

Workforce Oklahoma Occupational Outlook 2018



**Oklahoma Employment Security Commission
Economic Research and Analysis Division**

Oklahoma Employment Outlook 2018

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Economic Research & Analysis Division

P.O. Box 52003

Oklahoma City, OK 73152-2003

Richard McPherson, OESC Executive Director

Lynn Gray, Director of Economic Research & Analysis

Prepared by

John Carpenter, Public Information Officer

Assisted by

Huifen (Shirley) Zhang, Labor Market Information Manager

Edward Howell, Statistical Research Specialist

Monty Evans, Senior Economist

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About this publication

Long-term industry and occupational employment projections are developed on a two-year schedule. All state projections are funded by the U.S. Employment and Training Administration (ETA). State analysts have been provided with guidelines, training and technical support for producing projections. The Projections Suite developed by the Utah Department of Workforce Services is used to produce these industry and occupational projections.

Industry employment projections

Oklahoma industry employment projections are developed using the methodology, software tools, and guidelines developed by the Projections Workgroup and the Projections Managing Partnership.

Linear regression and shift-share analysis techniques have been employed as the primary methods of analysis. Projections for some industries are made at the three-digit or four-digit level under the 2007 North American Industry Classification System (NAICS).

Historical employment data are taken from the Quarterly Census of Employment and Wages (QCEW). Agriculture and non-covered employment data are from the American Community Survey (ACS) and the Current Employment Statistics (CES) programs, respectively. Employment for self-employed and unpaid family workers is produced from the projection matrix system based on the 2008 Occupational Employment Statistics (OES) survey and the Bureau of Labor Statistics' Current Population Survey (CPS). Employment is rounded to the nearest 10. Percent changes are based on unrounded data.

Total employment is divided into large groups called **supersectors**. These supersectors fall under the heading of either goods-producing industries or service-providing industries. The goods-producing industries group is composed of the following supersectors (including component industries, if

applicable): **natural resources & mining** (agriculture, mining), **construction** and **manufacturing**. The service-providing industries group includes **trade, transportation & utilities** (transportation & warehousing, wholesale trade, retail trade, utilities); **information; financial activities** (finance & insurance; real estate & rental & leasing); **professional & business services** (professional, scientific & technical services; management of companies & enterprises; administrative & support & waste management & remediation services); **educational & health services** (educational services; health care & social assistance); **leisure & hospitality** (arts, entertainment & recreation; accommodation & food services); **other services (except government)**; and **government**.

Occupational employment projections

Occupational projections reflect the 2000 Standard Occupational Classification system. More than 700 detailed occupations are covered in this publication. **Current employment** refers to the estimated annual employment by occupation for all industries based on 2008 data. **Projected employment** refers to the expected annual employment by occupation based on projections made for all detailed industries in Oklahoma for 2018. **Average annual openings** are job openings resulting from growth and replacement needs in an occupation. Employment is rounded to the nearest 10. Percentage changes are based on unrounded data and reflect the percent growth or decline in an occupation over the 10-year period based on unrounded data.

Most significant source of postsecondary education or training

Each occupation includes a category that best describes the postsecondary education or training needed by most workers to become fully qualified in that occupation. For more information about

these categories, see **Measures of Education and Training** (Bureau of Labor Statistics, May 2010) technical document at http://www.bls.gov/emp/ep_education_tech.htm.

Data limitations

Forecasting the future is not an exact science. Projections are the result of careful analysis of available data. One limitation is that they do not reflect what might happen under different

conditions. International, national and local events can have significant impacts on Oklahoma's economy. Moreover, the projection model does not take into account factors such as immigration, occupational supply, business relocation, emergence of new occupations, or industrial and scientific developments.

Please do not use these projections as your sole source of information.

INDUSTRY PROJECTIONS

Service-providing industries continue to drive state job growth

- Oklahoma is expected to add more than 178,000 jobs across all industries between 2008 and 2018, an increase of over 10 percent.
- The service-providing industries will contribute more than four of every five new jobs added between 2008 and 2018.
- Nearly half of all job growth during the 2008-to-2018 period will come from the **educational & health services** and **professional & business services** supersectors.
- Only one supersector, **information**, will drop jobs during the projection period.

TABLE 1: OKLAHOMA EMPLOYMENT PROJECTION by INDUSTRY, 2008-2018

INDUSTRY	EMPLOYMENT		CHANGE		SHARE	
	2008	2018	Jobs	Pct.	2008	2018
TOTAL EMPLOYMENT	1,750,130	1,928,790	178,670	10.21%	100.0%	100.0%
SE & UFW, primary job	116,690	125,680	8,980	7.70%	6.67%	6.52%
Natural resources & mining	88,290	92,850	4,560	5.17%	5.04%	4.81%
Construction	75,560	91,630	16,070	21.26%	4.32%	4.75%
Manufacturing	150,520	153,480	2,960	1.97%	8.60%	7.96%
Trade, transportation & utilities	289,740	308,830	19,090	6.59%	16.56%	16.01%
Information	28,960	27,220	-1,740	-6.02%	1.65%	1.41%
Financial activities	83,110	86,650	3,540	4.25%	4.75%	4.49%
Professional & business services	184,250	217,370	33,120	17.97%	10.53%	11.27%
Educational & health services	356,210	408,040	51,830	14.55%	20.35%	21.16%
Leisure & hospitality	143,770	160,990	17,230	11.98%	8.21%	8.35%
Other services (except government)	65,740	70,530	4,800	7.30%	3.76%	3.66%
Government	167,280	185,530	18,250	10.91%	9.56%	9.62%

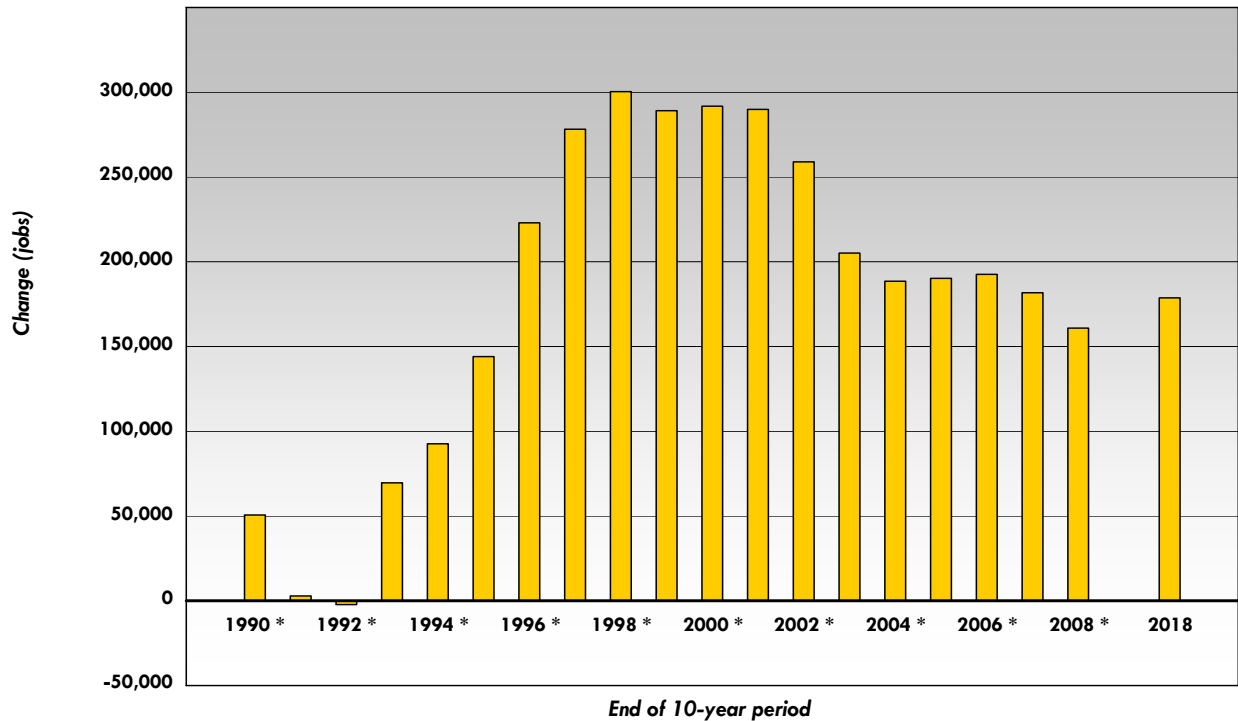
Oklahoma's economy: a snapshot

The Oklahoma economy has seen considerable change over the past few decades. After reporting strong growth throughout the 1970s, the state economy experienced a setback in the 1980s in the form of the oil bust. The state reported net job losses for 1986 through 1988 and again in 1991. The 1990s ushered in a recovery period, as Oklahoma's economy began gaining back the jobs lost over the previous few years. By 1994, Oklahoma had reached the same employment level it held before the losses in the 1980s, and state employment continued to climb, surpassing the 1.5 million mark in 2000. The recession that began in 2001 restricted growth to a degree, but state employment again reached an all-time high in 2008. Late that year, the Great Recession hit and severely impacted Oklahoma as it did the United

States as a whole.

It's difficult to predict all of the factors that will impact the state between 2008 and 2018. A few we already know. Recovery from the Great Recession has been sluggish so far, weakening future growth. Oklahoma, like all other states and the United States, is changing from a goods-producing economy to a service-providing economy, and the types of jobs available will reflect this change. The aging baby boomer generation will require a larger and better staffed health care industry. Constantly improving technology will continue to provide employers with options to human workers. The oil and gas industry will continue to be an important player in the economic well-being of the state.

CHART 1: 10-YEAR CHANGE in OKLAHOMA NONFARM EMPLOYMENT, 1990-2008 & 2018 FORECAST



* Historical data taken from Current Employment Statistics (CES) program

Overview

The two supersectors expected to account for almost half of the state’s job growth are **professional & business services** and **educational & health services** (Table 1). When combined, they will account for 47.5 percent of all jobs added between 2008 and 2018.

The **educational & health services** supersector is expected to add nearly 52,000 jobs during the projection period. The **educational services** industry will produce 12,480 new jobs, while the **health care & social assistance** industry will add 39,350 jobs. The **health care & social assistance** growth was provided mostly by the **ambulatory health care services** and **hospitals** industries.

Professional & business services is projected to gain more than 33,000 jobs between 2008 and 2018, expanding by almost 18 percent. The **professional, scientific & technical services** and **administrative & support services** industries will provide nearly all of the supersector’s growth during the period.

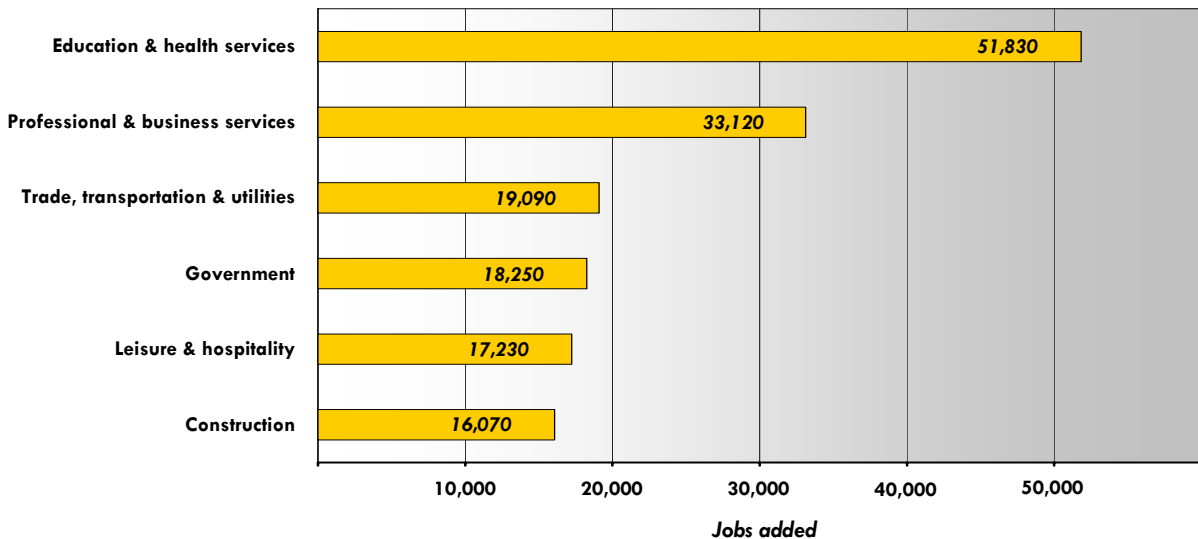
Trade, transportation & utilities is expected to add the third largest total of 19,090 new jobs.

Movement in **retail trade** will provide two-thirds of the growth, driven by job gains in **general merchandise stores, building material & garden equipment & supplies dealers,** and **health & personal care stores,** among other industries. The **transportation & warehousing** and **wholesale trade** industries will contribute a combined 5,500 jobs to the growth, with **utilities** making up the remainder.

Government employment is expected to grow by 18,250 jobs between 2008 and 2018. **Local government, excluding education & hospitals** is expected to add 14,760 new jobs during the period.

Leisure & hospitality is projected to grow by more than 17,000 jobs during the 2008-to-2018 period. The **accommodation & food services** industry will provide more than four out of every five jobs gained during the projection period, driven mostly by expansion in **food services & drinking places.** **Amusement, gambling & recreation** will contribute much of the rest of the growth seen in the **leisure & hospitality** supersector.

CHART 2: SUPERSECTORS with MOST EXPECTED JOB GROWTH, 2008-2018



Construction will expand at the fastest rate of all supersectors during the projection period, growing by more than 21 percent, or 16,070 jobs. Although all of its industries will grow between 2008 and 2018, the **specialty trade contractors** industry is expected to provide a majority of the job growth.

Other services (except government) will add 4,800 jobs during the forecast period, a gain of 7.30 percent. Almost all of the growth will come from the **repair & maintenance** and **personal & laundry services** industries. The only industry losing jobs for the forecast period will be **religious, grantmaking, civic, professional & similar organizations**.

Natural resources & mining will grow by more than 4,500 jobs, or 5.17 percent, during the projection period. Over 85 percent of the employment gains in this supersector will come from **support activities for mining**, an industry that will add 3,900 jobs between 2008 and 2018. This growth will be due to Oklahoma's strong oil

and natural gas industry.

Financial activities is expected to expand by 3,540 jobs for the period. Although most industries are expected to add jobs, **real estate and securities, commodity contracts & other financial investments & related activities** will lead the way.

Manufacturing is projected to add 2,960 jobs between 2008 and 2018. Although job gains will be seen in nearly half of **manufacturing's** industries, **machinery manufacturing** will drive growth with an addition of 4,710 jobs. The largest job loss is expected from the **transportation equipment manufacturing** industry.

The only supersector expected to lose jobs over the forecast period is **information**. This supersector will contract by 1,740 jobs between 2008 and 2018. The two largest industry losses will come from **publishing industries** and **broadcasting (except internet)**.

Industry forecasts

Growth industries

Between 2008 and 2018, the ten industries gaining the largest number of jobs will account for just over three-quarters of all jobs added. These industries, known as **growth industries**, cover a variety of disciplines, including health services, professional services and government.

Hospitals is the industry expected to add the most jobs, expanding by 18,640 jobs during the period. This industry is one of four on this list (**ambulatory health care services, educational services, social assistance**) that fall under the **educational & health services** supersector. All told, **educational & health services** will provide just under two of every five jobs added by the 10 growth industries between 2008 and 2018.

Professional, scientific & technical services is

projected to expand by 17,020 jobs, followed by **ambulatory health care services** with an addition of 16,440 jobs. **Administrative & support services** will grow by nearly 15,000 for the period, followed closely by **local government, excluding education & hospitals** with 14,760 new jobs.

Specialty trade contractors is the only growth industry to come from the goods producing industries. Its growth rate (31.23 percent) is the highest among the 10 growth industries. **Food services & drinking places** and **educational services** round out the industries that will record gains in excess of 10,000 jobs for the projection period. The remaining two industries on the list, **general merchandise stores** and **social assistance**, are expected to expand less between 2008 and 2018 than the other growth industries.

TABLE 2: OKLAHOMA’S TOP 10 GROWTH INDUSTRIES, 2008-2018 (INDUSTRIES with MOST PROJECTED GROWTH)

INDUSTRY	EMPLOYMENT		CHANGE	
	2008	2018	Jobs	Pct.
Hospitals	68,170	86,820	18,640	27.35%
Professional, scientific & technical services	65,010	82,030	17,020	26.18%
Ambulatory health care services	65,690	82,120	16,440	25.02%
Administrative & support services	102,350	117,330	14,980	14.64%
Local government, excluding education & hospitals	83,120	97,890	14,760	17.76%
Specialty trade contractors	46,990	61,670	14,680	31.23%
Food services & drinking places	113,460	126,700	13,240	11.67%
Educational services	162,550	175,030	12,480	7.68%
General merchandise stores	46,300	52,790	6,490	14.02%
Social assistance	25,430	30,810	5,380	21.16%

Rapid growth industries

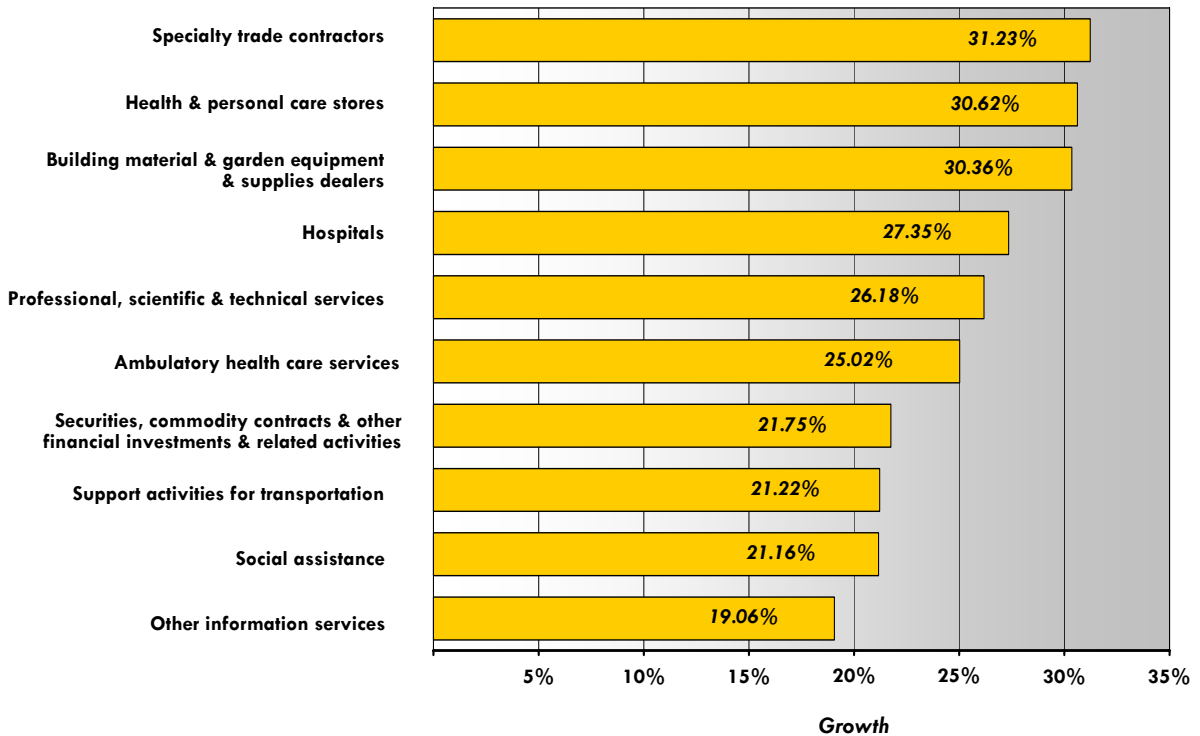
Rapid growth industries are those that report the largest percentage growth over the projection period. When looking at rapid growth industries, it is important to remember that they fall into one of two general categories. The first is made up of industries with a small number of jobs. Any growth in this type of industry will appear significant. For example, in an industry with 100 jobs, a gain of 10 jobs would represent a growth rate of 10 percent. However, an industry with 100,000 jobs would have to gain 10,000 jobs to achieve the same growth rate. The second category is made up of these larger industries. Because of the large number of jobs, the gain of a few jobs will affect the growth rate much less than in a small industry.

The industry with the highest projected growth rate between 2008 and 2018 is **specialty trade contractors**, the only rapid growth industry to

come from the good producing industries. The second and third highest growth rates belong to **health & personal care stores** and **building material & garden equipment & supplies dealers**, both industries of **retail trade**. Of the remaining rapid growth industries, four (**hospitals**; **professional, scientific & technical services**; **ambulatory health care services**; and **social assistance**) are classified as large industries.

Half of the rapid growth industries (**specialty trade contractors**; **hospitals**; **professional, scientific & technical services**; **ambulatory health care services**; and **social assistance**) also made the list of top 10 growth industries. All five of these industries fall into the large industry category and, when combined, are the source of more than 85 percent of the new jobs provided by the top 10 rapid growth industries for the projection period.

CHART 3: OKLAHOMA’S TOP 10 RAPID GROWTH INDUSTRIES, 2008-2018 (SECTORS with the FASTEST GROWTH)



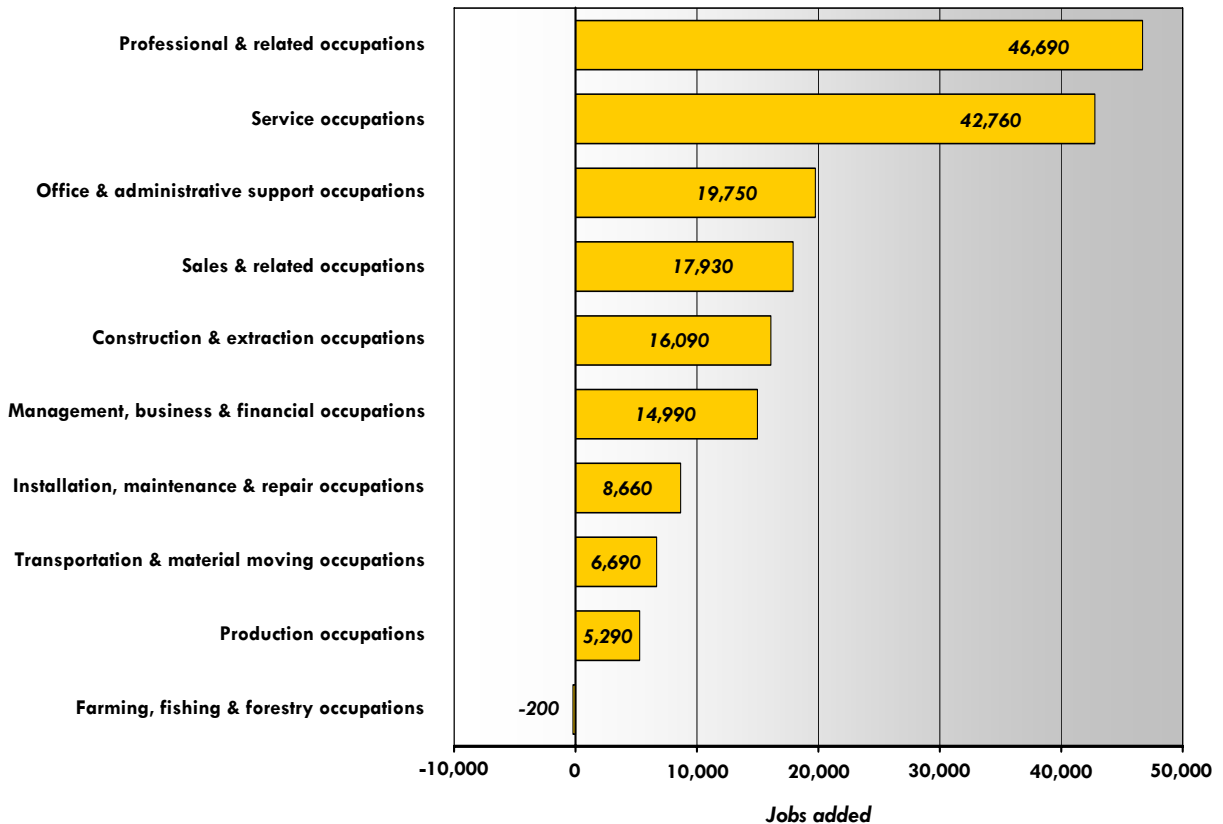
OCCUPATIONAL PROJECTIONS

Professional & related occupations, service occupations to provide half of all growth through 2018

Between 2008 and 2018, statewide occupational employment is projected to grow by 178,670 jobs, or 10.21 percent. This will amount to an average of more than 17,800 new jobs each year. Two major occupational divisions, **professional & related occupations** and **service occupations**, are expected to provide just over 50 percent of all jobs added over the period. These occupational

divisions join **construction & extraction occupations** and **installation, maintenance & repair occupations** as the only divisions to increase their share of total employment over the projection period. All major occupational divisions, with the exception of **farming, fishing & forestry occupations**, are expected to expand between 2008 and 2018.

CHART 4: OKLAHOMA'S OCCUPATIONAL EMPLOYMENT CHANGE, 2008-2018



Occupational forecasts

Two major occupational divisions, **professional & related occupations** and **service occupations**, are expected to provide more than half of all jobs gained over the forecast period. These two divisions will also be the source of just over two out of every five jobs added each year between 2008 and 2018.

Professional & related occupations

The **professional & related occupations** group is expected to add 46,690 jobs during the projection period. This group will also claim the second highest growth rate between 2008 and 2018 and the second highest number of jobs added each year for the period.

Health care and educational occupations are projected to be among the leading growth occupations in this group. The three **professional & related occupations** projected to add the largest average number of jobs between 2008 and 2018 are **Registered Nurses; Elementary School**

Teachers, Except Special Education; and Licensed Practical & Licensed Vocational Nurses. These three occupations will contribute more than one-quarter of all jobs gained by **professional & related occupations** during the projection period.

Service occupations

Following right behind **professional & related occupations** will be the **service occupations** group, which is expected to add more than 42,000 new jobs during the projection period. The group is also expected to add the most jobs each year among the major occupational groups.

Much of the growth in this occupational group will be provided by health care and food service occupations. **Combined Food Preparation & Serving Workers, Including Fast Food; Home Health Aides; Personal & Home Care Aides; and Waiters & Waitresses** are all expected to grow by more than 2,800 jobs between 2008 and 2018.

TABLE 3: OKLAHOMA EMPLOYMENT PROJECTION by OCCUPATION, 2008-2018

OCCUPATION	EMPLOYMENT		DISTRIBUTION		CHANGE		AVERAGE ANNUAL OPENINGS
	2008	2018	2008	2018	Jobs	Pct.	
TOTAL, all occupations	1,750,130	1,928,790	100.00%	100.00%	178,670	10.21%	59,190
Management, business & financial	174,380	189,380	9.96%	9.82%	14,990	8.60%	5,430
Professional & related	317,560	364,260	18.14%	18.89%	46,690	14.70%	11,700
Service	323,350	366,120	18.48%	18.98%	42,760	13.23%	12,640
Sales & related	180,600	198,530	10.32%	10.29%	17,930	9.93%	7,220
Office & administrative support	293,430	313,180	16.77%	16.24%	19,750	6.73%	8,500
Farming, fishing & forestry	27,800	27,600	1.59%	1.43%	-200	-0.71%	760
Construction & extraction	109,080	125,170	6.23%	6.49%	16,090	14.75%	3,530
Installation, maintenance & repair	78,210	86,870	4.47%	4.50%	8,660	11.08%	2,470
Production	129,900	135,190	7.42%	7.01%	5,290	4.07%	3,420
Transportation & material moving	115,810	122,500	6.62%	6.35%	6,690	5.78%	3,530

Office & administrative support occupations

Office & administrative support occupations will grow by 19,750 jobs between 2008 and 2018, the third largest amount of any occupational group. Despite this, these occupations are expected to provide more than one-third of the state's 30 declining occupations, or occupations with the largest expected job declines. **Customer Service Representatives; Bookkeeping, Accounting & Auditing Clerks;** and **Office Clerks, General** are each expected to add more than 3,600 jobs over the period, while **Order Clerks** and **File Clerks** will drop more than 750 jobs apiece.

Sales & related occupations

Expansion is expected to continue in **sales & related occupations** through 2018, with the occupational group posting a gain of 17,930 jobs, or nearly 10 percent, over the period. Retail trade will fuel this growth. The two largest occupations by number of jobs, **Retail Salespersons** and **Cashiers**, belong to **sales & related occupations**. Both of these occupations are among the 10 occupations with the largest employment change between 2008 and 2018.

Construction & extraction occupations

Between 2008 and 2018, **construction & extraction occupations** will expand by more than 16,000 jobs, or 14.75 percent, the highest growth rate among all major occupational groups. Much of the anticipated growth will come from construction occupations. **Construction Laborers**, expected to be one of the 30 occupations with the largest employment in 2018, will add more than 2,100 jobs from 2008 to 2018. **Electricians** and **First-line Supervisors/Managers of Construction Trades and Extraction Workers** are also expected to add more than 1,300 jobs each over the period.

Management, business & financial occupations

Management, business & financial occupations

will see an increase of nearly 15,000 jobs between 2008 and 2018. **Accountants & Auditors** is expected to lead this occupational group with a job gain of 3,660 jobs over the projection period. Despite a small projected job loss, **General & Operations Managers** remains one of the 30 occupational groups with the largest employment. When combined, these two occupations will provide one of every three jobs classified under **management, business & financial occupations** in 2018.

Installation, maintenance & repair occupations

Installation, maintenance & repair occupations is expected to add 8,660 jobs by 2018. **Maintenance & Repair Workers, General** is expected to be one of the 30 occupations with the largest employment in 2018. This occupational group will account for well over one-fifth of the jobs gained by **installation, maintenance & repair occupations** between 2008 and 2018.

Transportation & material moving occupations

Transportation & material moving occupations will expand over the period by 6,690 jobs. **Truck Drivers, Heavy & Tractor-trailer** is expected to add the fourth largest number of jobs of any occupation and will be joined by **Laborers & Freight, Stock & Material Movers, Hand** on the list of 30 occupations with the largest employment.

Production occupations

Production occupations will post the smallest growth rate of all occupational groups between 2008 and 2018. Two occupations, **Welders, Cutters, Solderers & Brazers** and **Team Assemblers**, will both be among the 30 occupations with the largest employment and the 30 occupations with the largest number of projected openings per year.

Farming, fishing & forestry occupations

Farming, fishing & forestry occupations is the smallest occupational group and the only one projected to record a job loss for the period, shedding an estimated 200 jobs between 2008 and 2018. Despite the anticipated contraction, **Farmworkers & Laborers, Crop, Nursery & Greenhouse** will continue to be one of the 30 occupations with the largest employment.

Job openings: growth vs. replacement

There are two basic types of job openings. Certain openings are created when a business opens or grows. These are referred to as growth openings. Other job openings, known as replacement openings, are created when workers leave their occupations. Reasons may include retirement, a change in occupations and family care responsibilities. Changing employers while

staying in the same occupation does not constitute a replacement opening.

Regardless of whether a business has a growth opening or a replacement opening, new workers are needed. By looking at the average number of annual job openings, one can get a good indication of how many new workers will be needed each year to fill these openings.

For the 2008-to-2018 time span, nearly one-third of all job openings will be growth openings, with replacement openings making up the rest. The **farming, fishing & forestry occupations** division is expected to produce the fewest growth openings and will have the lowest percentage of growth openings compared to all job openings. The **service occupations** division is expected to provide the largest number of replacement openings during the period.

Where is the most demand?

From 2008 to 2018, the 30 occupations with the most projected job openings per year, also known as demand occupations, will represent 37 percent of total employment and provide an average of just over two out of every five job openings each year. Two **sales & related occupations** (Cashiers and Retail Salespersons) will provide the most job

openings per year between 2008 and 2018, averaging 2,240 jobs per year and 2,160 jobs per year, respectively. Although **sales & related occupations** claimed the top two spots on the list, **service occupations** contributed seven of the top 30 demand occupations, as did **office & administrative support occupations**.

**TABLE 4: OKLAHOMA'S TOP 30 DEMAND OCCUPATIONS, 2008-2018
(OCCUPATIONS with LARGEST NUMBER of OPENINGS PER YEAR)**

OCCUPATION	EMPLOYMENT			AVERAGE ANNUAL OPENINGS
	2008	2018	Change	
Cashiers	41,370	45,160	3,800	2,240
Retail Salespersons	54,270	60,770	6,500	2,160
Waiters & Waitresses	28,180	30,990	2,810	1,840
Customer Service Representatives	27,790	31,990	4,200	1,300
Registered Nurses	27,920	35,600	7,670	1,260
Combined Food Preparation & Serving Workers, Including Fast Food	24,890	29,500	4,610	990
Office Clerks, General	40,950	44,630	3,680	930
Truck Drivers, Heavy & Tractor-Trailer	26,990	31,300	4,310	910
Laborers & Freight, Stock & Material Movers, Hand	25,400	25,380	-20	820
General & Operations Managers	27,940	27,720	-220	810
Bookkeeping, Accounting & Auditing Clerks	34,310	38,180	3,870	800
Elementary School Teachers, Except Special Education	18,000	21,080	3,080	720
First-line Supervisors/Managers of Retail Sales Workers	21,720	23,920	2,200	690
Licensed Practical & Licensed Vocational Nurses	14,090	16,330	2,240	660
Accountants & Auditors	17,520	21,170	3,660	660
First-line Supervisors/Managers of Office & Administrative Support Workers	17,480	19,440	1,960	590
Stock Clerks & Order Fillers	17,560	18,700	1,140	520
Cooks, Fast Food	13,930	15,550	1,620	520
Janitors & Cleaners, Except Maids & Housekeeping Cleaners	23,430	24,150	710	510
Team Assemblers	16,980	17,940	960	480
Welders, Cutters, Solderers & Brazers	12,240	13,250	1,010	480
Secondary School Teachers, Except Special & Vocational Education	11,860	13,060	1,190	460
Receptionists & Information Clerks	12,110	13,480	1,370	460
Maintenance & Repair Workers, General	16,910	18,830	1,920	450
Child Care Workers	13,180	13,710	530	440
Farmworkers & Laborers, Crop, Nursery & Greenhouse	15,440	15,190	-260	420
Personal & Home Care Aides	9,180	12,110	2,920	410
Home Health Aides	8,440	11,630	3,190	400
Sales Representatives, Wholesale & Manufacturing, Except Technical & Scientific Products	13,240	14,170	930	400
Tellers	8,710	9,080	370	400

Where is the most growth?

Oklahoma employment is expected to grow by more than 10 percent between 2008 and 2018. The 30 occupations predicted to grow at the fastest rates during the period, or growth occupations, all more than double this growth rate. **Professional**

& related occupations are expected to provide 12 of these growth occupations between 2008 and 2018. **Service occupations** will provide seven of the remaining growth occupations.

**TABLE 5: OKLAHOMA'S TOP 30 GROWTH OCCUPATIONS, 2008-2018
(OCCUPATIONS with LARGEST PERCENT GROWTH)**

OCCUPATION	EMPLOYMENT			AVERAGE ANNUAL OPENINGS
	2008	2018	Growth	
Network Systems & Data Communications Analysts	2,420	3,620	49.57%	160
Veterinary Technologists & Technicians	630	910	43.44%	40
Veterinary Assistants & Laboratory Animal Caretakers	1,070	1,530	42.59%	60
Medical Equipment Repairers	480	680	41.20%	30
Pharmacy Technicians	4,210	5,900	40.25%	280
Heating, Air Conditioning & Refrigeration Mechanics & Installers	3,570	4,970	39.35%	200
Veterinarians	790	1,100	39.34%	50
Radiation Therapists	330	450	38.11%	20
Home Health Aides	8,440	11,630	37.80%	400
Cardiovascular Technologists & Technicians	620	850	36.44%	30
Personal Financial Advisors	1,350	1,840	36.38%	60
Funeral Attendants	400	540	36.11%	30
Physician Assistants	1,130	1,520	35.35%	60
Helpers--Pipelayers, Plumbers, Pipefitters & Steamfitters	1,090	1,470	35.35%	60
Surgical Technologists	1,470	1,980	35.09%	90
Financial Examiners	230	320	35.04%	10
Computer Software Engineers, Applications	2,720	3,660	34.46%	120
Physical Therapist Aides	660	880	33.99%	30
Helpers--Electricians	1,690	2,240	33.10%	90
Personal & Home Care Aides	9,180	12,110	31.83%	410
Occupational Therapist Aides	240	320	31.67%	10
Respiratory Therapists	1,180	1,550	31.19%	60
Electrical & Electronics Repairers, Powerhouse, Substation & Relay	350	450	30.92%	20
Security & Fire Alarm Systems Installers	960	1,260	30.59%	50
Water & Liquid Waste Treatment Plant & System Operators	2,180	2,820	29.60%	110
Physical Therapist Assistants	1,240	1,600	29.48%	60
Civil Engineering Technicians	990	1,280	29.42%	50
Cost Estimators	1,770	2,280	29.28%	90
Survey Researchers	180	230	29.28%	10
Compliance Officers, Except Agriculture, Construction, Health & Safety, & Transportation	2,570	3,310	28.85%	100

Where is the biggest decline?

Unfortunately, not all occupations will expand over the projection period. Occupations that lose jobs over time are called declining occupations. Of the top 30 declining occupations between 2008 and 2018, the largest projected loss will be seen in **Order Clerks**, which will drop more than 1,000 job openings over the period. Over one-third of the top 30 declining occupations belong to the

office & administrative support occupations division. Six more declining occupations are classified as **production occupations**. These projections reflect a business world in which technology is helping reduce the office workload and an economy that is becoming service-based rather than goods-based.

**TABLE 6: OKLAHOMA'S TOP 30 DECLINING OCCUPATIONS, 2008-2018
(OCCUPATIONS with LARGEST LOSSES)**

OCCUPATION	EMPLOYMENT		CHANGE	
	2008	2018	Number	Pct.
Order Clerks	3,680	2,680	-1,010	-27.33%
Telemarketers	4,500	3,620	-880	-19.63%
File Clerks	3,100	2,320	-780	-25.07%
Computer Operators	1,780	1,250	-530	-29.91%
Postal Service Mail Sorters, Processors & Processing Machine Operators	1,720	1,310	-420	-24.25%
Packers & Packagers, Hand	5,990	5,590	-400	-6.74%
Data Entry Keyers	3,130	2,800	-320	-10.36%
Computer Programmers	3,760	3,450	-310	-8.14%
Shipping, Receiving & Traffic Clerks	9,670	9,370	-300	-3.05%
Information & Record Clerks, All Other	1,780	1,490	-290	-16.33%
Farmworkers & Laborers, Crop, Nursery & Greenhouse	15,440	15,190	-260	-1.66%
Paper Goods Machine Setters, Operators & Tenders	1,260	1,010	-250	-19.98%
Switchboard Operators, Including Answering Service	2,410	2,180	-230	-9.70%
Payroll & Timekeeping Clerks	3,410	3,180	-230	-6.75%
Radio & Television Announcers	890	670	-230	-25.42%
Machine Feeders & Offbearers	1,230	1,010	-220	-18.15%
General & Operations Managers	27,940	27,720	-220	-0.79%
Mail Clerks & Mail Machine Operators, Except Postal Service	1,320	1,120	-200	-14.99%
Cutting, Punching & Press Machine Setters, Operators & Tenders, Metal & Plastic	2,870	2,680	-200	-6.82%
First-line Supervisors/Managers of Transportation & Material-moving Machine & Vehicle Operators	3,310	3,120	-200	-5.89%
Aircraft Mechanics & Service Technicians	5,670	5,480	-190	-3.39%
Photographic Processing Machine Operators	630	470	-160	-25.55%
Human Resources Assistants, Except Payroll & Timekeeping	2,200	2,040	-160	-7.09%
Chief Executives	11,820	11,670	-150	-1.27%
Sewing Machine Operators	1,080	930	-150	-13.86%
Lathe & Turning Machine Tool Setters, Operators & Tenders, Metal & Plastic	1,160	1,040	-120	-10.42%
Reporters & Correspondents	690	570	-120	-17.05%
Insurance Underwriters	1,420	1,300	-120	-8.23%
Wellhead Pumpers	2,950	2,840	-120	-3.93%
Bindery Workers	480	370	-110	-23.60%

Education/training requirements

A job opening requires more than simply someone who is willing and able to fill it. That person must also have the education and training needed to complete the duties of that particular position. Education and training requirements for job openings can be divided into 11 categories: first professional degree, doctoral degree, master’s degree, work experience plus bachelor’s or higher degree, bachelor’s degree, associate degree, postsecondary vocational training, work experience in a related occupation, long term on-the-job training, moderate term on-the-job training, and short term on-the-job training. Definitions for these categories are included in the explanation of the educational attainment category (page 19).

Occupations are classified into one of these 11 categories according to the following principles.

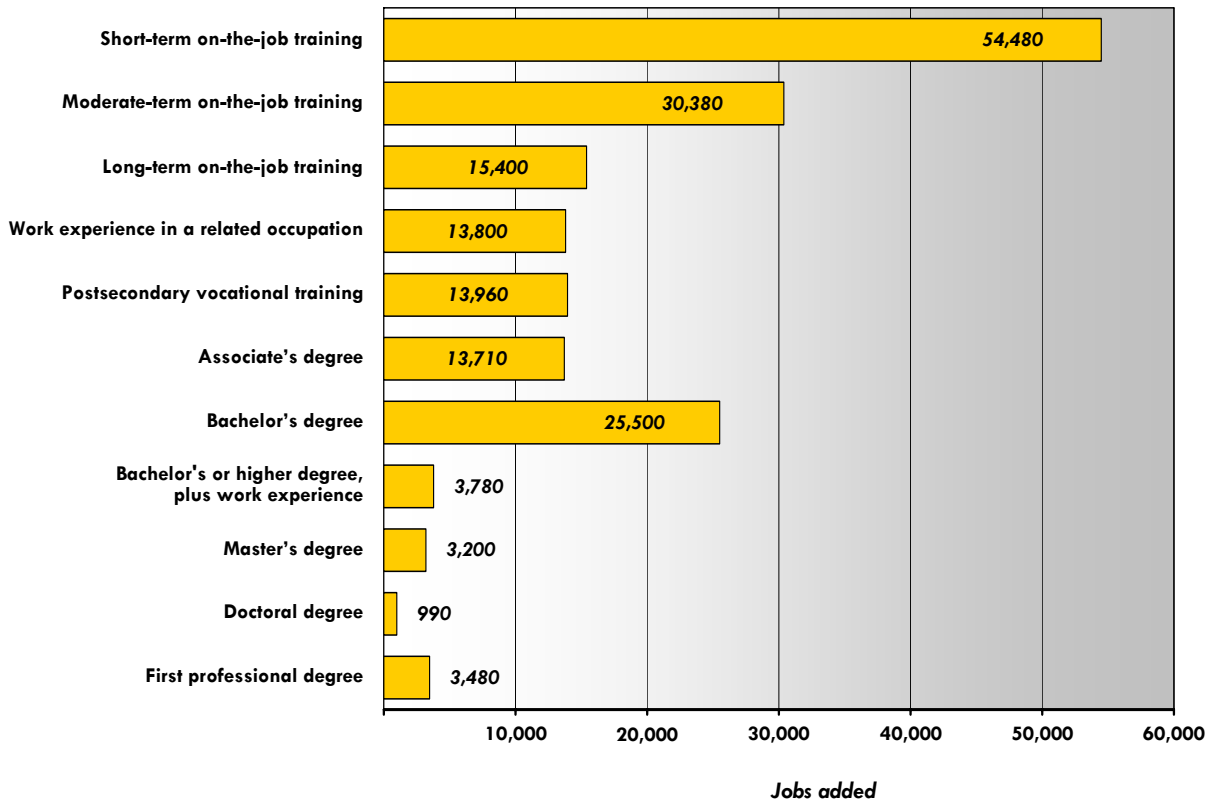
- An occupation is placed into the category that

best describes the education or training needed by most workers to become fully qualified.

- Postsecondary awards, if generally needed for entry into the occupation, take precedence over work-related training even though additional skills or experience may be needed for a worker to become fully qualified.
- The length of time an average worker generally needs to become fully qualified through a combination of on-the-job training and experience is used to categorize occupations in which a postsecondary award generally is not needed for entry.

For more information about the categories, see **Measures of Education and Training** (Bureau of Labor Statistics, May 2010) technical document at http://www.bls.gov/emp/ep_education_tech.htm.

CHART 5: OKLAHOMA’S OCCUPATIONAL EMPLOYMENT CHANGE by EDUCATION/ TRAINING, 2008-2018



Projections by education/training

In 2008, more than 70 percent of jobs did not require postsecondary education. These openings required only work experience in a related field or on-the-job training. By 2018, this number is expected to drop just below the 70 percent mark. All activities necessary to do the jobs that require

on-the-job training can be learned while working in the occupation. This movement means that the share of jobs requiring some level of postsecondary education or training will increase from just below to just above 30 percent of all job openings.

TABLE 7: OKLAHOMA EMPLOYMENT PROJECTION by EDUCATION/TRAINING, 2008-2018

EDUCATION/TRAINING CATEGORY	EMPLOYMENT		DISTRIBUTION		CHANGE		AVERAGE ANNUAL OPENINGS
	2008	2018	2008	2018	Jobs	Pct.	
TOTAL, all occupations	1,750,130	1,928,790	100.00%	100.00%	178,670	10.21%	59,190
Short-term on-the-job training	624,500	678,980	35.68%	35.20%	54,480	8.72%	23,000
Moderate-term on-the-job training	331,200	361,580	18.92%	18.75%	30,380	9.17%	9,740
Long-term on-the-job training	111,060	126,470	6.35%	6.56%	15,400	13.87%	3,990
Work experience in a related occupation	158,960	172,760	9.08%	8.96%	13,800	8.68%	4,600
Postsecondary vocational training	121,700	135,660	6.95%	7.03%	13,960	11.47%	4,000
Associate degree	67,170	80,870	3.84%	4.19%	13,710	20.41%	2,690
Bachelor's degree	177,330	202,830	10.13%	10.52%	25,500	14.38%	6,430
Bachelor's or higher degree, plus work experience	88,890	92,670	5.08%	4.80%	3,780	4.25%	2,620
Master's degree	21,730	24,930	1.24%	1.29%	3,200	14.72%	790
Doctoral degree	23,790	24,780	1.36%	1.28%	990	4.15%	550
First professional degree	23,790	27,270	1.36%	1.41%	3,480	14.62%	820

Notes: *Glossary*

Industry projections

Industry – detailed title for each industry and industry subdivision.

Employment, 2008 – estimated total number of jobs employed in that industry or industry subdivision.

Employment, 2018 – projected total number of jobs employed in that industry or industry subdivision.

Change, jobs – total number of jobs projected to be added or lost during the projection period.

Change, pct. – projected percentage change in employment taking place over the projection period. Percent change is based on the change from the starting amount.

Occupational projections

SOC code – Standard Occupational Classification system code. The SOC system is used by federal agencies to classify workers into one of more than 820 occupations. Each broad occupation includes detailed occupation(s) requiring similar job duties, skills, education, or experience.

Occupation – the title by which an occupation is known in the majority of establishments in which

it is found.

Employment, 2008 – estimated total number of jobs employed in that industry or industry subdivision.

Employment, 2018 – projected total number of jobs employed in that industry or industry subdivision.

Change, jobs – total number of jobs projected to be added or lost during the projection period.

Change, pct. – projected percentage change in employment taking place over the projection period. Percent change is based on the change from the starting amount.

Average annual openings – sum of average annual new jobs and average annual replacements. See Technical Notes, 8.

Average hourly wage – sum of wages earned by all employees in a given occupation divided by the total number of employees in that occupation.

Descriptor – see Technical Notes, 7.

Education attainment – the minimum educational level generally required by employers when hiring for a particular occupation.

Notes: Educational attainment

In the following occupational projection tables, educational attainment is given a value from 1 to 11. Each value represents a different minimum education/training requirement for a particular occupation. These values can be divided into two groups: postsecondary awards and work-related training.

Postsecondary awards

1. **First professional degree.** Completion of the degree usually requires at least three years of full-time academic study beyond a bachelor's degree.
2. **Doctoral degree.** Completion of a Ph.D. or other doctoral degree usually requires at least three years of full-time academic study beyond a bachelor's degree.
3. **Master's degree.** Completion of the degree usually requires one or two years of full-time academic study beyond a bachelor's degree.
4. **Bachelor's or higher degree, plus work experience.** Most occupations in this category are management occupations. All require experience in a related non-management position for which a bachelor's or higher degree is usually required.
5. **Bachelor's degree.** Completion of the degree generally requires at least four years, but not more than five years, of full-time academic study.
6. **Associate degree.** Completion of the degree usually requires at least two years of full-time academic study.
7. **Postsecondary vocational award.** Some programs last only a few weeks, while others may last more than a year. Programs lead to a certificate or other award but not a degree.

Work-related training

8. **Work experience in a related occupation.** Many occupations that require work experience are first-line supervisors/managers of service, sales & related, production, or other occupations, or are management occupations.
9. **Long-term on-the-job training.** More than 12 months of on-the-job training or combined work experience and formal classroom instruction are needed for workers to develop the skills necessary to be fully qualified. This category includes formal and informal apprenticeships that may last up to five years. Long-term on-the-job training also includes intensive occupation-specific, employer-sponsored programs that workers must successfully complete. These include fire and police academies and schools for air traffic controllers and flight attendants. In other occupations - insurance sales and securities sales, for example - trainees take formal courses, often provided on the job site, to prepare for the required licensing exams. Individuals undergoing training generally are considered to be employed in the occupation. Also included in this category is the development of a natural ability - such as that possessed by musicians, athletes, actors and other entertainers - that must be cultivated over several years, frequently in a non-work setting.
10. **Moderate-term on-the-job training.** Skills needed to be fully qualified can be acquired during one to 12 months of combined on-the-job experience and informal training.
11. **Short-term on-the-job training.** Skills needed to be fully qualified can be acquired during a short demonstration of job duties or during one month or less of on-the-job experience or instruction.

Notes: *Technical notes*

1. The data contained within this publication represents forecasts of future conditions rather than guaranteed conditions. Any decisions made using this data should be based on the user’s own analyses and conclusions.
2. Data for occupations estimated to employ less than 50 people in 2008 have not been included.
3. Both employment estimates and number of openings have been rounded to the nearest 10.
4. Occupational category totals may not calculate exactly as a result of rounding and suppression of data for occupations employing less than 50 people in 2008.
5. The data source for the wage information used in this publication is **2009 Oklahoma Occupational Employment and Wage Estimates**, available on the Bureau of Labor Statistics website (http://stats.bls.gov/oes/current/oes_ok.htm). Occupations noted in the data tables with * meet one of the following conditions.
 - Workers who generally work less than the usual 2,080 hours per year
 - Workers for whom there is not sufficient data
 - Workers who have no average hourly wage reflected.

Examples of occupations that typically have a work-year of less than 2,080 hours include musical and entertainment occupations; pilots and flight attendants; and teachers.
6. Bolded occupations in the **Employment projections by occupation, 2008-2018** tables are the occupational totals and subtotals.
7. Occupations are categorized using a three-letter code (A through D) based on three separate factors. Each letter in the code represents one of these factors. These codes are displayed in the “Descriptor” column in the included tables.
 - The first letter of the descriptor displays the quartile that the occupation fell into when the size of total employment was considered. First quartile occupations, or those that were largest (most jobs), were labeled “A.” Occupations in the last quartile were the smallest (fewest jobs) and were labeled “D.” Those in the second and third quartiles received a “B” or “C,” respectively. The four ranges are as follows:

Descriptor	Employment Quartile Ranking	Ranges
D	Small	49 to 363
C	Medium	364 to 965
B	Large	966 to 2,567
A	Very Large	2,567 to 54,271

- The second letter of the descriptor displays what quartile the occupation fell into when the rate of growth from 2008 to 2018 was considered. The rate of growth is defined as the change (increase, decrease, or no change) in employment totals over the period, expressed as a percentage of employment at the start of the period. First quartile occupations, those that had the fastest growth (largest rate of change) in employment from 2008 to 2018, received an “A.” Occupations in the last quartile (declining or stable growth) received a “D.” Those in the second and third quartiles received a “B” or “C,” respectively. The four ranges are as follows:

Descriptor	Growth Rate Quartile Ranking	Ranges
D	Declining to Stable	-29.91 to 3.07
C	Slow	3.08 to 9.42
B	Moderate	9.43 to 15.92
A	Fast	15.93 to 49.57

- The third letter of the descriptor describes the average wage range into which the occupation falls. The wage categories are based on the wage tables in *2009 Oklahoma Occupational Employment and Wage Estimates*. The four ranges are as follows:

Descriptor	Wage Quartile Ranking	Ranges
D	Low	\$7.86 to \$12.75
C	Medium	\$12.76 to \$17.13
B	High	\$17.14 to \$23.56
A	Very High	\$23.57 and over

As an example, occupation 41-3021 “Insurance Sales Agents” has a descriptor of ABC. The letter “A” means that the occupation ranks in the first quartile (top 25 percent) of occupations in regard to size. The letter “B” means that occupation ranks in the second quartile of occupations in regard to growth (the rate of change in employment between 2008 and 2018). The letter “C” means that the average annual wage for this occupation falls between \$12.76 and \$17.13.

8. Average annual openings include both openings due to growth and openings due to replacement needs. Average annual openings are not reduced by negative growth. An occupation may experience negative growth in some industries, affecting the employment level for that occupation in the future. However, the positive growth experienced in other industries will create job openings. Therefore, in a particular occupation, average annual openings are equal to the openings due to growth plus the openings due to replacement unless the growth is negative; in this case, average annual openings is equal to the openings due to replacements only. As a result, average annual openings for a group of occupations may be greater than the sum of openings due to growth and replacements by the amount of negative growth in the individual occupations within the group.
9. Limitations of the data include the following:
 - The data are intended to approximate long-term trends in the labor market and not predict future economic occurrences.
 - Occupational openings for a particular year may differ substantially from those shown in the report if the economy is in a recovery or a recession period.
 - Average annual openings reflect employment demand as a function of growth and replacement, but do not address turnover or geographic mobility.

Please direct questions regarding the methodology to:

Oklahoma Employment Security Commission

Economic Research & Analysis Division
 Oklahoma Employment Outlook 2018
 P.O. Box 52003
 Oklahoma City, OK 73152-2003

Phone (405) 557-7172
 Fax (405) 525-0139
 E-mail: lmi1@oesc.state.ok.us
 Web: http://www.ok.gov/oesc_web/

Employment projections by industry, 2008-2018

INDUSTRY	EMPLOYMENT		CHANGE	
	2008	2018	Jobs	Pct.
TOTAL EMPLOYMENT ¹	1,750,130	1,928,790	178,670	10.21%
Goods-producing industries	314,370	337,960	23,590	7.50%
Natural resources & mining	88,290	92,850	4,560	5.17%
Construction	75,560	91,630	16,070	21.26%
Manufacturing	150,520	153,480	2,960	1.97%
Services-providing industries	1,319,060	1,465,160	146,100	11.08%
Trade, transportation & utilities	289,740	308,830	19,090	6.59%
Information	28,960	27,220	-1,740	-6.02%
Financial activities	83,110	86,650	3,540	4.25%
Professional & business services	184,250	217,370	33,120	17.97%
Education & health services	356,210	408,040	51,830	14.55%
Leisure & hospitality	143,770	160,990	17,230	11.98%
Other services (except government)	65,740	70,530	4,800	7.30%
Government	167,280	185,530	18,250	10.91%
Total self-employed & unpaid family workers ²	116,690	125,680	8,980	7.70%
Self-employed workers	114,790	123,670	8,880	7.73%
Unpaid family workers	1,900	2,010	110	5.74%
Agriculture ³	36,200	36,180	-20	-0.06%
Mining	52,090	56,680	4,580	8.80%
Oil & gas extraction	19,810	20,270	460	2.33%
Mining (except oil & gas)	2,360	2,580	220	9.33%
Support activities for mining	29,930	33,830	3,900	13.04%
Utilities	10,870	11,540	670	6.14%
Construction	75,560	91,630	16,070	21.26%
Construction of buildings	16,080	16,370	290	1.79%
Heavy & civil engineering construction	12,490	13,600	1,100	8.82%
Specialty trade contractors	46,990	61,670	14,680	31.23%
Manufacturing	150,520	153,480	2,960	1.97%
Food manufacturing	19,650	19,710	70	0.35%
Beverage & tobacco product manufacturing	2,510	2,980	470	18.88%

¹ Total employment includes covered and non-covered employment, agricultural employment and self-employed and unpaid family workers. Covered employment data are from the BLS (Bureau of Labor Statistics) Quarterly Census of Employment and Wages program from Oklahoma Employment Security Commission. Non-covered employment data are average annual data from the BLS Current Employment Statistics program from Oklahoma Employment Security Commission. Employment estimates have been rounded to the nearest 10. Percent change is based on unrounded data.

² Self-employed & unpaid family workers data are produced from the projection matrix system based on Oklahoma OES (Occupational Employment Statistics) survey and BLS Current Population Survey. The estimates of the number of self-employed in the base year are larger than these projections round than they were in previous rounds because the file supplied by the Bureau of Labor Statistics now includes estimates of all self-employed jobs (jobs held by people primarily self-employed plus jobs held by people secondarily self-employed).

³ Employment data for Agriculture are from the Census Bureau's American Community Survey 2008 and QCEW program.

* Employment data is withheld to maintain data confidentiality.

INDUSTRY	EMPLOYMENT		CHANGE	
	2008	2018	Jobs	Pct.
Textile mills	160	180	20	9.20%
Textile product mills	720	580	-150	-20.58%
Apparel manufacturing	1,050	780	-270	-25.69%
Leather & allied product manufacturing	290	260	-30	-9.69%
Wood product manufacturing	3,140	2,950	-190	-6.18%
Paper manufacturing	2,950	2,270	-680	-23.08%
Printing & related support activities	3,600	2,950	-650	-18.03%
Petroleum & coal products manufacturing	2,470	2,860	390	15.84%
Chemical manufacturing	2,870	2,720	-150	-5.16%
Plastics & rubber products manufacturing	10,560	9,910	-650	-6.16%
Nonmetallic mineral product manufacturing	8,480	8,590	100	1.23%
Primary metal manufacturing	4,930	5,660	720	14.68%
Fabricated metal product manufacturing	24,090	24,620	520	2.18%
Machinery manufacturing	30,900	35,610	4,710	15.24%
Computer & electronic product manufacturing	6,330	6,630	300	4.76%
Electrical equipment, appliance & component manufacturing	3,170	3,020	-150	-4.86%
Transportation equipment manufacturing	15,670	14,250	-1,430	-9.09%
Furniture & related product manufacturing	2,540	2,600	60	2.36%
Miscellaneous manufacturing	4,430	4,370	-70	-1.47%
Wholesale trade	59,780	62,300	2,530	4.23%
Merchant wholesalers, durable goods	30,070	32,820	2,750	9.16%
Merchant wholesalers, non-durable goods	23,640	23,810	170	0.70%
Wholesale electronic markets & agents & brokers	6,070	5,670	-390	-6.49%
Retail trade	173,280	186,210	12,930	7.46%
Motor vehicle & parts dealers	23,530	22,260	-1,270	-5.39%
Furniture & home furnishings stores	5,150	5,960	810	15.78%
Electronics & appliance stores	4,530	3,730	-800	-17.67%
Building material & garden equipment & supplies dealers	15,280	19,920	4,640	30.36%
Food & beverage stores	21,630	18,890	-2,740	-12.67%
Health & personal care stores	11,190	14,620	3,430	30.62%
Gasoline stations	13,860	15,300	1,440	10.36%
Clothing & clothing accessories stores	11,710	12,470	760	6.53%
Sporting goods, hobby, book & music stores	6,940	7,480	540	7.84%
General merchandise stores	46,300	52,790	6,490	14.02%
Miscellaneous store retailers	11,140	11,190	50	0.46%
Non-store retailers	2,020	1,590	-430	-21.22%
Transportation & warehousing	45,810	48,780	2,970	6.48%
Air transportation	7,890	6,420	-1,470	-18.62%
Rail transportation	1,840	1,840	0	0.00%
Truck transportation	19,030	21,710	2,690	14.12%
Transit & ground passenger transport	*	*	*	*

* Employment data is withheld to maintain data confidentiality.

INDUSTRY	EMPLOYMENT		CHANGE	
	2008	2018	Jobs	Pct.
Pipeline transportation	1,880	2,030	160	8.27%
Scenic & sightseeing transportation	*	*	*	*
Support activities for transportation	6,080	7,360	1,290	21.22%
Couriers & messengers	4,270	4,330	60	1.45%
Warehousing & storage	3,970	4,200	240	5.92%
Information	28,960	27,220	-1,740	-6.02%
Publishing industries	7,260	6,310	-950	-13.09%
Motion picture & sound recording industries	1,960	2,000	40	2.10%
Broadcasting (except internet)	3,640	3,110	-530	-14.49%
Telecommunications	13,900	13,610	-290	-2.08%
Internet service providers, web search portals & data processing services	1,570	1,430	-140	-8.88%
Other information services Internet publishing & broadcasting	640	760	120	19.06%
Finance & insurance	59,470	61,040	1,570	2.64%
Monetary authorities - central bank	*	*	*	*
Credit intermediation & related activities	32,180	33,070	890	2.77%
Securities, commodity contracts & other financial investments & related activities	4,710	5,740	1,030	21.75%
Insurance carriers & related activities	22,210	21,900	-310	-1.40%
Funds, trusts & other financial vehicles	*	*	*	*
Real estate & rental & leasing	23,650	25,610	1,970	8.31%
Real estate	11,570	12,720	1,150	9.92%
Rental & leasing services	11,600	12,400	810	6.97%
Lessors of non-financial intangible assets (except copyrighted works)	480	490	10	1.87%
Professional, scientific & technical services	65,010	82,030	17,020	26.18%
Management of companies & enterprises	13,790	14,820	1,030	7.46%
Administrative & support & waste management & remediation services	105,450	120,520	15,070	14.29%
Administrative & support services	102,350	117,330	14,980	14.64%
Waste management & remediation service	3,100	3,190	80	2.67%
Educational services	162,550	175,030	12,480	7.68%
Health care & social assistance	193,660	233,010	39,350	20.32%
Ambulatory health care services	65,690	82,120	16,440	25.02%
Hospitals	68,170	86,820	18,640	27.35%
Nursing & residential care facilities	34,370	33,260	-1,110	-3.24%
Social assistance	25,430	30,810	5,380	21.16%
Arts, entertainment & recreation	18,670	21,360	2,690	14.39%
Performing arts, spectator sports & related industries	2,400	2,690	300	12.39%
Museums, historical sites & similar institutions	720	790	70	9.70%
Amusement, gambling & recreation industries	15,560	17,880	2,320	14.91%

* Employment data is withheld to maintain data confidentiality.

INDUSTRY	EMPLOYMENT		CHANGE	
	2008	2018	Jobs	Pct.
Accommodation & food services	125,090	139,630	14,540	11.62%
Accommodation	11,630	12,930	1,300	11.13%
Food services & drinking places	113,460	126,700	13,240	11.67%
Other services (except government)	65,740	70,530	4,800	7.30%
Repair & maintenance	14,230	16,770	2,540	17.85%
Personal & laundry services	13,580	15,850	2,260	16.67%
Religious, grantmaking, civic, professional & similar organizations	35,970	35,920	-40	-0.12%
Private households	1,960	1,990	40	1.84%
Government	167,280	185,530	18,250	10.91%
Federal government	45,290	45,870	580	1.29%
Federal government, excluding postal service	37,020	37,940	920	2.49%
Postal service	8,270	7,940	-340	-4.06%
State government, excluding education & hospitals	38,870	41,770	2,900	7.46%
Local government, excluding education & hospitals	83,120	97,890	14,760	17.76%

* Employment data is withheld to maintain data confidentiality.

Employment Projections by Occupation, 2008-2018

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2008	2018	Numeric	Percent				
00-0000	Total, All Occupations	1,750,130	1,928,790	178,670	10.21%	59,190	\$17.22		
11-0000	Management Occupations	106,370	111,560	5,180	4.87%	3,090	\$37.04		
11-1000	Top Executives	40,530	40,220	-310	-0.76%	1,170	*		
11-1011	Chief Executives	11,820	11,670	-150	-1.27%	330	\$56.78	A D A	4
11-1021	General and Operations Managers	27,940	27,720	-220	-0.79%	810	\$40.07	A D A	4
11-1031	Legislators	780	840	60	8.13%	30	*	C C	4
11-2000	Advertising, Marketing, Promotions, Public Relations, and Sales Managers	5,540	6,060	520	9.38%	180	*		
11-2011	Advertising and Promotions Managers	590	570	-30	-4.22%	10	\$27.96	C D A	4
11-2021	Marketing Managers	1,390	1,480	90	6.69%	40	\$39.72	B C A	4
11-2022	Sales Managers	2,890	3,300	410	14.33%	100	\$41.36	A B A	4
11-2031	Public Relations Managers	670	710	40	5.65%	20	\$29.85	C C A	4
11-3000	Operations Specialties Managers	19,240	20,640	1,400	7.29%	570	*		
11-3011	Administrative Services Managers	4,700	5,160	460	9.73%	140	\$27.32	A B A	4
11-3021	Computer and Information Systems Managers	2,260	2,470	210	9.35%	60	\$41.12	B C A	4
11-3031	Financial Managers	5,740	6,190	440	7.68%	150	\$39.55	A C A	4
11-3041	Compensation and Benefits Managers	800	880	80	9.98%	30	\$29.81	C B A	4
11-3042	Training and Development Managers	470	530	60	12.34%	20	\$30.60	C B A	4
11-3049	Human Resources Managers, All Other	670	730	60	8.18%	20	\$29.29	C C A	4
11-3051	Industrial Production Managers	2,570	2,660	90	3.55%	100	\$36.00	B C A	8
11-3061	Purchasing Managers	910	970	60	6.85%	30	\$32.37	C C A	4
11-3071	Transportation, Storage, and Distribution Managers	1,130	1,080	-50	-4.70%	30	\$31.34	B D A	8
11-9000	Other Management Occupations	41,060	44,630	3,570	8.70%	1,170	*		
11-9011	Farm, Ranch, and Other Agricultural Managers	6,750	7,290	540	8.05%	190	\$27.60	A C A	4
11-9021	Construction Managers	5,520	6,150	630	11.45%	110	\$30.13	A B A	5
11-9031	Education Administrators, Preschool and Child Care Center/Program	840	890	50	6.09%	30	\$18.06	C C B	4
11-9032	Education Administrators, Elementary and Secondary School	2,930	3,220	290	9.80%	120	*	A B	4
11-9033	Education Administrators, Postsecondary	980	950	-30	-2.65%	30	\$38.27	B D A	4
11-9039	Education Administrators, All Other	190	210	30	13.51%	10	\$35.91	D B A	4
11-9041	Engineering Managers	1,610	1,770	160	9.83%	50	\$49.36	B B A	4
11-9051	Food Service Managers	5,120	5,560	440	8.68%	140	\$19.30	A C B	8
11-9061	Funeral Directors	500	570	70	13.77%	20	\$24.20	C B A	6

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2008	2018	Numeric	Percent				
11-9071	Gaming Managers	210	250	40	20.98%	10	\$23.17	D A B	8
11-9111	Medical and Health Services Managers	4,550	5,330	770	17.00%	160	\$32.02	A A A	4
11-9121	Natural Sciences Managers	200	210	10	3.45%	10	\$47.24	D C A	4
11-9131	Postmasters and Mail Superintendents	570	530	-40	-7.73%	10	\$26.72	C D A	8
11-9141	Property, Real Estate, and Community Association Managers	5,030	5,300	270	5.31%	110	\$23.50	A C A	5
11-9151	Social and Community Service Managers	2,110	2,250	140	6.68%	60	\$21.54	B C B	5
11-9199	Managers, All Other	3,020	3,140	120	4.11%	90	\$36.48	A C A	8
13-0000	Business and Financial Operations Occupations	68,010	77,820	9,810	14.42%	2,340	\$24.87		
13-1000	Business Operations Specialists	35,770	40,240	4,470	12.49%	1,250	*		
13-1011	Agents and Business Managers of Artists, Performers, and Athletes	100	120	20	21.43%	0	\$20.72	D A B	4
13-1021	Purchasing Agents and Buyers, Farm Products	200	190	-10	-4.57%	0	\$20.57	D D B	9
13-1022	Wholesale and Retail Buyers, Except Farm Products	1,650	1,620	-30	-1.52%	40	\$21.41	B D B	9
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	3,590	4,240	650	18.10%	160	\$24.86	A A A	9
13-1031	Claims Adjusters, Examiners, and Investigators	3,760	3,880	130	3.36%	110	\$23.60	A C A	9
13-1032	Insurance Appraisers, Auto Damage	180	170	-10	-5.03%	10	*	D D	7
13-1041	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	2,570	3,310	740	28.85%	100	\$21.23	A A B	9
13-1051	Cost Estimators	1,770	2,280	520	29.28%	90	\$24.31	B A A	5
13-1061	Emergency Management Specialists	260	320	70	26.67%	10	\$23.06	D A B	8
13-1071	Employment, Recruitment, and Placement Specialists	1,800	2,110	300	16.81%	80	\$18.78	B A B	5
13-1072	Compensation, Benefits, and Job Analysis Specialists	1,460	1,720	260	17.65%	60	\$21.23	B A B	5
13-1073	Training and Development Specialists	3,520	4,420	890	25.39%	180	\$20.19	A A B	5
13-1079	Human Resources, Training, and Labor Relations Specialists, All Other	1,240	1,460	220	17.79%	50	\$24.17	B A A	5
13-1081	Logisticians	2,040	2,320	280	13.50%	70	\$32.18	B B A	5
13-1111	Management Analysts	5,740	5,960	220	3.74%	120	\$30.65	A C A	4
13-1121	Meeting and Convention Planners	340	390	50	13.20%	10	\$16.40	D B C	5
13-1199	Business Operations Specialists, All Other	5,570	5,750	180	3.20%	140	\$30.02	A C A	5
13-2000	Financial Specialists	32,240	37,580	5,340	16.56%	1,090	*		
13-2011	Accountants and Auditors	17,520	21,170	3,660	20.88%	660	\$25.94	A A A	5
13-2021	Appraisers and Assessors of Real Estate	1,140	1,280	130	11.65%	30	\$19.01	B B B	6
13-2031	Budget Analysts	720	830	110	15.12%	20	\$26.30	C B A	5
13-2041	Credit Analysts	680	750	70	10.72%	20	\$24.17	C B A	5
13-2051	Financial Analysts	1,410	1,660	250	17.53%	50	\$29.93	B A A	5

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		2008	2018	Numeric	Percent				
13-2052	Personal Financial Advisors	1,350	1,840	490	36.38%	60	\$24.37	B A A	5
13-2053	Insurance Underwriters	1,420	1,300	-120	-8.23%	40	\$24.02	B D A	5
13-2061	Financial Examiners	230	320	80	35.04%	10	\$37.37	D A A	5
13-2071	Loan Counselors	810	810	10	0.62%	10	\$15.36	C D C	5
13-2072	Loan Officers	4,880	5,290	410	8.31%	90	\$22.83	A C B	10
13-2081	Tax Examiners, Collectors, and Revenue Agents	780	880	90	11.99%	40	\$22.77	C B B	5
13-2082	Tax Preparers	1,070	1,220	150	13.98%	30	\$12.28	B B D	10
13-2099	Financial Specialists, All Other	230	240	10	4.42%	10	\$29.61	D C A	5
15-0000	Computer and Mathematical Occupations	28,510	32,570	4,050	14.21%	1,010	\$27.69		
15-1000	Computer Specialists	27,620	31,580	3,960	14.35%	970	*		
15-1011	Computer and Information Scientists, Research	150	170	20	14.47%	10	\$39.59	D B A	2
15-1021	Computer Programmers	3,760	3,450	-310	-8.14%	70	\$27.32	A D A	5
15-1031	Computer Software Engineers, Applications	2,720	3,660	940	34.46%	120	\$32.33	A A A	5
15-1032	Computer Software Engineers, Systems Software	1,920	2,390	470	24.26%	60	\$38.55	B A A	5
15-1041	Computer Support Specialists	7,810	8,140	330	4.27%	250	\$18.03	A C B	6
15-1051	Computer Systems Analysts	3,840	4,500	660	17.16%	150	\$32.24	A A A	5
15-1061	Database Administrators	1,000	1,160	170	16.53%	30	\$28.40	B A A	5
15-1071	Network and Computer Systems Administrators	2,780	3,210	430	15.37%	90	\$25.93	A B A	5
15-1081	Network Systems and Data Communications Analysts	2,420	3,620	1,200	49.57%	160	\$28.43	B A A	5
15-1099	Computer Specialists, All Other	1,230	1,290	60	4.98%	30	\$36.31	B C A	6
15-2000	Mathematical Scientists	890	980	90	9.84%	40	*		
15-2011	Actuaries	60	60	0	1.64%	0	\$39.65	D D A	4
15-2031	Operations Research Analysts	610	680	70	12.03%	30	\$31.06	C B A	3
15-2041	Statisticians	190	210	10	7.22%	10	\$23.60	D C A	3
17-0000	Architecture and Engineering Occupations	25,220	29,110	3,890	15.41%	920	\$32.47		
17-1000	Architects, Surveyors, and Cartographers	1,760	2,150	380	21.71%	70	*		
17-1011	Architects, Except Landscape and Naval	960	1,170	210	21.58%	40	\$31.56	C A A	5
17-1012	Landscape Architects	80	90	20	21.33%	0	\$18.25	D A B	5
17-1021	Cartographers and Photogrammetrists	180	230	50	28.02%	10	\$22.82	D A B	5
17-1022	Surveyors	540	650	110	19.89%	30	\$22.70	C A B	5
17-2000	Engineers	13,770	16,060	2,290	16.63%	540	*		
17-2011	Aerospace Engineers	630	670	40	6.37%	20	\$41.48	C C A	5
17-2041	Chemical Engineers	120	120	0	-1.63%	0	\$47.22	D D A	5
17-2051	Civil Engineers	1,670	2,120	450	26.84%	70	\$35.04	B A A	5
17-2061	Computer Hardware Engineers	380	420	50	12.50%	20	\$42.29	C B A	5
17-2071	Electrical Engineers	1,470	1,640	170	11.74%	50	\$35.24	B B A	5
17-2072	Electronics Engineers, Except Computer	1,840	1,950	120	6.43%	50	\$39.87	B C A	5
17-2081	Environmental Engineers	400	450	50	12.34%	10	\$38.45	C B A	5

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2008	2018	Numeric	Percent				
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	430	470	40	9.86%	20	\$28.93	C B A	5
17-2112	Industrial Engineers	1,370	1,710	340	25.07%	70	\$33.04	B A A	5
17-2131	Materials Engineers	180	210	30	15.22%	10	\$34.20	D B A	5
17-2141	Mechanical Engineers	2,150	2,420	280	12.96%	80	\$34.08	B B A	5
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	220	250	30	14.93%	10	\$44.18	D B A	5
17-2171	Petroleum Engineers	1,940	2,500	560	28.84%	100	\$53.07	B A A	5
17-2199	Engineers, All Other	950	1,070	110	11.95%	30	\$37.98	C B A	5
17-3000	Drafters, Engineering, and Mapping Technicians	9,680	10,900	1,210	12.53%	310	*		
17-3011	Architectural and Civil Drafters	1,060	1,180	120	11.29%	40	\$21.87	B B B	7
17-3012	Electrical and Electronics Drafters	390	420	40	9.30%	10	\$22.64	C C B	7
17-3013	Mechanical Drafters	1,320	1,450	130	9.88%	40	\$21.05	B B B	7
17-3019	Drafters, All Other	90	90	0	1.08%	0	\$20.66	D D B	7
17-3022	Civil Engineering Technicians	990	1,280	290	29.42%	50	\$21.78	B A B	6
17-3023	Electrical and Electronic Engineering Technicians	1,950	2,090	140	7.28%	50	\$25.99	B C A	6
17-3024	Electro-Mechanical Technicians	220	270	60	26.98%	10	\$19.46	D A B	6
17-3025	Environmental Engineering Technicians	320	370	50	15.58%	10	\$17.79	D B B	6
17-3027	Mechanical Engineering Technicians	530	590	60	11.22%	20	\$23.43	C B A	6
17-3029	Engineering Technicians, Except Drafters, All Other	780	830	50	6.01%	20	\$28.73	C C A	6
17-3031	Surveying and Mapping Technicians	800	940	140	17.46%	30	\$19.91	C A B	10
19-0000	Life, Physical, and Social Science Occupations	12,230	13,910	1,680	13.73%	530	\$27.61		
19-1000	Life Scientists	1,820	2,040	220	11.92%	70	*		
19-1012	Food Scientists and Technologists	100	110	10	7.69%	10	\$22.51	D C B	5
19-1023	Zoologists and Wildlife Biologists	90	90	0	-2.13%	0	\$24.39	D D A	5
19-1029	Biological Scientists, All Other	190	210	20	11.05%	10	\$34.39	D B A	2
19-1031	Conservation Scientists	230	240	10	4.85%	0	\$30.92	D C A	5
19-1032	Foresters	60	60	10	9.09%	0	\$25.55	D C A	5
19-1041	Epidemiologists	60	80	10	17.19%	0	\$30.46	D A A	3
19-1099	Life Scientists, All Other	240	240	0	0.42%	10		D D	5
19-2000	Physical Scientists	2,670	2,990	320	12.15%	110	*		
19-2021	Atmospheric and Space Scientists	220	230	10	2.74%	10	\$45.13	D D A	5
19-2031	Chemists	360	400	40	10.64%	20	\$36.44	D B A	5
19-2042	Geoscientists, Except Hydrologists and Geographers	1,310	1,540	230	17.45%	60	\$46.29	B A A	3
19-2043	Hydrologists	50	60	10	9.26%	0	\$37.74	D C A	3
19-2099	Physical Scientists, All Other	170	170	0	0.00%	0	\$33.86	D D A	5
19-3000	Social Scientists and Related Workers	4,710	5,490	780	16.50%	210	*		

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		2008	2018	Numeric	Percent				
19-3011	Economists	60	70	0	4.76%	0	\$27.39	D C A	3
19-3021	Market Research Analysts	2,040	2,460	420	20.69%	100	\$24.37	B A A	5
19-3022	Survey Researchers	180	230	50	29.28%	10	\$13.44	D A C	5
19-3031	Clinical, Counseling, and School Psychologists	1,780	1,970	190	10.91%	70	\$26.08	B B A	2
19-3039	Psychologists, All Other	150	160	10	7.89%	10	\$36.15	D C A	3
19-3051	Urban and Regional Planners	270	330	60	21.72%	10	\$27.65	D A A	3
19-3093	Historians	70	90	10	19.72%	10	\$17.78	D A B	3
19-3099	Social Scientists and Related Workers, All Other	120	140	20	13.82%	10	\$32.90	D B A	3
19-4000	Life, Physical, and Social Science Technicians	3,040	3,400	360	11.89%	150	*		
19-4011	Agricultural and Food Science Technicians	180	180	0	0.00%	10	\$16.82	D D C	6
19-4021	Biological Technicians	580	610	30	4.97%	20	\$15.70	C C C	5
19-4031	Chemical Technicians	350	380	40	11.01%	10	\$18.41	D B B	6
19-4041	Geological and Petroleum Technicians	990	1,200	210	21.03%	60	\$22.06	B A B	6
19-4091	Environmental Science and Protection Technicians, Including Health	260	300	40	13.26%	20	\$18.83	D B B	6
19-4092	Forensic Science Technicians	120	150	30	20.33%	10	\$25.01	D A A	5
19-4093	Forest and Conservation Technicians	210	210	10	2.93%	10	\$19.00	D D B	6
19-4099	Life, Physical, and Social Science Technicians, All Other	310	310	10	2.61%	10	\$31.43	D D A	6
21-0000	Community and Social Services Occupations	22,420	24,900	2,480	11.05%	750	\$17.18		
21-1000	Counselors, Social Workers, and Other Community and Social Service Specialists	21,770	24,190	2,420	11.13%	730	*		
21-1011	Substance Abuse and Behavioral Disorder Counselors	1,720	1,980	260	15.18%	60	\$17.82	B B B	5
21-1012	Educational, Vocational, and School Counselors	3,390	3,690	300	8.84%	100	\$20.52	A C B	3
21-1013	Marriage and Family Therapists	380	410	30	8.42%	10	\$17.46	C C B	3
21-1014	Mental Health Counselors	1,240	1,450	210	17.30%	50	\$20.13	B A B	3
21-1015	Rehabilitation Counselors	1,540	1,650	110	6.96%	40	\$13.08	B C C	3
21-1019	Counselors, All Other	150	160	20	12.33%	10	\$21.22	D B B	3
21-1021	Child, Family, and School Social Workers	4,750	5,110	350	7.45%	150	\$15.91	A C C	5
21-1022	Medical and Public Health Social Workers	1,450	1,740	290	20.28%	70	\$18.38	B A B	5
21-1023	Mental Health and Substance Abuse Social Workers	1,160	1,310	150	13.14%	40	\$17.84	B B B	3
21-1029	Social Workers, All Other	860	930	70	8.29%	30	\$18.74	C C B	5
21-1091	Health Educators	900	1,040	130	14.82%	30	\$20.97	C B B	5
21-1092	Probation Officers and Correctional Treatment Specialists	860	1,030	170	20.33%	40	\$16.50	C A C	5
21-1093	Social and Human Service Assistants	2,720	3,010	290	10.48%	90	\$13.20	A B C	10
21-1099	Community and Social Service Specialists, All Other	670	700	30	4.19%	20	\$16.83	C C C	5
21-2000	Religious Workers	650	710	50	8.27%	20	*		

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		2008	2018	Numeric	Percent				
21-2011	Clergy	570	620	50	7.84%	20	\$19.27	C C B	3
23-0000	Legal Occupations	14,200	15,410	1,210	8.48%	360	\$34.46		
23-1000	Lawyers, Judges, and Related Workers	8,760	9,360	600	6.80%	220	*		
23-1011	Lawyers	8,100	8,680	580	7.20%	210	\$43.79	A C A	1
23-1023	Judges, Magistrate Judges, and Magistrates	450	450	0	-0.89%	10	\$49.35	C D A	4
23-2000	Legal Support Workers	5,440	6,050	610	11.19%	130	*		
23-2011	Paralegals and Legal Assistants	2,690	3,160	470	17.58%	80	\$20.92	A A B	6
23-2091	Court Reporters	510	570	60	11.81%	10	\$24.86	C B A	7
23-2092	Law Clerks	310	340	30	10.65%	10	\$15.49	D B C	5
23-2093	Title Examiners, Abstractors, and Searchers	1,710	1,750	30	1.93%	30	\$20.28	B D B	10
23-2099	Legal Support Workers, All Other	230	240	10	4.89%	0	\$18.97	D C B	10
25-0000	Education, Training, and Library Occupations	102,250	113,290	11,040	10.80%	3,350	\$18.87		
25-1000	Postsecondary Teachers	20,910	21,500	590	2.80%	430	*		
25-2000	Primary, Secondary, and Special Education School Teachers	51,230	58,800	7,570	14.77%	2,000	*		
25-2011	Preschool Teachers, Except Special Education	5,240	5,840	610	11.55%	170	\$12.77	A B D	7
25-2012	Kindergarten Teachers, Except Special Education	2,340	2,730	380	16.25%	90	*	B A	5
25-2021	Elementary School Teachers, Except Special Education	18,000	21,080	3,080	17.12%	720	*	A A	5
25-2022	Middle School Teachers, Except Special and Vocational Education	7,570	8,830	1,270	16.72%	300	*	A A	5
25-2031	Secondary School Teachers, Except Special and Vocational Education	11,860	13,060	1,190	10.05%	460	*	A B	5
25-2032	Vocational Education Teachers, Secondary School	1,370	1,540	170	12.34%	60	*	B B	4
25-2041	Special Education Teachers, Preschool, Kindergarten, and Elementary School	2,490	2,980	490	19.74%	110	*	B A	5
25-2043	Special Education Teachers, Secondary School	1,290	1,480	190	14.47%	50	*	B B	5
25-3000	Other Teachers and Instructors	10,780	11,870	1,090	10.08%	280	*		
25-3011	Adult Literacy, Remedial Education, and GED Teachers and Instructors	1,420	1,560	140	10.09%	40	\$19.51	B B B	5
25-3021	Self-Enrichment Education Teachers	1,590	1,870	280	17.60%	50	\$23.73	B A A	8
25-3099	Teachers and Instructors, All Other	7,770	8,440	660	8.54%	190	*	A C	5
25-4000	Librarians, Curators, and Archivists	4,630	5,010	380	8.10%	200	*		
25-4011	Archivists	80	80	0	1.20%	0	\$15.63	D D C	3
25-4012	Curators	70	80	10	12.68%	0	\$20.83	D B B	3
25-4021	Librarians	2,470	2,610	150	5.96%	80	\$19.95	B C B	3
25-4031	Library Technicians	1,980	2,190	210	10.76%	110	\$11.03	B B D	7
25-9000	Other Education, Training, and Library Occupations	14,700	16,120	1,430	9.72%	460	*		

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2008	2018	Numeric	Percent				
25-9011	Audio-Visual Collections Specialists	110	110	10	7.62%	0	\$15.41	D C C	5
25-9031	Instructional Coordinators	1,280	1,450	170	13.28%	50	\$23.27	B B A	3
25-9041	Teacher Assistants	12,420	13,600	1,180	9.54%	380	*	A B	11
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	20,690	22,000	1,320	6.36%	710	\$18.17		
27-1000	Art and Design Workers	5,500	5,690	190	3.53%	180	*		
27-1011	Art Directors	570	560	-10	-2.26%	10	\$32.60	C D A	4
27-1012	Craft Artists	90	80	-10	-11.76%	0	\$9.54	D D D	9
27-1013	Fine Artists, Including Painters, Sculptors, and Illustrators	150	160	10	9.33%	0	\$21.93	D C B	9
27-1014	Multi-Media Artists and Animators	80	80	0	-2.44%	0	\$21.41	D D B	5
27-1021	Commercial and Industrial Designers	650	650	10	1.24%	20	\$25.41	C D A	5
27-1023	Floral Designers	880	920	40	3.98%	30	\$9.87	C C D	11
27-1024	Graphic Designers	2,080	2,190	120	5.54%	80	\$17.12	B C C	5
27-1025	Interior Designers	250	270	20	6.72%	10	\$22.31	D C B	6
27-1026	Merchandise Displayers and Window Trimmers	640	660	30	3.94%	20	\$12.12	C C D	10
27-1027	Set and Exhibit Designers	90	100	10	5.49%	0	\$10.45	D C D	5
27-2000	Entertainers and Performers, Sports and Related Workers	3,910	4,480	570	14.59%	150	*		
27-2012	Producers and Directors	520	470	-50	-9.73%	20	\$21.68	C D B	4
27-2022	Coaches and Scouts	2,600	3,170	570	21.96%	110	*	A A	9
27-2023	Umpires, Referees, and Other Sports Officials	170	190	20	10.00%	10	*	D B	9
27-2032	Choreographers	70	70	0	2.94%	0	\$12.93	D D C	8
27-2042	Musicians and Singers	190	190	0	1.60%	0	\$25.63	D D A	9
27-3000	Media and Communication Workers	7,790	7,760	-30	-0.44%	230	*		
27-3011	Radio and Television Announcers	890	670	-230	-25.42%	30	\$16.97	C D C	9
27-3021	Broadcast News Analysts	120	120	0	2.54%	0	\$34.39	D D A	5
27-3022	Reporters and Correspondents	690	570	-120	-17.05%	20	\$17.73	C D B	5
27-3031	Public Relations Specialists	2,150	2,450	290	13.56%	80	\$21.90	B B B	5
27-3041	Editors	980	920	-60	-6.31%	30	\$17.26	B D B	5
27-3042	Technical Writers	330	410	80	25.77%	10	\$21.48	D A B	5
27-3043	Writers and Authors	2,290	2,230	-60	-2.80%	50	\$19.32	B D B	5
27-3091	Interpreters and Translators	270	330	60	20.15%	10	\$13.81	D A C	9
27-4000	Media and Communication Equipment Workers	3,490	4,080	590	16.79%	150	*		
27-4011	Audio and Video Equipment Technicians	540	600	70	12.90%	20	\$14.64	C B C	7
27-4012	Broadcast Technicians	370	320	-50	-13.78%	10	\$14.96	C D C	6
27-4021	Photographers	2,020	2,610	580	28.80%	100	\$13.52	B A C	9

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		2008	2018	Numeric	Percent				
27-4031	Camera Operators, Television, Video, and Motion Picture	220	200	-20	-9.72%	10	\$14.79	D D C	5
27-4099	Media and Communication Equipment Workers, All Other	50	50	0	2.04%	0	\$30.42	D D A	10
29-0000	Healthcare Practitioners and Technical Occupations	92,040	113,070	21,030	22.85%	4,070	\$27.67		
29-1000	Health Diagnosing and Treating Practitioners	52,600	65,380	12,770	24.28%	2,250	*		
29-1011	Chiropractors	1,000	1,130	130	12.86%	30	\$41.02	B B A	1
29-1021	Dentists, General	1,330	1,420	90	6.71%	50	\$64.85	B C A	1
29-1023	Orthodontists	140	160	20	12.86%	10	\$96.03	D B A	1
29-1031	Dietitians and Nutritionists	730	810	80	10.93%	30	\$20.94	C B B	5
29-1041	Optometrists	640	750	110	17.95%	30	\$44.76	C A A	1
29-1051	Pharmacists	3,260	4,130	870	26.56%	160	\$46.69	A A A	1
29-1060	Physicians and Surgeons	7,880	9,220	1,340	17.01%	270	*		
29-1071	Physician Assistants	1,130	1,520	400	35.35%	60	\$36.91	B A A	3
29-1111	Registered Nurses	27,920	35,600	7,670	27.48%	1,260	\$25.58	A A A	6
29-1121	Audiologists	170	200	30	14.53%	10	\$26.50	D B A	1
29-1123	Physical Therapists	1,970	2,510	550	27.84%	80	\$33.48	B A A	3
29-1124	Radiation Therapists	330	450	130	38.11%	20	\$34.63	D A A	6
29-1125	Recreational Therapists	370	430	50	14.25%	20	\$17.63	C B B	5
29-1126	Respiratory Therapists	1,180	1,550	370	31.19%	60	\$22.62	B A B	6
29-1127	Speech-Language Pathologists	1,300	1,470	170	12.77%	40	\$27.33	B B A	3
29-1129	Therapists, All Other	110	110	10	6.60%	0	\$18.59	D C B	5
29-1131	Veterinarians	790	1,100	310	39.34%	50	\$38.06	C A A	1
29-1199	Health Diagnosing and Treating Practitioners, All Other	360	410	50	14.21%	10	\$32.24	D B A	5
29-2000	Health Technologists and Technicians	37,650	45,670	8,010	21.28%	1,740	*		
29-2011	Medical and Clinical Laboratory Technologists	1,790	2,160	360	20.25%	70	\$22.40	B A B	5
29-2012	Medical and Clinical Laboratory Technicians	1,610	1,900	290	18.15%	60	\$15.27	B A C	6
29-2021	Dental Hygienists	1,620	2,030	410	25.18%	70	\$29.14	B A A	6
29-2031	Cardiovascular Technologists and Technicians	620	850	230	36.44%	30	\$18.81	C A B	6
29-2032	Diagnostic Medical Sonographers	510	630	130	24.56%	20	\$27.92	C A A	6
29-2033	Nuclear Medicine Technologists	230	290	60	24.45%	10	\$32.01	D A A	6
29-2034	Radiologic Technologists and Technicians	2,410	2,960	560	23.16%	90	\$21.64	B A B	6
29-2041	Emergency Medical Technicians and Paramedics	2,280	2,530	250	10.88%	70	\$12.97	B B C	7
29-2051	Dietetic Technicians	580	670	90	15.65%	20	\$11.36	C B D	7
29-2052	Pharmacy Technicians	4,210	5,900	1,690	40.25%	280	\$11.62	A A D	10
29-2053	Psychiatric Technicians	950	1,070	120	12.40%	40	\$12.70	C B D	7
29-2054	Respiratory Therapy Technicians	340	380	40	11.80%	10	\$17.76	D B B	7

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		2008	2018	Numeric	Percent				
29-2055	Surgical Technologists	1,470	1,980	510	35.09%	90	\$16.28	B A C	7
29-2056	Veterinary Technologists and Technicians	630	910	280	43.44%	40	\$12.35	C A D	6
29-2061	Licensed Practical and Licensed Vocational Nurses	14,090	16,330	2,240	15.91%	670	\$15.76	A B C	7
29-2071	Medical Records and Health Information Technicians	3,010	3,580	580	19.16%	120	\$14.51	A A C	6
29-2099	Health Technologists and Technicians, All Other	440	530	90	21.36%	20	\$20.77	C A B	7
29-9000	Other Healthcare Practitioners and Technical Occupations	1,780	2,030	240	13.62%	80	*		
29-9011	Occupational Health and Safety Specialists	1,190	1,320	130	11.08%	50	\$23.00	B B B	5
29-9012	Occupational Health and Safety Technicians	160	170	20	10.32%	10	\$20.55	D B B	6
31-0000	Healthcare Support Occupations	47,590	57,040	9,450	19.85%	1,480	\$11.17		
31-1000	Nursing, Psychiatric, and Home Health Aides	28,280	33,380	5,100	18.04%	790	*		
31-1011	Home Health Aides	8,440	11,630	3,190	37.80%	400	\$9.53	A A D	11
31-1012	Nursing Aides, Orderlies, and Attendants	19,000	20,830	1,820	9.59%	370	\$9.75	A B D	7
31-1013	Psychiatric Aides	830	920	90	10.56%	20	\$10.88	C B D	11
31-2000	Occupational and Physical Therapist Assistants and Aides	2,600	3,390	790	30.30%	120	*		
31-2011	Occupational Therapist Assistants	460	590	120	26.51%	20	\$23.40	C A A	6
31-2012	Occupational Therapist Aides	240	320	80	31.67%	10	\$14.84	D A C	11
31-2021	Physical Therapist Assistants	1,240	1,600	370	29.48%	60	\$20.74	B A B	6
31-2022	Physical Therapist Aides	660	880	220	33.99%	30	\$10.47	C A D	11
31-9000	Other Healthcare Support Occupations	16,720	20,270	3,560	21.29%	580	*		
31-9091	Dental Assistants	3,880	4,810	940	24.15%	170	\$14.17	A A C	10
31-9092	Medical Assistants	5,980	7,390	1,410	23.59%	210	\$12.48	A A D	10
31-9094	Medical Transcriptionists	1,400	1,620	220	15.62%	40	\$13.39	B B C	7
31-9095	Pharmacy Aides	720	760	40	4.99%	10	\$8.64	C C D	11
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	1,070	1,530	460	42.59%	60	\$9.82	B A D	11
31-9099	Healthcare Support Workers, All Other	1,590	1,870	270	17.06%	50	\$13.52	B A C	11
33-0000	Protective Service Occupations	38,960	45,270	6,320	16.21%	1,690	\$16.22		
33-1000	First-Line Supervisors/Managers, Protective Service Workers	3,260	3,770	520	15.87%	190	*		
33-1011	First-Line Supervisors/Managers of Correctional Officers	750	840	90	11.33%	40	\$22.53	C B B	8
33-1012	First-Line Supervisors/Managers of Police and Detectives	1,290	1,500	220	16.95%	80	\$27.71	B A A	8
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	870	1,030	160	18.35%	60	\$28.96	C A A	8
33-1099	First-Line Supervisors/Managers, Protective Service Workers, All Other	350	400	50	15.47%	20	\$21.13	D B B	8

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2008	2018	Numeric	Percent				
33-2000	Fire Fighting and Prevention Workers	5,320	6,690	1,370	25.66%	300	*		
33-2011	Fire Fighters	5,000	6,320	1,330	26.52%	290	\$17.23	A A B	9
33-3000	Law Enforcement Workers	16,660	19,260	2,600	15.62%	660	*		
33-3011	Bailiffs	390	420	40	9.02%	10	\$14.28	C C C	10
33-3012	Correctional Officers and Jailers	6,540	7,560	1,010	15.50%	250	\$13.39	A B C	10
33-3021	Detectives and Criminal Investigators	1,270	1,440	170	13.59%	40	\$24.94	B B A	8
33-3031	Fish and Game Wardens	250	270	20	9.16%	10	\$18.26	D C B	6
33-3051	Police and Sheriff's Patrol Officers	8,160	9,510	1,350	16.60%	350	\$17.58	A A B	9
33-9000	Other Protective Service Workers	13,720	15,550	1,830	13.34%	540	*		
33-9021	Private Detectives and Investigators	500	610	110	22.31%	20	\$22.02	C A B	8
33-9031	Gaming Surveillance Officers and Gaming Investigators	450	540	80	18.32%	20	\$13.00	C A C	10
33-9032	Security Guards	10,460	11,760	1,300	12.45%	350	\$12.13	A B D	11
33-9091	Crossing Guards	510	620	100	20.23%	20	\$10.90	C A D	11
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	860	930	70	8.29%	70	\$7.99	C C D	11
35-0000	Food Preparation and Serving Related Occupations	132,510	147,670	15,150	11.44%	6,120	\$8.70		
35-1000	Supervisors, Food Preparation and Serving Workers	10,930	11,950	1,020	9.35%	210	*		
35-1011	Chefs and Head Cooks	1,030	1,070	40	4.08%	10	\$17.19	B C B	8
35-1012	First-Line Supervisors/Managers of Food Preparation and Serving Workers	9,900	10,880	980	9.90%	190	\$12.92	A B C	8
35-2000	Cooks and Food Preparation Workers	43,960	47,730	3,780	8.59%	1,590	*		
35-2011	Cooks, Fast Food	13,930	15,550	1,620	11.62%	520	\$8.06	A B D	11
35-2012	Cooks, Institution and Cafeteria	8,570	8,930	360	4.23%	260	\$8.82	A C D	10
35-2014	Cooks, Restaurant	10,370	11,570	1,210	11.63%	390	\$9.24	A B D	9
35-2015	Cooks, Short Order	2,070	2,150	80	3.86%	60	\$8.58	B C D	11
35-2021	Food Preparation Workers	8,630	9,050	420	4.87%	350	\$8.34	A C D	11
35-3000	Food and Beverage Serving Workers	63,820	72,520	8,700	13.64%	3,470	*		
35-3011	Bartenders	3,990	4,460	470	11.69%	190	\$9.29	A B D	11
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	24,890	29,500	4,610	18.53%	990	\$7.90	A A D	11
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	4,500	5,070	570	12.67%	390	\$7.86	A B D	11
35-3031	Waiters and Waitresses	28,180	30,990	2,810	9.97%	1,840	\$8.30	A B D	11
35-3041	Food Servers, Nonrestaurant	2,260	2,500	250	10.94%	60	\$8.61	B B D	11
35-9000	Other Food Preparation and Serving Related Workers	13,800	15,450	1,650	11.97%	860	*		

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2008	2018	Numeric	Percent				
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	4,220	4,610	390	9.14%	220	\$8.35	A C D	11
35-9021	Dishwashers	5,520	6,340	820	14.90%	310	\$8.00	A B D	11
37-0000	Building and Grounds Cleaning and Maintenance Occupations	55,160	58,560	3,400	6.16%	1,250	\$9.96		
37-1000	Supervisors, Building and Grounds Cleaning and Maintenance Workers	5,230	5,540	310	6.00%	90	*		
37-1011	First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	2,720	2,760	30	1.17%	30	\$14.08	A D C	8
37-1012	First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	2,510	2,790	280	11.25%	60	\$16.87	B B C	8
37-2000	Building Cleaning and Pest Control Workers	36,540	37,460	930	2.53%	790	*		
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	23,430	24,150	710	3.04%	510	\$9.50	A D D	11
37-2012	Maids and Housekeeping Cleaners	11,920	12,010	90	0.75%	220	\$8.38	A D D	11
37-2019	Building Cleaning Workers, All Other	170	200	30	15.38%	10	\$8.13	D B D	11
37-2021	Pest Control Workers	1,020	1,120	100	9.74%	50	\$13.43	B B C	10
37-3000	Grounds Maintenance Workers	13,390	15,550	2,160	16.13%	380	*		
37-3011	Landscaping and Groundskeeping Workers	11,830	13,640	1,820	15.38%	320	\$10.36	A B D	11
37-3013	Tree Trimmers and Pruners	970	1,220	260	26.74%	40	\$11.25	C A D	11
39-0000	Personal Care and Service Occupations	49,130	57,580	8,450	17.20%	2,100	\$9.71		
39-1000	Supervisors, Personal Care and Service Workers	2,770	3,120	350	12.62%	100	*		
39-1011	Gaming Supervisors	770	960	190	23.99%	40	\$21.34	C A B	8
39-1012	Slot Key Persons	740	800	70	8.96%	20	\$11.02	C C D	7
39-1021	First-Line Supervisors/Managers of Personal Service Workers	1,260	1,360	100	7.79%	40	\$13.89	B C C	8
39-2000	Animal Care and Service Workers	3,360	4,650	1,290	38.39%	200	*		
39-3000	Entertainment Attendants and Related Workers	6,910	7,960	1,050	15.17%	450	*		
39-3011	Gaming Dealers	1,540	1,860	330	21.29%	100	\$9.36	B A D	7
39-3012	Gaming and Sports Book Writers and Runners	670	740	70	10.16%	40	\$11.34	C B D	11
39-3021	Motion Picture Projectionists	100	100	-10	-7.69%	0	\$9.13	D D D	11
39-3031	Ushers, Lobby Attendants, and Ticket Takers	750	790	40	5.35%	50	\$7.96	C C D	11
39-3091	Amusement and Recreation Attendants	2,670	3,050	370	14.00%	180	\$8.79	A B D	11
39-3093	Locker Room, Coatroom, and Dressing Room Attendants	80	90	10	15.38%	10	\$8.50	D B D	11
39-3099	Entertainment Attendants and Related Workers, All Other	770	940	180	22.79%	60	*	C A	10
39-4000	Funeral Service Workers	590	740	160	26.50%	40	*		

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		2008	2018	Numeric	Percent				
39-4011	Embalmers	190	200	10	6.35%	10	\$16.72	D C C	7
39-4021	Funeral Attendants	400	540	140	36.11%	30	\$10.53	C A D	11
39-5000	Personal Appearance Workers	5,220	6,200	980	18.76%	180	*		
39-5012	Hairdressers, Hairstylists, and Cosmetologists	4,780	5,670	890	18.59%	160	\$9.88	A A D	7
39-5092	Manicurists and Pedicurists	210	250	40	20.10%	10	\$8.36	D A D	7
39-5094	Skin Care Specialists	80	90	10	16.00%	0	*	D A	7
39-6000	Transportation, Tourism, and Lodging Attendants	700	820	120	16.88%	40	*		
39-6011	Baggage Porters and Bellhops	250	320	70	27.67%	10	\$9.78	D A D	11
39-6021	Tour Guides and Escorts	150	150	10	3.45%	10	\$11.09	D C D	10
39-9000	Other Personal Care and Service Workers	29,590	34,100	4,510	15.24%	1,090	*		
39-9011	Child Care Workers	13,180	13,710	530	4.05%	440	\$8.59	A C D	11
39-9021	Personal and Home Care Aides	9,180	12,110	2,920	31.83%	410	\$8.42	A A D	11
39-9031	Fitness Trainers and Aerobics Instructors	3,140	3,830	690	21.86%	130	\$13.86	A A C	7
39-9032	Recreation Workers	3,260	3,620	360	10.95%	100	\$10.18	A B D	11
39-9041	Residential Advisors	570	550	-20	-3.66%	20	\$10.94	C D D	11
39-9099	Personal Care and Service Workers, All Other	250	280	30	12.10%	10	\$8.48	D B D	11
41-0000	Sales and Related Occupations	180,600	198,530	17,930	9.93%	7,220	\$13.84		
41-1000	Supervisors, Sales Workers	25,370	27,790	2,430	9.56%	790	*		
41-1011	First-Line Supervisors/Managers of Retail Sales Workers	21,720	23,920	2,200	10.15%	690	\$15.79	A B C	8
41-1012	First-Line Supervisors/Managers of Non-Retail Sales Workers	3,650	3,870	220	6.11%	100	\$26.80	A C A	8
41-2000	Retail Sales Workers	105,240	115,650	10,420	9.90%	4,740	*		
41-2011	Cashiers	41,370	45,170	3,800	9.18%	2,240	\$8.17	A C D	11
41-2012	Gaming Change Persons and Booth Cashiers	1,260	1,180	-80	-6.26%	60	\$10.70	B D D	11
41-2021	Counter and Rental Clerks	4,060	4,240	180	4.49%	130	\$11.32	A C D	11
41-2022	Parts Salespersons	4,280	4,300	20	0.54%	150	\$13.20	A D C	10
41-2031	Retail Salespersons	54,270	60,770	6,500	11.97%	2,160	\$10.93	A B D	11
41-3000	Sales Representatives, Services	12,120	13,300	1,180	9.76%	400	*		
41-3011	Advertising Sales Agents	1,600	1,650	50	2.87%	40	\$19.35	B D B	10
41-3021	Insurance Sales Agents	5,740	6,180	440	7.61%	180	\$23.76	A C A	7
41-3031	Securities, Commodities, and Financial Services Sales Agents	1,510	1,740	240	15.65%	70	\$38.34	B B A	5
41-3041	Travel Agents	690	800	110	16.20%	20	\$13.73	C A C	7
41-3099	Sales Representatives, Services, All Other	2,580	2,930	350	13.66%	100	\$21.47	A B B	8
41-4000	Sales Representatives, Wholesale and Manufacturing	19,900	21,400	1,500	7.54%	610	*		

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		2008	2018	Numeric	Percent				
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	6,650	7,220	570	8.57%	210	\$29.88	A C A	8
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	13,240	14,170	930	7.02%	400	\$22.76	A C B	8
41-9000	Other Sales and Related Workers	17,990	20,390	2,410	13.37%	690	*		
41-9011	Demonstrators and Product Promoters	490	540	40	8.70%	20	\$12.15	C C D	10
41-9021	Real Estate Brokers	1,550	1,630	80	4.90%	30	\$23.23	B C B	8
41-9022	Real Estate Sales Agents	6,510	7,150	640	9.83%	170	\$23.55	A B A	7
41-9031	Sales Engineers	390	400	20	3.86%	20	\$46.95	C C A	5
41-9041	Telemarketers	4,500	3,620	-880	-19.63%	110	\$9.72	A D D	11
41-9099	Sales and Related Workers, All Other	690	790	100	14.02%	30	\$17.51	C B B	10
43-0000	Office and Administrative Support Occupations	293,430	313,180	19,750	6.73%	8,500	\$13.54		
43-1000	Supervisors, Office and Administrative Support Workers	17,480	19,440	1,960	11.23%	590	*		
43-1011	First-Line Supervisors/Managers of Office and Administrative Support Workers	17,480	19,440	1,960	11.23%	590	\$19.70	A B B	8
43-2000	Communications Equipment Operators	2,530	2,300	-230	-9.14%	50	*		
43-2011	Switchboard Operators, Including Answering Service	2,410	2,180	-230	-9.70%	50	\$10.54	B D D	11
43-3000	Financial Clerks	62,910	69,630	6,720	10.68%	1,860	*		
43-3011	Bill and Account Collectors	6,030	7,240	1,200	19.96%	230	\$13.58	A A C	11
43-3021	Billing and Posting Clerks and Machine Operators	8,180	9,600	1,420	17.36%	280	\$13.47	A A C	11
43-3031	Bookkeeping, Accounting, and Auditing Clerks	34,310	38,180	3,870	11.29%	800	\$13.77	A B C	10
43-3041	Gaming Cage Workers	460	430	-30	-6.29%	10	\$11.74	C D D	11
43-3051	Payroll and Timekeeping Clerks	3,410	3,180	-230	-6.75%	80	\$14.93	A D C	10
43-3061	Procurement Clerks	1,820	1,920	110	5.83%	70	\$16.71	B C C	10
43-3071	Tellers	8,710	9,080	370	4.28%	400	\$10.54	A C D	11
43-4000	Information and Record Clerks	65,940	70,920	4,980	7.55%	2,660	*		
43-4011	Brokerage Clerks	230	230	0	0.43%	10	\$14.17	D D C	10
43-4021	Correspondence Clerks	370	310	-60	-16.12%	10	\$12.00	C D D	11
43-4031	Court, Municipal, and License Clerks	2,090	2,570	480	22.86%	110	\$12.60	B A D	11
43-4041	Credit Authorizers, Checkers, and Clerks	420	400	-20	-5.49%	10	\$15.41	C D C	11
43-4051	Customer Service Representatives	27,790	31,990	4,200	15.13%	1,300	\$13.84	A B C	10
43-4061	Eligibility Interviewers, Government Programs	670	750	80	12.56%	20	\$17.20	C B B	10
43-4071	File Clerks	3,100	2,320	-780	-25.07%	80	\$10.82	A D D	11
43-4081	Hotel, Motel, and Resort Desk Clerks	2,080	2,480	400	19.40%	110	\$8.33	B A D	11
43-4111	Interviewers, Except Eligibility and Loan	2,140	2,640	500	23.50%	100	\$11.15	B A D	11

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2008	2018	Numeric	Percent				
43-4121	Library Assistants, Clerical	1,630	1,830	200	12.28%	90	\$9.34	B B D	11
43-4131	Loan Interviewers and Clerks	2,460	2,480	20	0.85%	60	\$14.30	B D C	11
43-4141	New Accounts Clerks	940	930	-10	-1.38%	30	\$13.25	C D C	8
43-4151	Order Clerks	3,680	2,680	-1,010	-27.33%	100	\$12.11	A D D	11
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	2,200	2,040	-160	-7.09%	60	\$15.58	B D C	11
43-4171	Receptionists and Information Clerks	12,110	13,480	1,370	11.30%	460	\$10.61	A B D	11
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	2,260	2,300	40	1.86%	60	\$15.00	B D C	11
43-4199	Information and Record Clerks, All Other	1,780	1,490	-290	-16.33%	50	\$17.39	B D B	11
43-5000	Material Recording, Scheduling, Dispatching, and Distributing Workers	45,090	46,360	1,270	2.82%	1,300	*		
43-5011	Cargo and Freight Agents	310	340	30	8.01%	10	\$18.41	D C B	10
43-5021	Couriers and Messengers	1,100	1,100	0	-0.18%	30	\$10.75	B D D	11
43-5031	Police, Fire, and Ambulance Dispatchers	1,690	2,180	490	28.69%	80	\$12.63	B A D	10
43-5032	Dispatchers, Except Police, Fire, and Ambulance	2,820	2,870	50	1.81%	60	\$14.94	A D C	10
43-5041	Meter Readers, Utilities	970	880	-80	-8.70%	30	\$13.05	B D C	11
43-5051	Postal Service Clerks	760	670	-90	-11.21%	20	\$24.77	C D A	11
43-5052	Postal Service Mail Carriers	4,150	4,460	310	7.37%	160	\$22.88	A C B	11
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	1,720	1,310	-420	-24.25%	20	\$21.38	B D B	11
43-5061	Production, Planning, and Expediting Clerks	3,580	3,790	210	5.96%	110	\$20.52	A C B	10
43-5071	Shipping, Receiving, and Traffic Clerks	9,670	9,370	-300	-3.05%	240	\$13.43	A D C	11
43-5081	Stock Clerks and Order Fillers	17,560	18,700	1,140	6.51%	520	\$10.59	A C D	11
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	770	700	-70	-9.21%	30	\$11.59	C D D	11
43-6000	Secretaries and Administrative Assistants	46,940	49,790	2,850	6.07%	920	*		
43-6011	Executive Secretaries and Administrative Assistants	16,150	17,590	1,440	8.90%	360	\$17.19	A C B	8
43-6012	Legal Secretaries	2,150	2,320	170	7.87%	50	\$14.43	B C C	6
43-6013	Medical Secretaries	4,270	5,260	990	23.20%	160	\$12.90	A A C	10
43-6014	Secretaries, Except Legal, Medical, and Executive	24,370	24,620	250	1.03%	350	\$12.05	A D D	10
43-9000	Other Office and Administrative Support Workers	52,540	54,740	2,210	4.20%	1,120	*		
43-9011	Computer Operators	1,780	1,250	-530	-29.91%	20	\$15.33	B D C	10
43-9021	Data Entry Keyers	3,130	2,800	-320	-10.36%	70	\$12.47	A D D	10
43-9022	Word Processors and Typists	690	620	-70	-10.69%	10	\$14.15	C D C	10
43-9031	Desktop Publishers	160	140	-20	-13.29%	0	\$12.19	D D D	7
43-9041	Insurance Claims and Policy Processing Clerks	2,660	2,650	-20	-0.64%	40	\$15.96	A D C	10

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		2008	2018	Numeric	Percent				
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	1,320	1,120	-200	-14.99%	20	\$11.72	B D D	11
43-9061	Office Clerks, General	40,950	44,630	3,680	8.98%	930	\$10.86	A C D	11
43-9071	Office Machine Operators, Except Computer	500	430	-70	-14.34%	20	\$12.13	C D D	11
43-9081	Proofreaders and Copy Markers	130	110	-20	-16.54%	0	\$11.92	D D D	11
45-0000	Farming, Fishing, and Forestry Occupations	27,800	27,600	-200	-0.71%	760	\$12.63		
45-1000	Supervisors, Farming, Fishing, and Forestry Workers	1,530	1,650	120	7.97%	50	*		
45-1011	First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	1,520	1,640	120	7.98%	50	\$24.30	B C A	8
45-2000	Agricultural Workers	24,430	24,190	-230	-0.95%	660	*		
45-2011	Agricultural Inspectors	170	180	20	8.93%	10	\$18.45	D C B	8
45-2021	Animal Breeders	820	820	-10	-0.61%	20	\$11.95	C D D	8
45-2041	Graders and Sorters, Agricultural Products	660	630	-30	-4.24%	10	\$11.86	C D D	8
45-2090	Miscellaneous Agricultural Workers	22,770	22,560	-210	-0.94%	620	*		
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	15,450	15,190	-260	-1.66%	420	\$8.90	A D D	11
45-2093	Farmworkers, Farm and Ranch Animals	4,890	4,950	50	1.08%	140	\$11.23	A D D	11
47-0000	Construction and Extraction Occupations	109,080	125,170	16,090	14.75%	3,530	\$16.85		
47-1000	Supervisors, Construction and Extraction Workers	11,270	12,630	1,350	12.01%	350	*		
47-1011	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	11,270	12,630	1,350	12.01%	350	\$25.24	A B A	8
47-2000	Construction Trades Workers	70,600	80,770	10,170	14.40%	2,180	*		
47-2011	Boilermakers	400	510	110	27.05%	20	\$17.59	C A B	9
47-2021	Brickmasons and Blockmasons	910	1,100	190	20.53%	40	\$18.01	C A B	9
47-2022	Stonemasons	280	320	40	15.52%	10	\$13.85	D B C	9
47-2031	Carpenters	10,000	10,850	850	8.54%	210	\$14.73	A C C	9
47-2041	Carpet Installers	550	600	60	10.09%	20	\$11.61	C B D	10
47-2043	Floor Sanders and Finishers	260	310	50	20.62%	10	\$16.14	D A C	10
47-2044	Tile and Marble Setters	780	920	140	17.26%	30	\$12.78	C A D	9
47-2051	Cement Masons and Concrete Finishers	3,990	4,660	670	16.82%	170	\$14.18	A A C	10
47-2061	Construction Laborers	16,340	18,520	2,170	13.29%	330	\$12.32	A B D	10
47-2071	Paving, Surfacing, and Tamping Equipment Operators	2,020	2,280	260	12.70%	60	\$13.60	B B C	10
47-2073	Operating Engineers and Other Construction Equipment Operators	4,880	5,570	690	14.20%	150	\$16.47	A B C	10
47-2081	Drywall and Ceiling Tile Installers	1,760	2,080	320	18.08%	50	\$14.80	B A C	10
47-2111	Electricians	7,880	9,360	1,480	18.71%	340	\$19.01	A A B	9

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		2008	2018	Numeric	Percent				
47-2121	Glaziers	750	910	170	22.68%	40	\$13.53	C A C	9
47-2131	Insulation Workers, Floor, Ceiling, and Wall	270	320	50	19.40%	10	\$14.67	D A C	10
47-2132	Insulation Workers, Mechanical	410	530	110	27.36%	30	\$19.20	C A B	10
47-2141	Painters, Construction and Maintenance	5,010	5,510	500	10.01%	140	\$15.11	A B C	10
47-2151	Pipelayers	1,020	1,220	200	19.47%	40	\$12.41	B A D	11
47-2152	Plumbers, Pipefitters, and Steamfitters	6,210	7,530	1,320	21.20%	260	\$18.24	A A B	9
47-2161	Plasterers and Stucco Masons	220	240	20	9.22%	10	\$15.53	D C C	9
47-2171	Reinforcing Iron and Rebar Workers	90	90	0	0.00%	0	\$14.21	D D C	9
47-2181	Roofers	1,470	1,650	170	11.83%	40	\$13.48	B B C	10
47-2211	Sheet Metal Workers	3,890	4,340	450	11.58%	140	\$19.35	A B B	9
47-2221	Structural Iron and Steel Workers	810	930	110	13.78%	20	\$14.24	C B C	9
47-3000	Helpers, Construction Trades	4,420	5,610	1,190	26.84%	210	*		
47-3011	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	390	490	100	24.30%	20	\$11.75	C A D	11
47-3012	Helpers--Carpenters	670	760	100	14.29%	20	\$10.99	C B D	11
47-3013	Helpers--Electricians	1,690	2,240	560	33.10%	90	\$11.88	B A D	11
47-3014	Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	80	90	0	4.82%	0	\$12.08	D C D	11
47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	1,090	1,470	390	35.35%	60	\$12.43	B A D	11
47-3016	Helpers--Roofers	90	90	0	0.00%	0	\$10.16	D D D	11
47-3019	Helpers, Construction Trades, All Other	410	460	50	11.84%	10	\$13.22	C B C	11
47-4000	Other Construction and Related Workers	5,750	6,710	950	16.59%	240	*		
47-4011	Construction and Building Inspectors	1,100	1,350	250	22.27%	50	\$21.13	B A B	8
47-4021	Elevator Installers and Repairers	170	200	30	17.86%	10	*	D A	9
47-4031	Fence Erectors	230	280	60	26.22%	10	\$11.37	D A D	10
47-4051	Highway Maintenance Workers	3,200	3,750	560	17.36%	140	\$12.98	A A C	10
47-4061	Rail-Track Laying and Maintenance Equipment Operators	190	200	10	3.63%	10	\$22.70	D C B	10
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	360	430	70	18.13%	20	\$13.89	C A C	10
47-5000	Extraction Workers	17,040	19,470	2,430	14.29%	540	*		
47-5011	Derrick Operators, Oil and Gas	3,220	3,570	350	10.75%	90	\$20.99	A B B	10
47-5012	Rotary Drill Operators, Oil and Gas	3,520	3,910	390	10.96%	100	\$24.30	A B A	10
47-5013	Service Unit Operators, Oil, Gas, and Mining	2,160	2,620	460	21.10%	80	\$19.24	B A B	10
47-5021	Earth Drillers, Except Oil and Gas	580	650	80	13.19%	20	\$19.47	C B B	10
47-5031	Explosives Workers, Ordnance Handling Experts, and Blasters	410	420	10	3.46%	10	\$18.31	C C B	10
47-5042	Mine Cutting and Channeling Machine Operators	80	90	10	15.58%	0	\$14.10	D B C	10
47-5051	Rock Splitters, Quarry	310	330	20	6.54%	10	\$11.75	D C D	10

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		2008	2018	Numeric	Percent				
47-5071	Roustabouts, Oil and Gas	5,400	6,540	1,130	21.00%	210	\$15.81	A A C	10
47-5081	Helpers--Extraction Workers	1,310	1,290	-20	-1.22%	20	\$17.69	B D B	11
49-0000	Installation, Maintenance, and Repair Occupations	78,210	86,870	8,660	11.08%	2,470	\$18.68		
49-1000	Supervisors of Installation, Maintenance, and Repair Workers	5,520	5,950	420	7.68%	190	*		
49-1011	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	5,520	5,950	420	7.68%	190	\$26.40	A C A	8
49-2000	Electrical and Electronic Equipment Mechanics, Installers, and Repairers	8,200	9,000	800	9.74%	240	*		
49-2011	Computer, Automated Teller, and Office Machine Repairers	1,300	1,260	-30	-2.54%	20	\$18.42	B D B	7
49-2021	Radio Mechanics	120	100	-20	-14.17%	0	\$15.87	D D C	7
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	2,110	2,280	170	8.02%	50	\$23.18	B C B	7
49-2092	Electric Motor, Power Tool, and Related Repairers	400	460	60	16.20%	20	\$18.32	C A B	7
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	1,450	1,700	250	17.51%	50	\$24.62	B A A	7
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	350	450	110	30.92%	20	\$23.17	D A B	7
49-2096	Electronic Equipment Installers and Repairers, Motor Vehicles	180	170	-10	-6.52%	0	\$13.04	D D C	7
49-2097	Electronic Home Entertainment Equipment Installers and Repairers	370	370	0	0.54%	10	\$15.79	C D C	7
49-2098	Security and Fire Alarm Systems Installers	960	1,260	290	30.59%	50	\$14.00	C A C	7
49-3000	Vehicle and Mobile Equipment Mechanics, Installers	26,400	28,010	1,610	6.08%	730	*		
49-3011	Aircraft Mechanics and Service Technicians	5,670	5,480	-190	-3.39%	110	\$25.49	A D A	7
49-3021	Automotive Body and Related Repairers	2,970	3,250	280	9.46%	110	\$17.88	A B B	9
49-3023	Automotive Service Technicians and Mechanics	8,740	9,420	680	7.73%	240	\$15.29	A C C	7
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	3,880	4,210	330	8.53%	120	\$17.60	A C B	7
49-3041	Farm Equipment Mechanics	450	530	80	17.82%	20	\$16.34	C A C	9
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	1,670	1,920	260	15.44%	60	\$18.30	B B B	9
49-3043	Rail Car Repairers	150	160	10	6.04%	0	\$26.37	D C A	9
49-3051	Motorboat Mechanics	230	240	20	8.44%	10	\$16.10	D C C	9
49-3052	Motorcycle Mechanics	400	430	30	7.30%	10	\$14.40	C C C	9
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	540	650	110	20.59%	20	\$12.17	C A D	10
49-3092	Recreational Vehicle Service Technicians	230	240	10	3.93%	10	\$13.15	D C C	9

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2008	2018	Numeric	Percent				
49-3093	Tire Repairers and Changers	1,350	1,320	-20	-1.63%	30	\$10.77	B D D	11
49-9000	Other Installation, Maintenance, and Repair Occupations	38,080	43,910	5,830	15.32%	1,310	*		
49-9011	Mechanical Door Repairers	390	500	110	28.17%	20	\$13.43	C A C	10
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	790	840	50	6.05%	20	\$19.73	C C B	10
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	3,570	4,970	1,400	39.35%	200	\$17.92	A A B	7
49-9031	Home Appliance Repairers	470	500	30	5.96%	10	\$14.23	C C C	9
49-9041	Industrial Machinery Mechanics	4,890	6,040	1,150	23.45%	190	\$19.92	A A B	9
49-9042	Maintenance and Repair Workers, General	16,910	18,830	1,920	11.36%	450	\$15.62	A B C	10
49-9043	Maintenance Workers, Machinery	1,180	1,360	170	14.53%	40	\$17.72	B B B	10
49-9044	Millwrights	230	230	10	3.08%	10	\$21.50	D C B	9
49-9045	Refractory Materials Repairers, Except Brickmasons	90	90	0	3.33%	0	\$17.57	D C B	10
49-9051	Electrical Power-Line Installers and Repairers	1,820	2,060	250	13.61%	90	\$22.20	B B B	9
49-9052	Telecommunications Line Installers and Repairers	1,730	1,830	100	5.72%	40	\$22.70	B C B	9
49-9061	Camera and Photographic Equipment Repairers	110	90	-20	-15.74%	0	\$13.26	D D C	9
49-9062	Medical Equipment Repairers	480	680	200	41.20%	30	\$18.14	C A B	6
49-9069	Precision Instrument and Equipment Repairers, All Other	220	230	10	4.52%	10	\$24.94	D C A	10
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	880	950	70	8.21%	40	\$11.74	C C D	10
49-9096	Riggers	50	50	0	4.00%	0	\$20.07	D C B	11
49-9098	Helpers--Installation, Maintenance, and Repair Workers	2,460	2,680	220	9.11%	140	\$11.88	B C D	11
49-9099	Installation, Maintenance, and Repair Workers, All Other	1,310	1,420	100	7.84%	30	\$21.07	B C B	10
51-0000	Production Occupations	129,900	135,190	5,290	4.07%	3,420	\$15.15		
51-1000	Supervisors, Production Workers	9,000	9,410	410	4.54%	160	*		
51-1011	First-Line Supervisors/Managers of Production and Operating Workers	9,000	9,410	410	4.54%	160	\$24.64	A C A	8
51-2000	Assemblers and Fabricators	24,960	26,400	1,440	5.76%	690	*		
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	1,010	1,130	120	12.17%	30	\$17.14	B B B	10
51-2021	Coil Winders, Tapers, and Finishers	290	260	-30	-10.80%	0	\$13.47	D D C	11
51-2022	Electrical and Electronic Equipment Assemblers	2,220	2,310	90	4.24%	40	\$13.37	B C C	11
51-2023	Electromechanical Equipment Assemblers	330	350	20	5.18%	10	\$12.22	D C D	11
51-2031	Engine and Other Machine Assemblers	570	640	60	11.17%	20	\$14.05	C B C	11

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		2008	2018	Numeric	Percent				
51-2041	Structural Metal Fabricators and Fitters	2,160	2,390	230	10.70%	70	\$14.72	B B C	10
51-2091	Fiberglass Laminators and Fabricators	280	280	0	0.35%	10	\$11.78	D D D	10
51-2092	Team Assemblers	16,980	17,940	960	5.62%	480	\$12.28	A C D	10
51-2099	Assemblers and Fabricators, All Other	1,110	1,090	-20	-1.44%	30	\$12.00	B D D	10
51-3000	Food Processing Workers	8,000	8,180	190	2.31%	260	*		
51-3011	Bakers	1,390	1,390	0	0.00%	40	\$10.15	B D D	9
51-3021	Butchers and Meat Cutters	1,250	1,190	-70	-5.18%	40	\$12.09	B D D	9
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	620	630	10	1.13%	20	\$9.36	C D D	11
51-3023	Slaughterers and Meat Packers	2,950	3,080	130	4.48%	110	*	A C	10
51-3091	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	550	540	0	-0.55%	20	\$11.92	C D D	11
51-3092	Food Batchmakers	660	730	70	10.18%	20	\$11.99	C B D	11
51-3093	Food Cooking Machine Operators and Tenders	580	630	50	8.08%	20	\$9.70	C C D	11
51-4000	Metal Workers and Plastic Workers	34,810	36,100	1,290	3.70%	970	*		
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	1,460	1,660	200	13.48%	50	\$15.95	B B C	10
51-4012	Numerical Tool and Process Control Programmers	260	270	10	2.29%	10	\$21.05	D D B	8
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	790	810	20	2.93%	20	\$15.96	C D C	10
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	220	210	-10	-5.94%	0	\$13.72	D D C	10
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	570	550	-20	-3.51%	10	\$14.40	C D C	10
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	2,870	2,680	-200	-6.82%	60	\$13.68	A D C	10
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	600	500	-100	-16.19%	10	\$14.51	C D C	10
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,360	1,290	-70	-5.31%	20	\$14.17	B D C	10
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,160	1,040	-120	-10.42%	20	\$16.26	B D C	10
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	590	570	-20	-3.74%	10	\$15.43	C D C	10
51-4041	Machinists	7,070	7,540	470	6.65%	140	\$17.12	A C C	9
51-4051	Metal-Refining Furnace Operators and Tenders	160	180	20	13.21%	10	\$15.54	D B C	10
51-4052	Pourers and Casters, Metal	150	180	20	13.64%	10	\$14.48	D B C	10
51-4071	Foundry Mold and Coremakers	230	240	10	3.00%	10	\$13.03	D D C	10
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	1,100	1,130	30	2.27%	30	\$12.96	B D C	10

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2008	2018	Numeric	Percent				
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	880	800	-80	-9.30%	20	\$13.75	C D C	10
51-4111	Tool and Die Makers	420	440	20	4.31%	10	\$21.19	C C B	9
51-4121	Welders, Cutters, Solderers, and Brazers	12,240	13,250	1,010	8.23%	480	\$16.71	A C C	7
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	730	790	60	8.20%	30	\$16.65	C C C	7
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	420	430	10	1.65%	20	\$16.21	C D C	10
51-4192	Lay-Out Workers, Metal and Plastic	200	210	10	4.43%	10	\$12.61	D C D	10
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	480	480	0	0.41%	10	\$17.81	C D B	10
51-4194	Tool Grinders, Filers, and Sharpeners	340	390	50	13.49%	20	\$14.68	D B C	10
51-4199	Metal Workers and Plastic Workers, All Other	170	160	-10	-5.29%	0	\$19.73	D D B	10
51-5000	Printing Workers	3,030	2,640	-380	-12.69%	50	*		
51-5011	Bindery Workers	480	370	-110	-23.60%	10	\$12.53	C D D	11
51-5022	Prepress Technicians and Workers	620	510	-110	-17.50%	10	\$13.67	C D C	7
51-5023	Printing Machine Operators	1,490	1,400	-90	-6.11%	30	\$13.77	B D C	10
51-6000	Textile, Apparel, and Furnishings Workers	6,230	6,110	-130	-2.07%	90	*		
51-6011	Laundry and Dry-Cleaning Workers	3,190	3,260	70	2.04%	60	\$8.84	A D D	10
51-6021	Pressers, Textile, Garment, and Related Materials	850	830	-20	-2.47%	0	\$8.64	C D D	11
51-6031	Sewing Machine Operators	1,080	930	-150	-13.86%	10	\$9.99	B D D	10
51-6052	Tailors, Dressmakers, and Custom Sewers	150	160	10	3.97%	0	\$10.46	D C D	9
51-6062	Textile Cutting Machine Setters, Operators, and Tenders	60	50	-10	-13.56%	0	\$11.09	D D D	10
51-6091	Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	320	250	-70	-23.20%	0	\$13.03	D D C	10
51-6092	Fabric and Apparel Patternmakers	50	50	0	-7.69%	0	\$11.33	D D D	9
51-6093	Upholsterers	280	320	30	11.97%	10	\$11.71	D B D	9
51-7000	Woodworkers	2,940	3,120	180	6.09%	80	*		
51-7011	Cabinetmakers and Bench Carpenters	1,660	1,800	140	8.35%	50	\$12.12	B C D	9
51-7021	Furniture Finishers	120	110	0	-3.42%	0	\$12.92	D D C	9
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	550	550	0	0.73%	10	\$12.07	C D D	10
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	330	350	30	7.98%	10	\$12.92	D C C	10
51-8000	Plant and System Operators	5,630	6,720	1,090	19.34%	240	*		
51-8012	Power Distributors and Dispatchers	120	130	10	11.76%	10	\$29.05	D B A	9
51-8013	Power Plant Operators	420	490	70	16.51%	20	\$30.34	C A A	9
51-8021	Stationary Engineers and Boiler Operators	220	250	30	13.64%	10	\$21.29	D B B	9

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2008	2018	Numeric	Percent				
51-8031	Water and Liquid Waste Treatment Plant and System Operators	2,180	2,820	640	29.60%	110	\$13.77	B A C	9
51-8092	Gas Plant Operators	490	530	40	8.45%	20	\$25.58	C C A	9
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers	2,130	2,420	290	13.59%	80	\$22.85	B B B	9
51-9000	Other Production Occupations	35,300	36,520	1,220	3.44%	890	*		
51-9011	Chemical Equipment Operators and Tenders	480	470	-10	-1.86%	0	\$18.57	C D B	10
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	350	400	40	12.15%	10	\$17.07	D B C	10
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	800	820	30	3.52%	20	\$13.57	C C C	10
51-9022	Grinding and Polishing Workers, Hand	740	860	120	15.61%	30	\$12.76	C B D	10
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	1,230	1,460	230	18.49%	40	\$15.17	B A C	10
51-9031	Cutters and Trimmers, Hand	220	220	0	-0.45%	10	\$15.76	D D C	11
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	860	910	60	6.67%	20	\$17.92	C C B	10
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	6,890	7,230	340	4.87%	150	\$18.13	A C B	10
51-9071	Jewelers and Precious Stone and Metal Workers	240	250	10	3.72%	10	\$16.42	D C C	7
51-9081	Dental Laboratory Technicians	400	390	0	-1.01%	10	\$15.69	C D C	10
51-9083	Ophthalmic Laboratory Technicians	400	440	40	9.18%	10	\$11.37	C C D	10
51-9111	Packaging and Filling Machine Operators and Tenders	3,440	3,380	-60	-1.80%	60	\$11.85	A D D	11
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	2,180	2,530	350	16.03%	90	\$13.87	B A C	10
51-9122	Painters, Transportation Equipment	770	830	60	7.50%	30	\$16.62	C C C	10
51-9123	Painting, Coating, and Decorating Workers	400	490	90	23.00%	20	\$10.75	C A D	11
51-9131	Photographic Process Workers	210	220	10	5.85%	10	\$10.21	D C D	11
51-9132	Photographic Processing Machine Operators	630	470	-160	-25.55%	20	\$9.05	C D D	11
51-9192	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	280	280	0	0.36%	10	\$10.72	D D D	10
51-9193	Cooling and Freezing Equipment Operators and Tenders	170	190	20	11.38%	10	\$12.53	D B D	10
51-9194	Etchers and Engravers	90	90	0	1.18%	0	\$11.69	D D D	9
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	780	820	40	5.01%	40	\$14.52	C C C	10
51-9196	Paper Goods Machine Setters, Operators, and Tenders	1,260	1,010	-250	-19.98%	30	\$22.23	B D B	10
51-9198	Helpers--Production Workers	8,430	8,730	300	3.55%	180	\$11.01	A C D	11

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2008	2018	Numeric	Percent				
51-9199	Production Workers, All Other	1,740	1,760	20	1.26%	40	\$10.89	B D D	10
53-0000	Transportation and Material Moving Occupations	115,810	122,500	6,690	5.78%	3,530	\$14.46		
53-1000	Supervisors, Transportation and Material Moving Workers	5,520	5,490	-30	-0.45%	110	*		
53-1011	Aircraft Cargo Handling Supervisors	80	70	-10	-10.00%	0	\$29.23	D D A	8
53-1021	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	2,120	2,300	180	8.38%	60	\$19.16	B C B	8
53-1031	First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	3,310	3,120	-200	-5.89%	60	\$24.27	A D A	8
53-2000	Air Transportation Workers	1,080	1,160	80	7.32%	50	*		
53-2011	Airline Pilots, Copilots, and Flight Engineers	200	200	0	-1.00%	10	*	D D	5
53-2012	Commercial Pilots	330	330	0	-0.30%	10	*	D D	7
53-2021	Air Traffic Controllers	430	490	60	14.05%	20	\$44.18	C B A	9
53-2022	Airfield Operations Specialists	120	140	20	18.64%	10	\$23.61	D A A	9
53-3000	Motor Vehicle Operators	51,670	57,500	5,830	11.28%	1,510	*		
53-3011	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	230	250	20	10.22%	10	\$11.78	D B D	10
53-3021	Bus Drivers, Transit and Intercity	1,070	1,150	90	8.06%	30	\$12.13	B C D	10
53-3022	Bus Drivers, School	4,710	4,740	30	0.59%	90	\$9.71	A D D	10
53-3031	Driver/Sales Workers	5,440	5,870	430	7.91%	140	\$12.92	A C C	11
53-3032	Truck Drivers, Heavy and Tractor-Trailer	26,990	31,300	4,310	15.96%	910	\$17.88	A A B	11
53-3033	Truck Drivers, Light or Delivery Services	10,460	11,210	750	7.16%	260	\$12.93	A C C	11
53-3041	Taxi Drivers and Chauffeurs	2,550	2,750	200	7.76%	70	\$9.19	B C D	11
53-3099	Motor Vehicle Operators, All Other	230	230	10	2.20%	10	\$17.92	D D B	11
53-4000	Rail Transportation Workers	1,170	1,190	20	2.05%	40	*		
53-4010	Locomotive Engineers and Operators	420	430	10	3.34%	20	*		
53-6000	Other Transportation Workers	2,210	2,370	160	7.10%	100	*		
53-6021	Parking Lot Attendants	980	1,010	40	3.58%	40	\$8.89	B C D	11
53-6031	Service Station Attendants	500	530	30	6.16%	20	\$10.12	C C D	11
53-6041	Traffic Technicians	270	310	30	11.31%	10	\$15.45	D B C	11
53-6051	Transportation Inspectors	280	330	50	17.44%	10	\$36.87	D A A	8
53-7000	Material Moving Workers	54,140	54,770	630	1.16%	1,730	*		
53-7011	Conveyor Operators and Tenders	780	700	-80	-10.18%	20	\$12.82	C D C	11
53-7021	Crane and Tower Operators	540	630	80	14.89%	20	\$19.43	C B B	9
53-7031	Dredge Operators	100	110	10	9.38%	0	\$14.85	D C C	10
53-7032	Excavating and Loading Machine and Dragline Operators	3,050	3,510	460	15.18%	140	\$15.90	A B C	10
53-7051	Industrial Truck and Tractor Operators	7,330	7,790	460	6.30%	260	\$13.74	A C C	11

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2008	2018	Numeric	Percent				
53-7061	Cleaners of Vehicles and Equipment	3,520	3,670	150	4.38%	140	\$10.46	A C D	11
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	25,400	25,380	-20	-0.09%	820	\$10.81	A D D	11
53-7063	Machine Feeders and Offbearers	1,230	1,010	-220	-18.15%	10	\$13.01	B D C	11
53-7064	Packers and Packagers, Hand	5,990	5,590	-400	-6.74%	100	\$9.48	A D D	11
53-7071	Gas Compressor and Gas Pumping Station Operators	380	380	-10	-1.82%	10	\$18.69	C D B	10
53-7072	Pump Operators, Except Wellhead Pumpers	570	530	-30	-5.49%	20	\$19.76	C D B	10
53-7073	Wellhead Pumpers	2,950	2,840	-120	-3.93%	90	\$19.25	A D B	10
53-7081	Refuse and Recyclable Material Collectors	2,110	2,450	350	16.41%	100	\$13.07	B A C	11
53-7121	Tank Car, Truck, and Ship Loaders	150	150	0	-0.68%	0	\$13.59	D D C	10

Notes: *Alphabetical index of occupations*

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OCCUPATIONAL TITLE	SOC Code	OCCUPATIONAL TITLE	SOC Code
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OCCUPATIONAL TITLE	SOC Code	OCCUPATIONAL TITLE	SOC Code
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Teacher Assistants	25-9041	Audiologists	29-1121
Art Directors	27-1011	Physical Therapists	29-1123
Craft Artists	27-1012	Radiation Therapists	29-1124
Fine Artists, Including Painters, Sculptors, and Illustrators	27-1013	Recreational Therapists	29-1125

OCCUPATIONAL TITLE	SOC Code	OCCUPATIONAL TITLE	SOC Code
Respiratory Therapists	29-1126	First-Line Supervisors/Managers of Correctional Officers	33-1011
Speech-Language Pathologists	29-1127	First-Line Supervisors/Managers of Police and Detectives	33-1012
Therapists, All Other	29-1129	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	33-1021
Veterinarians	29-1131	First-Line Supervisors/Managers, Protective Service Workers, All Other	33-1099
Health Diagnosing and Treating Practitioners, All Other	29-1199	Fire Fighters	33-2011
Medical and Clinical Laboratory Technologists	29-2011	Bailiffs	33-3011
Medical and Clinical Laboratory Technicians	29-2012	Correctional Officers and Jailers	33-3012
Dental Hygienists	29-2021	Detectives and Criminal Investigators	33-3021
Cardiovascular Technologists and Technicians	29-2031	Fish and Game Wardens	33-3031
Diagnostic Medical Sonographers	29-2032	Police and Sheriff's Patrol Officers	33-3051
Nuclear Medicine Technologists	29-2033	Private Detectives and Investigators	33-9021
Radiologic Technologists and Technicians	29-2034	Gaming Surveillance Officers and Gaming Investigators	33-9031
Emergency Medical Technicians and Paramedics	29-2041	Security Guards	33-9032
Dietetic Technicians	29-2051	Crossing Guards	33-9091
Pharmacy Technicians	29-2052	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	33-9092
Psychiatric Technicians	29-2053	Chefs and Head Cooks	35-1011
Respiratory Therapy Technicians	29-2054	First-Line Supervisors/Managers of Food Preparation and Serving Workers	35-1012
Surgical Technologists	29-2055	Cooks, Fast Food	35-2011
Veterinary Technologists and Technicians	29-2056	Cooks, Institution and Cafeteria	35-2012
Licensed Practical and Licensed Vocational Nurses	29-2061	Cooks, Restaurant	35-2014
Medical Records and Health Information Technicians	29-2071	Cooks, Short Order	35-2015
Health Technologists and Technicians, All Other	29-2099	Food Preparation Workers	35-2021
Occupational Health and Safety Specialists	29-9011	Bartenders	35-3011
Occupational Health and Safety Technicians	29-9012	Combined Food Preparation and Serving Workers, Including Fast Food	35-3021
Home Health Aides	31-1011	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	35-3022
Nursing Aides, Orderlies, and Attendants	31-1012	Waiters and Waitresses	35-3031
Psychiatric Aides	31-1013	Food Servers, Nonrestaurant	35-3041
Occupational Therapist Assistants	31-2011	Dining Room and Cafeteria Attendants and Bartender Helpers	35-9011
Occupational Therapist Aides	31-2012	Dishwashers	35-9021
Physical Therapist Assistants	31-2021	First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	37-1011
Physical Therapist Aides	31-2022	First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	37-1012
Dental Assistants	31-9091	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	37-2011
Medical Assistants	31-9092	Maids and Housekeeping Cleaners	37-2012
Medical Transcriptionists	31-9094	Building Cleaning Workers, All Other	37-2019
Pharmacy Aides	31-9095	Pest Control Workers	37-2021
Veterinary Assistants and Laboratory Animal Caretakers	31-9096	Landscaping and Groundskeeping Workers	37-3011
Healthcare Support Workers, All Other	31-9099	Tree Trimmers and Pruners	37-3013

OCCUPATIONAL TITLE	SOC Code	OCCUPATIONAL TITLE	SOC Code
Gaming Supervisors	39-1011	Demonstrators and Product Promoters	41-9011
Slot Key Persons	39-1012	Real Estate Brokers	41-9021
First-Line Supervisors/Managers of Personal Service Workers	39-1021	Real Estate Sales Agents	41-9022
Gaming Dealers	39-3011	Sales Engineers	41-9031
Gaming and Sports Book Writers and Runners	39-3012	Telemarketers	41-9041
Motion Picture Projectionists	39-3021	Sales and Related Workers, All Other	41-9099
Ushers, Lobby Attendants, and Ticket Takers	39-3031	First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011
Amusement and Recreation Attendants	39-3091	Switchboard Operators, Including Answering Service	43-2011
Locker Room, Coatroom, and Dressing Room Attendants	39-3093	Bill and Account Collectors	43-3011
Entertainment Attendants and Related Workers, All Other	39-3099	Billing and Posting Clerks and Machine Operators	43-3021
Embalmers	39-4011	Bookkeeping, Accounting, and Auditing Clerks	43-3031
Funeral Attendants	39-4021	Gaming Cage Workers	43-3041
Hairdressers, Hairstylists, and Cosmetologists	39-5012	Payroll and Timekeeping Clerks	43-3051
Manicurists and Pedicurists	39-5092	Procurement Clerks	43-3061
Skin Care Specialists	39-5094	Tellers	43-3071
Baggage Porters and Bellhops	39-6011	Brokerage Clerks	43-4011
Tour Guides and Escorts	39-6021	Correspondence Clerks	43-4021
Child Care Workers	39-9011	Court, Municipal, and License Clerks	43-4031
Personal and Home Care Aides	39-9021	Credit Authorizers, Checkers, and Clerks	43-4041
Fitness Trainers and Aerobics Instructors	39-9031	Customer Service Representatives	43-4051
Recreation Workers	39-9032	Eligibility Interviewers, Government Programs	43-4061
Residential Advisors	39-9041	File Clerks	43-4071
Personal Care and Service Workers, All Other	39-9099	Hotel, Motel, and Resort Desk Clerks	43-4081
First-Line Supervisors/Managers of Retail Sales Workers	41-1011	Interviewers, Except Eligibility and Loan	43-4111
First-Line Supervisors/Managers of Non-Retail Sales Workers	41-1012	Library Assistants, Clerical	43-4121
Cashiers	41-2011	Loan Interviewers and Clerks	43-4131
Gaming Change Persons and Booth Cashiers	41-2012	New Accounts Clerks	43-4141
Counter and Rental Clerks	41-2021	Order Clerks	43-4151
Parts Salespersons	41-2022	Human Resources Assistants, Except Payroll and Timekeeping	43-4161
Retail Salespersons	41-2031	Receptionists and Information Clerks	43-4171
Advertising Sales Agents	41-3011	Reservation and Transportation Ticket Agents and Travel Clerks	43-4181
Insurance Sales Agents	41-3021	Information and Record Clerks, All Other	43-4199
Securities, Commodities, and Financial Services Sales Agents	41-3031	Cargo and Freight Agents	43-5011
Travel Agents	41-3041	Couriers and Messengers	43-5021
Sales Representatives, Services, All Other	41-3099	Police, Fire, and Ambulance Dispatchers	43-5031
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	41-4011	Dispatchers, Except Police, Fire, and Ambulance	43-5032
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012	Meter Readers, Utilities	43-5041

OCCUPATIONAL TITLE	SOC Code	OCCUPATIONAL TITLE	SOC Code
Postal Service Clerks	43-5051	Operating Engineers and Other Construction Equipment Operators	47-2073
Postal Service Mail Carriers	43-5052	Drywall and Ceiling Tile Installers	47-2081
Postal Service Mail Sorters, Processors, and Processing Machine Operators	43-5053	Electricians	47-2111
Production, Planning, and Expediting Clerks	43-5061	Glaziers	47-2121
Shipping, Receiving, and Traffic Clerks	43-5071	Insulation Workers, Floor, Ceiling, and Wall	47-2131
Stock Clerks and Order Fillers	43-5081	Insulation Workers, Mechanical	47-2132
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	43-5111	Painters, Construction and Maintenance	47-2141
Executive Secretaries and Administrative Assistants	43-6011	Pipelayers	47-2151
Legal Secretaries	43-6012	Plumbers, Pipefitters, and Steamfitters	47-2152
Medical Secretaries	43-6013	Plasterers and Stucco Masons	47-2161
Secretaries, Except Legal, Medical, and Executive	43-6014	Reinforcing Iron and Rebar Workers	47-2171
Computer Operators	43-9011	Roofers	47-2181
Data Entry Keyers	43-9021	Sheet Metal Workers	47-2211
Word Processors and Typists	43-9022	Structural Iron and Steel Workers	47-2221
Desktop Publishers	43-9031	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	47-3011
Insurance Claims and Policy Processing Clerks	43-9041	Helpers--Carpenters	47-3012
Mail Clerks and Mail Machine Operators, Except Postal Service	43-9051	Helpers--Electricians	47-3013
Office Clerks, General	43-9061	Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	47-3014
Office Machine Operators, Except Computer	43-9071	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	47-3015
Proofreaders and Copy Markers	43-9081	Helpers--Roofers	47-3016
First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	45-1011	Helpers, Construction Trades, All Other	47-3019
Agricultural Inspectors	45-2011	Construction and Building Inspectors	47-4011
Animal Breeders	45-2021	Elevator Installers and Repairers	47-4021
Graders and Sorters, Agricultural Products	45-2041	Fence Erectors	47-4031
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	45-2092	Highway Maintenance Workers	47-4051
Farmworkers, Farm and Ranch Animals	45-2093	Rail-Track Laying and Maintenance Equipment Operators	47-4061
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	47-1011	Septic Tank Servicers and Sewer Pipe Cleaners	47-4071
Boilermakers	47-2011	Derrick Operators, Oil and Gas	47-5011
Brickmasons and Blockmasons	47-2021	Rotary Drill Operators, Oil and Gas	47-5012
Stonemasons	47-2022	Service Unit Operators, Oil, Gas, and Mining	47-5013
Carpenters	47-2031	Earth Drillers, Except Oil and Gas	47-5021
Carpet Installers	47-2041	Explosives Workers, Ordnance Handling Experts, and Blasters	47-5031
Floor Sanders and Finishers	47-2043	Mine Cutting and Channeling Machine Operators	47-5042
Tile and Marble Setters	47-2044	Rock Splitters, Quarry	47-5051
Cement Masons and Concrete Finishers	47-2051	Roustabouts, Oil and Gas	47-5071
Construction Laborers	47-2061	Helpers--Extraction Workers	47-5081
Paving, Surfacing, and Tamping Equipment Operators	47-2071	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	49-1011

OCCUPATIONAL TITLE	SOC Code	OCCUPATIONAL TITLE	SOC Code
Computer, Automated Teller, and Office Machine Repairers	49-2011	Helpers--Installation, Maintenance, and Repair Workers	49-9098
Radio Mechanics	49-2021	Installation, Maintenance, and Repair Workers, All Other	49-9099
Telecommunications Equipment Installers and Repairers, Except Line Installers	49-2022	First-Line Supervisors/Managers of Production and Operating Workers	51-1011
Electric Motor, Power Tool, and Related Repairers	49-2092	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	51-2011
Electrical and Electronics Repairers, Commercial and Industrial Equipment	49-2094	Coil Winders, Tapers, and Finishers	51-2021
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	49-2095	Electrical and Electronic Equipment Assemblers	51-2022
Electronic Equipment Installers and Repairers, Motor Vehicles	49-2096	Electromechanical Equipment Assemblers	51-2023
Electronic Home Entertainment Equipment Installers and Repairers	49-2097	Engine and Other Machine Assemblers	51-2031
Security and Fire Alarm Systems Installers	49-2098	Structural Metal Fabricators and Fitters	51-2041
Aircraft Mechanics and Service Technicians	49-3011	Fiberglass Laminators and Fabricators	51-2091
Automotive Body and Related Repairers	49-3021	Team Assemblers	51-2092
Automotive Service Technicians and Mechanics	49-3023	Assemblers and Fabricators, All Other	51-2099
Bus and Truck Mechanics and Diesel Engine Specialists	49-3031	Bakers	51-3011
Farm Equipment Mechanics	49-3041	Butchers and Meat Cutters	51-3021
Mobile Heavy Equipment Mechanics, Except Engines	49-3042	Meat, Poultry, and Fish Cutters and Trimmers	51-3022
Rail Car Repairers	49-3043	Slaughterers and Meat Packers	51-3023
Motorboat Mechanics	49-3051	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	51-3091
Motorcycle Mechanics	49-3052	Food Batchmakers	51-3092
Outdoor Power Equipment and Other Small Engine Mechanics	49-3053	Food Cooking Machine Operators and Tenders	51-3093
Recreational Vehicle Service Technicians	49-3092	Computer-Controlled Machine Tool Operators, Metal and Plastic	51-4011
Tire Repairers and Changers	49-3093	Numerical Tool and Process Control Programmers	51-4012
Mechanical Door Repairers	49-9011	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	51-4021
Control and Valve Installers and Repairers, Except Mechanical Door	49-9012	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	51-4022
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	51-4023
Home Appliance Repairers	49-9031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	51-4031
Industrial Machinery Mechanics	49-9041	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4032
Maintenance and Repair Workers, General	49-9042	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4033
Maintenance Workers, Machinery	49-9043	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4034
Millwrights	49-9044	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	51-4035
Refractory Materials Repairers, Except Brickmasons	49-9045	Machinists	51-4041
Electrical Power-Line Installers and Repairers	49-9051	Metal-Refining Furnace Operators and Tenders	51-4051
Telecommunications Line Installers and Repairers	49-9052	Pourers and Casters, Metal	51-4052
Camera and Photographic Equipment Repairers	49-9061	Foundry Mold and Coremakers	51-4071
Medical Equipment Repairers	49-9062	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	51-4072
Precision Instrument and Equipment Repairers, All Other	49-9069	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4081
Coin, Vending, and Amusement Machine Servicers and Repairers	49-9091	Tool and Die Makers	51-4111
Riggers	49-9096	Welders, Cutters, Solderers, and Brazers	51-4121

OCCUPATIONAL TITLE	SOC Code	OCCUPATIONAL TITLE	SOC Code
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	51-4122	Ophthalmic Laboratory Technicians	51-9083
Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	51-4191	Packaging and Filling Machine Operators and Tenders	51-9111
Lay-Out Workers, Metal and Plastic	51-4192	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	51-9121
Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	51-4193	Painters, Transportation Equipment	51-9122
Tool Grinders, Filers, and Sharpeners	51-4194	Painting, Coating, and Decorating Workers	51-9123
Metal Workers and Plastic Workers, All Other	51-4199	Photographic Process Workers	51-9131
Bindery Workers	51-5011	Photographic Processing Machine Operators	51-9132
Prepress Technicians and Workers	51-5022	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	51-9192
Printing Machine Operators	51-5023	Cooling and Freezing Equipment Operators and Tenders	51-9193
Laundry and Dry-Cleaning Workers	51-6011	Etchers and Engravers	51-9194
Pressers, Textile, Garment, and Related Materials	51-6021	Molders, Shapers, and Casters, Except Metal and Plastic	51-9195
Sewing Machine Operators	51-6031	Paper Goods Machine Setters, Operators, and Tenders	51-9196
Tailors, Dressmakers, and Custom Sewers	51-6052	Helpers--Production Workers	51-9198
Textile Cutting Machine Setters, Operators, and Tenders	51-6062	Production Workers, All Other	51-9199
Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	51-6091	Aircraft Cargo Handling Supervisors	53-1011
Fabric and Apparel Patternmakers	51-6092	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	53-1021
Upholsterers	51-6093	First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Oper	53-1031
Cabinetmakers and Bench Carpenters	51-7011	Airline Pilots, Copilots, and Flight Engineers	53-2011
Furniture Finishers	51-7021	Commercial Pilots	53-2012
Sawing Machine Setters, Operators, and Tenders, Wood	51-7041	Air Traffic Controllers	53-2021
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	51-7042	Airfield Operations Specialists	53-2022
Power Distributors and Dispatchers	51-8012	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	53-3011
Power Plant Operators	51-8013	Bus Drivers, Transit and Intercity	53-3021
Stationary Engineers and Boiler Operators	51-8021	Bus Drivers, School	53-3022
Water and Liquid Waste Treatment Plant and System Operators	51-8031	Driver/Sales Workers	53-3031
Gas Plant Operators	51-8092	Truck Drivers, Heavy and Tractor-Trailer	53-3032
Petroleum Pump System Operators, Refinery Operators, and Gaugers	51-8093	Truck Drivers, Light or Delivery Services	53-3033
Chemical Equipment Operators and Tenders	51-9011	Taxi Drivers and Chauffeurs	53-3041
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	51-9012	Motor Vehicle Operators, All Other	53-3099
Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	51-9021	Parking Lot Attendants	53-6021
Grinding and Polishing Workers, Hand	51-9022	Service Station Attendants	53-6031
Mixing and Blending Machine Setters, Operators, and Tenders	51-9023	Traffic Technicians	53-6041
Cutters and Trimmers, Hand	51-9031	Transportation Inspectors	53-6051
Cutting and Slicing Machine Setters, Operators, and Tenders	51-9032	Conveyor Operators and Tenders	53-7011
Inspectors, Testers, Sorters, Samplers, and Weighers	51-9061	Crane and Tower Operators	53-7021
Jewelers and Precious Stone and Metal Workers	51-9071	Dredge Operators	53-7031
Dental Laboratory Technicians	51-9081	Excavating and Loading Machine and Dragline Operators	53-7032

OCCUPATIONAL TITLE	SOC Code	OCCUPATIONAL TITLE	SOC Code
Industrial Truck and Tractor Operators	53-7051	Gas Compressor and Gas Pumping Station Operators	53-7071
Cleaners of Vehicles and Equipment	53-7061	Pump Operators, Except Wellhead Pumpers	53-7072
Laborers and Freight, Stock, and Material Movers, Hand	53-7062	Wellhead Pumpers	53-7073
Machine Feeders and Offbearers	53-7063	Refuse and Recyclable Material Collectors	53-7081
Packers and Packagers, Hand	53-7064	Tank Car, Truck, and Ship Loaders	53-7121