

Oklahoma Employment Outlook 2016



Oklahoma Employment Security Commission

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January 2009

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About this publication

Long-term industry and occupational employment projections are developed on a two-year schedule funded by the U.S. Employment and Training Administration (ETA). State analysts have been provided with guidelines, training and technical support for producing these projections. Forecasts were created using the Projections Suite developed by the Utah Department of Employment Security.

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.

The primary methods of analysis for these projections were linear regression and shift-share analysis. Statewide data for some industries is projected at the three-digit level of the North American Industry Classification System (NAICS), while other data is forecast at the four-digit level.

Historical data for Oklahoma comes from the Quarterly Census of Employment and Wages (QCEW) program. Agriculture and non-covered employment data used in industry projections are taken from the American Community Survey and Current Employment Statistics (CES) program. Data for self-employed and unpaid family workers (SE & UFW, primary job) is produced from a projection matrix system based on Oklahoma's OES (Occupational Employment Statistics) survey and BLS Current Population Survey.

The goods-producing industries group is composed of the following supersectors (including the supersector's 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**.

Employment is rounded to the nearest ten. Percent changes are based on unrounded data.

Occupational employment projections

The occupational projections reflect the 2000 Standard Occupational Classification (SOC) system, which classifies more than 700 occupations. **Current employment** refers to the estimated annual employment by occupation for all industries based on 2006 data. **Projected employment** refers to the expected annual employment by occupation based on projections made for all detailed industries in Oklahoma. **Average annual openings** are job openings resulting from growth in an occupation and replacement needs in that occupation. Employment is rounded to the nearest ten. Percentage changes are based on un-rounded data and reflect the percent growth or decline in an occupation over the 10-year period. **Education and training attainment** refers to the minimum general education or training requirements for each occupation. These requirements may change based on the career ladder for each occupation.

Data limitations

Forecasting the future is not an exact science. Projections are the result of careful analysis of available data. One limitation is that projections

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, emerging

new occupations, and industrial or 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 174,000 jobs between 2006 and 2016 across all industries, an increase of over 10 percent.
- Nearly three of every five new jobs added during the 2006-to-2016 period will come from one of the following three supersectors:
 - Educational & health services
 - Professional & business services
 - Leisure & hospitality
- Only one supersector, **manufacturing**, will drop jobs during the projection period. This supersector, along with **natural resources & mining** and **construction**, makes up the goods-producing industries group.
- The service-providing industries group will contribute more than 85 percent of all job growth between 2006 and 2016.

TABLE 1: OKLAHOMA EMPLOYMENT PROJECTION by INDUSTRY, 2006-2016

INDUSTRY	EMPLOYMENT		CHANGE		SHARE	
	2006	2016	Jobs	Pct.	2006	2016
TOTAL EMPLOYMENT	1,687,270	1,861,500	174,240	10.33%	100.0%	100.0%
SE & UFW, primary job	115,600	123,160	7,570	6.54%	6.85%	6.62%
Natural resources & mining	74,520	80,190	5,680	7.62%	4.42%	4.31%
Construction	70,410	81,540	11,130	15.81%	4.17%	4.38%
Manufacturing	149,300	148,570	-730	-0.49%	8.85%	7.98%
Trade, transportation & utilities	284,030	299,970	15,940	5.61%	16.83%	16.11%
Information	29,810	31,880	2,070	6.93%	1.77%	1.71%
Financial activities	83,700	91,180	7,470	8.93%	4.96%	4.90%
Professional & business services	175,930	209,940	34,010	19.33%	10.43%	11.28%
Educational & health services	340,430	388,700	48,270	14.18%	20.18%	20.88%
Leisure & hospitality	137,110	158,660	21,550	15.72%	8.13%	8.52%
Other services (except government)	62,590	68,170	5,580	8.92%	3.71%	3.66%
Government	163,840	179,550	15,710	9.59%	9.71%	9.65%

Oklahoma's economy: a snapshot

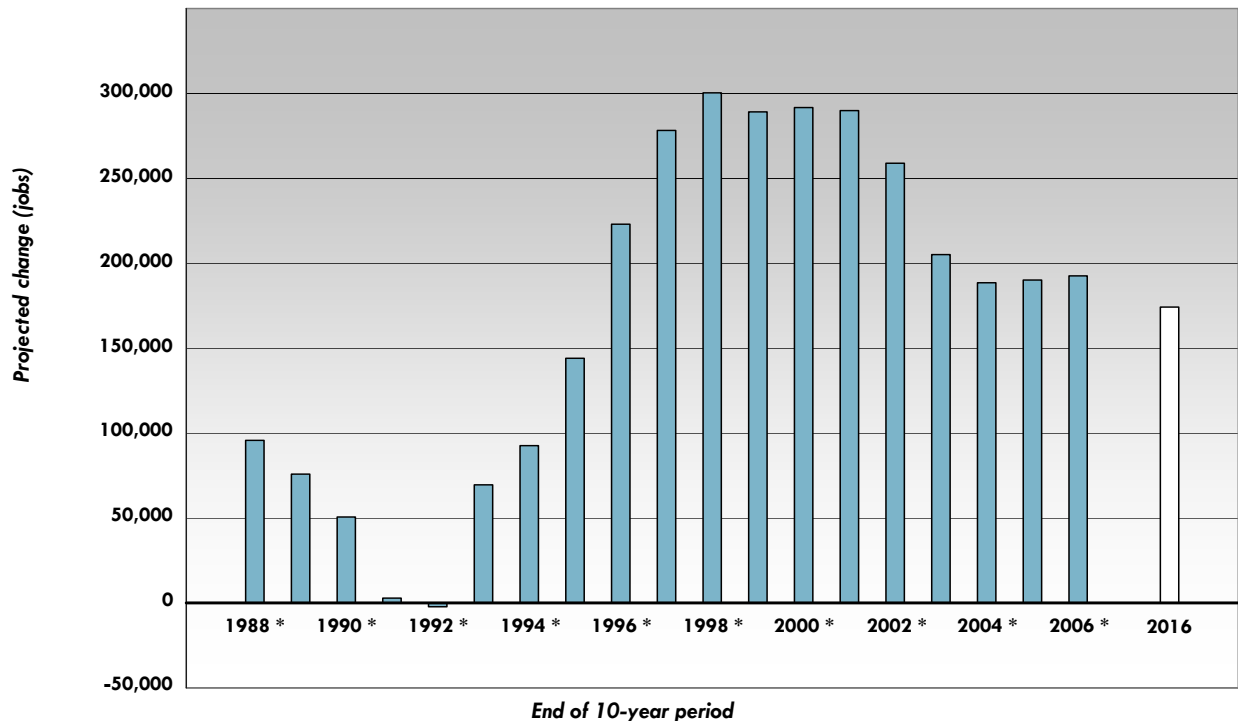
The Oklahoma economy has seen considerable change over the past few decades. After reporting strong growth throughout the 1970s, the state economy experienced a setback in the 1980s in the form of the oil bust. The state reported net job losses for 1986 through 1988 and again in 1991. The 1990s ushered 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 1.6 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 2004 and continued to climb through 2005 and 2006.

Although Oklahoma's economy is expanding, it's difficult to predict all of the factors that will impact the state during the 2006-to-2016 projection period.

A few we already know. Oklahoma, like all other states and the United States as a whole, 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 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.

Our forecast calls for Oklahoma to add nearly 175,000 jobs between 2006 and 2016, an increase of more than 10 percent. Although this should be considered strong growth, it falls short of the 193,000 jobs added during the 1996-to-2006 time period. Please note that this past 10-year period covered the economic recession that began in 2001, an event that slowed growth.

CHART 1: 10-YEAR CHANGE in OKLAHOMA NONFARM EMPLOYMENT, 1988-2006 & 2016 FORECAST



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

Overview

The three supersectors expected to account for most of the state’s job growth are **educational & health services, professional & business services, and leisure & hospitality**. When combined, these three supersectors will account for nearly 60 percent of all job growth over the 2006-to-2016 projection period.

The **educational & health services** supersector is expected to add more than 48,000 jobs during the projection period. **Educational services** will produce 18,580 new jobs, while **health services** will add 29,690 jobs. The **health services** growth will be spread across all four of its component industries (**ambulatory health care services, hospitals, nursing & residential care facilities, and social assistance**). This growth is the result of the gradually aging population and its increased future health care needs coupled with advances in new technologies that increase life expectancies.

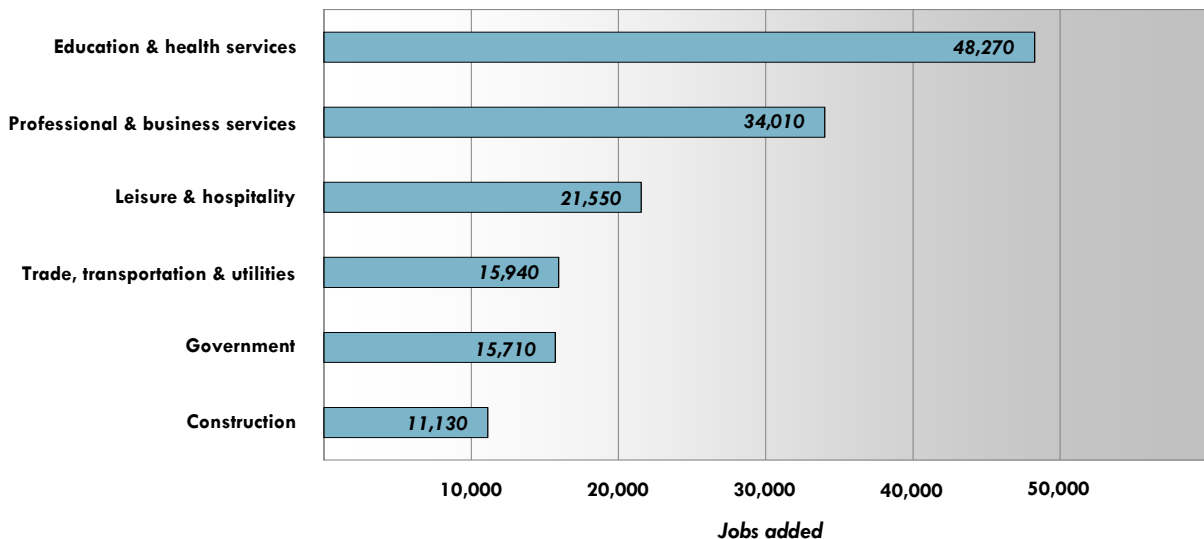
Professional & business services is projected to gain over 34,000 jobs between 2006 and 2016. This large gain will result in a job growth rate of more than 19 percent, the highest among all supersectors. The **professional, scientific & technical services** and **administrative & support**

services industries will provide all of the supersector’s growth during the period, as **management of companies & enterprises** sheds jobs. The catalyst for this growth will be business demand for sophisticated computer networks, technological solutions to current business challenges, and a variety of employment services to address complex business issues.

Leisure & hospitality is expected to grow by more than 21,000 jobs between 2006 and 2016. The **accommodation & food services** industries will provide more than four out of every five jobs gained during the projection period, driven almost entirely by **food services & drinking places**. **Amusement, gambling & recreation** industries will contribute much of the rest of the growth seen in **leisure & hospitality**. The continued growth of tribal casinos and resorts is expected to be a driving force for this supersector.

Although **trade, transportation & utilities** is expected to add the fourth largest total of new jobs, the supersector’s growth rate is below the state’s projected overall job growth rate of 10.33 percent. Movement in **retail trade** will provide more than half of the growth, driven mostly by

CHART 2: SUPERSECTORS with MOST EXPECTED JOB GROWTH, 2006-2016



job gains in **general merchandise stores**.

Wholesale trade industries will contribute 3,900 jobs of the growth, with **transportation & warehousing** making up the remaining 3,800 jobs. The factor that will most affect this supersector is technological innovation, such as electronic data exchange to help track product information, radio frequency identification that streamlines distribution, and electronic commerce options.

Government employment is expected to grow by more than 15,000 jobs between 2006 and 2016.

Local government, excluding education & hospitals is expected to account for 12,550 new jobs during the period. Growth in **state government** and **local government** will be driven by public education demands and the increasing need to augment community, health and protective services once provided to a greater degree by the federal government.

Construction will expand at a faster rate than the overall job market, growing by 11,130 jobs, or 15.81 percent, between 2006 and 2016. Although all of its industries will expand over the period, the **specialty trade contractors** industry is expected to provide a majority of the job growth. Construction projects expected to help drive growth include nursing homes, medical treatment facilities and schools.

Financial activities is expected to expand by nearly 9 percent with a gain of 7,470 jobs for the period. Although all industries are expected to add jobs, **credit intermediation & related activities** and **rental & leasing services** will lead the way.

Natural resources & mining will grow by more than 5,600 jobs, or 7.62 percent, during the projection period. Employment gains will be due almost entirely to **support activities for mining**, an industry that will add more than 4,500 jobs between 2006 and 2016. This growth will be due to Oklahoma's strong oil and natural gas industry. Nationally, this supersector is expected to shed more than 10,000 jobs over the projection period.

Other services (except government) will add more than 5,500 jobs during the forecast period, a gain of nearly 9 percent. More than 40 percent of the growth will come from the **repair & maintenance** industry. The only industry losing jobs for the period will be **private households**.

Information is expected to expand the least between 2006 and 2016, growing by just over 2,000 jobs. **Telecommunications**, the supersector's dominant industry, is expected to contribute more than 1,800 jobs.

The only supersector expected to lose jobs over the forecast period is **manufacturing**, which will contract by 730 jobs between 2006 and 2016. However, this small loss is not representative of the changes taking place within the **manufacturing** supersector. While a large number of jobs will be lost from industries such as **printing & related support activities**, other industries, like **food manufacturing**, will post solid growth between 2006 and 2016. The overall outlook for **manufacturing** is continuing demand-driven growth coupled with productivity-led employment declines.

Industry forecasts

Growth industries

Between 2006 and 2016, the 10 industries reporting the largest number of jobs gained will account for nearly 70 percent of all jobs added. These industries, known as **growth industries**, cover a variety of disciplines, including health services, professional services and hospitality.

The industry expected to add the most jobs is **administrative & support services**. This industry will expand by more than 19,000 jobs during the period. **Administrative & support services** includes areas such as **employment services, business support services** and **services to buildings**.

Next on the list of top 10 growth industries is **educational services**, an industry expected to expand by more than 18,500 jobs during the period. Factors affecting this industry will be an increased number of jobs at post-secondary and professional schools, added emphasis on structured activities for children, and anticipated educational reforms. Following closely behind

with an addition of 16,160 jobs will be the **food services & drinking places** industry. Growth is expected to result from an aging population that desires more convenient dining options.

Professional, scientific & technical services is projected to expand by 14,470 jobs, and **local government, excluding education & hospitals** will add more than 12,500 jobs. **Specialty trade contractors** is the only goods-producing industry in the top 10 growth industries for the 2006-to-2016 period.

Of the top 10 industries to add the most jobs, three are classified as **health services** industries: **hospitals, ambulatory health care, and nursing & residential care facilities**. These industries will combine to account for 23,610 new jobs between 2006 and 2016. When combined with **educational services**, the other component of the **educational & health services** supersector, these industries will provide nearly one-quarter of the jobs gained over the projection period.

TABLE 2: OKLAHOMA'S TOP 10 GROWTH INDUSTRIES, 2006-2016 (INDUSTRIES with MOST PROJECTED GROWTH)

INDUSTRY	EMPLOYMENT		CHANGE	
	2006	2016	Jobs	Pct.
Administrative & support services	98,740	117,760	19,010	19.25%
Educational services	157,250	175,830	18,580	11.82%
Food services & drinking places	110,340	126,500	16,160	14.64%
Professional, scientific & technical services	61,450	75,910	14,470	23.54%
Local government, excluding education & hospitals	79,840	92,390	12,550	15.72%
Specialty trade contractors	43,820	52,410	8,590	19.61%
Hospitals	63,490	71,890	8,400	13.23%
Self-employed workers, primary job	113,700	121,580	7,880	6.93%
Ambulatory health care services	61,200	68,900	7,700	12.58%
Nursing & residential care facilities	34,370	41,880	7,510	21.84%

Rapid growth industries

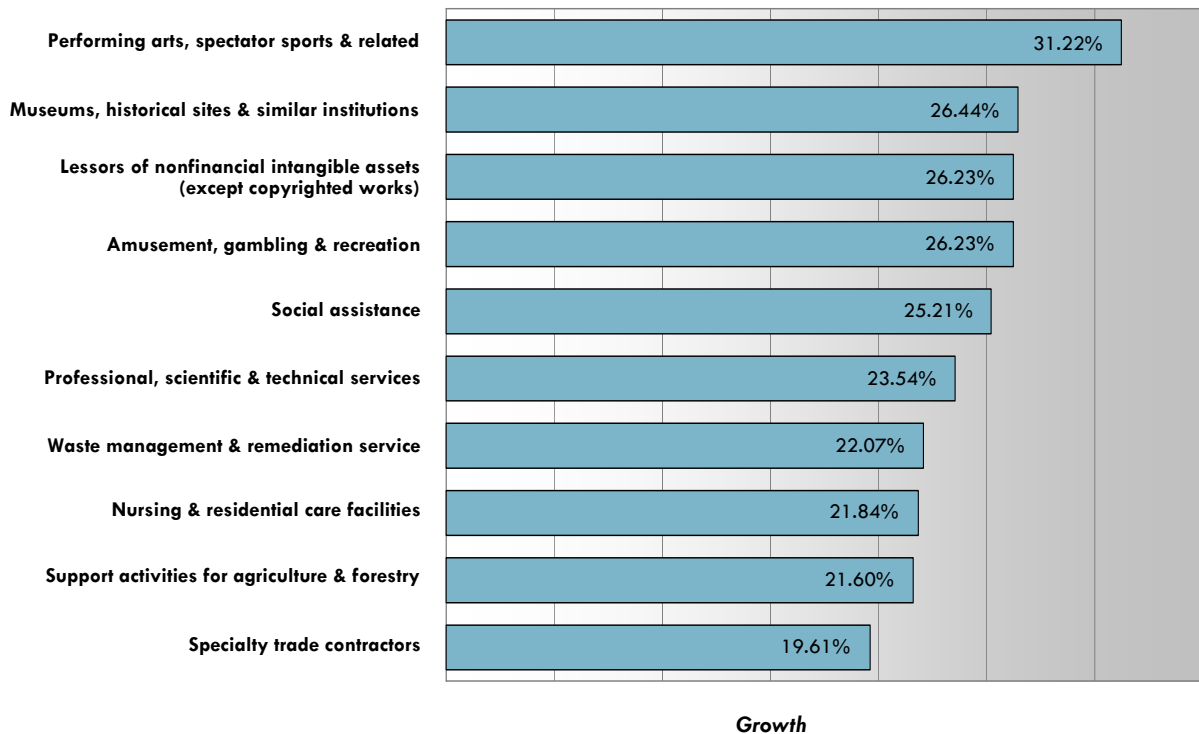
Rapid growth industries are those that report the largest percentage growth over the projection period. When looking at rapid growth industries, it is important to remember that they fall into one of two general categories. The first is made up of industries with a small number of jobs. Any growth in 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 other 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.

Three of the four industries with the highest growth rates (**performing arts, spectator sports & related industries; museums, historical sites & similar institutions; and amusement, gambling & recreational industries**) are recreation-related industries.

Other small industries represented among the top 10 rapid growth industries include **lessors of nonfinancial intangible assets (except copyrighted works), waste management & remediation services, and support activities for agriculture & forestry.**

Three industries classified as growth industries also made the list of top 10 rapid growth industries: **professional, scientific & technical services; nursing & residential care facilities; and specialty trade contractors.** All three of these industries fall into the large industry category and, when combined, are the source of more than 70 percent of the new jobs provided by the top 10 rapid growth industries. The fourth large industry on the list, **social assistance**, is expected to grow the fastest among the larger industries.

CHART 3: OKLAHOMA'S TOP 10 RAPID GROWTH INDUSTRIES, 2006-2016 (INDUSTRIES with the FASTEST GROWTH)



Declining industries

While many industries are expected to add jobs between 2006 and 2016, there are those that will do the opposite. These are known as **declining industries**. All of the industries represented in the top 10 declining industries belong to the service-providing industries. All told, the top 10 declining industries will shed a total of 6,780 jobs between 2006 and 2016.

Manufacturing industries make up six of the top 10 declining industries, with **printing & related support activities** expected to lead all industries with a projected loss of 1,110 jobs. Other

manufacturing industries making the list were **transportation equipment manufacturing, apparel manufacturing, plastics & rubber products manufacturing, paper manufacturing, and computer & electronic product manufacturing**.

Three industries that fall under **trade, transportation & utilities (miscellaneous store retailers, utilities, and nonstore retailers)**, were also included on the list. The remaining spot was claimed by **motion picture & sound recording industries**.

TABLE 2: OKLAHOMA'S TOP 10 DECLINING INDUSTRIES, 2006-2016 (INDUSTRIES with MOST PROJECTED LOSSES)

INDUSTRY	EMPLOYMENT		CHANGE	
	2006	2016	Jobs	Pct.
Printing & related support activities	3,980	2,870	-1,110	-27.92%
Transportation equipment manufacturing	16,510	15,640	-870	-5.25%
Miscellaneous store retailers	11,030	10,190	-840	-7.63%
Apparel manufacturing	1,090	430	-660	-60.57%
Plastics & rubber products manufacturing	12,640	12,000	-640	-5.04%
Utilities	9,910	9,290	-620	-6.28%
Paper manufacturing	2,870	2,250	-620	-21.62%
Nonstore retailers	2,290	1,750	-540	-23.54%
Motion picture & sound recording industries	1,600	1,110	-490	-30.39%
Computer & electronic product manufacturing	5,810	5,430	-390	-6.67%

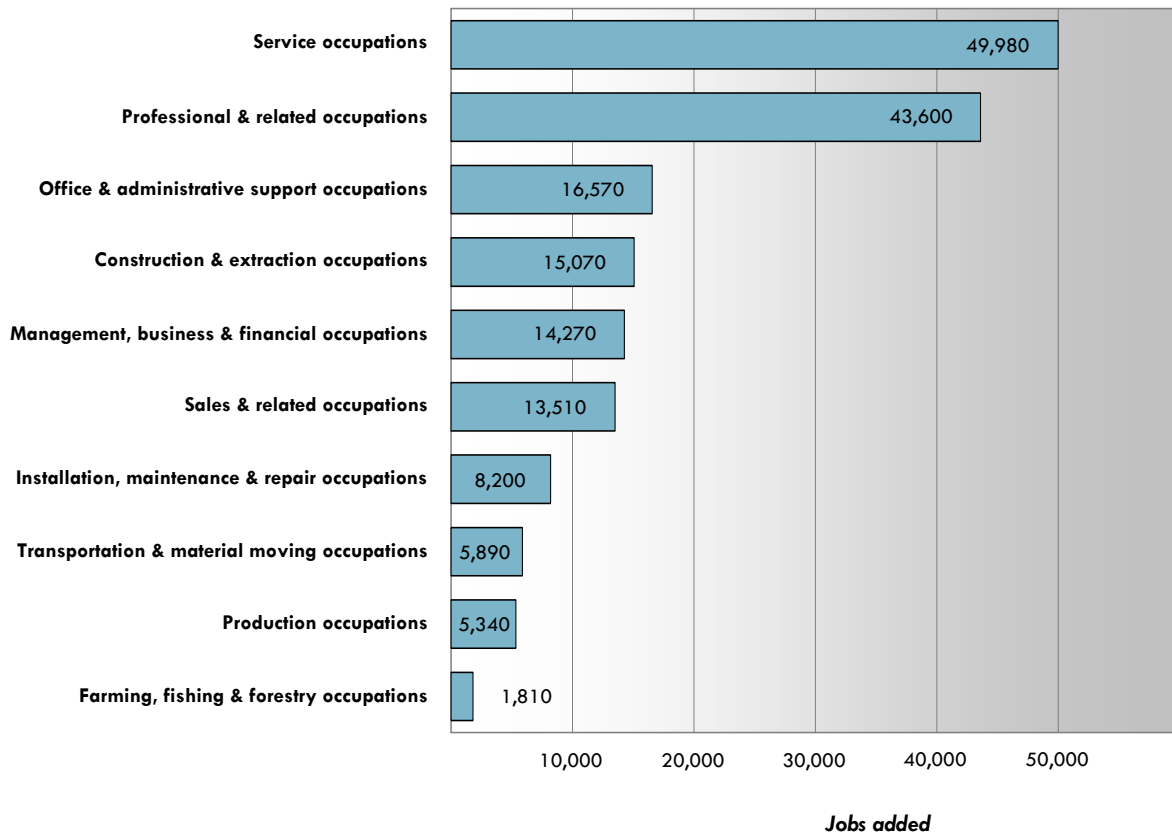
OCCUPATIONAL PROJECTIONS

Service occupations will lead growth through 2016

Oklahoma is expected to continue to grow during the projection period. Between 2006 and 2016, statewide occupational employment will expand by 174,240 jobs, or 10.3 percent. Although this is down from the 11.9 percent growth rate projected for the 2004-to-2014 period, it will still result in an average of more than 17,000 new jobs each year. One major occupational division, **service occupations**, is expected to provide the largest number of jobs, the largest percent change and the

most openings per year. Second place in each of these categories will be claimed by either **professional & related occupations** or **construction & extraction occupations**. These two divisions join **service occupations** as the only occupational divisions to increase their share of total employment over the 2006-2016 projection period. All major occupational divisions are expected to expand between 2006 and 2016.

CHART 4: OKLAHOMA’S OCCUPATIONAL EMPLOYMENT CHANGE, 2006-2016



Occupational forecasts

Two major occupational divisions, **service occupations** and **professional & related 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 more than two out of every five jobs added each year between 2006 and 2016.

Service occupations

The **service occupations** group is expected to add nearly 50,000 new jobs during the projection period, the most of any major occupational division. The division is also expected to post the highest growth rate and add the most jobs each year among the major occupational divisions.

Health care and food service occupations are projected to be among the leading growth occupations in this group. **Combined food preparation & serving workers, including fast food; personal & home care aides; waiters & waitresses; and nursing aides, orderlies &**

attendants are all expected to grow by more than 3,500 jobs between 2006 and 2016.

Professional & related occupations

Following right on the heels of **service occupations** will be **professional & related occupations**. This major division is expected to post a similar job gain and growth rate as **service occupations**, but will provide nearly 1,900 fewer jobs per year on average.

This group’s growth will be provided primarily through health care and educational occupations. The three professional & related occupations projected to add the largest average number of jobs each year between 2006 and 2016 are **registered nurses; postsecondary teachers; and elementary school teachers, except special education**. These three occupations will contribute more than one-quarter of all jobs gained by **professional & related occupations** during the projection period.

TABLE 4: OKLAHOMA EMPLOYMENT PROJECTION by OCCUAPTION, 2006-2016

OCCUPATION	EMPLOYMENT		DISTRIBUTION		CHANGE		AVERAGE ANNUAL OPENINGS
	2006	2016	2006	2016	Jobs	Pct.	
TOTAL, all occupations	1,687,270	1,861,510	100.00%	100.00%	174,240	10.33%	56,200
Management, business & financial	168,970	183,240	10.01%	9.84%	14,270	8.45%	4,840
Professional & related	316,750	360,350	18.77%	19.36%	43,600	13.76%	10,950
Service	312,380	362,360	18.51%	19.47%	49,980	16.00%	12,830
Sales & related	170,020	183,530	10.08%	9.86%	13,510	7.95%	6,670
Office & administrative support	276,710	293,280	16.40%	15.75%	16,570	5.99%	8,010
Farming, fishing & forestry	25,220	27,030	1.49%	1.45%	1,810	7.18%	800
Construction & extraction	98,950	114,020	5.86%	6.13%	15,070	15.23%	3,290
Installation, maintenance & repair	78,990	87,190	4.68%	4.68%	8,200	10.38%	2,090
Production	127,210	132,550	7.54%	7.12%	5,340	4.20%	3,440
Transportation & material moving	112,070	117,960	6.64%	6.34%	5,890	5.26%	3,290

Office & administrative support occupations

Office & administrative support occupations is a group in flux. It will grow by more than 16,500 jobs between 2006 and 2016, the third largest amount of any occupational group, and contains one-fifth of the 30 occupations expected to provide the most average job openings per year. Despite these facts, 12 of the 30 declining industries, or industries with the largest expected declines over the period, also originate from this group.

Customer service representatives are expected to add an average of more than 1,200 jobs each year. Over the same period, **file clerks** and **stock clerks & order fillers** will each average losses of at least 1,000 jobs per year.

Construction & extraction occupations

Construction & extraction occupations will expand by more than 15,000 jobs during the 2006-to-2016 period, giving it the second highest growth rate among occupational groups. Much of the anticipated growth will come from construction occupations. **Roofers** is expected to be one of the 30 fastest growing occupations, while **construction laborers** will make the list of 30 occupations with the largest number of new jobs.

Management, business & financial occupations

Management, business & financial occupations will see an increase of 14,270 jobs for the period. This group placed in the middle of all occupational groups when ranked for numeric change, percent change and average annual openings between 2006 and 2016. **General & operations managers** and **accountants & auditors** are both expected to post notable growth. When combined, these occupations will provide one of every four jobs classified under **management, business & financial occupations** in 2016.

Sales & related occupations

Sales & related occupations will continue to expand, posting a gain of more than 13,000 jobs over the period. This expansion will be driven by

continued growth in retail trade. **Retail salespersons**, the occupation with the largest employment of all occupations, joins **cashiers** and **first-line supervisors/managers of retail sales workers** as one of the 30 occupations with the most openings and one of the 30 expected to average the most jobs each year.

Installation, maintenance & repair occupations

Installation, maintenance & repair occupations are expected to add 8,200 jobs by 2016.

Maintenance & repair workers, general, expected to be one of the 30 occupations with the largest employment in 2016, will account for more than one-fifth of the jobs gained by **installation, maintenance & repair occupations** between 2006 and 2016.

Transportation & material moving occupations

Although **transportation & material moving occupations** is projected to expand over the period, its growth rate will be the second lowest among the major occupational groups. Two of this group's occupations, **laborers & freight, stock & material movers, hand** and **truck drivers, heavy & tractor-trailer**, are among the 30 occupations with the most employment and the 30 occupations expected to average the most jobs each year.

Production occupations

Production occupations will post the smallest growth rate of all occupational groups between 2006 and 2016. Although **team assemblers** will do well over the projection period, fully one-third of the 30 occupations expected to shed the most jobs belong to this group. Many of these losses are driven by the increased use of automated machinery by manufacturers and rising imports of manufactured goods.

Farming, fishing & forestry occupations

Farming, fishing & forestry occupations is the smallest occupational group. In 2006, this group

provided less than 1.5 percent of all jobs. That number is expected to decrease by 2016. Despite the anticipated contraction, **farmworkers & laborers, crop, nursery & greenhouse** will continue to be one of the occupations with the largest employment.

Job openings: growth vs. replacement

There are two basic types of job openings. Some 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 or a change in occupations. Changing employers while staying in the same occupation does not constitute a replacement opening.

Whether a business has a growth opening or a replacement opening, a new worker is 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 2006-to-2016 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 both growth openings and replacement openings during the period.

Where is the most demand?

From 2006 to 2016, the 30 occupations with the most projected job openings per year, also known as demand occupations, will represent nearly 40 percent of total employment and provide an average of more than two out of every five job openings each year. **Retail salespersons** and **cashiers**, two **sales & related occupations**, will provide the most job openings per year between

2006 and 2016, averaging 2,160 jobs per year and 2,020 jobs per year, respectively. Although **sales & related occupations** claimed the top two spots on the list, **service occupations** contributed eight of the top 30 demand occupations, followed by **office & administrative support occupations** (7) and **professional & related occupations** (6).

**TABLE 5: OKLAHOMA’S TOP 30 DEMAND OCCUPATIONS, 2006-2016
(OCCUPATIONS with LARGEST NUMBER of OPENINGS PER YEAR)**

OCCUPATION	EMPLOYMENT			AVERAGE ANNUAL OPENINGS
	2006	2016	Growth	
Retail salespersons	49,560	55,900	12.79%	2,160
Cashiers	41,960	42,170	0.50%	2,020
Waiters & waitresses	27,610	31,470	13.98%	1,890
Customer service representatives	23,590	29,370	24.50%	1,240
Combined food preparation & serving workers, including fast food	27,120	32,970	21.57%	1,100
Office clerks, general	37,370	41,130	10.06%	1,070
Registered nurses	25,680	30,890	20.29%	950
Laborers & freight, stock & material movers, hand	25,320	25,610	1.15%	840
Postsecondary teachers	19,540	23,810	21.85%	760
Janitors & cleaners, except maids & housekeeping cleaners	24,950	27,630	10.74%	750
Truck drivers, heavy & tractor-trailer	24,740	27,660	11.80%	740
Bookkeeping, accounting & auditing clerks	27,030	29,890	10.58%	710
General & operations managers	28,510	28,710	0.70%	710
Elementary school teachers, except special education	16,710	19,480	16.58%	650
Personal & home care aides	11,070	15,320	38.39%	620
Cooks, fast food	14,950	16,750	12.04%	590
Child care workers	13,180	15,090	14.49%	570
Nursing aides, orderlies & attendants	20,440	24,010	17.47%	540
Accountants & auditors	16,410	18,760	14.32%	530
Executive secretaries & administrative assistants	19,480	21,480	10.27%	510
Farmworkers & laborers, crop, nursery & greenhouse	16,050	17,080	6.42%	510
First-line supervisors/managers of retail sales workers	17,500	18,850	7.71%	510
Team assemblers	18,340	19,440	6.00%	500
Licensed practical & licensed vocational nurses	13,600	14,710	8.16%	490
Tellers	8,340	9,500	13.91%	480
Receptionists & information clerks	12,330	13,780	11.76%	450
Food preparation workers	8,550	10,030	17.31%	450
Secretaries, except legal, medical & executive	26,070	25,850	-0.84%	420
Secondary school teachers, except special & vocational education	10,550	11,460	8.63%	410
Computer support specialists	9,180	10,390	13.18%	410

Where is the most growth?

Oklahoma employment is expected to grow by more than 10 percent between 2006 and 2016. 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 make up nearly half of these growth occupations between

2006 and 2016. **Service occupations** will provide 10 of the remaining growth occupations. Two of the top three growth occupations are related to veterinary medicine. Three growth occupations are concerned with the information technology field, while four others work in the gaming industry.

**TABLE 6: OKLAHOMA'S TOP 30 GROWTH OCCUPATIONS, 2006-2016
(OCCUPATIONS with LARGEST PERCENT GROWTH)**

OCCUPATION	EMPLOYMENT			AVERAGE ANNUAL OPENINGS
	2006	2016	Growth	
Veterinary technologists & technicians	620	940	51.61%	60
Network systems & data communications analysts	2,090	3,090	47.85%	150
Veterinarians	800	1,140	42.50%	50
Computer software engineers, applications	2,180	3,030	38.99%	120
Personal & home care aides	11,070	15,320	38.39%	620
Gaming surveillance officers & gaming investigators	330	450	36.36%	20
Gaming & sports book writers & runners	510	680	33.33%	30
Home health aides	7,510	10,000	33.16%	320
Pharmacy technicians	3,690	4,890	32.52%	240
Forensic science technicians	130	170	30.77%	10
Gaming supervisors	390	510	30.77%	20
Gaming dealers	750	980	30.67%	40
Slaughterers & meat packers	2,160	2,810	30.09%	140
Criminal justice & law enforcement teachers, postsecondary	100	130	30.00%	10
Surveyors	470	610	29.79%	30
Library science teachers, postsecondary	70	90	28.57%	10
Industrial engineers	1,440	1,840	27.78%	80
Security & fire alarm systems installers	1,030	1,310	27.18%	50
Manicurists & pedicurists	150	190	26.67%	10
Correctional officers & jailers	5,510	6,970	26.50%	280
Sales representatives, services, all other	3,610	4,560	26.32%	180
Biochemists & biophysicists	230	290	26.09%	20
Computer systems analysts	3,650	4,570	25.21%	190
Political science teachers, postsecondary	160	200	25.00%	10
Animal trainers	520	650	25.00%	30
Airfield operations specialists	120	150	25.00%	10
Meat, poultry & fish cutters & trimmers	1,050	1,310	24.76%	60
Nonfarm animal caretakers	2,110	2,630	24.64%	90
Roofers	1,180	1,470	24.58%	60
Customer service representatives	23,590	29,370	24.50%	1,240

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 2006 and 2016, the largest projected loss will be seen in **file clerks**, which will drop nearly 1,200 job openings over the period. Twelve of the top 30

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

**TABLE 7: OKLAHOMA'S TOP 30 DECLINING OCCUPATIONS, 2006-2016
(OCCUPATIONS with LARGEST LOSSES)**

OCCUPATION	EMPLOYMENT		CHANGE	
	2006	2016	Number	Pct.
File clerks	2,730	1,540	-1,190	-43.59%
Stock clerks & order fillers	16,990	15,990	-1,000	-5.89%
Packers & packagers, hand	6,590	5,820	-770	-11.68%
Order clerks	2,620	1,900	-720	-27.48%
Telemarketers	6,010	5,560	-450	-7.49%
Computer programmers	3,600	3,250	-350	-9.72%
Sewing machine operators	1,530	1,200	-330	-21.57%
Electrical & electronic equipment assemblers	1,770	1,470	-300	-16.95%
Computer operators	1,120	840	-280	-25.00%
Data entry keyers	3,110	2,850	-260	-8.36%
Switchboard operators, including answering service	2,210	1,970	-240	-10.86%
Secretaries, except legal, medical & executive	26,070	25,850	-220	-0.84%
Mail clerks & mail machine operators, except postal service	1,560	1,340	-220	-14.10%
Information & record clerks, all other	1,960	1,750	-210	-10.71%
Parts salespersons	3,430	3,230	-200	-5.83%
New accounts clerks	1,100	910	-190	-17.27%
Tire builders	1,420	1,230	-190	-13.38%
Postal service mail sorters, processors & processing machine operators	1,850	1,670	-180	-9.73%
Bindery workers	620	480	-140	-22.58%
Driver/sales workers	6,510	6,370	-140	-2.15%
Meter readers, utilities	1,020	900	-120	-11.76%
Lathe & turning machine tool setters, operators & tenders, metal & plastic	860	740	-120	-13.95%
Paper goods machine setters, operators & tenders	680	560	-120	-17.65%
Pharmacy aides	1,010	890	-120	-11.88%
Prepress technicians & workers	550	440	-110	-20.00%
Radio & television announcers	700	590	-110	-15.71%
Machine feeders & offbearers	990	880	-110	-11.11%
Forging machine setters, operators & tenders, metal & plastic	520	420	-100	-19.23%
Cutting, punching & press machine setters, operators & tenders, metal & plastic	3,510	3,410	-100	-2.85%
Drilling & boring machine tool setters, operators & tenders, metal & plastic	800	700	-100	-12.50%

Education/training requirements

Education and training requirements for job openings can be divided into 11 categories: short term on-the-job training, moderate term on-the-job training, long term on-the-job training, work experience in a related occupation, postsecondary vocational training, associate degree, bachelor’s degree, bachelor’s or higher degree plus work experience, master’s degree, first professional degree, and doctoral degree. Definitions for these categories are included in the explanation of the educational attainment category.

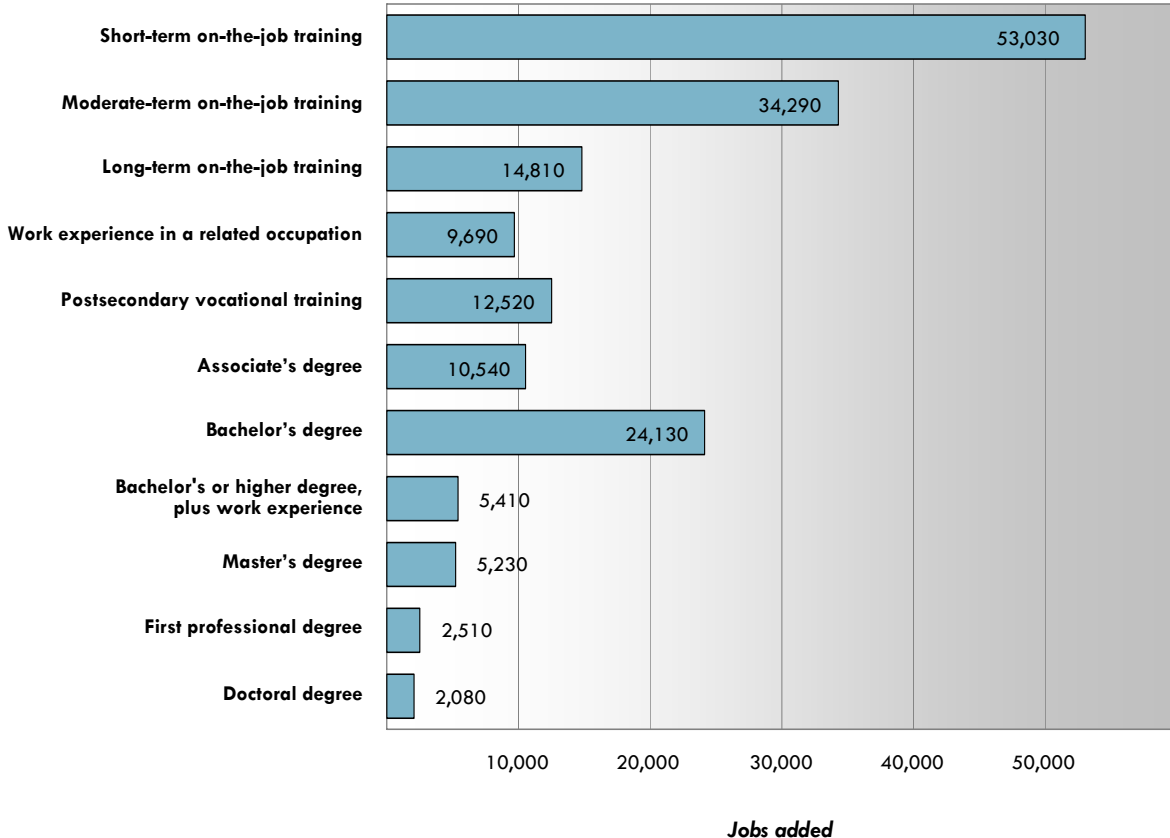
Occupations are classified into one of these 11 categories according to the following principles.

- 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 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 *Occupational Projections and Training Data, 2008-09 edition*, Bulletin 2702 (Bureau of Labor Statistics, February 2008) at <http://www.bls.gov/emp/optd/optd.pdf>.

CHART 5: OKLAHOMA’S OCCUPATIONAL EMPLOYMENT CHANGE by EDUCATION/TRAINING, 2006-2016



Projections by education/training

In 2006, more than 70 percent of job openings did not require postsecondary education. These openings required only work experience in a related field or on-the-job training. By 2016, this number is expected to drop to just below 70 percent. All activities necessary to do the jobs that require on-the-job training can be learned while working in the occupation. The four occupations requiring only work experience in a related field or on-the-job training with the highest growth rates are all service occupations: **personal & home care aides, gaming surveillance officers & gaming**

investigators, gaming & sports book writers & runners, and home health aides.

This movement means that the share of job openings requiring some level of postsecondary education or training will increase from just below to just above 30 percent of all job openings. Of the 30 occupations requiring some level of postsecondary education or training with the fastest growth rates, 26 are classified as **professional & related** occupations.

TABLE 8: OKLAHOMA EMPLOYMENT PROJECTION by EDUCATION/TRAINING, 2006-2016

EDUCATION/TRAINING CATEGORY	EMPLOYMENT		DISTRIBUTION		CHANGE		AVERAGE ANNUAL OPENINGS
	2006	2016	2006	2016	Jobs	Pct.	
TOTAL, all occupations	1,687,270	1,861,510	100.00%	100.00%	174,240	10.33%	56,200
Short-term on-the-job training	587,520	640,550	34.82%	34.41%	53,030	9.03%	22,490
Moderate-term on-the-job training	363,800	398,090	21.56%	21.39%	34,290	9.43%	10,680
Long-term on-the-job training	117,780	132,590	6.98%	7.12%	14,810	12.57%	4,090
Work experience in a related occupation	114,180	123,870	6.77%	6.65%	9,690	8.49%	3,160
Postsecondary vocational training	105,320	117,840	6.24%	6.33%	12,520	11.89%	3,050
Associate degree	62,090	72,630	3.68%	3.90%	10,540	16.98%	2,300
Bachelor's degree	176,320	200,450	10.45%	10.77%	24,130	13.69%	5,760
Bachelor's or higher degree, plus work experience	92,190	97,600	5.46%	5.24%	5,410	5.87%	2,530
Master's degree	35,080	40,310	2.08%	2.17%	5,230	14.91%	1,170
First professional degree	22,940	25,450	1.36%	1.37%	2,510	10.94%	670
Doctoral degree	10,100	12,180	0.60%	0.65%	2,080	20.59%	360

Notes: *Glossary*

Industry projections

Industry – detailed title for each industry and industry subdivision.

Employment, 2006 – estimated total number of jobs employed in that industry or industry subdivision.

Employment, 2016 – 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, 2006 – estimated total number of jobs employed in that industry or industry subdivision.

Employment, 2016 – 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 2006 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 2006.
5. The data source for the wage information used in this publication is **2007 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, 2006-2016** 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 second letter of the descriptor displays what quartile the occupation fell into when the amount of growth from 2006 to 2016 was considered. The rate of growth is defined as the difference between employment totals in 2006 and 2016. First quartile occupations, those that had the most growth (largest change) in employment from 2006 to 2016, received an "A." Occupations in the last quartile (least amount of growth) received a "D." Those in the second and third quartiles received a "B" or "C," respectively.
 - 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 **2007 Oklahoma Occupational Employment and Wage Estimates**. The four ranges are as follows:
 - D** - occupations with an average hourly wage between \$0.00 and \$11.99.
 - C** - occupations with an average hourly wage between \$12.00 and \$24.49.
 - B** - occupations with an average hourly wage between \$24.50 and \$49.74.
 - A** - occupations with an average hourly wage of \$49.75 or higher.

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 change in employment between 2006 and 2016). The letter “C” means that the average annual wage for this occupation falls between \$12.00 and \$24.49.

8. Average annual openings include openings due to growth as well as openings due to replacement needs. Average annual openings are not reduced by negative growth. An occupation may experience negative growth in some industries, which will affect 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:

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Employment projections by industry, 2006-2016

INDUSTRY	EMPLOYMENT		CHANGE	
	2006	2016	Jobs	Pct.
TOTAL EMPLOYMENT ¹	1,687,270	1,861,500	174,240	10.33%
Goods-producing industries	294,230	310,310	16,080	5.46%
Natural resources & mining	74,520	80,190	5,680	7.62%
Construction	70,410	81,540	11,130	15.81%
Manufacturing	149,300	148,570	-730	-0.49%
Services-providing industries	1,277,440	1,428,030	150,600	11.79%
Trade, transportation & utilities	284,030	299,970	15,940	5.61%
Information	29,810	31,880	2,070	6.93%
Financial activities	83,700	91,180	7,470	8.93%
Professional & business services	175,930	209,940	34,010	19.33%
Education & health services	340,430	388,700	48,270	14.18%
Leisure & hospitality	137,110	158,660	21,550	15.72%
Other services (except government)	62,590	68,170	5,580	8.92%
Government	163,840	179,550	15,710	9.59%
Total self-employed & unpaid family workers ²	115,600	123,160	7,570	6.54%
Self-employed workers	113,700	121,580	7,880	6.93%
Unpaid family workers	1,900	1,590	-310	-16.39%
Agriculture ³	32,660	33,860	1,200	3.67%
Mining	41,860	46,340	4,480	10.70%
Oil & gas extraction	16,200	16,060	-140	-0.85%
Mining (except oil & gas)	2,260	2,280	30	1.15%
Support activities for mining	23,400	27,990	4,590	19.60%
Utilities	9,910	9,290	-620	-6.28%
Construction	70,410	81,540	11,130	15.81%
Construction of buildings	14,860	16,680	1,830	12.31%
Heavy & civil engineering construction	11,730	12,450	710	6.08%
Specialty trade contractors	43,820	52,410	8,590	19.61%
Manufacturing	149,300	148,570	-730	-0.49%
Food manufacturing	19,810	23,080	3,270	16.50%
Beverage & tobacco product manufacturing	2,330	2,470	130	5.66%

¹ Total employment includes covered and non-covered employment, agricultural employment and self-employed and unpaid family workers. Covered employment data are from the Bureau of Labor Statistics (BLS) 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.

² Self-employed & unpaid family workers data are produced from the projection matrix system based on Oklahoma Occupational Employment Statistics (OES) survey and BLS Current Population Survey. The estimates of self-employed in the base year are larger than these projections round than they were in previous rounds because the file supplied by BLS 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 U.S. Census Bureau American Community Survey 2006 and QCEW program.

* Employment data is withheld to maintain data confidentiality.

INDUSTRY	EMPLOYMENT		CHANGE	
	2006	2016	Jobs	Pct.
Textile mills	120	70	-50	-40.65%
Textile product mills	770	670	-100	-12.52%
Apparel manufacturing	1,090	430	-660	-60.57%
Leather & allied product manufacturing	260	270	10	4.18%
Wood product manufacturing	3,810	4,130	320	8.39%
Paper manufacturing	2,870	2,250	-620	-21.62%
Printing & related support activities	3,980	2,870	-1,110	-27.92%
Petroleum & coal products manufacturing	2,150	1,870	-280	-13.09%
Chemical manufacturing	3,010	3,150	140	4.61%
Plastics & rubber products manufacturing	12,640	12,000	-640	-5.04%
Nonmetallic mineral product manufacturing	8,610	8,610	-10	-0.07%
Primary metal manufacturing	4,560	4,260	-300	-6.63%
Fabricated metal product manufacturing	23,150	22,880	-270	-1.17%
Machinery manufacturing	26,800	26,920	120	0.46%
Computer & electronic product manufacturing	5,810	5,430	-390	-6.67%
Electrical equipment, appliance & component manufacturing	3,200	3,590	390	12.15%
Transportation equipment manufacturing	16,510	15,640	-870	-5.25%
Furniture & related product manufacturing	2,880	2,920	50	1.60%
Miscellaneous manufacturing	4,940	5,060	130	2.59%
Wholesale trade	58,870	62,770	3,900	6.62%
Merchant wholesalers, durable goods	27,280	30,580	3,300	12.10%
Merchant wholesalers, non-durable goods	24,270	24,820	550	2.26%
Wholesale electronic markets & agents & brokers	7,310	7,360	50	0.67%
Retail trade	170,230	179,100	8,870	5.21%
Motor vehicle & parts dealers	23,080	23,660	570	2.48%
Furniture & home furnishings stores	4,920	4,990	70	1.42%
Electronics & appliance stores	4,580	4,520	-60	-1.38%
Building material & garden equipment & supplies dealers	14,890	16,980	2,090	14.01%
Food & beverage stores	22,520	22,460	-60	-0.28%
Health & personal care stores	10,830	11,800	970	8.91%
Gasoline stations	13,270	12,930	-350	-2.61%
Clothing & clothing accessories stores	11,900	12,430	520	4.39%
Sporting goods, hobby, book & music stores	6,920	7,320	390	5.69%
General merchandise stores	43,980	50,090	6,110	13.89%
Miscellaneous store retailers	11,030	10,190	-840	-7.63%
Non-store retailers	2,290	1,750	-540	-23.54%
Transportation & warehousing	45,020	48,820	3,800	8.44%
Air transportation	*	*	*	*
Rail transportation	*	*	*	*
Truck transportation	18,770	20,810	2,040	10.88%
Transit & ground passenger transport	*	*	*	*

* Employment data is withheld to maintain data confidentiality.

INDUSTRY	EMPLOYMENT		CHANGE	
	2006	2016	Jobs	Pct.
Pipeline transportation	1,380	1,160	-220	-15.87%
Scenic & sightseeing transportation	*	*	*	*
Support activities for transportation	5,330	6,240	920	17.17%
Couriers & messengers	4,210	4,330	120	2.95%
Warehousing & storage	4,040	4,720	680	16.94%
Information	29,810	31,880	2,070	6.93%
Publishing industries	7,190	7,410	220	3.12%
Motion picture & sound recording industries	1,600	1,110	-490	-30.39%
Broadcasting (except internet)	4,380	4,320	-60	-1.35%
Internet publishing & broadcasting	170	200	20	13.79%
Telecommunications	13,090	14,910	1,820	13.91%
Internet service providers, web search portals & data processing services	2,980	3,570	580	19.59%
	410	370	-40	-9.80%
Other information services	170	200	20	13.79%
Finance & insurance	59,300	63,470	4,170	7.03%
Monetary authorities - central bank	*	*	*	*
Credit intermediation & related activities	30,890	33,410	2,520	8.17%
Securities, commodity contracts & other financial investments & related activities	4,310	4,430	120	2.69%
Insurance carriers & related activities	23,730	25,270	1,540	6.49%
Funds, trusts & other financial vehicles	*	*	*	*
Real estate & rental & leasing	24,400	27,710	3,300	13.54%
Real estate	11,570	12,600	1,030	8.88%
Rental & leasing services	12,320	14,470	2,140	17.39%
Lessors of non-financial intangible assets (except copyrighted works)	510	640	130	26.23%
Professional, scientific & technical services	61,450	75,910	14,470	23.54%
Management of companies & enterprises	12,580	12,410	-160	-1.30%
Administrative & support & waste management & remediation services	101,910	121,620	19,710	19.34%
Administrative & support services	98,740	117,760	19,010	19.25%
Waste management & remediation service	3,160	3,860	700	22.07%
Educational services	157,250	175,830	18,580	11.82%
Health care & social assistance	183,180	212,870	29,690	16.21%
Ambulatory health care services	61,200	68,900	7,700	12.58%
Hospitals	63,490	71,890	8,400	13.23%
Nursing & residential care facilities	34,370	41,880	7,510	21.84%
Social assistance	24,120	30,200	6,080	25.21%
Arts, entertainment & recreation	15,660	19,890	4,240	27.05%
Performing arts, spectator sports & related industries	2,540	3,330	790	31.22%
Museums, historical sites & similar institutions	620	790	170	26.44%

* Employment data is withheld to maintain data confidentiality.

INDUSTRY	EMPLOYMENT		CHANGE	
	2006	2016	Jobs	Pct.
Amusement, gambling & recreation industries	12,490	15,770	3,280	26.23%
Accommodation & food services	121,450	138,770	17,310	14.26%
Accommodation	11,110	12,260	1,160	10.40%
Food services & drinking places	110,340	126,500	16,160	14.64%
Other services (except government)	62,590	68,170	5,580	8.92%
Repair & maintenance	13,210	15,660	2,450	18.55%
Personal & laundry services	12,400	14,200	1,810	14.59%
Religious, grantmaking, civic, professional & similar organizations	34,920	36,300	1,390	3.97%
Private households	2,070	2,000	-70	-3.15%
Government	163,840	179,550	15,710	9.59%
Federal government	45,840	47,710	1,860	4.06%
Federal government, excluding postal service	37,590	39,730	2,140	5.70%
Postal service	8,250	7,980	-280	-3.38%
State government, excluding education & hospitals	38,160	39,460	1,290	3.39%
Local government, excluding education & hospitals	79,840	92,390	12,550	15.72%

Employment Projections by Occupation, 2006-2016

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2006	2016	Numeric	Percent				
00-0000	Total, All Occupations	1,687,270	1,861,510	174,240	10.33%	56,200	\$16.21		
11-0000	Management Occupations	103,910	110,720	6,810	6.55%	2,920	\$34.01		
11-1000	Top Executives	41,020	41,390	370	0.90%	1,060	\$38.91		
11-1011	Chief Executives	11,540	11,710	170	1.47%	340	\$51.34	A B A	4
11-1021	General and Operations Managers	28,510	28,710	200	0.70%	710	\$35.19	A B B	4
11-1031	Legislators	980	980	0	0.00%	20	**	B D	4
11-2000	Advertising, Marketing, Promotions, Public Relations, and Sales Managers	5,230	5,720	490	9.37%	170	\$36.91		
11-2011	Advertising and Promotions Managers	420	420	0	0.00%	10	\$25.84	C D B	4
11-2021	Marketing Managers	1,110	1,220	110	9.91%	40	\$38.84	B B B	4
11-2022	Sales Managers	3,170	3,470	300	9.46%	100	\$38.94	A A B	4
11-2031	Public Relations Managers	550	620	70	12.73%	20	\$29.53	C B B	4
11-3000	Operations Specialties Managers	16,190	17,630	1,440	8.89%	490	\$32.35		
11-3011	Administrative Services Managers	3,400	3,750	350	10.29%	130	\$24.80	A A B	4
11-3021	Computer and Information Systems Managers	2,130	2,350	220	10.33%	60	\$40.48	B B B	4
11-3031	Financial Managers	5,570	6,110	540	9.69%	140	\$35.62	A A B	4
11-3041	Compensation and Benefits Managers	770	850	80	10.39%	30	\$30.88	C B B	4
11-3042	Training and Development Managers	390	440	50	12.82%	20	\$28.60	C C B	4
11-3049	Human Resources Managers, All Other	570	610	40	7.02%	20	\$28.09	C C B	4
11-3051	Industrial Production Managers	1,480	1,530	50	3.38%	60	\$33.49	B C B	8
11-3061	Purchasing Managers	730	760	30	4.11%	30	\$31.84	C C B	4
11-3071	Transportation, Storage, and Distribution Managers	1,180	1,270	90	7.63%	50	\$27.49	B B B	8
11-9000	Other Management Occupations	41,490	46,000	4,510	10.87%	1,200	\$26.80		
11-9011	Farm, Ranch, and Other Agricultural Managers	7,370	8,130	760	10.31%	140	\$29.16	A A B	4
11-9021	Construction Managers	4,810	5,720	910	18.92%	170	\$28.61	A A B	5
11-9031	Education Administrators, Preschool and Child Care Center/Program	760	840	80	10.53%	30	\$16.83	C B C	4
11-9032	Education Administrators, Elementary and Secondary School	2,740	3,020	280	10.22%	110	**	A A	4
11-9033	Education Administrators, Postsecondary	1,660	1,880	220	13.25%	70	\$31.03	B B B	4
11-9039	Education Administrators, All Other	300	330	30	10.00%	20	\$30.36	D C B	4
11-9041	Engineering Managers	1,570	1,690	120	7.64%	50	\$45.81	B B B	4
11-9051	Food Service Managers	5,250	5,650	400	7.62%	170	\$16.59	A A C	8
11-9061	Funeral Directors	530	620	90	16.98%	30	\$28.13	C B B	6

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2006	2016	Numeric	Percent				
11-9081	Lodging Managers	1,270	1,370	100	7.87%	40	\$11.81	B B D	8
11-9111	Medical and Health Services Managers	3,740	4,190	450	12.03%	120	\$31.63	A A B	4
11-9121	Natural Sciences Managers	310	350	40	12.90%	20	\$45.49	D C B	4
11-9131	Postmasters and Mail Superintendents	560	540	-20	-3.57%	20	\$25.92	C D B	8
11-9141	Property, Real Estate, and Community Association Managers	4,990	5,380	390	7.82%	110	\$19.85	A A C	5
11-9151	Social and Community Service Managers	1,420	1,650	230	16.20%	50	\$18.87	B B C	5
11-9199	Managers, All Other	4,170	4,560	390	9.35%	130	\$30.04	A A B	8
13-0000	Business and Financial Operations Occupations	65,060	72,520	7,460	11.47%	1,930	\$24.02		
13-1000	Business Operations Specialists	35,990	40,040	4,050	11.25%	1,070	\$23.91		
13-1021	Purchasing Agents and Buyers, Farm Products	290	260	-30	-10.34%	10	\$18.60	D D C	8
13-1022	Wholesale and Retail Buyers, Except Farm Products	1,760	1,690	-70	-3.98%	40	\$21.30	B D C	8
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	3,260	3,350	90	2.76%	80	\$24.42	A B C	8
13-1031	Claims Adjusters, Examiners, and Investigators	3,710	4,070	360	9.70%	130	\$21.94	A A C	9
13-1032	Insurance Appraisers, Auto Damage	450	500	50	11.11%	20	\$22.40	C C C	9
13-1041	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	3,180	3,380	200	6.29%	60	\$20.89	A B C	9
13-1051	Cost Estimators	1,650	2,020	370	22.42%	80	\$24.46	B A C	8
13-1071	Employment, Recruitment, and Placement Specialists	1,540	1,720	180	11.69%	60	\$18.05	B B C	5
13-1072	Compensation, Benefits, and Job Analysis Specialists	1,250	1,400	150	12.00%	50	\$21.25	B B C	5
13-1073	Training and Development Specialists	3,050	3,600	550	18.03%	130	\$19.40	A A C	5
13-1079	Human Resources, Training, and Labor Relations Specialists, All Other	1,510	1,650	140	9.27%	50	\$24.43	B B C	5
13-1081	Logisticians	1,830	2,130	300	16.39%	60	\$30.27	B A B	5
13-1111	Management Analysts	6,100	6,790	690	11.31%	180	\$26.81	A A B	4
13-1121	Meeting and Convention Planners	370	410	40	10.81%	20	\$15.52	C C C	5
13-1199	Business Operations Specialists, All Other	5,900	6,890	990	16.78%	170	\$27.93	A A B	5
13-2000	Financial Specialists	29,070	32,480	3,410	11.73%	860	\$24.15		
13-2011	Accountants and Auditors	16,410	18,760	2,350	14.32%	530	\$24.36	A A C	5
13-2021	Appraisers and Assessors of Real Estate	1,020	1,140	120	11.76%	40	\$16.52	B B C	7
13-2031	Budget Analysts	580	630	50	8.62%	20	\$26.51	C C B	5
13-2041	Credit Analysts	940	920	-20	-2.13%	40	\$22.63	B D C	5
13-2051	Financial Analysts	980	1,140	160	16.33%	30	\$29.80	B B B	5
13-2052	Personal Financial Advisors	1,200	1,330	130	10.83%	30	\$28.72	B B B	5
13-2053	Insurance Underwriters	1,340	1,410	70	5.22%	50	\$21.51	B B C	5
13-2061	Financial Examiners	270	330	60	22.22%	20	\$35.29	D C B	5

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		2006	2016	Numeric	Percent				
13-2071	Loan Counselors	580	620	40	6.90%	10	\$17.53	C C C	5
13-2072	Loan Officers	3,680	4,100	420	11.41%	90	\$25.08	A A B	5
13-2081	Tax Examiners, Collectors, and Revenue Agents	900	990	90	10.00%	40	\$21.03	C B C	5
13-2082	Tax Preparers	890	810	-80	-8.99%	20	\$11.56	C D D	10
13-2099	Financial Specialists, All Other	340	370	30	8.82%	20	\$27.97	C C B	5
15-0000	Computer and Mathematical Occupations	28,540	33,580	5,040	17.66%	1,230	\$25.48		
15-1000	Computer Specialists	27,930	32,940	5,010	17.94%	1,210	\$25.36		
15-1011	Computer and Information Scientists, Research	170	190	20	11.76%	10	\$36.51	D C B	2
15-1021	Computer Programmers	3,600	3,250	-350	-9.72%	80	\$28.57	A D B	5
15-1031	Computer Software Engineers, Applications	2,180	3,030	850	38.99%	120	\$31.19	B A B	5
15-1032	Computer Software Engineers, Systems Software	1,640	2,000	360	21.95%	60	\$35.20	B A B	5
15-1041	Computer Support Specialists	9,180	10,390	1,210	13.18%	410	\$16.71	A A C	6
15-1051	Computer Systems Analysts	3,650	4,570	920	25.21%	190	\$30.78	A A B	5
15-1061	Database Administrators	1,140	1,410	270	23.68%	40	\$27.99	B B B	5
15-1071	Network and Computer Systems Administrators	2,980	3,610	630	21.14%	140	\$25.92	A A B	5
15-1081	Network Systems and Data Communications Analysts	2,090	3,090	1,000	47.85%	150	\$26.24	B A B	5
15-1099	Computer Specialists, All Other	1,330	1,450	120	9.02%	50	\$32.22	B B B	6
15-2000	Mathematical Scientists	610	640	30	4.92%	20	\$29.63		
15-2011	Actuaries	60	60	0	0.00%	10	\$29.68	D D B	4
15-2031	Operations Research Analysts	330	340	10	3.03%	10	\$32.98	D C B	3
15-2041	Statisticians	220	230	10	4.55%	10	\$20.81	D C C	3
17-0000	Architecture and Engineering Occupations	24,440	28,000	3,560	14.57%	920	\$30.36		
17-1000	Architects, Surveyors, and Cartographers	1,900	2,360	460	24.21%	90	\$25.60		
17-1011	Architects, Except Landscape and Naval	1,270	1,570	300	23.62%	60	\$30.24	B A B	5
17-1022	Surveyors	470	610	140	29.79%	30	\$19.41	C B C	5
17-2000	Engineers	13,290	15,210	1,920	14.45%	500	\$36.08		
17-2011	Aerospace Engineers	920	1,120	200	21.74%	40	\$38.36	C B B	5
17-2031	Biomedical Engineers	140	170	30	21.43%	10	\$28.58	D C B	5
17-2041	Chemical Engineers	240	270	30	12.50%	10	\$33.47	D C B	5
17-2051	Civil Engineers	1,460	1,740	280	19.18%	70	\$34.05	B A B	5
17-2061	Computer Hardware Engineers	300	300	0	0.00%	10	\$38.57	D D B	5
17-2071	Electrical Engineers	870	970	100	11.49%	30	\$32.21	C B B	5
17-2072	Electronics Engineers, Except Computer	1,800	1,980	180	10.00%	60	\$36.46	B B B	5
17-2081	Environmental Engineers	230	270	40	17.39%	20	\$34.51	D C B	5
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	360	390	30	8.33%	20	\$25.56	C C B	5
17-2112	Industrial Engineers	1,440	1,840	400	27.78%	80	\$32.19	B A B	5
17-2131	Materials Engineers	130	150	20	15.38%	10	\$28.93	D C B	5

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2006	2016	Numeric	Percent				
17-2141	Mechanical Engineers	2,130	2,310	180	8.45%	70	\$33.99	B B B	5
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	290	330	40	13.79%	20	\$52.25	D C A	5
17-2171	Petroleum Engineers	2,160	2,480	320	14.81%	90	\$45.75	B A B	5
17-2199	Engineers, All Other	850	920	70	8.24%	20	\$36.02	C B B	5
17-3000	Drafters, Engineering, and Mapping Technicians	9,260	10,440	1,180	12.74%	330	\$23.49		
17-3011	Architectural and Civil Drafters	1,160	1,250	90	7.76%	50	\$20.39	B B C	7
17-3012	Electrical and Electronics Drafters	390	410	20	5.13%	20	\$21.29	C C C	7
17-3013	Mechanical Drafters	1,450	1,620	170	11.72%	60	\$19.73	B B C	7
17-3022	Civil Engineering Technicians	980	1,170	190	19.39%	40	\$22.45	B B C	6
17-3023	Electrical and Electronic Engineering Technicians	1,770	1,910	140	7.91%	50	\$25.86	B B B	6
17-3024	Electro-Mechanical Technicians	250	300	50	20.00%	10	\$19.93	D C C	6
17-3025	Environmental Engineering Technicians	160	190	30	18.75%	10	\$19.42	D C C	6
17-3027	Mechanical Engineering Technicians	490	560	70	14.29%	20	\$22.94	C C C	6
17-3029	Engineering Technicians, Except Drafters, All Other	560	590	30	5.36%	20	\$27.38	C C B	6
17-3031	Surveying and Mapping Technicians	700	830	130	18.57%	30	\$18.22	C B C	10
19-0000	Life, Physical, and Social Science Occupations	14,540	16,690	2,150	14.79%	570	\$25.07		
19-1000	Life Scientists	2,660	3,080	420	15.79%	120	\$25.20		
19-1012	Food Scientists and Technologists	70	80	10	14.29%	10	\$23.34	D D C	5
19-1013	Soil and Plant Scientists	130	140	10	7.69%	10	\$35.01	D C B	5
19-1021	Biochemists and Biophysicists	230	290	60	26.09%	20	**	D C	2
19-1022	Microbiologists	60	70	10	16.67%	10	\$24.38	D D C	2
19-1023	Zoologists and Wildlife Biologists	70	80	10	14.29%	10	\$24.11	D D C	5
19-1029	Biological Scientists, All Other	170	180	10	5.88%	10	\$31.51	D C B	5
19-1031	Conservation Scientists	500	550	50	10.00%	20	\$23.24	C C C	5
19-1032	Foresters	50	60	10	20.00%	10	\$22.46	D D C	5
19-1042	Medical Scientists, Except Epidemiologists	1,150	1,400	250	21.74%	60	\$24.03	B B C	2
19-2000	Physical Scientists	3,480	4,000	520	14.94%	150	\$31.15		
19-2012	Physicists	50	50	0	0.00%	10	\$62.13	D D A	2
19-2021	Atmospheric and Space Scientists	240	280	40	16.67%	10	**	D C	5
19-2031	Chemists	330	350	20	6.06%	20	\$29.26	D C B	5
19-2041	Environmental Scientists and Specialists, Including Health	1,670	1,930	260	15.57%	70	\$21.00	B B C	3
19-2042	Geoscientists, Except Hydrologists and Geographers	1,070	1,250	180	16.82%	50	\$40.47	B B B	3
19-2043	Hydrologists	60	60	0	0.00%	10	\$37.07	D D B	3
19-2099	Physical Scientists, All Other	80	80	0	0.00%	10	\$38.88	D D B	5
19-3000	Social Scientists and Related Workers	5,030	5,680	650	12.92%	140	\$25.12		

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		2006	2016	Numeric	Percent				
19-3011	Economists	90	90	0	0.00%	10	\$23.04	D D C	3
19-3021	Market Research Analysts	2,160	2,380	220	10.19%	40	\$24.87	B B B	5
19-3022	Survey Researchers	260	290	30	11.54%	10	\$17.56	D C C	5
19-3031	Clinical, Counseling, and School Psychologists	1,800	2,090	290	16.11%	60	\$23.79	B A C	2
19-3039	Psychologists, All Other	110	110	0	0.00%	10	\$34.08	D D B	3
19-3051	Urban and Regional Planners	330	390	60	18.18%	20	\$30.95	D C B	3
19-3093	Historians	70	80	10	14.29%	10	\$20.82	D D C	3
19-3099	Social Scientists and Related Workers, All Other	220	240	20	9.09%	10	\$29.03	D C B	3
19-4000	Life, Physical, and Social Science Technicians	3,390	3,950	560	16.52%	180	\$18.64		
19-4011	Agricultural and Food Science Technicians	180	200	20	11.11%	10	\$20.08	D C C	6
19-4021	Biological Technicians	900	1,100	200	22.22%	60	\$12.53	C B C	6
19-4031	Chemical Technicians	490	550	60	12.24%	30	\$16.23	C C C	6
19-4041	Geological and Petroleum Technicians	820	940	120	14.63%	50	\$22.40	C B C	6
19-4091	Environmental Science and Protection Technicians, Including Health	290	360	70	24.14%	20	\$18.66	D C C	6
19-4092	Forensic Science Technicians	130	170	40	30.77%	10	\$23.52	D C C	6
19-4093	Forest and Conservation Technicians	210	220	10	4.76%	10	**	D C	6
19-4099	Life, Physical, and Social Science Technicians, All Other	280	310	30	10.71%	20	\$28.34	D C B	6
21-0000	Community and Social Services Occupations	24,610	27,670	3,060	12.43%	740	\$16.20		
21-1000	Counselors, Social Workers, and Other Community and Social Service Specialists	17,930	20,500	2,570	14.33%	590	\$16.20		
21-1011	Substance Abuse and Behavioral Disorder Counselors	1,030	1,270	240	23.30%	50	\$15.42	B B C	3
21-1012	Educational, Vocational, and School Counselors	3,210	3,560	350	10.90%	100	\$18.42	A A C	3
21-1014	Mental Health Counselors	1,550	1,850	300	19.35%	70	\$18.53	B A C	3
21-1015	Rehabilitation Counselors	1,850	2,170	320	17.30%	70	\$11.77	B A D	3
21-1021	Child, Family, and School Social Workers	2,870	3,200	330	11.50%	100	\$14.61	A A C	5
21-1022	Medical and Public Health Social Workers	1,350	1,560	210	15.56%	50	\$18.29	B B C	5
21-1023	Mental Health and Substance Abuse Social Workers	870	980	110	12.64%	30	\$16.61	C B C	3
21-1029	Social Workers, All Other	600	640	40	6.67%	20	\$17.94	C C C	5
21-1091	Health Educators	600	670	70	11.67%	20	\$22.13	C B C	3
21-1092	Probation Officers and Correctional Treatment Specialists	900	1,080	180	20.00%	30	\$14.49	C B C	5
21-1093	Social and Human Service Assistants	2,260	2,570	310	13.72%	60	\$14.34	B A C	10
21-1099	Community and Social Service Specialists, All Other	590	660	70	11.86%	20	\$15.37	C B C	5
21-2000	Religious Workers	6,690	7,170	480	7.17%	150	\$16.24		
21-2011	Clergy	5,010	5,370	360	7.19%	110	\$18.29	A A C	3
21-2021	Directors, Religious Activities and Education	1,190	1,270	80	6.72%	40	\$14.44	B B C	5

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		2006	2016	Numeric	Percent				
21-2099	Religious Workers, All Other	490	530	40	8.16%	10	\$9.33	C C D	5
23-0000	Legal Occupations	12,550	13,850	1,300	10.36%	360	\$34.42		
23-1000	Lawyers, Judges, and Related Workers	8,010	8,880	870	10.86%	240	\$47.39		
23-1011	Lawyers	7,380	8,200	820	11.11%	230	\$48.63	A A B	1
23-1021	Administrative Law Judges, Adjudicators, and Hearing Officers	160	170	10	6.25%	10	\$35.36	D C B	4
23-1023	Judges, Magistrate Judges, and Magistrates	450	480	30	6.67%	20	\$38.67	C C B	4
23-2000	Legal Support Workers	4,550	4,980	430	9.45%	120	\$19.00		
23-2011	Paralegals and Legal Assistants	2,030	2,480	450	22.17%	80	\$20.35	B A C	6
23-2091	Court Reporters	280	300	20	7.14%	10	\$22.75	D C C	7
23-2092	Law Clerks	230	230	0	0.00%	10	\$18.79	D D C	5
23-2093	Title Examiners, Abstractors, and Searchers	1,810	1,770	-40	-2.21%	30	\$16.40	B D C	10
23-2099	Legal Support Workers, All Other	210	220	10	4.76%	10	\$18.16	D C C	5
25-0000	Education, Training, and Library Occupations	100,450	114,450	14,000	13.94%	3,380	\$17.12		
25-1000	Postsecondary Teachers	19,540	23,810	4,270	21.85%	760	\$25.98		
25-2000	Primary, Secondary, and Special Education School Teachers	49,840	56,710	6,870	13.78%	1,830	\$17.25		
25-2011	Preschool Teachers, Except Special Education	7,040	7,920	880	12.50%	210	\$10.51	A A D	7
25-2012	Kindergarten Teachers, Except Special Education	2,170	2,580	410	18.89%	80	**	B A	5
25-2021	Elementary School Teachers, Except Special Education	16,710	19,480	2,770	16.58%	650	**	A A	5
25-2022	Middle School Teachers, Except Special and Vocational Education	7,490	8,570	1,080	14.42%	280	**	A A	5
25-2023	Vocational Education Teachers, Middle School	160	160	0	0.00%	10	**	D D	4
25-2031	Secondary School Teachers, Except Special and Vocational Education	10,550	11,460	910	8.63%	410	**	A A	5
25-2032	Vocational Education Teachers, Secondary School	1,270	1,260	-10	-0.79%	40	**	B D	4
25-2041	Special Education Teachers, Preschool, Kindergarten, and Elementary School	2,220	2,710	490	22.07%	100	**	B A	5
25-2042	Special Education Teachers, Middle School	1,000	1,200	200	20.00%	50	**	B B	5
25-2043	Special Education Teachers, Secondary School	1,270	1,420	150	11.81%	50	**	B B	5
25-3000	Other Teachers and Instructors	13,880	15,080	1,200	8.65%	270	\$11.11		
25-3011	Adult Literacy, Remedial Education, and GED Teachers and Instructors	740	800	60	8.11%	20	\$17.69	C C C	5
25-3021	Self-Enrichment Education Teachers	1,890	2,100	210	11.11%	50	\$17.07	B B C	8
25-3099	Teachers and Instructors, All Other	11,270	12,180	910	8.07%	220	**	A A	5
25-4000	Librarians, Curators, and Archivists	4,060	4,450	390	9.61%	200	\$14.41		
25-4011	Archivists	100	100	0	0.00%	10	\$17.22	D D C	3
25-4012	Curators	70	80	10	14.29%	10	\$18.05	D D C	3

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2006	2016	Numeric	Percent				
25-4013	Museum Technicians and Conservators	70	80	10	14.29%	10	\$16.32	D D C	3
25-4021	Librarians	2,020	2,160	140	6.93%	70	\$18.38	B B C	3
25-4031	Library Technicians	1,830	2,040	210	11.48%	110	\$9.68	B B D	7
25-9000	Other Education, Training, and Library Occupations	13,130	14,420	1,290	9.82%	340	\$9.58		
25-9011	Audio-Visual Collections Specialists	70	70	0	0.00%	10	\$15.43	D D C	10
25-9021	Farm and Home Management Advisors	70	70	0	0.00%	10	\$17.09	D D C	5
25-9031	Instructional Coordinators	1,300	1,530	230	17.69%	50	\$21.64	B B C	3
25-9041	Teacher Assistants	10,400	11,360	960	9.23%	270	**	A A	11
25-9099	Education, Training, and Library Workers, All Other	1,300	1,410	110	8.46%	30	\$9.72	B B D	5
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	23,250	24,830	1,580	6.80%	750	\$17.18		
27-1000	Art and Design Workers	5,620	5,870	250	4.45%	190	\$16.25		
27-1011	Art Directors	280	280	0	0.00%	10	\$24.86	D D B	4
27-1012	Craft Artists	50	40	-10	-20.00%	10	\$14.35	D D C	9
27-1013	Fine Artists, Including Painters, Sculptors, and Illustrators	140	170	30	21.43%	10	\$24.33	D C C	9
27-1014	Multi-Media Artists and Animators	250	300	50	20.00%	20	\$21.72	D C C	5
27-1021	Commercial and Industrial Designers	650	690	40	6.15%	30	\$22.04	C C C	5
27-1023	Floral Designers	1,060	980	-80	-7.55%	30	\$9.79	B D D	10
27-1024	Graphic Designers	1,980	2,050	70	3.54%	60	\$17.84	B B C	5
27-1025	Interior Designers	390	420	30	7.69%	20	\$19.42	C C C	6
27-1026	Merchandise Displayers and Window Trimmers	710	780	70	9.86%	30	\$10.35	C B D	10
27-1027	Set and Exhibit Designers	80	90	10	12.50%	10	\$20.40	D C C	5
27-2000	Entertainers and Performers, Sports and Related Workers	6,870	7,280	410	5.97%	220	\$15.22		
27-2012	Producers and Directors	1,170	1,170	0	0.00%	40	\$19.55	B D C	4
27-2021	Athletes and Sports Competitors	110	120	10	9.09%	10	**	D C	9
27-2022	Coaches and Scouts	2,450	2,720	270	11.02%	100	**	A B	9
27-2042	Musicians and Singers	1,830	1,900	70	3.83%	50	\$14.27	B B C	9
27-3000	Media and Communication Workers	7,540	8,140	600	7.96%	240	\$20.49		
27-3011	Radio and Television Announcers	700	590	-110	-15.71%	30	\$14.13	C D C	9
27-3012	Public Address System and Other Announcers	130	130	0	0.00%	10	**	D D	9
27-3022	Reporters and Correspondents	1,080	1,100	20	1.85%	40	\$17.03	B C C	4
27-3031	Public Relations Specialists	2,050	2,280	230	11.22%	40	\$22.21	B B C	5
27-3041	Editors	900	930	30	3.33%	30	\$16.04	C C C	5
27-3042	Technical Writers	470	560	90	19.15%	30	\$23.83	C B C	5
27-3043	Writers and Authors	1,790	2,090	300	16.76%	70	\$31.89	B A B	5
27-3091	Interpreters and Translators	240	280	40	16.67%	10	\$11.23	D C D	9

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		2006	2016	Numeric	Percent				
27-4000	Media and Communication Equipment Workers	3,230	3,550	320	9.91%	120	\$13.33		
27-4011	Audio and Video Equipment Technicians	240	280	40	16.67%	20	\$13.74	D C C	9
27-4012	Broadcast Technicians	610	630	20	3.28%	30	\$13.36	C C C	6
27-4021	Photographers	1,770	2,060	290	16.38%	70	\$11.13	B A D	9
27-4031	Camera Operators, Television, Video, and Motion Picture	310	290	-20	-6.45%	10	\$17.44	D D C	10
27-4099	Media and Communication Equipment Workers, All Other	70	70	0	0.00%	10	\$30.52	D D B	10
29-0000	Healthcare Practitioners and Technical Occupations	88,470	101,370	12,900	14.58%	3,040	\$25.97		
29-1000	Health Diagnosing and Treating Practitioners	49,850	57,820	7,970	15.99%	1,650	\$33.78		
29-1011	Chiropractors	700	710	10	1.43%	10	\$38.23	C C B	1
29-1021	Dentists, General	1,640	1,840	200	12.20%	60	\$55.25	B B A	1
29-1029	Dentists, All Other Specialists	990	1,090	100	10.10%	30	\$30.65	B B B	1
29-1031	Dietitians and Nutritionists	810	840	30	3.70%	30	\$21.70	C C C	5
29-1041	Optometrists	520	500	-20	-3.85%	10	\$43.10	C D B	1
29-1051	Pharmacists	3,030	3,710	680	22.44%	130	\$44.33	A A B	1
29-1060	Physicians and Surgeons	7,400	7,730	330	4.46%	170	\$81.71	A A A	1
29-1071	Physician Assistants	830	940	110	13.25%	30	\$38.75	C B B	5
29-1111	Registered Nurses	25,680	30,890	5,210	20.29%	950	\$24.20	A A C	6
29-1121	Audiologists	130	130	0	0.00%	10	\$26.39	D D B	1
29-1122	Occupational Therapists	970	1,090	120	12.37%	30	**	B B	3
29-1123	Physical Therapists	2,160	2,530	370	17.13%	70	\$32.92	B A B	3
29-1124	Radiation Therapists	260	310	50	19.23%	10	\$27.20	D C B	6
29-1125	Recreational Therapists	360	350	-10	-2.78%	10	\$17.11	C D C	5
29-1126	Respiratory Therapists	1,200	1,470	270	22.50%	50	\$22.16	B B C	6
29-1127	Speech-Language Pathologists	1,450	1,580	130	8.97%	50	\$23.50	B B C	3
29-1131	Veterinarians	800	1,140	340	42.50%	50	\$31.44	C A B	1
29-1199	Health Diagnosing and Treating Practitioners, All Other	740	790	50	6.76%	20	\$36.08	C C B	5
29-2000	Health Technologists and Technicians	37,150	41,930	4,780	12.87%	1,360	\$15.68		
29-2011	Medical and Clinical Laboratory Technologists	1,630	1,770	140	8.59%	40	\$22.20	B B C	5
29-2012	Medical and Clinical Laboratory Technicians	1,400	1,500	100	7.14%	40	\$15.12	B B C	6
29-2021	Dental Hygienists	1,560	1,830	270	17.31%	60	\$27.78	B B B	6
29-2031	Cardiovascular Technologists and Technicians	550	670	120	21.82%	20	\$16.48	C B C	6
29-2032	Diagnostic Medical Sonographers	500	560	60	12.00%	20	\$27.98	C C B	6
29-2033	Nuclear Medicine Technologists	240	260	20	8.33%	10	\$28.68	D C B	6
29-2034	Radiologic Technologists and Technicians	2,130	2,350	220	10.33%	60	\$20.96	B B C	6

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		2006	2016	Numeric	Percent				
29-2041	Emergency Medical Technicians and Paramedics	3,960	4,540	580	14.65%	110	\$11.08	A A D	7
29-2051	Dietetic Technicians	400	460	60	15.00%	20	\$10.26	C C D	10
29-2052	Pharmacy Technicians	3,690	4,890	1,200	32.52%	240	\$11.52	A A D	10
29-2053	Psychiatric Technicians	930	880	-50	-5.38%	30	\$11.00	C D D	10
29-2054	Respiratory Therapy Technicians	390	390	0	0.00%	20	\$17.33	C D C	6
29-2055	Surgical Technologists	1,470	1,770	300	20.41%	80	\$15.63	B A C	7
29-2056	Veterinary Technologists and Technicians	620	940	320	51.61%	60	\$13.25	C A C	6
29-2061	Licensed Practical and Licensed Vocational Nurses	13,600	14,710	1,110	8.16%	490	\$15.23	A A C	7
29-2071	Medical Records and Health Information Technicians	2,740	3,030	290	10.58%	110	\$13.69	A A C	6
29-2081	Opticians, Dispensing	770	750	-20	-2.60%	30	\$12.70	C D C	9
29-2091	Orthotists and Prosthetists	90	100	10	11.11%	10	\$26.88	D C B	5
29-2099	Health Technologists and Technicians, All Other	580	620	40	6.90%	10	\$15.14	C C C	7
29-9000	Other Healthcare Practitioners and Technical Occupations	1,470	1,620	150	10.20%	50	\$21.94		
29-9011	Occupational Health and Safety Specialists	710	770	60	8.45%	20	\$24.21	C C C	5
29-9012	Occupational Health and Safety Technicians	140	160	20	14.29%	10	\$25.12	D C B	7
29-9091	Athletic Trainers	230	280	50	21.74%	10	**	D C	5
29-9099	Healthcare Practitioners and Technical Workers, All Other	400	430	30	7.50%	10	\$14.42	C C C	7
31-0000	Healthcare Support Occupations	46,990	55,700	8,710	18.54%	1,390	\$10.53		
31-1000	Nursing, Psychiatric, and Home Health Aides	28,780	34,810	6,030	20.95%	870	\$9.31		
31-1011	Home Health Aides	7,510	10,000	2,490	33.16%	320	\$9.23	A A D	11
31-1012	Nursing Aides, Orderlies, and Attendants	20,440	24,010	3,570	17.47%	540	\$9.30	A A D	7
31-1013	Psychiatric Aides	840	810	-30	-3.57%	10	\$10.30	C D D	11
31-2000	Occupational and Physical Therapist Assistants and Aides	2,440	2,880	440	18.03%	80	\$15.83		
31-2011	Occupational Therapist Assistants	490	580	90	18.37%	20	\$21.75	C B C	6
31-2012	Occupational Therapist Aides	220	250	30	13.64%	10	\$11.65	D C D	11
31-2021	Physical Therapist Assistants	1,020	1,230	210	20.59%	40	\$19.42	B B C	6
31-2022	Physical Therapist Aides	730	830	100	13.70%	20	\$9.08	C B D	11
31-9000	Other Healthcare Support Occupations	15,770	18,020	2,250	14.27%	450	\$11.90		
31-9011	Massage Therapists	600	690	90	15.00%	20	**	C B	7
31-9091	Dental Assistants	3,170	3,690	520	16.40%	110	\$13.30	A A C	10
31-9092	Medical Assistants	6,970	8,270	1,300	18.65%	220	\$11.88	A A D	10
31-9093	Medical Equipment Preparers	420	470	50	11.90%	10	\$12.24	C C C	11
31-9094	Medical Transcriptionists	1,150	1,200	50	4.35%	20	\$12.93	B C C	7
31-9095	Pharmacy Aides	1,010	890	-120	-11.88%	20	\$8.80	B D D	11
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	980	1,210	230	23.47%	40	\$9.21	B B D	11

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2006	2016	Numeric	Percent				
31-9099	Healthcare Support Workers, All Other	1,510	1,630	120	7.95%	40	\$12.30	B B C	11
33-0000	Protective Service Occupations	36,920	43,690	6,770	18.34%	1,690	\$15.62		
33-1000	First-Line Supervisors/Managers, Protective Service Workers	3,070	3,620	550	17.92%	150	\$25.13		
33-1011	First-Line Supervisors/Managers of Correctional Officers	710	860	150	21.13%	40	\$23.66	C B C	8
33-1012	First-Line Supervisors/Managers of Police and Detectives	1,320	1,530	210	15.91%	70	\$25.06	B B B	8
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	880	1,030	150	17.05%	50	\$28.33	C B B	8
33-1099	First-Line Supervisors/Managers, Protective Service Workers, All Other	180	200	20	11.11%	10	\$19.72	D C C	8
33-2000	Fire Fighting and Prevention Workers	4,930	5,830	900	18.26%	270	\$18.68		
33-2011	Fire Fighters	4,610	5,470	860	18.66%	260	\$18.63	A A C	9
33-2021	Fire Inspectors and Investigators	180	210	30	16.67%	10	\$26.13	D C B	8
33-2022	Forest Fire Inspectors and Prevention Specialists	160	160	0	0.00%	10	**	D D	8
33-3000	Law Enforcement Workers	16,450	19,690	3,240	19.70%	740	\$15.72		
33-3011	Bailiffs	240	270	30	12.50%	10	\$13.54	D C C	10
33-3012	Correctional Officers and Jailers	5,510	6,970	1,460	26.50%	280	\$12.86	A A C	10
33-3021	Detectives and Criminal Investigators	1,290	1,560	270	20.93%	60	\$22.11	B B C	8
33-3031	Fish and Game Wardens	70	80	10	14.29%	10	\$19.07	D D C	6
33-3051	Police and Sheriff's Patrol Officers	9,290	10,760	1,470	15.82%	400	\$16.90	A A C	9
33-9000	Other Protective Service Workers	12,480	14,570	2,090	16.75%	540	\$11.82		
33-9011	Animal Control Workers	370	430	60	16.22%	20	\$12.01	C C C	10
33-9021	Private Detectives and Investigators	610	710	100	16.39%	30	\$20.10	C B C	8
33-9031	Gaming Surveillance Officers and Gaming Investigators	330	450	120	36.36%	20	\$11.31	D B D	10
33-9032	Security Guards	9,360	10,950	1,590	16.99%	350	\$11.89	A A D	11
33-9091	Crossing Guards	460	470	10	2.17%	20	\$9.34	C C D	11
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	860	970	110	12.79%	80	\$7.76	C B D	11
33-9099	Protective Service Workers, All Other	520	610	90	17.31%	50	\$13.54	C B C	11
35-0000	Food Preparation and Serving Related Occupations	127,690	146,840	19,150	15.00%	6,220	\$7.82		
35-1000	Supervisors, Food Preparation and Serving Workers	9,710	11,010	1,300	13.39%	220	\$11.96		
35-1011	Chefs and Head Cooks	1,680	1,830	150	8.93%	40	\$12.01	B B C	8
35-1012	First-Line Supervisors/Managers of Food Preparation and Serving Workers	8,040	9,190	1,150	14.30%	180	\$11.95	A A D	8

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2006	2016	Numeric	Percent				
35-2000	Cooks and Food Preparation Workers	41,920	47,220	5,300	12.64%	1,740	\$7.86		
35-2011	Cooks, Fast Food	14,950	16,750	1,800	12.04%	590	\$7.39	A A D	11
35-2012	Cooks, Institution and Cafeteria	7,370	7,900	530	7.19%	260	\$8.21	A A D	10
35-2014	Cooks, Restaurant	8,830	10,150	1,320	14.95%	380	\$8.68	A A D	9
35-2015	Cooks, Short Order	2,160	2,340	180	8.33%	80	\$7.59	B B D	11
35-2021	Food Preparation Workers	8,550	10,030	1,480	17.31%	450	\$7.58	A A D	11
35-3000	Food and Beverage Serving Workers	63,870	74,710	10,840	16.97%	3,500	\$7.26		
35-3011	Bartenders	3,070	3,430	360	11.73%	150	\$8.18	A A D	11
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	27,120	32,970	5,850	21.57%	1,100	\$6.94	A A D	11
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	3,540	3,910	370	10.45%	290	\$7.48	A A D	11
35-3031	Waiters and Waitresses	27,610	31,470	3,860	13.98%	1,890	\$7.43	A A D	11
35-3041	Food Servers, Nonrestaurant	2,550	2,940	390	15.29%	80	\$7.20	A A D	11
35-9000	Other Food Preparation and Serving Related Workers	12,210	13,900	1,690	13.84%	780	\$7.27		
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	2,870	3,270	400	13.94%	160	\$7.07	A A D	11
35-9021	Dishwashers	5,400	6,130	730	13.52%	300	\$7.04	A A D	11
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	3,930	4,490	560	14.25%	330	\$7.78	A A D	11
37-0000	Building and Grounds Cleaning and Maintenance Occupations	54,470	59,920	5,450	10.01%	1,490	\$9.44		
37-1000	Supervisors, Building and Grounds Cleaning and Maintenance Workers	4,340	4,730	390	8.99%	90	\$14.78		
37-1011	First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	2,270	2,450	180	7.93%	60	\$13.96	A B C	8
37-1012	First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	2,070	2,290	220	10.63%	40	\$15.94	B B C	8
37-2000	Building Cleaning and Pest Control Workers	37,980	42,080	4,100	10.80%	1,140	\$8.74		
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	24,950	27,630	2,680	10.74%	750	\$9.06	A A D	11
37-2012	Maids and Housekeeping Cleaners	12,060	13,440	1,380	11.44%	370	\$7.76	A A D	11
37-3000	Grounds Maintenance Workers	12,170	13,120	950	7.81%	260	\$10.15		
37-3011	Landscaping and Groundskeeping Workers	9,930	10,830	900	9.06%	230	\$9.88	A A D	11
37-3013	Tree Trimmers and Pruners	1,510	1,520	10	0.66%	30	\$11.77	B C D	11
39-0000	Personal Care and Service Occupations	46,310	56,210	9,900	21.38%	2,070	\$8.84		
39-1000	Supervisors, Personal Care and Service Workers	1,900	2,170	270	14.21%	70	\$13.87		
39-1011	Gaming Supervisors	390	510	120	30.77%	20	\$18.70	C B C	8

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		2006	2016	Numeric	Percent				
39-1012	Slot Key Persons	210	240	30	14.29%	10	\$9.42	D C D	7
39-1021	First-Line Supervisors/Managers of Personal Service Workers	1,300	1,420	120	9.23%	40	\$13.35	B B C	8
39-2000	Animal Care and Service Workers	2,620	3,270	650	24.81%	110	\$9.94		
39-2011	Animal Trainers	520	650	130	25.00%	30	\$9.84	C B D	10
39-2021	Nonfarm Animal Caretakers	2,110	2,630	520	24.64%	90	\$9.96	B A D	11
39-3000	Entertainment Attendants and Related Workers	4,680	5,560	880	18.80%	300	\$8.42		
39-3011	Gaming Dealers	750	980	230	30.67%	40	\$8.57	C B D	7
39-3012	Gaming and Sports Book Writers and Runners	510	680	170	33.33%	30	\$8.94	C B D	11
39-3021	Motion Picture Projectionists	90	60	-30	-33.33%	10	\$8.52	D D D	11
39-3031	Ushers, Lobby Attendants, and Ticket Takers	530	500	-30	-5.66%	40	\$7.19	C D D	11
39-3091	Amusement and Recreation Attendants	1,760	2,080	320	18.18%	120	\$8.02	B A D	11
39-3093	Locker Room, Coatroom, and Dressing Room Attendants	160	190	30	18.75%	20	\$8.01	D C D	11
39-4000	Funeral Service Workers	680	800	120	17.65%	30	\$10.74		
39-4011	Embalmers	190	220	30	15.79%	10	\$13.93	D C C	7
39-4021	Funeral Attendants	500	590	90	18.00%	30	\$9.09	C B D	11
39-5000	Personal Appearance Workers	5,110	6,090	980	19.18%	160	\$8.81		
39-5012	Hairdressers, Hairstylists, and Cosmetologists	3,900	4,520	620	15.90%	110	\$8.93	A A D	7
39-5092	Manicurists and Pedicurists	150	190	40	26.67%	10	**	D C	7
39-6000	Transportation, Tourism, and Lodging Attendants	560	620	60	10.71%	20	\$8.96		
39-6011	Baggage Porters and Bellhops	360	400	40	11.11%	10	\$7.78	C C D	11
39-6012	Concierges	50	50	0	0.00%	10	\$11.68	D D D	10
39-6021	Tour Guides and Escorts	80	90	10	12.50%	10	\$11.47	D D D	10
39-6032	Transportation Attendants, Except Flight Attendants and Baggage Porters	50	60	10	20.00%	10	\$8.74	D D D	11
39-9000	Other Personal Care and Service Workers	30,790	37,710	6,920	22.47%	1,400	\$8.45		
39-9011	Child Care Workers	13,180	15,090	1,910	14.49%	570	\$7.74	A A D	11
39-9021	Personal and Home Care Aides	11,070	15,320	4,250	38.39%	620	\$8.16	A A D	11
39-9031	Fitness Trainers and Aerobics Instructors	2,380	2,820	440	18.49%	90	\$12.08	A A C	7
39-9032	Recreation Workers	3,300	3,600	300	9.09%	100	\$9.12	A A D	11
39-9041	Residential Advisors	590	670	80	13.56%	30	\$9.82	C B D	10
39-9099	Personal Care and Service Workers, All Other	280	230	-50	-17.86%	10	\$8.75	D D D	11
41-0000	Sales and Related Occupations	170,020	183,530	13,510	7.95%	6,670	\$13.49		
41-1000	Supervisors, Sales Workers	20,570	22,110	1,540	7.49%	570	\$17.24		
41-1011	First-Line Supervisors/Managers of Retail Sales Workers	17,500	18,850	1,350	7.71%	510	\$15.80	A A C	8

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2006	2016	Numeric	Percent				
41-1012	First-Line Supervisors/Managers of Non-Retail Sales Workers	3,070	3,260	190	6.19%	70	\$27.20	A B B	8
41-2000	Retail Sales Workers	100,300	107,790	7,490	7.47%	4,550	\$9.49		
41-2011	Cashiers	41,960	42,170	210	0.50%	2,020	\$7.61	A B D	11
41-2012	Gaming Change Persons and Booth Cashiers	860	950	90	10.47%	50	\$8.70	C B D	11
41-2021	Counter and Rental Clerks	4,510	5,560	1,050	23.28%	280	\$10.80	A A D	11
41-2022	Parts Salespersons	3,430	3,230	-200	-5.83%	40	\$12.01	A D C	10
41-2031	Retail Salespersons	49,560	55,900	6,340	12.79%	2,160	\$10.86	A A D	11
41-3000	Sales Representatives, Services	12,290	14,150	1,860	15.13%	460	\$22.68		
41-3011	Advertising Sales Agents	1,750	2,050	300	17.14%	70	\$20.38	B A C	10
41-3021	Insurance Sales Agents	4,880	5,530	650	13.32%	180	\$24.22	A A C	5
41-3031	Securities, Commodities, and Financial Services Sales Agents	1,510	1,490	-20	-1.32%	40	\$31.84	B D B	5
41-3041	Travel Agents	560	550	-10	-1.79%	10	\$14.60	C D C	7
41-3099	Sales Representatives, Services, All Other	3,610	4,560	950	26.32%	180	\$19.06	A A C	10
41-4000	Sales Representatives, Wholesale and Manufacturing	17,170	19,010	1,840	10.72%	570	\$25.97		
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	4,950	5,560	610	12.32%	170	\$28.56	A A B	10
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	12,230	13,460	1,230	10.06%	400	\$24.77	A A B	10
41-9000	Other Sales and Related Workers	19,700	20,480	780	3.96%	550	\$17.20		
41-9011	Demonstrators and Product Promoters	530	630	100	18.87%	30	\$12.13	C B C	10
41-9021	Real Estate Brokers	2,020	2,120	100	4.95%	50	\$39.22	B B B	8
41-9022	Real Estate Sales Agents	5,170	5,470	300	5.80%	120	\$22.44	A A C	7
41-9041	Telemarketers	6,010	5,560	-450	-7.49%	220	\$9.49	A D D	11
41-9091	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers	4,680	5,240	560	11.97%	120	\$11.09	A A D	11
41-9099	Sales and Related Workers, All Other	810	940	130	16.05%	20	\$15.47	C B C	10
43-0000	Office and Administrative Support Occupations	276,710	293,280	16,570	5.99%	8,010	\$12.93		
43-1000	Supervisors, Office and Administrative Support Workers	14,540	15,170	630	4.33%	370	\$18.51		
43-1011	First-Line Supervisors/Managers of Office and Administrative Support Workers	14,540	15,170	630	4.33%	370	\$18.51	A A C	8
43-2000	Communications Equipment Operators	2,410	2,110	-300	-12.45%	50	\$10.07		
43-2011	Switchboard Operators, Including Answering Service	2,210	1,970	-240	-10.86%	50	\$9.85	B D D	11

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		2006	2016	Numeric	Percent				
43-2021	Telephone Operators	180	110	-70	-38.89%	10	**	D D	11
43-3000	Financial Clerks	53,850	59,300	5,450	10.12%	1,640	\$12.84		
43-3011	Bill and Account Collectors	6,130	7,520	1,390	22.68%	240	\$13.56	A A C	11
43-3021	Billing and Posting Clerks and Machine Operators	7,630	7,620	-10	-0.13%	100	\$12.53	A D C	10
43-3031	Bookkeeping, Accounting, and Auditing Clerks	27,030	29,890	2,860	10.58%	710	\$13.45	A A C	10
43-3041	Gaming Cage Workers	290	320	30	10.34%	20	\$9.83	D C D	11
43-3051	Payroll and Timekeeping Clerks	3,100	3,130	30	0.97%	90	\$14.34	A C C	10
43-3061	Procurement Clerks	1,370	1,360	-10	-0.73%	30	\$16.37	B D C	11
43-3071	Tellers	8,340	9,500	1,160	13.91%	480	\$9.82	A A D	11
43-4000	Information and Record Clerks	61,490	67,650	6,160	10.02%	2,400	\$12.22		
43-4011	Brokerage Clerks	330	310	-20	-6.06%	20	\$17.55	D D C	10
43-4021	Correspondence Clerks	290	310	20	6.90%	10	\$12.43	D C C	11
43-4031	Court, Municipal, and License Clerks	2,590	3,030	440	16.99%	110	\$11.57	A A D	11
43-4041	Credit Authorizers, Checkers, and Clerks	440	390	-50	-11.36%	20	\$14.90	C D C	11
43-4051	Customer Service Representatives	23,590	29,370	5,780	24.50%	1,240	\$12.81	A A C	10
43-4061	Eligibility Interviewers, Government Programs	630	690	60	9.52%	20	\$15.58	C C C	10
43-4071	File Clerks	2,730	1,540	-1,190	-43.59%	80	\$10.11	A D D	11
43-4081	Hotel, Motel, and Resort Desk Clerks	2,060	2,310	250	12.14%	110	\$8.17	B B D	11
43-4111	Interviewers, Except Eligibility and Loan	1,590	1,790	200	12.58%	70	\$10.85	B B D	11
43-4121	Library Assistants, Clerical	1,020	1,130	110	10.78%	50	\$8.52	B B D	11
43-4131	Loan Interviewers and Clerks	2,380	2,350	-30	-1.26%	50	\$13.95	A D C	11
43-4141	New Accounts Clerks	1,100	910	-190	-17.27%	40	\$12.93	B D C	8
43-4151	Order Clerks	2,620	1,900	-720	-27.48%	60	\$12.39	A D C	11
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	2,990	3,310	320	10.70%	60	\$14.88	A A C	11
43-4171	Receptionists and Information Clerks	12,330	13,780	1,450	11.76%	450	\$10.37	A A D	11
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	2,930	2,850	-80	-2.73%	70	\$14.84	A D C	11
43-4199	Information and Record Clerks, All Other	1,960	1,750	-210	-10.71%	40	\$15.22	B D C	11
43-5000	Material Recording, Scheduling, Dispatching, and Distributing Workers	42,160	41,810	-350	-0.83%	1,150	\$13.80		
43-5011	Cargo and Freight Agents	520	550	30	5.77%	20	\$20.00	C C C	10
43-5021	Couriers and Messengers	1,210	1,160	-50	-4.13%	40	\$10.08	B D D	11
43-5031	Police, Fire, and Ambulance Dispatchers	1,970	2,330	360	18.27%	90	\$11.63	B A D	10
43-5032	Dispatchers, Except Police, Fire, and Ambulance	2,210	2,270	60	2.71%	70	\$15.51	B C C	10
43-5041	Meter Readers, Utilities	1,020	900	-120	-11.76%	40	\$12.76	B D C	11
43-5051	Postal Service Clerks	730	720	-10	-1.37%	20	\$21.13	C D C	11
43-5052	Postal Service Mail Carriers	4,070	4,020	-50	-1.23%	120	\$21.11	A D C	11

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		2006	2016	Numeric	Percent				
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	1,850	1,670	-180	-9.73%	20	\$19.05	B D C	11
43-5061	Production, Planning, and Expediting Clerks	3,760	4,030	270	7.18%	130	\$19.59	A B C	11
43-5071	Shipping, Receiving, and Traffic Clerks	7,330	7,730	400	5.46%	220	\$12.86	A A C	11
43-5081	Stock Clerks and Order Fillers	16,990	15,990	-1,000	-5.89%	410	\$10.42	A D D	11
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	560	490	-70	-12.50%	20	\$10.93	C D D	11
43-6000	Secretaries and Administrative Assistants	52,500	54,820	2,320	4.42%	1,100	\$13.19		
43-6011	Executive Secretaries and Administrative Assistants	19,480	21,480	2,000	10.27%	510	\$15.96	A A C	10
43-6012	Legal Secretaries	2,560	2,870	310	12.11%	80	\$14.21	A A C	7
43-6013	Medical Secretaries	4,400	4,640	240	5.45%	100	\$11.65	A B D	7
43-6014	Secretaries, Except Legal, Medical, and Executive	26,070	25,850	-220	-0.84%	420	\$11.36	A D D	10
43-9000	Other Office and Administrative Support Workers	49,770	52,440	2,670	5.36%	1,330	\$11.13		
43-9011	Computer Operators	1,120	840	-280	-25.00%	20	\$15.38	B D C	10
43-9021	Data Entry Keyers	3,110	2,850	-260	-8.36%	80	\$11.09	A D D	10
43-9022	Word Processors and Typists	810	720	-90	-11.11%	20	\$13.69	C D C	10
43-9031	Desktop Publishers	140	140	0	0.00%	10	\$11.34	D D D	7
43-9041	Insurance Claims and Policy Processing Clerks	3,080	3,010	-70	-2.27%	40	\$14.10	A D C	10
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	1,560	1,340	-220	-14.10%	50	\$10.60	B D D	11
43-9061	Office Clerks, General	37,370	41,130	3,760	10.06%	1,070	\$10.77	A A D	11
43-9071	Office Machine Operators, Except Computer	610	570	-40	-6.56%	20	\$12.12	C D C	11
45-0000	Farming, Fishing, and Forestry Occupations	25,220	27,030	1,810	7.18%	800	\$10.87		
45-1000	Supervisors, Farming, Fishing, and Forestry Workers	1,250	1,460	210	16.80%	50	\$19.41		
45-1011	First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	1,220	1,430	210	17.21%	50	\$19.40	B B C	8
45-2000	Agricultural Workers	23,490	25,040	1,550	6.60%	740	\$9.70		
45-2011	Agricultural Inspectors	330	370	40	12.12%	20	**	C C	8
45-2021	Animal Breeders	110	110	0	0.00%	10	\$19.22	D D C	11
45-2041	Graders and Sorters, Agricultural Products	840	860	20	2.38%	20	\$10.24	C C D	8
45-2091	Agricultural Equipment Operators	1,570	1,670	100	6.37%	50	\$10.46	B B D	10
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	16,050	17,080	1,030	6.42%	510	\$8.58	A A D	11
45-2093	Farmworkers, Farm and Ranch Animals	4,210	4,560	350	8.31%	140	\$9.17	A A D	11
45-2099	Agricultural Workers, All Other	410	430	20	4.88%	20	\$8.84	C C D	11
45-4000	Forest, Conservation, and Logging Workers	470	520	50	10.64%	20	\$17.58		

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		2006	2016	Numeric	Percent				
45-4011	Forest and Conservation Workers	170	190	20	11.76%	10	**	D C	10
45-4021	Fallers	60	70	10	16.67%	10	\$19.15	D D C	10
45-4022	Logging Equipment Operators	240	260	20	8.33%	10	\$14.56	D C C	10
47-0000	Construction and Extraction Occupations	98,950	114,020	15,070	15.23%	3,290	\$16.04		
47-1000	Supervisors, Construction and Extraction Workers	8,120	9,110	990	12.19%	220	\$24.94		
47-1011	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	8,120	9,110	990	12.19%	220	\$24.94	A A B	8
47-2000	Construction Trades Workers	65,790	75,700	9,910	15.06%	2,130	\$14.80		
47-2011	Boilermakers	230	260	30	13.04%	20	\$18.00	D C C	9
47-2021	Brickmasons and Blockmasons	1,280	1,520	240	18.75%	60	\$19.13	B B C	9
47-2022	Stonemasons	110	130	20	18.18%	10	\$15.18	D C C	9
47-2031	Carpenters	10,070	11,510	1,440	14.30%	280	\$14.17	A A C	9
47-2041	Carpet Installers	510	510	0	0.00%	10	\$11.56	C D D	10
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles	250	230	-20	-8.00%	10	\$15.87	D D C	10
47-2044	Tile and Marble Setters	520	620	100	19.23%	20	\$12.89	C B C	9
47-2051	Cement Masons and Concrete Finishers	3,060	3,620	560	18.30%	150	\$13.92	A A C	10
47-2061	Construction Laborers	15,130	17,570	2,440	16.13%	360	\$11.49	A A D	10
47-2071	Paving, Surfacing, and Tamping Equipment Operators	1,580	1,770	190	12.03%	60	\$13.04	B B C	10
47-2073	Operating Engineers and Other Construction Equipment Operators	5,650	6,280	630	11.15%	180	\$15.01	A A C	10
47-2081	Drywall and Ceiling Tile Installers	1,580	1,840	260	16.46%	50	\$14.31	B B C	10
47-2082	Tapers	190	220	30	15.79%	10	\$20.78	D C C	10
47-2111	Electricians	7,330	8,440	1,110	15.14%	300	\$19.25	A A C	9
47-2121	Glaziers	930	1,050	120	12.90%	30	\$12.51	B B C	9
47-2131	Insulation Workers, Floor, Ceiling, and Wall	290	340	50	17.24%	20	\$16.03	D C C	10
47-2132	Insulation Workers, Mechanical	620	730	110	17.74%	30	\$15.64	C B C	10
47-2141	Painters, Construction and Maintenance	4,420	5,200	780	17.65%	160	\$14.94	A A C	10
47-2142	Paperhangers	120	120	0	0.00%	10	\$16.02	D D C	10
47-2151	Pipelayers	900	1,010	110	12.22%	30	\$11.32	C B D	10
47-2152	Plumbers, Pipefitters, and Steamfitters	5,840	6,820	980	16.78%	220	\$17.70	A A C	9
47-2161	Plasterers and Stucco Masons	240	280	40	16.67%	10	\$18.57	D C C	9
47-2171	Reinforcing Iron and Rebar Workers	70	80	10	14.29%	10	\$14.14	D D C	9
47-2181	Roofers	1,180	1,470	290	24.58%	60	\$13.26	B A C	10
47-2211	Sheet Metal Workers	3,070	3,390	320	10.42%	110	\$18.77	A A C	9
47-2221	Structural Iron and Steel Workers	550	620	70	12.73%	30	\$17.08	C B C	9
47-3000	Helpers, Construction Trades	5,020	5,830	810	16.14%	210	\$11.23		

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		2006	2016	Numeric	Percent				
47-3011	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	560	670	110	19.64%	30	\$11.46	C B D	11
47-3012	Helpers--Carpenters	630	720	90	14.29%	30	\$10.11	C B D	11
47-3013	Helpers--Electricians	1,590	1,810	220	13.84%	70	\$11.87	B B D	11
47-3014	Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	190	200	10	5.26%	10	\$10.99	D C D	11
47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	1,490	1,780	290	19.46%	70	\$11.38	B A D	11
47-3016	Helpers--Roofers	190	220	30	15.79%	10	\$9.64	D C D	11
47-3019	Helpers, Construction Trades, All Other	400	450	50	12.50%	20	\$10.48	C C D	11
47-4000	Other Construction and Related Workers	6,540	7,700	1,160	17.74%	250	\$14.36		
47-4011	Construction and Building Inspectors	1,290	1,570	280	21.71%	60	\$19.25	B B C	8
47-4041	Hazardous Materials Removal Workers	380	430	50	13.16%	20	\$13.20	C C C	10
47-4051	Highway Maintenance Workers	3,960	4,670	710	17.93%	150	\$11.71	A A D	10
47-4061	Rail-Track Laying and Maintenance Equipment Operators	120	130	10	8.33%	10	\$20.62	D C C	10
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	260	290	30	11.54%	10	\$13.25	D C C	10
47-4099	Construction and Related Workers, All Other	290	320	30	10.34%	10	\$14.02	D C C	10
47-5000	Extraction Workers	13,500	15,710	2,210	16.37%	500	\$18.31		
47-5011	Derrick Operators, Oil and Gas	2,710	3,230	520	19.19%	80	\$21.01	A A C	10
47-5012	Rotary Drill Operators, Oil and Gas	1,400	1,650	250	17.86%	40	\$23.33	B B C	10
47-5013	Service Unit Operators, Oil, Gas, and Mining	2,340	2,640	300	12.82%	60	\$18.09	A A C	10
47-5021	Earth Drillers, Except Oil and Gas	380	450	70	18.42%	20	\$17.21	C C C	10
47-5031	Explosives Workers, Ordnance Handling Experts, and Blasters	380	410	30	7.89%	20	\$18.28	C C C	10
47-5071	Roustabouts, Oil and Gas	3,530	4,070	540	15.30%	160	\$14.92	A A C	10
47-5081	Helpers--Extraction Workers	2,360	2,790	430	18.22%	120	\$16.62	A A C	11
49-0000	Installation, Maintenance, and Repair Occupations	78,990	87,190	8,200	10.38%	2,090	\$17.69		
49-1000	Supervisors of Installation, Maintenance, and Repair Workers	6,640	7,210	570	8.58%	220	\$24.94		
49-1011	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	6,640	7,210	570	8.58%	220	\$24.94	A A B	8
49-2000	Electrical and Electronic Equipment Mechanics, Installers, and Repairers	8,760	9,390	630	7.19%	260	\$20.16		
49-2011	Computer, Automated Teller, and Office Machine Repairers	1,840	1,880	40	2.17%	30	\$16.99	B C C	7
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	2,040	2,150	110	5.39%	70	\$22.96	B B C	9
49-2092	Electric Motor, Power Tool, and Related Repairers	430	420	-10	-2.33%	20	\$14.43	C D C	7

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49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment	230	250	20	8.70%	10	\$15.61	D C C	7
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	1,170	1,350	180	15.38%	60	\$22.10	B B C	7
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	520	520	0	0.00%	20	\$22.80	C D C	7
49-2096	Electronic Equipment Installers and Repairers, Motor Vehicles	310	290	-20	-6.45%	10	\$13.40	D D C	7
49-2097	Electronic Home Entertainment Equipment Installers and Repairers	360	380	20	5.56%	10	\$15.47	C C C	7
49-2098	Security and Fire Alarm Systems Installers	1,030	1,310	280	27.18%	50	\$17.16	B B C	7
49-3000	Vehicle and Mobile Equipment Mechanics, Installers	26,260	29,170	2,910	11.08%	780	\$17.42		
49-3011	Aircraft Mechanics and Service Technicians	6,060	6,370	310	5.12%	100	\$23.58	A A C	7
49-3021	Automotive Body and Related Repairers	3,020	3,440	420	13.91%	120	\$15.52	A A C	9
49-3022	Automotive Glass Installers and Repairers	70	80	10	14.29%	10	\$15.81	D D C	9
49-3023	Automotive Service Technicians and Mechanics	8,190	9,220	1,030	12.58%	270	\$15.70	A A C	7
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	4,210	4,800	590	14.01%	150	\$16.00	A A C	7
49-3041	Farm Equipment Mechanics	490	510	20	4.08%	20	\$13.99	C C C	7
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	1,480	1,720	240	16.22%	60	\$17.20	B B C	7
49-3043	Rail Car Repairers	160	170	10	6.25%	10	**	D C	9
49-3051	Motorboat Mechanics	330	390	60	18.18%	20	\$14.77	D C C	9
49-3052	Motorcycle Mechanics	280	290	10	3.57%	10	\$16.59	D C C	9
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	420	410	-10	-2.38%	10	\$10.99	C D D	10
49-3092	Recreational Vehicle Service Technicians	110	120	10	9.09%	10	\$13.32	D C C	9
49-3093	Tire Repairers and Changers	1,490	1,720	230	15.44%	60	\$9.82	B B D	11
49-9000	Other Installation, Maintenance, and Repair Occupations	37,340	41,430	4,090	10.95%	850	\$16.30		
49-9011	Mechanical Door Repairers	330	390	60	18.18%	20	\$13.02	D C C	10
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	930	940	10	1.08%	20	\$20.91	B C C	10
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	3,450	4,100	650	18.84%	130	\$17.53	A A C	9
49-9031	Home Appliance Repairers	580	610	30	5.17%	20	\$13.75	C C C	9
49-9041	Industrial Machinery Mechanics	3,600	4,140	540	15.00%	120	\$19.71	A A C	9
49-9042	Maintenance and Repair Workers, General	17,860	19,690	1,830	10.25%	230	\$14.90	A A C	10
49-9043	Maintenance Workers, Machinery	1,240	1,280	40	3.23%	30	\$14.86	B C C	11
49-9044	Millwrights	240	290	50	20.83%	10	\$20.33	D C C	9

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2006	2016	Numeric	Percent				
49-9045	Refractory Materials Repairers, Except Brickmasons	80	80	0	0.00%	10	\$14.89	D D C	10
49-9051	Electrical Power-Line Installers and Repairers	1,710	1,890	180	10.53%	80	\$19.92	B B C	9
49-9052	Telecommunications Line Installers and Repairers	1,820	1,960	140	7.69%	70	\$22.59	B B C	9
49-9062	Medical Equipment Repairers	280	320	40	14.29%	20	\$17.57	D C C	6
49-9069	Precision Instrument and Equipment Repairers, All Other	240	250	10	4.17%	10	\$22.11	D C C	10
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	650	650	0	0.00%	20	\$11.59	C D D	10
49-9094	Locksmiths and Safe Repairers	220	260	40	18.18%	10	\$15.01	D C C	10
49-9097	Signal and Track Switch Repairers	50	40	-10	-20.00%	0	\$21.58	D D C	10
49-9098	Helpers--Installation, Maintenance, and Repair Workers	2,550	2,890	340	13.33%	100	\$10.77	A A D	11
51-0000	Production Occupations	127,210	132,550	5,340	4.20%	3,440	\$13.94		
51-1000	Supervisors, Production Workers	7,690	8,000	310	4.03%	160	\$22.93		
51-1011	First-Line Supervisors/Managers of Production and Operating Workers	7,690	8,000	310	4.03%	160	\$22.93	A A C	8
51-2000	Assemblers and Fabricators	25,110	26,190	1,080	4.30%	660	\$12.53		
51-2021	Coil Winders, Tapers, and Finishers	200	180	-20	-10.00%	10	\$13.54	D D C	11
51-2022	Electrical and Electronic Equipment Assemblers	1,770	1,470	-300	-16.95%	30	\$13.72	B D C	11
51-2023	Electromechanical Equipment Assemblers	240	240	0	0.00%	10	\$15.27	D D C	11
51-2031	Engine and Other Machine Assemblers	690	680	-10	-1.45%	20	\$15.42	C D C	11
51-2041	Structural Metal Fabricators and Fitters	1,730	1,900	170	9.83%	50	\$14.13	B B C	10
51-2091	Fiberglass Laminators and Fabricators	850	920	70	8.24%	30	\$11.51	C B D	10
51-2092	Team Assemblers	18,340	19,440	1,100	6.00%	500	\$11.75	A A D	10
51-2099	Assemblers and Fabricators, All Other	810	800	-10	-1.23%	20	\$11.42	C D D	10
51-3000	Food Processing Workers	7,090	8,540	1,450	20.45%	360	\$10.42		
51-3011	Bakers	1,080	1,280	200	18.52%	50	\$9.44	B B D	9
51-3021	Butchers and Meat Cutters	1,380	1,450	70	5.07%	60	\$11.32	B B D	9
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	1,050	1,310	260	24.76%	60	\$9.59	B B D	11
51-3023	Slaughterers and Meat Packers	2,160	2,810	650	30.09%	140	\$10.30	B A D	10
51-3092	Food Batchmakers	680	830	150	22.06%	40	\$10.75	C B D	11
51-3093	Food Cooking Machine Operators and Tenders	480	520	40	8.33%	30	\$9.03	C C D	11
51-4000	Metal Workers and Plastic Workers	33,650	34,960	1,310	3.89%	870	\$14.57		
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	1,740	1,870	130	7.47%	40	\$14.33	B B C	10
51-4012	Numerical Tool and Process Control Programmers	290	290	0	0.00%	10	\$21.44	D D C	9
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	540	530	-10	-1.85%	20	\$14.30	C D C	10

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2006	2016	Numeric	Percent				
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	520	420	-100	-19.23%	20	\$9.76	C D D	10
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	260	270	10	3.85%	10	\$12.72	D C C	10
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	3,510	3,410	-100	-2.85%	90	\$12.23	A D C	10
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	800	700	-100	-12.50%	20	\$13.36	C D C	10
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,220	1,150	-70	-5.74%	20	\$13.87	B D C	10
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	860	740	-120	-13.95%	20	\$14.24	C D C	10
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	470	410	-60	-12.77%	10	\$13.86	C D C	10
51-4041	Machinists	6,930	7,440	510	7.36%	160	\$15.74	A A C	9
51-4051	Metal-Refining Furnace Operators and Tenders	130	130	0	0.00%	10	\$14.94	D D C	10
51-4052	Pourers and Casters, Metal	100	110	10	10.00%	10	\$13.85	D C C	10
51-4061	Model Makers, Metal and Plastic	180	170	-10	-5.56%	10	\$13.57	D D C	10
51-4062	Patternmakers, Metal and Plastic	150	160	10	6.67%	10	\$15.15	D C C	10
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	1,190	1,130	-60	-5.04%	30	\$12.18	B D C	10
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,620	1,760	140	8.64%	50	\$16.58	B B C	10
51-4111	Tool and Die Makers	410	420	10	2.44%	10	\$20.16	C C C	9
51-4121	Welders, Cutters, Solderers, and Brazers	9,580	10,850	1,270	13.26%	330	\$14.59	A A C	9
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	790	930	140	17.72%	40	\$14.97	C B C	10
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	390	370	-20	-5.13%	10	\$15.22	C D C	10
51-4192	Lay-Out Workers, Metal and Plastic	110	100	-10	-9.09%	10	\$12.21	D D C	10
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	570	580	10	1.75%	20	\$15.42	C C C	10
51-4194	Tool Grinders, Filers, and Sharpeners	280	250	-30	-10.71%	10	\$13.72	D D C	10
51-5000	Printing Workers	3,320	2,860	-460	-13.86%	60	\$12.90		
51-5011	Bindery Workers	620	480	-140	-22.58%	10	\$11.59	C D D	11
51-5022	Prepress Technicians and Workers	550	440	-110	-20.00%	10	\$13.70	C D C	7
51-5023	Printing Machine Operators	1,610	1,510	-100	-6.21%	40	\$12.70	B D C	10
51-6000	Textile, Apparel, and Furnishings Workers	8,150	8,500	350	4.29%	210	\$9.69		
51-6011	Laundry and Dry-Cleaning Workers	3,000	3,350	350	11.67%	110	\$8.24	A A D	10

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2006	2016	Numeric	Percent				
51-6021	Pressers, Textile, Garment, and Related Materials	1,920	2,130	210	10.94%	40	\$11.13	B B D	11
51-6031	Sewing Machine Operators	1,530	1,200	-330	-21.57%	20	\$8.96	B D D	10
51-6052	Tailors, Dressmakers, and Custom Sewers	350	360	10	2.86%	10	\$11.55	C C D	9
51-6062	Textile Cutting Machine Setters, Operators, and Tenders	80	60	-20	-25.00%	10	\$9.42	D D D	10
51-6091	Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	190	180	-10	-5.26%	10	\$13.54	D D C	10
51-6093	Upholsterers	330	310	-20	-6.06%	10	\$11.47	D D D	9
51-7000	Woodworkers	3,070	3,460	390	12.70%	130	\$11.94		
51-7011	Cabinetmakers and Bench Carpenters	1,860	2,050	190	10.22%	80	\$11.71	B B D	9
51-7021	Furniture Finishers	110	110	0	0.00%	10	\$11.60	D D D	9
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	390	470	80	20.51%	20	\$11.82	C B D	10
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	500	610	110	22.00%	30	\$10.85	C B D	10
51-7099	Woodworkers, All Other	200	220	20	10.00%	10	\$19.19	D C C	10
51-8000	Plant and System Operators	4,740	5,160	420	8.86%	160	\$19.57		
51-8013	Power Plant Operators	500	510	10	2.00%	20	\$26.77	C C B	9
51-8021	Stationary Engineers and Boiler Operators	300	330	30	10.00%	10	\$17.81	D C C	9
51-8031	Water and Liquid Waste Treatment Plant and System Operators	2,240	2,650	410	18.30%	80	\$13.26	B A C	9
51-8091	Chemical Plant and System Operators	160	150	-10	-6.25%	10	\$20.83	D D C	9
51-8092	Gas Plant Operators	450	420	-30	-6.67%	20	\$23.81	C D C	9
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers	910	920	10	1.10%	30	\$22.53	C C C	9
51-9000	Other Production Occupations	34,420	34,890	470	1.37%	870	\$13.33		
51-9011	Chemical Equipment Operators and Tenders	620	590	-30	-4.84%	20	\$18.58	C D C	10
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	400	400	0	0.00%	10	\$12.12	C D C	10
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	610	590	-20	-3.28%	10	\$11.38	C D D	10
51-9022	Grinding and Polishing Workers, Hand	700	700	0	0.00%	20	\$11.23	C D D	10
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	2,000	2,120	120	6.00%	50	\$13.62	B B C	10
51-9031	Cutters and Trimmers, Hand	150	160	10	6.67%	10	\$16.76	D C C	11
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	640	650	10	1.56%	20	\$14.82	C C C	10
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	910	910	0	0.00%	20	\$14.43	C D C	10

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2006	2016	Numeric	Percent				
51-9051	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	320	310	-10	-3.13%	10	\$18.08	D D C	10
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	5,980	5,900	-80	-1.34%	90	\$16.70	A D C	10
51-9081	Dental Laboratory Technicians	630	710	80	12.70%	20	\$13.30	C B C	9
51-9083	Ophthalmic Laboratory Technicians	540	580	40	7.41%	20	\$12.07	C C C	10
51-9111	Packaging and Filling Machine Operators and Tenders	2,440	2,380	-60	-2.46%	50	\$11.19	A D D	11
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	2,000	1,990	-10	-0.50%	40	\$13.38	B D C	10
51-9122	Painters, Transportation Equipment	720	800	80	11.11%	30	\$15.70	C B C	9
51-9123	Painting, Coating, and Decorating Workers	460	500	40	8.70%	20	\$11.35	C C D	11
51-9131	Photographic Process Workers	280	180	-100	-35.71%	10	\$10.67	D D D	10
51-9192	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	230	240	10	4.35%	10	\$10.03	D C D	10
51-9193	Cooling and Freezing Equipment Operators and Tenders	110	120	10	9.09%	10	\$10.48	D C D	10
51-9194	Etchers and Engravers	100	100	0	0.00%	10	\$11.19	D D D	9
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	1,210	1,260	50	4.13%	40	\$12.29	B C C	10
51-9196	Paper Goods Machine Setters, Operators, and Tenders	680	560	-120	-17.65%	20	\$16.54	C D C	10
51-9197	Tire Builders	1,420	1,230	-190	-13.38%	60	\$22.78	B D C	10
51-9198	Helpers--Production Workers	8,650	9,420	770	8.90%	290	\$10.38	A A D	11
51-9199	Production Workers, All Other	1,510	1,620	110	7.28%	50	\$10.50	B B D	10
53-0000	Transportation and Material Moving Occupations	112,070	117,960	5,890	5.26%	3,290	\$13.54		
53-1000	Supervisors, Transportation and Material Moving Workers	5,010	5,580	570	11.38%	160	\$22.28		
53-1011	Aircraft Cargo Handling Supervisors	100	120	20	20.00%	10	\$29.88	D C B	8
53-1021	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	1,920	2,140	220	11.46%	70	\$18.22	B B C	8
53-1031	First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	3,000	3,330	330	11.00%	100	\$24.28	A A C	8
53-2000	Air Transportation Workers	1,160	1,350	190	16.38%	60	\$30.59		
53-2011	Airline Pilots, Copilots, and Flight Engineers	170	170	0	0.00%	10	**	D D	5
53-2012	Commercial Pilots	360	400	40	11.11%	20	**	C C	7
53-2021	Air Traffic Controllers	530	640	110	20.75%	30	**	C B	9
53-2022	Airfield Operations Specialists	120	150	30	25.00%	10	\$21.24	D C C	9
53-3000	Motor Vehicle Operators	49,750	54,250	4,500	9.05%	1,310	\$13.92		

SOC Code	Occupation Title	Employment		Employment Change		Average Annual Openings	Average Hourly Wage	Descriptor	Educational Attainment
		2006	2016	Numeric	Percent				
53-3021	Bus Drivers, Transit and Intercity	850	990	140	16.47%	30	\$10.54	C B D	10
53-3022	Bus Drivers, School	4,720	5,160	440	9.32%	110	\$8.72	A A D	11
53-3031	Driver/Sales Workers	6,510	6,370	-140	-2.15%	120	\$12.09	A D C	11
53-3032	Truck Drivers, Heavy and Tractor-Trailer	24,740	27,660	2,920	11.80%	740	\$16.21	A A C	10
53-3033	Truck Drivers, Light or Delivery Services	9,990	10,730	740	7.41%	250	\$12.23	A A C	11
53-3041	Taxi Drivers and Chauffeurs	1,680	1,890	210	12.50%	50	\$9.59	B B D	11
53-4000	Rail Transportation Workers	910	960	50	5.49%	40	\$28.94		
53-4021	Railroad Brake, Signal, and Switch Operators	200	180	-20	-10.00%	10	**	D D	10
53-4031	Railroad Conductors and Yardmasters	310	350	40	12.90%	20	\$32.23	D C B	10
53-6000	Other Transportation Workers	2,140	2,370	230	10.75%	100	\$13.60		
53-6021	Parking Lot Attendants	660	710	50	7.58%	30	\$9.31	C C D	11
53-6031	Service Station Attendants	620	680	60	9.68%	40	\$9.15	C C D	11
53-6041	Traffic Technicians	160	180	20	12.50%	10	\$16.75	D C C	11
53-6051	Transportation Inspectors	420	500	80	19.05%	30	\$28.46	C B B	8
53-6099	Transportation Workers, All Other	270	300	30	11.11%	10	\$16.74	D C C	11
53-7000	Material Moving Workers	53,050	53,400	350	0.66%	1,640	\$11.50		
53-7011	Conveyor Operators and Tenders	600	550	-50	-8.33%	10	\$12.79	C D C	11
53-7021	Crane and Tower Operators	490	530	40	8.16%	20	\$18.70	C C C	9
53-7032	Excavating and Loading Machine and Dragline Operators	1,680	1,910	230	13.69%	60	\$15.49	B B C	10
53-7033	Loading Machine Operators, Underground Mining	60	60	0	0.00%	10	**	D D	10
53-7051	Industrial Truck and Tractor Operators	7,440	7,400	-40	-0.54%	190	\$12.82	A D C	11
53-7061	Cleaners of Vehicles and Equipment	4,840	5,510	670	13.84%	260	\$10.26	A A D	11
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	25,320	25,610	290	1.15%	840	\$10.24	A A D	11
53-7063	Machine Feeders and Offbearers	990	880	-110	-11.11%	20	\$11.52	B D D	11
53-7064	Packers and Packagers, Hand	6,590	5,820	-770	-11.68%	80	\$8.62	A D D	11
53-7071	Gas Compressor and Gas Pumping Station Operators	130	130	0	0.00%	10	\$21.01	D D C	10
53-7072	Pump Operators, Except Wellhead Pumps	590	540	-50	-8.47%	30	\$19.97	C D C	10
53-7073	Wellhead Pumps	1,840	1,780	-60	-3.26%	80	\$20.00	B D C	10
53-7081	Refuse and Recyclable Material Collectors	2,080	2,240	160	7.69%	80	\$11.64	B B D	11
53-7121	Tank Car, Truck, and Ship Loaders	280	310	30	10.71%	10	\$13.33	D C C	10
53-7199	Material Moving Workers, All Other	140	140	0	0.00%	10	\$14.02	D D C	10

Notes: *Alphabetical index of occupations*

OCCUPATIONAL TITL	SOC Code	OCCUPATIONAL TITL	SOC Code
Accountants and Auditors	13-2011	Audio-Visual Collections Specialists	25-9011
Actuaries	15-2011	Automotive Body and Related Repairers	49-3021
Administrative Law Judges, Adjudicators, and Hearing Officers	23-1021	Automotive Glass Installers and Repairers	49-3022
Administrative Services Managers	11-3011	Automotive Service Technicians and Mechanics	49-3023
Adult Literacy, Remedial Education, and GED Teachers and Instructors	25-3011	Baggage Porters and Bellhops	39-6011
Advertising and Promotions Managers	11-2011	Bailiffs	33-3011
Advertising Sales Agents	41-3011	Bakers	51-3011
Aerospace Engineers	17-2011	Bartenders	35-3011
Agricultural and Food Science Technicians	19-4011	Bill and Account Collectors	43-3011
Agricultural Equipment Operators	45-2091	Billing and Posting Clerks and Machine Operators	43-3021
Agricultural Inspectors	45-2011	Bindery Workers	51-5011
Agricultural Workers, All Other	45-2099	Biochemists and Biophysicists	19-1021
Air Traffic Controllers	53-2021	Biological Scientists, All Other	19-1029
Aircraft Cargo Handling Supervisors	53-1011	Biological Technicians	19-4021
Aircraft Mechanics and Service Technicians	49-3011	Biomedical Engineers	17-2031
Airfield Operations Specialists	53-2022	Boilermakers	47-2011
Airline Pilots, Copilots, and Flight Engineers	53-2011	Bookkeeping, Accounting, and Auditing Clerks	43-3031
Amusement and Recreation Attendants	39-3091	Brickmasons and Blockmasons	47-2021
Animal Breeders	45-2021	Broadcast Technicians	27-4012
Animal Control Workers	33-9011	Brokerage Clerks	43-4011
Animal Trainers	39-2011	Budget Analysts	13-2031
Appraisers and Assessors of Real Estate	13-2021	Bus and Truck Mechanics and Diesel Engine Specialists	49-3031
Architects, Except Landscape and Naval	17-1011	Bus Drivers, School	53-3022
Architectural and Civil Drafters	17-3011	Bus Drivers, Transit and Intercity	53-3021
Archivists	25-4011	Business Operations Specialists, All Other	13-1199
Art Directors	27-1011	Butchers and Meat Cutters	51-3021
Assemblers and Fabricators, All Other	51-2099	Cabinetmakers and Bench Carpenters	51-7011
Athletes and Sports Competitors	27-2021	Camera Operators, Television, Video, and Motion Picture	27-4031
Athletic Trainers	29-9091	Cardiovascular Technologists and Technicians	29-2031
Atmospheric and Space Scientists	19-2021	Cargo and Freight Agents	43-5011
Audio and Video Equipment Technicians	27-4011	Carpenters	47-2031
Audiologists	29-1121	Carpet Installers	47-2041

OCCUPATIONAL TITIAL	SOC Code	OCCUPATIONAL TITIAL	SOC Code
Cashiers	41-2011	Computer Specialists, All Other	15-1099
Cement Masons and Concrete Finishers	47-2051	Computer Support Specialists	15-1041
Chefs and Head Cooks	35-1011	Computer Systems Analysts	15-1051
Chemical Engineers	17-2041	Computer, Automated Teller, and Office Machine Repairers	49-2011
Chemical Equipment Operators and Tenders	51-9011	Computer-Controlled Machine Tool Operators, Metal and Plastic	51-4011
Chemical Plant and System Operators	51-8091	Concierges	39-6012
Chemical Technicians	19-4031	Conservation Scientists	19-1031
Chemists	19-2031	Construction and Building Inspectors	47-4011
Chief Executives	11-1011	Construction and Related Workers, All Other	47-4099
Child Care Workers	39-9011	Construction Laborers	47-2061
Child, Family, and School Social Workers	21-1021	Construction Managers	11-9021
Chiropractors	29-1011	Control and Valve Installers and Repairers, Except Mechanical Door	49-9012
Civil Engineering Technicians	17-3022	Conveyor Operators and Tenders	53-7011
Civil Engineers	17-2051	Cooks, Fast Food	35-2011
Claims Adjusters, Examiners, and Investigators	13-1031	Cooks, Institution and Cafeteria	35-2012
Cleaners of Vehicles and Equipment	53-7061	Cooks, Restaurant	35-2014
Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	51-9192	Cooks, Short Order	35-2015
Clergy	21-2011	Cooling and Freezing Equipment Operators and Tenders	51-9193
Clinical, Counseling, and School Psychologists	19-3031	Correctional Officers and Jailers	33-3012
Coaches and Scouts	27-2022	Correspondence Clerks	43-4021
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	51-9121	Cost Estimators	13-1051
Coil Winders, Tapers, and Finishers	51-2021	Counter and Rental Clerks	41-2021
Coin, Vending, and Amusement Machine Servicers and Repairers	49-9091	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	35-3022
Combined Food Preparation and Serving Workers, Including Fast Food	35-3021	Couriers and Messengers	43-5021
Commercial and Industrial Designers	27-1021	Court Reporters	23-2091
Commercial Pilots	53-2012	Court, Municipal, and License Clerks	43-4031
Community and Social Service Specialists, All Other	21-1099	Craft Artists	27-1012
Compensation and Benefits Managers	11-3041	Crane and Tower Operators	53-7021
Compensation, Benefits, and Job Analysis Specialists	13-1072	Credit Analysts	13-2041
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041	Credit Authorizers, Checkers, and Clerks	43-4041
Computer and Information Scientists, Research	15-1011	Crossing Guards	33-9091
Computer and Information Systems Managers	11-3021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	51-9021
Computer Hardware Engineers	17-2061	Curators	25-4012
Computer Operators	43-9011	Customer Service Representatives	43-4051
Computer Programmers	15-1021	Cutters and Trimmers, Hand	51-9031
Computer Software Engineers, Applications	15-1031	Cutting and Slicing Machine Setters, Operators, and Tenders	51-9032
Computer Software Engineers, Systems Software	15-1032	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	51-4031

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Data Entry Keyers	43-9021	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	49-2095
Database Administrators	15-1061	Electrical Engineers	17-2071
Demonstrators and Product Promoters	41-9011	Electrical Power-Line Installers and Repairers	49-9051
Dental Assistants	31-9091	Electricians	47-2111
Dental Hygienists	29-2021	Electromechanical Equipment Assemblers	51-2023
Dental Laboratory Technicians	51-9081	Electro-Mechanical Technicians	17-3024
Dentists, All Other Specialists	29-1029	Electronic Equipment Installers and Repairers, Motor Vehicles	49-2096
Dentists, General	29-1021	Electronic Home Entertainment Equipment Installers and Repairers	49-2097
Derrick Operators, Oil and Gas	47-5011	Electronics Engineers, Except Computer	17-2072
Desktop Publishers	43-9031	Elementary School Teachers, Except Special Education	25-2021
Detectives and Criminal Investigators	33-3021	Eligibility Interviewers, Government Programs	43-4061
Diagnostic Medical Sonographers	29-2032	Embalmers	39-4011
Dietetic Technicians	29-2051	Emergency Medical Technicians and Paramedics	29-2041
Dietitians and Nutritionists	29-1031	Employment, Recruitment, and Placement Specialists	13-1071
Dining Room and Cafeteria Attendants and Bartender Helpers	35-9011	Engine and Other Machine Assemblers	51-2031
Directors, Religious Activities and Education	21-2021	Engineering Managers	11-9041
Dishwashers	35-9021	Engineering Technicians, Except Drafters, All Other	17-3029
Dispatchers, Except Police, Fire, and Ambulance	43-5032	Engineers, All Other	17-2199
Door-To-Door Sales Workers, News and Street Vendors, and Related Workers	41-9091	Environmental Engineering Technicians	17-3025
Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4032	Environmental Engineers	17-2081
Driver/Sales Workers	53-3031	Environmental Science and Protection Technicians, Including Health	19-4091
Drywall and Ceiling Tile Installers	47-2081	Environmental Scientists and Specialists, Including Health	19-2041
Earth Drillers, Except Oil and Gas	47-5021	Etchers and Engravers	51-9194
Economists	19-3011	Excavating and Loading Machine and Dragline Operators	53-7032
Editors	27-3041	Executive Secretaries and Administrative Assistants	43-6011
Education Administrators, All Other	11-9039	Explosives Workers, Ordnance Handling Experts, and Blasters	47-5031
Education Administrators, Elementary and Secondary School	11-9032	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	51-4021
Education Administrators, Postsecondary	11-9033	Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	51-6091
Education Administrators, Preschool and Child Care Center/Program	11-9031	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	51-9041
Education, Training, and Library Workers, All Other	25-9099	Fallers	45-4021
Educational, Vocational, and School Counselors	21-1012	Farm and Home Management Advisors	25-9021
Electric Motor, Power Tool, and Related Repairers	49-2092	Farm Equipment Mechanics	49-3041
Electrical and Electronic Engineering Technicians	17-3023	Farm, Ranch, and Other Agricultural Managers	11-9011
Electrical and Electronic Equipment Assemblers	51-2022	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	45-2092
Electrical and Electronics Drafters	17-3012	Farmworkers, Farm and Ranch Animals	45-2093
Electrical and Electronics Installers and Repairers, Transportation Equipment	49-2093	Fiberglass Laminators and Fabricators	51-2091
Electrical and Electronics Repairers, Commercial and Industrial Equipment	49-2094	File Clerks	43-4071

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Financial Analysts	13-2051	Forest Fire Inspectors and Prevention Specialists	33-2022
Financial Examiners	13-2061	Foresters	19-1032
Financial Managers	11-3031	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	51-4022
Financial Specialists, All Other	13-2099	Funeral Attendants	39-4021
Fine Artists, Including Painters, Sculptors, and Illustrators	27-1013	Funeral Directors	11-9061
Fire Fighters	33-2011	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	51-9051
Fire Inspectors and Investigators	33-2021	Furniture Finishers	51-7021
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	47-1011	Gaming and Sports Book Writers and Runners	39-3012
First-Line Supervisors/Managers of Correctional Officers	33-1011	Gaming Cage Workers	43-3041
First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	45-1011	Gaming Change Persons and Booth Cashiers	41-2012
First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	33-1021	Gaming Dealers	39-3011
First-Line Supervisors/Managers of Food Preparation and Serving Workers	35-1012	Gaming Supervisors	39-1011
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	53-1021	Gaming Surveillance Officers and Gaming Investigators	33-9031
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	37-1011	Gas Compressor and Gas Pumping Station Operators	53-7071
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	37-1012	Gas Plant Operators	51-8092
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	49-1011	General and Operations Managers	11-1021
First-Line Supervisors/Managers of Non-Retail Sales Workers	41-1012	Geological and Petroleum Technicians	19-4041
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011	Geoscientists, Except Hydrologists and Geographers	19-2042
First-Line Supervisors/Managers of Personal Service Workers	39-1021	Glaziers	47-2121
First-Line Supervisors/Managers of Police and Detectives	33-1012	Graders and Sorters, Agricultural Products	45-2041
First-Line Supervisors/Managers of Production and Operating Workers	51-1011	Graphic Designers	27-1024
First-Line Supervisors/Managers of Retail Sales Workers	41-1011	Grinding and Polishing Workers, Hand	51-9022
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Oper	53-1031	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal an	51-4033
First-Line Supervisors/Managers, Protective Service Workers, All Other	33-1099	Hairdressers, Hairstylists, and Cosmetologists	39-5012
Fish and Game Wardens	33-3031	Hazardous Materials Removal Workers	47-4041
Fitness Trainers and Aerobics Instructors	39-9031	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	17-2111
Floor Layers, Except Carpet, Wood, and Hard Tiles	47-2042	Health Diagnosing and Treating Practitioners, All Other	29-1199
Floral Designers	27-1023	Health Educators	21-1091
Food Batchmakers	51-3092	Health Technologists and Technicians, All Other	29-2099
Food Cooking Machine Operators and Tenders	51-3093	Healthcare Practitioners and Technical Workers, All Other	29-9099
Food Preparation Workers	35-2021	Healthcare Support Workers, All Other	31-9099
Food Scientists and Technologists	19-1012	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	51-4191
Food Servers, Nonrestaurant	35-3041	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021
Food Service Managers	11-9051	Helpers, Construction Trades, All Other	47-3019
Forensic Science Technicians	19-4092	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	47-3011
Forest and Conservation Technicians	19-4093	Helpers--Carpenters	47-3012
Forest and Conservation Workers	45-4011	Helpers--Electricians	47-3013

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Helpers--Extraction Workers	47-5081	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4034
Helpers--Installation, Maintenance, and Repair Workers	49-9098	Laundry and Dry-Cleaning Workers	51-6011
Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	47-3014	Law Clerks	23-2092
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	47-3015	Lawyers	23-1011
Helpers--Production Workers	51-9198	Lay-Out Workers, Metal and Plastic	51-4192
Helpers--Roofers	47-3016	Legal Secretaries	43-6012
Highway Maintenance Workers	47-4051	Legal Support Workers, All Other	23-2099
Historians	19-3093	Legislators	11-1031
Home Appliance Repairers	49-9031	Librarians	25-4021
Home Health Aides	31-1011	Library Assistants, Clerical	43-4121
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	35-9031	Library Technicians	25-4031
Hotel, Motel, and Resort Desk Clerks	43-4081	Licensed Practical and Licensed Vocational Nurses	29-2061
Human Resources Assistants, Except Payroll and Timekeeping	43-4161	Life, Physical, and Social Science Technicians, All Other	19-4099
Human Resources Managers, All Other	11-3049	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	33-9092
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Loading Machine Operators, Underground Mining	53-7033
Hydrologists	19-2043	Loan Counselors	13-2071
Industrial Engineers	17-2112	Loan Interviewers and Clerks	43-4131
Industrial Machinery Mechanics	49-9041	Loan Officers	13-2072
Industrial Production Managers	11-3051	Locker Room, Coatroom, and Dressing Room Attendants	39-3093
Industrial Truck and Tractor Operators	53-7051	Locksmiths and Safe Repairers	49-9094
Information and Record Clerks, All Other	43-4199	Lodging Managers	11-9081
Inspectors, Testers, Sorters, Samplers, and Weighers	51-9061	Logging Equipment Operators	45-4022
Instructional Coordinators	25-9031	Logisticians	13-1081
Insulation Workers, Floor, Ceiling, and Wall	47-2131	Machine Feeders and Offbearers	53-7063
Insulation Workers, Mechanical	47-2132	Machinists	51-4041
Insurance Appraisers, Auto Damage	13-1032	Maids and Housekeeping Cleaners	37-2012
Insurance Claims and Policy Processing Clerks	43-9041	Mail Clerks and Mail Machine Operators, Except Postal Service	43-9051
Insurance Sales Agents	41-3021	Maintenance and Repair Workers, General	49-9042
Insurance Underwriters	13-2053	Maintenance Workers, Machinery	49-9043
Interior Designers	27-1025	Management Analysts	13-1111
Interpreters and Translators	27-3091	Managers, All Other	11-9199
Interviewers, Except Eligibility and Loan	43-4111	Manicurists and Pedicurists	39-5092
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	37-2011	Market Research Analysts	19-3021
Judges, Magistrate Judges, and Magistrates	23-1023	Marketing Managers	11-2021
Kindergarten Teachers, Except Special Education	25-2012	Massage Therapists	31-9011
Laborers and Freight, Stock, and Material Movers, Hand	53-7062	Material Moving Workers, All Other	53-7199
Landscaping and Groundskeeping Workers	37-3011	Materials Engineers	17-2131

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Meat, Poultry, and Fish Cutters and Trimmers	51-3022	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4081
Mechanical Door Repairers	49-9011	Museum Technicians and Conservators	25-4013
Mechanical Drafters	17-3013	Musicians and Singers	27-2042
Mechanical Engineering Technicians	17-3027	Natural Sciences Managers	11-9121
Mechanical Engineers	17-2141	Network and Computer Systems Administrators	15-1071
Media and Communication Equipment Workers, All Other	27-4099	Network Systems and Data Communications Analysts	15-1081
Medical and Clinical Laboratory Technicians	29-2012	New Accounts Clerks	43-4141
Medical and Clinical Laboratory Technologists	29-2011	Nonfarm Animal Caretakers	39-2021
Medical and Health Services Managers	11-9111	Nuclear Medicine Technologists	29-2033
Medical and Public Health Social Workers	21-1022	Numerical Tool and Process Control Programmers	51-4012
Medical Assistants	31-9092	Nursing Aides, Orderlies, and Attendants	31-1012
Medical Equipment Preparers	31-9093	Occupational Health and Safety Specialists	29-9011
Medical Equipment Repairers	49-9062	Occupational Health and Safety Technicians	29-9012
Medical Records and Health Information Technicians	29-2071	Occupational Therapist Aides	31-2012
Medical Scientists, Except Epidemiologists	19-1042	Occupational Therapist Assistants	31-2011
Medical Secretaries	43-6013	Occupational Therapists	29-1122
Medical Transcriptionists	31-9094	Office Clerks, General	43-9061
Meeting and Convention Planners	13-1121	Office Machine Operators, Except Computer	43-9071
Mental Health and Substance Abuse Social Workers	21-1023	Operating Engineers and Other Construction Equipment Operators	47-2073
Mental Health Counselors	21-1014	Operations Research Analysts	15-2031
Merchandise Displayers and Window Trimmers	27-1026	Ophthalmic Laboratory Technicians	51-9083
Metal-Refining Furnace Operators and Tenders	51-4051	Opticians, Dispensing	29-2081
Meter Readers, Utilities	43-5041	Optometrists	29-1041
Microbiologists	19-1022	Order Clerks	43-4151
Middle School Teachers, Except Special and Vocational Education	25-2022	Orthotists and Prosthetists	29-2091
Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	51-4035	Outdoor Power Equipment and Other Small Engine Mechanics	49-3053
Millwrights	49-9044	Packaging and Filling Machine Operators and Tenders	51-9111
Mining and Geological Engineers, Including Mining Safety Engineers	17-2151	Packers and Packagers, Hand	53-7064
Mixing and Blending Machine Setters, Operators, and Tenders	51-9023	Painters, Construction and Maintenance	47-2141
Mobile Heavy Equipment Mechanics, Except Engines	49-3042	Painters, Transportation Equipment	51-9122
Model Makers, Metal and Plastic	51-4061	Painting, Coating, and Decorating Workers	51-9123
Molders, Shapers, and Casters, Except Metal and Plastic	51-9195	Paper Goods Machine Setters, Operators, and Tenders	51-9196
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	51-4072	Paperhangers	47-2142
Motion Picture Projectionists	39-3021	Paralegals and Legal Assistants	23-2011
Motorboat Mechanics	49-3051	Parking Lot Attendants	53-6021
Motorcycle Mechanics	49-3052	Parts Salespersons	41-2022
Multi-Media Artists and Animators	27-1014	Patternmakers, Metal and Plastic	51-4062

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Paving, Surfacing, and Tamping Equipment Operators	47-2071	Probation Officers and Correctional Treatment Specialists	21-1092
Payroll and Timekeeping Clerks	43-3051	Procurement Clerks	43-3061
Personal and Home Care Aides	39-9021	Producers and Directors	27-2012
Personal Care and Service Workers, All Other	39-9099	Production Workers, All Other	51-9199
Personal Financial Advisors	13-2052	Production, Planning, and Expediting Clerks	43-5061
Petroleum Engineers	17-2171	Property, Real Estate, and Community Association Managers	11-9141
Petroleum Pump System Operators, Refinery Operators, and Gaugers	51-8093	Protective Service Workers, All Other	33-9099
Pharmacists	29-1051	Psychiatric Aides	31-1013
Pharmacy Aides	31-9095	Psychiatric Technicians	29-2053
Pharmacy Technicians	29-2052	Psychologists, All Other	19-3039
Photographers	27-4021	Public Address System and Other Announcers	27-3012
Photographic Process Workers	51-9131	Public Relations Managers	11-2031
Physical Scientists, All Other	19-2099	Public Relations Specialists	27-3031
Physical Therapist Aides	31-2022	Pump Operators, Except Wellhead Pumpers	53-7072
Physical Therapist Assistants	31-2021	Purchasing Agents and Buyers, Farm Products	13-1021
Physical Therapists	29-1123	Purchasing Agents, Except Wholesale, Retail, and Farm Products	13-1023
Physician Assistants	29-1071	Purchasing Managers	11-3061
Physicians and Surgeons	29-1060	Radiation Therapists	29-1124
Physicists	19-2012	Radio and Television Announcers	27-3011
Pipelayers	47-2151	Radiologic Technologists and Technicians	29-2034
Plasterers and Stucco Masons	47-2161	Rail Car Repairers	49-3043
Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	51-4193	Railroad Brake, Signal, and Switch Operators	53-4021
Plumbers, Pipefitters, and Steamfitters	47-2152	Railroad Conductors and Yardmasters	53-4031
Police and Sheriff's Patrol Officers	33-3051	Rail-Track Laying and Maintenance Equipment Operators	47-4061
Police, Fire, and Ambulance Dispatchers	43-5031	Real Estate Brokers	41-9021
Postal Service Clerks	43-5051	Real Estate Sales Agents	41-9022
Postal Service Mail Carriers	43-5052	Receptionists and Information Clerks	43-4171
Postal Service Mail Sorters, Processors, and Processing Machine Operators	43-5053	Recreation Workers	39-9032
Postmasters and Mail Superintendents	11-9131	Recreational Therapists	29-1125
Pourers and Casters, Metal	51-4052	Recreational Vehicle Service Technicians	49-3092
Power Plant Operators	51-8013	Refractory Materials Repairers, Except Brickmasons	49-9045
Precision Instrument and Equipment Repairers, All Other	49-9069	Refuse and Recyclable Material Collectors	53-7081
Prepress Technicians and Workers	51-5022	Registered Nurses	29-1111
Preschool Teachers, Except Special Education	25-2011	Rehabilitation Counselors	21-1015
Pressers, Textile, Garment, and Related Materials	51-6021	Reinforcing Iron and Rebar Workers	47-2171
Printing Machine Operators	51-5023	Religious Workers, All Other	21-2099
Private Detectives and Investigators	33-9021	Reporters and Correspondents	27-3022

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Reservation and Transportation Ticket Agents and Travel Clerks	43-4181	Special Education Teachers, Middle School	25-2042
Residential Advisors	39-9041	Special Education Teachers, Preschool, Kindergarten, and Elementary School	25-2041
Respiratory Therapists	29-1126	Special Education Teachers, Secondary School	25-2043
Respiratory Therapy Technicians	29-2054	Speech-Language Pathologists	29-1127
Retail Salespersons	41-2031	Stationary Engineers and Boiler Operators	51-8021
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	51-4023	Statisticians	15-2041
Roofers	47-2181	Stock Clerks and Order Fillers	43-5081
Rotary Drill Operators, Oil and Gas	47-5012	Stonemasons	47-2022
Roustabouts, Oil and Gas	47-5071	Structural Iron and Steel Workers	47-2221
Sales and Related Workers, All Other	41-9099	Structural Metal Fabricators and Fitters	51-2041
Sales Managers	11-2022	Substance Abuse and Behavioral Disorder Counselors	21-1011
Sales Representatives, Services, All Other	41-3099	Surgical Technologists	29-2055
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012	Survey Researchers	19-3022
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	41-4011	Surveying and Mapping Technicians	17-3031
Sawing Machine Setters, Operators, and Tenders, Wood	51-7041	Surveyors	17-1022
Secondary School Teachers, Except Special and Vocational Education	25-2031	Switchboard Operators, Including Answering Service	43-2011
Secretaries, Except Legal, Medical, and Executive	43-6014	Tailors, Dressmakers, and Custom Sewers	51-6052
Securities, Commodities, and Financial Services Sales Agents	41-3031	Tank Car, Truck, and Ship Loaders	53-7121
Security and Fire Alarm Systems Installers	49-2098	Tapers	47-2082
Security Guards	33-9032	Tax Examiners, Collectors, and Revenue Agents	13-2081
Self-Enrichment Education Teachers	25-3021	Tax Preparers	13-2082
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	51-9012	Taxi Drivers and Chauffeurs	53-3041
Septic Tank Servicers and Sewer Pipe Cleaners	47-4071	Teacher Assistants	25-9041
Service Station Attendants	53-6031	Teachers and Instructors, All Other	25-3099
Service Unit Operators, Oil, Gas, and Mining	47-5013	Team Assemblers	51-2092
Set and Exhibit Designers	27-1027	Technical Writers	27-3042
Sewing Machine Operators	51-6031	Telecommunications Equipment Installers and Repairers, Except Line Installers	49-2022
Sheet Metal Workers	47-2211	Telecommunications Line Installers and Repairers	49-9052
Shipping, Receiving, and Traffic Clerks	43-5071	Telemarketers	41-9041
Signal and Track Switch Repairers	49-9097	Telephone Operators	43-2021
Slaughterers and Meat Packers	51-3023	Tellers	43-3071
Slot Key Persons	39-1012	Textile Cutting Machine Setters, Operators, and Tenders	51-6062
Social and Community Service Managers	11-9151	Tile and Marble Setters	47-2044
Social and Human Service Assistants	21-1093	Tire Builders	51-9197
Social Scientists and Related Workers, All Other	19-3099	Tire Repairers and Changers	49-3093
Social Workers, All Other	21-1029	Title Examiners, Abstractors, and Searchers	23-2093
Soil and Plant Scientists	19-1013	Tool and Die Makers	51-4111

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Tool Grinders, Filers, and Sharpeners	51-4194
Tour Guides and Escorts	39-6021
Traffic Technicians	53-6041
Training and Development Managers	11-3042
Training and Development Specialists	13-1073
Transportation Attendants, Except Flight Attendants and Baggage Porters	39-6032
Transportation Inspectors	53-6051
Transportation Workers, All Other	53-6099
Transportation, Storage, and Distribution Managers	11-3071
Travel Agents	41-3041
Tree Trimmers and Pruners	37-3013
Truck Drivers, Heavy and Tractor-Trailer	53-3032
Truck Drivers, Light or Delivery Services	53-3033
Upholsterers	51-6093
Urban and Regional Planners	19-3051
Ushers, Lobby Attendants, and Ticket Takers	39-3031
Veterinarians	29-1131

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Veterinary Assistants and Laboratory Animal Caretakers	31-9096
Veterinary Technologists and Technicians	29-2056
Vocational Education Teachers, Middle School	25-2023
Vocational Education Teachers, Secondary School	25-2032
Waiters and Waitresses	35-3031
Water and Liquid Waste Treatment Plant and System Operators	51-8031
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	43-5111
Welders, Cutters, Solderers, and Brazers	51-4121
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	51-4122
Wellhead Pumpers	53-7073
Wholesale and Retail Buyers, Except Farm Products	13-1022
Woodworkers, All Other	51-7099
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	51-7042
Word Processors and Typists	43-9022
Writers and Authors	27-3043
Zoologists and Wildlife Biologists	19-1023