46       13.88       17.22       13.88       13.92       13.92       24.38       3.99       13.12       24.38       3.99       13.92	Pesticide handlers, sprayers, and applicators, vegetation	22,120	12.19	25,360	7.75	9.49	11.62	14.17	17.20
Personal care and service occupations         2         0         0         1         1         1         2         3         1         1         2         3         1         2         3         1         2         3         1         1         1         1         1         1         2         3         1	Tree trimmers and pruners	44,850	12.43	25,860	7.62	9.12	11.51	14.83	19.01
Camming supervisors         25,100         192.1         39.900         10.72         14.38         16.87         23.44         73.13           Solid key persons         16.60         41.20         7.44         8.65         10.32         74.8         8.65         10.38         17.34         13.86         17.36         17.32         13.86         17.34         13.86         17.34         13.86         17.34         13.86         17.34         13.86         17.34         13.86         13.86         17.37         15.80         15.37         5.57         6.61         6.61         6.63         13.31         6.64         6.30         15.13         13.42         2.38         8.77         10.62         6.37         7.23         2.27         12.63         8.77         10.64         13.83         14.33         14.49         2.38         11.33         14.49         2.38         11.33         14.49         2.38         11.34         14.99         2.38         11.34         14.99         2.38         11.34         14.99         2.38         14.34         14.99         2.38         11.34         14.99         2.38         14.34         14.99         2.38         14.34         14.99         2.38         11.34         1	Percental care and convince accurations								
Sint Repartment       12.560       11.66       22.260       7.41       8.65       11.82       13.58       17.23         Sint Repartment Contradation       66.20       11.50       31.30       8.34       10.40       13.12         Contrant minimal contradation       66.20       8.71       12.72       6.61       6.01       15.8       7.23       12.76         Contrant minimal contradation       10.260       8.71       12.70       6.77       10.76       7.71       10.60       5.61       10.58       7.23       12.76       17.71       15.03       11.23       13.42       13.31       14.40       12.80       13.12       13.42       13.41       14.40       12.80       13.11       14.40       12.80       13.11       14.40       12.80       13.11       14.40       11.23       13.42       13.40       12.80       13.11       14.40       22.80       6.61       15.61       11.44       14.40       22.80       6.62       6.83       13.81       14.86       22.80       14.85       14.85       20.52       15.80       14.85       12.85       11.83       14.49       22.81       16.00       16.00       15.87       17.85       15.85       17.85       15.85	Gaming supervisors	25 100	19.21	30 060	10 72	14 33	18.87	23 54	27 31
First-fire Supervisor/managers of personal service workers.         68.70         15.00         31.30         8.34         10.49         13.48         17.92         42.35           Nonfar markens         66.20         13.70         18.27         6.77         7.97         9.99         13.12           Caming dealers         77.6         0.60         6.81         6.01         6.87         6.77         7.97         9.99         13.12           Caming dealers         77.6         0.60         19.370         6.84         6.81         6.83         7.84         11.23         13.42           Usbers, bibly attendants, and liket takes.         10.680         7.71         16.00         6.81         6.71         6.78         8.80         11.44           Usbers cont, contact         6.62         17.23         6.82         17.23         6.82         17.23         1.80         11.44         1.22         1.80         11.15         1.22         1.10         1.10         1.10         1.13         1.12         1.26         1.10         1.13         1.12         1.22         1.10         1.10         1.13         1.12         1.23         1.10         1.13         1.13         1.12         1.12         1.10         1.10	Slot key persons	12 580	11 66	24 250	7 41	8 65	10.82	13.58	17.23
Animal rainers         6.860         13.12         22.280         6.61         000         11.19         16.83         21.22           Gaming dealers         77.540         7.7         16.940         5.51         6.30         6.53         7.53         12.76           Gaming dealers         77.540         7.7         16.940         5.64         6.23         7.23         12.76           Motion picture projectionists         10.280         9.33         12.410         5.68         6.27         7.83         10.41           Amusement and receration attendants.         211.960         7.68         12.42         2.86         6.78         8.28         11.31         14.59         20.88         11.44           Amusement and receration attendants.         7.980         17.20         0.60         6.81         7.9         9.28         11.00           Costimum attendants.         7.280         10.70         17.30         0.62         1.657         13.88         12.42         1.860         1.86         12.42         1.680         1.657         13.88         1.645         1.656         1.657         13.88         1.643         1.728         0.64         1.643         1.73         1.644         1.748         1.644 <td>First-line supervisors/managers of personal service workers.</td> <td>98,750</td> <td>15.09</td> <td>31,380</td> <td>8.34</td> <td>10.49</td> <td>13.48</td> <td>17.92</td> <td>24.35</td>	First-line supervisors/managers of personal service workers.	98,750	15.09	31,380	8.34	10.49	13.48	17.92	24.35
Nordma mining caretakers.         66.23         8.70         19.27         6.57         6.79         7.97         9.89         13.12           Gaming dealers.         77.540         7.640         7.640         7.640         5.61         6.51         6.52         7.73         10.72         10.7	Animal trainers	6,860	13.12	27,280	6.61	8.00	11.19	16.83	21.62
Gaming dealers.         77.54         7.71         16,04         5.61         6.53         7.23         12.75           Gaming and aports book with and unmers.         11,310         100         100.71         15.00         5.61         6.74         10.75         15.25         7.74         10.75         15.25         7.74         10.75         15.25         7.74         10.75         15.25         7.74         10.75         15.25         7.74         10.75         15.25         7.74         10.75         15.25         7.74         10.75         15.25         7.74         10.75         15.25         7.74         10.75         15.25         7.74         10.74         11.72         10.72 <t< td=""><td>Nonfarm animal caretakers</td><td>86,230</td><td>8.79</td><td>18,270</td><td>5.97</td><td>6.73</td><td>7.97</td><td>9.99</td><td>13.12</td></t<>	Nonfarm animal caretakers	86,230	8.79	18,270	5.97	6.73	7.97	9.99	13.12
Gaming dealers.       77,540       77,1       16,040       561       6.21       6.23       7.23       12,76         Malora, lobp processing, and takes takes.       11,30       8.00       77,1       16,000       563       7.23       12,76       11,75       11,15       11,14       11,15       11,14       11,15       11,14       11,15       11,14       11,15       11,14       11,15       11,14       11,15       11,14       11,15       11,14       11,15       11,14       11,15       11,14       11,15       11,14       11,15       11,14       11,15       11,14									
Gaming and sports book writers and runners.         11.310         9.60         19.270         6.37         7.28         7.24         11.23         11.340           Motion picture projectionists.         12.02         3.31         14.30         5.38         6.52         7.24         11.32         11.32           Amusement and recreation attendents.         211.850         7.68         15.70         6.76         6.22         7.60         8.38         11.33         16.30         22.13         10.30         22.00         5.37         6.52         6.60         7.78         10.76         15.38         6.22         6.83         17.39         6.24         10.71         11.83         10.30         12.30         5.37         6.52         6.10         13.33         11.30         14.30         12.30         5.37         6.53         6.58         6.84         10.13         13.33         13.30         13.30         13.30         13.30         13.30         13.30         13.30         13.30         13.30         13.30         13.40         13.33         13.40         13.43         13.41         13.43         13.41         13.41         13.41         13.41         13.41         13.41         13.42         13.42         13.42         13.4	Gaming dealers	77,540	7.71	16,040	5.61	6.01	6.58	7.23	12.76
Motion puture projectionista.       10,280       9.33       19,410       5.8       6.52       7.44       11,23       13,42         Jubbres., Loby Anterdants, and dressing room attendants.       10,280       7.74       16,305       5.88       6.77       6.78       6.80       11,44         Coutiner attendants.       13,860       6.26       7.73       6.22       6.83       17,33       14,55       13,860         Locker room, coatroom, and dressing room attendants.       7,980       16,70       3,4730       8.22       11,65       15,88       20,226       25,60         Funcral attendants.       7,980       16,70       3,740       8.82       11,76       16,84       10,57       16,78       8.84       10,57       13,88         Haindressers, hairstyliss, and coemetologists.       322,920       10,127       21,800       6.64       11,78       16,42       11,78       15,420       16,43       17,72       16,14       12,72       16,64       11,72       16,41       12,20       16,83       14,40       12,71       15,46       13,763       14,70       12,71       16,41       12,21       16,18       11,03       12,410       13,78       11,78       15,40       11,78       16,41       14,41 <td>Gaming and sports book writers and runners</td> <td>11,310</td> <td>9.60</td> <td>19,970</td> <td>6.34</td> <td>7.23</td> <td>8.77</td> <td>10.76</td> <td>15.13</td>	Gaming and sports book writers and runners	11,310	9.60	19,970	6.34	7.23	8.77	10.76	15.13
usarets, acory attendants, and tocket tekers.         10,880         /7.1         16,030         5.86         6.17         6.70         8.38         10.37           Costume interidonts.         21,890         7.88         17.28         5.27         5.28         6.17         6.28         11.30         12.85         1	Notion picture projectionists	10,280	9.33	19,410	5.83	6.52	7.84	11.23	13.42
Armsent and tectement and dessing room attendants.         12.19.00         7.88         15.73         6.28         11.31         14.59         20.83           Locker room, coatroom, and dressing room attendants.         7.980         16.70         8.28         17.20         6.28         11.31         15.00         12.24         15.01         15.07         6.28         11.31         15.00         12.24         15.01         15.07         6.80         15.07         6.80         15.07         6.80         15.07         6.80         15.07         6.80         15.07         6.80         15.07         6.80         15.07         6.80         15.07         6.80         15.07         6.80         15.07         6.80         15.07         16.64         26.69           Hairdressers, hairsyliss, and cosmetologiss.         12.40         15.41         12.00         15.08         6.68         8.33         12.01         15.01         6.68         8.33         12.01         13.01         14.44         14.32         13.01         14.85         12.01         13.01         14.85         12.01         13.01         14.85         12.01         13.01         14.85         12.01         13.01         14.12	Usriers, lobby attendants, and ticket takers	101,680	7.71	16,030	5.68	6.17	6.78	8.08	11.44
Description:         3.540         12.45         2.680         7.7         20         6.27         7.92         1.05           Emblaners:         7.80         16.70         3.730         6.82         1.15         15.88         2.25         6.00           Barbers:         7.80         1.02         5.97         6.82         1.68         7.73         1.66         1.67         1.33         1.439         1.439         1.66           Hairdressers:         1.280         0.28         1.16         5.87         6.78         8.89         1.221         1.66         8.78         1.223         1.66         8.78         1.66         8.78         1.245         1.66         8.73         3.97         3.17         1.64         1.454         1.66         8.03         3.162         2.660         9.23         1.61         1.13         1.452         1.168         1.168         1.168         1.168         1.168         1.168         1.13         1.142         1.145         1.145         1.145         1.145         1.145         1.145         1.145         1.145         1.145         1.145         1.145         1.145         1.145         1.145         1.145         1.145         1.145         1.145	Amusement and recreation attendants	211,950	7.68	15,970	5.73	6.28	7.02	8.38	10.47
Location         0.40         17.30         9.42         11.00           Embalanes         7.98         16.70         34.73         8.82         12.02         22.850           Funcal attendants         12.890         10.27         21.800         5.97         6.80         8.48         10.57           Hairdressers, hairslyitis, and cosmetologists         12.829         10.27         21.800         8.64         11.78         16.44           Makeup antiss, theatrical and performance         12.40         15.41         15.85         6.68         8.78         11.78         16.64         26.69         7.78         8.89         12.50         5.86         6.60         7.79         12.60         5.86         6.68         8.33         9.95         12.50         5.86         6.68         8.33         9.52         12.50         5.86         6.60         7.78         1.73         8.75         12.60         11.63         22.400         5.83         6.83         8.33         9.52         12.50         5.86         6.60         7.78         1.73         7.91         11.42         14.38         15.66         11.57         11.57         7.71         8.82         11.64         13.67         16.64         5.87	Locker room, costroom, and draceing room attendants	3,540	12.45	25,890	0.70	8.29	11.33	14.59	20.88
Emainers.         7,880         16,70         34,730         8.82         11.65         15.88         20.26         25.60           Barbers.         12,280         0.21         19.20         5.87         6.78         8.89         12.21           Markurstis and performance.         12,390         10.19         21,300         5.07         6.58         7.78         11.65         15.23         5.87         6.78         8.89         12.21         16.68         7.73         10.51         16.23         5.88         6.60         7.73         9.37         3.97         5.81         6.63         8.03         16.22         6.63         8.03         16.22         6.63         8.03         16.22         6.63         8.03         16.22         11.45         11.65         11.45         11.65         11.45         11.65         11.45         11.65         11.45         11.65         11.45         11.65         11.45         11.65         11.45         11.65         11.65         11.65         11.65         11.65         11.65         11.65         11.65         11.65         11.65         11.65         11.65         11.65         11.65         11.65         11.65         11.65         11.65         11.65	LUCKET TUUM, CUALTUUM, AND DIESSING TUUM ALLENDARTS	19,800	0.28	17,230	0.02	0.83	7.9	9.25	11.00
Funeral attendants.         28,800         9.23         12,200         15.97         6.90         8.48         10.57         13.83           Hairdessers, hairstylats, and cosmetologists.         329,920         10.27         21.80         5.97         6.78         8.89         12.21         16.69           Makeup antists, theanical and performance.         12.40         15.43         6.60         6.73         9.17         9.17           Skin care speciallets.         12.40         15.43         6.69         8.33         9.56         2.60         7.3         9.17           Skin care speciallets.         12.40         15.03         6.69         14.510         5.58         6.60         7.73         9.17           Skin care speciallets.         16.10         11.03         22.940         6.83         8.24         10.12         13.56         6.81           Conciropsis.         16.10         11.03         22.940         6.81         8.31         11.42         14.83           Tour guides and escorts.         15.750         (4.680         15.00         12.21         13.66         16.81         16.80         5.92         6.61         7.78         8.41         16.43         15.67         11.80         16.64	Embalmers	7.980	16.70	34.730	8.82	11.65	15.88	20.26	25.60
Barbers       12.20       10.9       21.780       6.70       8.89       12.21       16.80         Maler partiss, theatricia and performance       1.240       15.41       32.920       10.59       21.380       6.10       6.99       8.78       11.78       16.44         Malexinitis and performance       1.240       15.41       32.020       8.64       17.980       5.99       6.69       6.69       8.60       7.73       9.17         Skin care specialists       14.470       12.71       25.310       6.43       7.72       10.61       14.85       21.05       14.20       14.21       13.56       16.31       11.42       13.56       16.31       11.42       13.56       16.31       11.42       13.56       16.31       11.42       13.56       16.31       11.42       13.56       16.31       16.30       2.2.30       5.98       6.68       8.33       13.62       19.91       11.42       13.56       16.31       7.72       10.61       11.45       11.42       13.56       16.31       7.73       15.75       11.42       13.56       16.31       7.74       14.64       16.43       16.43       14.48       11.44       14.42       14.56       15.41       14.44       14.56	Funeral attendants	28.960	9.23	19.200	5.97	6.90	8.48	10.57	13.83
Haidressers, hairstyläs, and cosmetologists.       329.20       10.27       21.326       6.10       6.96       7.8       11.78       16.44         Makeup artists, theartical and performance.       12.40       15.43       0.680       5.99       6.60       8.03       9.95       12.60         Shampooers.       15.230       6.98       14.510       5.58       6.68       8.03       9.95       12.60       6.43       7.72       10.61       14.85       21.05         Baggage porters and bellhops.       58.020       10.59       22.03       5.88       6.66       8.33       13.62       19.91         Coniergres.       16.10       11.00       29.40       6.13       7.03       8.83       11.42       14.35         Tour guides and escorts       28.680       9.78       20.340       6.13       7.01       16.44       23.82         Firal endational.       28.680       9.77       20.40       6.52       6.56       11.42       14.35         Transportation bare care aides.       116.700       (1)       40.800       80.60       5.26       6.51       7.11       9.46       11.17         Transportation bare care aides.       116.491       14.05       22.400       6.52 <td>Barbers</td> <td>12,290</td> <td>10.19</td> <td>21,190</td> <td>5.97</td> <td>6.78</td> <td>8.89</td> <td>12.21</td> <td>16.69</td>	Barbers	12,290	10.19	21,190	5.97	6.78	8.89	12.21	16.69
Makeup artists, the afticial and performance         11.240         15.41         21.200         6.46         10.49         14.54         16.64         26.92           Shampoores         15.230         6.98         6.44         17.800         5.58         5.69         6.66         80.3         9.51         21.50         5.84         6.60         7.73         9.17           Shin care specialists         11.217         25.310         6.84         17.20         5.88         6.68         8.33         13.62         19.91           Concierges         16.16         11.03         22.040         6.83         8.24         10.12         13.66         16.83         14.24         14.85         14.54         14.	Hairdressers, hairstvlists, and cosmetologists	329,920	10.27	21,360	6.10	6.96	8.78	11.78	16.44
Manicurists and pedicurists.         30.420         8.64         1.7800         5.99         6.69         8.13         1.7200         5.91         2.500         6.69         8.13         1.720         5.81         5.88         5.80         6.60         7.73         9.17           Skin care specialists         114.470         12.17         25.310         6.43         7.72         10.61         14.85         21.05           Beggage porters and belihops         5.80         10.59         22.940         6.38         8.24         10.12         13.66         16.31         17.03         8.83         11.42         14.84         23.81         10.50         11.130         16.44         23.82         11.576         (*         46.80         19.470         28.804         0.000         15.20         0.11         13.56         8.74         10.50         11.576         (*         46.80         19.470         28.804         0.000         16.800         5.82         6.51         7.71         9.46         11.576         (*         46.82         19.470         28.804         0.000         16.800         5.82         6.51         7.71         9.46         11.61.53         7.81         10.24         11.22         18.06         20.50 <td>Makeup artists, theatrical and performance</td> <td>1,240</td> <td>15.41</td> <td>32,050</td> <td>8.46</td> <td>10.49</td> <td>14.54</td> <td>16.64</td> <td>26.69</td>	Makeup artists, theatrical and performance	1,240	15.41	32,050	8.46	10.49	14.54	16.64	26.69
Sharpoores	Manicurists and pedicurists	30,420	8.64	17,980	5.99	6.69	8.03	9.95	12.50
Skin care specialists         11.470         12.17         25,310         6.43         7.72         10.61         14.85         21.05           Baggage porters and bellhops.         58,020         10.59         22,030         5.86         6.68         8.33         13.62         19.91           Concierges.         28,660         9.78         20,340         6.13         7.03         8.83         11.42         14.38           Travel guides.         115,750         (P)         9.84         20,480         6.01         6.92         8.69         15.60         6.61         6.92         8.69         15.61         15.61         15.00         6.61         6.92         8.69         11.64         16.30         5.82         6.51         7.71         9.46         11.17           Personal and home care aides.         408,360         8.00         17.62         8.69         11.64         10.51           Firest-tine supervisors/managers of retail sales workers.         253,470         12.00         6.52         7.84         11.22         16.64         7.76         8.41         10.51           Sales and related occupations         12.21         10.20         21.210         6.53         7.31         8.55         13.33         12.	Shampooers	15,230	6.98	14,510	5.58	5.98	6.60	7.73	9.17
Baggage porters and bellhops.         58,020         10.59         22,030         5.98         6.68         8.33         13.62         19.91           Concierges.         16,160         110.37         22,940         6.83         8.24         10.12         13.66         16.31           Tour guides.         5,460         15.00         31.210         8.65         10.11         13.07         16.44         23.92           Transportation attendants. except flight attendants and baggage porters.         25.910         9.84         16.00         16.920         6.85         17.71         9.46         11.57         60.87         66.67         7.76         8.46         11.63         10.57         6.64         7.76         8.46         11.64         12.32         16.92         8.65         17.71         9.46         11.12         16.84         10.51         11.57         11.22         16.84         10.51         11.55         12.22         13.67         13.67         16.84         11.55         11.57         12.22         16.85         7.71         9.46         11.13         15.55           Sciera and related occupations         16.940         14.05         5.93         6.52         7.81         11.22         18.63         13.670	Skin care specialists	14,470	12.17	25,310	6.43	7.72	10.61	14.85	21.05
Baggage poters and beiltops.       58,020       10.59       22,030       5.88       6.68       8.33       13.62       19.91         Concierges.       16,180       12,0340       6.13       7.03       8.83       11.42       14.38         Trave guides and ecorts.       28,680       9.78       29,340       6.13       7.03       8.83       11.42       14.38         Fright attendants.       29,630       40,600       57.80       85,740       17.71       9.46       11.13       7.03       8.83       11.42       14.42       32.92         Transportation attendants.       except flight attendants.       418,540       8.16       16,980       5.82       6.51       7.71       9.46       11.17         Personal and home care aides.       408,360       8.00       11.64       29,200       6.15       7.04       8.28       11.28       16.640       5.87       6.44       7.76       8.44       11.54       11.55         Sales and related occupations       12,02,10       11.55       20,270       6.15       7.01       8.56       11.81       15.64       5.38       10.54       13.74       18.53       25.88         Sales and related occupations       12,524,10       15.55									
Concerges         16,180         11.32         22,940         6.83         8.24         10.12         13.65         11.42           Traver guides and escorts         28,660         9.78         20,340         6.13         7.03         8.83         11.42         14.38           Traver guides         5.460         15.760         (°)         46,860         9.470         8.69         11.61         13.07         16.44         23.82           Child care workers         115,750         (°)         46,860         5.82         6.51         7.71         9.46         11.61           Personal and home care aides         408,308         8.00         16,640         5.87         6.64         7.76         8.84         11.22         18.06         20.270         6.15         7.14         8.11.18         15.47           Recreation workers         223,240         5.52         7.84         11.42         18.06         20.270         6.15         7.14         8.54         11.83         15.55           Sales and related occupations         11.252,410         15.95         3.170         8.51         10.49         8.50         10.69         24.75         3.66.15         3.84           Cashiers         3.397.630	Baggage porters and bellhops	58,020	10.59	22,030	5.98	6.68	8.33	13.62	19.91
Cour guides and escorts.         28.680         9.73         2/3.40         6.13         7/33         8.83         11.42         12.38           Flight attendants <sup>a</sup> .         5.460         15.00         31.27         8.05         10.11         13.07         16.44         23.92           Flight attendants <sup>a</sup> .         25.910         9.84         20.400         6.01         6.27         8.69         15.60         31.27         16.44         23.92           Child care workers.         418,540         8.16         16,980         5.82         6.51         7.71         9.46         11.17           Personal and home care aides.         408,300         8.00         16,400         5.82         6.51         7.71         9.46         11.17           Residential advisors.         53.870         10.27         20.270         6.15         7.04         11.23         18.05           Sales and related occupations         1.55         33.170         8.51         10.54         13.74         18.53         15.36         15.64         7.53         9.11         8.53         10.69         2.75         8.61         16.64         7.53         9.11         15.47         18.53         16.51         0.61         6.50         0.61<		16,180	11.03	22,940	6.83	8.24	10.12	13.56	16.31
11 every guides       13.210       3.1210       3.03       10.11       13.07       12.07       10.07       12.07       10.07       12.07       10.07       12.07       10.07 <td>Tour guides and escons</td> <td>28,680</td> <td>9.78</td> <td>20,340</td> <td>0.13</td> <td>7.03</td> <td>8.83</td> <td>11.42</td> <td>14.38</td>	Tour guides and escons	28,680	9.78	20,340	0.13	7.03	8.83	11.42	14.38
Transportational autoritational stand and segage porters       13,730       13,740       29,500       29,480       6,61       6,82       8,68       11,64       16,83         Child care workers       418,540       8,16       16,980       5,82       6,51       7,77       9,46       11,17         Personal and home care aides       16,003       406,360       800       16,640       5,87       6,64       7,76       8,94       10,51         Personal and home care aides       16,003       9,76       20,700       6,15       7,001       8,58       11,18       15,47       0,76       8,94       11,45       15,65         Recreation workers       16,040       14,08       29,206       6,52       7,84       11,22       18,06       26,06       7,84       11,37       15,55         Sales and related occupations       12,52,410       15,95       33,170       8,51       10,54       13,74       18,53       25,88       6,67       7,53       9,13       10,83       12,77         Counter and rental clerks       434,250       9,266       19,250       5,88       6,67       8,05       10,49       14,29         Parts salespersons       3,917,190       10,06       20,920       6,	Flight attendente3	0,400 115 750	15.00	31,210	0.05	20.620	10.07	57 960	23.92
Child care workers.       25.76       2.760       2.770       2.83       1.03       11.07         Personal and home care aldes.       418,540       8.16       16,980       5.82       6.51       7.71       9.46       11.17         Personal and home care aldes.       408,360       8.00       16,640       5.87       6.64       7.76       8.94       10.51         Recreation workers.       28,3460       9.75       20,270       6.52       7.84       11.43       15.65         Sales and related occupations       11.547       78.89       9.46       11.43       15.65         Sales and related occupations       12.52,410       15.95       33,170       8.51       10.54       13.74         First-line supervisors/managers of non-retail sales workers.       3.03,760       9.42       19,580       6.46       7.53       9.13       10.83       12.77         Courter and rental clerks.       444,250       9.26       19,250       5.88       6.67       8.05       10.49       14.23         Parts salespersons.       3.917,190       10.06       2.920       6.06       6.84       8.24       10.87       16.40         Advertising sales agents.       21.07,190       10.08       2.0220	Flight alteridants.	25 910	9.84	40,000	19,470 6.01	29,030	40,600	57,000 11.64	05,740 16.03
Child care workers	Transportation attendants, except night attendants and baggage porters	20,010	5.04	20,400	0.01	0.52	0.05	11.04	10.00
Personal and home care aides       408,360       8.00       16.64       5.87       6.64       7.76       8.94       10.51         Fitness trainers and aerobics instructors       263,460       9.75       20,270       6.15       7.01       8.58       11.18       15.47         Residential advisors       53,870       10.20       21,210       6.93       7.88       9.46       11.43       15.05         Sales and related occupations       First-line supervisors/managers of non-retail sales workers       3.387,580       78.1       10.54       13.74       18.53       25.88         Gashiers       3.387,580       7.81       16.240       5.73       6.32       7.18       8.50       10.64         Gashiers       3.387,580       7.81       16.240       5.73       6.32       7.19       8.50       10.83       12.77         Counter and rental clerks       434,250       7.84       49.850       10.44       12.47       15.41       15.40       15.41       15.41       15.41       15.41       15.41       15.41       15.41       16.40       12.47       16.40       12.47       15.81       10.64       12.23       17.88       8.01       11.42       12.41       16.90       23.81       10	Child care workers	418,540	8.16	16,980	5.82	6.51	7.71	9.46	11.17
Fitness trainers and aerobics instructors.       160,40       14.08       29,290       6.52       7.64       11.22       18.06       260,460       97,5       20,270       6.15       7.01       8.58       11.18       15.47         Rescration workers.       53,870       10.20       21,210       6.93       7.88       9.46       11.43       15.05         Sales and related occupations       1,252,410       15.95       33,170       8.51       10.54       13.74       18.53       25.86         Gaming change persons/managers of non-retail sales workers.       3,387,580       7.81       16,240       5.73       6.52       7.19       8.50       10.68       10.48       12.47       12.50       5.88       6.67       8.05       10.49       14.29       14.48       12.47       25.940       6.99       8.53       11.20       15.34       19.96       19.66       10.64       18.24       10.87       16.40       16.40       16.40       16.40       16.41       16.4	Personal and home care aides	408,360	8.00	16,640	5.87	6.64	7.76	8.94	10.51
Recreation workers       263,460       9.75       20,270       6.15       7.01       8.58       11.18       15.47         Residential advisors       10.20       21,210       6.33       7.88       9.46       11.43       15.05         Sales and related occupations       First-line supervisors/managers of retail sales workers       309,460       28.53       59.350       12.11       16.90       24.75       36.61       53.8         Gaming change persons and booth cashiers       33,87.50       7.81       16.240       7.73       9.13       10.83       12.77         Counter and rental clerks       434,250       9.26       19,250       5.88       6.67       8.05       10.49       14.29         Parts salespersons       3,917,190       10.06       20,922       6.00       6.44       8.24       10.87       16.40         Advertising sales agents       144,830       21.97       45,700       9.12       12.32       17.58       27.19       42.39         Insurace sales agents       270,730       35.3       7.33       12.30       15.60       19.43         Securities, commodities, and financial services sales agents       270,730       35.30       7.33       12.49       17.21       28.77       45.	Fitness trainers and aerobics instructors	160,490	14.08	29,290	6.52	7.84	11.22	18.06	26.06
Residential advisors.       53,870       10.20       21,210       6.93       7.88       9.46       11.43       15.05         Sales and related occupations       1,252,410       15.95       33,170       8.51       10.54       13.74       18.53         First-line supervisors/managers of non-retail sales workers.       3,387,500       7.81       16.240       5.73       6.32       7.19       8.50       10.64       13.74       18.53         Gaming change persons and booth cashiers.       3,387,500       7.81       16.240       5.73       6.32       7.19       8.50       10.69         Quiter and rental clerks.       434,250       9.26       19.250       5.89       6.67       8.05       10.49       14.29         Parts salespersons.       244,410       12.47       25.940       6.99       8.53       11.40.87       16.40         Advertising sales agents.       144,830       21.97       45.700       9.12       12.32       17.58       27.19       42.39         Insurance sales agents.       270,733       53.30       73,430       12.49       17.21       28.70       54.55       (6)         Sales representatives, wholesale and manufacturing, technical and scientiffic products.       370,330       29.10	Recreation workers	263,460	9.75	20,270	6.15	7.01	8.58	11.18	15.47
Sales and related occupations         1.252.410         15.95         33.170         8.51         10.54         13.74         18.53         25.88           First-line supervisors/managers of non-retail sales workers.         309.460         28.53         59.350         12.11         16.90         24.75         36.61         53.84           Gashiers.         33.87,580         7.81         16.240         5.73         6.32         7.19         8.50         10.69           Parts salespersons.         434,250         9.26         19.250         5.89         6.67         8.05         10.49         14.29           Parts salespersons.         3,917,190         10.06         20.920         6.00         6.84         8.24         10.87         16.40           Advertising sales agents.         144,830         21.97         45.700         9.12         12.32         17.58         27.19         42.39           Insurance sales agents.         269.000         23.5         48.570         9.92         13.20         15.60         19.43           Sales representatives, wholesale and manufacturing, technical and scientific products.         370.330         29.10         60.520         13.50         18.55         26.13         37.24         51.23	Residential advisors	53,870	10.20	21,210	6.93	7.88	9.46	11.43	15.05
Sales and related occupations       1,252,410       15.95       33,170       8.51       10.54       13.74       18.53       25.88         First-line supervisors/managers of non-retail sales workers.       309,460       28.53       59.350       12.11       16.90       24.75       36.61       53.84         Cashiers.       33,875.80       7.81       16.240       5.73       6.52       7.19       8.50       10.64         Gaming change persons and booth cashiers.       33,877       9.42       19,580       6.46       7.53       9.13       10.33       12.77         Counter and rental clerks.       434,250       9.26       19,250       5.89       6.67       8.05       10.49       14.29         Parts salespersons.       244,410       12.47       25,940       6.99       8.53       11.20       15.34       19.96         Insurance sales agents.       144,830       21.97       45,700       9.12       12.32       17.58       27.19       42.39         Insurance sales agents.       270,730       35.30       73.430       12.49       17.21       28.70       54.55       (P)         Travel agents.       11.1310       13.09       27,230       7.61       9.63       12.30									
First-line supervisors/managers of retail sales workers.       7,152,410       15,95       33,170       8.51       10.54       12,47       18,53       25,88         First-line supervisors/managers of non-retail sales workers.       339,460       28,53       59,350       12,11       16,90       24,75       36,61       53,84         Cashiers.       33,87,580       7,81       16,240       5,73       6.32       7,19       8.50       10.69         Gaming change persons and booth cashiers.       33,670       9,42       19,580       6.46       7,53       9.11       10.83       12,77         Counter and rental clerks.       434,250       9,26       19,250       5.89       6.67       8.05       10.49       14,29         Parts salespersons.       24,4410       12,47       45,700       9,12       12,32       17,58       27,19       42,39         Insurance sales agents.       144,830       21,97       45,700       9,12       12,32       17,58       27,19       42,39         Sales representatives, wholesale and manufacturing, technical and scientific products.       270,730       35,30       12,49       12,31       15,60       19,43         Demonstrators and product promoters.       96,670       12,45       25,910 </td <td>Sales and related occupations</td> <td>4 050 440</td> <td>45.05</td> <td>00.470</td> <td>0.54</td> <td>40.54</td> <td>40.74</td> <td>40.50</td> <td>05.00</td>	Sales and related occupations	4 050 440	45.05	00.470	0.54	40.54	40.74	40.50	05.00
Pristenite subervision largers of holf-retain sales workers.       309,460       26,33       39,350       12.11       10.80       24,475       30,610         Gaming change persons and booth cashiers.       3387,50       9.42       19,580       6.46       7.53       9.13       10.83       12.77         Counter and rental clerks.       434,250       9.26       19,250       5.89       6.67       8.05       10.49       14.29         Parts salespersons.       244,410       12.47       25,940       6.99       8.53       11.20       15.34       19.97         Retail salespersons.       29,00       0.06       8.48       10.87       16.40       15.74       12.29       17.58       27.19       42.39         Insurance sales agents.       144,830       21.97       45,700       9.12       12.32       17.58       27.19       42.39         Issuer presentatives, wholesale and manufacturing, technical and scientific products.       270,730       35.30       73.430       12.49       17.21       28.70       54.55       (?)         Parts alse spersentatives, wholesale and manufacturing, eccpt technical and scientific products.       29.00       60,520       13.50       18.55       26.13       37.24       51.23         Sales represent	First-line supervisors/managers of retail sales workers	1,252,410	15.95	33,170	10.01	10.54	13.74	18.53	25.88
Cashing change persons and booth cashiers.       3,30,300       7,81       10,240       3,32       7,15       6,32       7,15       10,33       10,83         Gaming change persons and booth cashiers.       3,307       9,42       19,580       6,46       7,53       9,13       10,83       10,83       10,83       10,83       10,83       10,83       10,83       10,83       10,83       10,83       10,83       10,83       10,83       10,83       10,83       10,83       10,83       11,27       20,920       6,06       6,46       7,53       9,13       11,20       15,34       19,96       8,53       11,20       15,34       19,96       8,53       11,20       15,34       19,96       8,53       11,20       15,34       19,96       8,53       11,20       15,34       19,96       8,53       11,20       15,34       19,96       8,53       11,20       15,34       19,96       8,53       11,20       15,34       19,96       8,53       11,20       15,34       14,29       12,49       12,49       12,49       12,49       12,49       12,49       12,49       12,49       12,49       12,49       12,49       12,49       12,30       15,60       19,43       39,450       11,43       19,96	Cashiors	2 297 590	20.00	39,350	5 72	6.22	24.75	30.01	23.04
Counter and rental clerks.       33,070       3-22       19,300       6.43       7.33       3.13       10.53       12.77         Counter and rental clerks.       434,250       9.26       19,250       5.89       6.67       8.05       10.49       14.29         Parts salespersons.       244,410       12.47       25,940       6.99       8.53       11.20       15.34       19,960         Advertising sales agents.       3,917,190       10.06       20,920       6.00       6.84       8.24       10.87       16.40         Advertising sales agents.       144,830       21.97       45,700       9.12       12.32       17.58       27.19       42.39         Securities, commodities, and financial services sales agents.       270,730       35.30       73,430       12.49       17.21       28.70       54.55       (?)         Travel agents.       111,310       13.09       27.230       7.61       9.63       14.30       12.30       15.60       19.43         Sales representatives, wholesale and manufacturing, technical and scientific products.       370,330       29.10       60,520       13.50       18.55       26.13       37.24       51.23         Sales representatives, wholesale and manufacturing, eccept technical and scienti	Cashiels	3,367,560	0.42	10,240	5.73	0.32	0.13	0.00	10.69
Counter and rental clerks	Carrier on ange percente and booth edonicio	55,070	5.42	10,000	0.40	1.55	5.15	10.00	12.11
Parts salespersons.       244,410       12.47       25,940       6.99       8.53       11.20       15.34       19.96         Retail salespersons.       3,917,190       10.06       20,920       6.00       6.84       8.24       10.87       16.40         Advertising sales agents.       20,920       45,700       9.12       12.32       17.58       27.19       42.39         Insurance sales agents.       270,730       35.30       73,430       12.49       17.21       28.77       54.55       (?)         Travel agents.       270,730       35.30       7.61       9.63       12.30       15.60       19.43         Sales representatives, wholesale and manufacturing, technical and scientific products.       370,330       29.10       60,520       13.50       18.55       26.13       37.24       51.23         Sales representatives, wholesale and manufacturing, except technical and scientific products.       370,330       29.10       60,520       13.50       18.55       26.13       37.24       51.23         Demonstrators and product promoters.       96,670       12.45       25,910       6.96       7.94       9.95       14.71       22.06         Models.       2,830       10.87       26,600       6.29	Counter and rental clerks	434,250	9.26	19,250	5.89	6.67	8.05	10.49	14.29
Retail salespersons       3,917,190       10.06       20,920       6.00       6.84       8.24       10.87       16.40         Advertising sales agents       144,830       21.97       45,700       9.12       12.32       17.58       27.19       42.39         Insurance sales agents       269,000       23.35       48,570       9.92       13.29       18.70       28.37       45.21         Securities, commodities, and financial services sales agents       270,730       35.30       73,430       12.49       17.21       28.70       54.55       (P)         Travel agents       270,330       29.10       60,520       13.50       18.55       26.13       37.24       51.23         Sales representatives, wholesale and manufacturing, except technical and scientific products       370,330       29.10       60,520       13.50       18.55       26.13       37.24       51.23         Demonstrators and product promoters       96,670       12.45       25,910       6.96       7.94       9.95       14.71       22.06         Models       2,930       10.87       22,600       6.29       7.17       9.14       12.36       16.93         Real estate brokers       38,530       31.45       65,410       9.27	Parts salespersons	244,410	12.47	25,940	6.99	8.53	11.20	15.34	19.96
Advertising sales agents.       144,830       21.97       45,700       9.12       12.32       17.58       27.19       42.39         Insurance sales agents.       269,000       23.35       48,570       9.92       13.29       18.70       28.37       45.21         Securities, commodities, and financial services sales agents.       270,730       35.30       73,430       12.49       17.21       28.70       54.55       (?)         Travel agents.       270,730       35.30       73,430       12.49       17.21       28.70       54.55       (?)         Sales representatives, wholesale and manufacturing, technical and scientific products.       370,330       29.10       60,520       13.50       18.55       26.13       37.24       51.23         Sales representatives, wholesale and manufacturing, except technical and scientific products.       370,330       29.10       60,520       13.50       18.55       26.13       37.24       51.23         Sales representatives, wholesale and manufacturing, except technical and scientific products.       370,330       29.10       60,520       13.59       14.74       22.66         Models.       82,800       10.87       22,600       6.29       7.17       9.14       12.36       16.93         Real estate broke	Retail salespersons	3,917,190	10.06	20,920	6.00	6.84	8.24	10.87	16.40
Advertising sales agents									
Insurance sales agents	Advertising sales agents	144,830	21.97	45,700	9.12	12.32	17.58	27.19	42.39
Securities, commonities, and financial services sales agents	Insurance sales agents	269,000	23.35	48,570	9.92	13.29	18.70	28.37	45.21
Traver agentss       111,310       13.09       27,230       7.61       9.63       12.30       15.60       19.43         Sales representatives, wholesale and manufacturing, technical and scientific products	Securities, commodities, and financial services sales agents	270,730	35.30	73,430	12.49	17.21	28.70	54.55	(2)
Galax representatives, wholesale and manufacturing, technical and scientific       370,330       29.10       60,520       13.50       18.55       26.13       37.24       51.23         Sales representatives, wholesale and manufacturing, except technical and scientific products.       1,352,800       23.19       48,240       10.58       14.34       19.96       28.40       41.23         Demonstrators and product promoters.       96,670       12.45       25,910       6.96       7.94       9.95       14.71       22.06         Models.       2,930       10.87       22,600       6.29       7.17       9.14       12.36       16.93         Real estate brokers.       38,530       31.45       65,410       9.27       13.79       24.70       45.66       (?)         Real estate sales agents.       81.01       64.490       17.18       22.48       28.71       38.58       49.08         Telemarketers.       28,280       14.30       29,740       6.35       7.82       11.91       16.39         Door-to-door sales workers, news and street vendors, and related workers.       28,090       14.30       29,740       6.35       7.82       11.94       18.10       25.60         Office and administrative support occupations       1,417,720 <t< td=""><td>Pales representatives, wholesals and manufacturing to the inclusion of a start?"</td><td>111,310</td><td>13.09</td><td>27,230</td><td>7.61</td><td>9.63</td><td>12.30</td><td>15.60</td><td>19.43</td></t<>	Pales representatives, wholesals and manufacturing to the inclusion of a start?"	111,310	13.09	27,230	7.61	9.63	12.30	15.60	19.43
Sales representatives, wholesale and manufacturing, except technical and scientific products	Sales representatives, wholesale and manufacturing, technical and scientific	270 220	20.10	60 520	12 50	19 55	26 12	27.24	F1 00
Scientific products       1,352,800       23.19       48,240       10.58       14.34       19.96       28.40       41.23         Demonstrators and product promoters       96,670       12.45       25,910       6.96       7.94       9.955       14.71       22.06         Models       2,930       10.87       22,600       6.29       7.17       9.14       12.36       16.93         Real estate brokers       38,530       31.45       65,410       9.27       13.79       24.70       45.66       (?)         Real estate sales agents       118,780       18.48       38,430       7.05       9.48       13.73       23.02       36.78         Sales engineers       118,710       10.50       21,850       6.59       7.61       9.24       11.91       16.39         Door-to-door sales workers, news and street vendors, and related workers       28,090       14.30       29,740       6.35       7.82       11.94       18.10       25.60         Office and administrative support occupations       1,417,720       19.67       40,920       11.06       14.04       18.26       23.83       30.45         Switchboard operators, including answering service       22,760       10.29       21,410       6.95       <	Sales representatives, wholesale and manufacturing, except technical and	370,330	29.10	00,520	13.50	10.00	20.13	57.24	51.25
Demonstrators and product promoters.         96,670         12.45         25,910         6.96         7.94         9.95         14.71         22.06           Models.         2,930         10.87         22,600         6.29         7.17         9.14         12.36         16.93           Real estate brokers.         38,530         31.45         65,410         9.27         13.79         24.70         45.66         (?)           Real estate sales agents.         118,780         18.48         38,430         7.05         9.48         13.73         23.02         36.78           Sales engineers.         118,780         18.48         38,430         7.05         9.48         13.73         23.02         36.78           Door-to-door sales workers, news and street vendors, and related workers.         28,090         14.30         29,740         6.35         7.82         11.91         16.39           Office and administrative support occupations         1,417,720         19.67         40,920         11.06         14.04         18.26         23.83         30.45           Switchboard operators, including answering service.         27,660         10.29         21,410         6.95         8.18         9.93         11.98         14.23           Tel	scientific products	1.352.800	23.19	48.240	10.58	14.34	19.96	28.40	41.23
Demonstrators and product promoters		.,,		,					
Models	Demonstrators and product promoters	96,670	12.45	25,910	6.96	7.94	9.95	14.71	22.06
Real estate brokers	Models	2,930	10.87	22,600	6.29	7.17	9.14	12.36	16.93
Real estate sales agents	Real estate brokers	38,530	31.45	65,410	9.27	13.79	24.70	45.66	(2)
Sales engineers	Real estate sales agents	118,780	18.48	38,430	7.05	9.48	13.73	23.02	36.78
Telemarketers	Sales engineers	82,850	31.01	64,490	17.18	22.48	28.71	38.58	49.08
Door-to-door sales workers, news and street vendors, and related workers	Telemarketers	437,510	10.50	21,850	6.59	7.61	9.24	11.91	16.39
Office and administrative support occupations         1,417,720         19.67         40,920         11.06         14.04         18.26         23.83         30.45           Switchboard operators, including answering service         1,417,720         19.67         40,920         11.06         14.04         18.26         23.83         30.45           Telephone operators         57,500         14.15         29,440         8.08         9.94         14.20         18.18         20.55	Door-to-door sales workers, news and street vendors, and related workers	28,090	14.30	29,740	6.35	7.82	11.94	18.10	25.60
Conce and administrative support occupations         1,417,720         19.67         40,920         11.06         14.04         18.26         23.83         30.45           Switchboard operators, including answering service         1,417,720         19.67         40,920         11.06         14.04         18.26         23.83         30.45           Telephone operators         57,500         14.15         29,440         8.08         9.94         14.20         18.18         20.55	Office and administrative our set assumptions								
The supervisors/final lagers of once and administrative support workers	Unice and administrative support occupations	1 417 700	10.67	40.000	11.00	14.04	10.00	22.02	20 45
Z2/,000         10.29         21,410         0.95         0.10         9.93         11.98         14.23           Telephone operators	Switchboard operators, including answering captice	227 660	10.07	21 / 10	6.05	14.04 Q 10	0.20	∠3.03 11 00	30.43
01,000 14.10 20,000 3.94 14.20 10.10 20.00 2.94 14.20 10.10 20.00	Telephone operators	57 500	10.29	20,410	0.90 8 AB	0.10	14 20	18 19	20 55
		01,000	14.13	_0,140	0.00	0.04	14.20	10.10	20.00

See footnotes at end of table.

		Mear	n wages			Percentiles		
Occupation	Employment	Hourby	Appual	10th	25th	50th	75th	00th
		Tioutiy	Annuar	Tour	2501	(Median)	7501	3001
Office and administrative support occupations - Continued								
Bill and account collectors	385,800	\$13.17	\$27,390	\$8.63	\$10.19	\$12.48	\$15.38	\$18.76
Billing and posting clerks and machine operators	480,610	12.66	26,340	8.55	10.05	12.19	14.69	17.54
Bookkeeping, accounting, and auditing clerks	1,697,890	13.38	27,820	8.23	10.19	12.76	15.97	19.61
Gaming cage workers	17,140	10.72	22,290	7.70	8.88	10.36	12.40	14.16
Payroll and timekeeping clerks	188,570	14.09	29,300	9.14	11.11	13.58	16.63	20.10
Procurement clerks	74,740	14.17	29,480	9.01	11.08	13.84	16.66	20.10
I ellers	532,740	9.69	20,150	7.21	8.21	9.54	10.85	12.79
Prokorago olarka	92 720	16 70	24 000	10.16	12 55	15.61	10.90	25.20
Correspondence clerks	34 190	12.66	26 330	8 89	10.15	12.01	14.51	17 49
Court municipal and license clerks	104.060	13.00	28,000	8.40	10.13	13.02	16.50	21.00
Credit authorizers checkers and clerks	78 450	13.40	27,870	8.37	9 99	12 44	15.80	19.94
Customer service representatives	1.875.370	13.20	27,450	8.02	9.76	12.23	15.71	20.24
Eligibility interviewers, government programs	97,240	15.16	31,530	10.73	12.33	14.43	17.63	21.07
File clerks	249,970	9.90	20,590	6.55	7.67	9.37	11.45	14.20
Hotel, motel, and resort desk clerks	176,920	8.48	17,640	6.10	7.04	8.13	9.59	11.20
	174.050		00.040	7.04	0.57	10.50	10.10	10.00
Interviewers, except eligibility and loan	171,650	11.17	23,240	7.31	8.57	10.52	13.10	16.22
Library assistants, ciencal.	106,360	9.00	20,090	6.09	10.74	8.93	11.73	14.51
New accounts clerks	00 760	12 47	25,000	8 00	10.74	11.86	14.22	16.80
Order clerks	338 430	12.47	25 770	7 48	9.10	11.66	14.88	18 24
Human resources assistants, except payroll and timekeeping	164 680	14 70	30,570	9.59	11 65	14 17	17 13	20.78
Receptionists and information clerks.	1 046 590	10.31	21 450	6.87	8 11	9.93	12 11	14 49
Reservation and transportation ticket agents and travel clerks	183.280	13.26	27.570	7.85	9.39	11.58	17.47	21.23
	,		,					-
Cargo and freight agents	60,530	15.53	32,300	8.63	11.04	14.73	19.13	23.29
Couriers and messengers	121,670	9.89	20,560	6.42	7.47	9.20	11.42	14.33
Police, fire, and ambulance dispatchers	88,550	13.30	27,670	8.16	10.15	12.83	16.14	19.60
Dispatchers, except police, fire, and ambulance	170,050	15.55	32,340	8.69	10.92	14.46	19.27	24.34
Meter readers, utilities	52,140	14.40	29,950	8.49	10.51	13.64	17.83	21.82
Postal service clerks	80,760	18.37	38,210	15.48	17.42	18.78	20.15	20.96
Postal service mail carriers	355,120	18.20	37,860	14.62	17.01	18.61	20.20	21.16
Postal service mail sorters, processors, and processing machine operators	201,150	15.48	32,190	9.53	11.84	16.95	19.25	20.60
Production, planning, and expediting clerks	302,430	10.38	34,070	9.18	11.71	15.59	20.20	25.25
Shipping, leceiving, and italic clerks	1 690 640	10.22	24,220	6.27	0.01	0.16	13.74	17.00
Weighers measurers checkers and samplers recordkeeping	78 620	13 10	27,460	7.61	9.24	11 87	16.12	21 29
	10,020				0.2.1			220
Executive secretaries and administrative assistants	1,384,240	16.34	33,980	10.32	12.56	15.57	19.29	23.44
Legal secretaries	263,590	17.29	35,970	10.75	13.08	16.64	21.01	25.62
Medical secretaries	334,200	12.50	26,000	8.48	9.77	11.86	14.62	17.56
Secretaries, except legal, medical, and executive	1,800,950	12.36	25,710	7.48	9.42	11.85	14.84	18.01
Computer operators	177 990	14 80	30 780	8 57	10.68	13 88	17 78	21 82
Data entry kevers	405.000	10.93	22,740	7.52	8.88	10.56	12.71	15.03
Word processors and typists.	229.090	12.92	26.870	8.22	10.07	12.50	15.23	18.39
Desktop publishers	34,860	16.05	33,380	8.65	11.19	15.00	19.70	25.17
Insurance claims and policy processing clerks	258,100	14.77	30,730	9.30	11.06	13.69	17.00	21.83
Mail clerks and mail machine operators, except postal service	166,000	10.37	21,560	6.98	8.19	9.91	12.09	14.53
Office clerks, general	2,791,420	11.06	23,000	6.72	8.30	10.47	13.24	16.39
Office machine operators, except computer	90,240	11.28	23,470	7.36	8.60	10.45	13.11	16.50
Proofreaders and copy markers	25,200	12.41	25,810	7.44	9.05	11.47	14.95	18.61
Statistical assistants	25,850	14.60	30,370	8.86	10.71	13.94	17.49	21.12
Farming, fishing, and forestry occupations								
First-line supervisors/managers of farming, fishing, and forestry workers	22.180	17.33	36,040	9.31	12.17	16.02	20.92	27.47
Farm labor contractors	6,450	9.53	19,810	6.29	6.59	7.10	10.16	12.96
Agricultural inspectors	13,980	14.24	29,630	7.98	9.85	13.17	17.72	21.90
Animal breeders	1,630	12.70	26,420	6.90	8.52	10.89	15.13	21.63
Graders and sorters, agricultural products	54,110	8.26	17,190	6.08	6.60	7.42	9.13	11.45
Agricultural equipment operators	26,580	8.94	18,600	5.98	6.69	8.00	10.42	13.47
Farmworkers and laborers, crop, nursery, and greenhouse	211,020	7.56	15,730	6.16	6.50	6.97	8.09	9.94
Farmworkers, farm and ranch animals	34,590	8.56	17,810	6.03	6.69	7.93	9.92	12.43
Forest and conservation workers	12,750	10.31	21,440	6.44	7.13	9.13	12.11	16.66
	9,790	15.66	32,580	7.12	9.46	12.85	19.07	30.35
Logging equipment operators	30,930	13.10	27,240	8.12 g 17	10.00	12.57	15.84	18.84 20 59
	4,900	13.75	20,010	0.17	10.20	12.91	10.00	20.00
Construction and extraction occupations								
First-line supervisors/managers of construction trades and extraction workers	514,750	23.77	49,430	14.18	17.64	22.39	28.49	35.37
Bollermakers	24,390	19.50	40,570	10.89	15.30	19.06	23.99	28.10
Brickmasons and Diockmasons	109,840	20.36	42,340	11.65	15.42	20.00	25.17	30.55
Siunemasons	11,880	16.26	33,820	9.36	11.41	15.60	20.00	24.75
Carpet installers	851,610	17.36	36,110	9.79	12.32	16.09	21.46	27.45
Carper installets	30,340	16.48	34,290	0.00 8 5 9	11.17	15.13	20.90	27.03
Floor sanders and finishers	8 230	13 75	28 590	8.82	9.96	12 47	16 11	21.19
	0,200	13.75	20,000	0.02	5.50	12.77	10.11	21.14
See footnotes at end of table.								

		Mear	wages		Percentiles			
Occupation	Employment	Hourly	Annual <sup>1</sup>	10th	25th	50th (Median)	75th	90th
Construction and extraction occupations - Continued	30 300	¢18 17	\$37 700	\$10.16	¢13.14	¢17.02	\$22.54	¢27.48
Cement masons and concrete finishers	176 590	15.67	32 590	8.87	11.08	14 25	φ22.34 19.42	25.36
Terrazzo workers and finishers.	5.800	15.02	31,240	8.59	10.21	13.80	18.52	24.72
Construction laborers.	825,390	13.36	27,790	7.43	9.11	11.57	16.66	22.59
Paving, surfacing, and tamping equipment operators	57.880	15.27	31.760	8.88	10.56	13.60	18.60	25.43
Pile-driver operators	4,950	20.59	42.820	11.23	13.89	19.86	27.03	32.43
Operating engineers and other construction equipment operators	353,650	17.86	37,160	10.30	12.57	16.42	22.12	28.19
Drywall and ceiling tile installers	121,450	17.07	35,500	9.64	12.19	15.87	20.97	27.14
Tapers	37,920	18.86	39,220	10.59	14.03	18.20	23.79	28.49
Electricians	625 560	20.75	43 160	11 65	14 76	10.60	25.04	32.66
Glaziers	46 960	16 11	33 510	8 71	14.70	14.68	20.05	27.36
Insulation workers	54 270	15.04	31 280	8.13	10.18	13.46	17.63	25.20
Painters, construction and maintenance	256,220	14.83	30.840	8.88	10.84	13.66	17.51	23.38
Paperhangers	9,320	15.76	32,780	8.63	11.03	15.07	20.12	24.71
Pipelayers	56,190	14.94	31,080	8.93	10.59	13.55	18.09	23.69
Plumbers, pipefitters, and steamfitters	438,290	19.78	41,140	10.94	14.28	18.61	24.92	31.01
Plasterers and stucco masons	53,790	16.98	35,310	9.96	12.32	15.79	20.57	26.78
Reinforcing iron and rebar workers	29,610	18.33	38,130	9.78	12.26	16.70	24.27	28.76
Roofers	118,160	15.55	32,350	8.95	10.95	14.16	19.17	25.05
Sheet metal workers	207,960	17.48	36,350	9.31	11.81	15.97	22.20	28.54
Structural iron and steel workers	78,700	19.55	40,660	10.29	13.81	18.72	25.09	30.89
Helpersbrickmasons, blockmasons, stonemasons, and tile and marble setters	64,730	12.79	26,590	7.82	9.42	11.35	14.87	21.17
Helperscarpenters	99,490	10.69	22,240	7.11	8.44	10.19	12.43	14.86
Helperselectricians	108,070	11.38	23,680	7.51	8.93	10.65	13.30	16.58
Helperspainters, paperhangers, plasterers, and stucco masons	29,750	10.46	21,770	6.90	7.77	9.36	11.86	15.91
Helperspipelayers, plumbers, pipefitters, and steamfitters	79,980	11.10	23,090	7.45	8.84	10.50	12.89	15.82
Helpersroofers	24,200	10.09	20,980	7.09	8.04	9.59	11.42	13.87
Construction and building inspectors	72 200	19.81	41 200	12.06	15 23	19.32	24 00	28.35
Elevator installers and repairers	26,450	24.39	50,730	12.86	18.63	24.82	30.13	35.58
Fence erectors	20,550	12.06	25,090	7.06	8.68	10.50	14.45	19.75
Hazardous materials removal workers	36,660	16.59	34,510	10.11	12.28	15.29	21.27	25.69
Highway maintenance workers	148,390	13.70	28,490	8.32	10.31	13.23	16.62	20.32
Rail-track laying and maintenance equipment operators	11,680	16.40	34,110	9.59	13.37	16.30	19.82	23.37
Septic tank servicers and sewer pipe cleaners	16,200	13.75	28,590	7.67	10.01	13.11	16.61	20.45
Segmental pavers	2,670	13.58	28,240	8.33	10.12	12.58	16.07	21.93
Derrick operators, oil and gas	15,150	14.84	30,870	9.72	11.24	13.70	17.42	22.24
Rotary drill operators, oil and gas	15,560	17.14	35,640	10.45	12.61	15.87	20.25	25.87
Service unit operators, oil, gas, and mining	13,320	14.47	30,100	9.02	10.54	13.11	17.45	21.90
Earth drillers, except oil and gas	19,630	16.29	33,870	9.81	12.09	15.39	19.55	24.66
Explosives workers, ordnance handling experts, and blasters	4,790	16.79	34,920	11.26	13.61	16.32	19.60	22.52
Continuous mining machine operators	9,560	16.50	34,320	11.35	13.39	16.17	19.32	22.25
Mine cutting and channeling machine operators	5,860	17.19	35,760	11.93	14.25	16.99	20.24	22.27
Rock splitters, quarry	2,710	13.92	28,940	8.76	10.48	12.95	16.21	20.11
Roof Doilers, Minning	3,990	11.00	37,000	7.95	0.15	10.02	20.54	22.44 17.22
Rousidbouls, oil and gas	37,010	12.46	25,400	7.20	0.15	10.10	13.44	17.33
	30,910	12.40	25,910	1.91	9.57	11.75	14.70	17.90
Installation, maintenance, and repair occupations			10 5	40	4	cc	<u> </u>	<u> </u>
First-line supervisors/managers of mechanics, installers, and repairers	441,700	23.32	48,510	13.53	17.12	22.27	28.28	34.87
Computer, automated teller, and office machine repairers	143,810	16.40	34,120	9.73	12.23	15.81	20.03	24.39
Talecommunications equipment installers and repairers, except line installers	0,550	21 22	30,120	9.82	17.60	22.20	21.50	20.75
Avionics technicians	210,000	21.33	44,300	12.90	16.69	10 02	23.00 23.05	20.01 27.12
Flectric motor, power tool, and related repairers	29 240	15.85	32 970	9.00	11.31	14 91	19 29	24.86
Electrical and electronics installers and repairers, transportation equipment	16.650	18.20	37.860	10.45	13.83	18.23	22.20	26.42
Electrical and electronics repairers, commercial and industrial equipment.	77.780	18.80	39,110	11.39	14.54	18.65	22.62	26.86
Electrical and electronics repairers, powerhouse, substation, and relay	19,680	23.30	48,470	15.35	20.27	24.24	27.11	30.78
Electronic equipment installers and repairers, motor vehicles	13,210	12.85	26,740	8.32	9.80	12.14	15.34	18.51
Electronic home entertainment equipment installers and repairers	29,770	13.81	28,710	7.99	10.08	12.96	16.94	21.06
Security and fire alarm systems installers	42,050	15.77	32,790	9.20	11.49	14.66	18.88	24.00
Aircraft mechanics and service technicians	135 250	20 41	42 460	12 75	16.39	20 19	24 76	28 34
Automotive body and related repairers	168,630	16.82	34.980	8.76	11.61	15.62	20.78	26.79
Automotive glass installers and repairers	21,550	13.52	28,120	8.14	9.87	13.06	16.50	20.12
Automotive service technicians and mechanics	701,150	15.32	31,870	7.98	10.33	14.19	19.25	24.39
Bus and truck mechanics and diesel engine specialists	254,420	16.62	34,570	10.32	12.79	16.14	20.10	24.00
Farm equipment mechanics	35,420	13.08	27,200	8.43	10.22	12.67	15.57	18.32
Mobile heavy equipment mechanics, except engines	116,260	17.26	35,900	11.18	13.76	16.92	20.46	24.16
Rail car repairers	11,860	17.90	37,220	11.51	15.00	18.46	20.86	23.38
Motorboat mechanics	18,370	14.13	29,390	8.68	10.62	13.55	16.82	20.68
Notorcycle mechanics	13,290	13.50	28,090	7.96	9.89	12.69	16.32	20.71
Outdoor power equipment and other small engine mechanics	27,250	12.15	25,270	7.10	9.19	11.63	14.53	17.70
Dicycle repairers Recreational vehicle service technicians	1,/30	9.46	19,670	0.47	10.14	9.05	11.12	10.14
Tire renairers and changers	86 200	10.00	21,100	7.00	7 95	0.10 0.19	11.09	19.52
	00,200	10.10	21,140	7.00	1.55	5.40	11.40	17.03
See footnotes at end of table.								

		Mear	wages		Percentiles			
Occupation	Employment	Hourly	Annual <sup>1</sup>	10th	25th	50th (Median)	75th	90th
Installation maintenance and renair occupations - Continued								
Mechanical door repairers	10,510	\$15.18	\$31,570	\$8.88	\$10.78	\$13.83	\$18.37	\$23.87
Control and valve installers and repairers, except mechanical door	37,740	20.49	42,610	11.61	15.42	20.65	25.61	29.30
Heating, air conditioning, and refrigeration mechanics and installers	201,850	17.07	35,510	10.09	12.67	16.35	20.72	25.65
Home appliance repairers.	33,640	15.10	31,420	8.53	10.72	14.22	18.57	22.47
Industrial machinery mechanics	187,750	18.69	38,880	11.81	14.44	18.08	22.56	26.97
Maintenance workers, machinery	98 280	15.88	33,030	9.40	11.30	15.36	19.03	23.03
Millwrights	69,800	20.34	42,310	12.42	15.78	20.18	25.21	28.80
Refractory materials repairers, except brickmasons	3,350	17.03	35,420	11.32	13.70	16.89	20.15	22.22
Electrical power-line installers and repairers	99,140	22.04	45,840	12.73	17.47	22.70	26.70	31.17
I elecommunications line installers and repairers.	168,260	18.76	39,030	10.21	13.22	18.84	24.33	27.20
Medical equipment repairers	22 070	18.06	37,570	10.16	10.32	14.45	22 17	22.90
Musical instrument repairers and tuners	4,520	15.73	32,710	7.62	10.28	14.15	19.30	28.95
Watch repairers	3,680	13.58	28,240	6.92	9.33	12.47	16.81	21.48
Coin, vending, and amusement machine servicers and repairers	33.100	13.19	27.440	7.51	9.68	12.74	16.19	19.99
Commercial divers	3,050	19.54	40,640	10.64	13.02	15.76	19.65	33.08
Fabric menders, except garment	2,090	13.13	27,310	7.30	8.57	11.39	18.15	20.91
Locksmiths and safe repairers	13,450	14.56	30,290	8.56	10.85	13.94	17.43	21.29
Manufactured building and mobile home installers	14,140	11.46	23,850	7.33	9.02	11.03	13.35	16.41
Niggels	15,340	20.61	34,150 42 860	9.60	12.26	15.72	19.59	24.41
Helpersinstallation, maintenance, and repair workers	148.390	11.16	23.220	6.76	8.05	10.20	13.39	17.33
	1.10,000		20,220	0.10	0.00	10120	10100	11100
Production occupations	700 440	04.54	44740	44.00	45.40	00.40	00.04	00.50
Aircraft structure surfaces rigging and systems assemblers	33 620	21.51	44,740 36,460	9.48	12.40	20.19	20.31	33.50 26.11
Coil winders, tapers, and finishers	43,900	11.41	23,740	7.32	8.61	10.62	13.53	16.91
Electrical and electronic equipment assemblers	302,530	11.49	23,900	7.35	8.78	10.71	13.46	16.92
Electromechanical equipment assemblers	63,930	12.54	26,080	7.78	9.47	11.87	14.99	18.68
Engine and other machine assemblers	55,820	14.24	29,610	8.13	10.14	13.51	17.68	21.81
Structural metal fabricators and fitters	90,480	14.06	29,240	9.04	10.85	13.46	16.55	20.07
Team assemblers	41,520	12.14	25,260	7.72	9.25	10.70	13 55	17.50
Timing device assemblers, adjusters, and calibrators	8,550	12.33	25,640	8.22	9.57	11.32	13.90	17.18
Pakara	154 410	10.40	21 020	6 6 9	7 02	0.02	12 70	15 70
Butchers and meat cutters	135 630	12 74	21,630	7.23	9.06	9.03	12.70	19.79
Meat, poultry, and fish cutters and trimmers	156,670	8.80	18,310	6.67	7.40	8.34	9.94	11.68
Slaughterers and meat packers	117,490	9.62	20,010	7.17	8.17	9.60	10.84	12.46
Food and tobacco roasting, baking, and drying machine operators and tenders	18,720	12.24	25,450	6.93	8.62	11.16	14.94	19.86
Food batchmakers	70,540	11.10	23,090	6.61	7.98	10.43	13.76	16.74
	34,910	10.93	22,730	6.72	8.01	10.30	13.27	16.45
Computer-controlled machine tool operators, metal and plastic	140,540	14.26	29,670	8.99	10.86	13.65	17.10	20.79
Numerical tool and process control programmers.	20,800	18.67	38,830	11.30	14.32	17.93	22.30	27.23
Extruding and drawing machine setters, operators, and tenders, metal and plastic	49 760	12.44	25,670	7.03	9.62	12.10	14.70	23 30
Rolling machine setters, operators, and tenders, metal and plastic	45.090	13.86	28,830	8.35	10.46	13.30	16.60	20.64
Cutting, punching, and press machine setters, operators, and tenders, metal			- ,					
and plastic	296,070	12.17	25,320	7.81 8 2 4	9.36	11.58	14.27	17.33
Grinding, lapping, polishing, and buffing machine tool setters, operators, and tenders, metal and plastic	56,000	13.04	20,300	0.34	10.13	12.02	10.25	20.66
tenders, metal and plastic	107,300	13.03	27,110	7.98	9.73	12.28	15.65	19.60
	70,000	1-1.12	00,000	5.23	11.00	1-1.2-1	17.00	21.40
Milling and planing machine setters, operators, and tenders, metal and plastic	32,680	14.44	30,020	8.74	10.70	13.82	17.24	21.39
Metal-refining furnace operators and tenders	190,090	10.01	32,880 30 910	9.44 0.79	12.00	10.43	17.18	22.74
Pourers and casters, metal	14,580	14.01	29,130	9.25	11.02	13.27	16.60	20.07
Model makers, metal and plastic	8,990	18.05	37,540	8.25	11.86	17.68	23.39	29.51
Patternmakers, metal and plastic	6,840	16.66	34,640	8.72	11.76	15.74	20.59	27.27
Foundry mold and coremakers	26,170	12.99	27,020	8.22	10.05	12.29	14.83	19.10
Molding, coremaking, and casting machine setters, operators, and tenders, metal	140.000	11 70	24 500	7 20	0.74	10 74	10 74	17.60
Autiple machine tool setters operators and tenders metal and plastic	149,000	14.58	24,500 30,320	1.29	0.71	13.42	13.74	23.88
Tool and die makers	112.960	20.40	42.430	12.63	15.90	20.01	24.82	29.49
Welders, cutters, solderers, and brazers	382,400	14.55	30,260	9.19	11.16	13.70	16.99	21.57
Welding, soldering, and brazing machine setters, operators, and tenders	60,810	14.80	30,780	9.04	10.94	13.57	17.23	23.95
Heat treating equipment setters, operators, and tenders, metal and plastic	32,490	13.87	28,840	8.87	10.65	13.24	16.39	20.48
Lay-out workers, metal and plastic	14,100	15.66	32,570	9.32	11.74	14.70	18.11	23.07
Frauny and coaling machine setters, operators, and tenders, metal and plastic	45,940	12.50	∠5,990 30,200	1.92	9.57	13.77	14.89	21 02
ו טטי פוווינטיס, וווכוס, מונע סוומוףכווכוס	20,410	14.52	30,200	0.07	10.00	13.77	17.53	21.93

See footnotes at end of table.

Table 1.	National employr	ment and wage da	ata from the Occu	pational Employ	vment Statistics s	urvey by occ	upation, 2001 -	Continued

		Mear	wages		Percentiles			
Occupation	Employment		Julia			50th		
		Hourly	Annual <sup>1</sup>	10th	25th	(Median)	75th	90th
						(		
Production occupations - Continued	00.040	<b>*</b> 44.07	<b>*</b> 00.050	<b>00 70</b>	<b>60 10</b>	<b>6</b> 40.00	<b>\$40.00</b>	<b>647 54</b>
Bindery workers.	93,240	\$11.37	\$23,650	\$6.79	\$8.13	\$10.33	\$13.63	\$17.54
lob printers	55 210	14.93	31,050	8.40	9.39	14.05	18.55	20.90
Prepress technicians and workers.	96,580	15.54	32,320	8.51	11.09	14.80	19.36	23.81
Printing machine operators	198,710	14.81	30,800	8.33	10.58	13.95	18.24	22.40
	,		,					
Laundry and dry-cleaning workers	214,520	8.29	17,240	5.93	6.71	7.86	9.41	11.37
Pressers, textile, garment, and related materials	92,730	8.33	17,330	6.00	6.82	7.98	9.52	11.18
Sewing machine operators	308,380	8.68	18,050	6.17	6.82 7.21	8.08	10.04	12.37
Shoe machine operators and tenders	9,970	9.45	19,650	6.50	7.21	0.70	11.10	13.00
Sewers, hand	22,550	9.29	19,320	6.21	7.09	8.43	10.52	13.34
Tailors, dressmakers, and custom sewers	31,580	11.38	23,670	6.70	8.11	10.38	13.89	17.30
Textile bleaching and dyeing machine operators and tenders	31,650	9.88	20,560	6.66	7.94	9.78	11.44	13.28
Textile cutting machine setters, operators, and tenders	37,250	9.92	20,630	6.71	7.65	9.31	11.56	14.35
Textile knitting and weaving machine setters, operators, and tenders	57,830	10.91	22,690	7.55	9.16	10.81	12.66	14.03
I extile winding, twisting, and drawing out machine setters, operators, and tenders	68,530	10.65	22,150	8.08	9.24	10.25	11.45	13.52
	30 370	13 15	27 340	8 / 8	10 71	13.04	15 72	17 54
glass libers	12 580	14.63	30 440	7.30	9.06	11 99	18.08	25.98
Upholsterers	39,780	12.61	26,240	7.69	9.41	11.80	15.34	18.71
•	,		,					
Cabinetmakers and bench carpenters	127,640	12.08	25,120	7.54	9.04	11.30	14.35	17.96
Furniture finishers	32,140	11.40	23,700	7.29	8.71	10.74	13.42	16.69
Nodel makers, wood	4,320	13.59	28,270	7.82	9.50	12.02	16.12	22.80
Patternmakers, wood	4,280	14.76	30,690	7.67	9.79	13.79	17.96	24.59
Woodworking machine setters, operators, and tenders, wood	91 640	10.97	22,810	7.23	8.54	10.45	12.91	15.79
	01,040	10.04	22,040	1.20	0.04	10.00	12.10	10.11
Nuclear power reactor operators	3,310	29.13	60,590	22.77	25.13	28.94	33.31	37.20
Power distributors and dispatchers	12,840	25.33	52,690	15.62	20.15	25.11	30.75	35.45
Power plant operators	35,030	22.95	47,740	14.61	18.86	23.34	27.31	31.68
Stationary engineers and boiler operators	54,330	20.43	42,490	12.19	15.62	19.93	25.12	30.03
Water and liquid waste treatment plant and system operators	98,440	16.23	33,760	9.57	12.16	15.66	19.81	24.14
Gas plant operators	12 600	20.09	41,790	15.23	10.52	20.19	24.17	27.20
Petroleum pump system operators, refinery operators, and gaugers	34 540	22.03	47,000	14 19	19.00	22.00	26.34	29.00
	01,010	22.71	-10,010	14.10	10.00	20.00	20.20	20.00
Chemical equipment operators and tenders	53,930	17.91	37,250	11.20	14.17	17.70	21.55	25.56
Separating, filtering, clarifying, precipitating, and still machine setters, operators,								
and tenders	35,380	14.52	30,200	8.39	10.75	14.04	17.72	21.45
Crushing, grinding, and polishing machine setters, operators, and tenders	46,470	13.02	27,080	8.04	9.73	12.34	15.78	19.44
Grinding and polisning workers, nand	44,050	11.88	24,700	7.43	8.88	10.84	13.73	17.71
Cutters and trimmers hand	31 440	11 70	24 340	6.84	8 25	10.46	13.72	18.72
Cutting and slicing machine setters, operators, and tenders	76.370	12.50	26.010	7.82	9.48	11.99	15.09	18.07
Extruding, forming, pressing, and compacting machine setters, operators, and	-,		-,	-				
tenders	76,640	13.04	27,120	8.15	9.85	12.40	15.72	19.40
Furnace, kiln, oven, drier, and kettle operators and tenders	30,020	14.02	29,170	8.66	10.68	13.46	16.98	20.83
Inspectors, testers, sorters, samplers, and weighers	525,540	14.04	29,210	7.64	9.70	12.83	17.20	23.01
Deptel laboratory technicians	29,030	14.37	29,900	0.91	9.21	13.08	17.64	22.05
Medical appliance technicians	12 410	13.95	29 010	8.02	9.69	12 43	16.23	22.00
Ophthalmic laboratory technicians	34,490	10.87	22,610	7.47	8.60	10.26	12.57	15.35
Packaging and filling machine operators and tenders	379,750	10.92	22,710	6.59	7.82	9.98	13.30	16.81
Coating, painting, and spraying machine setters, operators, and tenders	94,050	12.56	26,120	7.94	9.57	11.88	14.73	18.19
Painters, transportation equipment.	44,090	16.65	34,630	9.44	12.00	15.55	20.75	25.82
Painting, coating, and decorating workers	31,770	10.79	22,440	6.61	7.91	9.88	12.79	16.37
Photographic processing machine operators	23,420 54 500	9 77	22,400	6.25	7.03	9.44	11.01	14.78
Semiconductor processors.	51.060	13.54	28,170	9.07	10.38	12.73	15.87	19.70
Cementing and gluing machine operators and tenders	29,190	11.48	23,880	7.23	8.72	10.85	13.75	16.72
Cleaning, washing, and metal pickling equipment operators and tenders	18,070	11.70	24,340	7.28	8.62	10.77	14.00	17.60
Cooling and freezing equipment operators and tenders	7,320	11.26	23,420	6.61	8.07	10.15	13.68	18.07
Etchers and engravers	10,330	11.98	24,910	6.96	8.39	10.63	13.95	18.87
Molders, shapers, and casters, except metal and plastic	39,450	12.55	26,110	7.48	9.26	11.86	15.33	18.96
Tire builders	120,880	13.84	28,780	8.44	10.70	13.35	21.45	20.30
Helpersproduction workers	459.440	9.81	20.410	6.46	7.49	9.13	11.36	14.37
· · · · · F		0.01	_0,110	0.10		0.10		
Transportation and material moving occupations								
Aircraft cargo handling supervisors	9,070	19.58	40,720	10.25	12.93	17.95	24.81	32.19
First-line supervisors/managers of helpers, laborers, and material movers, hand	147,490	18.39	38,250	10.55	13.45	17.35	22.25	27.60
First-line supervisors/managers of transportation and material-moving machine	407 400	24.05	44 000	14 50	14.04	40.70	0E 70	22.40
Airline nilots conilots and flight engineers <sup>3</sup>	197,430	21.25	44,200	36 670	14.94	19.78	∠5./6 (2)	33.16 (2)
Commercial pilots <sup>3</sup>	18 380	(3)	55,400	25.520	33,630	47,410	( <sup>-)</sup> 69.780	( <sup>-)</sup> 104 980
Air traffic controllers	22,990	40.07	83,350	21.86	30.74	42.27	50.76	55.83
Airfield operations specialists	5,390	19.15	39,830	9.15	11.85	16.93	24.96	32.62
		1						

See footnotes at end of table.

Table 1.	National employn	nent and wage da	ta from the Occ	upational Empl	oyment Statistics	survey by	occupation, 2001	- Continued

		Mean	wages		Percentiles			
Occupation	Employment	Hourly	Annual <sup>1</sup>	10th	25th	50th (Median)	75th	90th
Transportation and material moving occupations - Continued								
Ambulance drivers and attendants, except emergency medical technicians	17.620	\$10.05	\$20,910	\$6.27	\$7.38	\$9.08	\$11.55	\$14.42
Bus drivers, transit and intercity.	190.530	14.15	29,430	7.99	9.98	13.49	18.04	21.73
Bus drivers, school	469,100	10.84	22,540	6.17	7.67	10.57	13.33	16.27
Driver/sales workers	378,220	11.22	23,340	5.98	6.89	9.70	14.35	19.20
Truck drivers, heavy and tractor-trailer	1,548,480	16.20	33,690	9.84	12.29	15.66	19.60	23.10
Truck drivers, light or delivery services	996,000	12.32	25,630	6.81	8.54	11.22	15.22	19.99
Taxi drivers and chauffeurs	125,860	9.51	19,780	6.10	7.04	8.62	10.90	14.15
Locomotive engineers	30,730	22.74	47,300	13.85	16.51	22.38	27.31	33.91
Locomotive firers	730	21.22	44,140	12.51	16.77	23.40	26.07	27.70
Rail yard engineers, dinkey operators, and hostlers	4,840	19.29	40,130	12.91	15.30	18.32	20.96	24.96
Railroad brake, signal, and switch operators	17,070	22.57	46,940	13.08	16.50	21.60	28.53	33.98
Railroad conductors and yardmasters	40,910	22.10	45,970	14.57	17.45	20.59	26.12	33.03
Sailors and marine oilers	28,650	14.55	30,270	7.57	10.19	13.76	18.36	21.98
Captains, mates, and pilots of water vessels	22,180	23.87	49,660	12.14	17.20	23.40	29.01	35.76
Motorboat operators	3,410	15.12	31,450	7.43	9.25	14.31	19.85	24.46
Ship engineers	7,470	24.56	51,080	13.04	18.11	24.04	30.50	36.46
Bridge and lock tenders	4,500	14.81	30,800	7.57	10.25	16.05	19.02	20.79
Parking lot attendants	109,930	7.99	16,610	5.96	6.62	7.54	8.79	10.79
Service station attendants	107,650	8.31	17,280	5.98	6.73	7.75	9.12	11.41
Traffic technicians	5,090	16.41	34,140	9.59	11.70	15.11	20.47	26.09
Transportation inspectors	27,670	22.37	46,530	10.36	16.67	22.75	27.13	34.42
Conveyor operators and tenders	61,590	11.97	24,900	7.71	9.28	11.25	13.76	17.62
Crane and tower operators	51,650	17.68	36,770	10.79	13.09	16.64	21.19	26.79
Dredge operators	2,920	14.64	30,450	8.34	10.46	13.27	17.37	24.35
Excavating and loading machine and dragline operators	70,370	16.57	34,470	10.01	12.19	15.38	20.25	25.69
Loading machine operators, underground mining	3,370	14.73	30,630	9.79	11.84	14.58	17.31	20.45
Hoist and winch operators	9,960	17.37	36,130	9.37	11.64	15.56	21.08	30.04
Industrial truck and tractor operators	591,790	13.00	27,040	8.49	9.95	12.19	15.24	19.24
Cleaners of vehicles and equipment	304,500	8.78	18,260	5.96	6.67	7.93	10.00	13.03
Laborers and freight, stock, and material movers, hand	2,098,180	10.18	21,170	6.46	7.55	9.35	11.84	15.44
Machine teeders and offbearers	190,080	10.92	22,720	7.10	8.27	10.17	12.82	16.13
Packers and packagers, hand	951,960	8.52	17,730	5.97	6.65	7.83	9.83	12.39
Gas compressor and gas pumping station operators	6,070	20.71	43,090	12.20	17.20	20.84	25.01	28.20
Pump operators, except wellhead pumpers	12,920	18.34	38,140	9.12	12.08	17.33	24.58	27.66
Wellhead pumpers	9,560	15.86	33,000	9.23	11.68	15.45	20.13	22.98
Refuse and recyclable material collectors	125,600	12.22	25,430	6.28	8.19	11.47	15.52	19.97
Snuttle car operators	3,020	17.46	36,310	12.64	14.68	18.01	20.33	21.84
I ank car, truck, and ship loaders	19,430	16.29	33,880	9.44	11.63	15.00	20.35	26.17

<sup>1</sup> Annual wages have been calculated by multiplying the hourly mean wage by a "year-round, full-time" hours figure of 2,080 hours; for those occupations where there is not an hourly mean wage published, the annual wage has been directly calculated from the reported survey data.

<sup>2</sup> Represents a wage above \$70.01 per hour.

<sup>3</sup> Hourly wage rates for occupations where workers typically work fewer than 2,080 hours per year are not available.

### **<u>11-1011</u>** Chief executives

Determine and formulate policies and provide the overall direction of companies or private and public sector organizations within the guidelines set up by a board of directors or similar governing body. Plan, direct, or coordinate operational activities at the highest level of management with the help of subordinate executives and staff managers.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
			wage	wage	Talik	
Top i	industries by employment for this occupation					
1.	Engineering & management services	42,570	\$56.44	\$117,390	1	27
2.	Business services	32,990	54.01	112,330	2	41
3.	Federal, State, and local government	26,160	36.56	76,050	3	70
4.	Depository institutions	22,630	54.16	112,640	4	39
5.	Educational services	22,020	47.53	98,870	5	55
Top J	paying industries for this occupation					
1.	Tobacco products	290	67.57	140,540	68	1
2.	Metal mining	90	65.41	136,060	69	2
3.	Instruments and related products	3,210	62.85	130,730	40	3
4.	Security and commodity brokers	8,570	62.81	130,640	18	4
5.	Electronic & other electrical equipment	5,740	62.05	129,060	26	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	6,780	\$47.13	\$98,030	1.121	3
2.	Delaware	2,990	48.58	101,060	.744	3
3.	Illinois	36,000	49.23	102,400	.614	7
4.	Pennsylvania	29,600	48.47	100,820	.534	8
5.	Massachusetts	16,720	57.21	118,990	.518	7
Top J	paying States for this occupation					
1.	Rhode Island	900	62.62	130,240	.192	3
2.	New Jersey	4,450	61.68	128,300	.116	5
3.	New York	25,680	59.54	123,840	.307	6
4.	Connecticut	4,300	59.20	123,130	.258	4
5.	Washington	3,230	58.89	122,500	.125	7

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Springfield, IL MSA	860	\$37.81	\$78,630	.782
2. Wilmington-Newark, DE-MD PMSA	2,330	49.76	103,500	.761
3. Longview-Marshall, TX MSA	590	40.65	84,560	.652
4. Odessa-Midland, TX MSA	670	41.15	85,580	.652
5. Chicago, IL PMSA	26,030	52.71	109,640	.647
Top paying MSAs for this occupation				
1. New York, NY PMSA	14,810	64.21	133,550	.365
2. San Jose, CA PMSA	4,450	63.77	132,640	.468
3. Bergen-Passaic, NJ PMSA	680	63.45	131,980	.108
4. Waterbury, CT PMSA	190	63.00	131,040	.222
5. Jersey City, NJ PMSA	360	62.76	130,540	.145

#### **<u>11-1021</u>** General and operations managers

Plan, direct, or coordinate the operations of companies or public and private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in any one functional area of management or administration, such as personnel, purchasing, or administrative services. Include owners and managers who head small business establishments whose duties are primarily managerial.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation					
1.	Business services	157,130	\$39.63	\$82,420	1	26
2.	Wholesale tradedurable goods	134,920	40.71	84,680	2	21
3.	Engineering & management services	115,810	45.34	94,300	3	6
4.	Eating and drinking places	91,060	23.83	49,570	4	69
5.	Special trade contractors	90,920	36.64	76,210	5	39
Top	paying industries for this occupation					
1.	Instruments and related products	12,670	49.13	102,190	45	1
2.	Electronic & other electrical equipment	17,740	48.05	99,950	37	2
3.	Chemicals and allied products	15,180	47.97	99,770	40	3
4.	Security and commodity brokers	19,270	47.83	99,480	33	4
5.	Paper and allied products	7,040	46.24	96,180	56	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
States v	with the highest concentration of workers in this occupation <sup>4</sup>					
1. I	District of Columbia	17,350	\$35.07	\$72,940	2.869	40
2. N	Maryland	67,010	34.05	70,820	2.759	48
3. N	Montana	10,160	22.22	46,210	2.649	88
4. I	Louisiana	44,050	29.75	61,880	2.384	35
5. A	Alaska	6,610	31.95	66,450	2.364	45
Top pa	ying States for this occupation					
1. N	New Jersey	54,090	47.74	99,290	1.406	13
2. N	New York	64,670	47.18	98,140	.772	17
3. 0	Connecticut	23,810	46.34	96,380	1.430	14
4. V	Washington	22,030	44.13	91,790	.854	17
5. 0	California	236,290	42.44	88,280	1.636	21

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Odessa-Midland, TX MSA	3,200	\$30.03	\$62,460	3.114
2. Baltimore, MD PMSA	35,910	32.61	67,830	2.970
3. Missoula, MT MSA	1,410	25.93	53,940	2.851
4. Great Falls, MT MSA	870	21.15	43,980	2.793
5. Billings, MT MSA	1,770	23.82	49,540	2.693
Top paying MSAs for this occupation				
1. Stamford-Norwalk, CT PMSA	4,620	52.63	109,460	2.224
2. New York, NY PMSA	34,290	51.42	106,950	.845
3. Newark, NJ PMSA	13,080	50.60	105,240	1.358
4. San Jose, CA PMSA	15,660	49.99	103,990	1.647
5. Bergen-Passaic, NJ PMSA	10,440	49.96	103,910	1.654

#### **<u>11-2022</u>** Sales managers

Direct the actual distribution or movement of a product or service to the customer. Coordinate sales distribution by establishing sales territories, quotas, and goals and establish training programs for sales representatives. Analyze sales statistics gathered by staff to determine sales potential and inventory requirements and monitor the preferences of customers.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	madony		wage	wage	rank	
Top	industries by employment for this occupation					
1.	Wholesale tradedurable goods	33,500	\$40.60	\$84,440	1	8
2.	Business services	32,430	39.26	81,660	2	17
3.	Automotive dealers & service stations	25,020	40.36	83,950	3	11
4.	Wholesale tradenondurable goods	25,020	37.67	78,360	4	24
5.	Communications	11,440	39.80	82,790	5	13
Top	paying industries for this occupation					
1.	Security and commodity brokers	4,260	47.55	98,910	22	1
2.	Instruments and related products	5,040	42.56	88,530	19	2
3.	Chemicals and allied products	5,810	42.53	88,460	15	3
4.	Electronic & other electrical equipment	7,070	42.27	87,920	13	4
5.	Paper and allied products	2,650	41.34	85,980	34	5

	_	Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Georgia	13,930	\$38.88	\$80,880	.363	19
2.	Massachusetts	11,720	43.23	89,910	.363	17
3.	Delaware	1,400	33.04	68,720	.348	35
4.	Illinois	20,400	35.32	73,460	.348	26
5.	Texas	29,260	36.05	74,990	.317	27
Top	paying States for this occupation					
1.	New York	13,820	47.20	98,180	.165	16
2.	New Jersey	8,930	45.21	94,030	.232	17
3.	Connecticut	4,490	43.93	91,370	.270	20
4.	Massachusetts	11,720	43.23	89,910	.363	17
5.	Minnesota	6,590	41.98	87,320	.252	17

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Rockford, IL MSA	800	\$29.34	\$61,030	.479
2. Atlanta, GA MSA	10,040	39.49	82,130	.466
3. Dallas, TX PMSA	8,820	40.62	84,490	.455
4. Nashua, NH PMSA	410	39.35	81,850	.442
5. Stamford-Norwalk, CT PMSA	910	48.50	100,880	.438
Top paying MSAs for this occupation				
1. New York, NY PMSA	7,590	50.52	105,070	.187
2. San Jose, CA PMSA	3,900	49.51	102,990	.410
3. Stamford-Norwalk, CT PMSA	910	48.50	100,880	.438
4. Newark, NJ PMSA	2,170	47.14	98,040	.225
5. Nassau-Suffolk, NY PMSA	2,180	46.58	96,890	.184

### **<u>11-3011</u>** Administrative services managers

Plan, direct, or coordinate supportive services of an organization, such as recordkeeping, mail distribution, telephone operator/receptionist, and other office support services. May oversee facilities planning and maintenance and custodial operations.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maastry		wage	wage	rank <sup>2</sup>	
Top i	ndustries by employment for this occupation					
1.	Federal, State, and local government	39,110	\$25.25	\$52,520	1	49
2.	Business services	27,690	26.27	54,650	2	43
3.	Health services	27,170	25.30	52,620	3	47
4.	Educational services	26,380	26.94	56,020	4	37
5.	Engineering & management services	25,170	26.26	54,610	5	44
Top p	paying industries for this occupation					
1.	Metal mining	-	42.80	89,030	-	1
2.	Security and commodity brokers	5,470	38.48	80,050	12	2
3.	Instruments and related products	2,230	37.77	78,560	33	3
4.	Chemicals and allied products	2,650	36.14	75,160	26	4
5.	Electric, gas, and sanitary services	3,450	35.56	73,970	22	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	5,700	\$26.21	\$54,520	.943	120
2.	Maryland	13,210	22.97	47,780	.544	170
3.	Oklahoma	5,920	19.11	39,740	.408	157
4.	Alaska	1,100	23.51	48,910	.393	152
5.	Tennessee	9,920	20.38	42,390	.384	159
Тор ј	paying States for this occupation					
1.	New York	19,960	39.68	82,540	.238	31
2.	New Jersey	7,680	38.30	79,660	.200	36
3.	Rhode Island	640	35.73	74,330	.137	29
4.	Connecticut	3,420	33.36	69,390	.205	59
5.	Washington	3,230	32.94	68,510	.125	65

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Baltimore, MD PMSA	8,580	\$20.28	\$42,180	.710
2. Santa Fe, NM MSA	420	23.15	48,150	.584
3. Austin-San Marcos, TX MSA	3,810	28.59	59,460	.579
4. Des Moines, IA MSA	1,610	27.94	58,100	.572
5. Cheyenne, WY MSA	190	25.09	52,180	.537
Top paying MSAs for this occupation				
1. New York, NY PMSA	11,320	43.50	90,470	.279
2. Jersey City, NJ PMSA	800	43.04	89,520	.321
3. Newark, NJ PMSA	1,700	39.25	81,640	.176
4. Middlesex-Somerset-Hunterdon, NJ PMSA	1,540	39.13	81,400	.245
5. Nassau-Suffolk, NY PMSA	2,660	38.74	80,590	.225

#### **<u>11-3031 Financial managers</u>**

Plan, direct, and coordinate accounting, investing, banking, insurance, securities, and other financial activities of a branch, office, or department of an establishment.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation					
1.	Depository institutions	89,860	\$31.81	\$66,160	1	58
2.	Engineering & management services	40,490	40.01	83,220	2	17
3.	Security and commodity brokers	35,410	51.72	107,570	3	1
4.	Federal, State, and local government	34,510	32.62	67,850	4	54
5.	Business services	33,100	37.39	77,770	5	35
Top	paying industries for this occupation					
1.	Security and commodity brokers	35,410	51.72	107,570	3	1
2.	Tobacco products	360	45.12	93,850	64	2
3.	Chemicals and allied products	5,430	43.35	90,170	27	3
4.	Holding and other investment offices	10,120	42.63	88,660	16	4
5.	Petroleum and coal products	730	42.58	88,570	61	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	5,110	\$39.06	\$81,240	.845	18
2.	Massachusetts	25,410	40.38	83,980	.787	24
3.	Delaware	2,540	32.16	66,900	.632	41
4.	New York	51,790	48.67	101,240	.618	12
5.	Connecticut	10,100	43.04	89,520	.607	21
Тор р	paying States for this occupation					
1.	New York	51,790	48.67	101,240	.618	12
2.	Rhode Island	1,650	43.25	89,960	.352	14
3.	Connecticut	10,100	43.04	89,520	.607	21
4.	New Jersey	21,220	41.69	86,720	.551	20
5.	Minnesota	9,130	41.01	85,310	.349	19

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Stamford-Norwalk, CT PMSA	2,290	\$51.09	\$106,270	1.102
2. Boston, MA-NH PMSA	18,950	43.12	89,690	.961
3. New York, NY PMSA	38,320	51.79	107,720	.945
4. Reading, PA MSA	1,300	23.29	48,440	.796
5. Jersey City, NJ PMSA	1,910	43.17	89,800	.767
Top paying MSAs for this occupation				
1. New York, NY PMSA	38,320	51.79	107,720	.945
2. Stamford-Norwalk, CT PMSA	2,290	51.09	106,270	1.102
3. San Jose, CA PMSA	5,400	48.40	100,670	.568
4. San Francisco, CA PMSA	6,910	46.30	96,310	.693
5. Nassau-Suffolk, NY PMSA	3,890	45.09	93,790	.328

### 13-1023 Purchasing agents, except wholesale, retail, and farm products

Purchase machinery, equipment, tools, parts, supplies, or services necessary for the operation of an establishment. Purchase raw or semi-finished materials for manufacturing. Include contract specialists, field contractors, purchasers, price analysts, tooling coordinators, and media buyers.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maastry		wage	wage	rank <sup>2</sup>	
Top i	ndustries by employment for this occupation					
1.	Federal, State, and local government	39,690	\$24.66	\$51,290	1	9
2.	Industrial machinery and equipment	20,140	22.06	45,890	2	25
3.	Transportation equipment	15,420	25.13	52,260	3	6
4.	Electronic & other electrical equipment	13,950	21.52	44,760	4	30
5.	Business services	11,950	21.65	45,040	5	28
Top p	paying industries for this occupation					
1.	Railroad transportation	180	29.22	60,770	61	1
2.	Pipelines, except natural gas	-	28.68	59,660	-	2
3.	Oil and gas extraction	850	28.59	59,460	39	3
4.	Electric, gas, and sanitary services	3,110	27.16	56,490	18	4
5.	Security and commodity brokers	640	25.48	52,990	44	5

	Employment	Hourly mean	Annual mean	Percent of	Wage rank
State		wage	wage	State	within State <sup>5</sup>
				employment	
States with the highest concentration of workers in this occupation <sup>4</sup>					
1. District of Columbia	2,600	\$30.19	\$62,800	.430	76
2. Virginia	8,480	24.29	50,530	.249	145
3. Washington	6,150	23.44	48,750	.238	200
4. Michigan	10,010	24.93	51,860	.225	144
5. Minnesota	5,640	21.66	45,060	.216	207
Top paying States for this occupation					
1. District of Columbia	2,600	30.19	62,800	.430	76
2. New Jersey	6,840	25.32	52,660	.178	185
3. Michigan	10,010	24.93	51,860	.225	144
4. Alaska	560	24.67	51,310	.200	123
5. Virginia	8,480	24.29	50,530	.249	145

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Huntsville, AL MSA	1,310	\$26.32	\$54,740	.742
2. Binghamton, NY MSA	470	22.89	47,610	.425
3. San Jose, CA PMSA	3,820	28.23	58,710	.402
4. Elkhart-Goshen, IN MSA	430	20.62	42,880	.385
5. Lowell, MA-NH PMSA	440	23.64	49,170	.354
Top paying MSAs for this occupation				
1. Washington, DC-MD-VA-WV PMSA	8,420	28.46	59,200	.315
2. San Jose, CA PMSA	3,820	28.23	58,710	.402
3. Detroit, MI PMSA	5,370	27.47	57,150	.262
4. Flint, MI PMSA	270	27.26	56,700	.166
5. Monmouth-Ocean, NJ PMSA	850	26.63	55,390	.222

### 13-1031 Claims adjusters, examiners, and investigators

Review settled claims to determine that payments and settlements have been made in accordance with company practices and procedures, ensuring that proper methods have been followed. Report overpayments, underpayments, and other irregularities. Confer with legal counsel on claims requiring litigation.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
			wage	Wage	Tallk	
Top i	industries by employment for this occupation					
1.	Insurance carriers	130,160	\$22.12	\$46,000	1	9
2.	Insurance agents, brokers, & service	45,510	21.11	43,920	2	14
3.	Federal, State, and local government	7,720	22.09	45,940	3	10
4.	Business services	6,850	20.98	43,650	4	15
5.	Membership organizations	2,100	18.03	37,510	5	25
Top	paying industries for this occupation					
1.	Communications	660	33.77	70,240	11	1
2.	Railroad transportation	270	31.91	66,370	14	2
3.	Electric, gas, and sanitary services	210	27.75	57,710	16	3
4.	Real estate	240	25.24	52,500	15	4
5.	Transportation by air	50	23.66	49,210	24	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Rhode Island	1,440	\$23.54	\$48,970	.308	129
2.	Connecticut	4,970	24.35	50,640	.299	177
3.	Nebraska	2,110	19.02	39,550	.239	167
4.	Illinois	13,620	19.00	39,510	.232	287
5.	Oklahoma	2,950	22.13	46,040	.203	94
Top J	paying States for this occupation					
1.	Alaska	80	29.57	61,500	.029	59
2.	New Hampshire	670	28.57	59,420	.111	58
3.	New York	14,520	24.41	50,760	.173	202
4.	Connecticut	4,970	24.35	50,640	.299	177
5.	California	26,280	23.87	49,650	.182	224

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Bloomington-Normal, IL MSA	1,180	\$22.35	\$46,490	1.406
2. Hartford, CT MSA	3,320	22.93	47,690	.542
3. Des Moines, IA MSA	1,400	18.33	38,120	.498
4. Jacksonville, FL MSA	2,430	23.01	47,860	.442
5. Wausau, WI MSA	290	20.41	42,460	.439
Top paying MSAs for this occupation				
1. Bridgeport, CT PMSA	70	35.80	74,470	.037
2. San Angelo, TX MSA	-	31.80	66,140	-
3. Lubbock, TX MSA	-	31.76	66,060	-
4. Anchorage, AK MSA	70	30.73	63,910	.053
5. Stamford-Norwalk, CT PMSA	800	30.10	62,610	.385

#### 13-1111 Management analysts

Conduct organizational studies and evaluations, design systems and procedures, conduct work simplifications and measurement studies, and prepare operations and procedures manuals to assist management in operating more efficiently and effectively. Include program analysts and management consultants.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation					
1.	Engineering & management services	109,630	\$35.90	\$74,670	1	4
2.	Federal, State, and local government	78,400	27.70	57,620	2	37
3.	Business services	41,660	32.64	67,880	3	9
4.	Insurance carriers	17,000	26.37	54,860	4	47
5.	Communications	16,300	26.10	54,290	5	48
Top	paying industries for this occupation					
1.	Legal services	220	38.32	79,700	38	1
2.	Services, nec	1,220	37.71	78,430	25	2
3.	Oil and gas extraction	1,220	37.01	76,990	27	3
4.	Engineering & management services	109,630	35.90	74,670	1	4
5.	Pipelines, except natural gas	80	35.46	73,750	52	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	17,050	\$30.24	\$62,890	2.820	75
2.	Virginia	29,090	34.29	71,310	.856	47
3.	Maryland	12,280	30.33	63,090	.506	83
4.	Connecticut	7,140	34.58	71,930	.429	52
5.	New Jersey	16,500	34.69	72,150	.429	54
Top J	paying States for this occupation					
1.	Rhode Island	1,250	40.21	83,640	.267	21
2.	Illinois	17,420	36.02	74,910	.297	24
3.	New Hampshire	1,850	35.35	73,530	.306	20
4.	Massachusetts	13,210	35.34	73,510	.409	42
5.	New Jersey	16,500	34.69	72,150	.429	54

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Tallahassee, FL MSA	3,830	\$32.13	\$66,830	2.488
2. Washington, DC-MD-VA-WV PMSA	43,120	33.09	68,830	1.613
3. Little Rock-North Little Rock, AR MSA	2,150	19.71	40,990	.715
4. Stamford-Norwalk, CT PMSA	1,420	41.06	85,410	.684
5. Huntsville, AL MSA	1,200	29.04	60,400	.680
Top paying MSAs for this occupation				
1. Manchester, NH PMSA	-	49.79	103,560	-
2. Providence-Fall River-Warwick, RI-MA MSA	1,000	42.01	87,380	.194
3. Santa Rosa, CA PMSA	190	41.57	86,470	.099
4. Lubbock, TX MSA	-	41.32	85,950	-
5. Grand Rapids-Muskegon-Holland, MI MSA	590	41.26	85,810	.107

### **13-2011** Accountants and auditors

*Examine, analyze, and interpret accounting records for the purpose of giving advice or preparing statements. Install or advise on systems of recording costs or other financial and budgetary data.* 

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation					
1.	Engineering & management services	256,400	\$26.94	\$56,030	1	2
2.	Federal, State, and local government	99,290	22.59	46,990	2	48
3.	Business services	44,560	23.40	48,660	3	40
4.	Wholesale tradedurable goods	30,700	24.82	51,610	4	20
5.	Educational services	29,440	20.55	42,740	5	66
Top J	paying industries for this occupation					
1.	Legal services	5,910	27.30	56,790	36	1
2.	Engineering & management services	256,400	26.94	56,030	1	2
3.	Transportation equipment	10,670	26.85	55,840	18	3
4.	Pipelines, except natural gas	170	26.83	55,810	69	4
5.	Security and commodity brokers	13,070	26.66	55,460	12	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	9,450	\$27.25	\$56,680	1.563	107
2.	New York	79,340	28.39	59,040	.947	139
3.	Connecticut	15,700	28.36	58,990	.943	117
4.	Washington	22,500	26.70	55,540	.872	133
5.	Vermont	2,500	25.46	52,950	.848	68
Top J	paying States for this occupation					
1.	New York	79,340	28.39	59,040	.947	139
2.	Connecticut	15,700	28.36	58,990	.943	117
3.	New Jersey	29,930	27.53	57,270	.778	145
4.	District of Columbia	9,450	27.25	56,680	1.563	107
5.	California	97,190	26.85	55,840	.673	169

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Tallahassee, FL MSA	2,510	\$23.73	\$49,350	1.631
2. Olympia, WA PMSA	1,240	22.73	47,280	1.481
3. Stamford-Norwalk, CT PMSA	2,700	30.37	63,160	1.300
4. New York, NY PMSA	48,680	30.38	63,200	1.200
5. Hartford, CT MSA	7,180	27.64	57,490	1.172
Top paying MSAs for this occupation				
1. Vallejo-Fairfield-Napa, CA PMSA	1,360	35.49	73,810	.749
2. Bergen-Passaic, NJ PMSA	5,370	30.95	64,370	.851
3. Danbury, CT PMSA	580	30.61	63,660	.664
4. New York, NY PMSA	48,680	30.38	63,200	1.200
5. Stamford-Norwalk, CT PMSA	2,700	30.37	63,160	1.300

#### 13-2072 Loan officers

Evaluate, authorize, or recommend approval of commercial, real estate, or credit loans. Advise borrowers on financial status and methods of payments. Include mortgage loan officers and agents, collection analysts, loan servicing officers, and loan underwriters.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation				. can it	
1.	Depository institutions	101,290	\$22.87	\$47,580	1	12
2.	Nondepository institutions	95,060	24.86	51,710	2	9
3.	Federal, State, and local government	5,380	25.20	52,410	3	7
4.	Real estate	3,010	27.76	57,740	4	5
5.	Insurance carriers	2,660	24.35	50,650	5	10
Top	paying industries for this occupation					
1.	Automotive dealers & service stations	950	35.40	73,630	9	1
2.	Wholesale tradedurable goods	120	32.53	67,660	11	2
3.	Security and commodity brokers	1,670	29.52	61,410	6	3
4.	Engineering & management services	110	28.35	58,960	12	4
5.	Real estate	3,010	27.76	57,740	4	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	South Dakota	1,420	\$18.70	\$38,900	.392	131
2.	Montana	1,190	18.91	39,330	.310	140
3.	Colorado	6,510	28.04	58,330	.301	85
4.	Utah	2,910	20.26	42,140	.278	169
5.	North Dakota	800	20.56	42,770	.257	95
Top J	paying States for this occupation					
1.	Rhode Island	960	36.82	76,580	.205	26
2.	Connecticut	2,240	30.79	64,030	.135	85
3.	New York	7,740	30.69	63,840	.092	93
4.	District of Columbia	610	29.47	61,290	.101	87
5.	Arizona	3,810	28.83	59,970	.171	53

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Great Falls, MT MSA	140	\$14.69	\$30,560	.449
2. Owensboro, KY MSA	170	17.11	35,580	.416
3. Manchester, NH PMSA	410	23.89	49,680	.402
4. Santa Rosa, CA PMSA	690	25.85	53,770	.361
5. Denver, CO PMSA	3,950	30.90	64,260	.343
Top paying MSAs for this occupation				
1. Stamford-Norwalk, CT PMSA	350	38.93	80,980	.168
2. New York, NY PMSA	3,350	38.07	79,180	.083
3. San Francisco, CA PMSA	1,810	35.78	74,430	.181
4. Providence-Fall River-Warwick, RI-MA MSA	1,050	35.61	74,080	.204
5. Bremerton, WA PMSA	120	34.21	71,160	.167

#### **15-1021** Computer programmers

Convert project specifications and statements of problems and procedures to detailed logical flow charts for coding into computer language. Develop and write computer programs to store, locate, and retrieve specific documents, data, and information. May program web sites.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	mustry		wage	wage	rank <sup>2</sup>	
Top i	ndustries by employment for this occupation					
1.	Business services	235,380	\$32.05	\$66,660	1	9
2.	Wholesale tradedurable goods	35,310	32.12	66,800	2	8
3.	Engineering & management services	28,220	29.58	61,540	3	17
4.	Insurance carriers	23,190	28.57	59,420	4	27
5.	Educational services	18,570	22.94	47,710	5	68
Top	paying industries for this occupation					
1.	Heavy construction, ex. building	380	35.42	73,680	54	1
2.	Security and commodity brokers	11,370	34.40	71,550	9	2
3.	Pipelines, except natural gas	80	33.85	70,400	65	3
4.	Oil and gas extraction	1,050	33.28	69,220	36	4
5.	Coal mining	40	33.13	68,910	67	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Virginia	28,010	\$29.52	\$61,400	.824	89
2.	Delaware	2,830	34.17	71,070	.704	29
3.	New Jersey	27,090	33.19	69,040	.704	69
4.	Colorado	13,010	31.66	65,850	.602	51
5.	Connecticut	9,560	32.27	67,110	.574	73
Top J	paying States for this occupation					
1.	Delaware	2,830	34.17	71,070	.704	29
2.	Texas	45,360	34.07	70,860	.491	41
3.	Washington	12,090	34.01	70,740	.468	52
4.	California	65,670	33.61	69,920	.455	75
5.	Massachusetts	16,320	33.51	69,700	.505	53

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Boulder-Longmont, CO PMSA	3,010	\$32.34	\$67,260	1.663
2. Olympia, WA PMSA	1,090	26.74	55,630	1.302
3. San Jose, CA PMSA	11,650	35.19	73,190	1.226
4. San Francisco, CA PMSA	11,890	36.53	75,990	1.192
5. Raleigh-Durham-Chapel Hill, NC MSA	7,040	34.04	70,790	1.064
Top paying MSAs for this occupation				
1. Houston, TX PMSA	9,000	36.72	76,370	.436
2. Dallas, TX PMSA	18,720	36.55	76,020	.965
3. San Francisco, CA PMSA	11,890	36.53	75,990	1.192
4. Middlesex-Somerset-Hunterdon, NJ PMSA	5,980	36.33	75,560	.952
5. Seattle-Bellevue-Everett, WA PMSA	9,090	36.14	75,180	.683

#### **15-1031** Computer software engineers, applications

Develop, create, and modify general computer applications software or specialized utility programs. Analyze user needs and develop software solutions. Design software or customize software for client use with the aim of optimizing operational efficiency. May analyze and design databases within an application area, working individually or coordinating database development as part of a team.

	Inductry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	industry		wage	wage	rank <sup>2</sup>	-
Top i	ndustries by employment for this occupation					
1.	Business services	190,710	\$36.15	\$75,190	1	2
2.	Engineering & management services	32,520	34.65	72,070	2	11
3.	Industrial machinery and equipment	16,620	35.95	74,780	3	4
4.	Electronic & other electrical equipment	16,470	35.79	74,440	4	5
5.	Instruments and related products	11,790	35.77	74,390	5	6
Top	paying industries for this occupation					
1.	Security and commodity brokers	5,200	37.75	78,520	11	1
2.	Business services	190,710	36.15	75,190	1	2
3.	Services, nec	170	35.95	74,780	39	3
4.	Industrial machinery and equipment	16,620	35.95	74,780	3	4
5.	Electronic & other electrical equipment	16,470	35.79	74,440	4	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Massachusetts	21,050	\$39.65	\$82,470	.652	27
2.	Colorado	13,280	36.45	75,810	.615	28
3.	New Hampshire	3,350	35.64	74,120	.554	16
4.	Virginia	17,150	34.10	70,930	.504	50
5.	Washington	12,880	36.39	75,690	.499	34
Top J	paying States for this occupation					
1.	Arizona	4,850	39.82	82,820	.217	14
2.	Massachusetts	21,050	39.65	82,470	.652	27
3.	California	66,400	39.16	81,450	.460	35
4.	New Jersey	17,010	36.59	76,100	.442	43
5.	Colorado	13,280	36.45	75,810	.615	28

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Boulder-Longmont, CO PMSA	3,640	\$37.14	\$77,260	2.011
2. San Jose, CA PMSA	17,530	42.59	88,600	1.844
3. Nashua, NH PMSA	1,290	38.40	79,880	1.389
4. Lowell, MA-NH PMSA	1,480	40.10	83,400	1.192
5. Burlington, VT MSA	1,200	35.55	73,940	1.110
Top paying MSAs for this occupation				
1. Pittsfield, MA MSA	100	44.99	93,580	.241
2. Santa Cruz-Watsonville, CA PMSA	670	43.84	91,180	.711
<ol><li>Vallejo-Fairfield-Napa, CA PMSA</li></ol>	-	42.84	89,100	-
4. San Jose, CA PMSA	17,530	42.59	88,600	1.844
5. Santa Rosa, CA PMSA	510	42.44	88,280	.267

#### 15-1032 Computer software engineers, systems software

Research, design, develop, and test operating systems-level software, compilers, and network distribution software for medical, industrial, military, communications, aerospace, business, scientific, and general computing applications. Set operational specifications and formulate and analyze software requirements. Apply principles and techniques of computer science, engineering, and mathematical analysis.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maastry		wage	wage	rank <sup>2</sup>	
Top i	ndustries by employment for this occupation					
1.	Business services	109,250	\$36.28	\$75,450	1	7
2.	Industrial machinery and equipment	29,760	38.56	80,210	2	1
3.	Engineering & management services	27,240	36.68	76,300	3	5
4.	Communication	20,250	33.55	69,770	4	23
5.	Electronic & other electrical equipment	14,180	37.97	78,980	5	2
Top	paying industries for this occupation					
1.	Industrial machinery and equipment	29,760	38.56	80,210	2	1
2.	Electronic & other electrical equipment	14,180	37.97	78,980	5	2
3.	Apparel and other textile products	-	37.07	77,100	-	3
4.	Transportation equipment	6,030	36.95	76,850	9	4
5.	Engineering & management services	27,240	36.68	76,300	3	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Virginia	16,630	\$34.66	\$72,090	.489	43
2.	Massachusetts	14,820	39.53	82,230	.459	28
3.	Washington	11,340	37.33	77,650	.439	32
4.	Maryland	10,190	37.89	78,810	.420	23
5.	Colorado	8,530	35.41	73,650	.395	30
Top J	paying States for this occupation					
1.	California	50,280	39.94	83,070	.348	30
2.	New Jersey	9,860	39.69	82,560	.256	29
3.	Massachusetts	14,820	39.53	82,230	.459	28
4.	Illinois	9,510	38.07	79,180	.162	20
5.	District of Columbia	1,470	37.98	79,000	.243	23

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. San Jose, CA PMSA	19,310	\$44.07	\$91,660	2.031
2. Lowell, MA-NH PMSA	1,400	39.88	82,940	1.127
3. Colorado Springs, CO MSA	2,460	35.55	73,940	1.051
4. Boulder-Longmont, CO PMSA	1,460	37.18	77,330	.807
5. Seattle-Bellevue-Everett, WA PMSA	10,430	37.60	78,200	.783
Top paying MSAs for this occupation				
1. Sarasota-Bradenton, FL MSA	190	47.02	97,800	.068
2. Santa Cruz-Watsonville, CA PMSA	270	44.07	91,660	.287
3. San Jose, CA PMSA	19,310	44.07	91,660	2.031
4. Tyler, TX MSA	-	43.72	90,950	-
5. Newark, NJ PMSA	1,950	41.82	86,980	.202

#### 15-1041 Computer support specialists

Provide technical assistance to computer system users. Answer questions or resolve computer problems for clients in person, via telephone or from remote location. May provide assistance concerning the use of computer hardware and software, including printing, installation, word processing, electronic mail, and operating systems.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation					
1.	Business services	188,270	\$20.35	\$42,330	1	29
2.	Educational services	48,690	16.81	34,960	2	65
3.	Wholesale tradedurable goods	32,410	23.52	48,930	3	7
4.	Engineering & management services	24,230	20.32	42,270	4	30
5.	Federal, State, and local government	20,580	19.85	41,290	5	35
Top	paying industries for this occupation					
1.	Heavy construction, ex. building	900	26.48	55,070	42	1
2.	Oil and gas extraction	970	25.53	53,110	39	2
3.	Electric, gas, and sanitary services	2,380	25.29	52,610	27	3
4.	Coal mining	120	25.23	52,480	65	4
5.	Paper and allied products	870	24.59	51,160	43	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Utah	7,660	\$12.35	\$25,700	.732	419
2.	Colorado	14,110	21.09	43,870	.653	197
3.	Rhode Island	2,920	18.94	39,400	.624	198
4.	Arizona	13,300	19.86	41,320	.596	176
5.	South Dakota	2,100	13.95	29,030	.580	230
Тор р	paying States for this occupation					
1.	Massachusetts	17,160	23.55	48,990	.531	188
2.	New York	33,020	23.55	48,980	.394	220
3.	New Jersey	18,800	22.76	47,330	.489	242
4.	California	57,820	22.60	47,000	.400	257
5.	Hawaii	1,420	22.42	46,630	.265	161

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Provo-Orem, UT MSA	2,250	\$12.01	\$24,990	1.574
2. Boulder-Longmont, CO PMSA	2,720	20.55	42,750	1.503
3. Olympia, WA PMSA	1,060	21.12	43,930	1.266
4. San Jose, CA PMSA	9,460	27.71	57,630	.995
5. Colorado Springs, CO MSA	2,160	18.14	37,720	.923
Top paying MSAs for this occupation				
1. San Jose, CA PMSA	9,460	27.71	57,630	.995
2. Lowell, MA-NH PMSA	1,120	27.21	56,600	.902
3. San Francisco, CA PMSA	6,860	27.07	56,300	.688
4. Waterbury, CT PMSA	190	26.85	55,840	.222
5. Charlotte-Gastonia-Rock Hill, NC-SC MSA	4,610	26.20	54,490	.571

#### 15-1051 Computer systems analysts

Analyze science, engineering, business, and all other data processing problems for application to electronic data processing systems. Analyze user requirements, procedures, and problems to automate or improve existing systems and review computer system capabilities, workflow, and scheduling limitations. May analyze or recommend commercially available software.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maasay		wage	wage	rank <sup>∠</sup>	
Top i	ndustries by employment for this occupation					
1.	Business services	158,620	\$32.79	\$68,200	1	3
2.	Federal, State, and local government	77,000	29.12	60,560	2	28
3.	Insurance carriers	30,170	29.96	62,320	3	19
4.	Engineering & management services	26,790	29.56	61,470	4	24
5.	Educational services	15,220	23.88	49,670	5	61
Top	paying industries for this occupation					
1.	Oil and gas extraction	690	33.68	70,060	36	1
2.	Pipelines, except natural gas	60	32.80	68,220	60	2
3.	Business services	158,620	32.79	68,200	1	3
4.	Security and commodity brokers	6,450	32.39	67,360	12	4
5.	Wholesale tradedurable goods	13,700	32.08	66,720	7	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
States	with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	7,480	\$33.98	\$70,670	1.237	47
2.	Virginia	25,520	30.47	63,370	.751	75
3.	Maryland	17,280	31.41	65,340	.712	70
4.	Colorado	13,850	33.55	69,790	.641	38
5.	Illinois	36,550	33.16	68,960	.624	38
Top pa	iying States for this occupation					
1.	New Jersey	17,480	36.17	75,230	.454	46
2.	District of Columbia	7,480	33.98	70,670	1.237	47
3.	Wisconsin	11,460	33.70	70,090	.426	26
4.	Colorado	13,850	33.55	69,790	.641	38
5.	New York	23,780	33.37	69,410	.284	68

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Springfield, IL MSA	1,530	\$27.84	\$57,920	1.391
2. Washington, DC-MD-VA-WV PMSA	34,570	32.21	66,990	1.293
3. Boulder-Longmont, CO PMSA	2,290	31.01	64,510	1.265
4. Huntsville, AL MSA	1,660	29.10	60,530	.940
5. Madison, WI MSA	2,400	25.87	53,820	.884
Top paying MSAs for this occupation				
1. Middlesex-Somerset-Hunterdon, NJ PMSA	4,120	40.35	83,930	.656
2. Bloomington-Normal, IL MSA	-	40.34	83,900	-
3. Milwaukee-Waukesha, WI PMSA	-	39.11	81,350	-
4. Jersey City, NJ PMSA	1,570	37.73	78,480	.630
5. Santa Rosa, CA PMSA	330	37.23	77,430	.172

### 17-2051 Civil engineers

Perform engineering duties in planning, designing, and overseeing construction and maintenance of building structures, and facilities, such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, water and sewage systems, and waste disposal units. Include architectural, structural, traffic, ocean, and geo-technical engineers.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation					
1.	Engineering & management services	106,400	\$29.52	\$61,390	1	18
2.	Federal, State, and local government	64,030	28.52	59,330	2	24
3.	Heavy construction, ex. building	8,500	32.09	66,750	3	11
4.	General building contractors	7,220	27.96	58,150	4	29
5.	Special trade contractors	3,940	27.80	57,820	5	31
Top	paying industries for this occupation					
1.	Oil and gas extraction	680	42.07	87,510	11	1
2.	Pipelines, except natural gas	170	40.23	83,670	25	2
3.	Trucking and warehousing	-	34.78	72,340	-	3
4.	Chemicals and allied products	760	33.95	70,620	10	4
5.	Paper and allied products	150	33.93	70,580	29	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Washington	10,190	\$32.02	\$66,610	.395	75
2.	Alaska	1,010	33.12	68,890	.361	36
3.	Hawaii	1,580	28.30	58,860	.295	64
4.	Colorado	6,150	28.56	59,410	.285	79
5.	Montana	1,090	24.85	51,690	.284	54
Top p	paying States for this occupation					
1.	District of Columbia	830	33.81	70,330	.137	48
2.	Alaska	1,010	33.12	68,890	.361	36
3.	Washington	10,190	32.02	66,610	.395	75
4.	California	30,960	31.96	66,470	.214	90
5.	Texas	16,070	31.69	65,910	.174	58

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Olympia, WA PMSA	760	\$28.83	\$59,980	.908
2. Yuba City, CA MSA	340	29.06	60,450	.882
3. Richland-Kennewick-Pasco, WA MSA	560	34.76	72,310	.727
4. Sacramento, CA PMSA	4,030	31.55	65,620	.557
5. Redding, CA MSA	340	29.50	61,360	.535
Top paying MSAs for this occupation				
1. Brazoria, TX PMSA	-	37.48	77,960	-
2. Odessa-Midland, TX MSA	-	36.80	76,550	-
<ol><li>Vallejo-Fairfield-Napa, CA PMSA</li></ol>	250	35.25	73,310	.138
4. Augusta-Aiken, GA-SC MSA	500	35.24	73,290	.257
5. Newburgh, NY-PA PMSA	100	35.03	72,860	.077

### **17-2071 Electrical engineers**

Design, develop, test, or supervise the manufacturing and installation of electrical equipment, components, or systems for commercial, industrial, military, or scientific use.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Engineering & management services	37,850	\$33.18	\$69,020	1	16
2.	Electronic & other electrical equipment	24,430	32.76	68,140	2	17
3.	Instruments and related products	18,520	33.70	70,090	3	12
4.	Industrial machinery and equipment	12,900	32.41	67,410	4	18
5.	Electric, gas, and sanitary services	9,730	33.33	69,320	5	14
Top p	paying industries for this occupation					
1.	Motion pictures	120	37.22	77,410	30	1
2.	Holding and other investment offices	210	37.16	77,290	24	2
3.	Business services	8,580	36.93	76,800	6	3
4.	Coal mining	50	36.78	76,500	37	4
5.	General building contractors	320	36.35	75,600	22	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	New Mexico	1,760	\$36.22	\$75,330	.244	21
2.	Colorado	4,850	31.79	66,130	.225	50
3.	Massachusetts	7,200	36.66	76,250	.223	37
4.	Virginia	6,780	32.70	68,010	.199	58
5.	Arizona	4,190	35.50	73,840	.188	19
Top	paying States for this occupation					
1.	Massachusetts	7,200	36.66	76,250	.223	37
2.	District of Columbia	500	36.24	75,390	.083	30
3.	New Mexico	1,760	36.22	75,330	.244	21
4.	Texas	12,310	36.06	75,000	.133	26
5.	California	24,830	36.01	74,900	.172	52

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Lowell, MA-NH PMSA	950	\$36.77	\$76,490	.765
2. San Jose, CA PMSA	7,050	42.46	88,320	.742
3. Huntsville, AL MSA	1,210	31.71	65,960	.685
<ol><li>Richland-Kennewick-Pasco, WA MSA</li></ol>	460	38.01	79,060	.597
5. Boulder-Longmont, CO PMSA	1,020	31.09	64,670	.564
Top paying MSAs for this occupation				
1. San Jose, CA PMSA	7,050	42.46	88,320	.742
2. Austin-San Marcos, TX MSA	2,480	39.13	81,380	.377
3. Brazoria, TX PMSA	-	38.92	80,940	-
4. Richland-Kennewick-Pasco, WA MSA	460	38.01	79,060	.597
5. Ventura, CA PMSA	390	37.84	78,700	.137

#### **17-2112 Industrial engineers**

Design, develop, test, and evaluate integrated systems for managing industrial production processes including human work factors, quality control, inventory control, logistics and material flow, cost analysis, and production coordination.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment	Wage rank <sup>3</sup>
Ton	industries by amployment for this occupation				тапк	
1001	Transportation equipment	24 870	\$30.32	\$63.070	1	19
2.	Industrial machinery and equipment	20.080	28.98	60.270	2	28
3.	Electronic & other electrical equipment	19,460	30.46	63,350	3	18
4.	Instruments and related products	13,080	30.66	63,780	4	14
5.	Business services	12,100	29.01	60,340	5	25
Top	paying industries for this occupation					
1.	Oil and gas extraction	1,370	37.07	77,100	20	1
2.	Services, nec	-	35.89	74,660	-	2
3.	Electric, gas, and sanitary services	2,200	35.71	74,270	16	3
4.	Pipelines, except natural gas	60	35.02	72,840	46	4
5.	Heavy construction, ex. building	990	33.75	70,190	22	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Michigan	12,730	\$31.10	\$64,680	.287	66
2.	Ohio	11,650	28.75	59,810	.215	60
3.	Minnesota	5,100	31.44	65,390	.195	54
4.	Indiana	5,380	26.74	55,630	.188	72
5.	Massachusetts	6,020	31.33	65,170	.186	72
Top J	paying States for this occupation					
1.	Alaska	80	36.41	75,740	.029	21
2.	California	18,320	32.74	68,090	.127	85
3.	District of Columbia	200	32.47	67,540	.033	63
4.	Hawaii	70	32.36	67,310	.013	38
5.	Washington	2,770	32.10	66,760	.107	73

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Lawrence, MA-NH PMSA	930	\$32.68	\$67,970	.594
2. Flint, MI PMSA	820	32.52	67,650	.503
3. Mansfield, OH MSA	370	24.91	51,820	.472
4. San Jose, CA PMSA	4,350	38.41	79,890	.458
5. Boulder-Longmont, CO PMSA	820	32.76	68,140	.453
Top paying MSAs for this occupation				
1. Odessa-Midland, TX MSA	60	38.72	80,530	.058
2. San Jose, CA PMSA	4,350	38.41	79,890	.458
3. Richland-Kennewick-Pasco, WA MSA	-	37.44	77,870	-
4. Brazoria, TX PMSA	-	35.60	74,050	-
5. Lake Charles, LA MSA	120	35.36	73,540	.143

#### **17-2141 Mechanical engineers**

Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment. Oversee installation, operation, maintenance, and repair of such equipment as centralized heat, gas, water, and steam systems.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment	Wage rank <sup>3</sup>
Ton	industries by employment for this occupation				Tank	
1.	Engineering & management services	40.150	\$32.25	\$67.080	1	12
2.	Industrial machinery and equipment	38,790	27.68	57,570	2	39
3.	Transportation equipment	22,040	30.20	62,820	3	25
4.	Instruments and related products	15,780	31.32	65,150	4	15
5.	Electronic & other electrical equipment	14,080	30.83	64,120	5	21
Top	paying industries for this occupation					
1.	Amusement & recreation services	240	41.40	86,110	32	1
2.	Holding and other investment offices	60	38.59	80,270	42	2
3.	Heavy construction, ex. building	820	37.02	77,000	21	3
4.	Business services	12,610	36.27	75,430	6	4
5.	Electric, gas, and sanitary services	2,240	35.41	73,640	14	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Michigan	14,350	\$30.18	\$62,780	.323	73
2.	Connecticut	4,840	30.33	63,090	.291	88
3.	Wisconsin	6,920	27.42	57,030	.257	61
4.	Indiana	7,000	27.54	57,280	.245	65
5.	Kansas	2,880	25.69	53,440	.218	83
Top	paying States for this occupation					
1.	New Mexico	830	36.73	76,400	.115	20
2.	Texas	18,190	35.17	73,150	.197	32
3.	District of Columbia	680	34.72	72,220	.112	42
4.	Alaska	270	34.57	71,910	.097	30
5.	Delaware	510	34.14	71,020	.127	30

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Peoria-Pekin, IL MSA	1,470	\$32.54	\$67,670	.905
2. Richland-Kennewick-Pasco, WA MSA	490	38.36	79,800	.636
3. Huntsville, AL MSA	920	31.13	64,740	.521
4. Bremerton, WA PMSA	350	29.52	61,400	.487
5. Houston, TX PMSA	9,660	37.89	78,800	.468
Top paying MSAs for this occupation				
1. Richland-Kennewick-Pasco, WA MSA	490	38.36	79,800	.636
2. Houston, TX PMSA	9,660	37.89	78,800	.468
3. Boulder-Longmont, CO PMSA	650	37.67	78,350	.359
4. Brazoria, TX PMSA	-	37.41	77,800	-
5. San Jose, CA PMSA	3,970	37.17	77,310	.418

#### **17-3023** Electrical and electronic engineering technicians

Apply electrical and electronic theory and related knowledge, usually under the direction of engineering staff, to design, build, repair, calibrate, and modify electrical components, circuitry, controls, and machinery for subsequent evaluation and use by engineering staff in making engineering design decisions.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Electronic & other electrical equipment	53,320	\$18.23	\$37,910	1	40
2.	Wholesale tradedurable goods	26,730	21.77	45,290	2	12
3.	Communications	21,970	23.51	48,900	3	7
4.	Federal, State, and local government	21,870	23.69	49,270	4	6
5.	Engineering & management services	21,050	20.95	43,580	5	17
Top p	paying industries for this occupation					
1.	Pipelines, except natural gas	120	26.69	55,520	39	1
2.	Electric, gas, and sanitary services	8,100	24.97	51,940	9	2
3.	Motion pictures	940	24.92	51,840	16	3
4.	Railroad transportation	200	24.17	50,270	33	4
5.	Petroleum and coal products	190	23.83	49,580	34	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Idaho	6,850	\$19.75	\$41,080	1.227	141
2.	Arizona	9,330	18.91	39,340	.418	202
3.	Oregon	5,740	18.53	38,550	.368	260
4.	New Mexico	2,380	20.78	43,220	.330	134
5.	New Hampshire	1,420	21.14	43,970	.235	140
Top J	paying States for this occupation					
1.	Alaska	370	27.49	57,170	.132	80
2.	District of Columbia	400	24.35	50,650	.066	144
3.	Delaware	260	23.87	49,650	.065	112
4.	Colorado	4,540	23.49	48,860	.210	146
5.	New Jersey	5,130	22.90	47,630	.133	235

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Boise City, ID MSA	6,300	\$19.60	\$40,770	2.837
2. San Jose, CA PMSA	8,530	23.94	49,790	.897
3. Las Cruces, NM MSA	420	20.10	41,810	.750
4. Boulder-Longmont, CO PMSA	1,340	28.16	58,580	.740
5. Nashua, NH PMSA	570	20.57	42,790	.614
Top paying MSAs for this occupation				
1. Boulder-Longmont, CO PMSA	1,340	28.16	58,580	.740
2. Bergen-Passaic, NJ PMSA	1,060	26.41	54,930	.168
3. Bremerton, WA PMSA	260	25.37	52,770	.362
4. Bloomington-Normal, IL MSA	70	25.34	52,700	.083
5. Bakersfield, CA MSA	970	25.18	52,370	.419

### 19-2031 Chemists

Conduct qualitative and quantitative chemical analyses or chemical experiments in laboratories for quality or process control or to develop new products or knowledge.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation					
1.	Chemicals and allied products	32,540	\$28.45	\$59,170	1	6
2.	Engineering & management services	22,270	24.07	50,070	2	24
3.	Federal, State, and local government	9,900	29.08	60,490	3	4
4.	Food and kindred products	2,620	22.84	47,500	4	27
5.	Instruments and related products	2,390	27.00	56,160	5	13
Top J	paying industries for this occupation					
1.	Oil and gas extraction	-	42.91	89,240	-	1
2.	Electric, gas, and sanitary services	1,220	30.27	62,960	7	2
3.	Paper and allied products	1,060	29.46	61,280	10	3
4.	Federal, State, and local government	9,900	29.08	60,490	3	4
5.	Petroleum and coal products	1,000	28.97	60,260	11	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Delaware	1,000	\$37.69	\$78,400	.249	20
2.	New Jersey	6,940	30.96	64,410	.180	102
3.	North Carolina	4,350	27.96	58,170	.117	72
4.	Massachusetts	3,670	31.36	65,230	.114	71
5.	Maryland	2,590	32.80	68,220	.107	59
Тор ј	paying States for this occupation					
1.	Delaware	1,000	37.69	78,400	.249	20
2.	District of Columbia	470	35.45	73,740	.078	36
3.	Maryland	2,590	32.80	68,220	.107	59
4.	Connecticut	1,560	32.62	67,850	.094	68
5.	Massachusetts	3,670	31.36	65,230	.114	71

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Raleigh-Durham-Chapel Hill, NC MSA	2,510	\$29.64	\$61,660	.380
2. Middlesex-Somerset-Hunterdon, NJ PMSA	2,110	30.25	62,910	.336
3. Newark, NJ PMSA	2,990	31.81	66,170	.310
4. Wilmington-Newark, DE-MD PMSA	950	38.22	79,500	.310
5. Boulder-Longmont, CO PMSA	550	23.66	49,210	.304
Top paying MSAs for this occupation				
1. Lawrence, MA-NH PMSA	130	40.06	83,330	.083
2. Wilmington-Newark, DE-MD PMSA	950	38.22	79,500	.310
3. Johnson City-Kingsport-Bristol, TN-VA MSA	-	36.83	76,600	-
4. Washington, DC-MD-VA-WV PMSA	2,620	35.70	74,260	.098
5. Stamford-Norwalk, CT PMSA	410	33.66	70,020	.197

#### **19-2041** Environmental scientists and specialists, including health

Conduct research or perform investigation for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or the health of the population. Utilizing knowledge of various scientific disciplines may collect, synthesize, study, report, and take action based on data derived from measurements or observations of air, food, soil, water, and other sources.

	Inductry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maustry		wage	wage	rank <sup>2</sup>	
Top i	ndustries by employment for this occupation					
1.	Federal, State, and local government	29,050	\$23.88	\$49,660	1	19
2.	Engineering & management services	19,140	24.16	50,240	2	18
3.	Electric, gas, and sanitary services	2,010	28.96	60,240	3	10
4.	Educational services	1,890	19.35	40,250	4	24
5.	Chemicals and allied products	1,590	30.38	63,200	5	8
Top p	paying industries for this occupation					
1.	Holding and other investment offices	60	40.95	85,180	12	1
2.	Oil and gas extraction	440	38.96	81,030	7	2
3.	Wholesale tradenondurable goods	110	36.14	75,170	10	3
4.	Petroleum and coal products	240	33.09	68,820	8	4
5.	Paper and allied products	60	31.29	65,090	13	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	1,130	\$33.27	\$69,210	.187	54
2.	Alaska	470	27.32	56,820	.168	82
3.	New Mexico	930	22.27	46,310	.129	109
4.	Washington	2,780	26.63	55,390	.108	137
5.	Nebraska	890	16.58	34,490	.101	231
Top	paying States for this occupation					
1.	District of Columbia	1,130	33.27	69,210	.187	54
2.	California	5,240	29.16	60,650	.036	137
3.	Colorado	1,330	28.46	59,200	.062	80
4.	New Jersey	2,260	27.87	57,970	.059	141
5.	Alaska	470	27.32	56,820	.168	82

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Richland-Kennewick-Pasco, WA MŠA	470	\$31.51	\$65,540	.610
2. Olympia, WA PMSA	440	23.59	49,060	.526
3. Tallahassee, FL MSA	540	35.16	73,130	.351
4. Las Cruces, NM MSA	170	16.98	35,320	.304
5. Santa Fe, NM MSA	210	22.97	47,780	.292
Top paying MSAs for this occupation				
1. Tallahassee, FL MSA	540	35.16	73,130	.351
2. San Luis Obispo-Atascadero-Paso Robles, CA MSA	-	34.85	72,480	-
3. Bakersfield, CA MSA	90	33.58	69,850	.039
4. Middlesex-Somerset-Hunterdon, NJ PMSA	330	32.99	68,610	.053
5. San Francisco, CA PMSA	610	32.17	66,910	.061

#### 19-3021 Market research analysts

Research market conditions in local, regional, or national areas to determine potential sales of a product or service. May gather information on competitors, prices, sales, and methods of marketing and distribution. May use survey results to create a marketing campaign based on regional preferences and buying habits.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
			waye	waye	rank	
Top i	industries by employment for this occupation					
1.	Engineering & management services	20,490	\$23.83	\$49,570	1	45
2.	Business services	16,220	30.21	62,840	2	13
3.	Communications	5,960	31.16	64,820	3	7
4.	Insurance carriers	5,870	23.55	48,980	4	47
5.	Wholesale tradedurable goods	5,540	34.66	72,100	5	3
Top	paying industries for this occupation					
1.	Industrial machinery and equipment	3,640	35.92	74,700	9	1
2.	Transportation equipment	840	35.75	74,360	25	2
3.	Wholesale tradedurable goods	5,540	34.66	72,100	5	3
4.	Electronic & other electrical equipment	5,130	33.28	69,220	6	4
5.	Oil and gas extraction	150	32.04	66,630	47	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	1,130	\$30.36	\$63,160	.187	73
2.	Washington	4,540	36.32	75,540	.176	35
3.	Minnesota	4,440	31.33	65,160	.170	57
4.	Massachusetts	5,060	29.95	62,290	.157	83
5.	Connecticut	2,530	30.65	63,750	.152	86
Top J	paying States for this occupation					
1.	Washington	4,540	36.32	75,540	.176	35
2.	Oregon	1,440	32.71	68,030	.092	37
3.	California	15,200	31.38	65,270	.105	97
4.	Minnesota	4,440	31.33	65,160	.170	57
5.	Connecticut	2,530	30.65	63,750	.152	86

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Stamford-Norwalk, CT PMSA	680	\$31.11	\$64,700	.327
2. Seattle-Bellevue-Everett, WA PMSA	3,850	37.87	78,770	.289
3. San Jose, CA PMSA	2,680	38.53	80,150	.282
4. Utica-Rome, NY MSA	350	8.61	17,910	.271
5. Austin-San Marcos, TX MSA	1,610	36.94	76,820	.245
Top paying MSAs for this occupation				
1. Eugene-Springfield, OR MSA	-	46.84	97,420	-
2. San Francisco, CA PMSA	1,740	39.93	83,050	.174
3. San Jose, CA PMSA	2,680	38.53	80,150	.282
4. Seattle-Bellevue-Everett, WA PMSA	3,850	37.87	78,770	.289
5. Austin-San Marcos, TX MSA	1,610	36.94	76,820	.245

### 19-3031 Clinical, counseling, and school psychologists

Diagnose and treat mental disorders; learning disabilities; and cognitive, behavioral, and emotional problems using individual, child, family, and group therapies. May design and implement behavior modification programs.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maastry		wage	wage	rank <sup>2</sup>	
Top i	ndustries by employment for this occupation					
1.	Educational services	39,560	\$26.53	\$55,170	1	2
2.	Health services	32,490	27.21	56,590	2	1
3.	Social services	12,910	20.27	42,160	3	7
4.	Federal, State, and local government	9,260	24.94	51,880	4	4
5.	Engineering & management services	550	25.41	52,840	5	3
Top J	paying industries for this occupation					
1.	Health services	32,490	27.21	56,590	2	1
2.	Educational services	39,560	26.53	55,170	1	2
3.	Engineering & management services	550	25.41	52,840	5	3
4.	Federal, State, and local government	9,260	24.94	51,880	4	4
5.	Business services	350	23.89	49,690	6	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Connecticut	2,110	\$26.94	\$56,030	.127	142
2.	Massachusetts	3,770	23.48	48,850	.117	192
3.	New Hampshire	700	23.26	48,380	.116	118
4.	Delaware	450	25.13	52,280	.112	101
5.	Utah	1,100	21.24	44,170	.105	145
Top J	paying States for this occupation					
1.	New York	8,420	31.86	66,270	.101	85
2.	California	12,600	30.23	62,870	.087	118
3.	Michigan	3,440	29.48	61,310	.077	81
4.	New Jersey	3,020	28.55	59,370	.078	126
5.	Alaska	240	28.25	58,760	.086	70

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. New Bedford, MA PMSA	230	\$26.44	\$54,990	.356
2. Brockton, MA PMSA	310	27.79	57,810	.316
3. Redding, CA MSA	170	27.52	57,240	.267
4. Pueblo, CO MSA	140	23.71	49,320	.257
5. Dutchess County, NY PMSA	260	28.88	60,070	.236
Top paying MSAs for this occupation				
1. Nashua, NH PMSA	70	37.62	78,250	.075
2. Nassau-Suffolk, NY PMSA	1,070	36.27	75,440	.090
3. New York, NY PMSA	3,770	36.02	74,920	.093
4. Terre Haute, IN MSA	-	35.89	74,640	-
5. San Luis Obispo-Atascadero-Paso Robles, CA MSA	110	34.02	70,770	.108

#### 19-4031 Chemical technicians

Conduct chemical and physical laboratory tests to assist scientists in making qualitative and quantitative analyses of solids, liquids, and gaseous materials for purposes, such as research and development of new products or processes, quality control, maintenance of environmental standards, and other work involving experimental, theoretical, or practical application of chemistry and related sciences.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	madeny		waye	waye	rank⁻	
Top i	industries by employment for this occupation					
1.	Chemicals and allied products	28,240	\$20.01	\$41,620	1	8
2.	Engineering & management services	15,320	14.25	29,630	2	32
3.	Instruments and related products	2,890	19.42	40,390	3	11
4.	Food and kindred products	2,050	16.00	33,290	4	26
5.	Electric, gas, and sanitary services	1,970	25.14	52,290	5	1
Top J	paying industries for this occupation					
1.	Electric, gas, and sanitary services	1,970	25.14	52,290	5	1
2.	Pipelines, except natural gas	120	23.97	49,850	25	2
3.	Oil and gas extraction	1,210	23.30	48,460	11	3
4.	Transportation equipment	980	22.88	47,580	15	4
5.	Tobacco products	-	22.28	46,350	-	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Delaware	1,040	\$22.92	\$47,680	.259	122
2.	West Virginia	920	19.56	40,690	.134	145
3.	New Jersey	5,040	19.90	41,400	.131	307
4.	Louisiana	2,270	23.24	48,340	.123	112
5.	Wyoming	260	12.87	26,770	.109	276
Top J	paying States for this occupation					
1.	Louisiana	2,270	23.24	48,340	.123	112
2.	Delaware	1,040	22.92	47,680	.259	122
3.	Hawaii	30	21.71	45,170	.006	180
4.	New Mexico	380	21.10	43,880	.053	129
5.	Arizona	460	21.07	43,830	.021	148

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Parkersburg-Marietta, WV-OH MSA	270	\$19.99	\$41,580	.409
2. Wilmington-Newark, DE-MD PMSA	980	23.36	48,590	.320
3. Casper, WY MSA	100	11.78	24,510	.307
4. Middlesex-Somerset-Hunterdon, NJ PMSA	1,880	19.05	39,620	.299
5. Baton Rouge, LA MSA	860	24.21	50,350	.295
Top paying MSAs for this occupation				
1. Houma, LA MSA	60	25.48	53,010	.077
2. Brazoria, TX PMSA	-	25.38	52,790	-
3. Baton Rouge, LA MSA	860	24.21	50,350	.295
4. Beaumont-Port Arthur, TX MSA	390	24.19	50,320	.257
5. Wilmington-Newark, DE-MD PMSA	980	23.36	48,590	.320

### **21-1012 Educational, vocational, and school counselors**

Counsel individuals and provide group educational and vocational guidance services.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maastry		wage	wage	rank <sup>2</sup>	
Top i	ndustries by employment for this occupation					
1.	Educational services	166,340	\$23.08	\$48,010	1	2
2.	Social services	21,070	13.66	28,420	2	9
3.	Federal, State, and local government	9,620	21.01	43,690	3	3
4.	Health services	2,690	16.73	34,800	4	5
5.	Membership organizations	440	15.42	32,070	5	6
Top	paying industries for this occupation					
1.	Engineering & management services	-	29.95	62,290	-	1
2.	Educational services	166,340	23.08	48,010	1	2
3.	Federal, State, and local government	9,620	21.01	43,690	3	3
4.	Holding and other investment offices	190	20.41	42,450	6	4
5.	Health services	2,690	16.73	34,800	4	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Louisiana	5,510	\$19.29	\$40,130	.298	184
2.	Florida	18,450	21.87	45,490	.261	170
3.	Hawaii	1,250	19.51	40,580	.233	229
4.	Vermont	680	19.94	41,470	.231	159
5.	Alaska	640	23.82	49,550	.229	142
Top J	paying States for this occupation					
1.	New York	13,190	29.65	61,670	.158	115
2.	New Jersey	5,930	27.97	58,180	.154	139
3.	Michigan	5,640	24.68	51,330	.127	152
4.	Rhode Island	740	24.61	51,190	.158	109
5.	Connecticut	2,960	24.32	50,580	.178	178

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Bryan-College Station, TX MSA	390	\$16.54	\$34,400	.512
2. Grand Forks, ND-MN MSA	210	16.79	34,920	.457
3. Baton Rouge, LA MSA	1,300	21.41	44,520	.446
4. Visalia-Tulare-Porterville, CA MSA	500	17.34	36,070	.409
5. Wichita, KS MSA	1,080	20.50	42,640	.387
Top paying MSAs for this occupation				
1. New York, NY PMSA	5,860	37.36	77,710	.144
2. Myrtle Beach, SC MSA	-	31.05	64,590	-
3. Nassau-Suffolk, NY PMSA	1,560	29.69	61,760	.132
4. Roanoke, VA MSA	170	29.37	61,100	.122
5. Stamford-Norwalk, CT PMSA	210	29.00	60,310	.101

#### 21-1015 Rehabilitation counselors

Counsel individuals to maximize the independence and employability of persons coping with personal, social, and vocational difficulties that result from birth defects, illness, disease, accidents, or the stress of daily life. Coordinate activities for residents of care and treatment facilities. Assess client needs and design and implement rehabilitation programs that may include personal and vocational counseling, training, and job placement.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation					
1.	Social services	68,920	\$12.03	\$25,010	1	8
2.	Federal, State, and local government	19,190	18.23	37,920	2	2
3.	Health services	13,830	14.78	30,750	3	7
4.	Educational services	1,850	17.67	36,760	4	3
5.	Engineering & management services	540	17.28	35,940	5	4
Top	paying industries for this occupation					
1.	Insurance agents, brokers, & service	-	34.25	71,240	-	1
2.	Federal, State, and local government	19,190	18.23	37,920	2	2
3.	Educational services	1,850	17.67	36,760	4	3
4.	Engineering & management services	540	17.28	35,940	5	4
5.	Insurance carriers	120	17.01	35,370	6	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Washington	8,420	\$14.30	\$29,740	.326	488
2.	Idaho	1,320	15.49	32,210	.237	240
3.	Connecticut	3,690	16.88	35,110	.222	363
4.	Oklahoma	2,970	8.68	18,060	.205	568
5.	North Dakota	490	11.40	23,720	.157	344
Top J	paying States for this occupation					
1.	Mississippi	760	25.17	52,340	.070	62
2.	Michigan	1,490	19.54	40,650	.034	275
3.	Ohio	3,290	18.64	38,770	.061	253
4.	South Dakota	260	16.92	35,190	.072	160
5.	Connecticut	3,690	16.88	35,110	.222	363

MSA	Employment	Hourly mean	Annual mean	Percent of MSA
WISA		nago	nago	employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Tacoma, WA PMSA	1,620	\$14.65	\$30,470	.702
2. Spokane, WA MSA	1,090	14.87	30,930	.582
3. Yakima, WA MSA	440	14.19	29,520	.582
4. Cumberland, MD-WV MSA	170	11.20	23,300	.460
5. Olympia, WA PMSA	370	14.10	29,330	.442
Top paying MSAs for this occupation				
1. Jackson, MS MSA	-	29.69	61,760	-
2. Ventura, CA PMSA	-	23.99	49,890	-
3. Detroit, MI PMSA	460	21.64	45,020	.022
<ol><li>Lansing-East Lansing, MI MSA</li></ol>	120	21.61	44,950	.055
5. Allentown-Bethlehem-Easton, PA MSA	70	21.18	44,050	.026

### 21-1021 Child, family, and school social workers

Provide social services and assistance to improve the social and psychological functioning of children and their families and to maximize the family well-being and the academic functioning of children. May assist single parents, arrange adoptions, and find foster homes for abandoned or abused children. In schools, they address such problems as teenage pregnancy, misbehavior, and truancy. May also advise teachers on how to deal with problem children.

	Inductry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maustry		wage	wage	rank <sup>2</sup>	
Top i	ndustries by employment for this occupation					
1.	Federal, State, and local government	112,730	\$17.78	\$36,990	1	3
2.	Social services	88,240	14.21	29,560	2	9
3.	Educational services	34,680	21.38	44,470	3	1
4.	Health services	15,930	17.41	36,220	4	4
5.	Membership organizations	4,660	12.38	25,750	5	12
Top	paying industries for this occupation					
1.	Educational services	34,680	21.38	44,470	3	1
2.	Personal services	-	20.04	41,690	-	2
3.	Federal, State, and local government	112,730	17.78	36,990	1	3
4.	Health services	15,930	17.41	36,220	4	4
5.	Amusement & recreation services	50	17.04	35,440	9	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Rhode Island	2,270	\$18.94	\$39,390	.485	199
2.	Kentucky	7,360	15.07	31,350	.426	300
3.	Delaware	1,640	17.25	35,870	.408	214
4.	Maine	2,170	15.69	32,630	.366	257
5.	West Virginia	2,360	11.66	24,260	.343	383
Тор ј	paying States for this occupation					
1.	Connecticut	4,630	22.75	47,330	.278	200
2.	New Jersey	6,970	22.03	45,830	.181	256
3.	New York	22,650	19.96	41,510	.270	298
4.	District of Columbia	670	19.89	41,360	.111	210
5.	Hawaii	1,240	19.82	41,220	.232	224

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Springfield, IL MSA	670	\$16.69	\$34,710	.609
2. Bangor, ME MSA	300	14.24	29,620	.523
3. Jackson, MI MSA	310	17.41	36,210	.515
4. Providence-Fall River-Warwick, RI-MA MSA	2,630	19.11	39,750	.511
5. Wheeling, WV-OH MSA	280	13.08	27,200	.453
Top paying MSAs for this occupation				
1. Nashua, NH PMSA	90	29.77	61,920	.097
2. Bergen-Passaic, NJ PMSA	1,060	24.34	50,630	.168
3. New London-Norwich, CT-RI MSA	370	23.47	48,820	.272
4. Bridgeport, CT PMSA	490	23.38	48,630	.262
5. Middlesex-Somerset-Hunterdon, NJ PMSA	780	23.22	48,300	.124

#### 21-1022 Medical and public health social workers

Provide persons, families, or vulnerable populations with the psychosocial support needed to cope with chronic, acute, or terminal illnesses, such as Alzheimer's, cancer, or AIDS. Services include advising family care givers, providing patient education and counseling, and making necessary referrals for other social services.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation					
1.	Health services	63,060	\$19.24	\$40,030	1	5
2.	Federal, State, and local government	19,180	18.24	37,940	2	8
3.	Social services	18,340	14.94	31,080	3	11
4.	Engineering & management services	720	18.25	37,950	4	7
5.	Educational services	670	18.81	39,120	5	6
Top	paying industries for this occupation					
1.	Insurance agents, brokers, & service	-	26.49	55,090	-	1
2.	Chemicals and allied products	30	23.16	48,180	11	2
3.	Insurance carriers	390	21.23	44,150	7	3
4.	Business services	220	19.65	40,860	8	4
5.	Health services	63,060	19.24	40,030	1	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	South Dakota	740	\$15.38	\$31,980	.204	195
2.	Alabama	2,740	15.08	31,360	.150	285
3.	Massachusetts	4,580	19.30	40,150	.142	289
4.	Hawaii	610	20.32	42,260	.114	212
5.	Iowa	1,600	15.43	32,100	.113	280
Top J	paying States for this occupation					
1.	Nevada	400	22.45	46,700	.039	149
2.	California	10,260	21.50	44,710	.071	280
3.	New York	6,760	21.06	43,810	.081	270
4.	Connecticut	1,730	21.00	43,680	.104	244
5.	New Jersey	3,400	20.90	43,470	.088	278

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Barnstable-Yarmouth, MA MSA	160	\$20.50	\$42,630	.248
2. Sioux Falls, SD MSA	260	17.75	36,930	.230
3. Brockton, MA PMSA	220	20.20	42,010	.224
4. Lowell, MA-NH PMSA	270	16.34	33,990	.217
5. Bismarck, ND MSA	100	16.02	33,320	.208
Top paying MSAs for this occupation				
1. Oakland, CA PMSA	720	26.16	54,420	.072
<ol><li>Vallejo-Fairfield-Napa, CA PMSA</li></ol>	150	25.31	52,640	.083
3. Washington, DC-MD-VA-WV PMSA	1,580	24.85	51,680	.059
4. Fort Pierce-Port St. Lucie, FL MSA	100	24.62	51,200	.098
5. Danbury, CT PMSA	-	24.60	51,170	-
#### 21-1093 Social and human service assistants

Assist professionals from a wide variety of fields, such as psychology, rehabilitation, or social work, to provide client services, as well as support for families. May assist clients in identifying available benefits and social and community services and help clients obtain them. May assist social workers with developing, organizing, and conducting programs to prevent and resolve problems relevant to substance abuse, human relationships, rehabilitation, or adult daycare.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation					
1.	Social services	146,880	\$10.68	\$22,220	1	12
2.	Federal, State, and local government	81,850	13.75	28,600	2	3
3.	Health services	38,810	12.48	25,960	3	5
4.	Educational services	6,480	11.40	23,710	4	6
5.	Membership organizations	6,460	10.81	22,480	5	10
Top	paying industries for this occupation					
1.	Insurance carriers	70	18.25	37,960	11	1
2.	Engineering & management services	790	15.86	32,990	6	2
3.	Federal, State, and local government	81,850	13.75	28,600	2	3
4.	Real estate	300	13.30	27,660	10	4
5.	Health services	38,810	12.48	25,960	3	5

	State	Employment	Hourly mean wage	Annual mean wage	Percent of State employment	Wage rank within State <sup>5</sup>
State	s with the highest concentration of workers in this occupation $^4$				employment	
1.	Vermont	2,140	\$12.14	\$25,250	.726	359
2.	Maryland	13,540	10.92	22,710	.558	537
3.	Connecticut	8,270	15.78	32,830	.497	400
4.	Wyoming	1,080	9.16	19,060	.453	374
5.	North Dakota	1,400	10.24	21,300	.449	379
Top J	paying States for this occupation					
1.	District of Columbia	1,560	17.99	37,410	.258	238
2.	Connecticut	8,270	15.78	32,830	.497	400
3.	California	21,640	13.64	28,370	.150	499
4.	Alaska	1,190	13.46	28,000	.426	336
5.	New York	27,930	13.23	27,530	.334	512

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Lewiston-Auburn, ME MSA	430	\$11.33	\$23,570	.941
2. Lynchburg, VA MSA	830	9.83	20,460	.887
3. Duluth-Superior, MN-WI MSA	930	9.75	20,270	.840
4. Utica-Rome, NY MSA	1,010	11.84	24,630	.783
5. Wheeling, WV-OH MSA	470	8.19	17,030	.761
Top paying MSAs for this occupation				
1. San Jose, CA PMSA	860	17.13	35,640	.090
2. Hartford, CT MSA	2,730	16.79	34,930	.446
3. Oakland, CA PMSA	1,050	16.42	34,160	.105
4. Chico-Paradise, CA MSA	320	16.42	34,160	.445
5. Danbury, CT PMSA	150	16.19	33,670	.172

#### 23-1011 Lawyers

Represent clients in criminal and civil litigation and other legal proceedings, draw up legal documents, and manage or advise clients on legal transactions. May specialize in a single area or may practice broadly in many areas of law.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maastry		wage	wage	rank <sup>2</sup>	
Top i	ndustries by employment for this occupation					
1.	Legal services	334,140	\$45.79	\$95,250	1	44
2.	Federal, State, and local government	100,450	36.54	76,000	2	54
3.	Insurance carriers	13,130	43.20	89,850	3	47
4.	Engineering & management services	5,070	50.76	105,590	4	29
5.	Business services	3,660	47.66	99,130	5	37
Top p	paying industries for this occupation					
1.	Paper and allied products	110	61.96	128,880	39	1
2.	Petroleum and coal products	460	60.81	126,480	26	2
3.	Instruments and related products	610	59.16	123,050	23	3
4.	Metal mining	30	59.11	122,950	53	4
5.	Transportation equipment	720	58.85	122,400	22	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	22,570	\$49.41	\$102,780	3.733	2
2.	New York	58,590	48.74	101,370	.700	11
3.	New Jersey	19,350	45.26	94,150	.503	16
4.	Massachusetts	15,840	45.00	93,610	.490	15
5.	Alaska	1,260	41.04	85,370	.451	10
Top J	paying States for this occupation					
1.	California	58,300	50.43	104,900	.404	8
2.	District of Columbia	22,570	49.41	102,780	3.733	2
3.	Utah	3,210	49.20	102,340	.307	7
4.	New York	58,590	48.74	101,370	.700	11
5.	Texas	31,820	48.18	100,220	.345	13

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Washington, DC-MD-VA-WV PMSA	31,840	\$47.48	\$98,760	1.191
2. Tallahassee, FL MSA	1,830	42.27	87,910	1.189
3. New York, NY PMSA	42,450	52.21	108,600	1.046
4. Trenton, NJ PMSA	1,900	40.60	84,460	.922
5. San Francisco, CA PMSA	9,160	54.01	112,340	.918
Top paying MSAs for this occupation				
1. San Jose, CA PMSA	4,320	59.42	123,600	.454
2. Ocala, FL MSA	200	57.76	120,140	.245
3. Anniston, AL MSA	40	57.33	119,250	.089
4. Danbury, CT PMSA	270	57.08	118,730	.309
5. Houston, TX PMSA	10,260	56.97	118,490	.497

#### 23-1021 Administrative law judges, adjudicators, and hearing officers

Conduct hearings to decide or recommend decisions on claims concerning government programs or other government-related matters and prepare decisions. Determine penalties or the existence and the amount of liability, or recommend the acceptance or rejection of claims, or compromise settlements.

Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
<ul> <li>Top industries by employment for this occupation</li> <li>1. Federal, State, and local government</li> <li>2.</li> <li>3.</li> <li>4.</li> </ul>	30,520	\$27.30	\$56,780	1	1
<ol> <li>Top paying industries for this occupation</li> <li>Federal, State, and local government</li> <li>3.</li> <li>4.</li> <li>5</li> </ol>	30,520	27.30	56,780	1	1

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Virginia	4,540	\$31.04	\$64,570	.134	69
2.	Washington	1,640	23.99	49,900	.064	188
3.	Maryland	1,430	21.78	45,290	.059	187
4.	Alaska	150	26.93	56,010	.054	91
5.	West Virginia	300	23.01	47,870	.044	89
Top p	paying States for this occupation					
1.	New Jersey	440	34.45	71,650	.011	55
2.	California	2,320	34.05	70,810	.016	68
3.	Michigan	470	32.63	67,880	.011	56
4.	Connecticut	270	32.56	67,710	.016	69
5.	Virginia	4,540	31.04	64,570	.134	69

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Parkersburg-Marietta, WV-OH MSA	130	\$16.66	\$34,650	.197
2. Washington, DC-MD-VA-WV PMSA	4,870	31.99	66,540	.182
3. Roanoke, VA MSA	180	22.99	47,820	.129
4. Baltimore, MD PMSA	1,390	21.61	44,950	.115
5. Montgomery, AL MSA	160	24.28	50,510	.106
Top paying MSAs for this occupation				
1. Fresno, CA MSA	50	44.87	93,340	.015
2. San Jose, CA PMSA	40	44.50	92,560	.004
3. Sacramento, CA PMSA	270	42.48	88,360	.037
4. Riverside-San Bernardino, CA PMSA	70	41.88	87,100	.007
5. Orlando, FL MSA	40	38.38	79,830	.005

#### 23-2011 Paralegals and legal assistants

Assist lawyers by researching legal precedent, investigating facts, or preparing legal documents. Conduct research to support a legal proceeding, to formulate a defense, or to initiate legal action.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation					
1.	Legal services	134,750	\$18.24	\$37,940	1	38
2.	Federal, State, and local government	22,620	20.07	41,750	2	29
3.	Business services	5,180	21.35	44,400	3	21
4.	Insurance carriers	4,950	21.04	43,760	4	22
5.	Engineering & management services	2,310	20.31	42,250	5	28
Top	paying industries for this occupation					
1.	Communication	640	27.98	58,210	13	1
2.	Electronic & other electrical equipment	110	27.27	56,730	28	2
3.	Electric, gas, and sanitary services	290	26.65	55,420	19	3
4.	Wholesale tradedurable goods	220	25.37	52,770	24	4
5.	Railroad transportation	60	23.79	49,480	36	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	6,010	\$18.26	\$37,990	.994	236
2.	Delaware	1,260	16.59	34,500	.313	231
3.	West Virginia	1,890	12.62	26,250	.274	346
4.	Florida	18,090	18.71	38,920	.256	238
5.	Connecticut	3,850	20.82	43,310	.231	251
Top	paying States for this occupation					
1.	California	20,530	23.55	48,990	.142	237
2.	New York	16,040	22.64	47,090	.192	240
3.	Alaska	410	21.57	44,870	.147	177
4.	New Jersey	4,280	20.85	43,380	.111	279
5.	Connecticut	3,850	20.82	43,310	.231	251

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Fort Lauderdale, FL PMSA	4,630	\$15.25	\$31,710	.680
2. Charleston, WV MSA	600	13.54	28,170	.478
3. West Palm Beach-Boca Raton, FL MSA	2,110	21.27	44,230	.417
4. Shreveport-Bossier City, LA MSA	650	13.10	27,250	.391
5. Wilmington-Newark, DE-MD PMSA	1,080	16.65	34,640	.353
Top paying MSAs for this occupation				
1. Los Angeles-Long Beach, CA PMSA	5,420	26.12	54,330	.133
2. Monmouth-Ocean, NJ PMSA	410	25.89	53,850	.107
3. San Francisco, CA PMSA	3,100	25.42	52,880	.311
4. San Jose, CA PMSA	2,170	25.14	52,280	.228
5. New York, NY PMSA	11,340	24.26	50,450	.280

#### 23-2092 Law clerks

Assist lawyers or judges by researching or preparing legal documents. May meet with clients or assist lawyers and judges in court.

	Inductor	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	industry		wage	wage	rank <sup>2</sup>	
Top i	ndustries by employment for this occupation					
1.	Federal, State, and local government	20,960	\$16.06	\$33,400	1	6
2.	Legal services	17,200	14.85	30,880	2	12
3.	Insurance carriers	460	15.18	31,560	3	11
4.	Nondepository institutions	370	15.55	32,340	4	8
5.	Business services	200	15.34	31,900	5	9
Top	paying industries for this occupation					
1.	Membership organizations	70	25.87	53,820	10	1
2.	Insurance agents, brokers, & service	50	18.64	38,770	11	2
3.	Engineering & management services	80	17.72	36,850	9	3
4.	Educational services	40	17.19	35,750	12	4
5.	Security and commodity brokers	200	16.17	33,630	6	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	1,510	\$18.70	\$38,890	.250	230
2.	South Carolina	1,940	10.86	22,590	.111	502
3.	Utah	680	14.01	29,150	.065	354
4.	Hawaii	340	15.97	33,210	.063	311
5.	Louisiana	1,110	14.06	29,250	.060	342
Top J	paying States for this occupation					
1.	Idaho	160	21.08	43,850	.029	115
2.	Nevada	330	19.74	41,050	.032	226
3.	Rhode Island	80	19.69	40,960	.017	183
4.	New York	2,060	19.13	39,790	.025	319
5.	Minnesota	720	19.11	39,750	.028	289

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Columbia, SC MSA	630	\$11.62	\$24,170	.223
2. Philadelphia, PA-NJ PMSA	2,240	17.17	35,720	.096
<ol><li>Washington, DC-MD-VA-WV PMSA</li></ol>	2,480	18.01	37,470	.093
4. Little Rock-North Little Rock, AR MSA	270	12.41	25,820	.090
5. Birmingham, AL MSA	380	10.97	22,820	.084
Top paying MSAs for this occupation				
1. Tallahassee, FL MSA	100	27.50	57,200	.065
2. Boise City, ID MSA	80	25.92	53,910	.036
3. Stamford-Norwalk, CT PMSA	-	25.64	53,320	-
4. West Palm Beach-Boca Raton, FL MSA	90	23.37	48,600	.018
5. New York, NY PMSA	1,230	21.85	45,440	.030

#### 23-2093 Title examiners, abstractors, and searchers

Search real estate records, examine titles, or summarize pertinent legal or insurance details for a variety of purposes. May compile lists of mortgages, contracts, and other instruments pertaining to titles by searching public and private records for law firms, real estate agencies, or title insurance companies.

	Inductry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maustry		wage	wage	rank <sup>2</sup>	
Top i	industries by employment for this occupation					
1.	Insurance carriers	18,440	\$18.19	\$37,840	1	5
2.	Real estate	15,920	16.08	33,440	2	11
3.	Legal services	3,590	14.35	29,840	3	14
4.	Federal, State, and local government	870	17.24	35,860	4	9
5.	Communications	630	26.84	55,820	5	2
Top J	paying industries for this occupation					
1.	Oil and gas extraction	500	27.23	56,630	7	1
2.	Communications	630	26.84	55,820	5	2
3.	Electric, gas, and sanitary services	70	25.10	52,210	14	3
4.	General building contractors	70	19.54	40,650	15	4
5.	Insurance carriers	18,440	18.19	37,840	1	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Utah	910	\$20.63	\$42,900	.087	159
2.	Colorado	1,750	15.18	31,580	.081	373
3.	Wyoming	190	12.54	26,080	.080	282
4.	Hawaii	380	17.00	35,360	.071	276
5.	Oregon	1,090	20.54	42,730	.070	224
Top J	paying States for this occupation					
1.	California	6,300	23.14	48,130	.044	244
2.	New Jersey	1,400	20.98	43,640	.036	276
3.	Utah	910	20.63	42,900	.087	159
4.	Oregon	1,090	20.54	42,730	.070	224
5.	Nevada	560	20.19	42,000	.054	205

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA
				employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Casper, WY MSA	40	\$15.13	\$31,460	.123
2. Eugene-Springfield, OR MSA	140	19.45	40,450	.103
3. Pocatello, ID MSA	30	16.67	34,670	.102
4. Santa Fe, NM MSA	70	14.33	29,800	.097
5. Salinas, CA MSA	140	21.02	43,730	.092
Top paying MSAs for this occupation				
1. Reno, NV MSA	120	26.54	55,190	.062
2. Sacramento, CA PMSA	640	26.36	54,820	.088
3. San Francisco, CA PMSA	470	25.68	53,420	.047
4. Oakland, CA PMSA	510	25.45	52,930	.051
5. Yolo, CA PMSA	30	25.44	52,920	.034

#### 25-2011 Preschool teachers, except special education

Instruct children (normally up to 5 years of age) in activities designed to promote social, physical, and intellectual growth needed for primary school in preschool, day care center, or other child development facility. May be required to hold State certification.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation					
1.	Social services	300,240	\$9.25	\$19,240	1	10
2.	Educational services	55,300	14.17	29,480	2	1
3.	Membership organizations	8,560	10.65	22,150	3	4
4.	Health services	5,980	10.15	21,110	4	6
5.	Federal, State, and local government	5,080	12.66	26,340	5	2
Top	paying industries for this occupation					
1.	Educational services	55,300	14.17	29,480	2	1
2.	Federal, State, and local government	5,080	12.66	26,340	5	2
3.	Engineering & management services	260	11.52	23,970	8	3
4.	Membership organizations	8,560	10.65	22,150	3	4
5.	Amusement & recreation services	810	10.31	21,440	6	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Georgia	19,370	\$9.34	\$19,420	.505	599
2.	Utah	4,840	9.38	19,510	.462	546
3.	New Hampshire	2,740	9.35	19,450	.453	506
4.	Massachusetts	14,030	11.33	23,580	.434	559
5.	Connecticut	7,190	11.12	23,130	.432	552
Тор ј	paying States for this occupation					
1.	District of Columbia	1,360	13.59	28,270	.225	316
2.	Vermont	460	12.17	25,310	.156	356
3.	Rhode Island	1,260	12.08	25,130	.269	387
4.	New Jersey	12,250	11.84	24,630	.318	543
5.	Minnesota	6,370	11.68	24,290	.244	552

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Auburn-Opelika, AL MSA	340	\$7.07	\$14,710	.835
2. Manchester, NH PMSA	780	8.89	18,500	.765
<ol><li>Clarksville-Hopkinsville, TN-KY MSA</li></ol>	490	6.83	14,200	.757
4. Greenville, NC MSA	430	8.26	17,180	.668
5. Goldsboro, NC MSA	280	7.22	15,020	.661
Top paying MSAs for this occupation				
1. Hagerstown, MD PMSA	50	16.55	34,430	.079
2. Yolo, CA PMSA	150	14.94	31,080	.168
3. Vineland-Millville-Bridgeton, NJ PMSA	120	14.01	29,130	.205
4. Jersey City, NJ PMSA	540	13.87	28,850	.217
5. Yakima, WA MSA	140	13.75	28,600	.185

#### 25-2021 Elementary school teachers, except special education

*Teach pupils in public or private schools at the elementary level basic academic, social, and other formative skills.* 

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment	Wage rank <sup>3</sup>
Top	industries by employment for this occupation				Tarik	
1.	Educational services	1,437,860	-	\$43,350	1	1
2.	Social services	6,570	-	29,790	2	7
3.	Membership organizations	2,420	-	31,450	3	5
4.	Health services	380	-	37,840	4	4
5.	Business services	200	-	39,090	5	3
Top	paying industries for this occupation					
1.	Educational services	1,437,860	-	43,350	1	1
2.	Amusement & recreation services	70	-	39,810	7	2
3.	Business services	200	-	39,090	5	3
4.	Health services	380	-	37,840	4	4
5.	Membership organizations	2,420	-	31,450	3	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	North Dakota	5,780	-	\$32,610	1.853	195
2.	Idaho	9,490	-	39,580	1.701	151
3.	Louisiana	29,370	-	33,670	1.590	276
4.	Alaska	4,340	-	48,990	1.552	151
5.	Vermont	4,390	-	38,970	1.489	189
Top p	paying States for this occupation					
1.	New York	101,780	-	59,220	1.215	136
2.	Delaware	4,120	-	52,760	1.025	96
3.	Connecticut	19,110	-	51,620	1.148	168
4.	New Jersey	55,550	-	49,400	1.443	219
5.	Pennsylvania	66,820	-	49,370	1.206	147

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. McAllen-Edinburg-Mission, TX MSA	4,200	-	\$38,590	2.527
2. Bakersfield, CA MSA	5,600	-	49,250	2.419
3. Redding, CA MSA	1,460	-	41,490	2.296
4. Newburgh, NY-PA PMSA	2,910	-	53,400	2.252
5. Dover, DE MSA	1,140	-	51,370	2.190
Top paying MSAs for this occupation				
1. Nassau-Suffolk, NY PMSA	14,920	-	60,180	1.260
2. Dutchess County, NY PMSA	1,770	-	59,940	1.605
3. Jersey City, NJ PMSA	2,920	-	55,650	1.172
4. Bergen-Passaic, NJ PMSA	9,780	-	55,180	1.549
5. Bridgeport, CT PMSA	2,490	-	53,450	1.331

#### 25-2022 Middle school teachers, except special and vocational education

Teach students in public or private schools in one or more subjects at the middle, intermediate, or junior high level, which falls between elementary and senior high school as defined by applicable State laws and regulations.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	industries by employment for this occupation					
1.	Educational services	569,410	-	\$43,550	1	1
2.	Social services	330	-	36,440	2	2
3.	Membership organizations	130	-	29,660	3	4
4. 5.	Engineering & management services	110	-	30,710	4	3
Top	paying industries for this occupation					
1.	Educational services	569,410	-	43,550	1	1
2.	Social services	330	-	36,440	2	2
3.	Engineering & management services	110	-	30,710	4	3
4.	Membership organizations	130	-	29,660	3	4
5.						

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Iowa	11,730	-	\$35,000	.827	239
2.	Maine	4,160	-	38,130	.702	190
3.	Vermont	2,040	-	41,220	.692	164
4.	New Hampshire	4,160	-	38,390	.688	178
5.	Texas	61,690	-	39,870	.668	239
Top p	paying States for this occupation					
1.	New York	43,970	-	59,420	.525	134
2.	Connecticut	9,630	-	53,460	.578	151
3.	New Jersey	19,580	-	51,460	.509	198
4.	California	46,900	-	49,590	.325	225
5.	Pennsylvania	23,530	-	49,070	.425	151

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Goldsboro, NC MSA	720	-	\$35,830	1.701
2. Brownsville-Harlingen-San Benito, TX MSA	1,570	-	40,350	1.434
3. Provo-Orem, UT MSA	1,930	-	37,930	1.350
4. Killeen-Temple, TX MSA	1,150	-	43,230	1.159
5. Laredo, TX MSA	790	-	41,100	1.116
Top paying MSAs for this occupation				
1. Nassau-Suffolk, NY PMSA	5,110	-	61,530	.431
2. Bergen-Passaic, NJ PMSA	2,940	-	58,860	.466
3. Champaign-Urbana, IL MSA	-	-	57,910	-
4. Waterbury, CT PMSA	580	-	56,660	.678
5. Danbury, CT PMSA	610	-	55,600	.699

# 25-2031 Secondary school teachers, except special and vocational education

Instruct students in secondary public or private schools in one or more subjects at the secondary level, such as English, mathematics, or social studies. May be designated according to subject matter specialty, such as typing instructors, commercial teachers, or English teachers.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maasay		wage	wage	rank <sup>2</sup>	
Top	industries by employment for this occupation					
1.	Educational services	976,410	-	\$45,390	1	1
2.	Social services	620	-	33,970	2	4
3.	Membership organizations	300	-	34,800	3	3
4.	Engineering & management services	240	-	41,440	4	2
5.	Health services	60	-	32,950	5	5
Top	paying industries for this occupation					
1.	Educational services	976,410	-	45,390	1	1
2.	Engineering & management services	240	-	41,440	4	2
3.	Membership organizations	300	-	34,800	3	3
4.	Social services	620	-	33,970	2	4
5.	Health services	60	-	32,950	5	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
States	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Idaho	8,900	-	\$37,590	1.595	172
2.	Maine	7,590	-	39,080	1.280	175
3.	Illinois	68,070	-	52,070	1.161	127
4.	North Dakota	3,200	-	31,710	1.026	211
5.	Montana	3,920	-	30,340	1.022	249
Top p	paying States for this occupation					
1.	New York	80,970	-	58,780	.967	142
2.	New Jersey	31,660	-	55,240	.823	167
3.	Delaware	1,920	-	54,900	.478	84
4.	Connecticut	14,450	-	52,560	.868	160
5.	California	90,640	-	52,330	.627	195

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Newburgh, NY-PA PMSA	3,110	-	\$52,450	2.407
<ol><li>McAllen-Edinburg-Mission, TX MSA</li></ol>	3,130	-	40,890	1.883
3. Binghamton, NY MSA	1,930	-	43,470	1.744
4. Glens Falls, NY MSA	860	-	48,040	1.736
5. Sharon, PA MSA	860	-	43,340	1.688
Top paying MSAs for this occupation				
1. Nassau-Suffolk, NY PMSA	15,030	-	61,490	1.269
2. Stamford-Norwalk, CT PMSA	1,490	-	60,590	.717
3. Newark, NJ PMSA	8,610	-	59,740	.894
4. Atlantic-Cape May, NJ PMSA	820	-	59,670	.453
5. San Jose, CA PMSA	4,500	-	58,400	.473

#### 25-9041 Teacher assistants

Perform duties that are instructional in nature or deliver direct services to students or parents. Serve in a position for which a teacher or another professional has ultimate responsibility for the design and implementation of educational programs and services.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment	Wage rank <sup>3</sup>
Ton	industries by employment for this occupation				Tank	
100	Educational services	1 004 630	_	\$19.670	1	3
2	Social services	120 530	_	17 140	2	9
3	Membership organizations	16,740	_	16.810	3	12
4.	Health services	6.030	-	19,630	4	4
5.	Business services	950	-	19,690	5	2
Top	paying industries for this occupation					
1.	Museums, botanical, zoological garden	230	-	21.140	8	1
2.	Business services	950	-	19,690	5	2
3.	Educational services	1,004,630	-	19,670	1	3
4.	Health services	6,030	-	19,630	4	4
5.	Engineering & management services	-	-	19,600	-	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Vermont	5,290	-	\$18,750	1.794	459
2.	Alaska	4,460	-	27,940	1.595	337
3.	New York	129,930	-	22,780	1.552	602
4.	Connecticut	23,400	-	22,770	1.406	557
5.	Maine	7,770	-	22,330	1.310	456
Top J	paying States for this occupation					
1.	District of Columbia	4,000	-	28,140	.662	317
2.	Alaska	4,460	-	27,940	1.595	337
3.	Nevada	3,630	-	24,350	.351	447
4.	New York	129,930	-	22,780	1.552	602
5.	Connecticut	23,400	-	22,770	1.406	557

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Redding, CA MSA	1,710	-	\$19,930	2.689
2. Laredo, TX MSA	1,500	-	16,960	2.120
3. Brownsville-Harlingen-San Benito, TX MSA	2,210	-	14,690	2.019
4. Visalia-Tulare-Porterville, CA MSA	2,450	-	22,750	2.004
5. Corvallis, OR MSA	680	-	24,380	1.980
Top paying MSAs for this occupation				
1. Galveston-Texas City, TX PMSA	1,100	-	36,070	1.270
2. State College, PA MSA	1,020	-	29,520	1.650
3. Anchorage, AK MSA	1,580	-	26,700	1.194
4. New York, NY PMSA	67,480	-	26,320	1.663
5. Waterbury, CT PMSA	1,550	-	26,310	1.813

#### 27-1023 Floral designers

Design, cut, and arrange live, dried, or artificial flowers and foliage.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maastry		wage	wage	rank∠	
Top i	ndustries by employment for this occupation					
1.	Miscellaneous retail	50,700	\$9.55	\$19,870	1	13
2.	Food stores	8,290	10.42	21,680	2	9
3.	Wholesale tradenondurable goods	3,970	9.94	20,670	3	11
4.	General merchandise stores	1,760	8.99	18,710	4	15
5.	Business services	1,480	15.07	31,340	5	3
Top J	paying industries for this occupation					
1.	Services, nec	-	21.89	45,530	-	1
2.	Federal, State, and local government	40	16.83	35,000	13	2
3.	Business services	1,480	15.07	31,340	5	3
4.	Hotels and other lodging places	210	12.61	26,230	11	4
5.	Eating and drinking places	250	11.71	24,350	9	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	North Dakota	480	\$8.01	\$16,660	.154	454
2.	South Dakota	380	7.57	15,750	.105	480
3.	Idaho	530	7.87	16,380	.095	497
4.	Montana	340	7.67	15,960	.089	494
5.	West Virginia	590	7.76	16,150	.086	541
Тор р	paying States for this occupation					
1.	District of Columbia	-	13.41	27,890	-	319
2.	New York	3,950	12.99	27,020	.047	524
3.	New Jersey	1,950	12.29	25,570	.051	526
4.	Massachusetts	1,300	12.04	25,040	.040	536
5.	Connecticut	910	11.87	24,690	.055	529

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Florence, SC MSA	120	\$7.16	\$14,900	.20
2. Enid, OK MSA	40	6.88	14,300	.187
3. Sumter, SC MSA	70	10.96	22,790	.183
4. Spokane, WA MSA	340	9.06	18,840	.181
5. Steubenville-Weirton, OH-WV MSA	80	8.15	16,960	.169
Top paying MSAs for this occupation				
1. Atlantic-Cape May, NJ PMSA	240	20.81	43,290	.132
2. New York, NY PMSA	-	17.52	36,440	-
3. Nassau-Suffolk, NY PMSA	670	15.89	33,040	.057
4. San Francisco, CA PMSA	-	15.69	32,630	-
5. Newark, NJ PMSA	200	14.86	30,900	.021

#### 27-1024 Graphic designers

Design or create graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. May use a variety of mediums to achieve artistic or decorative effects.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation		0		Turik	
1.	Business services	55,330	\$21.04	\$43,770	1	9
2.	Printing and publishing	33,880	16.23	33,760	2	50
3.	Engineering & management services	10,370	20.02	41,650	3	17
4.	Wholesale tradenondurable goods	3,540	18.38	38,220	4	33
5.	Educational services	2,900	17.77	36,970	5	37
Top	paying industries for this occupation					
1.	Transportation equipment	1,560	24.09	50,100	10	1
2.	Services, nec	300	22.95	47,730	33	2
3.	Legal services	130	22.60	47,000	46	3
4.	Security and commodity brokers	470	22.14	46,060	22	4
5.	Oil and gas extraction	100	21.84	45,430	51	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	1,090	\$20.82	\$43,300	.180	196
2.	Vermont	530	16.30	33,910	.180	222
3.	Connecticut	2,660	20.56	42,770	.160	254
4.	New York	11,660	23.19	48,240	.139	225
5.	Washington	3,600	20.98	43,640	.139	269
Top J	paying States for this occupation					
1.	Massachusetts	4,350	25.20	52,420	.135	157
2.	New York	11,660	23.19	48,240	.139	225
3.	California	17,910	21.56	44,840	.124	276
4.	Washington	3,600	20.98	43,640	.139	269
5.	District of Columbia	1,090	20.82	43,300	.180	196

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. West Palm Beach-Boca Raton, FL MSA	2,350	\$18.40	\$38,270	.464
2. Stamford-Norwalk, CT PMSA	790	23.31	48,490	.380
3. Appleton-Oshkosh-Neenah, WI MSA	480	19.81	41,200	.248
4. Lawrence, KS MSA	110	13.70	28,490	.234
5. Burlington, VT MSA	250	16.82	34,980	.231
Top paying MSAs for this occupation				
1. San Jose, CA PMSA	1,100	29.15	60,640	.116
2. Boston, MA-NH PMSA	3,040	28.14	58,530	.154
3. New York, NY PMSA	7,320	26.47	55,050	.180
4. San Francisco, CA PMSA	1,820	25.54	53,120	.182
5. Santa Rosa, CA PMSA	280	25.03	52,060	.146

#### 27-2011 Actors

Play parts in stage, television, radio, video, or motion picture productions for entertainment, information, or instruction. Interpret serious or comic role by speech, gesture, and body movement to entertain or inform audience. May dance and sing.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
T					Tank	
Topi	ndustries by employment for this occupation					
1.	Motion pictures	64,070	-	\$41,560	1	3
2.	Amusement & recreation services	21,960	-	25,210	2	11
3.	Business services	1,060	-	20,300	3	12
4.	Educational services	650	-	33,180	4	4
5.	Museums, botanical, zoological garden	610	-	29,400	5	6
Top	paying industries for this occupation					
1.	Communications	260	-	54,710	6	1
2.	Social services	120	-	44,900	8	2
3.	Motion pictures	64,070	-	41,560	1	3
4.	Educational services	650	-	33,180	4	4
5.	Engineering & management services	-	-	31,150	-	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	New York	30,880	-	\$27,650	.369	510
2.	California	35,670	-	52,050	.247	202
3.	South Dakota	240	-	19,540	.066	411
4.	Florida	3,600	-	25,840	.051	457
5.	Minnesota	790	-	36,140	.030	343
Тор р	paying States for this occupation					
1.	California	35,670	-	52,050	.247	202
2.	Tennessee	-	-	44,720	-	140
3.	Washington	340	-	44,450	.013	258
4.	Arizona	-	-	42,630	-	162
5.	Colorado	-	-	42,360	-	218

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Los Angeles-Long Beach, CA PMSA	32,500	-	\$53,070	.798
2. New York, NY PMSA	26,480	-	27,680	.653
3. Nassau-Suffolk, NY PMSA	590	-	42,180	.050
4. Richmond-Petersburg, VA MSA	240	-	31,750	.045
5. Sarasota-Bradenton, FL MSA	110	-	23,740	.039
Top paying MSAs for this occupation				
1. Dallas, TX PMSA	-	-	75,270	-
2. San Francisco, CA PMSA	-	-	60,680	-
3. Los Angeles-Long Beach, CA PMSA	32,500	-	53,070	.798
4. Seattle-Bellevue-Everett, WA PMSA	280	-	49,100	.021
5. Santa Barbara-Santa Maria-Lompoc, CA MSA	-	-	46,340	-

#### 27-3031 Public relations specialists

Engage in promoting or creating good will for individuals, groups, or organizations by writing or selecting favorable publicity material and releasing it through various communications media. May prepare and arrange displays, and make speeches.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Engineering & management services	23,740	\$24.54	\$51,030	1	17
2.	Federal, State, and local government	15,610	23.63	49,150	2	20
3.	Membership organizations	12,800	19.48	40,510	3	45
4.	Educational services	12,430	18.65	38,800	4	49
5.	Business services	10,200	22.68	47,180	5	25
Top p	paying industries for this occupation					
1.	Electronic & other electrical equipment	860	32.25	67,080	20	1
2.	Petroleum and coal products	160	31.40	65,320	47	2
3.	Oil and gas extraction	240	30.91	64,290	42	3
4.	Rubber and misc. plastics products	90	28.93	60,170	55	4
5.	Instruments and related products	750	28.84	59,980	23	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	3,260	\$26.25	\$54,600	.539	119
2.	Vermont	870	20.66	42,980	.295	144
3.	Washington	4,680	25.65	53,350	.181	154
4.	Wisconsin	4,520	16.39	34,080	.168	316
5.	South Dakota	600	15.49	32,210	.166	191
Top J	paying States for this occupation					
1.	District of Columbia	3,260	26.25	54,600	.539	119
2.	California	15,920	26.12	54,340	.110	181
3.	Washington	4,680	25.65	53,350	.181	154
4.	New York	13,440	25.34	52,710	.160	184
5.	Maryland	1,910	24.03	49,990	.079	147

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Springfield, IL MSA	420	\$19.57	\$40,700	.382
2. Tallahassee, FL MSA	570	22.93	47,690	.370
3. Olympia, WA PMSA	280	26.01	54,090	.335
4. Burlington, VT MSA	360	19.81	41,210	.333
5. Madison, WI MSA	820	20.07	41,750	.302
Top paying MSAs for this occupation				
1. San Francisco, CA PMSA	2,180	33.89	70,500	.219
2. San Jose, CA PMSA	1,430	33.02	68,690	.150
3. Fort Collins-Loveland, CO MSA	180	31.35	65,210	.150
4. Sacramento, CA PMSA	1,650	29.04	60,400	.228
5. Seattle-Bellevue-Everett, WA PMSA	2,890	27.85	57,940	.217

#### 27-3041 Editors

Perform variety of editorial duties, such as laying out, indexing, and revising content of written materials, in preparation for final publication. Include technical editors.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Printing and publishing	65,490	\$21.43	\$44,570	1	25
2.	Business services	10,360	23.75	49,390	2	12
3.	Engineering & management services	5,580	21.97	45,690	3	21
4.	Membership organizations	5,250	21.39	44,490	4	26
5.	Communications	5,190	19.69	40,960	5	30
Top p	paying industries for this occupation					
1.	Depository institutions	100	28.22	58,690	24	1
2.	Security and commodity brokers	300	26.72	55,570	15	2
3.	Nondepository institutions	50	26.58	55,300	30	3
4.	Wholesale tradenondurable goods	870	26.38	54,870	9	4
5.	Transportation equipment	480	26.30	54,710	13	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	3,180	\$24.13	\$50,200	.526	149
2.	New York	16,230	24.27	50,480	.194	204
3.	Massachusetts	4,620	23.89	49,690	.143	179
4.	Connecticut	1,880	24.96	51,910	.113	167
5.	Virginia	3,740	23.35	48,560	.110	162
Тор ј	paying States for this occupation					
1.	Connecticut	1,880	24.96	51,910	.113	167
2.	Hawaii	250	24.61	51,200	.047	125
3.	New York	16,230	24.27	50,480	.194	204
4.	District of Columbia	3,180	24.13	50,200	.526	149
5.	Washington	2,050	23.98	49,880	.079	189

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Charlottesville, VA MSA	540	\$17.44	\$36,270	.641
2. Stamford-Norwalk, CT PMSA	660	26.15	54,390	.318
3. Boulder-Longmont, CO PMSA	570	15.57	32,380	.315
4. New York, NY PMSA	12,210	25.84	53,760	.301
5. Bloomington, IN MSA	180	17.13	35,640	.298
Top paying MSAs for this occupation				
1. San Jose, CA PMSA	810	30.79	64,050	.085
2. Rochester, MN MSA	-	29.81	62,010	-
3. Kalamazoo-Battle Creek, MI MSA	70	27.20	56,570	.035
4. Jersey City, NJ PMSA	380	26.36	54,840	.153
5. Stamford-Norwalk, CT PMSA	660	26.15	54,390	.318

#### 29-1051 Pharmacists

Dispense drugs prescribed by physicians and other health practitioners and provide information to patients about medications and their use. May advise physicians and other health practitioners on the selection, dosage, interactions, and side effects of medications.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation				. cu	
1.	Miscellaneous retail	98,160	\$35.16	\$73,130	1	6
2.	Health services	57,750	34.70	72,180	2	7
3.	General merchandise stores	26,780	35.76	74,370	3	3
4.	Food stores	21,470	35.64	74,130	4	5
5.	Federal, State, and local government	7,120	33.56	69,800	5	10
Top	paying industries for this occupation					
1.	Holding and other investment offices	-	38.71	80,510	-	1
2.	Insurance agents, brokers, & service	70	37.49	77,990	13	2
3.	General merchandise stores	26,780	35.76	74,370	3	3
4.	Wholesale tradedurable goods	340	35.74	74,350	11	4
5.	Food stores	21,470	35.64	74,130	4	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Maryland	6,390	\$34.62	\$72,010	.263	40
2.	West Virginia	1,700	35.76	74,390	.247	11
3.	Louisiana	4,140	31.80	66,150	.224	28
4.	Nebraska	1,970	30.00	62,400	.224	37
5.	Montana	850	30.09	62,600	.222	21
Top J	paying States for this occupation					
1.	California	21,490	40.08	83,370	.149	29
2.	Delaware	510	37.85	78,720	.127	19
3.	Wisconsin	4,080	37.75	78,510	.152	14
4.	Nevada	1,470	37.38	77,740	.142	14
5.	Florida	13,250	37.34	77,670	.188	24

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Iowa City, IA MSA	270	\$31.13	\$64,760	.417
2. Baltimore, MD PMSA	4,160	33.68	70,060	.344
3. Medford-Ashland, OR MSA	230	37.44	77,870	.320
4. Punta Gorda, FL MSA	120	38.42	79,920	.315
5. Alexandria, LA MSA	170	30.71	63,880	.313
Top paying MSAs for this occupation				
1. Redding, CA MSA	160	44.97	93,550	.252
2. Visalia-Tulare-Porterville, CA MSA	160	44.67	92,910	.131
3. Santa Barbara-Santa Maria-Lompoc, CA MSA	240	42.12	87,610	.148
4. Chico-Paradise, CA MSA	180	41.81	86,960	.250
5. Fresno, CA MSA	570	41.77	86,880	.170

#### 29-1111 Registered nurses

Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required. Include advance practice nurses such as: nurse practitioners, clinical nurse specialists, certified nurse midwives, and certified registered nurse anesthetists. Advanced practice nursing is practiced by RNs who have specialized formal, post-basic education and who function in highly autonomous and specialized roles.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Health services	1,844,930	\$23.26	\$48,370	1	17
2.	Federal, State, and local government	135,770	24.07	50,060	2	11
3.	Business services	80,860	24.23	50,410	3	9
4.	Educational services	74,400	20.53	42,700	4	30
5.	Social services	32,980	20.01	41,620	5	34
Top	paying industries for this occupation					
1.	Electric, gas, and sanitary services	110	27.16	56,500	29	1
2.	Services, nec	-	26.77	55,690	-	2
3.	Legal services	190	26.15	54,390	25	3
4.	Petroleum and coal products	50	26.10	54,280	35	4
5.	Wholesale tradedurable goods	770	25.11	52,230	12	5

	State	Employment	Hourly mean wage	Annual mean wage	Percent of State employment	Wage rank within State <sup>5</sup>
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Rhode Island	11,480	\$24.30	\$50,550	2.452	114
2.	West Virginia	15,970	19.53	40,620	2.318	146
3.	South Dakota	8,350	19.05	39,630	2.307	121
4.	Massachusetts	74,200	25.26	52,550	2.297	156
5.	Maine	12,180	21.67	45,080	2.054	114
Top p	paying States for this occupation					
1.	California	201,070	27.85	57,940	1.392	152
2.	Maryland	44,790	27.29	56,770	1.844	104
3.	Hawaii	8,120	27.10	56,370	1.516	74
4.	Alaska	4,700	26.26	54,620	1.681	98
5.	New Jersey	70,560	25.90	53,870	1.834	176

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Punta Gorda, FL MSA	1,410	\$22.55	\$46,900	3.697
2. Jackson, TN MSA	1,940	18.65	38,790	3.654
3. Sarasota-Bradenton, FL MSA	10,040	21.02	43,730	3.602
4. Columbia, MO MSA	2,290	20.44	42,510	3.443
5. Gainesville, FL MSA	3,980	22.22	46,220	3.350
Top paying MSAs for this occupation				
1. Oakland, CA PMSA	14,490	34.40	71,560	1.451
2. San Francisco, CA PMSA	11,540	31.92	66,390	1.157
3. San Jose, CA PMSA	11,420	31.61	65,750	1.201
4. New York, NY PMSA	77,740	29.30	60,940	1.916
5. Salinas, CA MSA	2,050	29.16	60,660	1.348

#### 29-2041 Emergency medical technicians and paramedics

Assess injuries, administer emergency medical care, and extricate trapped individuals. Transport injured or sick persons to medical facilities.

	Inductor	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maustry		wage	wage	rank <sup>2</sup>	
Top i	ndustries by employment for this occupation					
1.	Local and interurban passenger transit	73,830	\$11.04	\$22,960	1	17
2.	Federal, State, and local government	51,360	13.62	28,330	2	6
3.	Health services	40,540	12.49	25,980	3	12
4.	Amusement & recreation services	910	11.99	24,940	4	14
5.	Transportation by air	890	15.60	32,450	5	3
Top	paying industries for this occupation					
1.	Chemicals and allied products	-	22.94	47,720	-	1
2.	Paper and allied products	30	19.05	39,630	15	2
3.	Transportation by air	890	15.60	32,450	5	3
4.	Transportation equipment	50	14.11	29,350	14	4
5.	Educational services	330	13.90	28,910	8	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	West Virginia	1,840	\$9.01	\$18,730	.267	501
2.	Pennsylvania	14,350	11.35	23,610	.259	568
3.	North Dakota	770	8.87	18,450	.247	427
4.	Missouri	5,850	11.54	24,000	.221	508
5.	Wisconsin	5,750	11.00	22,870	.214	540
Top p	paying States for this occupation					
1.	District of Columbia	660	19.15	39,840	.109	223
2.	Washington	2,200	16.80	34,940	.085	395
3.	Alaska	290	15.54	32,330	.104	286
4.	Oregon	1,120	15.36	31,940	.072	383
5.	New York	10,220	14.41	29,970	.122	470

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Johnstown, PA MSA	560	\$8.46	\$17,600	.663
2. Benton Harbor, MI MSA	240	11.58	24,080	.383
3. Daytona Beach, FL MSA	560	11.32	23,550	.361
4. Youngstown-Warren, OH MSA	770	10.01	20,820	.333
5. Altoona, PA MSA	180	8.69	18,070	.310
Top paying MSAs for this occupation				
1. Bremerton, WA PMSA	140	24.96	51,930	.195
2. San Francisco, CA PMSA	-	22.22	46,210	-
3. Salinas, CA MSA	-	20.84	43,350	-
4. Olympia, WA PMSA	100	20.38	42,400	.119
5. Tacoma, WA PMSA	180	18.81	39,110	.078

#### 29-2052 Pharmacy technicians

Prepare medications under the direction of a pharmacist. May measure, mix, count out, label, and record amounts and dosages of medications.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation					
1.	Miscellaneous retail	105,340	\$9.89	\$20,570	1	12
2.	Health services	53,800	12.50	26,010	2	5
3.	General merchandise stores	16,660	9.65	20,060	3	13
4.	Food stores	15,760	10.95	22,780	4	11
5.	Wholesale tradenondurable goods	6,930	11.25	23,400	5	10
Top	paying industries for this occupation					
1.	Chemicals and allied products	400	17.11	35,600	11	1
2.	Federal, State, and local government	5,000	13.80	28,710	6	2
3.	Business services	1,100	12.83	26,690	7	3
4.	Insurance carriers	480	12.80	26,630	9	4
5.	Health services	53,800	12.50	26,010	2	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	West Virginia	1,700	\$9.24	\$19,210	.247	487
2.	Rhode Island	1,060	9.88	20,550	.226	464
3.	Alabama	3,990	8.62	17,930	.218	578
4.	Minnesota	5,660	12.53	26,060	.217	519
5.	Maryland	5,180	10.89	22,640	.213	538
Top J	paying States for this occupation					
1.	California	17,960	14.81	30,810	.124	465
2.	Alaska	310	13.94	29,000	.111	325
3.	Washington	3,900	13.54	28,160	.151	516
4.	Oregon	2,200	13.00	27,050	.141	472
5.	Colorado	2,310	12.71	26,430	.107	481

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Cumberland, MD-WV MSA	140	\$9.34	\$19,430	.379
2. Columbia, MO MSA	240	9.61	19,990	.361
3. Florence, AL MSA	180	10.73	22,310	.358
4. Punta Gorda, FL MSA	130	9.66	20,090	.341
5. Iowa City, IA MSA	220	11.76	24,460	.339
Top paying MSAs for this occupation				
1. San Francisco, CA PMSA	680	16.67	34,680	.068
2. Oakland, CA PMSA	1,440	15.96	33,190	.144
3. San Jose, CA PMSA	940	15.60	32,440	.099
4. Santa Rosa, CA PMSA	290	15.46	32,150	.152
5. Bakersfield, CA MSA	290	15.03	31,260	.125

#### 29-2061 Licensed practical and licensed vocational nurses

Care for ill, injured, convalescent, or disabled persons in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a registered nurse. Licensing required.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	madeny		wage	wage	rank	
Top	industries by employment for this occupation					
1.	Health services	554,700	\$14.92	\$31,040	1	13
2.	Federal, State, and local government	43,140	15.22	31,660	2	12
3.	Business services	38,550	18.20	37,860	3	5
4.	Social services	24,170	14.73	30,650	4	15
5.	Educational services	15,010	15.27	31,760	5	11
Top	paying industries for this occupation					
1.	Amusement & recreation services	80	22.58	46,960	15	1
2.	Industrial machinery and equipment	40	20.80	43,270	18	2
3.	Insurance carriers	1,270	18.87	39,260	8	3
4.	Holding and other investment offices	-	18.24	37,950	-	4
5.	Business services	38,550	18.20	37,860	3	5

	_	Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Arkansas	12,240	\$12.19	\$25,360	1.092	340
2.	West Virginia	6,890	11.78	24,500	1.000	376
3.	Louisiana	16,430	12.64	26,290	.889	409
4.	North Dakota	2,710	12.76	26,540	.869	286
5.	Oklahoma	12,540	12.56	26,130	.865	390
Top J	paying States for this occupation					
1.	Connecticut	7,030	20.53	42,690	.422	258
2.	Rhode Island	1,980	19.15	39,820	.423	193
3.	District of Columbia	1,540	18.48	38,450	.255	233
4.	New Jersey	18,250	18.48	38,440	.474	339
5.	Massachusetts	17,280	18.47	38,420	.535	318

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Punta Gorda, FL MSA	850	\$14.39	\$29,930	2.229
2. Wheeling, WV-OH MSA	970	11.32	23,540	1.571
3. Alexandria, LA MSA	850	12.22	25,420	1.564
4. Pine Bluff, AR MSA	520	11.65	24,220	1.515
5. Abilene, TX MSA	730	13.83	28,770	1.362
Top paying MSAs for this occupation				
1. Bridgeport, CT PMSA	820	21.34	44,380	.438
2. Oakland, CA PMSA	3,840	21.12	43,930	.385
3. San Francisco, CA PMSA	2,380	20.73	43,130	.239
4. Hartford, CT MSA	2,690	20.72	43,100	.439
5. Stamford-Norwalk, CT PMSA	610	20.60	42,860	.294

#### 31-1011 Home health aides

Provide routine, personal healthcare, such as bathing, dressing, or grooming, to elderly, convalescent, or disabled persons in the home of patients or in a residential care facility.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation					
1.	Health services	259,430	\$8.62	\$17,940	1	10
2.	Social services	225,160	8.49	17,660	2	11
3.	Federal, State, and local government	34,110	13.33	27,740	3	1
4.	Business services	33,890	9.28	19,310	4	5
5.	Engineering & management services	3,510	8.71	18,110	5	8
Top	paying industries for this occupation					
1.	Federal, State, and local government	34,110	13.33	27,740	3	1
2.	Holding and other investment offices	220	11.98	24,910	11	2
3.	Depository institutions	-	11.54	23,990	-	3
4.	Membership organizations	410	11.49	23,900	8	4
5.	Business services	33,890	9.28	19,310	4	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	New York	109,330	\$9.04	\$18,810	1.306	653
2.	Minnesota	19,930	9.62	20,020	.763	613
3.	Maine	4,230	8.94	18,590	.713	523
4.	West Virginia	4,290	6.72	13,970	.623	568
5.	Texas	56,710	8.48	17,640	.614	648
Top J	paying States for this occupation					
1.	Alaska	850	11.66	24,250	.304	376
2.	Connecticut	8,290	11.53	23,990	.498	539
3.	Rhode Island	2,540	11.27	23,450	.543	412
4.	Colorado	6,790	11.26	23,420	.314	541
5.	Massachusetts	13,990	10.52	21,890	.433	585

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Laredo, TX MSA	1,930	\$6.31	\$13,120	2.727
2. Muncie, IN MSA	1,060	8.75	18,190	1.968
3. Brownsville-Harlingen-San Benito, TX MSA	1,870	7.20	14,970	1.708
<ol><li>McAllen-Edinburg-Mission, TX MSA</li></ol>	2,660	6.25	13,000	1.601
5. Dutchess County, NY PMSA	1,700	11.82	24,590	1.541
Top paying MSAs for this occupation				
1. Denver, CO PMSA	3,010	12.65	26,320	.262
2. New London-Norwich, CT-RI MSA	470	12.49	25,990	.346
3. Austin-San Marcos, TX MSA	1,900	12.34	25,670	.289
4. Hartford, CT MSA	2,520	12.10	25,170	.411
5. Oakland, CA PMSA	2,050	11.97	24,900	.205

#### 31-1012 Nursing aides, orderlies, and attendants

Provide basic patient care under direction of nursing staff. Perform duties, such as feed, bathe, dress, groom, or move patients, or change linens.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maacuy		waye	waye	rank⁻	
Top i	ndustries by employment for this occupation					
1.	Health services	1,093,380	\$9.48	\$19,710	1	7
2.	Federal, State, and local government	73,200	10.77	22,400	2	1
3.	Social services	65,900	8.61	17,900	3	11
4.	Business services	50,340	10.42	21,680	4	3
5.	Educational services	12,710	9.54	19,840	5	6
Top J	paying industries for this occupation					
1.	Federal, State, and local government	73,200	10.77	22,400	2	1
2.	Agricultural services	-	10.44	21,720	-	2
3.	Business services	50,340	10.42	21,680	4	3
4.	Engineering & management services	4,520	9.97	20,730	6	4
5.	Membership organizations	1,410	9.74	20,270	8	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	North Dakota	5,760	\$8.44	\$17,550	1.847	443
2.	Rhode Island	7,850	10.64	22,140	1.677	441
3.	South Dakota	6,030	8.60	17,900	1.666	444
4.	Maine	9,170	9.37	19,480	1.546	509
5.	Oklahoma	22,150	7.80	16,220	1.528	600
Top J	paying States for this occupation					
1.	Alaska	1,280	13.06	27,170	.458	346
2.	Connecticut	23,300	12.37	25,730	1.40	514
3.	New York	89,270	11.95	24,850	1.066	561
4.	Massachusetts	40,680	11.36	23,630	1.259	557
5.	Hawaii	3,280	11.04	22,970	.612	452

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Alexandria, LA MSA	1,540	\$7.27	\$15,120	2.834
2. Eau Claire, WI MSA	1,960	9.85	20,480	2.645
3. Texarkana, TX-Texarkana, AR MSA	1,310	7.99	16,610	2.586
4. Enid, OK MSA	530	7.53	15,650	2.474
5. Punta Gorda, FL MSA	880	9.20	19,140	2.307
Top paying MSAs for this occupation				
1. Nassau-Suffolk, NY PMSA	11,300	13.96	29,050	.954
2. New York, NY PMSA	45,060	13.05	27,140	1.111
3. Waterbury, CT PMSA	1,430	12.64	26,280	1.672
4. Hartford, CT MSA	9,150	12.59	26,180	1.494
5. Oakland, CA PMSA	8,390	12.53	26,070	.840

#### 31-9091 Dental assistants

Assist dentist, set up patient and equipment, and keep records.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment	Wage rank <sup>3</sup>
Top	industries by employment for this occupation				Turin	
1.	Health services	258,230	\$13.29	\$27,640	1	5
2.	Federal, State, and local government	4,450	13.33	27,730	2	4
3.	Business services	2,180	14.21	29,550	3	1
4.	Educational services	1,710	12.68	26,370	4	6
5.	Engineering & management services	730	13.90	28,920	5	2
Top	paying industries for this occupation					
1.	Business services	2,180	14.21	29,550	3	1
2.	Engineering & management services	730	13.90	28,920	5	2
3.	Membership organizations	50	13.42	27,900	8	3
4.	Federal, State, and local government	4,450	13.33	27,730	2	4
5.	Health services	258,230	13.29	27,640	1	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Washington	9,060	\$15.59	\$32,420	.351	449
2.	Oregon	5,450	14.07	29,270	.350	422
3.	Utah	3,340	9.75	20,270	.319	528
4.	Illinois	16,530	10.23	21,280	.282	619
5.	California	40,100	15.58	32,400	.278	440
Тор р	paying States for this occupation					
1.	District of Columbia	490	18.54	38,570	.081	232
2.	Colorado	5,790	17.04	35,450	.268	309
3.	Connecticut	3,440	15.79	32,850	.207	399
4.	Washington	9,060	15.59	32,420	.351	449
5.	Nevada	1,650	15.58	32,410	.159	340

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Santa Barbara-Santa Maria-Lompoc, CA MSA	910	\$16.92	\$35,190	.561
2. Jonesboro, AR MSA	200	9.37	19,480	.504
3. Salinas, CA MSA	740	14.66	30,480	.486
4. Vallejo-Fairfield-Napa, CA PMSA	860	14.40	29,960	.474
5. Yakima, WA MSA	350	12.57	26,130	.463
Top paying MSAs for this occupation				
1. Boulder-Longmont, CO PMSA	400	23.10	48,060	.221
2. Santa Rosa, CA PMSA	710	18.73	38,950	.371
3. San Jose, CA PMSA	2,260	18.43	38,330	.238
4. Barnstable-Yarmouth, MA MSA	160	18.30	38,070	.248
5. Iowa City, IA MSA	190	18.14	37,730	.293

#### 31-9092 Medical assistants

Perform administrative and certain clinical duties under the direction of physician. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by physician.

	la du otini	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	industry		wage	wage	rank <sup>2</sup>	-
Top	industries by employment for this occupation					
1.	Health services	319,640	\$11.67	\$24,270	1	6
2.	Federal, State, and local government	7,050	13.63	28,360	2	1
3.	Business services	5,490	11.18	23,260	3	8
4.	Educational services	4,670	12.90	26,840	4	2
5.	Engineering & management services	4,290	12.44	25,880	5	3
Top	paying industries for this occupation					
1.	Federal, State, and local government	7,050	13.63	28,360	2	1
2.	Educational services	4,670	12.90	26,840	4	2
3.	Engineering & management services	4,290	12.44	25,880	5	3
4.	Membership organizations	80	11.94	24,830	11	4
5.	Insurance carriers	630	11.68	24,300	7	5

	_	Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Hawaii	3,810	\$12.36	\$25,710	.711	408
2.	Arizona	9,970	10.95	22,780	.447	467
3.	Florida	28,350	11.23	23,350	.402	519
4.	California	50,690	12.76	26,550	.351	528
5.	Washington	8,820	12.77	26,550	.342	546
Top J	paying States for this occupation					
1.	District of Columbia	1,500	15.26	31,730	.248	287
2.	Alaska	380	14.93	31,040	.136	301
3.	Connecticut	4,130	13.89	28,890	.248	463
4.	Massachusetts	5,830	13.29	27,640	.180	501
5.	Vermont	490	13.14	27,340	.166	312

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Modesto, CA MSA	1,380	\$13.50	\$28,070	.895
2. Fort Myers-Cape Coral, FL MSA	1,360	11.12	23,140	.784
3. McAllen-Edinburg-Mission, TX MSA	1,260	8.72	18,140	.758
4. Honolulu, HI MSA	2,850	12.84	26,700	.727
5. Santa Barbara-Santa Maria-Lompoc, CA MSA	1,100	13.10	27,240	.678
Top paying MSAs for this occupation				
1. Anchorage, AK MSA	190	16.41	34,140	.144
2. San Jose, CA PMSA	2,250	16.06	33,410	.237
3. Vallejo-Fairfield-Napa, CA PMSA	690	15.70	32,660	.380
4. Stamford-Norwalk, CT PMSA	310	15.33	31,890	.149
5. Hartford, CT MSA	1,260	15.23	31,670	.206

#### 31-9094 Medical transcriptionists

Use transcribing machines with headset and foot pedal to listen to recordings by physicians and other healthcare professionals dictating a variety of medical reports, such as emergency room visits, diagnostic imaging studies, operations, chart reviews, and final summaries. Transcribe dictated reports and translate medical jargon and abbreviations into their expanded forms. Edit as necessary and return reports in either printed or electronic form to the dictator for review and signature, or correction.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation					
1.	Health services	80,900	\$12.97	\$26,980	1	7
2.	Business services	10,350	12.91	26,850	2	8
3.	Engineering & management services	880	13.80	28,700	3	5
4.	Federal, State, and local government	580	14.40	29,960	4	3
5.	Educational services	540	13.47	28,010	5	6
Top	paying industries for this occupation					
1.	Holding and other investment offices	-	14.51	30,180	-	1
2.	Insurance carriers	160	14.46	30,080	7	2
3.	Federal, State, and local government	580	14.40	29,960	4	3
4.	Insurance agents, brokers, & service	80	14.28	29,700	8	4
5.	Engineering & management services	880	13.80	28,700	3	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	South Dakota	690	\$11.24	\$23,370	.191	322
2.	North Dakota	480	10.64	22,130	.154	363
3.	Iowa	1,950	11.23	23,360	.137	474
4.	West Virginia	820	10.52	21,870	.119	425
5.	Maine	700	12.28	25,540	.118	383
Top J	paying States for this occupation					
1.	Alaska	260	17.13	35,630	.093	254
2.	Maryland	1,130	16.49	34,310	.047	334
3.	Hawaii	290	15.90	33,070	.054	313
4.	Connecticut	880	15.70	32,650	.053	402
5.	Nevada	350	15.64	32,540	.034	337

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA
				employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Rapid City, SD MSA	120	\$11.65	\$24,220	.249
2. Hattiesburg, MS MSA	110	11.42	23,760	.236
3. Sioux Falls, SD MSA	260	12.08	25,120	.230
4. Champaign-Urbana, IL MSA	210	10.86	22,580	.217
5. Bangor, ME MSA	120	15.60	32,450	.209
Top paying MSAs for this occupation				
1. Danbury, CT PMSA	-	21.30	44,300	-
2. Anchorage, AK MSA	140	18.59	38,660	.106
<ol><li>San Luis Obispo-Atascadero-Paso Robles, CA MSA</li></ol>	60	17.13	35,620	.059
4. Washington, DC-MD-VA-WV PMSA	1,230	17.06	35,490	.046
5. Los Angeles-Long Beach, CA PMSA	2,230	17.06	35,490	.055

#### <u>33-1012</u> First-line supervisors/managers of police and detectives

Supervise and coordinate activities of members of police force.

Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top industries by employment for this occupation					
1. Federal, State, and local government	112,520	\$28.89	\$60,080	1	1
2. Educational services	1,400	23.29	48,440	2	3
3. Membership organizations	50	26.55	55,220	3	2
4.					
5.					
Top paying industries for this occupation					
1. Federal, State, and local government	112,520	28.89	60,080	1	1
2. Membership organizations	50	26.55	55,220	3	2
3. Educational services	1,400	23.29	48,440	2	3
4.					
5.					

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Alabama	2,810	\$21.01	\$43,700	.154	142
2.	New Mexico	1,110	22.22	46,220	.154	111
3.	New Jersey	5,420	37.82	78,670	.141	39
4.	Connecticut	2,160	29.38	61,110	.130	103
5.	Hawaii	690	26.38	54,860	.129	90
Top J	paying States for this occupation					
1.	District of Columbia	760	38.83	80,760	.126	19
2.	New Jersey	5,420	37.82	78,670	.141	39
3.	California	12,500	37.74	78,490	.087	39
4.	New York	10,670	33.96	70,640	.127	62
5.	Alaska	280	33.31	69,290	.100	34

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Montgomery, AL MSA	810	\$26.51	\$55,150	.538
2. Tallahassee, FL MSA	470	29.00	60,310	.305
3. Yuma, AZ MSA	140	27.89	58,020	.276
4. Merced, CA MSA	130	30.73	63,910	.218
5. Stamford-Norwalk, CT PMSA	450	28.29	58,840	.217
Top paying MSAs for this occupation				
1. Nassau-Suffolk, NY PMSA	1,000	44.66	92,890	.084
2. Orange County, CA PMSA	770	43.79	91,080	.055
3. San Francisco, CA PMSA	380	43.29	90,050	.038
4. Bergen-Passaic, NJ PMSA	800	43.03	89,490	.127
5. Oakland, CA PMSA	670	42.44	88,260	.067

#### 33-2011 Fire fighters

Control and extinguish fires or respond to emergency situations where life, property, or the environment is at risk. Duties may include fire prevention, emergency medical service, hazardous material response, search and rescue, and disaster management.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Federal, State, and local government	263,740	\$17.37	\$36,130	1	6
2.	Business services	4,710	15.43	32,080	2	10
3.	Electric, gas, and sanitary services	350	21.71	45,160	3	1
4.	Membership organizations	320	13.47	28,010	4	12
5.	Transportation equipment	290	17.84	37,100	5	5
Top p	paying industries for this occupation					
1.	Electric, gas, and sanitary services	350	21.71	45,160	3	1
2.	Petroleum and coal products	100	21.13	43,960	10	2
3.	Educational services	170	18.75	39,000	6	3
4.	Chemicals and allied products	70	18.53	38,540	13	4
5.	Transportation equipment	290	17.84	37,100	5	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Alaska	3,250	\$12.76	\$26,540	1.162	354
2.	Wyoming	930	14.06	29,240	.390	243
3.	Ohio	20,310	14.33	29,800	.376	430
4.	Massachusetts	11,470	18.33	38,120	.355	322
5.	Washington	8,620	19.31	40,160	.334	330
Top J	paying States for this occupation					
1.	New Jersey	5,140	25.98	54,030	.134	174
2.	California	28,810	23.10	48,050	.199	245
3.	New York	13,560	22.90	47,620	.162	235
4.	Connecticut	5,150	21.95	45,660	.309	216
5.	Missouri	5,270	20.96	43,600	.199	169

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Columbus, OH MSA	5,740	\$11.84	\$24,640	.671
2. Fayetteville, NC MSA	640	13.19	27,430	.625
3. Barnstable-Yarmouth, MA MSA	380	23.24	48,350	.589
4. Worcester, MA-CT PMSA	1,220	16.33	33,960	.530
5. Bremerton, WA PMSA	350	17.34	36,060	.487
Top paying MSAs for this occupation				
1. Oakland, CA PMSA	2,050	32.26	67,100	.205
2. Bergen-Passaic, NJ PMSA	480	29.42	61,200	.076
3. Newark, NJ PMSA	1,720	28.48	59,240	.179
4. San Francisco, CA PMSA	2,260	27.98	58,200	.227
5. Vallejo-Fairfield-Napa, CA PMSA	470	27.48	57,170	.259

#### 33-3012 Correctional officers and jailers

Guard inmates in penal or rehabilitative institution in accordance with established regulations and procedures. May guard prisoners in transit between jail, courtroom, prison, or other point. Include deputy sheriffs and police who spend the majority of their time guarding prisoners in correctional institutions.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Federal, State, and local government	379,420	\$16.45	\$34,210	1	1
2.	Engineering & management services	17,250	12.46	25,920	2	4
3.	Health services	2,160	14.94	31,070	3	2
4.	Social services	1,120	10.33	21,490	4	6
5.	Business services	940	10.70	22,250	5	5
Top	paying industries for this occupation					
1.	Federal, State, and local government	379,420	16.45	34,210	1	1
2.	Health services	2,160	14.94	31,070	3	2
3.	Membership organizations	-	12.71	26,430	-	3
4.	Engineering & management services	17,250	12.46	25,920	2	4
5.	Business services	940	10.70	22,250	5	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Louisiana	9,940	\$11.22	\$23,340	.538	471
2.	Mississippi	5,270	10.49	21,810	.484	454
3.	New Mexico	3,490	11.09	23,070	.484	404
4.	New York	38,100	21.68	45,090	.455	256
5.	Texas	39,170	13.27	27,610	.424	417
Top J	paying States for this occupation					
1.	Massachusetts	7,480	23.51	48,900	.232	191
2.	New Jersey	13,230	23.05	47,940	.344	231
3.	California	32,470	22.43	46,650	.225	263
4.	New York	38,100	21.68	45,090	.455	256
5.	Alaska	930	20.01	41,630	.333	200

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Glens Falls, NY MSA	880	\$21.67	\$45,080	1.776
2. Utica-Rome, NY MSA	1,960	19.88	41,360	1.519
3. Bakersfield, CA MSA	2,870	21.90	45,560	1.240
4. Pueblo, CO MSA	530	19.74	41,060	.971
5. Punta Gorda, FL MSA	340	14.55	30,260	.891
Top paying MSAs for this occupation				
1. Bergen-Passaic, NJ PMSA	890	26.21	54,510	.141
2. San Francisco, CA PMSA	1,160	24.77	51,530	.116
<ol><li>Vallejo-Fairfield-Napa, CA PMSA</li></ol>	700	23.74	49,380	.386
4. Boston, MA-NH PMSA	5,720	23.10	48,050	.290
5. Riverside-San Bernardino, CA PMSA	3,310	23.02	47,890	.318

#### 33-3051 Police and sheriff's patrol officers

Maintain order, enforce laws and ordinances, and protect life and property in an assigned patrol district. Perform combination of following duties: patrol a specific area on foot or in a vehicle; direct traffic; issue traffic summonses; investigate accidents; apprehend and arrest suspects, or serve legal processes of courts.

Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top industries by employment for this occupation					
1. Federal, State, and local government	590,650	\$20.23	\$42,090	1	1
2. Educational services	8,430	15.82	32,910	2	2
3. Membership organizations	440	14.07	29,280	3	3
4.					
5.					
Top paying industries for this occupation					
1. Federal, State, and local government	590,650	20.23	42,090	1	1
2. Educational services	8,430	15.82	32,910	2	2
3. Membership organizations	440	14.07	29,280	3	3
4.					
5.					

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	New Mexico	5,480	\$15.83	\$32,930	.760	243
2.	Arizona	13,890	20.23	42,080	.623	170
3.	Connecticut	10,240	22.92	47,680	.615	198
4.	New York	50,550	23.62	49,130	.604	216
5.	Louisiana	10,880	11.90	24,760	.589	439
Top J	paying States for this occupation					
1.	New Jersey	19,940	27.98	58,200	.518	138
2.	California	69,210	26.20	54,500	.479	178
3.	Alaska	1,330	23.84	49,590	.476	141
4.	Washington	8,540	23.74	49,390	.331	193
5.	New York	50,550	23.62	49,130	.604	216

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Laredo, TX MSA	1,080	\$19.38	\$40,320	1.526
2. Salinas, CA MSA	2,110	24.01	49,940	1.387
3. Brownsville-Harlingen-San Benito, TX MSA	1,510	18.13	37,720	1.380
4. Yuma, AZ MSA	570	16.97	35,290	1.126
5. Tallahassee, FL MSA	1,610	17.72	36,860	1.046
Top paying MSAs for this occupation				
1. Bergen-Passaic, NJ PMSA	2,940	32.68	67,970	.466
2. Nassau-Suffolk, NY PMSA	6,080	32.21	66,990	.513
3. San Francisco, CA PMSA	2,930	31.86	66,270	.294
4. Oakland, CA PMSA	4,210	31.66	65,860	.422
5. Orange County, CA PMSA	4,680	29.20	60,730	.333

#### 33-9032 Security guards

Guard, patrol, or monitor premises to prevent theft, violence, or infractions of rules.

	Inductry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maustry		wage	wage	rank <sup>2</sup>	
Top i	ndustries by employment for this occupation					
1.	Business services	607,650	\$9.00	\$18,730	1	67
2.	Educational services	55,620	11.75	24,440	2	36
3.	Health services	44,760	11.67	24,270	3	37
4.	Real estate	36,370	11.12	23,140	4	40
5.	Amusement & recreation services	33,720	9.96	20,710	5	58
Top	paying industries for this occupation					
1.	Services, nec	50	16.11	33,500	67	1
2.	Electric, gas, and sanitary services	3,290	15.99	33,270	20	2
3.	Railroad transportation	-	15.78	32,810	-	3
4.	Heavy construction, ex. building	600	15.58	32,400	45	4
5.	Fabricated metal products	1,840	15.11	31,420	30	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	11,090	\$11.41	\$23,730	1.834	354
2.	Nevada	16,460	10.14	21,090	1.591	509
3.	Hawaii	7,750	9.98	20,750	1.447	476
4.	New York	97,740	10.38	21,600	1.167	617
5.	New Mexico	7,650	8.89	18,480	1.061	502
Top J	paying States for this occupation					
1.	Alaska	1,980	13.24	27,540	.708	341
2.	Maryland	20,580	11.57	24,080	.847	514
3.	Colorado	14,570	11.52	23,950	.675	536
4.	District of Columbia	11,090	11.41	23,730	1.834	354
5.	Minnesota	13,570	11.05	22,990	.519	574

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Atlantic-Cape May, NJ PMSA	3,580	\$10.35	\$21,520	1.976
2. Las Vegas, NV-AZ MSA	13,820	10.24	21,300	1.808
3. Memphis, TN-AR-MS MSA	9,640	9.43	19,610	1.757
4. New York, NY PMSA	68,110	10.39	21,600	1.679
5. Miami, FL PMSA	15,200	8.17	17,000	1.521
Top paying MSAs for this occupation				
1. Richland-Kennewick-Pasco, WA MSA	370	18.79	39,090	.481
2. Utica-Rome, NY MSA	990	14.12	29,380	.767
3. San Luis Obispo-Atascadero-Paso Robles, CA MSA	590	13.88	28,880	.580
4. Lafayette, IN MSA	170	13.77	28,640	.198
5. Lynchburg, VA MSA	770	12.93	26,900	.823

#### <u>35-1012 First-line supervisors/managers of food preparation and serving</u> workers

Supervise workers engaged in preparing and serving food.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation					
1.	Eating and drinking places	471,650	\$12.17	\$25,310	1	25
2.	Educational services	50,040	11.86	24,660	2	29
3.	Food stores	35,400	13.85	28,800	3	17
4.	Health services	24,990	13.59	28,260	4	19
5.	Hotels and other lodging places	19,450	13.82	28,760	5	18
Top	paying industries for this occupation					
1.	Transportation by air	270	22.49	46,790	22	1
2.	Trucking and warehousing	40	18.87	39,260	29	2
3.	Water transportation	410	18.26	37,980	20	3
4.	Printing and publishing	30	18.07	37,590	31	4
5.	Legal services	30	17.78	36,990	30	5

	State	Employment	Hourly mean wage	Annual mean wage	Percent of State	Wage rank within State <sup>5</sup>
State	s with the highest concentration of workers in this occupation $\frac{4}{3}$				employment	
<i>Siale</i> 1.	Hawaii	4,310	\$14.14	\$29,400	.805	364
2.	Indiana	20,940	11.48	23,890	.733	522
3.	North Dakota	2,150	10.16	21,140	.689	383
4.	West Virginia	4,700	9.18	19,090	.682	491
5.	Wyoming	1,620	10.41	21,650	.679	344
Top p	paying States for this occupation					
1.	Massachusetts	14,160	25.16	52,330	.438	160
2.	Alaska	1,130	16.03	33,340	.404	274
3.	Washington	13,280	15.98	33,240	.515	429
4.	District of Columbia	1,350	15.10	31,400	.223	291
5.	Connecticut	7,510	14.99	31,180	.451	422

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Fort Walton Beach, FL MSA	710	\$11.15	\$23,190	.974
2. Cheyenne, WY MSA	340	9.69	20,140	.961
3. Muncie, IN MSA	500	11.88	24,710	.928
4. Benton Harbor, MI MSA	570	10.05	20,910	.910
5. Fargo-Moorhead, ND-MN MSA	880	10.21	21,240	.893
Top paying MSAs for this occupation				
1. Boston, MA-NH PMSA	8,320	32.94	68,520	.422
2. Lancaster, PA MSA	790	19.23	39,990	.364
3. Seattle-Bellevue-Everett, WA PMSA	6,570	17.51	36,410	.493
4. Lawrence, MA-NH PMSA	620	17.34	36,060	.396
5. Bridgeport, CT PMSA	450	17.29	35,960	.240

#### 35-2014 Cooks, restaurant

Prepare, season, and cook soups, meats, vegetables, desserts, or other foodstuffs in restaurants. May order supplies, keep records and accounts, price items on menu, or plan menu.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Eating and drinking places	580,940	\$9.04	\$18,800	1	19
2.	Hotels and other lodging places	53,160	10.83	22,520	2	6
3.	Amusement & recreation services	23,590	10.46	21,750	3	7
4.	Membership organizations	4,180	9.71	20,200	4	11
5.	Business services	2,360	9.62	20,010	5	12
Top J	paying industries for this occupation					
1.	Railroad transportation	310	15.24	31,710	13	1
2.	Furniture and homefurnishings stores	60	12.24	25,460	19	2
3.	Transportation by air	60	11.68	24,300	20	3
4.	Federal, State, and local government	250	11.64	24,220	14	4
5.	Museums, botanical, zoological garden	320	10.89	22,640	12	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Nevada	10,190	\$11.66	\$24,260	.985	450
2.	Montana	3,450	8.19	17,030	.900	486
3.	Colorado	19,380	9.67	20,120	.897	597
4.	Hawaii	4,710	12.28	25,540	.879	412
5.	New Mexico	5,270	7.97	16,570	.731	538
Top	paying States for this occupation					
1.	Hawaii	4,710	12.28	25,540	.879	412
2.	New Jersey	11,610	12.07	25,110	.302	535
3.	Nevada	10,190	11.66	24,260	.985	450
4.	Alaska	990	11.66	24,240	.354	377
5.	New York	19,960	11.52	23,970	.238	580

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Sharon, PA MSA	810	\$7.11	\$14,780	1.590
2. Grand Junction, CO MSA	660	7.80	16,230	1.292
3. Flagstaff, AZ-UT MSA	650	8.48	17,630	1.202
4. Macon, GA MSA	1,680	6.80	14,140	1.175
5. Naples, FL MSA	1,250	11.96	24,870	1.162
Top paying MSAs for this occupation				
1. Atlantic-Cape May, NJ PMSA	1,950	13.88	28,870	1.076
2. New York, NY PMSA	10,120	12.87	26,780	.249
3. San Francisco, CA PMSA	6,370	12.85	26,730	.639
4. Newark, NJ PMSA	2,540	12.69	26,400	.264
5. Bridgeport, CT PMSA	730	12.56	26,110	.390

#### **35-2021 Food preparation workers**

Perform a variety of food preparation duties other than cooking, such as preparing cold foods and shellfish, slicing meat, and brewing coffee or tea.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation					
1.	Eating and drinking places	384,250	\$7.49	\$15,580	1	33
2.	Food stores	137,520	8.68	18,050	2	13
3.	Health services	104,650	8.41	17,490	3	19
4.	Educational services	95,500	8.76	18,220	4	12
5.	Social services	21,930	7.72	16,070	5	29
Top	paying industries for this occupation					
1.	Legal services	70	11.80	24,530	28	1
2.	Communication	-	11.52	23,960	-	2
3.	Holding and other investment offices	50	10.86	22,580	29	3
4.	Transportation by air	510	10.71	22,280	19	4
5.	Oil and gas extraction	-	10.34	21,500	-	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Louisiana	21,570	\$6.67	\$13,860	1.167	640
2.	Maine	6,260	8.14	16,930	1.056	541
3.	South Dakota	3,770	7.24	15,060	1.042	490
4.	North Dakota	3,190	8.97	18,660	1.023	425
5.	Mississippi	10,880	6.48	13,470	.999	613
Тор ј	paying States for this occupation					
1.	District of Columbia	3,840	10.45	21,730	.635	369
2.	Hawaii	4,530	10.37	21,580	.846	468
3.	Alaska	2,400	10.30	21,430	.858	394
4.	Connecticut	12,390	9.75	20,280	.744	584
5.	Nevada	5,410	9.35	19,440	.523	529

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Alexandria, LA MSA	1,200	\$6.44	\$13,390	2.209
2. Champaign-Urbana, IL MSA	2,070	6.66	13,840	2.144
3. Galveston-Texas City, TX PMSA	1,640	6.93	14,410	1.894
4. Salem, OR PMSA	2,330	8.83	18,360	1.735
5. Rockford, IL MSA	2,700	6.66	13,850	1.615
Top paying MSAs for this occupation				
1. Stamford-Norwalk, CT PMSA	860	11.33	23,570	.414
2. Fargo-Moorhead, ND-MN MSA	1,500	10.85	22,560	1.522
3. Danbury, CT PMSA	530	10.79	22,430	.607
4. Rochester, MN MSA	240	10.63	22,100	.283
5. Honolulu, HI MSA	3,120	10.49	21,830	.795

# <u>35-3021</u> Combined food preparation and serving workers, including fast <u>food</u>

Perform duties which combine both food preparation and food service.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Eating and drinking places	1,670,840	\$6.89	\$14,330	1	36
2.	Food stores	177,440	8.07	16,780	2	18
3.	Educational services	40,950	8.29	17,240	3	17
4.	Amusement & recreation services	34,600	7.45	15,500	4	27
5.	Hotels and other lodging places	18,400	8.57	17,820	5	13
Top	paying industries for this occupation					
1.	Personal services	360	13.15	27,360	23	1
2.	Railroad transportation	590	13.06	27,170	22	2
3.	Printing and publishing	80	11.60	24,130	29	3
4.	Federal, State, and local government	14,400	11.14	23,160	7	4
5.	Depository institutions	70	9.77	20,320	30	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Hawaii	21,260	\$6.85	\$14,240	3.970	525
2.	Wyoming	6,550	6.43	13,380	2.745	445
3.	South Dakota	8,940	7.58	15,760	2.470	479
4.	Alaska	6,820	8.14	16,920	2.439	422
5.	Washington	62,890	8.10	16,860	2.437	670
Top p	paying States for this occupation					
1.	Connecticut	15,520	8.66	18,010	.932	601
2.	District of Columbia	8,480	8.48	17,650	1.402	394
3.	Massachusetts	46,720	8.38	17,420	1.446	634
4.	Alaska	6,820	8.14	16,920	2.439	422
5.	Washington	62,890	8.10	16,860	2.437	670

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Jacksonville, NC MSA	2,580	\$6.18	\$12,850	6.859
2. Punta Gorda, FL MSA	1,930	6.72	13,970	5.060
3. Greenville, NC MSA	2,880	6.36	13,230	4.477
4. Honolulu, HI MSA	17,520	6.60	13,720	4.467
5. Chico-Paradise, CA MSA	2,870	6.94	14,440	3.991
Top paying MSAs for this occupation				
1. Barnstable-Yarmouth, MA MSA	-	10.16	21,130	-
2. Danbury, CT PMSA	1,050	9.14	19,020	1.202
3. Portsmouth-Rochester, NH-ME PMSA	2,410	9.14	19,010	2.065
4. San Francisco, CA PMSA	12,270	9.03	18,770	1.230
5. Madison, WI MSA	4,090	8.97	18,660	1.506

#### 35-3031 Waiters and waitresses

Take orders and serve food and beverages to patrons at tables in dining establishment.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation					
1.	Eating and drinking places	1,675,820	\$7.26	\$15,110	1	21
2.	Hotels and other lodging places	138,010	7.74	16,100	2	13
3.	Amusement & recreation services	78,960	8.28	17,230	3	6
4.	Membership organizations	16,250	8.20	17,060	4	8
5.	Automotive dealers & service stations	12,150	6.65	13,820	5	28
Top	paying industries for this occupation					
1.	Railroad transportation	1,180	14.91	31,010	16	1
2.	Transportation services	70	11.28	23,460	26	2
3.	Transportation by air	50	9.46	19,670	27	3
4.	Business services	11,800	9.12	18,980	6	4
5.	Holding and other investment offices	180	8.93	18,580	22	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Nevada	30,180	\$7.74	\$16,090	2.917	556
2.	Hawaii	12,480	9.52	19,810	2.330	488
3.	New Mexico	15,820	6.75	14,040	2.193	565
4.	Colorado	46,200	8.27	17,190	2.140	628
5.	Rhode Island	9,750	7.50	15,610	2.083	509
Top J	paying States for this occupation					
1.	Massachusetts	53,620	9.83	20,460	1.660	602
2.	Hawaii	12,480	9.52	19,810	2.330	488
3.	Vermont	5,720	8.95	18,620	1.940	462
4.	Washington	37,490	8.91	18,540	1.453	658
5.	New York	96,720	8.75	18,210	1.155	663

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Barnstable-Yarmouth, MA MSA	2,550	\$9.18	\$19,100	3.954
2. Atlantic-Cape May, NJ PMSA	6,930	8.75	18,200	3.825
3. Flagstaff, AZ-UT MSA	1,790	6.43	13,370	3.310
4. Las Vegas, NV-AZ MSA	24,390	8.03	16,690	3.191
5. Naples, FL MSA	3,310	9.50	19,760	3.078
Top paying MSAs for this occupation				
1. New York, NY PMSA	41,400	10.97	22,810	1.021
2. Jersey City, NJ PMSA	1,540	10.66	22,180	.618
3. Boston, MA-NH PMSA	31,160	10.49	21,810	1.581
4. San Luis Obispo-Atascadero-Paso Robles, CA MSA	2,710	10.02	20,830	2.666
5. Seattle-Bellevue-Everett, WA PMSA	17,990	9.76	20,310	1.351
#### <u>37-1011 First-line supervisors/managers of housekeeping and janitorial</u> workers

Supervise work activities of cleaning personnel in hotels, hospitals, offices, and other establishments.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Business services	52,160	\$13.19	\$27,430	1	53
2.	Educational services	41,740	15.71	32,680	2	36
3.	Hotels and other lodging places	33,500	11.83	24,600	3	57
4.	Health services	25,080	13.82	28,740	4	50
5.	Real estate	13,540	15.17	31,550	5	43
Top p	paying industries for this occupation					
1.	Primary metal industries	100	22.34	46,470	44	1
2.	Security and commodity brokers	70	21.62	44,970	49	2
3.	Instruments and related products	270	21.31	44,330	28	3
4.	Paper and allied products	100	21.03	43,740	45	4
5.	Chemicals and allied products	350	20.48	42,610	22	5

	01-11-	Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State employment	within State <sup>°</sup>
State.	s with the highest concentration of workers in this occupation $^4$					
1.	District of Columbia	2,930	\$11.68	\$24,290	.485	349
2.	Nevada	2,910	13.25	27,560	.281	398
3.	Hawaii	1,410	14.81	30,800	.263	349
4.	Missouri	5,700	13.13	27,310	.215	417
5.	Maryland	5,140	14.59	30,350	.212	405
Тор р	paying States for this occupation					
1.	New York	15,480	17.84	37,110	.185	360
2.	Alaska	390	17.37	36,120	.139	247
3.	Connecticut	2,760	17.12	35,610	.166	359
4.	New Jersey	7,560	16.66	34,650	.196	387
5.	Massachusetts	5,390	16.43	34,180	.167	393

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Atlantic-Cape May, NJ PMSA	1,070	\$14.58	\$30,320	.591
2. Myrtle Beach, SC MSA	400	11.26	23,430	.422
3. Flagstaff, AZ-UT MSA	210	10.70	22,260	.388
4. Bloomington, IN MSA	230	15.49	32,210	.380
5. Dover, DE MSA	160	12.63	26,280	.307
Top paying MSAs for this occupation				
1. Nassau-Suffolk, NY PMSA	1,750	20.56	42,760	.148
2. Waterbury, CT PMSA	120	19.79	41,170	.140
3. Modesto, CA MSA	200	19.69	40,960	.130
4. San Francisco, CA PMSA	1,460	19.33	40,210	.146
5. Danbury, CT PMSA	180	18.94	39,400	.206

### <u>37-1012</u> First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers

Plan, organize, direct, or coordinate activities of workers engaged in landscaping or groundskeeping activities, such as planting and maintaining ornamental trees, shrubs, flowers, and lawns, and applying fertilizers, pesticides, and other chemicals, according to contract specifications. May also coordinate activities of workers engaged in terracing hillsides, building retaining walls, constructing pathways, installing patios, and similar activities in following a landscape design plan. Work may involve reviewing contracts to ascertain service, machine, and work force requirements; answering inquiries from potential customers regarding methods, material, and price ranges; and preparing estimates according to labor, material, and machine costs.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maastry		wage	wage	rank <sup>2</sup>	
Top i	ndustries by employment for this occupation					
1.	Agricultural services	49,360	\$16.40	\$34,110	1	22
2.	Real estate	7,570	17.13	35,630	2	17
3.	Federal, State, and local government	7,440	19.76	41,090	3	9
4.	Amusement & recreation services	6,020	19.60	40,770	4	10
5.	Business services	4,750	16.23	33,760	5	23
Top 1	paying industries for this occupation					
1.	Food and kindred products	30	28.99	60,300	30	1
2.	Chemicals and allied products	140	24.73	51,440	22	2
3.	General building contractors	540	22.99	47,820	14	3
4.	Food stores	40	22.86	47,540	27	4
5.	Paper and allied products	30	21.15	43,990	29	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Hawaii	810	\$17.36	\$36,100	.151	268
2.	Arizona	2,950	14.11	29,350	.132	345
3.	Nevada	1,140	18.04	37,520	.110	267
4.	Florida	7,620	15.34	31,900	.108	327
5.	Nebraska	940	16.74	34,820	.107	224
Тор ј	paying States for this occupation					
1.	Rhode Island	220	25.25	52,520	.047	97
2.	Connecticut	1,200	22.43	46,650	.072	208
3.	New York	5,320	21.64	45,020	.064	258
4.	Alaska	70	21.09	43,860	.025	183
5.	Washington	1,530	21.05	43,780	.059	268

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Naples, FL MSA	400	\$16.40	\$34,100	.372
<ol><li>Fort Pierce-Port St. Lucie, FL MSA</li></ol>	270	15.57	32,380	.266
<ol><li>Barnstable-Yarmouth, MA MSA</li></ol>	140	18.78	39,070	.217
<ol><li>Fort Myers-Cape Coral, FL MSA</li></ol>	360	14.15	29,430	.207
5. Salinas, CA MSA	290	16.41	34,140	.191
Top paying MSAs for this occupation				
1. Tacoma, WA PMSA	230	26.35	54,820	.100
2. Nassau-Suffolk, NY PMSA	1,220	25.53	53,100	.103
3. Bridgeport, CT PMSA	140	25.37	52,760	.075
4. New York, NY PMSA	1,930	25.01	52,020	.048
5. Providence-Fall River-Warwick, RI-MA MSA	220	24.40	50,760	.043

#### 37-2011 Janitors and cleaners, except maids and housekeeping cleaners

Keep buildings in clean and orderly condition. Perform heavy cleaning duties, such as cleaning floors, shampooing rugs, washing walls and glass, and removing rubbish. Duties may include tending furnace and boiler, performing routine maintenance activities, notifying management of need for repairs, and cleaning snow or debris from sidewalk.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maaony		wage	wage	rank	
Top i	ndustries by employment for this occupation					
1.	Business services	692,370	\$8.26	\$17,180	1	62
2.	Educational services	454,990	10.92	22,720	2	15
3.	Federal, State, and local government	128,610	12.57	26,140	3	4
4.	Health services	100,340	9.26	19,260	4	42
5.	Real estate	98,290	10.19	21,200	5	24
Top	paying industries for this occupation					
1.	Transportation equipment	8,070	15.74	32,740	24	1
2.	Metal mining	-	13.93	28,980	-	2
3.	Railroad transportation	930	13.16	27,370	58	3
4.	Federal, State, and local government	128,610	12.57	26,140	3	4
5.	Coal mining	230	12.33	25,650	65	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	15,830	\$9.54	\$19,830	2.618	382
2.	Hawaii	12,960	9.18	19,100	2.420	497
3.	Nevada	23,540	10.12	21,040	2.275	510
4.	New York	182,810	11.56	24,040	2.183	579
5.	Alaska	5,930	11.68	24,300	2.121	375
Top J	paying States for this occupation					
1.	Alaska	5,930	11.68	24,300	2.121	375
2.	New York	182,810	11.56	24,040	2.183	579
3.	Massachusetts	59,910	11.19	23,270	1.855	564
4.	Michigan	71,770	11.15	23,190	1.616	589
5.	Connecticut	29,350	10.84	22,540	1.763	560

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Brownsville-Harlingen-San Benito, TX MSA	3,340	\$7.37	\$15,320	3.051
2. Gadsden, AL MSA	1,110	7.15	14,860	3.032
3. Jersey City, NJ PMSA	6,420	10.01	20,820	2.578
4. Honolulu, HI MSA	9,890	8.98	18,680	2.521
5. New York, NY PMSA	99,700	12.60	26,220	2.458
Top paying MSAs for this occupation				
1. Kokomo, IN MSA	890	13.09	27,220	1.812
2. Flint, MI PMSA	2,490	12.98	26,990	1.527
3. New York, NY PMSA	99,700	12.60	26,220	2.458
4. Champaign-Urbana, IL MSA	2,190	12.57	26,140	2.268
5. Fitchburg-Leominster, MA PMSA	650	12.11	25,180	1.267

#### 37-2012 Maids and housekeeping cleaners

Perform any combination of light cleaning duties to maintain private households or commercial establishments, such as hotels, restaurants, and hospitals, in a clean and orderly manner. Duties include making beds, replenishing linens, cleaning rooms and halls, and vacuuming.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Hotels and other lodging places	395,500	\$7.86	\$16,350	1	46
2.	Health services	235,500	8.42	17,520	2	31
3.	Business services	130,420	8.11	16,870	3	39
4.	Real estate	46,250	8.57	17,830	4	28
5.	Social services	30,460	7.70	16,020	5	50
Top	paying industries for this occupation					
1.	Services, nec	90	14.02	29,170	39	1
2.	Transportation by air	200	11.23	23,350	33	2
3.	Chemicals and allied products	40	11.13	23,150	50	3
4.	Oil and gas extraction	-	10.93	22,720	-	4
5.	Transportation services	150	10.90	22,670	35	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Nevada	20,370	\$9.45	\$19,650	1.969	528
2.	Hawaii	10,350	11.16	23,210	1.933	448
3.	Wyoming	3,230	7.36	15,310	1.353	429
4.	Montana	4,690	6.96	14,470	1.223	517
5.	South Dakota	4,100	7.29	15,150	1.133	488
Top J	paying States for this occupation					
1.	District of Columbia	5,900	11.19	23,270	.976	360
2.	Hawaii	10,350	11.16	23,210	1.933	448
3.	New York	50,430	10.92	22,710	.602	605
4.	Alaska	2,350	9.91	20,610	.840	401
5.	Massachusetts	21,260	9.52	19,790	.658	609

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Myrtle Beach, SC MSA	2,890	\$7.68	\$15,970	3.046
2. Atlantic-Cape May, NJ PMSA	4,770	9.65	20,080	2.633
3. Flagstaff, AZ-UT MSA	1,330	6.68	13,900	2.460
4. Las Vegas, NV-AZ MSA	16,600	9.77	20,320	2.172
5. Barnstable-Yarmouth, MA MSA	1,280	8.92	18,550	1.985
Top paying MSAs for this occupation				
1. New York, NY PMSA	25,640	13.66	28,420	.632
2. San Francisco, CA PMSA	8,360	11.04	22,970	.838
3. Honolulu, HI MSA	5,540	10.57	21,980	1.412
4. Cumberland, MD-WV MSA	370	10.51	21,870	1.002
5. Anchorage, AK MSA	1,030	10.25	21,310	.778

#### 37-3011 Landscaping and groundskeeping workers

Landscape or maintain grounds of property using hand or power tools or equipment. Workers typically perform a variety of tasks, which may include any combination of the following: sod laying, mowing, trimming, planting, watering, fertilizing, digging, raking, sprinkler installation, and installation of mortarless segmental concrete masonry wall units.

	Inductry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maustry		wage	wage	rank <sup>2</sup>	
Top i	ndustries by employment for this occupation					
1.	Agricultural services	340,990	\$9.61	\$19,980	1	47
2.	Amusement & recreation services	102,080	9.48	19,720	2	49
3.	Federal, State, and local government	77,000	12.52	26,030	3	9
4.	Real estate	66,250	9.57	19,910	4	48
5.	Educational services	41,330	11.96	24,880	5	15
Top p	paying industries for this occupation					
1.	Communications	350	14.78	30,740	34	1
2.	Instruments and related products	290	14.57	30,300	41	2
3.	Transportation equipment	80	14.44	30,040	55	3
4.	Chemicals and allied products	450	13.98	29,070	29	4
5.	Paper and allied products	210	13.63	28,340	44	5

	State	Employment	Hourly mean wage	Annual mean wage	Percent of State	Wage rank within State <sup>5</sup>
	Glate		- 5	5	employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Hawaii	6,400	\$11.23	\$23,370	1.195	443
2.	Arizona	25,080	8.62	17,920	1.124	563
3.	Nevada	10,570	9.93	20,640	1.022	514
4.	Florida	70,470	9.23	19,200	.998	613
5.	California	111,340	10.61	22,080	.771	620
Top J	paying States for this occupation					
1.	Alaska	710	12.64	26,300	.254	356
2.	Connecticut	11,340	12.34	25,670	.681	515
3.	Massachusetts	18,780	12.26	25,490	.581	529
4.	District of Columbia	1,030	12.04	25,040	.170	340
5.	New Jersey	21,680	11.66	24,260	.563	550

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Naples, FL MSA	3,290	\$9.91	\$20,610	3.059
2. Barnstable-Yarmouth, MA MSA	1,290	11.16	23,200	2.000
3. Fort Pierce-Port St. Lucie, FL MSA	1,930	9.21	19,160	1.898
4. West Palm Beach-Boca Raton, FL MSA	9,310	8.81	18,330	1.839
5. Punta Gorda, FL MSA	670	8.38	17,430	1.757
Top paying MSAs for this occupation				
1. Lowell, MA-NH PMSA	750	14.17	29,460	.604
2. New York, NY PMSA	9,560	13.23	27,520	.236
3. Danbury, CT PMSA	1,130	13.23	27,520	1.294
4. Oakland, CA PMSA	7,540	13.19	27,440	.755
5. San Francisco, CA PMSA	5,720	12.72	26,450	.574

#### 39-3091 Amusement and recreation attendants

Perform variety of attending duties at amusement or recreation facility. May schedule use of recreation facilities, maintain and provide equipment to participants of sporting events or recreational pursuits, or operate amusement concessions and rides.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation					
1.	Amusement & recreation services	136,730	\$7.35	\$15,300	1	13
2.	Federal, State, and local government	37,570	8.84	18,380	2	3
3.	Membership organizations	10,910	7.76	16,140	3	11
4.	Hotels and other lodging places	8,660	7.87	16,360	4	10
5.	Eating and drinking places	2,990	6.99	14,540	5	18
Top J	paying industries for this occupation					
1.	Holding and other investment offices	110	9.18	19,100	14	1
2.	Health services	-	8.97	18,650	-	2
3.	Federal, State, and local government	37,570	8.84	18,380	2	3
4.	Social services	990	8.13	16,910	11	4
5.	Real estate	1,970	8.12	16,900	7	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Hawaii	1,860	\$9.48	\$19,710	.347	489
2.	Florida	24,160	7.11	14,790	.342	676
3.	Nevada	3,400	7.35	15,300	.329	560
4.	Minnesota	8,270	8.49	17,660	.316	632
5.	New Hampshire	1,630	8.10	16,850	.269	534
Top	paying States for this occupation					
1.	Alaska	470	11.99	24,950	.168	367
2.	District of Columbia	60	10.24	21,290	.010	371
3.	Connecticut	1,460	9.48	19,720	.088	592
4.	Hawaii	1,860	9.48	19,710	.347	489
5.	Washington	4,040	9.02	18,770	.157	652

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Atlantic-Cape May, NJ PMSA	1,150	\$6.56	\$13,640	.635
2. Naples, FL MSA	630	7.62	15,840	.586
3. Wilmington, NC MSA	560	6.45	13,420	.516
4. Rapid City, SD MSA	200	6.54	13,610	.415
5. Sarasota-Bradenton, FL MSA	1,120	7.50	15,600	.402
Top paying MSAs for this occupation				
1. Anchorage, AK MSA	140	12.41	25,820	.106
2. Stamford-Norwalk, CT PMSA	280	11.47	23,860	.135
3. Killeen-Temple, TX MSA	80	10.36	21,560	.081
4. Ventura, CA PMSA	390	10.30	21,430	.137
5. Yakima, WA MSA	80	10.29	21,410	.106

#### 39-5012 Hairdressers, hairstylists, and cosmetologists

Provide beauty services, such as shampooing, cutting, coloring, and styling hair, and massaging and treating scalp. May also apply makeup, dress wigs, perform hair removal, and provide nail and skin care services.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
			wage	Wage	Tallk	
Тор і	ndustries by employment for this occupation					
1.	Personal services	297,080	\$10.25	\$21,310	1	11
2.	General merchandise stores	24,050	9.93	20,660	2	14
3.	Miscellaneous retail	2,400	9.96	20,720	3	13
4.	Business services	2,290	15.59	32,420	4	1
5.	Health services	1,270	10.78	22,420	5	8
Top	paying industries for this occupation					
1.	Business services	2,290	15.59	32,420	4	1
2.	Wholesale tradenondurable goods	200	13.93	28,970	10	2
3.	Amusement & recreation services	500	13.10	27,250	6	3
4.	Federal, State, and local government	230	12.76	26,540	9	4
5.	Apparel and accessory stores	360	12.74	26,490	7	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	North Dakota	1,340	\$9.23	\$19,190	.430	418
2.	New Jersey	14,970	10.07	20,940	.389	597
3.	Wisconsin	10,130	10.73	22,320	.376	548
4.	Pennsylvania	20,660	9.26	19,250	.373	632
5.	Maryland	8,830	9.99	20,790	.364	572
Top p	paying States for this occupation					
1.	District of Columbia	650	17.13	35,640	.107	253
2.	Washington	7,140	14.03	29,180	.277	499
3.	Alaska	490	13.14	27,340	.175	343
4.	Hawaii	780	12.14	25,250	.146	419
5.	Connecticut	5,880	11.59	24,100	.353	538

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Kenosha, WI PMSA	360	\$10.27	\$21,370	.710
2. Monmouth-Ocean, NJ PMSA	2,390	9.47	19,700	.625
3. Allentown-Bethlehem-Easton, PA MSA	1,480	9.14	19,000	.545
4. Bismarck, ND MSA	260	9.86	20,510	.542
5. New London-Norwich, CT-RI MSA	720	9.29	19,320	.530
Top paying MSAs for this occupation				
1. Seattle-Bellevue-Everett, WA PMSA	3,400	17.97	37,380	.255
2. Stamford-Norwalk, CT PMSA	860	15.58	32,410	.414
3. Iowa City, IA MSA	200	15.01	31,230	.309
4. Rockford, IL MSA	390	14.20	29,540	.233
5. San Francisco, CA PMSA	1,390	14.02	29,150	.139

#### 39-9011 Child care workers

Attend to children at schools, businesses, private households, and child care institutions. Perform a variety of tasks, such as dressing, feeding, bathing, and overseeing play.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation					
1.	Social services	233,480	\$7.89	\$16,410	1	15
2.	Educational services	106,630	8.90	18,510	2	6
3.	Amusement & recreation services	23,610	7.34	15,280	3	20
4.	Membership organizations	22,900	7.72	16,050	4	17
5.	Health services	11,180	8.41	17,480	5	11
Top	paying industries for this occupation					
1.	Services, nec	-	13.01	27,050	-	1
2.	Federal, State, and local government	9,260	9.47	19,700	6	2
3.	Museums, botanical, zoological garden	-	9.45	19,650	-	3
4.	Motion pictures	150	9.30	19,340	14	4
5.	Engineering & management services	1,140	9.16	19,040	10	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Vermont	2,180	\$8.12	\$16,890	.739	484
2.	South Dakota	2,300	7.29	15,150	.636	487
3.	Arkansas	6,890	6.62	13,770	.615	586
4.	New York	48,460	9.37	19,480	.579	643
5.	Wyoming	1,290	7.28	15,140	.541	432
Тор ј	paying States for this occupation					
1.	Massachusetts	10,020	9.88	20,550	.310	601
2.	California	35,550	9.68	20,140	.246	647
3.	Connecticut	5,550	9.64	20,040	.333	589
4.	New York	48,460	9.37	19,480	.579	643
5.	Maryland	10,350	9.35	19,440	.426	588

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Redding, CA MSA	840	\$8.74	\$18,180	1.321
2. Lawrence, KS MSA	500	7.62	15,850	1.062
3. Iowa City, IA MSA	620	6.95	14,450	.956
4. San Angelo, TX MSA	390	6.65	13,840	.883
5. Terre Haute, IN MSA	550	8.49	17,660	.830
Top paying MSAs for this occupation				
1. San Francisco, CA PMSA	1,810	14.31	29,750	.181
2. Vallejo-Fairfield-Napa, CA PMSA	560	11.30	23,500	.309
3. San Jose, CA PMSA	2,600	10.80	22,460	.274
4. Stamford-Norwalk, CT PMSA	970	10.25	21,320	.467
5. Pittsfield, MA MSA	170	10.22	21,260	.409

#### 39-9021 Personal and home care aides

Assist elderly or disabled adults with daily living activities at the person's home or in a daytime nonresidential facility. Duties performed at a place of residence may include keeping house (making beds, doing laundry, washing dishes) and preparing meals. May provide meals and supervised activities at nonresidential care facilities. May advise families, the elderly, and disabled on such things as nutrition, cleanliness, and household utilities.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Social services	242,110	\$8.31	\$17,270	1	10
2.	Health services	144,770	7.30	15,180	2	15
3.	Federal, State, and local government	7,710	9.47	19,690	3	5
4.	Personal services	4,390	7.61	15,830	4	14
5.	Business services	3,990	8.69	18,080	5	6
Top	paying industries for this occupation					
1.	Engineering & management services	1,480	16.41	34,130	6	1
2.	Holding and other investment offices	80	10.95	22,780	12	2
3.	Eating and drinking places	210	9.78	20,350	10	3
4.	Membership organizations	300	9.65	20,080	9	4
5.	Federal, State, and local government	7,710	9.47	19,690	3	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Maine	4,730	\$8.40	\$17,480	.798	536
2.	New York	65,190	8.11	16,870	.778	669
3.	Texas	67,470	6.32	13,140	.731	694
4.	North Dakota	1,840	8.00	16,630	.590	455
5.	Kansas	7,640	8.13	16,920	.578	589
Top J	paying States for this occupation					
1.	Alaska	1,160	11.74	24,430	.415	372
2.	Rhode Island	1,730	10.47	21,780	.370	448
3.	Arizona	2,530	10.34	21,500	.113	498
4.	Connecticut	4,770	10.21	21,230	.287	577
5.	Massachusetts	8,000	9.74	20,270	.248	604

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Brownsville-Harlingen-San Benito, TX MSA	4,910	\$6.04	\$12,570	4.486
2. McAllen-Edinburg-Mission, TX MSA	5,220	6.07	12,630	3.141
3. San Angelo, TX MSA	840	6.09	12,660	1.901
4. Wichita Falls, TX MSA	980	6.18	12,850	1.724
5. Missoula, MT MSA	800	7.01	14,590	1.617
Top paying MSAs for this occupation				
1. Stamford-Norwalk, CT PMSA	200	13.58	28,240	.096
2. Tucson, AZ MSA	1,100	12.29	25,570	.336
3. New London-Norwich, CT-RI MSA	600	11.79	24,520	.442
4. Santa Barbara-Santa Maria-Lompoc, CA MSA	420	11.51	23,950	.259
5. Atlantic-Cape May, NJ PMSA	180	11.49	23,900	.099

#### 39-9032 Recreation workers

Conduct recreation activities with groups in public, private, or volunteer agencies or recreation facilities. Organize and promote activities, such as arts and crafts, sports, games, music, dramatics, social recreation, camping, and hobbies, taking into account the needs and interests of individual members.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	,		nago	nage	Talik	
Top i	ndustries by employment for this occupation					
1.	Federal, State, and local government	115,590	\$10.55	\$21,950	1	3
2.	Membership organizations	44,870	8.51	17,710	2	16
3.	Health services	34,380	9.91	20,610	3	7
4.	Social services	27,840	9.48	19,720	4	9
5.	Amusement & recreation services	17,570	8.67	18,030	5	14
Top	paying industries for this occupation					
1.	Printing and publishing	70	13.01	27,060	14	1
2.	Personal services	-	12.72	26,450	-	2
3.	Federal, State, and local government	115,590	10.55	21,950	1	3
4.	Real estate	2,790	10.49	21,830	9	4
5.	General building contractors	50	10.07	20,940	17	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Maryland	11,700	\$9.52	\$19,800	.482	585
2.	Connecticut	6,420	11.10	23,080	.386	553
3.	Hawaii	1,800	11.15	23,200	.336	449
4.	Vermont	940	9.41	19,580	.319	451
5.	Delaware	1,220	8.92	18,560	.303	449
Top J	paying States for this occupation					
1.	Kentucky	-	14.09	29,300	-	335
2.	District of Columbia	670	13.16	27,380	.111	325
3.	Arizona	4,830	11.38	23,680	.217	460
4.	Washington	6,950	11.15	23,200	.269	598
5.	Hawaii	1,800	11.15	23,200	.336	449

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. New London-Norwich, CT-RI MSA	1,330	\$9.53	\$19,820	.979
2. New Haven-Meriden, CT PMSA	1,500	11.82	24,580	.584
3. Bellingham, WA MSA	320	8.68	18,060	.490
4. Santa Rosa, CA PMSA	930	9.97	20,740	.486
5. Raleigh-Durham-Chapel Hill, NC MSA	3,080	9.17	19,070	.466
Top paying MSAs for this occupation				
1. Louisville, KY-IN MSA	-	15.57	32,380	-
2. Champaign-Urbana, IL MSA	140	14.24	29,620	.145
3. Tacoma, WA PMSA	430	14.11	29,350	.186
4. Lansing-East Lansing, MI MSA	130	13.23	27,520	.060
5. Danbury, CT PMSA	150	13.20	27,450	.172

#### 41-1011 First-line supervisors/managers of retail sales workers

Directly supervise sales workers in a retail establishment or department. Duties may include management functions, such as purchasing, budgeting, accounting, and personnel work, in addition to supervisory duties.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maastry		wage	wage	rank <sup>∠</sup>	
Top i	industries by employment for this occupation					
1.	Miscellaneous retail	242,490	\$14.67	\$30,510	1	54
2.	Food stores	203,700	14.35	29,850	2	57
3.	General merchandise stores	161,210	12.96	26,960	3	59
4.	Automotive dealers & service stations	152,100	20.28	42,180	4	27
5.	Apparel and accessory stores	149,500	14.22	29,580	5	58
Top	paying industries for this occupation					
1.	Instruments and related products	620	34.18	71,090	38	1
2.	Insurance carriers	1,640	29.93	62,260	29	2
3.	Security and commodity brokers	2,020	28.70	59,700	25	3
4.	Insurance agents, brokers, & service	1,000	28.54	59,370	35	4
5.	Oil and gas extraction	40	26.99	56,140	61	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	New Hampshire	7,660	\$14.76	\$30,700	1.266	306
2.	Missouri	31,250	14.20	29,540	1.180	372
3.	Maryland	28,480	15.69	32,630	1.173	362
4.	West Virginia	7,860	12.09	25,140	1.141	362
5.	Hawaii	6,000	16.14	33,570	1.120	300
Top J	paying States for this occupation					
1.	Washington	21,780	19.31	40,150	.844	331
2.	New Jersey	33,830	19.11	39,750	.879	327
3.	Connecticut	15,090	18.34	38,140	.906	322
4.	California	132,240	17.97	37,370	.915	363
5.	Colorado	21,130	17.72	36,850	.979	285

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Barnstable-Yarmouth, MA MSA	1,180	\$16.24	\$33,770	1.830
2. Texarkana, TX-Texarkana, AR MSA	810	12.34	25,670	1.599
3. Myrtle Beach, SC MSA	1,510	15.21	31,630	1.592
4. Jacksonville, NC MSA	570	13.93	28,980	1.515
5. Joplin, MO MSA	1,120	13.68	28,450	1.514
Top paying MSAs for this occupation				
1. Seattle-Bellevue-Everett, WA PMSA	10,530	20.88	43,420	.791
2. Bergen-Passaic, NJ PMSA	5,830	20.79	43,230	.923
3. Stamford-Norwalk, CT PMSA	2,060	20.52	42,690	.992
4. Trenton, NJ PMSA	1,640	20.42	42,470	.796
5. Bridgeport, CT PMSA	1,460	20.21	42,030	.780

#### 41-2011 Cashiers

Receive and disburse money in establishments other than financial institutions. Usually involves use of electronic scanners, cash registers, or related equipment. Often involved in processing credit or debit card transactions and validating checks.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Food stores	1,112,080	\$8.10	\$16,840	1	36
2.	Miscellaneous retail	527,250	7.34	15,260	2	51
3.	General merchandise stores	421,660	7.51	15,610	3	48
4.	Automotive dealers & service stations	347,720	7.40	15,390	4	50
5.	Eating and drinking places	276,180	7.05	14,660	5	53
Top p	paying industries for this occupation					
1.	Federal, State, and local government	38,220	13.24	27,540	12	1
2.	Insurance carriers	260	11.76	24,460	42	2
3.	Electric, gas, and sanitary services	2,900	11.40	23,700	28	3
4.	Security and commodity brokers	1,980	11.00	22,890	31	4
5.	Transportation by air	1,420	10.82	22,500	32	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Vermont	10,430	\$7.66	\$15,930	3.538	493
2.	New Hampshire	21,360	7.75	16,120	3.531	542
3.	Nevada	36,440	8.75	18,200	3.522	540
4.	Mississippi	36,860	6.74	14,020	3.384	607
5.	Alabama	57,960	6.75	14,040	3.171	630
Top J	paying States for this occupation					
1.	District of Columbia	6,510	9.83	20,450	1.077	378
2.	Washington	71,830	9.68	20,140	2.783	639
3.	California	364,420	9.46	19,670	2.523	652
4.	Alaska	7,100	9.41	19,560	2.539	405
5.	Oregon	33,010	9.18	19,100	2.118	594

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Myrtle Beach, SC MSA	5,000	\$7.28	\$15,130	5.271
2. Auburn-Opelika, AL MSA	1,760	6.52	13,550	4.323
3. Danbury, CT PMSA	3,650	8.73	18,160	4.180
4. Monmouth-Ocean, NJ PMSA	15,950	8.08	16,800	4.174
5. Decatur, AL MSA	2,280	6.98	14,510	4.087
Top paying MSAs for this occupation				
1. San Francisco, CA PMSA	22,590	10.64	22,130	2.265
2. Santa Rosa, CA PMSA	5,630	10.54	21,920	2.942
3. Seattle-Bellevue-Everett, WA PMSA	32,470	10.22	21,250	2.438
4. San Luis Obispo-Atascadero-Paso Robles, CA MSA	3,110	10.03	20,860	3.060
5. Sacramento, CA PMSA	19,180	9.80	20,380	2.649

#### 41-2031 Retail salespersons

Sell merchandise, such as furniture, motor vehicles, appliances, or apparel in a retail establishment.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation					
1.	General merchandise stores	968,330	\$8.42	\$17,520	1	60
2.	Miscellaneous retail	789,320	8.61	17,910	2	56
3.	Apparel and accessory stores	683,990	8.10	16,840	3	62
4.	Furniture and homefurnishings stores	372,400	11.65	24,220	4	33
5.	Automotive dealers & service stations	354,070	17.97	37,380	5	8
Top	paying industries for this occupation					
1.	Transportation equipment	560	21.09	43,870	44	1
2.	Oil and gas extraction	-	21.00	43,690	-	2
3.	Local and interurban passenger transit	60	19.67	40,900	61	3
4.	Insurance carriers	160	19.58	40,720	55	4
5.	Nonmetallic minerals, except fuels	50	19.29	40,120	62	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	New Hampshire	25,830	\$10.15	\$21,110	4.270	486
2.	Hawaii	22,570	9.85	20,490	4.214	481
3.	Colorado	82,620	11.07	23,030	3.826	545
4.	Delaware	14,930	10.15	21,110	3.714	418
5.	Montana	14,030	9.11	18,960	3.658	458
Top J	paying States for this occupation					
1.	Washington	72,510	12.05	25,060	2.810	567
2.	Alaska	8,100	11.90	24,750	2.897	369
3.	Connecticut	52,060	11.27	23,450	3.127	549
4.	Colorado	82,620	11.07	23,030	3.826	545
5.	Massachusetts	101,050	10.87	22,610	3.128	576

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Barnstable-Yarmouth, MA MSA	3,660	\$10.45	\$21,750	5.675
2. Nashua, NH PMSA	5,100	10.35	21,520	5.492
3. Punta Gorda, FL MSA	1,970	10.49	21,820	5.165
4. Danbury, CT PMSA	4,230	11.45	23,810	4.844
5. Rapid City, SD MSA	2,330	9.15	19,030	4.837
Top paying MSAs for this occupation				
1. Stamford-Norwalk, CT PMSA	7,770	13.73	28,570	3.740
2. Tacoma, WA PMSA	6,090	12.84	26,700	2.638
3. Seattle-Bellevue-Everett, WA PMSA	38,200	12.70	26,420	2.868
4. Anchorage, AK MSA	4,630	12.57	26,140	3.498
5. Olympia, WA PMSA	2,060	12.35	25,690	2.461

# <u>41-4012</u> Sales representatives, wholesale and manufacturing, except <u>technical and scientific products</u>

Sell goods for wholesalers or manufacturers to businesses or groups of individuals. Work requires substantial knowledge of items sold.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
			hage	nago	Tallk	
Top i	ndustries by employment for this occupation					
1.	Wholesale tradedurable goods	491,850	\$23.78	\$49,470	1	28
2.	Wholesale tradenondurable goods	368,210	22.93	47,690	2	39
3.	Business services	53,680	23.21	48,280	3	34
4.	Special trade contractors	37,380	22.37	46,530	4	44
5.	Printing and publishing	36,940	26.11	54,300	5	10
Top	paying industries for this occupation					
1.	Paper and allied products	11,350	29.38	61,100	16	1
2.	Holding and other investment offices	960	28.84	59,980	47	2
3.	Oil and gas extraction	900	28.80	59,910	48	3
4.	Real estate	1,730	28.48	59,250	39	4
5.	Coal mining	50	27.96	58,150	65	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	New York	112,180	\$26.49	\$55,090	1.340	160
2.	Georgia	50,100	23.51	48,910	1.306	141
3.	Washington	31,980	22.49	46,780	1.239	224
4.	Alabama	22,380	22.22	46,230	1.224	124
5.	Wisconsin	31,950	23.67	49,240	1.187	119
Top p	paying States for this occupation					
1.	Connecticut	17,950	28.79	59,880	1.078	110
2.	New Jersey	40,880	27.07	56,310	1.062	159
3.	New York	112,180	26.49	55,090	1.340	160
4.	Minnesota	30,040	26.42	54,960	1.150	109
5.	Massachusetts	30,910	25.98	54,040	.957	139

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Billings, MT MSA	1,300	\$18.18	\$37,820	1.978
2. Nassau-Suffolk, NY PMSA	21,510	27.06	56,280	1.816
3. Victoria, TX MSA	600	20.06	41,720	1.669
4. Albany, GA MSA	920	20.50	42,640	1.648
5. Orange County, CA PMSA	22,900	26.68	55,500	1.628
Top paying MSAs for this occupation				
1. Kenosha, WI PMSA	520	36.66	76,250	1.026
2. Stamford-Norwalk, CT PMSA	2,630	34.38	71,510	1.266
3. Jersey City, NJ PMSA	2,480	32.64	67,890	.996
4. San Jose, CA PMSA	8,820	30.53	63,510	.928
5. Salinas, CA MSA	1,220	30.49	63,430	.802

#### 41-9041 Telemarketers

Solicit orders for goods or services over the telephone.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Business services	227,760	\$9.87	\$20,520	1	40
2.	Miscellaneous retail	31,710	10.24	21,310	2	35
3.	Communication	24,390	11.93	24,820	3	21
4.	Engineering & management services	18,380	10.68	22,220	4	32
5.	Printing and publishing	17,170	10.89	22,650	5	29
Top J	paying industries for this occupation					
1.	Oil and gas extraction	30	21.74	45,220	51	1
2.	Transportation by air	230	16.88	35,100	40	2
3.	Federal, State, and local government	190	16.21	33,710	42	3
4.	Rubber and misc. plastics products	130	15.91	33,100	45	4
5.	Wholesale tradedurable goods	16,470	15.22	31,650	7	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Iowa	11,150	\$8.32	\$17,310	.786	580
2.	West Virginia	5,410	8.65	17,990	.785	514
3.	North Dakota	2,210	8.24	17,150	.709	447
4.	Nebraska	5,660	8.72	18,140	.642	529
5.	Utah	6,510	10.51	21,860	.622	497
Тор ј	paying States for this occupation					
1.	Massachusetts	9,460	13.69	28,470	.293	482
2.	Connecticut	2,870	13.15	27,360	.172	484
3.	Vermont	280	13.05	27,140	.095	318
4.	California	39,650	11.99	24,940	.274	562
5.	Nevada	2,630	11.86	24,670	.254	442

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Cedar Rapids, IA MSA	2,820	\$9.60	\$19,970	2.324
2. Casper, WY MSA	650	6.62	13,780	1.996
3. Las Cruces, NM MSA	760	6.04	12,570	1.357
4. San Antonio, TX	9,280	8.07	16,780	1.323
5. Charleston, WV MSA	1,650	9.53	19,820	1.313
Top paying MSAs for this occupation				
1. Stamford-Norwalk, CT PMSA	490	22.33	46,440	.236
2. San Jose, CA PMSA	1,710	20.19	42,000	.180
<ol><li>Vallejo-Fairfield-Napa, CA PMSA</li></ol>	50	18.58	38,650	.028
4. Lowell, MA-NH PMSA	280	17.44	36,280	.225
5. New Orleans, LA MSA	1,560	15.84	32,950	.260

#### 43-3031 Bookkeeping, accounting, and auditing clerks

Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
			waye	waye	rank-	
Top i	industries by employment for this occupation					
1.	Business services	125,120	\$13.11	\$27,260	1	50
2.	Engineering & management services	124,670	14.06	29,250	2	26
3.	Health services	102,590	13.47	28,010	3	42
4.	Federal, State, and local government	101,680	13.90	28,910	4	34
5.	Wholesale tradedurable goods	100,870	13.58	28,240	5	41
Top	paying industries for this occupation					
1.	Security and commodity brokers	14,370	17.50	36,410	33	1
2.	Railroad transportation	1,340	16.26	33,830	64	2
3.	Metal mining	220	15.74	32,730	69	3
4.	Pipelines, except natural gas	100	15.63	32,500	70	4
5.	Electric, gas, and sanitary services	10,130	15.50	32,230	39	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
States	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	South Dakota	7,850	\$10.25	\$21,310	2.169	377
2.	Vermont	6,110	12.84	26,720	2.072	330
3.	North Dakota	5,700	10.31	21,440	1.828	376
4.	Montana	6,990	10.52	21,870	1.823	395
5.	Wyoming	4,220	10.68	22,220	1.768	325
Top p	paying States for this occupation					
1.	District of Columbia	4,550	17.67	36,760	.752	244
2.	Connecticut	25,730	15.83	32,920	1.546	398
3.	Alaska	4,350	15.46	32,150	1.556	288
4.	California	191,680	15.32	31,870	1.327	452
5.	New Jersey	61,380	15.26	31,750	1.595	430

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Rapid City, SD MSA	1,080	\$10.10	\$21,020	2.242
2. Bellingham, WA MSA	1,430	13.23	27,520	2.192
3. Missoula, MT MSA	1,040	10.79	22,430	2.103
4. Chico-Paradise, CA MSA	1,390	12.25	25,480	1.933
5. Eau Claire, WI MSA	1,430	11.43	23,780	1.930
Top paying MSAs for this occupation				
1. San Francisco, CA PMSA	13,960	18.48	38,430	1.400
2. Stamford-Norwalk, CT PMSA	3,860	18.24	37,930	1.858
3. San Jose, CA PMSA	10,530	17.89	37,200	1.108
4. Oakland, CA PMSA	12,240	17.26	35,890	1.226
5. New York, NY PMSA	55,060	16.46	34,230	1.357

#### 43-4051 Customer service representatives

Interact with customers to provide information in response to inquiries about products and services and to handle and resolve complaints.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment	Wage rank <sup>3</sup>
Top	industries by employment for this occupation				Turik	
1.	Business services	310,590	\$12.05	\$25,070	1	49
2.	Communications	167,530	16.32	33,950	2	7
3.	Depository institutions	134,710	12.17	25,310	3	47
4.	Insurance carriers	130,180	13.92	28,950	4	30
5.	Insurance agents, brokers, & service	109,540	13.66	28,410	5	36
Top	paying industries for this occupation					
1.	Pipelines, except natural gas	40	19.06	39,640	67	1
2.	Railroad transportation	3,230	17.93	37,290	52	2
3.	Transportation equipment	5,100	16.95	35,260	42	3
4.	Electric, gas, and sanitary services	46,580	16.81	34,970	15	4
5.	Instruments and related products	11,840	16.63	34,600	26	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
S	tate		wage	wage	State	within State <sup>5</sup>
-					employment	
States with the highest concentra	tion of workers in this occupation <sup>4</sup>					
1. South Dakota		8,130	\$10.51	\$21,870	2.247	365
2. Nebraska		18,760	11.38	23,680	2.129	427
3. Delaware		8,370	14.02	29,150	2.082	303
4. Utah		21,340	11.28	23,460	2.038	464
5. Texas		182,260	12.29	25,560	1.975	466
Top paying States for this occupa	ntion					
1. California		194,970	15.46	32,150	1.350	445
2. District of Columbia		3,790	15.44	32,110	.627	284
3. Massachusetts		51,350	15.21	31,640	1.590	419
4. New York		116,600	15.17	31,550	1.392	441
5. Alaska		2,000	15.01	31,210	.715	300

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Sioux Falls, SD MSA	5,020	\$10.83	\$22,540	4.437
2. Hagerstown, MD PMSA	2,590	10.35	21,530	4.085
3. Lubbock, TX MSA	3,860	9.41	19,580	3.288
4. Jacksonville, FL MSA	17,390	11.88	24,710	3.160
5. Dallas, TX PMSA	57,990	13.62	28,320	2.989
Top paying MSAs for this occupation				
1. San Jose, CA PMSA	13,320	22.28	46,340	1.401
2. San Francisco, CA PMSA	17,350	18.48	38,440	1.740
3. Santa Cruz-Watsonville, CA PMSA	1,630	16.78	34,900	1.730
4. New York, NY PMSA	55,790	16.61	34,560	1.375
5. Middlesex-Somerset-Hunterdon, NJ PMSA	8,540	16.04	33,360	1.360

#### 43-5081 Stock clerks and order fillers

Receive, store, and issue sales floor merchandise, materials, equipment, and other items from stockroom, warehouse, or storage yard to fill shelves, racks, tables, or customers' orders. May mark prices on merchandise and set up sales displays.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maasay		wage	wage	rank <sup>∠</sup>	
Top	industries by employment for this occupation					
1.	Food stores	472,980	\$9.12	\$18,970	1	64
2.	General merchandise stores	304,850	8.48	17,630	2	66
3.	Wholesale tradenondurable goods	136,210	10.79	22,450	3	48
4.	Wholesale tradedurable goods	114,490	11.41	23,730	4	39
5.	Federal, State, and local government	111,570	17.83	37,100	5	2
Top	paying industries for this occupation					
1.	Electric, gas, and sanitary services	5,080	19.25	40,050	28	1
2.	Federal, State, and local government	111,570	17.83	37,100	5	2
3.	Communications	5,050	17.44	36,280	29	3
4.	Oil and gas extraction	840	17.36	36,100	49	4
5.	Metal mining	160	17.35	36,090	67	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Florida	118,030	\$9.46	\$19,670	1.672	605
2.	Tennessee	42,380	9.49	19,740	1.639	590
3.	Mississippi	17,490	8.70	18,090	1.606	551
4.	Georgia	57,540	10.20	21,220	1.499	568
5.	New Jersey	57,620	11.50	23,920	1.497	559
Top J	paying States for this occupation					
1.	District of Columbia	2,320	12.93	26,890	.384	329
2.	Alaska	3,380	12.78	26,580	1.209	353
3.	Colorado	22,280	11.69	24,310	1.032	531
4.	Washington	25,140	11.64	24,220	.974	583
5.	Delaware	5,950	11.61	24,150	1.480	380

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Brockton, MA PMSA	2,160	\$10.79	\$22,450	2.204
2. Sarasota-Bradenton, FL MSA	6,080	9.37	19,490	2.181
3. Roanoke, VA MSA	3,030	9.47	19,700	2.167
4. Erie, PA MSA	2,610	12.71	26,430	2.044
5. Jacksonville, FL MSA	11,190	9.83	20,450	2.033
Top paying MSAs for this occupation				
1. Reno, NV MSA	3,060	13.02	27,070	1.573
2. San Francisco, CA PMSA	9,680	12.98	27,000	.971
3. Stamford-Norwalk, CT PMSA	2,270	12.96	26,960	1.093
4. Anchorage, AK MSA	1,390	12.82	26,670	1.050
5. Yolo, CA PMSA	1,610	12.80	26,630	1.807

#### 43-6014 Secretaries, except legal, medical, and executive

Perform routine clerical and administrative functions such as drafting correspondence, scheduling appointments, organizing and maintaining paper and electronic files, or providing information to callers.

	la du otra (	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	industry		wage	wage	rank <sup>2</sup>	-
Top i	ndustries by employment for this occupation					
1.	Educational services	331,660	\$12.41	\$25,810	1	29
2.	Federal, State, and local government	184,000	14.27	29,690	2	12
3.	Health services	175,670	12.14	25,240	3	33
4.	Business services	148,980	12.07	25,110	4	37
5.	Engineering & management services	99,640	13.10	27,260	5	21
Top	paying industries for this occupation					
1.	Railroad transportation	1,160	17.36	36,110	63	1
2.	Metal mining	130	15.67	32,600	68	2
3.	Chemicals and allied products	9,310	15.52	32,280	33	3
4.	Security and commodity brokers	16,670	14.88	30,950	19	4
5.	Instruments and related products	7,510	14.82	30,820	38	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	District of Columbia	14,580	\$16.76	\$34,870	2.411	260
2.	Louisiana	42,030	10.11	21,030	2.275	519
3.	New Mexico	14,810	10.85	22,580	2.053	418
4.	Nebraska	17,990	10.37	21,570	2.041	476
5.	Wyoming	4,530	9.99	20,790	1.898	357
Top J	paying States for this occupation					
1.	District of Columbia	14,580	16.76	34,870	2.411	260
2.	New Jersey	72,100	15.52	32,270	1.874	420
3.	Hawaii	5,990	14.60	30,360	1.118	354
4.	Alaska	3,760	14.50	30,150	1.345	311
5.	Connecticut	28,430	14.40	29,950	1.708	447

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Trenton, NJ PMSA	5,810	\$15.99	\$33,270	2.819
2. Monroe, LA MSA	1,930	9.59	19,940	2.703
3. Iowa City, IA MSA	1,660	14.59	30,350	2.561
4. Houma, LA MSA	1,990	10.33	21,480	2.549
5. Cheyenne, WY MSA	870	10.73	22,330	2.459
Top paying MSAs for this occupation				
1. San Jose, CA PMSA	8,720	16.97	35,290	.917
2. San Francisco, CA PMSA	9,900	16.81	34,960	.993
3. Middlesex-Somerset-Hunterdon, NJ PMSA	12,080	16.22	33,730	1.923
4. Oakland, CA PMSA	9,400	16.10	33,490	.941
5. Trenton, NJ PMSA	5,810	15.99	33,270	2.819

#### 43-9061 Office clerks, general

Perform duties too varied and diverse to be classified in any specific office clerical occupation, requiring limited knowledge of office management systems and procedures. Clerical duties may be assigned in accordance with the office procedures of individual establishments and may include a combination of answering telephones, bookkeeping, typing or word processing, stenography, office machine operation, and filing.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maastry		wage	wage	rank <sup>∠</sup>	
Top i	ndustries by employment for this occupation					
1.	Business services	337,810	\$10.37	\$21,580	1	51
2.	Federal, State, and local government	309,620	12.32	25,630	2	10
3.	Health services	286,550	10.79	22,450	3	42
4.	Educational services	281,460	10.97	22,810	4	39
5.	Wholesale tradedurable goods	123,380	11.33	23,560	5	27
Top	paying industries for this occupation					
1.	Railroad transportation	10,700	16.46	34,240	44	1
2.	Communications	41,190	15.19	31,590	18	2
3.	Electric, gas, and sanitary services	18,130	14.60	30,370	32	3
4.	Transportation equipment	12,920	14.49	30,130	38	4
5.	Metal mining	210	14.23	29,600	68	5

	State	Employment	Hourly mean wage	Annual mean wage	Percent of State	Wage rank within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation $^4$					
1.	New York	241,000	\$11.79	\$24,520	2.878	570
2.	Minnesota	75,040	11.65	24,220	2.871	553
3.	Delaware	10,570	11.16	23,210	2.629	390
4.	Colorado	56,660	12.08	25,130	2.624	512
5.	Missouri	69,200	10.68	22,220	2.613	538
Top J	paying States for this occupation					
1.	District of Columbia	10,460	13.24	27,530	1.730	324
2.	Alaska	6,440	13.02	27,090	2.303	347
3.	Massachusetts	58,140	12.62	26,260	1.800	518
4.	Connecticut	31,460	12.47	25,940	1.890	508
5.	Washington	58,890	12.19	25,350	2.282	562

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Yolo, CA PMSA	4,320	\$12.15	\$25,260	4.849
2. Olympia, WA PMSA	3,680	11.82	24,580	4.396
3. Gainesville, FL MSA	4,880	11.23	23,370	4.108
<ol><li>Bryan-College Station, TX MSA</li></ol>	2,930	8.19	17,040	3.846
5. Iowa City, IA MSA	2,370	13.24	27,540	3.656
Top paying MSAs for this occupation				
1. Anchorage, AK MSA	3,340	13.48	28,030	2.523
2. Iowa City, IA MSA	2,370	13.24	27,540	3.656
3. Stamford-Norwalk, CT PMSA	4,590	13.20	27,460	2.209
4. Danbury, CT PMSA	1,170	13.20	27,460	1.340
5. Tallahassee, FL MSA	4,990	13.18	27,420	3.242

#### 45-2041 Graders and sorters, agricultural products

Grade, sort, or classify unprocessed food and other agricultural products by size, weight, color, or condition.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	<b>,</b>		wage	wage	rank	
Top i	industries by employment for this occupation					
1.	Agricultural services	18,940	\$7.10	\$14,770	1	13
2.	Wholesale tradenondurable goods	18,920	8.53	17,740	2	10
3.	Food and kindred products	9,810	8.87	18,450	3	8
4.	Food stores	4,310	9.59	19,950	4	6
5.	Wholesale tradedurable goods	420	11.13	23,160	5	3
Top	paying industries for this occupation					
1.	Federal, State, and local government	270	12.83	26,690	7	1
2.	Lumber and wood products	260	11.43	23,770	8	2
3.	Wholesale tradedurable goods	420	11.13	23,160	5	3
4.	Engineering & management services	-	10.00	20,800	-	4
5.	Building materials & garden supplies	130	9.68	20,140	9	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Idaho	2,140	\$6.93	\$14,410	.383	523
2.	Washington	4,240	8.41	17,500	.164	667
3.	South Dakota	530	9.37	19,490	.146	412
4.	North Dakota	430	10.63	22,110	.138	364
5.	Vermont	320	8.91	18,530	.109	464
Top p	paying States for this occupation					
1.	New Hampshire	-	11.91	24,770	-	421
2.	Alaska	70	11.83	24,610	.025	370
3.	Kansas	180	11.21	23,310	.014	474
4.	North Dakota	430	10.63	22,110	.138	364
5.	Iowa	740	10.56	21,960	.052	500

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Yakima, WA MSA	1,430	\$8.09	\$16,820	1.891
2. Bakersfield, CA MSA	3,410	7.01	14,590	1.473
3. Visalia-Tulare-Porterville, CA MSA	1,480	7.58	15,780	1.210
4. Salinas, CA MSA	1,140	7.96	16,550	.749
5. Fresno, CA MSA	2,270	7.15	14,880	.676
Top paying MSAs for this occupation				
1. Raleigh-Durham-Chapel Hill, NC MSA	50	13.98	29,070	.008
2. Hickory-Morganton-Lenoir, NC MSA	40	13.54	28,170	.024
3. Tulsa, OK MSA	30	13.18	27,410	.008
4. Seattle-Bellevue-Everett, WA PMSA	270	12.50	26,010	.020
5. Columbia, SC MSA	-	12.30	25,590	-

#### 45-2091 Agricultural equipment operators

Drive and control farm equipment to till soil and to plant, cultivate, and harvest crops. May perform tasks, such as crop baling or hay bucking. May operate stationary equipment to perform post-harvest tasks, such as husking, shelling, threshing, and ginning.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maastry		wage	wage	rank∠	
Top i	ndustries by employment for this occupation					
1.	Agricultural services	19,760	\$8.35	\$17,360	1	11
2.	Wholesale tradenondurable goods	2,980	10.89	22,650	2	5
3.	Food and kindred products	2,620	9.94	20,680	3	8
4.	Trucking and warehousing	250	9.87	20,530	4	9
5.	Educational services	170	11.82	24,590	5	4
Top	paying industries for this occupation					
1.	Federal, State, and local government	80	17.17	35,700	8	1
2.	Real estate	30	12.77	26,570	10	2
3.	Chemicals and allied products	150	12.77	26,550	6	3
4.	Educational services	170	11.82	24,590	5	4
5.	Wholesale tradenondurable goods	2,980	10.89	22,650	2	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Arkansas	660	\$8.17	\$17,000	.059	540
2.	Iowa	830	10.86	22,600	.059	490
3.	California	7,990	9.20	19,130	.055	661
4.	Texas	4,670	6.71	13,950	.051	688
5.	Arizona	1,070	8.12	16,890	.048	574
Top J	paying States for this occupation					
1.	Maryland	40	16.06	33,390	.002	350
2.	Indiana	-	11.97	24,890	-	494
3.	Michigan	240	11.88	24,710	.005	563
4.	Kansas	390	11.64	24,210	.030	454
5.	Vermont	40	11.61	24,160	.014	379

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Yuma, AZ MSA	390	\$7.95	\$16,550	.770
2. Fresno, CA MSA	2,160	7.82	16,260	.643
3. Bakersfield, CA MSA	960	8.46	17,610	.415
4. Pine Bluff, AR MSA	130	6.07	12,630	.379
5. Salinas, CA MSA	550	11.03	22,950	.362
Top paying MSAs for this occupation				
1. Montgomery, AL MSA	-	17.04	35,430	-
2. Peoria-Pekin, IL MSA	30	15.20	31,620	.018
3. Washington, DC-MD-VA-WV PMSA	60	13.85	28,820	.002
4. St. Cloud, MN MSA	40	13.64	28,360	.044
5. Appleton-Oshkosh-Neenah, WI MSA	-	13.53	28,150	-

#### 45-2092 Farmworkers and laborers, crop, nursery, and greenhouse

Manually plant, cultivate, and harvest vegetables, fruits, nuts, horticultural specialties, and field crops. Use hand tools, such as shovels, trowels, hoes, tampers, pruning hooks, shears, and knives. Duties may include tilling soil and applying fertilizers; transplanting, weeding, thinning, or pruning crops; applying pesticides; cleaning, grading, sorting, packing and loading harvested products. May construct trellises, repair fences and farm buildings, or participate in irrigation activities.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	<b>,</b>		hago	nago	Talik	
Top i	ndustries by employment for this occupation					
1.	Agricultural services	169,520	\$7.39	\$15,370	1	23
2.	Wholesale tradenondurable goods	12,190	7.98	16,590	2	20
3.	Business services	9,700	7.25	15,070	3	24
4.	Building materials & garden supplies	6,110	8.22	17,090	4	18
5.	Food and kindred products	3,260	9.19	19,120	5	11
Top	paying industries for this occupation					
1.	Federal, State, and local government	1,000	13.13	27,320	9	1
2.	Hotels and other lodging places	-	10.86	22,580	-	2
3.	Amusement & recreation services	-	10.55	21,940	-	3
4.	Educational services	1,720	10.36	21,560	8	4
5.	Museums, botanical, zoological garden	170	10.19	21,200	12	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	California	122,850	\$7.51	\$15,630	.850	697
2.	New Mexico	4,650	6.16	12,820	.645	573
3.	Arizona	11,050	6.70	13,930	.495	603
4.	Florida	21,050	7.20	14,980	.298	670
5.	Oregon	3,330	7.83	16,290	.214	623
Top p	paying States for this occupation					
1.	Alaska	40	10.78	22,430	.014	392
2.	Delaware	80	10.51	21,860	.020	405
3.	Rhode Island	200	10.41	21,650	.043	451
4.	Massachusetts	410	10.25	21,310	.013	589
5.	Wyoming	170	10.23	21,290	.071	351

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Yuma, AZ MSA	7,150	\$6.60	\$13,730	14.121
2. Salinas, CA MSA	19,500	8.14	16,940	12.819
3. Visalia-Tulare-Porterville, CA MSA	13,360	7.66	15,940	10.926
4. Bakersfield, CA MSA	20,470	6.96	14,470	8.843
5. Fresno, CA MSA	23,260	7.01	14,580	6.923
Top paying MSAs for this occupation				
1. San Francisco, CA PMSA	250	12.35	25,690	.025
2. Decatur, IL MSA	-	12.19	25,350	-
3. Wilmington-Newark, DE-MD PMSA	30	12.16	25,300	.010
4. Dayton-Springfield, OH MSA	60	11.97	24,900	.013
5. Harrisburg-Lebanon-Carlisle, PA MSA	50	11.58	24,080	.014

#### 45-2093 Farmworkers, farm and ranch animals

Attend to live farm, ranch, or aquacultural animals that may include cattle, sheep, swine, goats, horses and other equines, poultry, finfish, shellfish, and bees. Attend to animals produced for animal products, such as meat, fur, skins, feathers, eggs, milk, and honey. Duties may include feeding, watering, herding, grazing, castrating, branding, de-beaking, weighing, catching, and loading animals. May maintain records on animals; examine animals to detect diseases and injuries; assist in birth deliveries; and administer medications, vaccinations, or insecticides as appropriate. May clean and maintain animal housing areas. Include workers who shear wool from sheep, and collect eggs in hatcheries.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Agricultural services	11,990	\$8.31	\$17,280	1	17
2.	Wholesale tradenondurable goods	7,970	7.60	15,810	2	20
3.	Food and kindred products	7,030	9.44	19,640	3	5
4.	Amusement & recreation services	2,560	8.77	18,250	4	14
5.	Educational services	880	10.03	20,850	5	4
Top p	paying industries for this occupation					
1.	Federal, State, and local government	530	14.05	29,230	6	1
2.	Trucking and warehousing	-	10.50	21,830	-	2
3.	Chemicals and allied products	30	10.26	21,330	14	3
4.	Educational services	880	10.03	20,850	5	4
5.	Food and kindred products	7,030	9.44	19,640	3	5

	State	Employment	Hourly mean wage	Annual mean wage	Percent of State employment	Wage rank within State <sup>5</sup>
State.	s with the highest concentration of workers in this occupation $^4$					
1.	Kentucky	2,740	\$8.87	\$18,440	.159	570
2.	Arkansas	1,660	8.86	18,420	.148	512
3.	Montana	510	7.85	16,330	.133	492
4.	South Carolina	1,910	9.45	19,660	.109	564
5.	Oklahoma	1,210	7.72	16,060	.083	601
Top p	paying States for this occupation					
1.	Vermont	40	12.46	25,920	.014	351
2.	Connecticut	-	11.15	23,190	-	551
3.	Missouri	1,080	10.11	21,020	.041	558
4.	Washington	380	9.87	20,520	.015	637
5.	Maryland	360	9.82	20,420	.015	579

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Lexington, KY MSA	1,820	\$8.78	\$18,260	.712
2. Fresno, CA MSA	1,200	6.92	14,390	.357
3. Billings, MT MSA	110	7.72	16,060	.167
4. Ocala, FL MSA	130	8.98	18,690	.159
5. Modesto, CA MSA	230	7.45	15,500	.149
Top paying MSAs for this occupation				
1. Memphis, TN-AR-MS MSA	60	12.32	25,620	.011
2. Stamford-Norwalk, CT PMSA	-	11.80	24,550	-
3. Middlesex-Somerset-Hunterdon, NJ PMSA	60	11.64	24,200	.010
4. Washington, DC-MD-VA-WV PMSA	310	11.43	23,780	.012
5. San Francisco, CA PMSA	170	11.39	23,690	.017

#### 45-4022 Logging equipment operators

Drive logging tractor or wheeled vehicle equipped with one or more accessories, such as bulldozer blade, frontal shear, grapple, logging arch, cable winches, hoisting rack, or crane boom, to fell tree; to skid, load, unload, or stack logs; or to pull stumps or clear brush.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation					
1.	Lumber and wood products	29,230	\$13.02	\$27,090	1	4
2.	Trucking and warehousing	660	14.92	31,040	2	3
3.	Paper and allied products	220	18.77	39,040	3	1
4.	Wholesale tradedurable goods	160	11.10	23,090	4	6
5.	Agricultural services	150	16.53	34,390	5	2
Top	paying industries for this occupation					
1.	Paper and allied products	220	18.77	39,040	3	1
2.	Agricultural services	150	16.53	34,390	5	2
3.	Trucking and warehousing	660	14.92	31,040	2	3
4.	Lumber and wood products	29,230	13.02	27,090	1	4
5.	Furniture and fixtures	30	11.52	23,960	6	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Maine	1,330	\$12.05	\$25,060	.224	394
2.	Mississippi	1,840	11.95	24,860	.169	379
3.	Arkansas	1,820	9.94	20,670	.162	470
4.	Idaho	850	18.49	38,460	.152	163
5.	Alabama	2,670	12.08	25,120	.146	430
Top J	paying States for this occupation					
1.	Alaska	160	19.69	40,960	.057	206
2.	Idaho	850	18.49	38,460	.152	163
3.	Washington	1,990	17.51	36,420	.077	368
4.	Colorado	50	16.84	35,030	.002	316
5.	Oregon	1,830	16.66	34,650	.117	331

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Redding, CA MSA	290	\$15.25	\$31,720	.456
2. Olympia, WA PMSA	160	17.05	35,450	.191
3. Eugene-Springfield, OR MSA	250	17.54	36,480	.184
4. Jacksonville, NC MSA	60	11.71	24,360	.160
5. Florence, AL MSA	70	17.00	35,360	.139
Top paying MSAs for this occupation				
1. Salem, OR PMSA	60	19.90	41,380	.045
2. Tacoma, WA PMSA	150	19.32	40,180	.065
3. Yakima, WA MSA	100	19.00	39,520	.132
4. Eugene-Springfield, OR MSA	250	17.54	36,480	.184
5. Yuba City, CA MSA	50	17.24	35,850	.130

# Table 2. Employment and Wages for Selected Occupations by Industry, State, and MSA,2001 - Continued47-1011 First-line supervisors/managers of construction trades andextraction workers

Directly supervise and coordinate activities of construction or extraction workers.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation					
1.	Special trade contractors	186,030	\$24.15	\$50,230	1	23
2.	General building contractors	132,740	24.02	49,950	2	24
3.	Heavy construction, ex. building	65,620	23.07	47,980	3	33
4.	Federal, State, and local government	47,900	21.24	44,180	4	47
5.	Oil and gas extraction	12,980	24.70	51,380	5	22
Top	paying industries for this occupation					
1.	Printing and publishing	60	30.71	63,880	51	1
2.	Local and interurban passenger transit	90	30.29	63,000	49	2
3.	Hotels and other lodging places	120	29.01	60,340	43	3
4.	Paper and allied products	140	28.80	59,900	42	4
5.	Coal mining	4,860	28.72	59,740	10	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Wyoming	1,980	\$22.98	\$47,790	.830	70
2.	Colorado	13,820	24.81	51,600	.640	123
3.	Louisiana	11,350	19.61	40,800	.614	178
4.	Arizona	13,490	22.63	47,060	.605	120
5.	Virginia	20,390	22.63	47,080	.600	175
Top p	paying States for this occupation					
1.	Alaska	1,290	32.18	66,940	.461	42
2.	New Jersey	12,280	29.99	62,380	.319	109
3.	New York	31,890	28.99	60,310	.381	126
4.	Washington	11,840	28.68	59,650	.459	110
5.	California	44,090	28.51	59,300	.305	144

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Fort Myers-Cape Coral, FL MSA	1,920	\$21.56	\$44,830	1.106
2. Lafayette, LA MSA	1,780	19.00	39,530	1.093
3. Brazoria, TX PMSA	670	21.49	44,700	.903
4. Houma, LA MSA	690	19.16	39,840	.884
5. Naples, FL MSA	930	22.65	47,120	.865
Top paying MSAs for this occupation				
1. New York, NY PMSA	13,610	34.17	71,080	.336
2. San Jose, CA PMSA	2,490	33.27	69,210	.262
3. Anchorage, AK MSA	470	33.26	69,180	.355
4. Bergen-Passaic, NJ PMSA	1,830	32.97	68,570	.290
5. Newark, NJ PMSA	2,790	31.81	66,170	.290

#### 47-2031 Carpenters

Construct, erect, install, or repair structures and fixtures made of wood, such as concrete forms; building frameworks, including partitions, joists, studding, and rafters; wood stairways, window and door frames, and hardwood floors. May also install cabinets, siding, drywall and batt or roll insulation. Include brattice builders who build doors or brattices (ventilation walls or partitions) in underground passageways to control the proper circulation of air through the passageways and to the working places.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation					
1.	General building contractors	394,930	\$17.62	\$36,640	1	20
2.	Special trade contractors	260,370	17.84	37,110	2	17
3.	Heavy construction, ex. building	31,500	19.12	39,760	3	8
4.	Lumber and wood products	28,790	13.16	27,370	4	56
5.	Business services	28,480	15.12	31,440	5	42
Top	paying industries for this occupation					
1.	Electric, gas, and sanitary services	570	22.44	46,670	27	1
2.	Communications	80	21.34	44,390	58	2
3.	Nonmetallic minerals, except fuels	130	20.65	42,950	50	3
4.	Trucking and warehousing	720	20.59	42,820	26	4
5.	Petroleum and coal products	270	20.23	42,070	38	5

	_	Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Nevada	13,750	\$20.04	\$41,690	1.329	211
2.	Utah	12,750	15.35	31,920	1.218	307
3.	Alaska	3,240	22.54	46,890	1.159	166
4.	Arizona	24,340	15.52	32,280	1.091	299
5.	Montana	3,990	14.48	30,120	1.040	253
Top	paying States for this occupation					
1.	Hawaii	3,280	24.69	51,350	.612	122
2.	New Jersey	19,110	22.71	47,230	.497	245
3.	Alaska	3,240	22.54	46,890	1.159	166
4.	Illinois	39,570	22.07	45,920	.675	208
5.	Massachusetts	18,420	20.89	43,460	.570	253

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Vallejo-Fairfield-Napa, CA PMSA	3,500	\$22.42	\$46,630	1.929
2. Riverside-San Bernardino, CA PMSA	19,430	17.78	36,980	1.869
3. Elkhart-Goshen, IN MSA	1,760	17.20	35,780	1.575
4. Bremerton, WA PMSA	1,130	16.39	34,080	1.573
5. Las Vegas, NV-AZ MSA	10,730	19.44	40,440	1.404
Top paying MSAs for this occupation				
1. Bergen-Passaic, NJ PMSA	3,130	26.53	55,190	.496
2. San Francisco, CA PMSA	7,820	26.03	54,130	.784
3. Honolulu, HI MSA	2,180	25.37	52,780	.556
4. Kankakee, IL PMSA	280	24.28	50,500	.647
5. Newark, NJ PMSA	5,150	23.47	48,820	.535

#### 47-2061 Construction laborers

Perform tasks involving physical labor at building, highway, and heavy construction projects, tunnel and shaft excavations, and demolition sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. May clean and prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, clean up rubble and debris, and remove asbestos, lead, and other hazardous waste materials. May assist other craft workers.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment	Wage rank <sup>3</sup>
Top	industries by employment for this occupation		-	-	. cu	
1.	Special trade contractors	309,740	\$13.53	\$28,140	1	15
2.	Heavy construction, ex. building	209,360	14.27	29,680	2	12
3.	General building contractors	192,860	13.28	27,630	3	18
4.	Business services	48,650	8.92	18,560	4	44
5.	Federal, State, and local government	35,660	13.62	28,330	5	14
Top	paying industries for this occupation					
1.	Metal mining	50	21.51	44,750	39	1
2.	Hotels and other lodging places	120	19.21	39,960	30	2
3.	Railroad transportation	220	18.48	38,450	24	3
4.	Health services	350	17.25	35,880	20	4
5.	Electric, gas, and sanitary services	2,100	16.45	34,220	10	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Wyoming	2,930	\$10.87	\$22,600	1.228	318
2.	New Mexico	7,930	9.85	20,490	1.099	461
3.	Nevada	10,210	14.08	29,280	.987	373
4.	Nebraska	8,650	10.61	22,060	.982	466
5.	Alaska	2,660	19.11	39,750	.951	219
Тор ј	paying States for this occupation					
1.	Hawaii	2,810	19.68	40,940	.525	226
2.	Massachusetts	15,980	19.43	40,420	.495	284
3.	Alaska	2,660	19.11	39,750	.951	219
4.	New Jersey	14,900	18.91	39,340	.387	332
5.	New York	46,620	18.52	38,520	.557	334

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Brazoria, TX PMSA	1,490	\$9.65	\$20,080	2.008
2. Lake Charles, LA MSA	1,470	10.93	22,740	1.752
3. Alexandria, LA MSA	940	10.62	22,100	1.730
4. Naples, FL MSA	1,820	11.27	23,440	1.692
5. Pueblo, CO MSA	750	10.48	21,800	1.374
Top paying MSAs for this occupation				
1. Janesville-Beloit, WI MSA	280	21.75	45,240	.428
2. Atlantic-Cape May, NJ PMSA	970	21.54	44,800	.535
3. Jersey City, NJ PMSA	580	21.43	44,580	.233
4. Boston, MA-NH PMSA	8,850	21.29	44,280	.449
5. Honolulu, HI MSA	1,700	21.25	44,190	.433

#### 47-2111 Electricians

Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation					
1.	Special trade contractors	433,990	\$20.81	\$43,290	1	24
2.	Federal, State, and local government	28,760	20.98	43,640	2	20
3.	Transportation equipment	21,550	24.14	50,220	3	5
4.	General building contractors	11,130	18.60	38,690	4	45
5.	Electric, gas, and sanitary services	10,850	24.39	50,730	5	3
Top	paying industries for this occupation					
1.	Holding and other investment offices	110	29.16	60,640	50	1
2.	Real estate	1,580	24.41	50,760	28	2
3.	Electric, gas, and sanitary services	10,850	24.39	50,730	5	3
4.	Motion pictures	100	24.33	50,610	51	4
5.	Transportation equipment	21,550	24.14	50,220	3	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Alaska	2,180	\$24.86	\$51,700	.780	121
2.	Wyoming	1,760	18.63	38,750	.738	154
3.	Louisiana	12,680	16.43	34,170	.686	269
4.	Nevada	6,690	22.36	46,500	.647	152
5.	Utah	6,490	18.64	38,770	.620	208
Top	paying States for this occupation					
1.	New York	43,320	27.76	57,750	.517	150
2.	Oregon	8,880	25.34	52,710	.570	116
3.	New Jersey	18,440	25.20	52,420	.479	188
4.	Alaska	2,180	24.86	51,700	.780	121
5.	Hawaii	2,160	24.66	51,280	.403	123

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Baton Rouge, LA MSA	3,840	\$14.66	\$30,490	1.317
2. Lake Charles, LA MSA	1,100	17.69	36,790	1.311
<ol><li>Appleton-Oshkosh-Neenah, WI MSA</li></ol>	2,310	18.96	39,430	1.193
4. Beaumont-Port Arthur, TX MSA	1,640	17.45	36,300	1.081
5. Janesville-Beloit, WI MSA	670	24.20	50,340	1.024
Top paying MSAs for this occupation				
1. Vallejo-Fairfield-Napa, CA PMSA	1,410	34.08	70,890	.777
2. Nassau-Suffolk, NY PMSA	3,620	32.78	68,180	.306
3. Oakland, CA PMSA	5,680	31.00	64,480	.569
4. New York, NY PMSA	26,460	30.35	63,130	.652
5. San Francisco, CA PMSA	3,790	30.09	62,580	.380

#### 47-2152 Plumbers, pipefitters, and steamfitters

Assemble, install, alter, and repair pipelines or pipe systems that carry water, steam, air, or other liquids or gases. May install heating and cooling equipment and mechanical control systems.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation					
1.	Special trade contractors	308,170	\$19.91	\$41,420	1	17
2.	Heavy construction, ex. building	19,290	18.89	39,290	2	25
3.	Federal, State, and local government	18,520	18.15	37,750	3	32
4.	Transportation equipment	14,820	21.40	44,510	4	10
5.	Electric, gas, and sanitary services	12,280	20.68	43,010	5	11
Top	paying industries for this occupation					
1.	Apparel and other textile products	50	23.95	49,810	42	1
2.	Petroleum and coal products	810	23.03	47,900	22	2
3.	Paper and allied products	1,820	22.68	47,170	16	3
4.	Railroad transportation	260	22.62	47,050	30	4
5.	Chemicals and allied products	3,470	22.53	46,870	11	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Louisiana	11,160	\$16.81	\$34,970	.604	258
2.	Delaware	2,280	21.20	44,090	.567	147
3.	Wyoming	1,180	15.68	32,610	.494	212
4.	Colorado	10,550	19.05	39,620	.489	250
5.	Alaska	1,340	25.98	54,030	.479	101
Top J	paying States for this occupation					
1.	Illinois	19,070	26.67	55,470	.325	97
2.	Alaska	1,340	25.98	54,030	.479	101
3.	Oregon	4,430	24.40	50,750	.284	136
4.	Michigan	18,510	24.35	50,640	.417	161
5.	New Jersey	9,390	23.72	49,330	.244	221

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Baton Rouge, LA MSA	3,820	\$17.12	\$35,620	1.310
2. Bremerton, WA PMSA	840	25.14	52,290	1.169
3. Brazoria, TX PMSA	830	17.00	35,350	1.118
4. Houma, LA MSA	810	16.13	33,560	1.037
5. Lake Charles, LA MSA	870	19.06	39,640	1.037
Top paying MSAs for this occupation				
1. Chicago, IL PMSA	12,140	28.85	60,000	.302
2. Champaign-Urbana, IL MSA	410	28.50	59,280	.425
3. San Francisco, CA PMSA	2,050	28.30	58,870	.206
4. San Jose, CA PMSA	2,530	28.20	58,650	.266
5. Racine, WI PMSA	290	27.52	57,250	.371

# <u>49-1011</u> First-line supervisors/managers of mechanics, installers, and <u>repairers</u>

Supervise and coordinate the activities of mechanics, installers, and repairers.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation					
1.	Automotive dealers & service stations	56,270	\$22.30	\$46,370	1	44
2.	Auto repair, services, and parking	50,220	21.42	44,560	2	50
3.	Federal, State, and local government	46,900	22.75	47,320	3	37
4.	Wholesale tradedurable goods	34,190	23.20	48,260	4	32
5.	Communications	28,760	27.05	56,260	5	11
Top	paying industries for this occupation					
1.	Coal mining	1,090	33.06	68,760	46	1
2.	Security and commodity brokers	70	30.65	63,760	66	2
3.	Electric, gas, and sanitary services	18,920	29.51	61,390	7	3
4.	Tobacco products	-	29.40	61,160	-	4
5.	Petroleum and coal products	1,380	29.38	61,110	44	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Wyoming	1,190	\$22.92	\$47,670	.499	74
2.	Indiana	13,820	22.52	46,840	.483	139
3.	Alabama	8,230	20.54	42,720	.450	156
4.	Arkansas	5,020	19.60	40,760	.448	135
5.	Virginia	14,540	23.94	49,800	.428	152
Top p	paying States for this occupation					
1.	Alaska	950	30.52	63,480	.340	53
2.	New Jersey	12,380	27.50	57,190	.322	146
3.	Connecticut	4,900	26.98	56,130	.294	140
4.	California	38,250	26.13	54,360	.265	180
5.	New York	28,260	25.94	53,960	.337	168

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Steubenville-Weirton, OH-WV MSA	350	\$23.30	\$48,470	.740
2. Bremerton, WA PMSA	520	27.42	57,040	.724
3. Lafayette, LA MSA	1,140	22.08	45,930	.700
4. Beaumont-Port Arthur, TX MSA	940	21.68	45,090	.620
5. Kokomo, IN MSA	300	26.14	54,370	.611
Top paying MSAs for this occupation				
1. Punta Gorda, FL MSA	120	30.69	63,830	.315
2. Stamford-Norwalk, CT PMSA	480	30.02	62,450	.231
3. Oakland, CA PMSA	2,860	29.90	62,180	.286
4. San Francisco, CA PMSA	1,950	29.87	62,130	.196
5. San Jose, CA PMSA	2,180	29.53	61,430	.229

#### <u>49-2022 TeleCommunicationss equipment installers and repairers, except</u> <u>line installers</u>

Set-up, rearrange, or remove switching and dialing equipment used in central offices. Service or repair telephones and other Communications equipment on customers' property. May install equipment in new locations or install wiring and telephone jacks in buildings under construction.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maasay		wage	wage	rank <sup>∠</sup>	
Top i	ndustries by employment for this occupation					
1.	Communications	169,170	\$22.17	\$46,120	1	7
2.	Special trade contractors	12,520	15.01	31,230	2	26
3.	Wholesale tradedurable goods	9,300	18.45	38,380	3	18
4.	Business services	5,400	20.27	42,170	4	13
5.	Engineering & management services	2,340	21.92	45,600	5	9
Top	paying industries for this occupation					
1.	Electric, gas, and sanitary services	670	26.44	54,980	11	1
2.	Holding and other investment offices	520	24.57	51,100	13	2
3.	Printing and publishing	430	24.33	50,610	15	3
4.	Chemicals and allied products	60	22.81	47,440	24	4
5.	Oil and gas extraction	60	22.72	47,260	25	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Colorado	6,750	\$22.89	\$47,600	.313	161
2.	Washington	6,920	22.74	47,290	.268	218
3.	Arizona	5,930	21.35	44,400	.266	145
4.	New Jersey	9,950	24.23	50,390	.259	207
5.	Oklahoma	3,650	21.46	44,630	.252	111
Top p	paying States for this occupation					
1.	Alaska	640	27.79	57,800	.229	75
2.	Massachusetts	5,100	25.94	53,950	.158	141
3.	New York	14,480	25.61	53,260	.173	177
4.	New Jersey	9,950	24.23	50,390	.259	207
5.	New Hampshire	660	23.80	49,500	.109	104

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Lubbock, TX MSA	830	\$18.25	\$37,970	.707
2. Odessa-Midland, TX MSA	550	19.97	41,530	.535
3. Burlington, VT MSA	500	21.65	45,020	.462
4. Colorado Springs, CO MSA	1,050	21.57	44,870	.448
5. Topeka, KS MSA	420	19.27	40,080	.420
Top paying MSAs for this occupation				
1. Anchorage, AK MSA	410	28.47	59,220	.310
2. Syracuse, NY MSA	270	28.31	58,880	.081
3. Boston, MA-NH PMSA	3,290	26.56	55,250	.167
4. New York, NY PMSA	8,160	26.25	54,590	.201
5. Glens Falls, NY MSA	-	25.91	53,890	-

#### 49-3023 Automotive service technicians and mechanics

Diagnose, adjust, repair, or overhaul automotive vehicles.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maaony		wage	wage	rank	
Top i	ndustries by employment for this occupation					
1.	Automotive dealers & service stations	321,060	\$16.66	\$34,640	1	20
2.	Auto repair, services, and parking	257,180	13.55	28,180	2	48
3.	Federal, State, and local government	35,010	17.53	36,460	3	12
4.	Wholesale tradedurable goods	18,850	13.83	28,760	4	44
5.	General merchandise stores	13,420	9.76	20,300	5	54
Top p	paying industries for this occupation					
1.	Museums, botanical, zoological garden	-	26.37	54,840	-	1
2.	Amusement & recreation services	3,000	23.32	48,500	14	2
3.	Communications	1,350	22.74	47,300	17	3
4.	Electric, gas, and sanitary services	3,470	20.86	43,380	10	4
5.	Paper and allied products	150	19.61	40,780	42	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	New Hampshire	4,460	\$15.25	\$31,710	.737	293
2.	North Dakota	2,170	13.01	27,060	.696	277
3.	Maine	4,050	12.94	26,910	.683	351
4.	Arizona	15,030	15.10	31,410	.674	308
5.	Alaska	1,860	19.85	41,290	.665	204
Top J	paying States for this occupation					
1.	Alaska	1,860	19.85	41,290	.665	204
2.	Michigan	21,820	17.55	36,510	.491	333
3.	Colorado	11,550	17.52	36,430	.535	295
4.	Connecticut	9,490	17.22	35,810	.570	357
5.	Nevada	5,040	17.04	35,440	.487	291

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Oakland, CA PMSA	10,880	\$14.74	\$30,660	1.090
2. Jacksonville, NC MSA	370	14.60	30,370	.984
3. Eau Claire, WI MSA	710	11.62	24,170	.958
4. Enid, OK MSA	200	11.51	23,940	.933
5. Brockton, MA PMSA	900	16.40	34,110	.918
Top paying MSAs for this occupation				
1. Bremerton, WA PMSA	450	21.07	43,830	.626
2. Danbury, CT PMSA	570	21.02	43,730	.653
3. Detroit, MI PMSA	9,540	19.66	40,900	.465
4. San Francisco, CA PMSA	3,800	19.56	40,690	.381
5. Santa Rosa, CA PMSA	1,170	19.40	40,340	.611

#### 49-3031 Bus and truck mechanics and diesel engine specialists

Diagnose, adjust, repair, or overhaul trucks, buses, and all types of diesel engines. Include mechanics working primarily with automobile diesel engines.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top	industries by employment for this occupation					
1.	Trucking and warehousing	52,770	\$15.38	\$31,990	1	43
2.	Wholesale tradedurable goods	34,100	16.83	35,000	2	19
3.	Auto repair, services, and parking	32,860	16.12	33,520	3	30
4.	Federal, State, and local government	23,310	18.73	38,960	4	10
5.	Educational services	17,430	15.52	32,290	5	40
Top	paying industries for this occupation					
1.	Transportation by air	6,960	21.77	45,290	8	1
2.	Communications	550	21.60	44,940	29	2
3.	Electric, gas, and sanitary services	5,050	20.46	42,560	13	3
4.	Textile mill products	-	20.16	41,940	-	4
5.	Railroad transportation	960	19.75	41,080	22	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Wyoming	970	\$16.24	\$33,790	.406	197
2.	Utah	4,210	15.51	32,270	.402	302
3.	Arkansas	3,760	13.43	27,930	.336	290
4.	North Dakota	1,000	13.99	29,090	.321	248
5.	South Dakota	1,090	13.61	28,300	.301	240
Top J	paying States for this occupation					
1.	Alaska	740	21.75	45,240	.265	176
2.	Washington	6,470	20.03	41,670	.251	307
3.	Hawaii	820	19.98	41,550	.153	220
4.	Nevada	1,660	19.26	40,060	.160	239
5.	New Jersey	6,820	19.23	40,000	.177	324

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Casper, WY MSA	240	\$16.70	\$34,730	.737
2. Albany, GA MSA	390	13.91	28,920	.698
3. Green Bay, WI MSA	860	15.43	32,090	.610
4. Fayetteville-Springdale-Rogers, AR MSA	930	13.20	27,460	.594
5. Hamilton-Middletown, OH PMSA	740	17.57	36,540	.585
Top paying MSAs for this occupation				
1. Vallejo-Fairfield-Napa, CA PMSA	-	22.54	46,890	-
2. New York, NY PMSA	5,210	22.37	46,530	.128
3. Anchorage, AK MSA	370	22.30	46,390	.280
4. San Francisco, CA PMSA	710	21.87	45,490	.071
5. Seattle-Bellevue-Everett, WA PMSA	3,240	21.86	45,470	.243

#### 49-9042 Maintenance and repair workers, general

Perform work involving the skills of two or more maintenance or craft occupations to keep machines, mechanical equipment, or the structure of an establishment in repair. Duties may involve pipe fitting; boiler making; insulating; welding; machining; carpentry; repairing electrical or mechanical equipment; installing, aligning, and balancing new equipment; and repairing buildings, floors, or stairs.

	Inductry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	industry		wage	wage	rank <sup>2</sup>	-
Top i	ndustries by employment for this occupation					
1.	Real estate	194,100	\$11.95	\$24,860	1	63
2.	Federal, State, and local government	129,980	15.38	31,980	2	28
3.	Educational services	82,460	14.20	29,540	3	40
4.	Health services	60,090	13.29	27,650	4	48
5.	Hotels and other lodging places	58,370	11.60	24,120	5	66
Top	paying industries for this occupation					
1.	Pipelines, except natural gas	510	21.14	43,970	66	1
2.	Transportation equipment	24,690	20.16	41,940	13	2
3.	Communications	10,610	19.79	41,170	28	3
4.	Electric, gas, and sanitary services	17,220	19.63	40,830	21	4
5.	Petroleum and coal products	2,930	19.28	40,110	54	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	South Carolina	23,470	\$14.30	\$29,740	1.342	324
2.	Alaska	3,450	19.62	40,800	1.234	210
3.	Mississippi	13,310	12.25	25,480	1.222	359
4.	Arkansas	13,640	12.68	26,370	1.217	319
5.	Kentucky	21,010	14.09	29,300	1.217	334
Тор ј	paying States for this occupation					
1.	Alaska	3,450	19.62	40,800	1.234	210
2.	District of Columbia	3,450	17.38	36,160	.571	249
3.	New Jersey	31,830	17.05	35,460	.827	376
4.	Connecticut	11,800	16.80	34,950	.709	367
5.	Illinois	55,360	16.51	34,350	.944	361

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Pine Bluff, AR MSA	670	\$15.37	\$31,970	1.952
2. Terre Haute, IN MSA	1,170	14.02	29,170	1.765
3. Rocky Mount, NC MSA	1,020	14.42	29,990	1.667
4. Victoria, TX MSA	590	10.47	21,770	1.641
5. Gadsden, AL MSA	560	14.89	30,970	1.530
Top paying MSAs for this occupation				
1. Anchorage, AK MSA	1,220	19.47	40,490	.922
2. Bloomington-Normal, IL MSA	1,140	18.95	39,410	1.359
3. Oakland, CA PMSA	7,530	18.48	38,440	.754
4. Rockford, IL MSA	1,690	17.99	37,430	1.011
5. Danbury, CT PMSA	700	17.91	37,250	.802

## 51-1011 First-line supervisors/managers of production and operating workers

Supervise and coordinate the activities of production and operating workers, such as inspectors, precision workers, machine setters and operators, assemblers, fabricators, and plant and system operators.

	Industry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maaday		wage	wage	rank <sup>-</sup>	
Top i	ndustries by employment for this occupation					
1.	Industrial machinery and equipment	62,530	\$23.54	\$48,970	1	16
2.	Fabricated metal products	56,760	21.40	44,520	2	33
3.	Food and kindred products	53,460	19.90	41,400	3	43
4.	Transportation equipment	47,500	24.07	50,060	4	13
5.	Electronic & other electrical equipment	42,570	22.00	45,750	5	28
Top	paying industries for this occupation					
1.	Electric, gas, and sanitary services	13,830	31.26	65,020	22	1
2.	Communications	800	30.72	63,890	50	2
3.	Coal mining	860	29.83	62,040	48	3
4.	Pipelines, except natural gas	410	29.03	60,380	55	4
5.	Oil and gas extraction	3,310	27.60	57,420	33	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Indiana	27,790	\$20.93	\$43,520	.972	169
2.	Arkansas	9,480	17.93	37,290	.846	168
3.	Wisconsin	22,050	22.29	46,360	.819	152
4.	Iowa	11,530	20.10	41,810	.813	156
5.	Ohio	43,870	21.61	44,950	.811	173
Тор р	paying States for this occupation					
1.	Alaska	530	28.82	59,950	.190	63
2.	Connecticut	10,310	25.41	52,850	.619	156
3.	Michigan	34,410	25.20	52,410	.775	137
4.	New Jersey	20,190	24.90	51,790	.525	194
5.	Delaware	2,130	24.02	49,960	.530	110

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Elkhart-Goshen, IN MSA	2,130	\$19.19	\$39,920	1.906
2. Sheboygan, WI MSA	1,090	19.70	40,970	1.853
3. Hickory-Morganton-Lenoir, NC MSA	2,530	17.76	36,930	1.504
4. Danville, VA MSA	630	17.91	37,250	1.425
5. Waterloo-Cedar Falls, IA MSA	980	25.54	53,120	1.413
Top paying MSAs for this occupation				
1. Stamford-Norwalk, CT PMSA	850	29.10	60,530	.409
2. San Jose, CA PMSA	5,290	28.38	59,030	.556
3. Bremerton, WA PMSA	340	27.81	57,850	.473
4. Flint, MI PMSA	1,040	27.80	57,820	.638
5. Detroit, MI PMSA	15,830	27.71	57,630	.771
### 51-2092 Team assemblers

Work as part of a team having responsibility for assembling an entire product or component of a product. Team assemblers can perform all tasks conducted by the team in the assembly process and rotate through all or most of them rather than being assigned to a specific task on a permanent basis. May participate in making management decisions affecting the work. Team leaders who work as part of the team should be included.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Transportation equipment	171,780	\$14.84	\$30,870	1	2
2.	Industrial machinery and equipment	135,790	12.38	25,740	2	6
3.	Electronic & other electrical equipment	126,160	10.99	22,860	3	24
4.	Fabricated metal products	104,120	11.28	23,460	4	20
5.	Wholesale tradedurable goods	77,620	11.08	23,050	5	22
Top J	paying industries for this occupation					
1.	Communications	990	15.62	32,480	28	1
2.	Transportation equipment	171,780	14.84	30,870	1	2
3.	Petroleum and coal products	760	13.39	27,860	30	3
4.	Membership organizations	70	13.04	27,120	37	4
5.	Engineering & management services	2,270	13.03	27,110	25	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Indiana	70,880	\$12.31	\$25,610	2.480	475
2.	Tennessee	48,430	11.96	24,870	1.873	468
3.	Arkansas	20,140	10.06	20,930	1.797	463
4.	Iowa	25,140	12.92	26,870	1.772	387
5.	Wisconsin	46,770	12.09	25,150	1.737	491
Top J	paying States for this occupation					
1.	Kentucky	28,760	15.42	32,080	1.666	289
2.	Michigan	69,950	14.19	29,520	1.575	459
3.	South Carolina	24,380	13.07	27,190	1.394	384
4.	Iowa	25,140	12.92	26,870	1.772	387
5.	Connecticut	12,050	12.47	25,950	.724	507

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Elkhart-Goshen, IN MSA	11,260	\$13.91	\$28,930	10.076
2. Racine, WI PMSA	3,880	12.19	25,350	4.969
<ol><li>Clarksville-Hopkinsville, TN-KY MSA</li></ol>	2,950	14.12	29,380	4.557
4. Fort Smith, AR-OK MSA	3,650	11.51	23,940	3.696
5. Lafayette, IN MSA	3,170	14.28	29,700	3.693
Top paying MSAs for this occupation				
1. Peoria-Pekin, IL MSA	2,260	19.84	41,270	1.392
2. Cedar Rapids, IA MSA	1,190	18.86	39,240	.981
3. Rockford, IL MSA	3,960	16.66	34,660	2.369
4. Waterloo-Cedar Falls, IA MSA	1,710	16.55	34,430	2.465
5. Detroit, MI PMSA	29,850	16.46	34,230	1.455

### 51-4041 Machinists

Set up and operate a variety of machine tools to produce precision parts and instruments. Include precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, shop mathematics, metal properties, layout, and machining procedures.

	la du ofra	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	industry		wage	wage	rank <sup>2</sup>	-
Top i	ndustries by employment for this occupation					
1.	Industrial machinery and equipment	150,980	\$15.89	\$33,040	1	27
2.	Fabricated metal products	44,300	15.40	32,040	2	33
3.	Transportation equipment	36,690	16.89	35,120	3	21
4.	Wholesale tradedurable goods	27,520	14.08	29,280	4	39
5.	Business services	18,080	11.36	23,620	5	46
Top p	paying industries for this occupation					
1.	Electric, gas, and sanitary services	1,630	26.12	54,340	24	1
2.	Amusement & recreation services	240	24.77	51,520	35	2
3.	Tobacco products	190	22.59	46,990	37	3
4.	Transportation by air	1,330	21.81	45,370	26	4
5.	Coal mining	100	21.36	44,430	42	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Michigan	23,630	\$16.16	\$33,620	.532	379
2.	Wisconsin	14,240	16.70	34,740	.529	310
3.	Connecticut	8,680	16.75	34,850	.521	368
4.	Ohio	27,940	15.80	32,870	.517	362
5.	Indiana	14,040	15.64	32,540	.491	339
Top J	paying States for this occupation					
1.	Hawaii	300	21.67	45,080	.056	182
2.	Alaska	310	21.28	44,250	.111	181
3.	District of Columbia	150	19.95	41,490	.025	209
4.	Washington	5,860	18.76	39,020	.227	342
5.	New Mexico	1,120	17.91	37,260	.155	185

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. York, PA MŠA	2,140	\$17.43	\$36,260	1.297
2. Lafayette, IN MSA	1,090	18.00	37,440	1.270
3. Decatur, AL MSA	620	13.05	27,130	1.111
4. Rockford, IL MSA	1,670	15.85	32,970	.999
5. Anniston, AL MSA	450	14.89	30,980	.996
Top paying MSAs for this occupation				
1. Vallejo-Fairfield-Napa, CA PMSA	480	23.15	48,150	.264
2. Bremerton, WA PMSA	190	23.09	48,020	.264
3. Anchorage, AK MSA	90	22.41	46,620	.068
4. Honolulu, HI MSA	260	22.07	45,900	.066
5. San Jose, CA PMSA	3,370	21.27	44,230	.355

### 51-9061 Inspectors, testers, sorters, samplers, and weighers

Inspect, test, sort, sample, or weigh nonagricultural raw materials or processed, machined, fabricated, or assembled parts or products for defects, wear, and deviations from specifications. May use precision measuring instruments and complex test equipment.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment	Wage rank <sup>3</sup>
Top	ndustries by employment for this occupation				Tarik	
1.	Electronic & other electrical equipment	48.100	\$13.41	\$27,890	1	32
2.	Transportation equipment	47,800	18.84	39,200	2	6
3.	Business services	42,140	10.78	22,420	3	52
4.	Industrial machinery and equipment	38,410	15.13	31,460	4	24
5.	Fabricated metal products	32,550	14.15	29,440	5	29
Top	paying industries for this occupation					
1.	Pipelines, except natural gas	170	23.23	48,320	50	1
2.	Communications	1,480	23.12	48,090	31	2
3.	Transportation by air	1,130	23.09	48,020	34	3
4.	Electric, gas, and sanitary services	3,940	23.03	47,900	24	4
5.	Federal, State, and local government	18,200	21.78	45,300	12	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State.	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Indiana	19,730	\$14.85	\$30,880	.690	374
2.	Arkansas	7,650	11.70	24,330	.683	372
3.	South Carolina	11,600	12.93	26,900	.663	392
4.	Michigan	27,910	17.65	36,710	.628	329
5.	North Carolina	23,300	11.64	24,210	.625	492
Top p	paying States for this occupation					
1.	Alaska	310	20.89	43,460	.111	189
2.	District of Columbia	260	20.74	43,140	.043	199
3.	Hawaii	310	18.59	38,660	.058	246
4.	Michigan	27,910	17.65	36,710	.628	329
5.	Delaware	1,160	16.00	33,270	.289	250

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Lawrence, MA-NH PMSA	1,990	\$17.54	\$36,490	1.271
2. Hickory-Morganton-Lenoir, NC MSA	2,010	11.15	23,180	1.195
3. Greenville-Spartanburg-Anderson, SC MSA	4,840	12.68	26,380	1.062
4. Terre Haute, IN MSA	670	14.99	31,180	1.011
5. Rocky Mount, NC MSA	610	11.15	23,200	.997
Top paying MSAs for this occupation				
1. Flint, MI PMSA	830	22.28	46,340	.509
2. Bremerton, WA PMSA	220	22.09	45,940	.306
3. Bloomington-Normal, IL MSA	270	20.45	42,540	.322
4. Ann Arbor, MI PMSA	2,100	20.37	42,370	.735
5. Honolulu, HI MSA	230	20.23	42,080	.059

## 51-9198 Helpers--production workers

Help production workers by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Business services	107,750	\$8.19	\$17,030	1	49
2.	Food and kindred products	53,750	10.61	22,070	2	19
3.	Fabricated metal products	36,600	9.59	19,940	3	35
4.	Paper and allied products	32,050	11.34	23,590	4	10
5.	Printing and publishing	28,350	10.08	20,960	5	26
Top	paying industries for this occupation					
1.	Coal mining	640	19.92	41,440	39	1
2.	Tobacco products	1,890	14.31	29,770	24	2
3.	Electric, gas, and sanitary services	1,290	13.52	28,110	30	3
4.	Federal, State, and local government	1,410	13.00	27,040	29	4
5.	Heavy construction, ex. building	1,250	12.88	26,800	32	5

			Hourly mean	Annual mean	Percent of	Wage rank
	State	Employment	wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Arkansas	9,250	\$9.26	\$19,250	.826	494
2.	Tennessee	16,430	9.84	20,470	.636	578
3.	Illinois	35,290	8.92	18,560	.602	656
4.	Georgia	21,540	9.00	18,710	.561	609
5.	Wisconsin	15,080	10.77	22,390	.560	546
Top J	paying States for this occupation					
1.	Alaska	110	14.42	30,000	.039	315
2.	Kentucky	8,090	11.71	24,360	.469	454
3.	Maryland	5,250	11.30	23,510	.216	520
4.	West Virginia	1,930	10.97	22,820	.280	406
5.	Washington	6,400	10.97	22,810	.248	603

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Fort Smith, AR-OK MSA	2,120	\$7.73	\$16,070	2.146
2. Decatur, AL MSA	810	11.29	23,480	1.452
3. Waco, TX MSA	1,240	8.39	17,450	1.323
4. Rocky Mount, NC MSA	760	8.70	18,100	1.242
5. Pine Bluff, AR MSA	400	10.99	22,860	1.165
Top paying MSAs for this occupation				
1. Anchorage, AK MSA	50	15.80	32,870	.038
2. Steubenville-Weirton, OH-WV MSA	230	14.61	30,390	.487
3. Pittsfield, MA MSA	170	14.11	29,340	.409
4. Roanoke, VA MSA	350	13.87	28,860	.250
5. Kalamazoo-Battle Creek, MI MSA	510	13.71	28,530	.252

## 53-3032 Truck drivers, heavy and tractor-trailer

Drive a tractor-trailer combination or a truck with a capacity of at least 26,000 GVW, to transport and deliver goods, livestock, or materials in liquid, loose, or packaged form. May be required to unload truck. May require use of automated routing equipment. Requires commercial drivers' license.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Trucking and warehousing	775,020	\$17.10	\$35,570	1	16
2.	Wholesale tradenondurable goods	145,360	16.17	33,630	2	20
3.	Stone, clay, and glass products	71,480	14.41	29,980	3	46
4.	Wholesale tradedurable goods	64,970	14.46	30,090	4	44
5.	Heavy construction, ex. building	49,490	15.32	31,860	5	34
Top	paying industries for this occupation					
1.	Communications	500	20.99	43,650	48	1
2.	Motion pictures	170	19.74	41,070	57	2
3.	Miscellaneous manufacturing industries	930	19.70	40,990	44	3
4.	Transportation by air	23,120	19.59	40,750	11	4
5.	Amusement & recreation services	340	19.46	40,470	51	5

	State	Employment	Hourly mean wage	Annual mean wage	Percent of State employment	Wage rank within State <sup>5</sup>
States v	with the highest concentration of workers in this occupation $^4$					
1. A	Arkansas	31,930	\$15.09	\$31,400	2.850	240
2. N	Vebraska	23,520	15.75	32,760	2.669	245
3. Т	Tennessee	60,010	16.58	34,490	2.321	269
4. V	Wyoming	5,150	14.69	30,550	2.158	227
5. N	North Dakota	6,210	14.35	29,850	1.991	237
Top pa	ying States for this occupation					
1. A	Alaska	2,390	20.19	41,990	.855	198
2. N	Massachusetts	23,830	18.09	37,620	.738	328
3. N	New Jersey	41,270	17.73	36,880	1.072	359
4. I	llinois	73,770	17.72	36,860	1.259	322
5. 0	Connecticut	12,330	17.71	36,830	.741	345

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Joplin, MO MSA	4,270	\$17.60	\$36,620	5.774
2. Fayetteville-Springdale-Rogers, AR MSA	8,650	16.24	33,790	5.529
3. Chattanooga, TN-GA MSA	12,010	18.50	38,480	5.433
4. Laredo, TX MSA	2,460	15.11	31,420	3.476
5. Cedar Rapids, IA MSA	3,950	18.20	37,850	3.255
Top paying MSAs for this occupation				
1. Gainesville, FL MSA	710	23.07	48,000	.598
2. Harrisburg-Lebanon-Carlisle, PA MSA	6,250	20.24	42,100	1.792
3. Champaign-Urbana, IL MSA	-	19.90	41,400	-
4. New York, NY PMSA	14,060	19.59	40,740	.347
5. Lowell, MA-NH PMSA	1,120	19.46	40,480	.902

## 53-3033 Truck drivers, light or delivery services

Drive a truck or van with a capacity of under 26,000 GVW, primarily to deliver or pick up merchandise or to deliver packages within a specified area. May require use of automatic routing or location software. May load and unload truck.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Transportation by air	152,960	\$17.77	\$36,970	1	1
2.	Trucking and warehousing	123,960	13.86	28,830	2	10
3.	Wholesale tradedurable goods	114,010	10.67	22,200	3	55
4.	Wholesale tradenondurable goods	106,190	11.98	24,910	4	29
5.	Business services	64,410	11.07	23,030	5	46
Top	paying industries for this occupation					
1.	Transportation by air	152,960	17.77	36,970	1	1
2.	Railroad transportation	890	17.44	36,270	47	2
3.	Coal mining	180	16.38	34,060	61	3
4.	Transportation services	13,830	15.91	33,100	15	4
5.	Electric, gas, and sanitary services	2,750	15.18	31,570	32	5

	State	Employment	Hourly mean wage	Annual mean wage	Percent of State	Wage rank within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Virginia	34,880	\$10.62	\$22,090	1.026	579
2.	Kentucky	16,190	10.67	22,190	.938	506
3.	Idaho	5,160	10.44	21,720	.925	421
4.	Georgia	34,970	12.62	26,260	.911	437
5.	New Jersey	34,490	13.55	28,190	.896	485
Top	paying States for this occupation					
1.	Massachusetts	23,620	14.42	29,990	.731	453
2.	Illinois	50,060	14.30	29,740	.854	443
3.	Maryland	21,100	13.78	28,670	.869	429
4.	Alaska	1,890	13.58	28,250	.676	333
5.	New Jersey	34,490	13.55	28,190	.896	485

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation <sup>6</sup>				
1. Roanoke, VA MSA	2,780	\$10.04	\$20,880	1.989
2. Yolo, CA PMSA	1,520	16.51	34,340	1.706
3. Redding, CA MSA	1,060	11.68	24,290	1.667
4. Richmond-Petersburg, VA MSA	8,850	10.20	21,220	1.643
5. Topeka, KS MSA	1,590	9.57	19,900	1.591
Top paying MSAs for this occupation				
1. Yolo, CA PMSA	1,520	16.51	34,340	1.706
2. Worcester, MA-CT PMSA	2,820	15.69	32,630	1.225
3. Jersey City, NJ PMSA	3,910	15.69	32,630	1.570
4. Champaign-Urbana, IL MSA	1,130	15.15	31,510	1.170
5. Springfield, IL MSA	800	15.12	31,450	.727

## 53-7051 Industrial truck and tractor operators

Operate industrial trucks or tractors equipped to move materials around a warehouse, storage yard, factory, construction site, or similar location.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Trucking and warehousing	74,230	\$12.88	\$26,790	1	27
2.	Wholesale tradenondurable goods	57,150	12.80	26,620	2	29
3.	Wholesale tradedurable goods	51,550	13.03	27,090	3	24
4.	Food and kindred products	46,140	13.00	27,040	4	26
5.	Business services	33,280	10.95	22,780	5	53
Top p	paying industries for this occupation					
1.	Water transportation	8,590	20.17	41,950	22	1
2.	Real estate	360	19.16	39,860	47	2
3.	Coal mining	1,680	18.36	38,190	38	3
4.	Transportation equipment	16,940	17.70	36,810	11	4
5.	Hotels and other lodging places	130	16.14	33,580	54	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	Tennessee	19,990	\$12.15	\$25,280	.773	456
2.	Indiana	21,610	13.39	27,860	.756	419
3.	Arkansas	8,220	11.16	23,210	.734	401
4.	Georgia	27,350	11.70	24,350	.713	485
5.	Iowa	9,660	12.48	25,960	.681	418
Top J	paying States for this occupation					
1.	Michigan	25,410	16.90	35,140	.572	348
2.	Alaska	430	16.57	34,470	.154	264
3.	Wyoming	1,110	16.56	34,450	.465	191
4.	Hawaii	1,530	14.81	30,810	.286	348
5.	District of Columbia	250	14.71	30,600	.041	295

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Danville, VA MSA	560	\$11.24	\$23,380	1.267
2. Stockton-Lodi, CA MSA	2,420	14.43	30,010	1.226
3. Pine Bluff, AR MSA	410	11.38	23,660	1.194
4. Yakima, WA MSA	900	11.48	23,880	1.190
5. Kankakee, IL PMSA	490	13.29	27,640	1.133
Top paying MSAs for this occupation				
1. Flint, MI PMSA	1,190	22.34	46,460	.730
2. Detroit, MI PMSA	12,540	18.73	38,960	.611
3. Ann Arbor, MI PMSA	1,150	18.23	37,920	.402
4. Saginaw-Bay City-Midland, MI MSA	580	17.96	37,360	.337
5. Lansing-East Lansing, MI MSA	820	17.71	36,840	.379

## 53-7062 Laborers and freight, stock, and material movers, hand

Manually move freight, stock, or other materials or perform other unskilled general labor. Include all unskilled manual laborers not elsewhere classified.

	Inductry	Employment	Hourly mean	Annual mean	Employment	Wage rank <sup>3</sup>
	maustry		wage	wage	rank <sup>2</sup>	
Top	ndustries by employment for this occupation					
1.	Business services	419,810	\$8.37	\$17,410	1	65
2.	Wholesale tradedurable goods	197,810	10.43	21,700	2	37
3.	Wholesale tradenondurable goods	194,910	10.39	21,610	3	38
4.	Trucking and warehousing	151,600	11.75	24,430	4	18
5.	Transportation by air	136,500	11.76	24,460	5	17
Top	paying industries for this occupation					
1.	Coal mining	1,840	17.68	36,770	56	1
2.	Metal mining	390	16.89	35,140	63	2
3.	Pipelines, except natural gas	310	15.62	32,490	64	3
4.	Transportation equipment	22,440	14.95	31,090	20	4
5.	Railroad transportation	4,760	14.36	29,870	49	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	West Virginia	19,570	\$7.99	\$16,630	2.841	538
2.	Tennessee	60,680	9.93	20,660	2.347	576
3.	Alabama	41,950	9.24	19,220	2.295	555
4.	Arkansas	25,340	8.91	18,540	2.262	509
5.	Mississippi	23,780	8.78	18,260	2.183	548
Top J	paying States for this occupation					
1.	Alaska	4,620	13.32	27,690	1.652	339
2.	Hawaii	5,260	12.66	26,340	.982	401
3.	Delaware	5,200	12.11	25,200	1.294	371
4.	Michigan	66,930	11.99	24,940	1.507	558
5.	Massachusetts	39,740	11.69	24,310	1.230	544

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Yolo, CA PMSA	4,300	\$12.46	\$25,910	4.826
2. Laredo, TX MSA	3,170	7.99	16,610	4.480
3. Jersey City, NJ PMSA	9,730	9.48	19,710	3.907
4. Hamilton-Middletown, OH PMSA	4,870	10.57	21,980	3.851
5. Middlesex-Somerset-Hunterdon, NJ PMSA	21,890	10.29	21,400	3.485
Top paying MSAs for this occupation				
1. Saginaw-Bay City-Midland, MI MSA	1,800	14.81	30,800	1.046
2. Anchorage, AK MSA	2,250	13.50	28,080	1.700
3. Harrisburg-Lebanon-Carlisle, PA MSA	7,350	13.26	27,590	2.107
4. Gary, IN PMSA	5,190	13.05	27,140	2.065
5. Flint, MI PMSA	2,070	13.04	27,120	1.269

## 53-7064 Packers and packagers, hand

Pack or package by hand a wide variety of products and materials.

	Industry	Employment	Hourly mean wage	Annual mean wage	Employment rank <sup>2</sup>	Wage rank <sup>3</sup>
Top i	ndustries by employment for this occupation					
1.	Food stores	268,010	\$7.16	\$14,890	1	52
2.	Business services	171,030	7.74	16,100	2	48
3.	Food and kindred products	88,790	9.60	19,960	3	22
4.	Wholesale tradenondurable goods	71,230	9.11	18,940	4	30
5.	Rubber and misc. plastics products	34,870	9.76	20,300	5	20
Top	paying industries for this occupation					
1.	Federal, State, and local government	1,590	16.20	33,690	33	1
2.	Water transportation	460	12.60	26,220	39	2
3.	Heavy construction, ex. building	-	12.33	25,650	-	3
4.	Transportation equipment	4,740	11.38	23,670	29	4
5.	Stone, clay, and glass products	12,560	11.19	23,280	15	5

		Employment	Hourly mean	Annual mean	Percent of	Wage rank
	State		wage	wage	State	within State <sup>5</sup>
					employment	
State	s with the highest concentration of workers in this occupation <sup>4</sup>					
1.	New Jersey	46,390	\$8.49	\$17,660	1.205	629
2.	Tennessee	27,100	8.50	17,680	1.048	616
3.	Indiana	28,430	9.09	18,920	.995	612
4.	Wisconsin	26,520	9.48	19,710	.985	590
5.	Ohio	52,070	8.93	18,570	.963	638
Top J	paying States for this occupation					
1.	Delaware	2,230	10.21	21,230	.555	414
2.	Oregon	10,410	9.51	19,780	.668	590
3.	Wisconsin	26,520	9.48	19,710	.985	590
4.	Pennsylvania	48,080	9.33	19,410	.868	628
5.	Massachusetts	20,050	9.18	19,080	.621	622

MSA	Employment	Hourly mean wage	Annual mean wage	Percent of MSA employment
MSAs with the highest concentration of workers in this occupation $^{6}$				
1. Yakima, WA MSA	2,000	\$7.96	\$16,560	2.644
2. Jersey City, NJ PMSA	5,710	7.75	16,110	2.293
3. Vineland-Millville-Bridgeton, NJ PMSA	1,290	10.01	20,830	2.204
4. York, PA MSA	3,410	9.19	19,120	2.067
5. Sarasota-Bradenton, FL MSA	5,510	6.88	14,300	1.977
Top paying MSAs for this occupation				
1. Kokomo, IN MSA	460	12.91	26,850	.937
2. Steubenville-Weirton, OH-WV MSA	330	12.18	25,340	.698
3. Lincoln, NE MSA	860	11.98	24,920	.591
4. Yolo, CA PMSA	1,240	11.83	24,610	1.392
5. Green Bay, WI MSA	1,680	11.64	24,210	1.191

<sup>1</sup>This table shows occupational employment and wage estimates for 10 industries—the 5 with the highest employment and the 5 with the highest wages for a given occupation. Industries are shown at the two-digit Standard Industrial Classification (SIC) code level. Data for industries are available at the three-digit SIC code level.

<sup>2</sup>Employment rank refers to the industry's occupational employment estimate relative to that of other industries. In other words, the industry with employment rank 1 has the largest number of workers in this occupation; that with employment rank 2 has the second largest, and so forth. Most occupations are not found in all industries. Some occupations occur in only one or a few industries.

<sup>3</sup> Wage rank refers to the industry's occupational wage estimate relative to other industries' wages for the same occupation. In other words, the industry with wage rank 1 is the highest paying industry for

this occupation; that with wage rank 2 is the second highest paying, and so forth.

<sup>4</sup>These are the States with the highest percentages of workers in the occupation. The percent of employment is calculated by dividing the State employment for the detailed occupation by the total State employment for all occupations.

<sup>5</sup>Wage rank within State refers to an occupation's wage estimate relative to those of other occupations in the same State. In other words, an occupation with wage rank within State of 1 is the highest paying occupation in the State.

<sup>6</sup>These are the Metropolitan Statistical Areas (MSAs) with the highest percentages of workers in the occupation. The percent of workers is calculated by dividing the MSA employment for the detailed occupation by the total MSA employment for all occupations.

### [Footnotes for formal table 2] Table 2. Industry, State, and MSA data for

### selected occupations, 2001--Continued

<sup>1</sup>This table shows occupational employment and wage estimates for 10 industries--the 5 with the highest employment and the 5 with the highest wages for a given occupation. Industries are shown at the two-digit Standard Industrial Classification (SIC) code level. Data for industries are available at the three-digit SIC code level.

<sup>2</sup>Employment rank refers to the industry's occupational employment estimate relative to that of other industries. In other words, the industry with employment rank 1 has the largest number of workers in this occupation; that with employment rank 2 has the second largest, and so forth. Most occupations are not found in all industries. Some occupations occur in only one or a few industries.

<sup>3</sup> Wage rank refers to the industry's occupational wage estimate relative to other industries' wages for the same occupation. In other words, the industry with wage rank 1 is the highest paying industry for this occupation; that with wage rank 2 is the second highest paying, and so forth.

<sup>4</sup>These are the States with the highest percentages of workers in the occupation. The percent of employment is

1

calculated by dividing the State employment for the detailed occupation by the total State employment for all occupations.

<sup>5</sup>Wage rank within State refers to an occupation's wage estimate relative to those of other occupations in the same State. In other words, an occupation with wage rank within State of 1 is the highest paying occupation in the State.

<sup>6</sup>These are the Metropolitan Statistical Areas (MSAs) with the highest percentages of workers in the occupation. The percent of workers is calculated by dividing the MSA employment for the detailed occupation by the total MSA employment for all occupations.

## Appendix A. The Standard Occupational Classification System

In 2000, the Occupational Employment Statistics (OES) survey fully implemented the U.S. Office of Management and Budget's (OMB) new occupational classification system the Standard Occupational Classification System (SOC). The SOC is a response to a growing need for a universal occupational classification system that permits government agencies and private industry to produce comparable data.

Users of occupational data from the OES survey include government program managers, industrial and labor relations practitioners, students considering career training, job seekers, vocational training schools, and employers wishing to set salary scales or locate a new plant. OMB requires all Federal statistical agencies collecting occupational data to use the SOC. The new classification system is designed to cover all occupations in which work is performed for pay or profit, reflecting the current occupational structure in the United States.

The OES survey uses 22 of the 23 major occupational groups from the SOC to categorize workers who work for pay in one of 770 detailed occupations. The major group excluded is military occupations, which are not covered in the OES survey.

#### **Description of the SOC structure**

The SOC is an empirically based, economywide occupational classification system. The occupations are identified by codes and titles, and by definitions that describe primary job duties. The skill level required for some of the occupations is implicit in the definition. The classification system emphasizes occupations of special interest to many data users, such as technology-related occupations and those requiring substantial training.

The SOC system has four levels of classification: Major group, minor group, broad occupation, and detailed occupation. Occupation codes consist of six digits, with a hyphen between the second and third digits for presentation clarity. The first two digits represent the major group; the third, the minor group; and the fourth and fifth, the broad occupation. The last digit, along with the preceding five, identifies the detailed occupation.

Major group codes end with 0000 (for example, 33-0000, Protective Service Occupations), minor groups end with 000 (33-2000, Fire Fighting Workers), and broad occupations end with 0 (33-2020, Fire Inspectors). All residuals ("Other," "Miscellaneous," or "All Other"), whether at the detailed or broad occupation or minor group level, will contain a 9 at the level of the residual. Detailed residual occupations will end in 9 (for example, 33-9199, Protective Service Workers, All Other); broad occupations that are minor group residuals will end in 90 (33-9190, Miscellaneous Protective Service Workers); and minor groups that are major group residuals will end in 9000 (33-9000, Other Protective Service Workers).

There are residual categories within the various levels of the system to permit the reporting of occupations not identified at the detailed level. The following sections examine the first level of the system (major group), as well as the residual occupational categories.

#### Major groups

The major groups and numbers of detailed occupations of the SOC surveyed in the OES program in 2001 are as follows:

Code	Major occupational group	Detailed occupa- tions
44.0000	lotal	//0
11-0000	Management	30
13-0000	Business and financial operations.	28
15-0000	Computer and mathematical	16
17-0000	Architecture and engineering	35
19-0000	Life, physical, and social science	39
21-0000	Community and social services	14
23-0000	Legal	9
25-0000	Education, training, and library	58
27-0000	Arts, design, entertainment, sports,	
	and media	37
29-0000	Healthcare practitioner and	
	technical	46
31-0000	Healthcare support	15
33-0000	Protective service	20
35-0000	Food preparation and serving	
	related	16
37-0000	Building and grounds cleaning and	
	maintenance	9
39-0000	Personal care and service	33
41-0000	Sales and related	21
43-0000	Office and administrative support	56
45-0000	Farming, fishing, and forestry	13
47-0000	Construction and extraction	58
49-0000	Installation, maintenance, and	
	repair	53
51-0000	Production	112
53-0000	Transportation and material	
	moving	52

#### **Classification guidelines**

To ensure that all users of occupational data classify workers in the same way, the following classification principles apply:

- 1. The classification covers all occupations in which work is performed for pay or profit, including work performed in family-operated enterprises by family members who are not directly compensated. It excludes occupations unique to volunteers. Each occupation is assigned to only one occupation at the lowest level of the classification. OES does not cover the self-employed. For additional information, see appendix B.
- Occupations are classified based upon the work performed and the skills, education, training, and credentials required.
- 3. Supervisors of professional and technical workers usually have qualifications similar to those of the workers they supervise and are, therefore, classified with the workers supervised. Likewise, team leaders, lead workers, and supervisors of production, sales, and service workers who spend at least 20 percent of their time performing work similar to that of the workers they supervise are classified with the workers they supervise.
- 4. First-line managers and supervisors of production, service, and sales workers who spend 80 percent or more of their time performing supervisory activities are classified separately in the appropriate supervisor category because their work activities are distinct from those of the workers they supervise. First-line managers generally are found in smaller establishments, where they perform both supervisory and management functions, such as accounting, marketing, and personnel work.
- 5. Apprentices and trainees are classified in the occupations for which they are being trained, while helpers and aides are classified separately.

- 6. If an occupation is not included as a distinct detailed occupation in the SOC structure, it is classified in the appropriate residual occupation. Residual occupations contain all occupations within a major, minor, or broad group that are not classified separately.
- 7. When workers may be classified in more than one occupation, they are classified in the occupation that requires the highest level of skill. If there is no measurable difference in skill requirements, workers are included in the occupation at which they spend the most time.
- 8. OES data collection and reporting agencies classify workers at the most detailed level possible. Different agencies may use different levels of aggregation, depending on their ability to collect data and the requirements of data users.

First-line managers and supervisors are included in the last 11 major occupational groups. Professional, paraprofessional, and technical supervisors are classified with the workers they supervise, due to the extensive subject matter knowledge required. First-line managers and supervisors may be supervised by top and middle managers in the managerial and administrative major groups.

#### **Residual occupational categories**

The SOC has detailed categories for occupations that are numerically significant, either in one industry or across all industries. For less populous occupations, residual categories (that is, "All other...") have been created within most levels of the SOC system. Residual categories provide a complete accounting of all workers employed within an establishment and allow aggregation and analysis of occupational employment data at various levels of detail. Some examples of residual categories are: "All other sales and related workers" at the major group level, and "All other machinery maintenance mechanics" at the detailed level. For 2001, residual occupations are not published.

For more information about the SOC, see the Bureau of Labor Statistics Web site at **http://www.bls.gov/soc/.** 

## Appendix B. Survey Methods and Reliability of the 2001 Occupational Employment Statistics Estimates

The Occupational Employment Statistics (OES) program samples approximately 400,000 establishments each year and, over a 3-year period, contacts approximately 1.2 million establishments. Each single-year sample represents one-third of both the certainty and noncertainty strata for the full 3year sample plan. (Certainty strata consist of establishments that are included in the sample because of their large employment size.) While estimates can be made from data for 1 or 2 years, the OES survey has been designed to produce estimates using a full 3 years' worth of data. The sample allows the production of estimates for detailed area, industry, and occupational levels. Estimates using any one year of data are subject to a higher sampling error (due to the smaller sample size) and to the limitations associated with being based on data from only one-third of the certainty units. Estimates from the 2001 survey are based on a full 3 years' worth of data. Beginning with those for 2002, estimates will reflect the implementation of a new semiannual collection cycle and the 2002 North American Industry Classification System.

#### Occupational and industrial classification

*The occupational classification system.* In 1999, the OES survey began using the U.S. Office of Management and Budget's (OMB) new occupational classification system— the **Standard Occupational Classification** (SOC). (See appendix A for a detailed description of the SOC.) The SOC is the first OMB-required occupational classification system for Federal statistical agencies. The OES survey uses 22 major occupational groups from the SOC to categorize workers in 1 of almost 770 detailed occupations.

*The industrial classification system.* The industrial classification system used in this survey is described in the *1987 Standard Industrial Classification Manual* (SIC), whereby reporting establishments are classified into industries on the basis of major product or activity. The OES program produces estimates by both two-digit and three-digit SIC codes and across all industries.

#### Scope of the survey

Occupational employment data by wage interval are used to

produce the 2001 national, State, and area occupational employment and wage estimates by industry. This is the sixth year for which the OES program has collected both occupational employment and wage data for all nonfarm industries, except private households. The survey covers establishments in SIC codes 07, 10 through 42, 44 through 87, and 89, and State and local governments. In addition, data for the U.S. Postal Service and Federal Government are universe counts obtained from the U.S. Office of Personnel Management. Occupational employment and wage estimates at the national level were produced by the Bureau of Labor Statistics (BLS) using employment and wage data from the 50 States and the District of Columbia. Guam, Puerto Rico, and the Virgin Islands were surveyed; however, data from these territories are not included in the production of national estimates.

Employers participating in the OES survey are asked to provide occupational data for a particular reference period. The reference period of the 2001 survey is the pay period that included October 12th, November 12th, or December 12th of the year. The pay period including the 12th day of the reference month is standard for Federal agencies collecting employment data. The reference period for any particular establishment in this survey was dependent on the establishment's SIC code. (See table below.)

Reference date	SIC codes of industries surveyed
October 12	07, 15, 16, 17, 241, 472, 50, 51, 52, 53, 541, 542, 543, 545, 546, 549, 55, 56, 57, 58, 59, 60, 61, 62, 637, 655, 672, 673, 679, 70, 722, 731, 732, 733, 734, 736, 738, 792, 793, 794, 799, and 84.
November 12	26, 27, 28, 29, 351, 352, 353, 354, 355, 356, 358, 359, 37, 386, 40, 41, 42, 44, 45, 46, 473, 474, 478, 48, 631, 632, 633, 635, 636, 639, 64, 651, 653, 654, 671, 735, 737, 751, 753, 754, 76, 78, 80, 81, 83, 86, 87, and 89.
December 12	10, 12, 13, 14, 20, 21, 22, 23, 242, 243, 244, 245, 249, 25, 30, 31, 32, 33, 34, 357, 36, 381, 382, 384, 385, 387, 39, 49, 544, 721, 723, 724, 725, 726, 729, 752, 791, 82, and State and local governments.

The employment estimates have been adjusted to the full universe counts of the 2001 survey reference period based on information from the BLS Covered Employment and Wages program. The 1999 and 2000 wage data have been adjusted to the 2001 reference period by using the national over-theyear fourth-quarter rate of change in wages for nine major occupational groups obtained from the BLS national Employment Cost Index.

#### Concepts

An *establishment* is an economic unit that produces goods or services. It generally is found at a single physical location and is engaged predominantly in one type of economic activity. Where a single physical location encompasses two or more distinct activities, these are treated as separate establishments if separate payroll records are available and certain other criteria are met.

*Employment* includes full- and part-time workers; workers on paid vacations or other types of leave; workers on unpaid short-term absences (such as those due to illness, bad weather, temporary layoff, or jury duty); salaried officers, executives, and staff of incorporated firms; employees temporarily assigned to other units; and employees for whom the reporting unit is their permanent (home) duty station, regardless of whether the unit prepares their paycheck. Among those excluded from coverage are most proprietors (owners and partners of unincorporated firms), self-employed workers, and unpaid family workers.

*Occupation* refers to the occupation in which employees are working rather than the occupation for which they may have been trained. For example, an employee trained as an engineer but working as a drafter is reported as a drafter. Employees who perform the duties of two or more occupations are reported in the occupation that requires the highest level of skill or in the occupation in which the most time is spent if there is no measurable difference in skill requirements.

*Working supervisors* (those spending 20 percent or more of their time doing work similar to that performed by workers under their supervision) are reported in the occupation most closely related to their work.

Part-time workers, workers receiving on-the-job training, and apprentices are reported in the occupation in which they ordinarily work.

A *wage* is money that is paid or received for work or services performed in a specified period. Included in wages for this survey are: Base rate; cost-of-living allowance; guaranteed pay; hazardous duty pay; incentive pay, including commissions; piece rates; production bonuses; length-ofservice allowance (longevity pay); oncall pay; portal-to-portal pay; and tips. Not included are: Backpay; overtime pay; severance pay; shift differentials; jury-duty pay; vacation pay; premium pay for work on holidays or weekends; attendance bonuses; holiday bonuses; meal and lodging allowances; merchandise discounts; nonproduction bonuses; profit-sharing distributions; relocation allowances; stock bonuses; tool allowances; tuition reimbursements; or uniform allowances.

#### Survey procedures

The survey is based on a probability sample, stratified by area, industry, and size of establishment, and is designed to represent the total or "universe" of establishments covered by the survey. The survey is conducted over a 3-year cycle. Each year, one-third of the sample units are included in the survey. To the extent possible, units selected in one year are not included in the sample the following 2 years.

Employers are asked to classify each of their workers in an occupation and wage range. There are 12 wage ranges, on both an hourly and annual basis, as follows:

	Wages			
Interval	Hourly	Annual		
Range A	Under \$6.75	Under \$14,040		
Range B	\$6.75 to \$8.49 \$8.50 to \$10.74	\$14,040 to \$17,679 \$17,680 to \$22,350		
Range D	\$10.75 to \$13.49	\$22,360 to \$28,079		
Range E	\$13.50 to \$16.99	\$28,080 to \$35,359		
Range F	\$17.00 to \$21.49	\$35,360 to \$44,719		
Range G	\$21.50 to \$27.24	\$44,720 to \$56,679		
Range H	\$27.25 to \$34.49	\$56,680 to \$71,759		
Range I	\$34.50 to \$43.74	\$71,760 to \$90,999		
Range J	\$43.75 to \$55.49	\$91,000 to \$115,439		
Range K	\$55.50 to \$69.99	\$115,440 to \$145,599		
Range L	\$70.00 and over	\$145,600 and over		

#### Method of collection

Survey questionnaires, or "schedules," initially are mailed out to almost all sampled establishments; State Employment Security Agency (SESA) staff make personal visits to some of the larger establishments.

Two additional mailings are sent to nonrespondents at approximately 3-week intervals. Telephone or personal visit followups are made for those nonrespondents considered critical to the survey because of their size.

#### Sampling procedures

The sampling frame for this survey was the list of establishments in the two- and three-digit SIC codes listed above that reported to the SESAs for Unemployment Insurance (UI) purposes. Each quarter, the lists from all States are compiled into a single file at BLS. This comprehensive file is called the Longitudinal Database (LDB), and is a compilation of State unemployment insurance reports. Virtually all businesses are required to file these reports within the State in which they are located. For the 1999 survey, the sampling frame was the LDB file from the second quarter of 1998; for the 2000 survey, it was the file from the second quarter of 2000. This frame was supplemented with a list supplying establishment information on railroads (SIC 401).

A census is taken of Federal Government establishments each year. Data representing Federal Government employment and wages are obtained at the end of the survey process from the U.S. Office of Personnel Management.

Within each State, establishments in the universe were stratified by Metropolitan Statistical Area (MSA), three-digit SIC code, and size of firm. An establishment's size class is determined by its employment as reported on the sampling frame. Establishments in smaller size classes were selected using a probability-based sampling procedure. Establishments in the largest size class are sampled with virtual certainty across the 3-year cycle of the survey. The targeted sample size of 1.2 million establishments per 3-year cycle was allocated in a manner that equalized the expected relative standard error of the typical occupational employment within each MSA/three-digit SIC cell. Within each of these cells, the sample was allocated across size classes in a manner that minimized the variance of the average typical occupational employment estimate.

The OES survey uses permanent random numbers (PRNs) in its sample selection methodology. The purpose of the PRN is to limit, to the extent possible, overlap between the OES survey and other BLS surveys. These numbers are placed on the frame and are retained by establishments across time. A sample selection using PRNs can be done in several ways. For example, a range of PRNs can be used to select a portion of the universe within each stratum. Alternatively, a specific PRN value can be used as a "start" point within a stratum. Within a stratum sorted by PRN value,  $n_{\mu}$ establishments are selected sequentially, beginning with this "start" point (where  $n_{\mu}$  is the number of sample units allocated to stratum h). This latter method is the one used for the OES sample selection. For purposes of the sample selection, a stratum is defined by State/MSA/three-digit SIC/employment size class. Approximately one-third of the allocated units are selected within each stratum each year.

The above allocation method resulted in initial sample sizes of 402,636 establishments in 1999, 406,876 establishments in 2000, and 405,655 establishments in 2001. The combined initial sample size for the 2001 estimates is 1,208,542 establishments. Note that the sum of samples across the 3 years does not equal the combined sample size because only the current year's State and Federal Government establishments are included.

#### Response

Of the 369,694 eligible units from the 1999 sample, usable responses were obtained from 286,903, producing a response rate of 77.6 percent based on units. Of the 375,387 eligible units from the 2000 sample, usable responses were obtained from 293,450, producing a response rate of 78.2 percent based on units. Of the 366,760 eligible units from the 2001 sample, usable responses were obtained from 286, 726, producing a response rate of 78.2 percent based on units.

#### Nonresponse

Nonresponding establishments are accounted for in the OES survey by a two-step imputation process. First, the staffing pattern is imputed using a "hot-deck," "nearest-neighbor" imputation method. "Hot-deck" procedures utilize data from the current period to impute missing data (from the current period). The "nearest-neighbor" method searches the responding establishments within a defined cell and finds the responding establishment that most closely matches the nonresponding establishment for key classification values (area/SIC/size class). The staffing pattern, or employment distribution, of the responding establishment is used as the staffing pattern of the nonresponding establishment. The second step is to impute a wage distribution for each occupation of the imputed staffing pattern. This imputation procedure replaces the missing data by determining the distribution of the reported occupational wage data across wage intervals in the current area/SIC/size class. If there are sufficient data at this level, the procedure uses this reported wage distribution to allocate the nonrespondent's imputed occupational employment across the wage intervals. If there are not enough data, the pool of donors is expanded to include adjacent size classes, industries, and areas until a distribution can be determined.

Occasionally, a responding establishment provides employment information, but refuses to provide wage distribution information for selected occupations. The OES survey uses the "distribution within a cell" procedure described above to impute the missing data for this partial report.

#### Combining and benchmarking multiyear data

Survey data from 1999, 2000, and 2001 were used to produce the wage and employment estimates for all but one of the occupations. The exception is physicians and surgeons, all other, because data were not collected for this occupation in 1999; wage estimates for this occupation in are based on 2000 and 2001 data only. Each year's sample is weighted to represent the universe as it appeared at the time the sample was selected. In order to combine the data, each unit's weight is modified so that the aggregate sample represents the universe. This is done via a fairly simple procedure: each unit's weight is divided by the number of years for which sample units were selected for that stratum.

A ratio estimator is used to develop estimates of occupational employment. The auxiliary variable used was the 2001 reference-month population value of total employment. In order to balance the States' need for estimates at different levels of geographic and industrial aggregation, the ratio adjustment process was applied as a hierarchical series of ratio adjustment, or "benchmark," factors.

The primary component of this procedure is a ratio adjustment at the State/MSA/three-digit SIC/employment size class level. If these ratio adjustment values are out of range, they are set at predetermined maximum or minimum values. This adjustment can be described as follows:

Define:

h =State/MSA/three-digit SIC

- H =State/three-digit SIC
- s = 1 of 4 employment size classes {1-19, 20-

49, 50 - 249, 250+}

- S = 1 of 2 aggregate employment size classes  $\{1-49, 50+\}$
- M = 2001 reference month population value of total employment
- i = establishment
- $w_i$  = adjusted sample weight for establishment *i*  $x_i$  = total establishment employment
- $BMF_{min} =$  a parameter, the lowest value allowed for BMF

$$\beta_{hs} = \left( M_{hs} / \sum_{i \in hs} w_i p_i \right), \quad \beta_{hs} = \left( M_{hs} / \sum_{i \in hs} w_i p_i \right), \quad \beta_h = \left( M_h / \sum_{i \in h} w_i p_i \right), \text{ then}$$

 $BMF_{1,hs} = \begin{cases} \beta_{hs}, \text{ if all } \beta_{hs} \text{ within h are bounded by (BMF_{min}, BMF_{max}),} \\ \beta_{hs}, \text{ if all } \beta_{hs} \text{ within h are bounded by (BMF_{min}, BMF_{max}),} \\ BMF_{min}, \text{ if } \beta_{h} < BMF_{min}, \\ BMF_{max}, \text{ if } \beta_{h} > BMF_{max}, \\ \beta_{s} \text{ otherwise} \end{cases}$ 

The next component in the procedure is a ratio adjustment at the State/three-digit SIC level using the product of the adjusted sampling weight and the first ratio adjustment as a final weight value. If these ratio adjustment values are out of range, they are set at predetermined maximum or minimum values. This ratio adjustment accounts for weighted, ratio-adjusted sample employment that does not adequately represent the universe within one or more of the State/MSA/ three-digit SIC strata. This adjustment is calculated as follows:

Define:

$$\beta_{H} = \left( \frac{M_{H}}{\sum_{hs \in H} \sum_{i \in hs} w_{i} p_{i} BMF_{1, hs}} \right), \text{ then}$$

$$BMF_{2,H} = \begin{cases} BMF_{min}, \text{ if } \beta_H < BMF_{min}, \\ BMF_{max}, \text{ if } \beta_H > BMF_{max}, \\ \beta_H \text{ otherwise} \end{cases}$$

A ratio adjustment at the State/two-digit SIC level is then calculated using the product of the adjusted sampling weight, the first ratio adjustment, and the second ratio adjustment as a final weight value. If these ratio adjustment values are out of range, they are set at predetermined maximum or minimum values. This ratio adjustment accounts for weighted, ratio-adjusted sample employment that does not adequately represent the universe within one or more of the State/three-digit SIC strata. This adjustment is calculated similarly to  $BMF_{2H}$ .

Finally, a ratio adjustment at the State/industry-division level is calculated using the product of the adjusted sampling weight, the first ratio adjustment, the second ratio adjustment, and the third ratio adjustment as a final weight value. If these ratio adjustment values are out of range, they are set at predetermined maximum or minimum values. This ratio adjustment accounts for weighted, ratio-adjusted sample employment that does not adequately represent the universe within one or more of the State/two-digit SIC strata. This adjustment also is calculated similarly to  $BMF_{2H}$ .

A final ratio adjustment factor,  $BMF_{i}$ , is calculated as the product of the four hierarchical ratio adjustment factors. That is,  $BMF_i = BMF_1 * BMF_2 * BMF_3 * BMF_4$ . A final weight value is then calculated as the product of the adjusted sample weight and the final ratio adjustment factor. Note that the population values of total employment ( $M_{hs}$ ) are obtained from the BLS Longitudinal Data Base (LDB) file.

#### Estimation methodology

Producing estimates using sample data for 3 years provides additional occupational detail and sampling error reductions (particularly for small geographic areas and occupations). However, this procedure also has some quality limitations because it requires the adjustment of earlier years' data to the current reference period—a procedure referred to as "wage updating."

Estimates for all survey years use the estimation methodology introduced in 1997. The employment estimation methodology uses a "nearest neighbor" approach for nonrespondents and applies employment benchmarks at a detailed MSA/ three-digit industry/broad size class level. (See the sections on estimated employment and nonresponse.) Wage estimates are updated using the Employment Cost Index. (See section on estimated wage rates.)

The 1999 OES survey wage estimates for some occupations were developed from data for the full 3 years of the OES sample, while the remaining occupational wage estimates and all of the employment estimates were from 1 year's worth of data due to change in the occupation classification system used. (See appendix A.) The combined 1997, 1998, and 1999 data were obtained from approximately 1.2 million sample units. The 2000 OES survey estimates are developed from data for 2 years of the OES sample. The combined 1999 and 2000 data were obtained from approximately 800,000 sample units. The 2001 OES survey estimates are developed from data for the full 3 years of the OES sample. The combined 1999, 2000, and 2001 data were obtained from approximately 1.2 million sample units.

#### **Estimated employment**

As discussed previously, a ratio estimator is used to develop estimates of occupational employment. The auxiliary variable is the population value of total employment obtained from the refined UI files for the 2001 reference month. For each MSA, the estimated employment for an occupation at the reported three-digit SIC level was calculated by summing the product of the weighted employment and the ratio factor for each sampled establishment in the MSA/three-digit SIC. The estimated employment for an occupation at the all-industry level was obtained by summing the occupational employment estimates across all industries within an MSA reporting that occupation. The employment and wage data for Federal Government workers in each occupation were added to the survey-derived data.

First, within each MSA, the estimated employment for an occupation at the reported three-digit SIC h level was calculated using the following equation:

$$\hat{X}_{ho} = \sum_{i \in h} \left( w_i \; BMF_i \; x_{io} \right)$$

where

0

h

i

= occupation; = reported three-digit SIC within an MSA: = establishment; = adjusted sample weight for estab-W, lishment I; BMF, = the hierarchical benchmark factor applied to establishment *i*; = reported employment for occu- $X_{io}$ pation *o* in establishment *i*;  $\hat{X}_{ho}$ = estimated employment for occupation *o* in SIC *h* within an MSA.

The estimated employment for an occupation at the allindustry level was obtained by summing the occupational employment estimate  $\hat{X}_{ho}$  across all industries within an MSA that reported that occupation. See the formula below:

$$\hat{X}_o = \sum_{h=1}^{L_h} \hat{X}_{ho}$$

where L<sub>i</sub> is the number of industries reporting that occupation within the MSA.

#### **Estimated wage rates**

Occupational wage data in the OES survey are collected as the number of workers in an occupation who are paid wages within each of 12 contiguous wage intervals. For example, an establishment might report that it employs 10 secretaries: 2 in wage interval B, paid wages between \$6.75 and \$8.49 per hour; 6 in wage interval D, paid wages between \$10.75 and \$13.49 per hour; and 2 in wage interval E, paid wages between \$13.50 and \$16.99 per hour. As a result, individual wage rates of workers are not collected. Conventional arithmetic mean formulas are not applicable in this situation. Because wage data are collected within an interval matrix, the particular wage rate of all employees within an interval is approximated by a mean wage rate value for the interval for each of the first 11 wage intervals. Data from the BLS National Compensation Survey (NCS) are used to calculate these mean wage rate values. The mean wage value for the upper open-ended wage interval is set at that interval's starting point. Occupational wage rates are calculated by developing a weighted estimate of total occupational wages, and dividing that by a weighted estimate of total occupational employment ( $\hat{X}_{o}$ ).

Wage updating process. Because data from 3 years were used to produce the 2001 OES wage estimates for most occupations, a process was used to update prior year information so that it would be representative of the 2001 reference period. This was done by adjusting the 1999 and 2000 wage data by a factor developed from the BLS Employment Cost Index (ECI) program. The ECI program provides a rate of change in wages from fourth-quarter 1999 to fourth-quarter 2001 for nine major occupational groups. Each OES occupation belongs to one of these major occupational groups.

Estimated mean wage rate. Mean wage is the estimated total wages for an occupation divided by its weighted survey employment. An estimate of the mean wage rate was calculated by using a standard interval-based estimation formula, modified to account for the wage-updating process. See the formula below:

$$\hat{R}_o = \frac{\sum_{z=t-2}^{t} \left( \sum_{i \in z} w_i BMF_i \hat{y}_{io} \right)}{\hat{X}_o} , \text{ where } \hat{y}_{io} = u_{zo} \sum_r x_{ior} c_{zr} ; (i \in z)$$

and where o

= occupation;

$\hat{R}_{_{o}}$	= mean wage rate for occupation <i>o</i> ;
z	= year;
t	= current reference year;
w <sub>i</sub>	= adjusted sampling weight for estab- lishment <i>i</i> ;
$\hat{y}_{io}$	= unweighted total wage estimate
	for occupation <i>o</i> in establishment <i>i</i> ;
r	= wage interval;
$\hat{X}_{o}$	= estimated employment for occupation <i>o</i> ;
X <sub>ior</sub>	= reported employment for occu- pation <i>o</i> in establishment <i>i</i> in wage interval <i>r</i> (note that establishment <i>i</i> reported data for 1 year ( <i>z</i> ));
и <sub>г о</sub>	= ECI updating factor for year $z$ and occupation $o$ ; and
С	= see below.

In this formula,  $c_{rr}$  represents the mean wage of interval r for year z. This mean was determined empirically using data from the BLS NCS survey. Research is conducted at periodic intervals to verify the continued utility of this updating procedure.

Median wage. The median wage is the estimated 50th percentile of the distribution of wages; 50 percent of workers in an occupation earn wages below, and 50 percent earn wages above the median wage. The wage interval containing the median wage is located using a cumulative frequency count of employment across wage intervals. After the targeted wage interval is identified, the median wage rate is then estimated using a linear interpolation procedure.

#### Variance of estimates

*Occupational employment variance estimates.* Estimates of sampling error are calculated to allow data users to determine if occupational employment estimates are reliable enough for their needs. Only a probability-based sample can be used to calculate estimates of sampling error from the sample itself.

The formula used to estimate variances (a common measure of sampling error) for the occupational employment estimates is based on the survey's sample design and method of estimation. The OES program employs a subsample replication technique, called the "jackknife random group," to estimate variances of occupational employment. In this technique, each sampled establishment is assigned to one of G random groups. Using the data in these groups, G subsamples are formed from the parent sample. Next, G estimates of total occupational employment ( $\hat{X}_{hjog}$ ) are calculated, one employment estimate per subsample. Afterwards, the variability of these G employment estimates is calculated to obtain the estimated occupational employment variance.

The occupational employment variance estimate at the reported three-digit SIC *h*/reported size class *j* level is calculated using the following equation:

$$v(\hat{X}_{hjo}) = \frac{\sum_{g=1}^{G} (\hat{X}_{hjog} - \hat{\overline{X}}_{hjo})^2}{G(G-1)}$$

where 
$$v(\hat{X}_{hjo}) = \text{estimated variance of } \hat{X}_{hjo};$$
  
 $G = \text{number of random groups;}$   
 $\hat{X}_{hjo} = \text{estimated employment of occupa-tion o in SIC h and size class j;}$   
 $\hat{X}_{hjog} = \text{estimated employment of occupa-tion o in SIC h, size class j, and}$   
 $\hat{\overline{X}}_{hjo} = \text{estimated mean employment for}$   
 $occupation o$  in SIC h and size  
class j based on the G subsamples.

(Note that a finite population correction factor is applied to the terms  $\hat{X}_{hjog}$  and  $\hat{\overline{X}}_{hjo}$ .)

The variance for an occupational employment estimate at the reported three-digit SIC *h* level was obtained by summing the variance  $v(\hat{X}_{hjo})$  across all reported size classes *j* in SIC *h*.

$$v(\hat{X}_{ho}) = \sum_{j \in h} v(\hat{X}_{hjo})$$

Similarly, the variance for an occupational employment estimate at the reported two-digit SIC level *H* is obtained by summing the variance  $v(\hat{X}_{ho})$  across all reported three-digit SICs *h* within the two-digit SIC.

$$v(\hat{X}_{Ho}) = \sum_{h \in H} v(\hat{X}_{ho})$$

Occupational mean wage variance estimates. The formula used to estimate occupational mean wage variances also is based on the survey's sample design and method of estimation. Because the OES wage data are collected in intervals, we do not capture the exact wage of each worker. Therefore, some components of the wage variance are approximated using factors developed from NCS data. A *Taylor Linearization* technique was used to develop a variance estimator appropriate for OES mean wage estimates. The primary component of the mean wage variance, which accounts for the variability of the observed sample data, is estimated using the standard estimator of variance for a ratio estimate. This component is the first term in the formula given below:

$$\psi(\hat{R}_{o}) = \left(\frac{1}{\hat{X}_{o}^{2}}\left(\sum_{h}\left\{\frac{n_{ho}(1-f_{ho})}{n_{ho}-1}\right\}\left\{\sum_{i\in h}w_{i}^{2}(q_{io}-\overline{q}_{ho})^{2}\right\}\right) + \sum_{r}\theta_{or}^{2}\sigma_{cr}^{2} + \frac{1}{\hat{X}_{o}^{2}}\sum_{r}\left(\sum_{i=1}^{n_{o}}(w_{i}x_{ior})^{2}\right)\sigma_{er}^{2} + \frac{1}{\hat{X}_{o}}\sum_{r}\theta_{or}\sigma_{\omega r}^{2}\right)$$

where  $\hat{R}$ 

h

 $f_{ho}$ 

 $n_{ho}$ 

i

 $W_i$ 

 $\hat{y}_{io}$ 

= the estimated mean wage for occupation o;

 $v(\hat{R}_o)$  = the estimated variance of  $\hat{R}_o$ ;

- the estimated occupational employment for occupation *o*;
- = a stratum (area / industry / establishment employment size);
- = the sampling fraction for occupation *o* in stratum *h*;
- the number of sampled establishments that reported occupation
   *o* in stratum *h*;
- = an establishment;
- the sampling weight for establishment *i*;

$$q_{io}$$
 = the quantity  $(\hat{y}_{io} - \hat{R}_o x_{io})$  for  
occupation *o* in establishment *I*;

 the estimated total occupational wage in establishment *i* for occupation *o*;

$x_{io}$	=	the reported employment in estab-
		lishment <i>i</i> for occupation <i>o</i> ;

 $\overline{q}_{ho}$  = the mean of the  $q_{io}$  quantities for occupation *o* in stratum *h*;

= a wage interval;

 $\theta_{or}$  = the proportion of employment within interval *r* for occupation *o*;

$$\left(\sigma_{cr}^2,\sigma_{er}^2,and\;\sigma_{\omega r}^2
ight)$$
 respectively repre-

sent—within wage interval r—the variability of the wage value imputed to each worker, the variability of wages across establishments, and the variability of wages within establishments. These quantities are estimated using data from the BLS NCS.

#### **Reliability of the estimates**

Estimates developed from a sample may differ from the results of a census. Two types of error, sampling and nonsampling, can occur in estimates calculated from a sample. *Sampling error* occurs because our observations are based on a sample, not on the entire population. *Nonsampling error* occurs because of response and operational errors in the survey. Unlike sampling error, this form of error also can occur in a census.

#### Sampling errors

The particular sample used in this survey is one of a large number of many possible samples of the same size that could have been selected using the same sample design. Estimates derived from different samples would tend to differ from one another. As indicated above, the variance of a survey estimate is a measure of the variation among the estimates from all possible samples. The standard error of a survey estimate is the square root of its variance; the relative standard error is the ratio of the standard error to the estimate itself.

The sample estimate and its standard error allow the data user to construct an interval estimate with a prescribed level of confidence that the interval will include the mean value of the estimate from all possible samples.

To illustrate, if all possible samples were selected, and if each of these were surveyed under essentially the same conditions, and an estimate and its estimated standard error were calculated from each sample, then:

1. Approximately 68 percent of the intervals from 1 standard error below to 1 standard error above the derived estimate would include the average value of the estimates from all possible samples. This interval is called a 68-percent confidence interval.

2. Approximately 90 percent of the intervals from 1.6 standard errors below to 1.6 standard errors above the derived estimate would include the average value of the esti-

mates from all possible samples. This interval is called a 90percent confidence interval.

3. Approximately 95 percent of the intervals from 2 standard errors below to 2 standard errors above the derived estimate would include the average value of the estimates from all possible samples. This interval is called the 95-percent confidence interval.

4. Almost all (99.7 percent) of the intervals from 3 standard errors below to 3 standard errors above the derived estimate would include the average value of the estimates from all possible samples.

For example, suppose that an estimated occupational employment total is 5,000, with an associated relative standard error of 2.0 percent. Based on these data, the standard error of the estimate is 100 (2 percent of 5,000). A 68-percent confidence interval for the employment estimate is (5,000 + -100) or from 4,900 to 5,100. Approximately 68 percent of the intervals constructed in this manner will include the mean of all possible employment estimates as computed from all possible samples. A 95-percent confidence interval for the employment estimate is (5,000 + -200) or from 4,800 to 5,200. Approximately 95 percent of the intervals constructed in this manner will include the mean of all possible employment estimates as computed from all possible employment estimates as computed in this manner will include the mean of all possible employment estimates as computed in this manner will include the mean of all possible employment estimates as computed in this manner will include the mean of all possible employment estimates as computed from all possible employment estimates as computed in this manner will include the mean of all possible employment estimates as computed from all possible employment estimates as computed from all possible employment estimates as computed from all possible samples. Estimates of sampling errors for occupational employment and mean wage estimates are provided with this publication.

#### Nonsampling error

This type of error is attributable to several causes such as: An inability to obtain information for all establishments in the sample; differences in the respondents' interpretation of the survey question; inability or unwillingness of the respondents to provide correct information; errors made in recording, coding, or processing the data; and errors made in imputing values for missing data. Explicit measures of the effects of nonsampling error are not available.

Several edit and quality control procedures are used to reduce nonsampling error. For example, completed survey questionnaires are checked for data consistency. Followup mailings and telephone calls are directed to nonresponding establishments to improve the survey response rate. Response analysis studies are conducted to assess the respondents' comprehension of the questionnaire. (See the section below for additional information on the quality control procedures used by the OES survey.) The relative standard error indicates the magnitude of the sampling error. It does not measure nonsampling error, including any biases in the data. Particular care should be exercised in the interpretation of small estimates or of small differences between estimates when the sampling error is relatively large or the magnitude of the bias is unknown.

#### **Quality control measures**

The OES survey is a Federal-State cooperative effort that enables States to conduct their own surveys. A major concern with a cooperative program such as OES is to accommodate the needs of BLS and other Federal agencies, as well as State-specific publication needs, with limited resources while simultaneously standardizing survey procedures across all 50 States, the District of Columbia, and the U.S. territories. Controlling sources of nonsampling error in this decentralized environment can be difficult. One important computerized quality control measure used by the OES survey is the Survey Processing and Management (SPAM) system. It was developed to provide a consistent and automated framework for survey processing and to reduce the workload for analysts at the State, regional, and national levels.

To ensure standardized sampling methods in all areas, the sample is drawn in the national office. Standardizing data processing activities such as validating the sampling frame, allocating and selecting the sample, refining mailing addresses, addressing envelopes and mailers, editing and updating questionnaires, conducting electronic review, producing management reports, and calculating employment estimates has resulted in the overall standardization of the OES survey methodology. This has reduced the number of errors on the data files as well as the time needed to review them.

Other quality control measures used in the OES survey include:

• Followup solicitations of nonrespondents (especially

critical nonrespondents);

- Review of schedules to verify the accuracy and reasonableness of the reported data;
- Adjustments for atypical reporting units on the data file;
- Validation of the benchmark employment figures and of the benchmark factors; and
- Validation of the analytical tables of estimates (at the two- and three-digit SIC levels).

#### Confidentiality

BLS has a strict confidentiality policy that ensures that the survey sample composition, lists of reporters, and names of respondents will be kept confidential. Additionally, the policy assures respondents that published figures will not reveal the identity of any specific respondent and will not allow the data of any specific respondent to be imputed. Each published estimate is screened to ensure that it meets these confidentiality requirements. The specific screening criteria are not listed in this publication to further protect the confidentiality of the data.

## Appendix C. Availability of Historical Occupational Employment Statistics Survey Data Nationally and from State Agencies

The Occupational Employment Statistics (OES) program first collected employment and wage data in 1996 to produce occupational estimates for all industries and also to produce occupational wage data for all States and metropolitan areas each year. Prior to 1996, the OES survey collected data from specified industries in 1 of 3 years in the survey round, as indicated in the table below. States also produce occupational estimates by industry. Prior to 1983, not all States participated in the OES program in all survey years. Starting with the 1991 OES survey, certain States also collected wage data. In 1996, all States began collecting wage data. Check with the State Employment Security Agencies listed on the inside back cover of this publication regarding the availability of State data on occupational employment and wages.

Industry	1987 SIC code	Years collected
	07	4000 4005
Agricultural services	07	1992, 1995
Mining	10-14	1978, 1981, 1984, 1987, 1990, 1993
Construction	15-17	1978, 1981, 1984, 1987, 1990, 1993
Manufacturing	20-39	1977, 1980, 1983, 1986, 1989, 1992, 1995
Transportation and public utilities	40-49	1979, 1982, 1985, 1988, 1991, 1994
Wholesale trade	50-51	1979, 1982, 1985, 1988, 1991, 1994
Retail trade	52-59	1979, 1982, 1985, 1988, 1991, 1994
Finance, insurance, and real estate	60-67	1978, 1981, 1984, 1987, 1990, 1993
Services	70-87, 89	1978, 1981, 1984, 1987, 1990, 1993
Hospitals	806	1980, 1983, 1986, 1989, 1992, 1995
Educational services	82	1978, 1981, 1985, 1988, 1991, 1994
State government		1979, 1982, 1985, 1988, 1991, 1994
Local government		1979, 1982, 1985, 1988, 1991, 1994