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OCCUPATIONAL EMPLOYMENT AND WAGES — MAY 2019

Installation, maintenance, and repair occupations had employment of 5.7 million in May 2019, representing 3.9 percent of total national employment, the U.S. Bureau of Labor Statistics reported today. The largest installation, maintenance, and repair occupation was general maintenance and repair workers (1.4 million) and the highest paying installation, maintenance, and repair occupation was powerhouse, substation, and relay electrical and electronics repairers (\$81,280). (See charts 1 and 2.) The annual mean wage across all installation, maintenance, and repair occupations was \$50,130, compared with the U.S. average wage of \$53,490. (See table 1.)

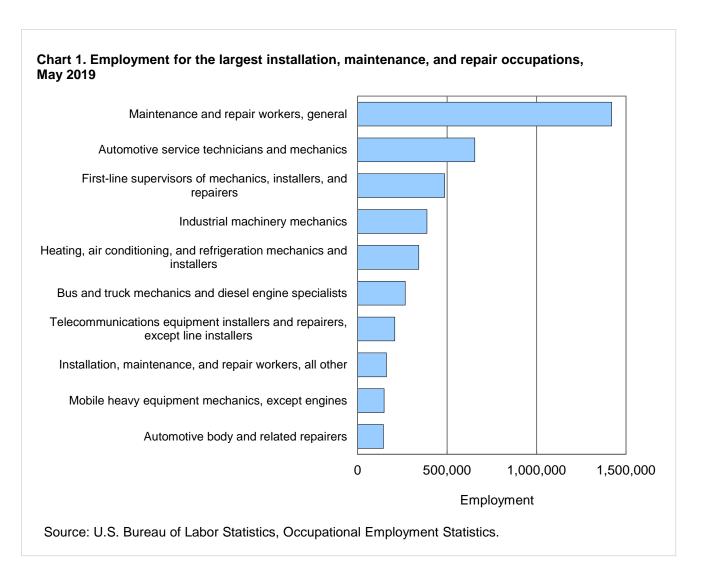
The Occupational Employment Statistics (OES) program provides employment and wage estimates for nearly 800 occupations in the nation, states, and approximately 530 areas. National data are available by industry for approximately 415 industry classifications and by ownership across all industries, schools, and hospitals. This news release features installation, maintenance, and repair; sales and related; and community and social service occupations, in addition to STEM (science, technology, engineering, and mathematics) occupations and employment and wages by typical entry-level educational requirement. National employment and wage information for all occupations is shown in table 1.

Installation, maintenance, and repair occupations

- The **largest** installation, maintenance, and repair occupations were general maintenance and repair workers (1.4 million); automotive service technicians and mechanics (655,330); and first-line supervisors of mechanics, installers, and repairers (485,700). (See table 1 and chart 1.)
- The **highest paying** installation, maintenance, and repair occupations included powerhouse, substation, and relay electrical and electronics repairers (\$81,280), which typically require a

Changes to the Occupational Employment Statistics (OES) Data

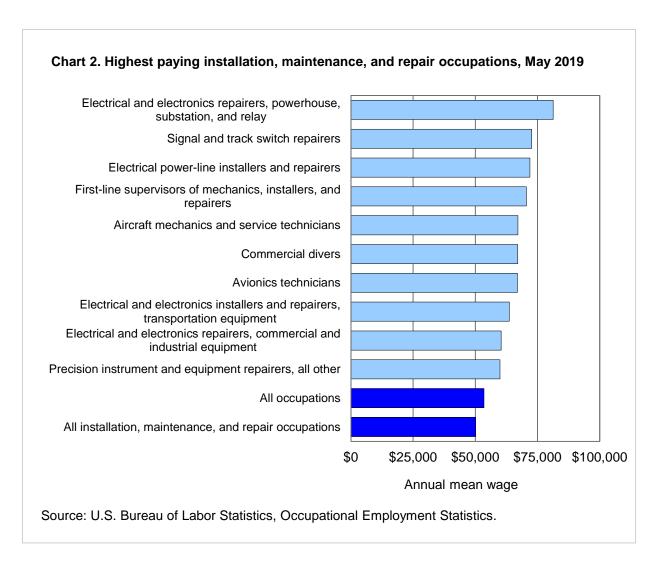
With the May 2019 estimates, the OES program has begun implementing the 2018 Standard Occupational Classification (SOC) system. See the box note at the end of this news release for more information on changes to the OES data.



postsecondary nondegree award, such as a certificate, for entry; and signal and track switch repairers (\$72,690) and electrical power-line installers and repairers (\$71,960), which typically require a high school diploma or equivalent. (See table 1 and chart 2.)

- The **lowest paying** installation, maintenance, and repair occupations were tire repairers and changers (\$30,350) and bicycle repairers (\$31,360). (See table 1.)
- **Industries** with the largest employment of installation, maintenance, and repair occupations were automotive repair and maintenance (454,220), building equipment contractors (437,470), and real estate (352,350).
- States with the highest employment shares of installation, maintenance, and repair occupations included Wyoming (6.6 percent of state employment), Alaska (5.7 percent), and North Dakota (5.3 percent).
- Alaska (\$61,260), the District of Columbia (\$60,630), and Connecticut (\$58,110) were among the states with the highest wages for installation, maintenance, and repair occupations.

State data are available at www.bls.gov/oes/current/oessrcst.htm.



National industry-specific data are available at www.bls.gov/oes/current/oessrci.htm.

Sales and related occupations

- Sales and related occupations had **employment** of 14.4 million, representing 9.8 percent of U.S. employment, and an **annual mean wage** of \$43,060. This was the second-largest occupational group, after office and administrative support occupations. (See table 1.)
- The **largest** sales and related occupations were retail salespersons (4.3 million); cashiers (3.6 million); and wholesale and manufacturing sales representatives, except technical and scientific products (1.3 million). (See table 1.)
- **Metropolitan areas** with the highest employment of wholesale and manufacturing sales representatives, except technical and scientific products were New York-Newark-Jersey City, N.Y.-N.J.-PA. (84,870); Los Angeles-Long Beach-Anaheim, CA. (63,550); and Chicago-Naperville-Elgin, IL.-IN.-WI. (57,050).
- The **highest paying** sales and related occupations were sales engineers (\$112,780); securities, commodities, and financial services sales agents (\$93,090); and wholesale and manufacturing

- sales representatives of technical and scientific products (\$92,980). These occupations typically require a bachelor's degree for entry. (See table 1.)
- The **lowest paying** sales and related occupations were cashiers (\$24,370) and gambling change persons and booth cashiers (\$28,010). (See table 1.)
- Wholesale and manufacturing sales representatives, except technical and scientific products had an annual mean wage of \$71,110 nationally. (See table 1.) The highest paying states for this occupation included New Jersey (\$84,170), Massachusetts (\$82,220), and Colorado (\$81,670).

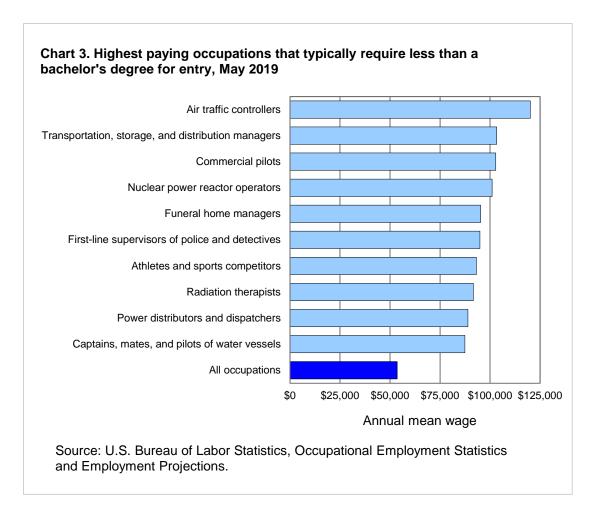
Metropolitan area data are available at www.bls.gov/oes/current/oessrcma.htm.

Community and social service occupations

- Community and social service occupations had total **employment** of 2.2 million and an **annual mean wage** of \$50,480. (See table 1.)
- The **largest** community and social service occupations were social and human service assistants (404,450) and child, family, and school social workers (327,710). (See table 1.)
- The **highest paying** community and social service occupations included all other social workers (\$61,750); educational, guidance, and career counselors and advisors (\$61,000); and health education specialists (\$60,500). Educational, guidance, and career counselors and advisors typically require a master's degree for entry; health education specialists and all other social workers typically require a bachelor's degree. (See table 1.)
- The **lowest paying** occupation in this group was social and human service assistants (\$37,050). (See table 1.)
- Child, family, and school social workers had an annual mean wage of \$51,030 nationally. (See table 1.) The states with the highest wages for this occupation included New Jersey (\$68,830) and the District of Columbia (\$71,590). The lowest paying states for this occupation included Mississippi (\$37,190) and Oklahoma (\$37,610).

Typical entry-level education

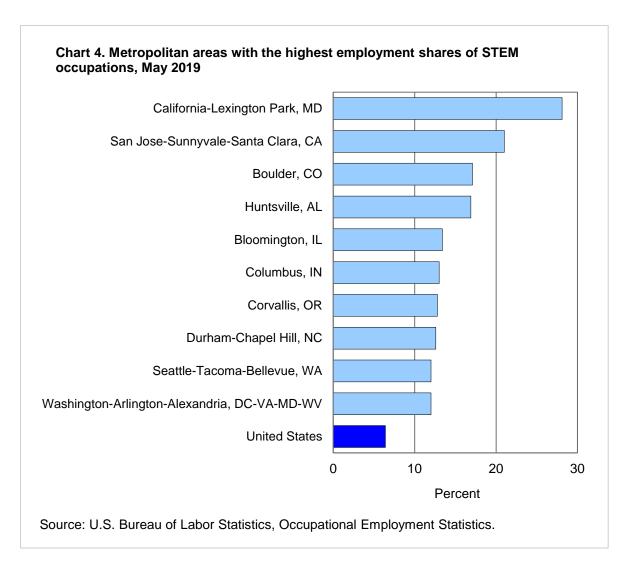
- Occupations typically requiring postsecondary education for entry made up 38 percent of
 employment. The largest postsecondary category, occupations typically requiring a bachelor's
 degree for entry, made up 22 percent of employment. This educational category includes
 registered nurses; teachers at the kindergarten through secondary levels; and many management,
 business and financial operations, computer, and engineering occupations.
- Occupations typically requiring a **high school diploma or the equivalent** for entry made up 38 percent of employment, and occupations typically requiring **no formal educational credential** for entry made up 24 percent of employment. These two educational categories include most



production and construction occupations, as well as large occupations such as retail salespersons, fast food and counter workers, and cashiers.

- Average wages were generally higher for occupations requiring more education. Annual mean wages were \$29,190 for occupations typically requiring no formal educational credential for entry, \$44,190 for occupations typically requiring a high school diploma or the equivalent, \$58,430 for occupations typically requiring an associate's degree, and \$88,260 for occupations typically requiring a bachelor's degree.
- The **highest paying** occupations typically requiring **less than a bachelor's degree** for entry included air traffic controllers (\$120,140), which typically require an associate's degree for entry, and transportation, storage, and distribution managers (\$103,320), which typically require a high school diploma or the equivalent. (See chart 3.)

The typical education level required to enter an occupation is based on education and training categories from the BLS Employment Projections program. More information about the system of education and training categories is available at www.bls.gov/emp/documentation/education/tech.htm. Typical entry-level educational requirements assigned to each occupation in the May 2019 OES estimates are available at www.bls.gov/oes/educ_list_2019.xlsx. Additional charts are available at www.bls.gov/oes/current/overview_2019.htm.



Science, technology, engineering, and mathematics (STEM) occupations

- There were over 9.3 million STEM jobs representing 6.4 percent of total U.S. employment.
- Six of the 10 largest STEM occupations were related to computers and included software developers and software quality assurance analysts and testers (1.4 million) and computer user support specialists (647,330). (See table 1.)
- Areas with the highest employment shares of STEM occupations were California-Lexington Park, MD. (28.1 percent), and San Jose-Sunnyvale-Santa Clara, CA. (21.0 percent). (See chart 4.)
- STEM occupations had an **annual mean wage** of \$95,350, compared with \$50,600 for non-STEM occupations. Ninety-one of the 98 STEM occupations had mean wages significantly above the all-occupations average of \$53,490. (See table 1.)
- The **highest paying** STEM occupations were petroleum engineers (\$156,780) and the three STEM-related management occupations: computer and information systems managers

(\$156,390), architectural and engineering managers (\$152,930), and natural sciences managers (\$145,450). (See table 1.)

• The **lowest paying** STEM occupations were agricultural and food science technicians (\$44,440) and forest and conservation technicians (\$45,860). (See table 1.)

Occupations included in the STEM definition used for this news release are available at www.bls.gov/oes/stem_list_2019.xlsx. Additional STEM charts are available at www.bls.gov/oes/current/overview_2019.htm.

Largest occupations

- The largest occupations overall were retail salespersons (4.3 million) and fast food and counter workers (4.0 million). (See table 1.)
- Eight of the 10 largest occupations had below-average wages. Retail salespersons (\$29,360) and fast food and counter workers (\$23,250) had annual mean wages significantly below the alloccupations average of \$53,490. (See table 1.)
- Of the 10 largest occupations, registered nurses (\$77,460) and general and operations managers (\$123,030) were the only occupations with above-average wages. (See table 1.)

Public sector occupations

- The public sector made up 15 percent of employment and had a different occupational mix from the private sector.
- Many of the **largest** public sector occupations were related to education. These occupations included elementary school teachers, except special education (public sector employment of 1.3 million); teaching assistants, except postsecondary (1.1 million); secondary school teachers, except special and career/technical education (904,570); and middle school teachers, except special and career/technical education (553,620).
- Outside of the educational instruction and library group, the occupations with the highest public sector employment included police and sheriff's patrol officers (658,300); general office clerks (511,040); and secretaries and administrative assistants, except legal, medical, and executive (500,330).

Changes to the Occupational Employment Statistics (OES) Data

With the May 2019 estimates, the OES program has begun implementing the 2018 Standard Occupational Classification (SOC) system. Each set of OES estimates is calculated from six panels of survey data collected over three years. Because the May 2019 estimates are based on a combination of survey data collected using the 2010 SOC and survey data collected using the 2018 SOC, these estimates use a hybrid of the two classification systems that contains some combinations of occupations that are not found in either the 2010 or 2018 SOC. These combinations may include occupations from more than one 2018 SOC minor group or broad occupation. Therefore, OES will not publish data for some 2018 SOC minor groups and broad occupations in the May 2019 estimates. The May 2021 estimates, to be published in Spring 2022, will be the first OES estimates based entirely on survey data collected using the 2018 SOC.

In addition, the OES program has replaced some 2018 SOC detailed occupations with SOC broad occupations or OES-specific aggregations. These include home health aides and personal care aides, for which OES will publish only the 2018 SOC broad occupation 31-1120 Home Health and Personal Care Aides.

For more information on the occupational classification system used in the May 2019 OES estimates, please see www.bls.gov/oes/soc_2018.htm and www.bls.gov/oes/oes_ques.htm#qf10.

The May 2019 OES estimates use the metropolitan area definitions delineated in Office of Management and Budget (OMB) Bulletin 17-01, which add a new Metropolitan Statistical Area (MSA) for Twin Falls, Idaho. For more information on the area definitions used in the May 2019 estimates, please see www.bls.gov/oes/current/msa_def.htm.

Technical Note

Scope of the survey

The Occupational Employment Statistics (OES) survey is a semiannual survey measuring occupational employment and wage rates for wage and salary workers in nonfarm establishments in the United States. The OES data available from BLS include cross-industry occupational employment and wage estimates for the nation; over 580 areas, including states and the District of Columbia, metropolitan statistical areas (MSAs), nonmetropolitan areas, and territories; national industry-specific estimates at the NAICS sector, 3-digit, most 4-digit, and selected 5- and 6-digit industry levels; and national estimates by ownership across all industries and for schools and hospitals.

The OES survey is a cooperative effort between BLS and the State Workforce Agencies (SWAs). BLS funds the survey and provides the procedures and technical support, while the State Workforce Agencies collect most of the data. OES estimates are constructed from a sample of about 1.1 million establishments. Each year, two semiannual panels of approximately 180,000 to 200,000 sampled establishments are contacted, one panel in May and the other in November. Responses are obtained by mail, Internet or other electronic means, email, telephone, or personal visit. The May 2019 estimates are based on responses from six semiannual panels collected over a 3-year period: May 2019, November 2018, May 2018, November 2017, May 2017, and November 2016. The unweighted sampled employment of 83 million across all six semiannual panels represents approximately 57 percent of total national employment. The overall national response rate for the six panels, based on the 50 states and the District of Columbia, is 71 percent based on establishments and 68 percent based on weighted sampled employment.

The occupational coding system

The May 2019 OES estimates contain nearly 800 occupational categories based on the Office of Management and Budget's Standard Occupational Classification (SOC) system. Together, these occupations make up 22 of the 23 SOC major occupational groups. Major group 55, Military Specific Occupations, is not included.

For more information about the SOC system, please see the BLS website at www.bls.gov/soc/.

The May 2019 OES estimates are the first set of OES estimates to be based in part on survey data collected using the 2018 SOC. These estimates use a hybrid of the 2010 and 2018 SOC systems. For more information on the hybrid classification system used in the May 2019 OES estimates, please see the "Changes to the May 2019 estimates" section of this technical note.

The industry coding system

The May 2019 OES estimates use the 2017 North American Industry Classification System (NAICS). For more information about NAICS, see the BLS website at www.bls.gov/bls/naics.htm.

The OES survey excludes the majority of the agricultural

sector, with the exception of logging (NAICS 113310), support activities for crop production (NAICS 1151), and support activities for animal production (NAICS 1152). Private households (NAICS 814) also are excluded. OES federal government data include the U.S. Postal Service and the federal executive branch only. All other industries, including state and local government, are covered by the survey.

Survey sample

The OES survey draws its sample from state unemployment insurance (UI) files. Supplemental sources are used for rail transportation (NAICS 4821) and Guam because they do not report to the UI program. The OES survey sample is stratified by metropolitan and nonmetropolitan area, industry, and size.

To provide the most occupational coverage, larger employers are more likely to be selected than smaller employers. A census is taken of the executive branch of the federal government, the U.S. Postal Service, and state government.

Concepts

Occupational employment is the estimate of total wage and salary employment in an occupation. The OES survey defines employment as the number of workers who can be classified as full- or part-time employees, including workers on paid vacations or other types of paid leave; workers on unpaid short-term absences; salaried officers, executives, and staff members of incorporated firms; employees temporarily assigned to other units; and employees for whom the reporting unit is their permanent duty station, regardless of whether that unit prepares their paycheck. The survey does not include the self-employed, owners and partners in unincorporated firms, household workers, or unpaid family workers.

Wages for the OES survey are straight-time, gross pay, exclusive of premium pay. Base rate; cost-of-living allowances; guaranteed pay; hazardous-duty pay; incentive pay, including commissions and production bonuses; and tips are included. Excluded are overtime pay, severance pay, shift differentials, nonproduction bonuses, employer cost for supplementary benefits, and tuition reimbursements.

OES receives wage rate data for the federal government, the U.S. Postal Service, and most state governments. For the remaining establishments, the OES survey data are placed into 12 intervals. The intervals are defined both as hourly rates and the corresponding annual rates, where the annual rate for an occupation is calculated by multiplying the hourly wage rate by a typical work year of 2,080 hours. The responding establishments are instructed to report the hourly rate for part-time workers, and to report annual rates for occupations that are typically paid at an annual rate but do not work 2,080 hours per year, such as teachers, pilots, and flight attendants. Other workers, such as some entertainment workers, are paid hourly rates, but generally do not work 40 hours per week, year round. For these workers, only an hourly wage is reported.

Estimation methodology

The OES survey is designed to produce estimates by combining six panels of data collected over a 3-year period. Each OES panel contains approximately 180,000 to 200,000 establishments. Recent OES survey panels have a reduced sample; see the "Changes to the May 2019 estimates" section below for more information. The full six-panel sample of 1.1 million establishments allows the production of estimates at detailed levels of geography, industry, and occupation.

Wage updating. Significant reductions in sampling errors are obtained by combining six panels of data, particularly for small geographic areas and occupations. Wages for the current panel need no adjustment. However, wages in the five previous panels need to be updated to the current panel's reference period.

The OES program uses the BLS Employment Cost Index (ECI) to adjust survey data from prior panels before combining them with the current panel's data. The wage updating procedure adjusts each detailed occupation's wage rate, as measured in the earlier panel, according to the average movement of its broader occupational division.

Imputation. Some establishments do not respond for a given panel. For most employers, a "nearest neighbor" hot deck imputation procedure is used to impute missing occupational employment totals. A variant of mean imputation is used to impute missing wage distributions. In some cases, data for nonrespondents are available from earlier panels. In those cases, the older data may be used and aged to represent the current reference period.

Weighting and benchmarking. The sampled establishments are weighted to represent all establishments for the reference period. Weights are further adjusted by the ratio of employment totals (the average of November 2018 and May 2019 employment) from the BLS Quarterly Census of Employment and Wages to employment totals from the OES survey.

Changes to the May 2019 estimates

With the May 2019 estimates, the OES program has begun implementing the 2018 Standard Occupational Classification

(SOC) system. Each set of OES estimates is calculated from six panels of survey data collected over three years. Because the May 2019 estimates are based on a combination of survey data collected using the 2010 SOC and survey data collected using the 2018 SOC, these estimates use a hybrid of the two classification systems that contains some combinations of occupations that are not found in either the 2010 or 2018 SOC. These combinations may include occupations from more than one 2018 SOC minor group or broad occupation. Therefore, OES will not publish data for some 2018 SOC minor groups and broad occupations in the May 2019 estimates. The May 2021 estimates, to be published in Spring 2022, will be the first OES estimates based entirely on survey data collected using the 2018 SOC.

In addition, the OES program has replaced some 2018 SOC detailed occupations with SOC broad occupations or OES-specific aggregations. These include home health aides and personal care aides, for which OES will publish only the 2018 SOC broad occupation 31-1120 Home Health and Personal Care Aides.

More information on the occupational classification system used in the May 2019 OES estimates is available at www.bls.gov/oes/soc_2018.htm and in the OES frequently asked questions at www.bls.gov/oes/oes_ques.htm#qf10.

The May 2019 OES estimates use the metropolitan area definitions delineated in Office of Management and Budget (OMB) Bulletin 17-01, which add a new Metropolitan Statistical Area (MSA) for Twin Falls, Idaho. For more information on the area definitions used in the May 2019 estimates, please see www.bls.gov/oes/current/msa_def.htm.

The OES sample has been reduced in recent survey panels. The May 2019 OES survey panel had a sample of approximately 183,000 establishments. The November 2017, May 2018, and November 2018 survey panels each had a sample of approximately 186,000 establishments. The May 2017 panel sample consisted of approximately 195,000 establishments, and the November 2016 panel sample consisted of approximately 202,000 establishments.

For more information

Answers to frequently asked questions about the OES data are available at www.bls.gov/oes/oes ques.htm.

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2019

		Mean wa	ages	Median
Occupation	Employment	Hourly	Annual ¹	hourly wages
All occupations	146,875,480	\$25.72	\$53,490	\$19.14
Management occupations	8,054,120	58.88	122,480	50.80
Top executives	2,658,440 205.890	61.09 93.20	127,070 193,850	49.63 88.68
General and operations managers.	2,400,280	59.15	123,030	48.45
Legislators	52,280	(2)	49,440	(2)
Advertising, marketing, promotions, public relations, and sales managers	770,540	68.91	143,330	61.96
Advertising and promotions managers	25,100	68.22	141,890	60.34
Marketing and sales managers Marketing managers	666,280 263,680	69.55 71.73	144,660 149,200	62.84 65.79
Sales managers	402,600	68.12	141,690	60.89
Public relations and fundraising managers	79,160	63.77	132,630	55.86
Operations specialties managers	1,996,160	64.69	134,550	58.15
Administrative services and facilities managers	307,280 433,960	51.23 75.19	106,550 156,390	46.61 70.37
Computer and information systems managers Financial managers	654,790	70.93	147,530	62.45
Industrial production managers	185,790	55.34	115,110	50.71
Purchasing managers	72,100	61.73	128,400	58.23
Transportation, storage, and distribution managers	132,040	49.67	103,320	45.46
Compensation and benefits managers	16,900	64.52	134,210	58.78 56.11
Human resources managers Training and development managers	154,800 38,510	62.29 59.36	129,570 123,470	54.50
Other management occupations	2,628,970	49.31	102,560	43.90
Farmers, ranchers, and other agricultural managers	5,060	38.63	80,360	34.21
Construction managers	293,380	50.48	105,000	45.80
Education and childcare administrators	512,820	47.25	98,270	43.81
Education and childcare administrators, preschool and daycare Education administrators, kindergarten through secondary	52,360 271,020	25.81 (²)	53,690 100,340	23.18 (²)
Education administrators, postsecondary	144,880	54.04	112,400	45.87
Education administrators, all other	44,550	44.30	92,150	41.08
Architectural and engineering managers	194,250	73.52	152,930	69.63
Food service managers	235,470	28.76	59,820	26.60
Gambling managers	4,450 38,340	40.72 30.56	84,700 63,570	36.04 26.17
Medical and health services managers	394,910	55.37	115,160	48.55
Natural sciences managers	67,720	69.93	145,450	62.07
Postmasters and mail superintendents	13,850	37.60	78,220	36.97
Property, real estate, and community association managers	220,750	34.48	71,720	28.25
Social and community service managers	156,460	35.05	72,900	32.28
Emergency management directors Funeral home managers	10,060 9,400	39.68 45.78	82,530 95,220	35.86 36.71
Personal service managers, all other; entertainment and recreation managers, except gambling;	,	57.07		53.19
and managers, all other	472,060		118,710	
Business and financial operations occupations Business operations specialists	8,183,750 5,427,140	37.56 36.31	78,130 75,530	33.57 33.04
Agents and business managers of artists, performers, and athletes	17,060	46.72	97,170	35.45
Buyers and purchasing agents	421,280	33.50	69,680	30.95
Claims adjusters, appraisers, examiners, and investigators	301,710	33.09	68,820	31.99
Claims adjusters, examiners, and investigators	287,960	33.15	68,940	32.11
Insurance appraisers, auto damage Compliance officers	13,750 317,600	31.85 35.03	66,240 72,850	30.42 33.20
Cost estimators.	210,000	34.31	71,350	31.37
Human resources workers	708,780	32.79	68,200	30.02
Human resources specialists	633,040	32.58	67,760	29.77
Farm labor contractors	160	29.84	62,060	29.77 33.18
Labor relations specialists	75,580 182,050	34.55 37.83	71,870 78,680	35.16 35.94
Management analysts	709,750	45.94	95,560	40.99
Meeting, convention, and event planners	117,610	26.39	54,880	24.33
Fundraisers	81,660	30.21	62,830	27.87
Compensation, benefits, and job analysis specialists	89,300	33.58	69,840	31.04
Training and development specialists	312,450 678.500	31.56 34.41	65,640 71,570	29.43 30.67
Project management specialists and business operations specialists, all other	1,279,390	38.57	80,220	35.37
Financial specialists	2,756,610	40.03	83,260	34.59
Accountants and auditors	1,280,700	38.23	79,520	34.40
Property appraisers and assessors	56,320 51,460	30.58	63,610	27.41
Budget analysts Credit analysts	51,460 73,930	38.61 40.83	80,300 84,930	36.80 35.41
Personal financial advisors	210,190	57.35	119,290	42.24
Insurance underwriters	100,050	37.33	77,640	33.67
Financial examiners	64,550	44.39	92,330	38.99
Credit counselors and loan officers	340,480	35.46	73,750	29.37
Credit counselors	32,110	24.15	50,230	22.09
Loan officers Tax examiners, collectors and preparers, and revenue agents	308,370 120,430	36.64 26.27	76,200 54,640	30.42 23.84
Tax examiners and collectors, and revenue agents	53,760	29.31	60,960	26.39
See footnotes at end of table.				

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2019- Continued

		Mean w	ages	Median
Occupation	Employment	Hourly	Annual ¹	hourly wages
Business and financial operations occupations (Continued)				
Tax preparersFinancial and investment analysts, financial risk specialists, and financial specialists, all other		\$23.82 45.27	\$49,550 94,160	\$20.71 39.22
Computer and mathematical occupations	4,552,880	45.08	93,760	42.47
Computer occupations		45.01	93,620	42.43
Computer and information analysts		46.91	97,570	44.40
Computer systems analysts		46.23	96,160	43.71
Information security analysts		50.10	104,210	47.95
Computer and information research scientists		61.28	127,460	59.06
Computer support specialists		28.51 33.10	59,290 68,860	26.33 30.51
Computer network support specialists		27.19	56,550	25.13
Database and network administrators and architects.		46.33	96,380	43.94
Computer network architects		55.34	115,110	54.18
Network and computer systems administrators		42.51	88,410	40.15
Database administrators and architects		46.21	96,110	45.07
Software and web developers, programmers, and testers		51.44	106,980	49.20
Computer programmers		44.53	92,610	41.61
Software developers and software quality assurance analysts and testers		53.66	111,620	51.69
Web developers and digital interface designers		39.60	82,370	35.46
Computer occupations, all other		44.43 46.59	92,410 96,900	42.57 43.47
Mathematical science occupations		46.59 58.16	120,970	43.47 52.09
Mathematicians		51.57	107,280	50.50
Operations research analysts.		43.56	90,600	40.78
Statisticians.		46.00	95,680	43.83
Data scientists and mathematical science occupations, all other		48.35	100,560	45.33
Architecture and engineering occupations	2,592,680	42.69	88,800	39.15
Architects, surveyors, and cartographers		39.06	81,250	35.83
Architects, except naval		41.85	87,060	37.93
Architects, except landscape and navalLandscape architects		43.06 35.56	89,560 73,970	38.82 33.35
Surveyors, cartographers, and photogrammetrists		32.84	68,300	30.71
Cartographers and photogrammetrists		33.55	69,790	31.47
Surveyors		32.66	67,920	30.49
Engineers		48.45	100,770	45.43
Aerospace engineers		57.32	119,220	56.01
Agricultural engineers		47.26	98,290	38.81
Bioengineers and biomedical engineers	. 19,780	46.68	97,090	43.95
Chemical engineers		56.29	117,090	52.30
Civil engineers		45.36	94,360	41.86
Computer hardware engineers		59.15	123,030	56.36
Electrical and electronics engineers		51.08	106,240	48.68
Electrical engineers Electronics engineers, except computer		49.75 52.99	103,480 110,210	47.37 50.76
Environmental engineers		45.30	94,220	42.72
Industrial engineers, including health and safety		44.63	92,830	42.42
Health and safety engineers, except mining safety engineers and inspectors		45.58	94,810	43.95
Industrial engineers		44.55	92,660	42.32
Marine engineers and naval architects	. 11,360	47.47	98,730	44.42
Materials engineers	26,820	47.06	97,890	44.88
Mechanical engineers		44.97	93,540	42.51
Mining and geological engineers, including mining safety engineers	6,280	46.63	96,990	43.83
Nuclear engineers		58.03	120,700	54.55
Petroleum engineers		75.37	156,780	66.21
Engineers, all other		49.26	102,460	47.62
Drafters, engineering technicians, and mapping technicians	. 679,310 192,760	29.00 28.60	60,320 59,480	27.73 27.32
Architectural and civil drafters		27.92	58,080	27.32
Electrical and electronics drafters		31.60	65,720	29.58
Mechanical drafters		29.09	60,500	27.43
Drafters, all other		26.37	54,840	25.40
Engineering technologists and technicians, except drafters		29.87	62,130	28.66
Aerospace engineering and operations technologists and technicians		32.86	68,340	31.74
Civil engineering technologists and technicians		26.67	55,480	25.68
Electrical and electronic engineering technologists and technicians		31.84	66,240	31.38
Electro-mechanical and mechatronics technologists and technicians		29.53	61,420	28.05
Environmental engineering technologists and technicians		26.32	54,740	24.34
Industrial engineering technologists and technicians		28.56	59,400 59,160	27.19 27.40
Mechanical engineering technologists and technicians	42,020	28.44	59,160	21.40
drafters, all otherdrafters and engineering technologists and technicians, except	. 88,330	31.70	65,940	30.28
Surveying and mapping technicians		23.32	48,500	21.64
Life, physical, and social science occupations	1,288,920	37.28	77,540	32.77
Life scientists		42.68	88,770	37.54
Agricultural and food scientists		34.88	72,550	31.33
Animal scientists	2,690	32.96	68,570	28.99
See footnotes at end of table.				

See footnotes at end of table.

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2019- Continued

		Mean w	vages	Median
Occupation	Employment	Hourly	Annual ¹	hourly wages
Life, physical, and social science occupations (Continued)				
Food scientists and technologists	13,460	\$36.63	\$76,190	\$33.16
Soil and plant scientists		33.58	69,860	30.39
Biological scientists		42.84	89,100	38.26
Biochemists and biophysicists		52.01	108,180	45.43
Microbiologists		39.79	82,760	36.37
Zoologists and wildlife biologists		32.31	67,200	30.42
Biological scientists, all other		42.11 31.68	87,590 65,900	39.53 30.01
Conservation scientists and foresters		32.23	67,040	30.01
Foresters		30.42	63,270	29.71
Medical scientists		46.95	97,650	41.97
Epidemiologists		37.64	78,290	34.13
Medical scientists, except epidemiologists		47.49	98,770	42.69
Life scientists, all other		41.29	85,890	36.49
Physical scientists		43.80	91,110	39.07
Astronomers and physicists	18,800	62.56	130,110	58.76
Astronomers		58.79	122,270	55.09
Physicists		63.02	131,080	59.06
Atmospheric and space scientists		46.71	97,160	45.86
Chemists and materials scientists		41.04	85,360	37.88
Chemists		40.46	84,150	37.32
Materials scientists		48.28	100,430	46.54
Environmental scientists and geoscientists		41.25	85,790	36.46
Environmental scientists and specialists, including health		37.47	77,940	34.31
Geoscientists, except hydrologists and geographers		52.09	108,350	44.25
Hydrologists		41.50 53.88	86,330	39.07 52.84
Physical scientists, all other		42.32	112,070 88,030	38.57
Social scientists and related workers Economists		56.07	116,630	50.49
Survey researchers		31.61	65,760	28.45
Psychologists		42.68	88,770	38.64
Clinical, counseling, and school psychologists		42.04	87,450	37.59
Industrial-organizational psychologists		53.44	111,150	44.66
Psychologists, all other		47.23	98,230	48.94
Sociologists		43.55	90,590	40.10
Urban and regional planners		37.38	77,750	35.75
Miscellaneous social scientists and related workers		42.06	87,480	39.37
Anthropologists and archeologists	6,720	32.12	66,810	30.61
Geographers	1,400	39.41	81,970	39.20
Historians	3,040	33.02	68,690	30.62
Political scientists		57.82	120,260	58.76
Social scientists and related workers, all other		42.16	87,690	40.06
Life, physical, and social science technicians		25.17	52,340	23.19
Agricultural and food science technicians		21.37	44,440	19.82
Biological technicians		23.61	49,110	22.05
Chemical technicians.		25.44 26.07	52,910 54,220	23.68 22.96
Environmental science and geoscience technicians		24.41	50,760	22.38
Geological and hydrologic technicians.		29.23	60,800	24.58
Nuclear technicians		39.77	82,710	39.46
Social science research assistants.		24.68	51,340	22.84
Forest and conservation technicians.		22.05	45,860	21.87
Miscellaneous life, physical, and social science technicians		26.74	55,610	25.04
Forensic science technicians		30.37	63,170	28.44
Life, physical, and social science technicians, all other	64,260	25.80	53,670	24.30
Occupational health and safety specialists and technicians		34.95	72,690	33.88
Occupational health and safety specialists and technicians		34.95	72,690	33.88
Occupational health and safety specialists	92,780	36.68	76,290	35.63
Occupational health and safety technicians		27.15	56,470	24.79
Community and social service occupations	2,244,310	24.27	50,480	22.16
Counselors, social workers, and other community and social service specialists		24.23	50,410	22.15
Counselors		25.54	53,120	23.45
Educational, guidance, and career counselors and advisors		29.33	61,000	27.42
Marriage and family therapists		26.25	54,590	23.85
Rehabilitation counselors		19.31 24.01	40,160 49,950	17.28 22.23
Counselors, all other		23.46	49,950 48,800	22.23
Social workers		26.05	54,190	24.26
Child, family, and school social workers		24.53	51,030	22.78
Healthcare social workers		28.51	59,300	27.29
Mental health and substance abuse social workers		24.84	51,670	22.43
Social workers, all other		29.69	61,750	29.44
Miscellaneous community and social service specialists		21.06	43,810	18.80
Health education specialists		29.09	60,500	26.55
Probation officers and correctional treatment specialists		28.80	59,910	26.10
Social and human service assistants	404,450	17.81	37,050	16.85
Community health workers		21.34	44,390	19.41
Community and social service specialists, all other	97,480	22.55	46,900	21.05

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2019- Continued

Occupation	Employment	Mean w	ages	Median
Occupation	Employment	Hourly	Annual ¹	hourly wages
Community and social service occupations (Continued)				
Religious workers	84,440	\$25.12	\$52,260	\$22.5
Člergy	53,180	26.53	55,190	24.2
Directors, religious activities and education	21,820	24.28	50,490	21.0
Religious workers, all other	9,450	19.15	39,830	15.2
Legal occupations	1,150,780	52.71	109,630	39.3
Lawyers, judges, and related workers		67.87	141,180	57.6
Lawyers and judicial law clerks		68.84	143,200	58.0
Lawyers		69.86 28.79	145,300 59,890	59.1 25.9
Judges, magistrates, and other judicial workers		54.55	113,470	53.4
Administrative law judges, adjudicators, and hearing officers		48.19	100,230	47.0
Arbitrators, mediators, and conciliators	6,090	35.44	73,720	30.7
Judges, magistrate judges, and magistrates		61.80	128,550	65.8
Legal support workers		27.08	56,320	24.9
Paralegals and legal assistants		26.45 29.18	55,020 60,690	24.8 25.2
Title examiners, abstractors, and searchers		25.02	52,050	23.1
Legal support workers, all other		34.06	70,840	28.0
Educational instruction and library occupations	8,886,600	27.75	57,710	24.4
Postsecondary teachers	1,407,110	(2)	90,830	(
Business teachers, postsecondary		(2)	105,440	(
Math and computer science teachers, postsecondary		(2) (2)	90,970 98,430	(
Computer science teachers, postsecondary			98,430 86,330	
Engineering and architecture teachers, postsecondary		(2) (2) (2) (2)	110,040	(
Architecture teachers, postsecondary		(2)	98,980	(
Engineering teachers, postsecondary		(2)	112,110	(
Life sciences teachers, postsecondary		(2)	97,110	(
Agricultural sciences teachers, postsecondary		(2)	89,320	(
Biological science teachers, postsecondary Forestry and conservation science teachers, postsecondary		(2) (2) (2)	98,700 90,940	
Physical sciences teachers, postsecondary		(2)	97,090	
Atmospheric, earth, marine, and space sciences teachers, postsecondary		(2)	102,690	(
Chemistry teachers, postsecondary		(2) (2)	92,650	(
Environmental science teachers, postsecondary		(2)	93,450	(
Physics teachers, postsecondary		(2)	101,110 92.920	((((
Social sciences teachers, postsecondary Anthropology and archeology teachers, postsecondary		(2) (2) (2)	95,140	(:
Area, ethnic, and cultural studies teachers, postsecondary		(2)	88,410	(
Economics teachers, postsecondary	13,270	(2)	119,160	(i
Geography teachers, postsecondary		(2)	86,540	(
Political science teachers, postsecondary		(2) (2)	102,290	(
Psychology teachers, postsecondary		(2) (2)	87,530 85,240	
Social sciences teachers, postsecondary, all other		(²)	85,390	(((
Health teachers, postsecondary		(2)	112,850	
Health specialties teachers, postsecondary		(2) (2)	121,620	
Nursing instructors and teachers, postsecondary		(2)	83,160	
Education and library science teachers, postsecondary	65,690	(2)	74,740	
Education teachers, postsecondaryLibrary science teachers, postsecondary		(2) (2)	74,560 77,170	
Law, criminal justice, and social work teachers, postsecondary		(²)	95,510	
Criminal justice and law enforcement teachers, postsecondary		(2)	72,980	
Law teachers, postsecondary	16,180	(2)	129,950	
Social work teachers, postsecondary		(2)	77,910	
Arts, communications, history, and humanities teachers, postsecondary		(2)	82,360	
Art, drama, and music teachers, postsecondary		(2) (2)	83,220 79,830	
English language and literature teachers, postsecondary			80,180	
Foreign language and literature teachers, postsecondary		(2) (2)	80,170	
History teachers, postsecondary		(2)	84,210	
Philosophy and religion teachers, postsecondary		(2)	88,970	
Miscellaneous postsecondary teachers		(2)	73,540	
Family and consumer sciences teachers, postsecondary		(2)	85,270	
Recreation and fitness studies teachers, postsecondary		(²) 29.05	73,720 60,420	26.
Postsecondary teachers, all other		(2)	80,720	20.
Preschool, elementary, middle, secondary, and special education teachers		(2)	61,420	
Preschool and kindergarten teachers	555,650	19.41	40,370	16.0
Preschool teachers, except special education		16.66	34,650	14.0
Kindergarten teachers, except special education		(2)	60,210	
Elementary and middle school teachers Elementary school teachers, except special education		(2) (2)	63,820 63,930	
Middle school teachers, except special and career/technical education		(2)	63,550	
Career/technical education teachers, middle school.		(²)	64,900	
Secondary school teachers		(2)	65,850	
Secondary school teachers, except special and career/technical education		(2)	65,930	(
Career/technical education teachers, secondary school	74,520	(2)	64,800	

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2019- Continued

9		Mean w	/ages	Median
Occupation	Employment	Hourly	Annual ¹	hourly wages
Educational instruction and library occupations (Continued)				
Special education teachers		(2)	\$65,230	(2)
Special education teachers, preschool		(2)	67,060	(2)
Special education teachers, kindergarten and elementary school		(2)	64,420	(2) (2)
Special education teachers, middle school		(2)	65,740	(2)
Special education teachers, secondary school		(2) (2)	65,710 65,350	(2) (2)
Other teachers and instructors		19.58	40,730	15.93
Adult basic education, adult secondary education, and English as a second language instructors		28.36	58,980	26.13
Self-enrichment teachers		22.17	46,120	18.84
Substitute teachers, short-term		15.61	32,460	13.84
Tutors and teachers and instructors, all other		(2)	48,700	(2)
Librarians, curators, and archivists		25.16	52,330	23.57
Archivists, curators, and museum technicians		26.11 27.65	54,320 57,500	23.97 25.94
Curators.		28.43	59,130	26.24
Museum technicians and conservators		23.09	48,030	21.36
Librarians and media collections specialists		29.77	61,920	28.61
Library technicians	. 88,720	17.76	36,950	16.78
Other educational instruction and library occupations		(2)	35,330	(2)
Farm and home management educators		25.34	52,720	23.90
Instructional coordinators		33.26	69,180	31.87
Teaching assistants Teaching assistants, postsecondary		(2)	30,280 36,460	(2) (2)
Teaching assistants, postsecondary Teaching assistants, except postsecondary		(²)	29,640	(2)
Educational instruction and library workers, all other		22.10	45,970	19.38
Arts, design, entertainment, sports, and media occupations	2,017,810	29.79	61,960	24.59
Art and design workers Artists and related workers		27.54 43.01	57,290 89,470	23.14 37.14
Art directors		52.69	109,600	45.30
Craft artists.		18.63	38,740	16.69
Fine artists, including painters, sculptors, and illustrators	· · · · · · · · · · · · · · · · · · ·	30.30	63,030	24.30
Special effects artists and animators		40.76	84,780	36.19
Artists and related workers, all other		32.57	67,750	31.01
Designers		24.75	51,490	21.35
Commercial and industrial designers		35.49	73,820	33.12
Fashion designersFloral designers		41.40 14.31	86,110 29,760	35.48 13.48
Graphic designers		27.17	56,510	25.05
Interior designers		29.32	60,990	26.94
Merchandise displayers and window trimmers		15.84	32,940	14.16
Set and exhibit designers		30.04	62,480	26.25
Designers, all other		35.34	73,510	31.07
Entertainers and performers, sports and related workers		30.10 40.52	62,600	21.76
Actors, producers, and directors		29.14	84,290 (2)	30.34 20.43
Producers and directors		45.16	93,940	35.78
Athletes, coaches, umpires, and related workers		(2)	46,460	(2)
Athletes and sports competitors		(2)	93,140	(2)
Coaches and scouts		(2)	44,910	(2)
Umpires, referees, and other sports officials		(2)	38,810	(2)
Dancers and choreographers		23.83	49,570	18.68
Dancers	9,690	22.91	(²) 53 500	17.49
Choreographers		25.77 38.15	53,590	22.27 28.88
Music directors and composers.		31.09	64,670	24.84
Musicians and singers	41,130	39.96	(2)	30.39
Miscellaneous entertainers and performers, sports and related workers	15,840	23.40	(2)	15.86
Media and communication workers		32.61	67,830	28.48
Broadcast announcers and radio disc jockeys		25.76	53,580	16.65
News analysts, reporters, and journalists		30.00	62,400	22.25
Public relations specialists		33.75 35.42	70,190 73,680	29.40 31.31
Editors		34.57	71,910	29.50
Technical writers		36.95	76,860	35.03
Writers and authors		35.51	73,860	30.39
Miscellaneous media and communication workers		27.49	57,170	25.15
Interpreters and translators	58,870	27.40	57,000	24.92
Court reporters and simultaneous captioners		31.25	64,990	28.91
Media and communication workers, all other		25.51	53,060 57,050	22.88
Media and communication equipment workers		27.86 24.65	57,950 51,260	23.21 22.07
Broadcast technicians.		22.50	46,800	19.51
Sound engineering technicians		32.25	67,090	26.32
		21.85	45,440	17.44
Photographers		37.27	77,510	28.76
Television, video, and film camera operators and editors				20.70
Television, video, and film camera operators and editors	21,500	31.23	64,960	26.52
Television, video, and film camera operators and editors	21,500 27,570			

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2019- Continued

		Mean w	ages	Median
Occupation	Employment	Hourly	Annual ¹	hourly wages
Healthcare practitioners and technical occupations	8,673,140	\$40.21	\$83,640	\$32.78
Healthcare diagnosing or treating practitioners	5,685,500	49.26 40.87	102,470 85,010	39.61 33.82
Dentists	35,010 127,200	88.01	183,060	76.54
Dentists, general	110,730	85.70	178,260	74.81
Oral and maxillofacial surgeons	4,650	114.21	237,570	(3) (3)
Orthodontists	5,990	110.98	230,830	(3)
Prosthodontists	490 5,330	106.17 85.59	220,840 178,040	(3) 70.78
Dentists, all other specialists	67,670	29.97	62,330	29.46
Optometrists	39,420	59.12	122,980	55.41
Pharmacists	311,200	60.34	125,510	61.58
Physician assistants	120,090	54.04	112,410	53.97
Podiatrists	9,770	68.60	142,680	60.69
Therapists	709,730	38.87	80,850	37.88
Occupational therapists.	133,570	41.45	86,210	40.84
Physical therapists	233,350 17,860	43.35 44.05	90,170 91,620	43.00 41.14
Radiation therapistsRecreational therapists	19,070	24.58	51,130	23.18
Respiratory therapists	132,090	30.75	63,950	29.48
Speech-language pathologists	154,360	39.43	82,000	38.04
Exercise physiologists	7,280	26.32	54,750	23.64
Therapists, all other	12,170	28.17	58,600	25.31
Veterinarians	74,540	50.39	104,820	45.90
Registered nurses	2,982,280	37.24	77,460	35.24
Nurse anesthetists	43,570	87.04	181,040	84.03
Nurse midwives	6,930	52.31	108,810	50.50
Nurse practitioners	200,600 13,590	53.77 40.34	111,840 83,900	52.80 37.31
Audiologists	31,010	125.83	261,730	(3)
Family medicine physicians.	109,370	102.53	213,270	98.84
General internal medicine physicians.	44,610	96.85	201,440	96.92
Obstetricians and gynecologists	18,620	112.31	233,610	(3)
Pediatricians, general	29,740	88.66	184,410	84. <u>2</u> 8
Psychiatrists	25,530	105.98	220,430	(3)
Physicians, all other; and ophthalmologists, except pediatric	390,680	97.81	203,450	99.28
Surgeons, except ophthalmologists	36,270	121.17	252,040	(3)
Miscellaneous healthcare diagnosing or treating practitioners	258,060	37.93	78,900	36.63
Dental hygienists	221,560 36,500	37.13	77,230 89,060	36.65 36.37
Acupuncturists and healthcare diagnosing or treating practitioners, all other Health technologists and technicians	2,902,300	42.82 22.86	47,540	21.34
Clinical laboratory technologists and technicians.	326,020	26.34	54,780	25.54
Cardiovascular technologists and technicians	56,110	28.66	59,600	27.75
Diagnostic medical sonographers	72,790	36.44	75,780	35.73
Nuclear medicine technologists	18,110	38.58	80,240	37.48
Radiologic technologists and technicians	207,360	30.34	63,120	29.09
Magnetic resonance imaging technologists	37,900	35.70	74,270	35.30
Emergency medical technicians and paramedics Health practitioner support technologists and technicians	260,600	18.67 18.17	38,830 37,800	17.02 17.12
Dietetic technicians	803,740 29,230	14.99	31,180	13.66
Pharmacy technicians	417,780	16.95	35,250	16.32
Psychiatric technicians	78,470	18.05	37,550	16.24
Surgical technologists	109,000	24.09	50,110	23.22
Veterinary technologists and technicians	110,650	17.63	36,670	16.98
Ophthalmic medical technicians	58,600	18.64	38,760	17.76
Licensed practical and licensed vocational nurses	697,510	23.32	48,500	22.83
Opticians, dispensing	72,330	19.58	40,730	18.19
Orthotists and prosthetists	9,830	35.01 26.62	72,810	32.89 25.68
Hearing aid specialists	8,210 331,790	22.40	55,360 46,590	20.50
Other healthcare practitioners and technical occupations	85,340	27.22	56,620	23.93
Athletic trainers	28,600	(2)	50,540	(2)
Genetic counselors	2,390	40.Š4	84,310	39.36
Health information technologists, medical registrars, surgical assistants, and healthcare practitioners and technical workers, all other	54,350	28.17	58,600	23.97
Healthcare support occupations	6,521,790	14.91	31,010	13.69
Home health and personal care aides; and nursing assistants, orderlies, and psychiatric aides	4.683.430	13.39	27,860	12.68
Home health and personal care aides	3,161,500	12.71	26,440	12.15
Nursing assistants, orderlies, and psychiatric aides	1,521,930	14.80	30,790	14.27
Nursing assistants	1,419,920	14.77	30,720	14.26
Orderlies	46,990	14.76	30,710	13.93
Psychiatric aides.	55,020	15.67	32,590	14.96
Occupational therapy and physical therapist assistants and aides	198,660	24.56	51,080	25.44
Occupational therapy assistants and aides	52,550 44,990	27.84 29.75	57,910 61,880	28.46 29.57
Occupational therapy assistants Occupational therapy aides	7,560	16.50	34,310	29.57 14.05
Physical therapist assistants and aides	146,110	23.38	48,630	23.55
	96,840	28.14	58,520	28.26
1 11731/al thetapist assistants				12.98
Physical therapist assistantsPhysical therapist aides	49,270	14.03	29,180	12.50
Physical therapist aides Other healthcare support occupations	1,639,700	14.03	37,580	17.24
Physical therapist aides				

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2019- Continued

Occupation	El	Mean w	ages	Median
Occupation	Employment	Hourly	Annual ¹	hourly wages
Healthcare support occupations (Continued)				
Miscellaneous healthcare support occupations	1,532,460	\$17.74	\$36,910	\$17.13
Dental assistants	351,470	19.79	41,170	19.27
Medical assistants	,	17.17	35,720	16.73
Medical equipment preparers	,	19.01	39,530	18.00
Medical transcriptionists		16.93 14.66	35,210 30,490	16.05 13.39
Pharmacy aides Veterinary assistants and laboratory animal caretakers		14.28	29,690	13.75
Phlebotomists		17.54	36,480	17.07
Healthcare support workers, all other		19.24	40,010	18.49
Protective service occupations	3,498,800	23.98	49,880	19.99
Supervisors of protective service workers		37.31	77,600	34.35
First-line supervisors of law enforcement workers.		42.20 33.18	87,770 69,000	39.90 30.64
First-line supervisors of correctional officers		45.65	94,950	43.79
First-line supervisors of firefighting and prevention workers	69,590	39.43	82,010	37.40
Miscellaneous first-line supervisors, protective service workers	82,590	25.58	53,210	24.27
Firefighting and prevention workers		26.46	55,040	24.68
Firefighters		26.27	54,650	24.45
Fire inspectors	15,870	30.38	63,180	28.96
Fire inspectors and investigators		31.12	64,730	29.65
Forest fire inspectors and prevention specialists		25.65	53,350	21.77
Law enforcement workers		30.17	62,740	27.42
Bailiffs, correctional officers, and jailers		24.14	50,210	21.78
Bailiffs	,	24.92 24.10	51,840 50,130	22.99 21.72
Correctional officers and jailers Detectives and criminal investigators		41.36	86,030	39.99
Fish and game wardens		27.73	57,690	27.64
Parking enforcement workers		20.88	43,420	19.67
Police officers		32.51	67,620	30.41
Police and sheriff's patrol officers	665,280	32.50	67,600	30.36
Transit and railroad police	4,690	34.19	71,120	34.53
Other protective service workers		16.05	33,380	14.31
Animal control workers		19.09	39,710	18.07
Private detectives and investigators		27.40	57,000	24.28
Security guards and gambling surveillance officers.		15.90 18.28	33,080 38,030	14.29 16.44
Gambling surveillance officers and gambling investigators		15.88	33,030	14.27
Miscellaneous protective service workers		15.42	32,070	13.78
Crossing guards and flaggers		15.83	32,920	14.31
Lifeguards, ski patrol, and other recreational protective service workers		12.20	25,380	11.26
Transportation security screeners	46,730	20.34	42,310	20.08
School bus monitors and protective service workers, all other	146,390	16.77	34,880	14.90
Food preparation and serving related occupations Supervisors of food preparation and serving workers	13,494,590	12.82	26,670	11.65
Supervisors of food preparation and serving workers		18.82 18.82	39,140 39,140	16.74 16.74
Chefs and head cooks		27.07	56,310	24.78
First-line supervisors of food preparation and serving workers	1.011.100	17.77	36,960	16.06
Cooks and food preparation workers	3,367,740	13.03	27,100	12.45
Cooks		13.24	27,550	12.67
Cooks, fast food	527,220	11.31	23,530	11.30
Cooks, institution and cafeteria		13.96	29,030	13.34
Cooks, private household		21.92	45,600	18.21
Cooks, restaurant		13.80	28,700	13.36
Cooks, short order	,	12.62 15.50	26,240 32,240	12.09 14.79
Cooks, all otherFood preparation workers		12.41	32,240 25,820	14.79
Food and beverage serving workers		12.01	24,990	11.02
Bartenders	, ,	13.46	28,000	11.39
Fast food and counter workers		11.18	23,250	10.93
Waiters and waitresses		12.88	26,800	11.00
Food servers, nonrestaurant	277,580	12.54	26,080	11.74
Other food preparation and serving related workers		11.82	24,590	11.37
Dining room and cafeteria attendants and bartender helpers		12.03	25,020	11.28
Dishwashers	514,330	11.74	24,410	11.53
Hosts and hostesses, restaurant, lounge, and coffee shop		11.54 12.74	24,010 26,510	11.10 12.01
Building and grounds cleaning and maintenance occupations	4,429,100	15.03	31,250	13.62
Supervisors of building and grounds cleaning and maintenance workers		22.80	47,430	21.39
First-line supervisors of building and grounds cleaning and maintenance workers		22.80	47,430	21.39
First-line supervisors of housekeeping and janitorial workers	155,550	21.23	44,160	19.61
First-line supervisors of landscaping, lawn service, and groundskeeping workers		25.16	52,340	23.73
Building cleaning and pest control workers		14.11	29,350	12.78
Building cleaning workers		13.98	29,080	12.68
Janitors and cleaners, except maids and housekeeping cleaners		14.43	30,010	13.19
Maids and housekeeping cleaners		12.89 16.96	26,810 35,270	11.95 15.01
	10.1001	10.90	33,270	10.01
Building cleaning workers, all otherPest control workers		19.19	39,910	17.95

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2019- Continued

		Mean w	ages	Median
Occupation	Employment	Hourly	Annual ¹	hourly wages
suilding and grounds cleaning and maintenance occupations (Continued)				
Grounds maintenance workers	. 999,960	\$15.91	\$33,100	\$14.85
Grounds maintenance workers		15.91	33,100	14.85
Landscaping and groundskeeping workers		15.56	32,360	14.63
Pesticide handlers, sprayers, and applicators, vegetation Tree trimmers and pruners		18.86 20.44	39,230 42,510	17.23 19.22
Grounds maintenance workers, all other		18.21	37,870	15.43
ersonal care and service occupations	3,303,200	15.03	31,260	12.61
Supervisors of personal care and service workers	. 247,100	21.35	44,400	19.68
First-line supervisors of gambling services workersFirst-line supervisors of personal service and entertainment and recreation workers, except gambling	. 29,420	24.93	51,850	24.38
services		20.86	43,400	19.14
Animal care and service workers		13.33	27,720	12.02 14.63
Animal trainers Animal caretakers		17.43 13.01	36,240 27,060	11.91
Entertainment attendants and related workers		12.05	25,060	11.18
Gambling services workers		12.02	25,010	10.45
Gambling dealers		11.53	23,980	10.22
Gambling and sports book writers and runners	. 9,970	13.38	27,830	11.90
Gambling service workers, all other		15.38	32,000	13.61
Motion picture projectionists		14.37	29,890	12.09
Ushers, lobby attendants, and ticket takers		11.96 12.06	24,870	11.30 11.32
Miscellaneous entertainment attendants and related workers Amusement and recreation attendants		11.70	25,090 24,330	11.32
Costume attendants		23.55	48,970	19.91
Locker room, coatroom, and dressing room attendants		13.57	28,230	12.07
Entertainment attendants and related workers, all other		15.28	31,790	12.72
Embalmers		24.09	50,100	22.96
Funeral attendants	- ,	14.34	29,830	13.43
Morticians, undertakers, and funeral arrangers		28.06	58,360	26.04
Personal appearance workers		15.24	31,700	12.71
Barbers, hairdressers, hairstylists and cosmetologists		15.25 16.92	31,710 35,190	12.63 14.50
Hairdressers, hairstylists, and cosmetologists		15.16	31,530	12.54
Miscellaneous personal appearance workers		15.22	31,660	12.83
Makeup artists, theatrical and performance		39.23	81,600	36.41
Manicurists and pedicurists		13.17	27,390	12.39
Shampooers		11.02	22,910	10.84
Skincare specialists		18.74	38,970	16.39
Baggage porters, bellhops, and concierges		15.06	31,330	13.73
Baggage porters, bellhops, and concierges Baggage porters and bellhops		15.06 13.57	31,330 28,230	13.73 12.30
Concierges.		16.48	34,290	15.09
Tour and travel guides		14.74	30,670	13.27
Tour and travel guides		14.74	30,670	13.27
Childcare workers		12.27	25,510	11.65
Recreation and fitness workers		17.71	36,830	14.66
Exercise trainers and group fitness instructors		21.69	45,110	19.42
Recreation workersResidential advisors		14.10 15.20	29,330 31,610	12.67 14.16
Crematory operators and personal care and service workers, all other		14.03	29,190	13.04
ales and related occupations	14,371,410	20.70	43,060	14.24
Supervisors of sales workers	. 1,420,990	25.43	52,900	21.27
First-line supervisors of sales workers		25.43	52,900	21.27
First-line supervisors of retail sales workers		22.03	45,830	19.40
First-line supervisors of non-retail sales workers		41.43	86,180	35.94
Retail sales workers		13.27 11.73	27,600 24,400	11.84 11.38
Cashiers		11.72	24,370	11.37
Gambling change persons and booth cashiers		13.46	28,010	12.35
Counter and rental clerks and parts salespersons		16.16	33,610	14.35
Counter and rental clerks		15.67	32,600	13.86
Parts salespersons		16.93	35,220	15.24
Retail salespersons		14.12	29,360	12.14
Sales representatives, services		34.45	71,660	26.62
Advertising sales agentsInsurance sales agents		31.09 32.59	64,660 67,780	25.63 24.49
Securities, commodities, and financial services sales agents		32.59 44.75	93,090	29.94
Travel agents		21.49	44,690	19.55
Sales representatives of services, except advertising, insurance, financial services, and travel		32.10	66,760	26.99
Sales representatives, wholesale and manufacturing		36.14	75,180	30.29
Sales representatives, wholesale and manufacturing	. 1,651,500	36.14	75,180	30.29
Sales representatives, wholesale and manufacturing, technical and scientific products		44.70	92,980	38.95
Sales representatives, wholesale and manufacturing, except technical and scientific products		34.19	71,110	28.81
Other sales and related workers		25.72	53,500	17.89
Models, demonstrators, and product promoters		17.00	35,360	14.85
Demonstrators and product promoters		16.98 17.52	35,320 36,430	14.87 13.63
		17.52	UU , 1 UU	

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2019- Continued

0	F	Mean w	ages	Median
Occupation	Employment	Hourly	Annual ¹	hourly wages
Sales and related occupations (Continued)				
Real estate brokers and sales agents		\$31.78	\$66,100	\$24.39
Real estate brokers		39.16	81,450	28.7
Real estate sales agents	'	29.83	62,060	23.5
Sales engineers		54.22	112,780	49.99 12.6
Telemarketers Miscellaneous sales and related workers		14.31 19.35	29,770 40,240	15.14
Door-to-door sales workers, news and street vendors, and related workers		16.90	35,150	13.19
Sales and related workers, all other		19.53	40,620	15.30
Office and administrative support occupations	19,528,250	19.73	41,040	18.0
Supervisors of office and administrative support workers		28.91	60,130	27.2
First-line supervisors of office and administrative support workers		28.91	60,130	27.2: 14.9
Communications equipment operators		16.29 15.88	33,890 33,030	14.7
Telephone operators		18.24	37,940	17.19
Communications equipment operators, all other		22.14	46,050	20.5
Financial clerks		19.60	40,770	18.5
Bill and account collectors		18.90	39,300	17.79
Billing and posting clerks		19.53	40,620	18.6
Bookkeeping, accounting, and auditing clerks		20.65	42,960	19.82
Gambling cage workers		14.23	29,600	13.4
Payroll and timekeeping clerks		22.79	47,390	22.2
Procurement clerks		21.14 15.22	43,980 31,660	20.8 15.0
TellersFinancial clerks, all other		21.51	44,740	20.4
Information and record clerks.		17.59	36,580	16.3
Brokerage clerks		26.53	55,190	25.3
Correspondence clerks		19.03	39,570	18.3
Court, municipal, and license clerks		20.21	42,030	18.9
Credit authorizers, checkers, and clerks		20.13	41,880	19.2
Customer service representatives	2,919,230	17.94	37,320	16.6
Eligibility interviewers, government programs		22.65	47,110	22.4
File clerks		16.64	34,610	15.7
Hotel, motel, and resort desk clerks		12.47	25,950	11.7
Interviewers, except eligibility and loan		17.49	36,390	16.8
Library assistants, clerical Loan interviewers and clerks		14.34 20.17	29,820 41,960	13.2 19.5
New accounts clerks		18.50	38,490	17.5
Order clerks		17.60	36,600	16.4
Human resources assistants, except payroll and timekeeping		20.49	42,620	19.9
Receptionists and information clerks		15.02	31,250	14.4
Reservation and transportation ticket agents and travel clerks		21.34	44,390	18.4
Information and record clerks, all other	153,850	20.39	42,410	19.8
Material recording, scheduling, dispatching, and distributing workers		21.13	43,950	19.3
Cargo and freight agents		22.48	46,770	21.0
Couriers and messengers		15.21	31,640	14.2 19.6
Dispatchers		21.24 21.31	44,170 44,310	20.1
Public safety telecommunicators Dispatchers, except police, fire, and ambulance		21.20	44,100	19.3
Meter readers, utilities		22.23	46,250	20.3
Postal service workers.		24.88	51,740	25.0
Postal service clerks		24.33	50,610	23.2
Postal service mail carriers		25.09	52,180	24.6
Postal service mail sorters, processors, and processing machine operators		24.61	51,190	28.9
Production, planning, and expediting clerks		24.35	50,640	23.2
Shipping, receiving, and inventory clerks		17.32	36,030	16.4
Weighers, measurers, checkers, and samplers, recordkeeping		17.62	36,650	16.8
Secretaries and administrative assistants		20.87 20.87	43,410 43,410	19.1 19.1
Executive secretaries and executive administrative assistants		30.25	62,920	29.2
Legal secretaries and administrative assistants		24.47	50,900	22.7
Medical secretaries and administrative assistants		18.31	38,090	17.5
Secretaries and administrative assistants, except legal, medical, and executive		18.84	39,180	18.1
Other office and administrative support workers		17.75	36,920	16.6
Data entry and information processing workers		17.52	36,440	16.7
Data entry keyers		16.74	34,820	16.1
Word processors and typists		20.13	41,880	19.3
Desktop publishers		23.43	48,740	21.8
Insurance claims and policy processing clerks		20.81 15.68	43,280 32,620	19.5 14.8
Office clerks, general		17.48	36,360	16.3
Office machine operators, except computer		16.90	35,150	16.0
Proofreaders and copy markers		20.77	43,200	19.5
Statistical assistants		24.83	51,640	23.9
Office and administrative support workers, all other		18.41	38,290	17.0
arming, fishing, and forestry occupations	484,750	15.07	31,340	13.0
Supervisors of farming, fishing, and forestry workers		25.25	52,520	23.2
First-line supervisors of farming, fishing, and forestry workers	22,560	25.25	52,520	23.2

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2019- Continued

		Mean w	ages	Median
Occupation	Employment	Hourly	Annual ¹	hourly wages
Farming, fishing, and forestry occupations (Continued)				
Agricultural workers	415,390	\$14.00	\$29,120	\$12.52
Agricultural inspectors		22.67	47,160	21.87
Animal breeders	1,610	22.32	46,420	20.64
Graders and sorters, agricultural products		13.25	27,570	12.34
Miscellaneous agricultural workers		13.71	28,510	12.41
Agricultural equipment operators		16.01	33,300	15.36
Farmworkers and laborers, crop, nursery, and greenhouse Farmworkers, farm, ranch, and aquacultural animals		13.36 14.37	27,780 29,880	12.23 13.38
Agricultural workers, all other		16.31	33,930	14.23
Forest, conservation, and logging workers.		19.78	41,130	18.79
Forest and conservation workers		15.76	32,790	15.27
Logging workers		20.49	42,620	19.82
Fallers	4,890	23.88	49,670	21.46
Logging equipment operators		20.22	42,060	19.92
Log graders and scalers		18.80	39,110	17.92
Logging workers, all other	3,750	19.42	40,390	19.12
Construction and extraction occupations	6,194,140	25.28	52,580	22.80
Supervisors of construction and extraction workers.		34.35	71,440 71,440	31.83
First-line supervisors of construction trades and extraction workers		34.35 24.68	51,330	31.83 22.28
Construction trades workers		31.27	65,040	30.34
Brickmasons, blockmasons, and stonemasons.		26.46	55,040	24.79
Brickmasons and blockmasons.		27.15	56,470	25.53
Stonemasons		23.11	48,070	20.81
Carpenters		25.41	52,850	23.24
Carpet, floor, and tile installers and finishers		22.44	46,680	20.22
Carpet installers		21.79	45,320	19.27
Floor layers, except carpet, wood, and hard tiles	16,290	23.37	48,610	21.27
Floor sanders and finishers		20.34	42,300	19.04
Tile and stone setters		22.74	47,300	20.70
Cement masons, concrete finishers, and terrazzo workers		23.30	48,450	21.57
Cement masons and concrete finishers		23.24	48,330	21.54
Terrazzo workers and finishers		27.09	56,340	25.09
Construction laborers		20.06	41,730	17.72
Construction equipment operatorsPaving, surfacing, and tamping equipment operators		25.66 21.46	53,370 44,630	23.16 19.29
Pile driver operators		33.76	70,230	30.10
Operating engineers and other construction equipment operators		26.06	54,210	23.55
Drywall installers, ceiling tile installers, and tapers		25.09	52,190	22.77
Drywall and ceiling tile installers		24.31	50,560	21.97
Tapers		29.59	61,550	28.40
Electricians		29.02	60,370	27.01
Glaziers	52,400	23.95	49,810	21.46
Insulation workers	60,220	23.60	49,090	21.24
Insulation workers, floor, ceiling, and wall		21.68	45,100	19.41
Insulation workers, mechanical		26.02	54,120	23.41
Painters and paperhangers		21.46	44,630	19.37
Painters, construction and maintenance		21.46	44,640	19.37
Paperhangers		21.38	44,470	19.48
Pipelayers, plumbers, pipefitters, and steamfitters		28.16	58,570	25.92
PipelayersPlumbers, pipefitters, and steamfitters		20.96 28.75	43,600 59,800	18.66 26.52
Distance and stores access	07.000	23.90	49,710	21.85
Reinforcing iron and rebar workers		26.27	54,650	23.60
Roofers		22.03	45,820	20.24
Sheet metal workers		26.19	54,480	24.23
Structural iron and steel workers	76,570	28.45	59,170	26.46
Solar photovoltaic installers	11,080	22.52	46,850	21.58
Helpers, construction trades	242,400	16.49	34,300	15.73
Helpers, construction trades		16.49	34,300	15.73
Helpersbrickmasons, blockmasons, stonemasons, and tile and marble setters		18.48	38,440	17.02
Helperscarpenters		16.26	33,830	15.89
Helperselectricians		16.49	34,300	15.78
Helperspainters, paperhangers, plasterers, and stucco masons		15.83	32,930	15.07
Helperspipelayers, plumbers, pipefitters, and steamfitters		16.23	33,750	15.43
Helpersroofers		16.04 16.06	33,350 33,400	15.44 15.34
Other construction and related workers		24.81	51,600	22.36
Construction and building inspectors.		30.96	64,390	29.19
Elevator and escalator installers and repairers.		40.02	83,250	40.86
Fence erectors		18.56	38,600	17.21
Hazardous materials removal workers		22.95	47,740	21.11
Highway maintenance workers		20.39	42,410	19.58
Rail-track laying and maintenance equipment operators	16,180	27.48	57,160	26.97
Septic tank servicers and sewer pipe cleaners	29,750	20.56	42,760	19.17
Microfles and accompany time and adapted complete	32,040	21.17	44,030	19.10
Miscellaneous construction and related workers				
Niscellaneous construction and related workers Extraction workers Derrick, rotary drill, and service unit operators, oil and gas	270,390	23.16 25.15	48,180 52,320	21.61 23.24

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2019- Continued

Occupation	Employment	Mean w	/ages	Median
Occupation	Employment	Hourly	Annual ¹	hourly wages
Construction and extraction occupations (Continued)				
Derrick operators, oil and gas		\$23.09	\$48,030	\$22.59
Rotary drill operators, oil and gas		27.44	57,070	26.43
Service unit operators, oil and gas		24.71	51,390	22.47
Excavating and loading machine and dragline operators, surface mining		23.36	48,580	21.54
Continuous mining machine operators		27.18 28.63	56,530	26.58 28.41
Roof bolters, mining Loading and moving machine operators, underground mining		25.83	59,560 53,730	26.41
Rock splitters, quarry		17.97	37,390	17.34
Roustabouts, oil and gas.		19.85	41,280	18.71
Helpersextraction workers		18.46	38,390	17.85
Earth drillers, except oil and gas; and explosives workers, ordnance handling experts, and blasters Underground mining machine operators and extraction workers, all other	. 24,940	23.50 25.13	48,890 52,280	22.24 24.11
Installation, maintenance, and repair occupations	5,713,450	24.10	50,130	22.42
Supervisors of installation, maintenance, and repair workers		33.92	70,550	32.44
First-line supervisors of mechanics, installers, and repairers		33.92	70,550	32.44
Electrical and electronic equipment mechanics, installers, and repairers	. 557,620	26.27	54,630	25.28
Computer, automated teller, and office machine repairers	98,260	20.23	42,070	19.01
Radio and telecommunications equipment installers and repairers	222,850	28.13	58,510	27.75
Radio, cellular, and tower equipment installers and repairers		27.80	57,820	26.62
Telecommunications equipment installers and repairers, except line installers		28.15	58,560	27.84
Miscellaneous electrical and electronic equipment mechanics, installers, and repairers		27.02	56,200	26.14
Avionics technicians		32.20	66,970	31.59
Electric motor, power tool, and related repairers		22.41	46,620	21.19
Electrical and electronics installers and repairers, transportation equipment		30.61	63,670	30.06
Electrical and electronics repairers, commercial and industrial equipment		29.02	60,360	28.51
Electrical and electronics repairers, powerhouse, substation, and relay		39.08	81,280	39.80
Electronic equipment installers and repairers, motor vehicles.		18.71	38,910	17.97
Audiovisual equipment installers and repairers		20.25 24.14	42,130 50,210	18.99 23.54
Security and fire alarm systems installers Vehicle and mobile equipment mechanics, installers, and repairers		22.81	47,440	23.54
Aircraft mechanics and service technicians.		32.27	67,110	30.81
Automotive technicians and repairers		21.71	45,150	20.26
Automotive body and related repairers		22.79	47,390	20.20
Automotive glass installers and repairers		18.00	37,440	17.20
Automotive service technicians and mechanics		21.58	44,890	20.24
Bus and truck mechanics and diesel engine specialists		24.21	50,360	23.32
Heavy vehicle and mobile equipment service technicians and mechanics		25.55	53,140	24.80
Farm equipment mechanics and service technicians		20.97	43,630	20.29
Mobile heavy equipment mechanics, except engines		26.36	54,840	25.66
Rail car repairers		27.31	56,810	27.11
Small engine mechanics		19.26	40,050	18.19
Motorboat mechanics and service technicians	. 22,940	20.89	43,440	19.87
Motorcycle mechanics	15,590	19.22	39,970	18.08
Outdoor power equipment and other small engine mechanics		18.11	37,670	17.36
Miscellaneous vehicle and mobile equipment mechanics, installers, and repairers		15.24	31,710	14.19
Bicycle repairers		15.07	31,360	14.58
Recreational vehicle service technicians		20.03	41,660	18.54
Tire repairers and changers		14.59	30,350	13.77
Other installation, maintenance, and repair occupations		22.83	47,480	21.20
Control and valve installers and repairers		26.43	54,970	24.34
Mechanical door repairers		21.03	43,740	19.99
Control and valve installers and repairers, except mechanical door		28.81 24.72	59,920 51,420	27.93 23.43
Heating, air conditioning, and refrigeration mechanics and installers		20.38	51,420 42,400	19.36
Home appliance repairersIndustrial machinery installation, repair, and maintenance workers		26.27	54,640	25.41
Industrial machinery mechanics		26.60	55,320	25.77
Maintenance workers, machinery		23.77	49,450	22.85
Millwrights		27.43	57,050	26.71
Refractory materials repairers, except brickmasons		26.80	55,750	25.95
Line installers and repairers.		31.52	65,570	31.59
Electrical power-line installers and repairers.		34.60	71,960	34.86
Telecommunications line installers and repairers		28.69	59,670	27.29
Precision instrument and equipment repairers	-,	24.85	51,700	23.29
Camera and photographic equipment repairers		19.58	40,720	18.69
Medical equipment repairers		25.54	53,130	23.69
Musical instrument repairers and tuners		19.11	39,750	17.62
Watch and clock repairers		21.77	45,280	20.44
Precision instrument and equipment repairers, all other		28.82	59,940	28.23
Maintenance and repair workers, general	1,418,990	20.17	41,960	18.79
Wind turbine service technicians	5,960	27.26	56,700	25.44
Miscellaneous installation, maintenance, and repair workers		19.86	41,310	17.91
Coin, vending, and amusement machine servicers and repairers		17.97	37,380	17.03
Commercial divers	. 3,420	32.26	67,100	24.03
Locksmiths and safe repairers	17,010	21.38	44,460	20.16
Manufactured building and mobile home installers		16.49	34,300	16.29
Riggers		25.20	52,420	24.45
Signal and track switch repairers		34.95	72,690	35.52
Helpersinstallation, maintenance, and repair workers	99,460	15.66	32,570	14.68
Installation, maintenance, and repair workers, all other	161,290	21.06	43,800	19.15
				i

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2019- Continued

Occupation	Employment	Mean wa	ages	Median hourly	
Occupation	Employment	Hourly	Annual ¹	wages	
duction occupations	9,158,980	\$19.30	\$40,140	\$17	
Supervisors of production workers		31.35	65,220	29	
First-line supervisors of production and operating workers		31.35	65,220	29	
Assemblers and fabricators		17.46	36,310 56,460	16	
Aircraft structure, surfaces, rigging, and systems assemblers Electrical, electronics, and electromechanical assemblers		27.15 17.79	37,010	26 16	
Coil winders, tapers, and finishers		18.63	38,760	17	
Electrical, electronic, and electromechanical assemblers, except coil winders, tapers,	,				
and finishers	285,190	17.75	36,930	16	
Engine and other machine assemblers		22.39	46,570	21	
Structural metal fabricators and fitters		20.67	43,000	19	
Fiberglass laminators and fabricators		17.78	36,970	1	
Timing device assemblers and adjusters		18.32	38,110	1	
Miscellaneous assemblers and fabricators		16.73	34,800	1	
Food processing workers		14.94	31,080	1	
Bakers		14.25 14.87	29,630 30,920	1: 1:	
Butchers and other meat, poultry, and fish processing workers		16.35	34,010	1	
Butchers and meat cutters Meat, poultry, and fish cutters and trimmers		13.85	28,810	1	
Slaughterers and meat packers		14.23	29,600	1	
Miscellaneous food processing workers		15.56	32,360	1	
Food and tobacco roasting, baking, and drying machine operators and tenders		16.29	33,880	1	
Food batchmakers	159,390	15.92	33,120	1	
Food cooking machine operators and tenders		15.54	32,320	1	
Food processing workers, all other	42,890	13.85	28,820	1	
Metal workers and plastic workers		20.22	42,050	1	
Forming machine setters, operators, and tenders, metal and plastic	125,730	18.89	39,290	1	
Extruding and drawing machine setters, operators, and tenders, metal and plastic		18.16	37,770	1	
Forging machine setters, operators, and tenders, metal and plastic		19.81	41,200	1	
Rolling machine setters, operators, and tenders, metal and plastic		20.15	41,920	1	
Machine tool cutting setters, operators, and tenders, metal and plastic		18.48	38,440	1	
Cutting, punching, and press machine setters, operators, and tenders, metal and plastic		17.94	37,310	1	
Drilling and boring machine tool setters, operators, and tenders, metal and plastic Grinding, lapping, polishing, and buffing machine tool setters, operators, and tenders,		20.49	42,630	1	
metal and plastic		18.20	37,860	1	
Lathe and turning machine tool setters, operators, and tenders, metal and plastic		20.19	41,990	1	
Milling and planing machine setters, operators, and tenders, metal and plastic		21.55 22.17	44,820 46,120	2	
Metal furnace operators, tenders, pourers, and casters		20.43	42,500	1	
Metal-refining furnace operators and tenders		20.81	43,280	2	
Pourers and casters, metal.		19.64	40,850	1	
Model makers and patternmakers, metal and plastic		25.75	53,560	2	
Model makers, metal and plastic		27.61	57,420	2	
Patternmakers, metal and plastic	3,010	23.10	48,050	2	
Molders and molding machine setters, operators, and tenders, metal and plastic	190,110	16.77	34,870	1	
Foundry mold and coremakers		17.75	36,920	1	
Molding, coremaking, and casting machine setters, operators, and tenders, metal and plastic		16.67	34,670	1	
Multiple machine tool setters, operators, and tenders, metal and plastic		18.47	38,410	1	
Tool and die makers		26.43	54,980	2	
Welding, soldering, and brazing workers		21.54	44,800	2	
Welders, cutters, solderers, and brazers		21.73	45,190	2	
Welding, soldering, and brazing machine setters, operators, and tenders		19.35	40,240	1	
Miscellaneous metal workers and plastic workers		18.49	38,470 39,840	1	
Heat treating equipment setters, operators, and tenders, metal and plastic Layout workers, metal and plastic	19,560 8,150	19.16 23.51	48,900	1	
Plating machine setters, operators, and tenders, metal and plastic		17.14	35,640	1	
Tool grinders, filers, and sharpeners	,	20.18	41,970	1	
Metal workers and plastic workers, all other		18.17	37,790	1	
Printing workers.		18.65	38,790	1	
Printing workers		18.65	38,790	i	
Prepress technicians and workers		20.45	42,540	1	
Printing press operators		18.80	39,100	1	
Print binding and finishing workers		16.89	35,130	1	
Textile, apparel, and furnishings workers		13.78	28,660	1	
Laundry and dry-cleaning workers		12.22	25,420	1	
Pressers, textile, garment, and related materials	. 38,070	11.93	24,820	1	
Sewing machine operators		13.46	28,000	1	
Shoe and leather workers	-,	14.70	30,570	1	
Shoe and leather workers and repairers		14.70	30,580	1	
Shoe machine operators and tenders		14.68	30,540	1	
Tailors, dressmakers, and sewers		16.32	33,950	1	
Sewers, hand		14.92	31,020	1	
Tailors, dressmakers, and custom sewers Textile machine setters, operators, and tenders		16.60	34,530	1	
		14.77	30,720	1	
		14.81 14.26	30,810	1 1	
Textile bleaching and dyeing machine operators and tenders	1.3 / 101		29,660 31,300	1	
Textile bleaching and dyeing machine operators and tenders Textile cutting machine setters, operators, and tenders					
Textile bleaching and dyeing machine operators and tenders Textile cutting machine setters, operators, and tenders Textile knitting and weaving machine setters, operators, and tenders	21,130	15.05 14 78		- 1	
Textile bleaching and dyeing machine operators and tenders Textile cutting machine setters, operators, and tenders Textile knitting and weaving machine setters, operators, and tenders Textile winding, twisting, and drawing out machine setters, operators, and tenders	21,130 31,190	14.78	30,740	1	
Textile bleaching and dyeing machine operators and tenders Textile cutting machine setters, operators, and tenders Textile knitting and weaving machine setters, operators, and tenders	21,130 31,190 71,570			1 1 1	

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2019- Continued

Occupation	Employment	Mean wages		Median	
		Hourly	Annual ¹	hourly wages	
Production occupations (Continued)					
Upholsterers		\$17.62	\$36,640	\$16.8	
Textile, apparel, and furnishings workers, all other		14.76	30,710	13.4	
Woodworkers		16.66	34,660	15.7 17.2	
Cabinetmakers and bench carpenters		18.09 16.51	37,620 34,350	17.2	
Model makers and patternmakers, wood		28.49	59,270	29.3	
Model makers, wood		27.56	57,320	28.4	
Patternmakers, wood		30.53	63,490	31.1	
Woodworking machine setters, operators, and tenders	. 129,580	15.47	32,170	14.7	
Sawing machine setters, operators, and tenders, wood		15.46	32,150	14.6	
Woodworking machine setters, operators, and tenders, except sawing		15.47	32,180	14.9	
Woodworkers, all other		16.96	35,270	15.9	
Plant and system operators Power plant operators, distributors, and dispatchers		30.40 40.22	63,230 83,660	29.0 41.3	
Nuclear power reactor operators		48.55	100,990	48.3	
Power distributors and dispatchers		42.74	88,910	43.6	
Power plant operators		38.16	79,370	39.4	
Stationary engineers and boiler operators		31.71	65,970	29.8	
Water and wastewater treatment plant and system operators		24.28	50,490	22.9	
Miscellaneous plant and system operators	96,580	32.77	68,170	32.6	
Chemical plant and system operators		30.15	62,710	30.0	
Gas plant operators		34.16	71,050	34.0	
Petroleum pump system operators, refinery operators, and gaugers		35.49	73,830	35.6	
Plant and system operators, all other		28.61	59,500	28.0	
Other production occupations		18.64	38,770	17.1	
Chemical equipment operators and tenders		23.68 24.78	49,250 51,540	22.2 23.6	
Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders		21.81	45,370	19.8	
Crushing, grinding, polishing, mixing, and blending workers		18.63	38,740	17.6	
Crushing, grinding, and polishing machine setters, operators, and tenders		18.88	39,270	18.0	
Grinding and polishing workers, hand		15.90	33,060	14.7	
Mixing and blending machine setters, operators, and tenders	125,340	19.19	39,920	18.1	
Cutting workers	. 67,620	17.37	36,120	16.7	
Cutters and trimmers, hand		15.55	32,340	14.5	
Cutting and slicing machine setters, operators, and tenders		17.67	36,750	17.1	
Extruding, forming, pressing, and compacting machine setters, operators, and tenders		17.90	37,240	17.0	
Furnace, kiln, oven, drier, and kettle operators and tenders		19.88	41,350	19.2	
Inspectors, testers, sorters, samplers, and weighers		20.67	43,000	18.8 19.6	
Jewelers and precious stone and metal workers Dental and ophthalmic laboratory technicians and medical appliance technicians		22.09 19.58	45,950 40,730	17.9	
Dental laboratory technicians.		21.31	44,330	17.9	
Medical appliance technicians		21.25	44,200	19.5	
Ophthalmic laboratory technicians		16.73	34,800	15.6	
Packaging and filling machine operators and tenders		16.15	33,590	14.9	
Painting workers	158,780	19.63	40,820	18.1	
Painting, coating, and decorating workers		17.11	35,600	15.8	
Coating, painting, and spraying machine setters, operators, and tenders		19.84	41,260	18.3	
Semiconductor processing technicians		20.17	41,950	18.3	
Photographic process workers and processing machine operators		17.74	36,890	15.5	
Computer numerically controlled tool operators and programmers Computer numerically controlled tool operators		21.90	45,560	20.6 19.8	
Computer numerically controlled tool programmers		20.75 28.72	43,170 59,730	27.1	
Miscellaneous production workers		16.34	33,980	14.9	
Adhesive bonding machine operators and tenders.	13,890	17.31	36,010	16.5	
Cleaning, washing, and metal pickling equipment operators and tenders		16.46	34,230	15.3	
Cooling and freezing equipment operators and tenders		17.80	37,010	16.9	
Etchers and engravers	. 10,310	16.24	33,770	14.7	
Molders, shapers, and casters, except metal and plastic		17.31	36,000	16.3	
Paper goods machine setters, operators, and tenders		19.70	40,980	18.8	
Tire builders		21.64	45,010	22.1	
Helpersproduction workers		14.68	30,540	13.9	
Production workers, all other	. 222,230	16.26	33,830	14.3	
representation and material maying appropriate	12,532,030	18.23	37,920	15.6	
ransportation and material moving occupations Supervisors of transportation and material moving workers		27.81	57,850	26.4	
First-line supervisors of transportation and material moving workers.		27.81	57,850	26.4	
Aircraft cargo handling supervisors		27.87	57,960	25.8	
First-line supervisors of transportation and material moving workers, except aircraft cargo	3,000		,		
handling supervisors	455,390	27.81	57,840	26.4	
Air transportation workers	275,960	(2)	104,130	(
Aircraft pilots and flight engineers		(2)	152,610	(
Airline pilots, copilots, and flight engineers		(2)	174,870	(
Commercial pilots		(2)	102,870	(
Air traffic controllers and airfield operations specialists		47.96	99,760	44.8	
Air traffic controllers		57.76	120,140	59.1	
Airfield operations specialists		27.70	57,620 56,330	25.3	
Flight attendants		(²) 19.57	56,230 40,710	18.5	
Motor vehicle operators		14.23	40,710 29,600	18.5 12.4	
		20.27	42,170	19.3	
Driver/sales workers and truck drivers			74.1101	10.0	
Driver/sales workers and truck drivers		14.53	30,230	12.4	

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2019- Continued

Occupation	Employment	Mean wages		Median
		Hourly	Annual ¹	hourly wages
ransportation and material moving occupations (Continued)				
Heavy and tractor-trailer truck drivers	1,856,130	\$22.52	\$46,850	\$21.
Light truck drivers	923,050	18.52	38,520	16.
Passenger vehicle drivers	879,540	17.21	35,790	16
Bus drivers, transit and intercity	179,510	22.03	45,830	20
Passenger vehicle drivers, except bus drivers, transit and intercity		15.97	33,210	15
Motor vehicle operators, all other	56,590	17.93	37,300	15
Rail transportation workers	111,090	32.33	67,240	31
Locomotive engineers and operators		33.21	69.080	31
Locomotive engineers	- ,	34.41	71,570	32
Rail yard engineers, dinkey operators, and hostlers	5.400	25.33	52,690	23
Railroad brake, signal, and switch operators and locomotive firers	11.080	29.99	62,380	28
Railroad conductors and yardmasters	45,710	32.86	68,350	31
Subway and streetcar operators.	10,730	30.66	63,770	32
Rail transportation workers, all other.	2,650	26.04	54,170	24
		34.25	71,240	27
Water transportation workers				20
Sailors and marine oilers	31,290	25.60	53,250	
Ship and boat captains and operators		40.93	85,130	33
Captains, mates, and pilots of water vessels		42.03	87,420	34
Motorboat operators		23.57	49,030	23
Ship engineers	8,410	38.24	79,540	35
Other transportation workers	368,840	15.98	33,240	12
Bridge and lock tenders	3,150	23.02	47,880	24
Parking attendants	147,390	12.72	26,450	12
Automotive and watercraft service attendants		12.91	26,860	12
Traffic technicians	7,470	25.28	52,590	22
Transportation inspectors	30,020	37.27	77,530	36
Passenger attendants	28,200	14.15	29,420	12
Aircraft service attendants and transportation workers, all other	34,940	20.65	42,940	17
Material moving workers	7,061,370	15.28	31,790	13
Conveyor operators and tenders	24,050	17.38	36,150	16
Crane and tower operators	45,480	29.10	60,530	2
Dredge operators.	1,550	24.68	51,340	22
Hoist and winch operators	4.800	30.14	62,690	28
Industrial truck and tractor operators	629,270	18.24	37,930	17
Laborers and material movers.		14.70	30,570	13
Cleaners of vehicles and equipment	382,670	13.43	27,940	12
Laborers and freight, stock, and material movers, hand		15.45	32,130	14
Machine feeders and offbearers	63,280	15.87	33,010	14
Packers and packagers, hand	633,640	13.31	27,680	12
	2,135,850	14.26	29,660	13
Stockers and order fillers				
Pumping station operators		25.87	53,820	25
Gas compressor and gas pumping station operators	3,440	30.15	62,710	31
Pump operators, except wellhead pumpers		23.61	49,120	2
Wellhead pumpers		26.48	55,080	26
Refuse and recyclable material collectors		19.90	41,400	18
Tank car, truck, and ship loaders		22.88	47,580	20
Material moving workers, all other	28,240	17.56	36,530	15

¹ 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.

² Wages for some occupations that do not generally work year-round, full time, are reported either as hourly wages or annual salaries depending on how they are typically paid.

³ Represents a wage equal to or greater than \$100.00 per hour.