

# Arkansas-Statewide Short-Term Industry and Occupational Projections

2016-2018

## ARKANSAS SHORT-TERM INDUSTRY AND OCCUPATIONAL PROJECTIONS 2016-2018





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### ARKANSAS SHORT-TERM INDUSTRY AND OCCUPATIONAL PROJECTIONS 2016-2018

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### **Definition of Important Terms**

Base Employment - The average number of jobs in a particular industry or occupation during the benchmark year or quarter.

Content Skills - Learned capabilities that allow workers to master and perform the specific activities of their jobs.

**Current Employment Statistics (CES)** – A monthly survey of business establishments that provides estimates of employment, hours, and earnings data by industry for the nation as a whole, all states, and most major metropolitan areas.

Employment – The number of jobs in a business or firm at any given time.

**Establishment** – The physical location of a certain economic activity, for example, a factory, mine, store, or office. Generally, a single establishment produces a single good or provides a single service.

**Fastest Growing/Declining** – Refers to percent growth. The higher the percent growth, the faster an industry or occupation is growing. For declining industries or occupations, the lower the percent growth, the faster it is declining.

Industry – A group of establishments that produce similar products or provide similar services.

Knowledge Domain - Learned sets of facts and standards required by many work situations.

**Metropolitan Statistical Area** – A county or group of contiguous counties that contains an urban center of at least 50,000 residents and has a high degree of economic and social ties.

Net Change - The difference between projected employment and base employment.

North American Industry Classification System (NAICS) – A system used in assigning industry-designated code numbers to employers and/or establishments based on the nature of their activities, services rendered or products delivered; established by the U.S. Office of Management and Budget and used by all agencies for data compilation.

**Occupation** – A set of activities that employees are paid to perform; employees who perform the same tasks are in the same occupation, whether or not they are in the same industry.

**Occupational Employment Statistics (OES)** – A federal/state cooperative program that produces employment and wage estimates for over 700 occupations. These are estimates of the number of people employed in certain occupations and estimates of the wages paid to them. They are also used to gather occupational staffing patterns by industry that are used to project employment needs by occupation.

Percent (%) Change - The rate at which an industry or occupation is expected to grow or decline.

Projected Employment - The average number of jobs expected to be in an industry or occupation in the future.

**Quarterly Census of Employment and Wages (QCEW)** – A federal/state cooperative program that produces employment and wage data for workers covered by State unemployment insurance laws and Federal workers covered by the Unemployment Compensation for Federal Employees Program; data is arranged by the type of industry according to the North American Industry Classification System (NAICS).

Sector – A level of industry classification under supersector according to the NAICS structure.

**Standard Occupational Classification (SOC)** – A coding system used by all federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data.

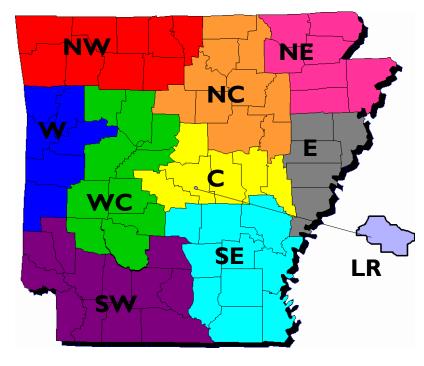
Subsector – A level of industry classification under sector according to the NAICS structure.

Supersector – The top level of industry classification according to the NAICS structure.

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### Local Workforce Development Areas



#### Northwest Arkansas Workforce Development Area

Baxter, Benton, Boone, Carroll, Madison, Marion, Newton, Searcy, and Washington Counties

#### North Central Arkansas Workforce Development Area

Cleburne, Fulton, Independence, Izard, Jackson, Sharp, Stone, Van Buren, White, and Woodruff Counties

#### Northeast Arkansas Workforce Development Area

Clay, Craighead, Greene, Lawrence, Mississippi, Poinsett, and Randolph Counties

#### Western Arkansas Workforce Development Area

Crawford, Franklin, Logan, Polk, Scott, and Sebastian Counties

#### West Central Arkansas Workforce Development Area

Clark, Conway, Garland, Hot Spring, Johnson, Montgomery, Perry, Pike, Pope, and Yell Counties

#### **Central Arkansas Workforce Development Area**

Faulkner, Lonoke, Monroe, Prairie, Pulaski outside the City Limits of Little Rock, and Saline Counties

#### **City of Little Rock Workforce Development Area**

Inside the City Limits of Little Rock

#### Eastern Arkansas Workforce Development Area

Crittenden, Cross, Lee, Phillips, and St. Francis Counties

#### Southwest Arkansas Workforce Development Area

Calhoun, Columbia, Dallas, Hempstead, Howard, Lafayette,

Little River, Miller, Nevada, Ouachita, Sevier, and Union Counties

#### Southeast Arkansas Workforce Development Area

Arkansas, Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Grant, Jefferson, and Lincoln Counties

### Introduction

The Arkansas Short-Term Industry and Occupational Projections publication includes an overview of where the Arkansas labor market may be heading in the near future. It contains information on the growth and decline of industries and occupations.

Industries in this publication are classified by North American Industry Classification System (NAICS) codes. NAICS was created to bring consistency and comparability to the classifying of industries and businesses across the United States, Canada, and Mexico.

This publication is divided into two main parts. The first part of the publication involves the industry projections. Several tables and graphs are used to show what is happening at the industry level in Arkansas. A written narrative highlights projections at the division level as well as key industries within that division.

The second part of this publication involves occupational projections. Several tables and graphs are used to show what is happening at the occupational level in Arkansas. A written narrative highlights projections at the division level as well as key occupations within that division. Occupations are classified by Standard Occupational Classification (SOC) codes.

Information about annual job openings is included in this publication. Job openings are classified as one of two types: replacement or growth. The more replacement openings a specific occupation has, the higher the turnover for that occupation. It is important to look at both growth annual openings and replacement annual openings when determining whether a particular occupation is right for you.

For each occupation, an education/training level is provided. Educational requirements are determined by the Bureau of Labor Statistics and recognize the educational attainment of most people in a particular occupation. Each occupation will have three categories: education, work experience, and training. Some businesses, however, may require a higher level of training. Some occupations may also have different grades or levels that require different levels of training. These various levels of training will not be reflected in this publication.

The need for workers to have certain skills has become increasingly important in the labor market. A part of the publication presents the top skills that are in demand for new jobs and for jobs being replaced. Top knowledge domains are also presented.

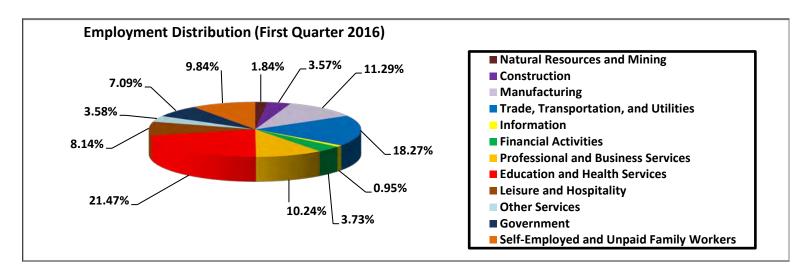
### **State of Arkansas Profile**

Arkansas has 75 counties and 10 Local Workforce Development Areas. There are also six Metropolitan Statistical Areas (MSAs). The MSAs are Little Rock/North Little Rock/Conway; Fayetteville/Springdale/Rogers, which includes McDonald County in Missouri; Pine Bluff; Hot Springs; Jonesboro; and Fort Smith, which includes Leflore and Sequoyah Counties in Oklahoma. Parts of two other MSAs are located in the state, but are based in other states. Crittenden County is part of the Memphis/West Memphis MSA, which is based in Tennessee, and Miller County is part of the Texarkana AR/TX MSA, which is based in Texas.

Arkansas is rich in natural resources. There are many historical landmarks and state parks scattered throughout the state. This is one of the reasons why Arkansas is called the Natural State.

Educational opportunities in the state of Arkansas are numerous. Prospective students have a wide range of institutions from which to choose, ranging from two-year community and technical colleges to four-year universities. Students can also choose between public/state institutions and private or religious-based institutions. These schools offer a variety of programs, ranging from technical certificates and Associate's Degrees to graduate degrees. Arkansas also has a number of small institutions that focus on specific types of careers. With all these educational opportunities, an array of occupational careers is waiting for students.

Arkansas's population based on the United States Census Bureau estimates was 2,988,248, as of July 1, 2016, which is an increase of 10,395 residents from the July 1, 2015 estimate of 2,977,853. The non-seasonally adjusted average unemployment rate for first quarter 2016 was 4.4 percent, while the seasonally adjusted number was 4.1 percent.



### Methodology

The following is a brief overview of the methods used to produce short-term employment projections in Arkansas.

#### **Data Development**

Data development is accomplished by using the following sources:

The Quarterly Census of Employment and Wages (QCEW) program. This source provides all the covered employment for Arkansas. A firm or business is considered covered if it meets the guidelines established under the Unemployment Insurance Law.

*The Current Employment Statistics (CES) Survey.* This source provides employment information for non-covered establishments, which are railroads, the Federal Work Study Program, churches, religious-based schools, elected officials, commissioned insurance agents, as well as other establishments not reporting to the *Quarterly Census of Employment and Wages (QCEW)* program.

*Agriculture employment*. This is obtained from the Census of Agriculture. The Census of Agriculture is taken every five years in years ending in two and seven. Information from the QCEW reports is used to make estimates for years following the Census year until the next Census. Other information from the Bureau of Economic Analysis (BEA) is used to supplement agriculture employment.

*Other Non-Covered Employment.* Data on other Agriculture employment, specifically NAICS 113, 114, and 115 as well as Private Households are supplemented using data from the Bureau of Economic Analysis.

#### **Industry Projections**

A monthly time series is developed at the three- and four-digit NAICS level from the three sources listed above with a time period of January 1990 to March of the base year 2016. The industry projections in this publication were produced using the *Projections Suite* software, authorized by the U.S. Department of Labor and developed by the Utah Department of Workforce Services. The software has several components to deal with industry projections. First, it allows the analyst to choose from a list of national and state variables to determine a state leading index, which is a list of variables that when factored together, helps predict changes in the state employment figures. National economic variables are also provided. State variables are labor force data, such as civilian labor force and unemployment rate, major industry division (CES) totals, nonfarm employment, building permits, manufacturing hours, natural gas prices, air passenger data, and a composite index.

The software uses a series of statistical models to forecast employment through eight quarters. Using trend and seasonal factors, as well as business cycle patterns, a forecast is chosen based on established statistical methodology. Projections are adjusted to reflect current or near future events in the labor market such as closures, layoffs, openings, and expansions.

#### **Occupational Projections**

Occupational projections are produced by merging industries and occupations together into an industry-occupational matrix. This matrix is a table showing the occupational pattern of each industry (i.e., the ratios of employment by occupation in a specific industry). The statewide matrix is based on the Bureau of Labor Statistics' Occupational Employment Statistics (OES) survey and uses a Standard Occupational Classification (SOC) code

for each occupation. It uses the May 2015 OES semiannual survey to establish state staffing patterns and is provided through the Local Employment and Wage Information System (LEWIS). National staffing patterns are used where state patterns do not exist.

The occupational employment projections contained in this publication were created using the *Projections Suite* software, authorized by the U.S. Department of Labor and developed by the Utah Department of Workforce Services. The software applies occupational change factors to the projected patterns to form a projected matrix. Also, using national self-employment staffing patterns, the system generates base and projected employment for self-employed workers. Patterns and projections for Unpaid Family Workers are based on Census numbers.

#### **Data Limitations**

The projections contained in this publication are estimates based on historical data. It is important not to rely on these projections as the actual employment numbers that will occur in 2018. While every attempt is made to incorporate current and near future events, such as business closings, corporate layoffs, openings, and expansions, it's not possible to know everything that might happen. Events that may take place after the projection period or announcements concerning closings, layoffs, openings, and expansions known after projections were completed are not reflected in the forecasts. Also, legislative policy could cause employment to change. Events such as these will likely cause the actual employment numbers to vary significantly from these projections.

It is important to look at both net growth and percent growth when looking at projections. Generally, industries or occupations with small employment will have higher growth rates than those with larger employment, but these industries may only add a few employees over the projection period. When examining occupational projections, it is important to look at both replacement and growth openings. Even if an occupation is in decline, it still may have openings to replace workers who leave the profession for various reasons.

### EXPLANATION OF INDUSTRY PROJECTIONS DATA ARKANSAS-STATEWIDE 2016-2018

NAICS Code	NAICS Title	2016 Estimated Employment	2018 Projected Employment	Net Growth	Percent Growth
Industry code according to the North American Industry Classification System (NAICS) Title and Coding Structure	Industry title according to the North American Industry Classification System (NAICS) Title and Coding Structure	An estimate of the number of jobs in an industry in 2016	The projected number of jobs expected to be in an industry in 2018	Total number of jobs an industry is expected to gain or lose over the 2016 to 2018 period	Percent change in the number of jobs in an industry over the 2016 to 2018 period

#### 2016 2018 NAICS Percent Numeric North American Industry Classification System Title Estimated Projected Code Change Change Employment Employment TOTAL ALL INDUSTRIES 41,750 000000 1,408,327 3.06% 1,366,577 Total Self Employed and Unpaid Family Workers, All Jobs 000671 134.451 138.298 3.847 2.86% 006010 Self Employed Workers, All Jobs 3,634 127,023 130,657 2.86% 007010 Unpaid Family Workers, All Jobs 7,428 7,641 213 2.87% 101000 Goods Producing 228.089 232.555 4.466 1.96% NATURAL RESOURCES AND MINING 101100 25,110 24,633 -477 -1.90% 110000 Agriculture, Forestry, Fishing and Hunting 20.354 20.889 535 2.63% 210000 Minina 4.756 3.744 -1.012 -21.28% CONSTRUCTION 101200 48.757 52.260 3.503 7.18% MANUFACTURING 0.93% 101300 154,222 155,662 1.440 Non-Durable Goods Manufacturing 1.98% 79.277 80.846 1.569 74,816 -0.17% **Durable Goods Manufacturing** 74,945 -129 102000 Services Providing 1.004.037 1.037.474 33.437 3.33% 102100 TRADE, TRANSPORTATION, AND UTILITIES 249,523 256,563 7,040 2.82% 420000 Wholesale Trade 46.093 46.975 882 1.91% Retail Trade 440000 140,327 145,177 4,850 3.46% Transportation and Warehousing 480000 55.332 56.800 1.468 2.65% 220000 Utilities 7,771 7,611 -160 -2.06% 102200 INFORMATION 13.630 13.386 -244 -1.79% 102300 FINANCIAL ACTIVITIES 50,979 52,727 1,748 3.43% 520000 Finance and Insurance 3.37% 37,934 39.214 1,280 Real Estate and Rental and Leasing 3.59% 530000 13.045 13.513 468 PROFESSIONAL AND BUSINESS SERVICES 6,629 102400 139,887 146,516 4.74% 540000 Professional, Scientific, and Technical Services 42.948 45.012 2.064 4.81% Management of Companies and Enterprises 550000 34.355 36.616 2,261 6.58% Administrative and Support and Waste Management and Remediation Services 560000 62.584 64.888 2.304 3.68% 102500 EDUCATION AND HEALTH SERVICES 3.29% 293.242 302.879 9.637 610000 Educational Services 115.077 118.434 3.357 2.92% 620000 Health Care and Social Assistance 178,165 184,445 6,280 3.52% 102600 LEISURE AND HOSPITALITY 111.140 116.667 5.527 4.97% Arts, Entertainment, and Recreation 5.56% 710000 9,871 10,420 549 720000 Accommodation and Food Services 101.269 106.247 4.978 4.92% 102700 OTHER SERVICES (EXCEPT GOVERNMENT) 3.87% 48,849 50,738 1,889 102800 GOVERNMENT 96.787 97.998 1.211 1.25%

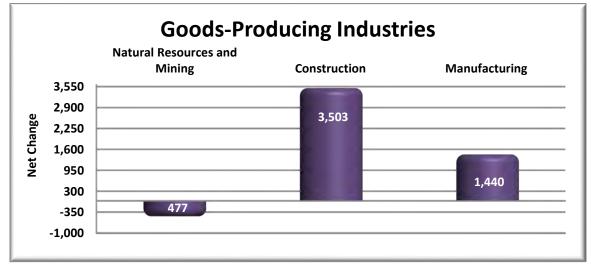
### 2016-2018 Arkansas Statewide Industry Projections by Major Division

### **Industry Outlook**

Between first quarter 2015 and first quarter 2016, an increase of 21,736 jobs was seen in the Arkansas economy, which translates to a 1.87 percent increase in jobs. The job market is expected to continue this growth with an increase of 41,750 jobs, equivalent to a 3.06 percent rise in employment by 2018. Goods-Producing Industries are estimated to see a net gain of 4,466 jobs, while the Services-Providing Industries are forecast to increase employment by 33,437. Arkansas's self-employed ranks are estimated to experience a net gain of 3,847, an increase of 2.86 percent.

#### **Natural Resources and Mining**

Employment in **Natural Resources and Mining** is expected to fall by 477 jobs, or 1.90 percent. The significant source of the decline is in the **Mining** sector, which is expected to lose 1,012 jobs, or 21.28 percent of its workforce. A significant drop in investment in Fayetteville Shale natural gas activities is a major contributor to this loss. A small percentage may return but the industry is not likely to return to employment levels it had in its prime. *Support Activities for Mining* could be the major contributor to the loss with 718 jobs projected to be cut, a decline of 35.28 percent, placing it as the top declining industry in the state and second in percent decline. *Oil and Gas Extraction* is predicted to



lose 195. These two industries have lost 1,677 jobs between first quarter 2015 and first quarter 2016. The **Agriculture, Forestry, Fishing and Hunting** sector is projected to soften the loss some with a gain of 535 jobs. Both *Crop Production* and *Animal Production* are estimated to see small gains of 337 and 475 jobs, respectively.

#### **Construction**

**Construction** is expected to grow by 3,503 jobs between 2016 and 2018. Its projected growth of 7.18 percent is highest in the state among the supersectors. The *Specialty Trade Contractors* subsector is estimated to gain 2,276 jobs during the projection period, almost 65 percent of the total growth in **Construction**. Building Equipment Contractors could account for 1,158 of those jobs, placing eighth in the Top 20 Growing Industries list. Building Finishing Contractors is placing sixth on the Top 20 Fastest Growing Industries list with a 15.83 percent gain. The *Construction of Buildings* subsector is predicted to gain 1,088 jobs, while *Heavy and Civil Engineering Construction* could add a modest 139 jobs. Other Heavy and Civil Engineering Construction could see a decline of 27 jobs, or 4.78 percent of its workforce.

#### **Non-Durable Goods Manufacturing**

**Non-Durable Goods Manufacturing** is projected to experience a net gain of 1,569 jobs. *Food Manufacturing* is estimated to have the brightest outlook among the subsectors with a gain of 1,471 jobs, more than 93 percent of the overall growth in **Non-Durable Goods Manufacturing**. Animal Slaughtering and Processing could see strong growth during the projection period with an anticipated increase of 989, placing it among the Top 10 on the Top 20 Growing Industries by Net Growth list. Animal Food Manufacturing is predicted to gain 13.77 percent placing the industry

among the Top 10 on the Top 20 Fastest Growing Industries by Percent Growth list for the state. The *Plastics and Rubber Products Manufacturing* subsector is estimated to add 150 jobs to its workforce. Not all areas in **Non-Durable Goods Manufacturing** are seeing a favorable outlook. *Paper Manufacturing* is estimated to lose 252 jobs, or about 2.62 percent of its workforce. Converted Paper Product Manufacturing is likely to lose the most with 177 jobs projected to be lost. *Textile Mills* could lose 12.87 percent of its workforce between 2016 and 2018.

#### **Durable Goods Manufacturing**

**Durable Goods Manufacturing** is forecast to see a mixed outlook between 2016 and 2018 with a net loss of 129 jobs. The brightest outlook could come in *Transportation Equipment Manufacturing* with a gain of 415 jobs, an increase of 3.07 percent. The top 3 fastest growing industries in the state are in **Durable Goods** 

**Manufacturing** with Forging and Stamping leading with an anticipated increase of 32.11 percent. Iron and Steel Mills and Ferroalloy Manufacturing places third in the Top 20 Fastest Growing Industries list with a 21.13 percent increase in jobs and also makes the Top 20 Growing Industries list. On the negative side of the economy, *Furniture and Related Product Manufacturing* could lose 381 jobs, or 11.08 percent of its workforce. Household



and Institutional Furniture & Kitchen Cabinet Manufacturing drives this decline with a loss of 246, but Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing could lose the most among Durable Goods industries declining by 307 jobs, or more than 10 percent of its workforce. Cutlery and Handtool Manufacturing is estimated to lose 44.11 percent of its workforce between 2016 and 2018, making it the fastest declining industry in the state. In all, 10 industries in Durable Goods Manufacturing make the Top 20 Fastest Declining Industries list. Also, *Computer and Electronic Product Manufacturing* is predicted to lose 333 jobs, or 14.48 percent of its workforce.

#### **Wholesale Trade**

The Wholesale Trade sector is projected to have a net gain of 882 jobs, a 1.91 percent increase. *Merchant Wholesalers, Durable Goods* is forecast to increase by 514 jobs, while *Merchant Wholesalers, Nondurable Goods* is estimated to experience a growth of 19. *Wholesale Electronic Markets and Agents and Brokers* is predicted to add 349 jobs to the Arkansas labor market. Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers leads all industries in Wholesale Trade with an expected gain of 239 jobs. On the negative side of the economy, Miscellaneous Nondurable Goods Merchant Wholesalers is expected to lose 119 jobs, or 3.41 percent of its workforce.

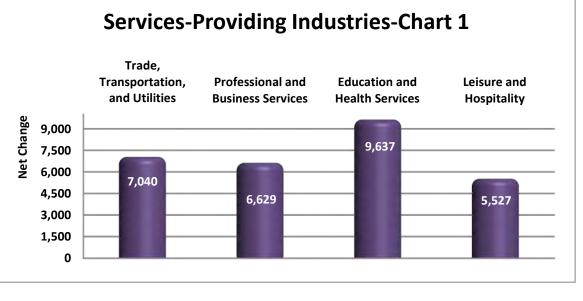
#### **Retail Trade**

**Retail Trade** is projected to add 4,850 new jobs to the Arkansas labor market, about 69 percent of the job growth in **Trade, Transportation, and Utilities.** *General Merchandise Stores* is projected to add the most jobs with 1,083 new jobs anticipated. *Furniture and Home Furnishings Stores* could increase employment by 7.68 percent between 2016 and 2018. Other Motor Vehicle Dealers is projected to be the fastest growing among **Retail Trade** industries increasing by 14.20 percent. Most of the **Retail Trade** industries are expecting growth, however, *Nonstore Retailers* is

anticipated to lose 19, or just under 1.00 percent of its workforce, and *Electronics and Appliance Stores* could see a slight net loss due to recent closures.

#### **Transportation and Warehousing**

The **Transportation and Warehousing** sector is predicted to have a net gain of 1,468 jobs over the projection period. *Warehousing and Storage* could see the most jobs with 872 new jobs, an increase of 10.77 percent. *Truck Transportation* is projected to add an additional 303 new jobs to the labor market. Driving this growth is General Freight Trucking with a gain of 481. Nonscheduled Air Transportation is projected to be the fourth fastest growing industry increasing jobs by 20.48 percent. On the negative side of the economy, Specialized Freight Trucking could lose 178 jobs. Support Activities for Air Transportation is slated to lose 12.71 percent of its workforce.

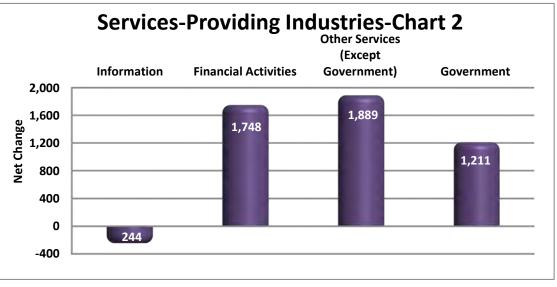


#### **Utilities**

The **Utilities** sector could see a drop in employment by March 2018 with a loss of 160 jobs, or 2.06 percent of its workforce. Electric Power Generation, Transmission and Distribution is estimated to take the brunt of the loss with a decline of 102 jobs, while Water, Sewage and Other Systems could add 10 new jobs to its workforce.

#### **Information**

**Information** is expected to continue to struggle with an anticipated loss of 244 jobs by the first quarter of 2018. *Publishing Industries (except Internet)* is expected to have a net loss of 259. Newspaper, Periodical, Book, and Directory Publishers is expected to lose 290 jobs, or 9.08 percent of its workforce. The *Telecommunications* subsector is expected to lose 79 jobs. The bright spot in this supersector comes in *Data Processing, Hosting and Related Services* with a gain of 64 new jobs, a 4.87 percent increase in jobs.



#### **Finance and Insurance**

The **Finance and Insurance** sector is predicted to experience a net gain of 1,280 jobs between 2016 and 2018, a 3.37 percent rise in employment. *Insurance Carriers and Related Activities* could see a rise in employment over the 2016-2018 period with 703 new jobs. Increasing requirements under the Affordable Care Act may play a role in this increase. Insurance Carriers are likely to drive this growth adding 494 jobs, or 6.62 percent increase. *Credit Intermediation and Related Activities* could see a turnaround with a net gain of 565 new jobs. Contributing to this growth is Depository Credit Intermediation, which is predicted to add 402 jobs to its workforce.

#### **Real Estate and Rental and Leasing**

The **Real Estate and Rental and Leasing** sector is expected to see a net gain of 468 jobs during the projection period. The *Real Estate* subsector is predicted to dominate the growth in the sector adding 370 new jobs to its workforce, while the *Rental and Leasing Services* subsector is predicted to gain 107 jobs. Activities Related to Real Estate is estimated to be the top growing industry in the sector with 162 new jobs, while Consumer Goods Rental is anticipated to increase employment by 135, or 6.89 percent. Commercial and Industrial Machinery and Equipment Rental and Leasing could offset this with a loss of 87, or 9.34 percent of its workforce.

#### **Professional, Scientific, and Technical Services**

The **Professional, Scientific, and Technical Services** sector is predicted to add 2,064 new jobs, an increase of 4.81 percent. Computer Systems Design and Related Services is estimated to lead the sector in growth with 623 new jobs placing it on the Top 20 Growing Industries list. Architectural, Engineering, and Related Services is estimated to gain an additional 438 jobs, a 7.30 percent increase. Specialized Design Services could see a tough outlook with a loss of 88 jobs or 21.78 percent of its workforce.

#### **Management of Companies and Enterprises**

Between first quarter 2015 and first quarter 2016, the **Management of Companies and Enterprises** sector experienced a growth of 1,760 new jobs. The industry is estimated to continue strong growth during the projection period with 2,261 new jobs, a 6.58 percent increase, the fastest among Services-Providing sectors. The industry is third in the Top 20 Growing industries list.

#### Administrative and Support and Waste Management and Remediation Services

The Administrative and Support and Waste Management and Remediation Services sector is projected to account for 2,304 new jobs, a 3.68 percent increase during the projection period. The majority of the job growth is likely to come in the *Administrative and Support Services* subsector, which is estimated to add 2,139 new jobs. Two industries within this subsector are forecast to be on the Top 20 Growing Industries list for the state. Employment Services is expected to be fourth in the state in net growth with 1,389 new jobs, while Services to Buildings and Dwellings is anticipated to add 562 to its workforce. *Waste Management and Remediation Services* is predicted to have a gain of 165 jobs between 2016 and 2018. Business Support Services, however, could see the toughest outlook losing 114 jobs during the projection period.

#### **Educational Services**

The **Educational Services** sector is predicted to experience a net gain of 3,357 jobs during the projection period. Colleges, Universities, and Professional Schools is estimated to add 791 jobs during the projection period, while Elementary and Secondary Schools could add the most with 2,351 new jobs anticipated. Private and Charter schools could be a contributing factor of this growth in this subsector.

#### Health Care and Social Assistance

The **Health Care and Social Assistance** sector is projected to add 6,280 jobs, making it the top growing industry sector in the state and more than 65 percent of the growth in **Education and Health Services**, which is expected to be the top growing supersector with an increase of 9,637 jobs. The *Ambulatory Health Care Services* subsector is estimated to add 2,981 jobs to the Arkansas labor market, while *Hospitals* are predicted to add a total of 1,013 to their workforce. Offices of Physicians is estimated to add 1,318 new jobs placing it among the Top 5 on the Top 20 Growing Industries list. The *Social Assistance* subsector is projected to have a net gain of 1,630 jobs. Individual and Family Services is second in net change in **Health Care and Social Assistance** and sixth overall in the state with an anticipated growth of 1,254 jobs. The only major downside in **Healthcare and Social Assistance** is expected in Other Residential Care Facilities with a decline of 92 jobs, an 8.46 percent drop in employment.

#### Arts, Entertainment, and Recreation

The Arts, Entertainment, and Recreation sector is projected to experience a net gain of 549 jobs. More than 54 percent of the growth is likely to come in *Amusement, Gambling, and Recreation Industries*, which is projected to gain 297 jobs between 2016 and 2018, while *Performing Arts, Spectator Sports, and Related Industries* is predicted to have a net gain of 170 jobs. Other Amusement and Recreation Industries is predicted to add 301 jobs to the labor force, an increase of 4.92 percent. *Museums, Historical Sites, and Similar Institutions* could be among the 10 fastest growing industries in the state with a 13.44 percent rise in employment. Performing Arts Companies is predicted to lose 10.15 percent of its workforce making the Top 20 Fastest Declining Industries list.

#### **Accommodation and Food Services**

The Accommodation and Food Services sector will likely see most of the growth that is projected to occur in the Leisure and Hospitality supersector with an increase of 4,978 jobs. The *Food Services and Drinking Places* subsector will likely drive the growth with a net gain of 4,769 jobs. Restaurants and Other Eating Places is projected to be the top growing industry in the state with a gain of 4,360 jobs. The industry added 4,115 jobs between March 2015 and March 2016. Accommodation, including Hotels and Motels could gain an additional 209 jobs during the projection period.

#### **Other Services (Except Government)**

The **Other Services** (**Except Government**) supersector is expected to experience a net gain of 1,889 jobs between 2016 and 2018. *Religious, Grantmaking, Civic, Professional, and Similar Organizations* is predicted to experience a net gain of 1,294 jobs, while *Repair and Maintenance* is projected to see a net gain of 555 jobs. Religious Organizations is the top growing industry in **Other Services** (**Except Government**) with an anticipated 1,206 new jobs. Private Households is estimated to lose 123 jobs, or 5.71 percent of its workforce.

#### **Government**

The **Government** supersector is projected to see a net gain of 1,211 jobs during the projection period. Local Government, Excluding Education and Hospitals is predicted to have the brightest outlook with 705 new jobs, while State Government, Excluding Education and Hospitals could add 557. Federal Government, Excluding Post Office could see a loss of 157 jobs during the projection period, while Postal Service could see an increase of 106 jobs.

### Top 20 Growing Industries by Net Growth

NAICS Code	NAICS Title	2016 Estimated Employment	2018 Projected Employment	Net Growth	Percent Growth
722500	Restaurants and Other Eating Places	85,850	90,210	4,360	5.08%
611100	Elementary and Secondary Schools	77,887	80,238	2,351	3.02%
551000	Management of Companies and Enterprises	34,355	36,616	2,261	6.58%
561300	Employment Services	26,708	28,097	1,389	5.20%
621100	Offices of Physicians	23,820	25,138	1,318	5.53%
624100	Individual and Family Services	24,642	25,896	1,254	5.09%
813100	Religious Organizations	19,565	20,771	1,206	6.16%
238200	Building Equipment Contractors	16,486	17,644	1,158	7.02%
311600	Animal Slaughtering and Processing	29,588	30,577	989	3.34%
236200	Nonresidential Building Construction	7,324	8,237	913	12.47%
493000	Warehousing and Storage	8,097	8,969	872	10.77%
622100	General Medical and Surgical Hospitals	49,923	50,763	840	1.68%
611300	Colleges, Universities, and Professional Schools	26,314	27,105	791	3.01%
999300	Local Government, Excluding Education and Hospitals	40,024	40,729	705	1.76%
238300	Building Finishing Contractors	4,309	4,991	682	15.83%
541500	Computer Systems Design and Related Services	10,215	10,838	623	6.10%
561700	Services to Buildings and Dwellings	13,442	14,004	562	4.18%
999200	State Government, Excluding Education and Hospitals	36,216	36,773	557	1.54%
331100	Iron and Steel Mills and Ferroalloy Manufacturing	2,546	3,084	538	21.13%
621300	Offices of Other Health Practitioners	8,063	8,583	520	6.45%

NAICS Code	NAICS Title	2016 Estimated Employment	2018 Projected Employment	Net Growth	Percent Growth
332100	Forging and Stamping	383	506	123	32.11%
327100	Clay Product and Refractory Manufacturing	402	490	88	21.89%
331100	Iron and Steel Mills and Ferroalloy Manufacturing	2,546	3,084	538	21.13%
481200	Nonscheduled Air Transportation	83	100	17	20.48%
325300	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	422	495	73	17.30%
238300	Building Finishing Contractors	4,309	4,991	682	15.83%
721300	Rooming and Boarding Houses	126	145	19	15.08%
441200	Other Motor Vehicle Dealers	1,577	1,801	224	14.20%
311100	Animal Food Manufacturing	1,518	1,727	209	13.77%
712000	Museums, Historical Sites, and Similar Institution	610	692	82	13.44%
236200	Nonresidential Building Construction	7,324	8,237	913	12.47%
562200	Waste Treatment and Disposal	825	927	102	12.36%
812900	Other Personal Services	829	926	97	11.70%
314900	Other Textile Product Mills	917	1,019	102	11.12%
453300	Used Merchandise Stores	1,994	2,211	217	10.88%
811200	Electronic and Precision Equipment Repair and Maintenance	896	993	97	10.83%
493000	Warehousing and Storage	8,097	8,969	872	10.77%
424800	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	1,589	1,759	170	10.70%
813200	Grantmaking and Giving Services	863	953	90	10.43%
711300	Promoters of Performing Arts, Sports, and Similar Events	658	724	66	10.03%

### Top 20 Fastest Growing Industries by Percent Growth (50 Minimum Employment)

### Top 20 Declining Industries by Net Growth

NAICS Code	NAICS Title	2016 Estimated Employment	2018 Projected Employment	Net Growth	Percent Growth
213000	Support Activities for Mining	2,035	1,317	-718	-35.28%
115000	Support Activities for Agriculture and Forestry	5,250	4,926	-324	-6.17%
333400	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	3,046	2,739	-307	-10.08%
511100	Newspaper, Periodical, Book, and Directory Publishers	3,195	2,905	-290	-9.08%
332200	Cutlery and Handtool Manufacturing	603	337	-266	-44.11%
331500	Foundries	1,888	1,628	-260	-13.77%
337100	Household and Institutional Furniture & Kitchen Cabinet Manufacturing	2,619	2,373	-246	-9.39%
211000	Oil and Gas Extraction	1,157	962	-195	-16.85%
484200	Specialized Freight Trucking	6,215	6,037	-178	-2.86%
322200	Converted Paper Product Manufacturing	5,674	5,497	-177	-3.12%
335300	Electrical Equipment Manufacturing	3,248	3,076	-172	-5.30%
336300	Motor Vehicle Parts Manufacturing	4,982	4,815	-167	-3.35%
334400	Semiconductor and Other Electronic Component Manufacturing	1,622	1,461	-161	-9.93%
999100	Federal Government, Excluding Post Office	15,057	14,900	-157	-1.04%
453200	Office Supplies, Stationery, and Gift Stores	1,828	1,679	-149	-8.15%
337200	Office Furniture (including Fixtures) Manufacturing	717	585	-132	-18.41%
488100	Support Activities for Air Transportation	968	845	-123	-12.71%
814000	Private Households	2,155	2,032	-123	-5.71%
424900	Miscellaneous Nondurable Goods Merchant Wholesalers	3,493	3,374	-119	-3.41%
517100	Wired Telecommunications Carriers	3,777	3,663	-114	-3.02%
561400	Business Support Services	8,181	8,067	-114	-1.39%

NAICS Code	NAICS Title	2016 Estimated Employment	2018 Projected Employment	Net Growth	Percent Growth
332200	Cutlery and Handtool Manufacturing	603	337	-266	-44.11%
213000	Support Activities for Mining	2,035	1,317	-718	-35.28%
334500	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	411	307	-104	-25.30%
541400	Specialized Design Services	404	316	-88	-21.78%
337200	Office Furniture (including Fixtures) Manufacturing	717	585	-132	-18.41%
327900	Other Nonmetallic Mineral Product Manufacturing	432	355	-77	-17.82%
211000	Oil and Gas Extraction	1,157	962	-195	-16.85%
533000	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	54	45	-9	-16.67%
332400	Boiler, Tank, and Shipping Container Manufacturing	707	607	-100	-14.14%
331500	Foundries	1,888	1,628	-260	-13.77%
488100	Support Activities for Air Transportation	968	845	-123	-12.71%
517900	Other Telecommunications	280	248	-32	-11.43%
424200	Drugs and Druggists' Sundries Merchant Wholesalers	605	538	-67	-11.07%
316200	Footwear Manufacturing	909	812	-97	-10.67%
711100	Performing Arts Companies	335	301	-34	-10.15%
333400	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	3,046	2,739	-307	-10.08%
332600	Spring and Wire Product Manufacturing	388	349	-39	-10.05%
334400	Semiconductor and Other Electronic Component Manufacturing	1,622	1,461	-161	-9.93%
337100	Household and Institutional Furniture & Kitchen Cabinet Manufacturing	2,619	2,373	-246	-9.39%
532400	Commercial and Industrial Machinery and Equipment Rental and Leasing	931	844	-87	-9.34%

### Top 20 Fastest Declining Industries by Percent Growth (Net Growth No Greater than -5)

NAICS Code	North American Industry Classification System Title	2016 Estimated Employment	2018 Projected Employment	Numeric Change	Percent Change
000000	TOTAL ALL INDUSTRIES	1,366,577	1,408,327	41,750	3.06%
000674	Total Solf Employed and Unnaid Family Werkers All John	124 454	129 209	2 9 4 7	2.86%
<b>000671</b> 006010	Total Self Employed and Unpaid Family Workers, All Jobs Self Employed Workers, All Jobs	<b>134,451</b> 127,023	<b>138,298</b> 130,657	<b>3,847</b> 3,634	2.86%
007010	Unpaid Family Workers, All Jobs	,	,	213	2.80%
007010	Onpaid Panning Workers, All Jobs	7,428	7,641	213	2.01%
101000	Goods Producing	228,089	232,555	4,466	1.96%
101100	NATURAL RESOURCES AND MINING	25,110	24,633	-477	-1.90%
110000	Agriculture, Forestry, Fishing and Hunting	20,354	20,889	535	2.63%
111000	Crop Production	6,740	7,077	337	5.00%
112000	Animal Production	5,838	6,313	475	8.14%
115000	Support Activities for Agriculture and Forestry	5,250	4,926	-324	-6.17%
	OTHER	2,526	2,573	47	1.86%
210000	Mining	4,756	3,744	-1,012	-21.28%
211000	Oil and Gas Extraction	1,157	962	-195	-16.85%
212000	Mining (except Oil and Gas)	1,564	1,465	-99	-6.33%
213000	Support Activities for Mining	2,035	1,317	-718	-35.28%
101200	CONSTRUCTION	48,757	52,260	3,503	7.18%
230000	Construction	48,757	52,260	3,503	7.18%
236000	Construction of Buildings	10,313	11,401	1,088	10.55%
236100	Residential Building Construction	2,989	3,164	175	5.85%
236200	Nonresidential Building Construction	7,324	8,237	913	12.47%
237000	Heavy and Civil Engineering Construction	7,414	7,553	139	1.87%
237100	Utility System Construction	4,150	4,260	110	2.65%
237200	Land Subdivision	85	82	-3	-3.53%
237300	Highway, Street, and Bridge Construction	2,614	2,673	59	2.26%
237900	Other Heavy and Civil Engineering Construction	565	538	-27	-4.78%

NAICS Code	North American Industry Classification System Title	2016 Estimated Employment	2018 Projected Employment	Numeric Change	Percent Change
238000	Specialty Trade Contractors	31,030	33,306	2,276	7.33%
238100	Foundation, Structure, and Building Exterior Contractors	5,822	6,089	267	4.59%
238200	Building Equipment Contractors	16,486	17,644	1,158	7.02%
238300	Building Finishing Contractors	4,309	4,991	682	15.83%
238900	Other Specialty Trade Contractors	4,413	4,582	169	3.83%
101300	MANUFACTURING	154,222	155,662	1,440	0.93%
	Non-Durable Goods Manufacturing	79,277	80,846	1,569	1.98%
311000	Food Manufacturing	43,973	45,444	1,471	3.35%
311100	Animal Food Manufacturing	1,518	1,727	209	13.77%
311200	Grain and Oilseed Milling	2,570	2,532	-38	-1.48%
311400	Fruit and Vegetable Preserving and Specialty Food Manufacturing	4,125	4,071	-54	-1.31%
311500	Dairy Product Manufacturing	531	530	-1	-0.19%
311600	Animal Slaughtering and Processing	29,588	30,577	989	3.34%
311800	Bakeries and Tortilla Manufacturing	3,492	3,651	159	4.55%
311900	Other Food Manufacturing	2,090	2,297	207	9.90%
	Other	59	59	0	0.00%
312000	Beverage and Tobacco Product Manufacturing	1,342	1,417	75	5.59%
313000	Textile Mills	101	88	-13	-12.87%
314000	Textile Product Mills	953	1,055	102	10.70%
314100	Textile Furnishings Mills	36	36	0	0.00%
314900	Other Textile Product Mills	917	1,019	102	11.12%
315000	Apparel Manufacturing	914	953	39	4.27%
315100	Apparel Knitting Mills	673	732	59	8.77%
315200	Cut and Sew Apparel Manufacturing	151	138	-13	-8.61%
315900	Apparel Accessories and Other Apparel Manufacturing	90	83	-7	-7.78%
316000	Leather and Allied Product Manufacturing	1,104	1,025	-79	-7.16%
316200	Footwear Manufacturing	909	812	-97	-10.67%
316900	Other Leather and Allied Product Manufacturing	195	213	18	9.23%
322000	Paper Manufacturing	9,627	9,375	-252	-2.62%
322100	Pulp, Paper, and Paperboard Mills	3,953	3,878	-75	-1.90%
322200	Converted Paper Product Manufacturing	5,674	5,497	-177	-3.12%
323000	Printing and Related Support Activities	4,029	3,986	-43	-1.07%
324000	Petroleum and Coal Products Manufacturing	1,141	1,205	64	5.61%

NAICS Code	North American Industry Classification System Title	2016 Estimated Employment	2018 Projected Employment	Numeric Change	Percent Change
325000	Chemical Manufacturing	5,064	5,119	55	1.09%
325100	Basic Chemical Manufacturing	1,854	1,852	-2	-0.11%
325200	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing	295	289	-6	-2.03%
325300	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	422	495	73	17.30%
325400	Pharmaceutical and Medicine Manufacturing	300	316	16	5.33%
325500	Paint, Coating, and Adhesive Manufacturing	270	267	-3	-1.11%
325600	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	1,185	1,126	-59	-4.98%
325900	Other Chemical Product and Preparation Manufacturing	738	774	36	4.88%
326000	Plastics and Rubber Products Manufacturing	11,029	11,179	150	1.36%
326100	Plastics Product Manufacturing	6,770	7,016	246	3.63%
326200	Rubber Product Manufacturing	4,259	4,163	-96	-2.25%
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	Durable Goods Manufacturing	74,945	74,816	-129	-0.17%
321000	Wood Product Manufacturing	9,359	9,643	284	3.03%
321100	Sawmills and Wood Preservation	4,478	4,705	227	5.07%
321200	Veneer, Plywood, and Engineered Wood Product Manufacturing	1,857	1,769	-88	-4.74%
321900	Other Wood Product Manufacturing	3,024	3,169	145	4.79%
327000	Nonmetallic Mineral Product Manufacturing	3,567	3,627	60	1.68%
327100	Clay Product and Refractory Manufacturing	402	490	88	21.89%
327200	Glass and Glass Product Manufacturing	352	332	-20	-5.68%
327300	Cement and Concrete Product Manufacturing	2,105	2,181	76	3.61%
327400	Lime and Gypsum Product Manufacturing	276	269	-7	-2.54%
327900	Other Nonmetallic Mineral Product Manufacturing	432	355	-77	-17.82%
331000	Primary Metal Manufacturing	8,344	8,474	130	1.56%
331100	Iron and Steel Mills and Ferroalloy Manufacturing	2,546	3,084	538	21.13%
331200	Steel Product Manufacturing from Purchased Steel	2,204	2,108	-96	-4.36%
331300	Alumina and Aluminum Production	1,250	1,238	-12	-0.96%
331400	Nonferrous Metal (except Aluminum) Production and Processing	456	416	-40	-8.77%
331500	Foundries	1,888	1,628	-260	-13.77%
332000	Fabricated Metal Product Manufacturing	14,932	14,917	-15	-0.10%
332100	Forging and Stamping	383	506	123	32.11%
332200	Cutlery and Handtool Manufacturing	603	337	-266	-44.11%
332300	Architectural and Structural Metals Manufacturing	4,188	4,359	171	4.08%
332400	Boiler, Tank, and Shipping Container Manufacturing	707	607	-100	-14.14%
332500	Hardware Manufacturing	280	286	6	2.14%
332600	Spring and Wire Product Manufacturing	388	349	-39	-10.05%

NAICS Code	North American Industry Classification System Title	2016 Estimated Employment	2018 Projected Employment	Numeric Change	Percent Change
332700	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	1,874	1,841	-33	-1.76%
332800	Coating, Engraving, Heat Treating, and Allied Activities	661	639	-22	-3.33%
332900	Other Fabricated Metal Product Manufacturing	5,848	5,993	145	2.48%
333000	Machinery Manufacturing	11,059	10,936	-123	-1.11%
333100	Agriculture, Construction, and Mining Machinery Manufacturing	2,748	2,813	65	2.37%
333200	Industrial Machinery Manufacturing	607	596	-11	-1.81%
333300	Commercial and Service Industry Machinery Manufacturing	735	737	2	0.27%
333400	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	3,046	2,739	-307	-10.08%
333500	Metalworking Machinery Manufacturing	1,035	955	-80	-7.73%
333600	Engine, Turbine, and Power Transmission Equipment Manufacturing	663	704	41	6.18%
333900	Other General Purpose Machinery Manufacturing	2,225	2,392	167	7.51%
334000	Computer and Electronic Product Manufacturing	2,300	1,967	-333	-14.48%
334400	Semiconductor and Other Electronic Component Manufacturing	1,622	1,461	-161	-9.93%
334500	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	411	307	-104	-25.30%
	Other	267	199	-68	-25.47%
335000	Electrical Equipment, Appliance, and Component Manufacturing	5,015	4,759	-256	-5.10%
335100	Electric Lighting Equipment Manufacturing	366	365	-1	-0.27%
335200	Household Appliance Manufacturing	43	42	-1	-2.33%
335300	Electrical Equipment Manufacturing	3,248	3,076	-172	-5.30%
335900	Other Electrical Equipment and Component Manufacturing	1,358	1,276	-82	-6.04%
336000	Transportation Equipment Manufacturing	13,505	13,920	415	3.07%
336200	Motor Vehicle Body and Trailer Manufacturing	1,839	1,867	28	1.52%
336300	Motor Vehicle Parts Manufacturing	4,982	4,815	-167	-3.35%
336400	Aerospace Product and Parts Manufacturing	3,405	3,644	239	7.02%
336600	Ship and Boat Building	1,833	1,968	135	7.36%
	Other	1,446	1,626	180	12.45%
337000	Furniture and Related Product Manufacturing	3,440	3,059	-381	-11.08%
337100	Household and Institutional Furniture & Kitchen Cabinet Manufacturing	2,619	2,373	-246	-9.39%
337200	Office Furniture (including Fixtures) Manufacturing	717	585	-132	-18.41%
337900	Other Furniture Related Product Manufacturing	104	101	-3	-2.88%
339000	Miscellaneous Manufacturing	3,424	3,514	90	2.63%
339100	Medical Equipment and Supplies Manufacturing	1,701	1,827	126	7.41%
339900	Other Miscellaneous Manufacturing	1,723	1,687	-36	-2.09%
102000	Services Providing	1,004,037	1,037,474	33,437	3.33%

NAICS Code	North American Industry Classification System Title	2016 Estimated Employment	2018 Projected Employment	Numeric Change	Percent Change
102100	TRADE, TRANSPORTATION, AND UTILITIES	249,523	256,563	7,040	2.82%
420000	Wholesale Trade	46,093	46,975	882	1.91%
423000	Merchant Wholesalers, Durable Goods	20,348	20,862	514	2.53%
423100	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	2,618	2,857	239	9.13%
423200	Furniture and Home Furnishing Merchant Wholesalers	446	458	12	2.69%
423300	Lumber and Other Construction Materials Merchant Wholesalers	1,399	1,459	60	4.29%
423400	Professional and Commercial Equipment and Supplies Merchant Wholesalers	2,396	2,453	57	2.38%
423500	Metal and Mineral (except Petroleum) Merchant Wholesalers	857	840	-17	-1.98%
423600	Household Appliances & Electrical and Electronic Goods Merchant Wholesalers	1,880	1,945	65	3.46%
423700	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	2,312	2,424	112	4.84%
423800	Machinery, Equipment, and Supplies Merchant Wholesalers	6,644	6,656	12	0.18%
423900	Miscellaneous Durable Goods Merchant Wholesalers	1,796	1,770	-26	-1.45%
424000	Merchant Wholesalers, Nondurable Goods	14,522	14,541	19	0.13%
424100	Paper and Paper Product Merchant Wholesalers	1,177	1,202	25	2.12%
424200	Drugs and Druggists' Sundries Merchant Wholesalers	605	538	-67	-11.07%
424300	Apparel, Piece Goods, and Notions Merchant Wholesalers	602	632	30	4.98%
424400	Grocery and Related Product Wholesalers	4,302	4,362	60	1.39%
424500	Farm Product Raw Material Merchant Wholesalers	828	814	-14	-1.69%
424600	Chemical and Allied Products Merchant Wholesalers	637	597	-40	-6.28%
424700	Petroleum and Petroleum Products Merchant Wholesalers	1,289	1,263	-26	-2.02%
424800	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	1,589	1,759	170	10.70%
424900	Miscellaneous Nondurable Goods Merchant Wholesalers	3,493	3,374	-119	-3.41%
425000	Wholesale Electronic Markets and Agents and Brokers	11,223	11,572	349	3.11%
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440000	Retail Trade	140,327	145,177	4,850	3.46%
441000	Motor Vehicle and Parts Dealers	19,336	20,209	873	4.51%
441100	Automobile Dealers	11,918	12,421	503	4.22%
441200	Other Motor Vehicle Dealers	1,577	1,801	224	14.20%
441300	Automotive Parts, Accessories, and Tire Stores	5,841	5,987	146	2.50%
442000	Furniture and Home Furnishings Stores	3,620	3,898	278	7.68%
442100	Furniture Stores	2,057	2,254	197	9.58%
442200	Home Furnishings Stores	1,563	1,644	81	5.18%
443000	Electronics and Appliance Stores	3,836	3,833	-3	-0.08%

NAICS Code	North American Industry Classification System Title	2016 Estimated Employment	2018 Projected Employment	Numeric Change	Percent Change
444000	Building Material and Garden Equipment and Supplies Dealers	11,176	11,776	600	5.37%
444100	Building Material and Supplies Dealers	9,240	9,711	471	5.10%
444200	Lawn and Garden Equipment and Supplies Stores	1,936	2,065	129	6.66%
445000	Food and Beverage Stores	19,694	20,365	671	3.41%
445100	Grocery Stores	16,978	17,464	486	2.86%
445200	Specialty Food Stores	961	1,033	72	7.49%
445300	Beer, Wine, and Liquor Stores	1,755	1,868	113	6.44%
446000	Health and Personal Care Stores	8,431	8,848	417	4.95%
447000	Gasoline Stations	12,205	12,696	491	4.02%
448000	Clothing and Clothing Accessories Stores	8,840	8,903	63	0.71%
448100	Clothing Stores	6,867	6,943	76	1.11%
448200	Shoe Stores	1,244	1,253	9	0.72%
448300	Jewelry, Luggage, and Leather Goods Stores	729	707	-22	-3.02%
451000	Sporting Goods, Hobby, Book, and Music Stores	4,686	4,805	119	2.54%
451100	Sporting Goods, Hobby, and Musical Instrument Stores	4,162	4,235	73	1.75%
451200	Book, Periodical, and Music Stores	524	570	46	8.78%
452000	General Merchandise Stores	39,337	40,420	1,083	2.75%
453000	Miscellaneous Store Retailers	7,252	7,529	277	3.82%
453100	Florists	722	712	-10	-1.39%
453200	Office Supplies, Stationery, and Gift Stores	1,828	1,679	-149	-8.15%
453300	Used Merchandise Stores	1,994	2,211	217	10.88%
453900	Other Miscellaneous Store Retailers	2,708	2,927	219	8.09%
454000	Nonstore Retailers	1,914	1,895	-19	-0.99%
454100	Electronic Shopping and Mail Order Houses	757	744	-13	-1.72%
454200	Vending Machine Operators	446	462	16	3.59%
454300	Direct Selling Establishments	711	689	-22	-3.09%
480000	Transportation and Warehousing	55,332	56,800	1,468	2.65%
481000	Air Transportation	645	658	13	2.02%
481100	Scheduled Air Transportation	562	558	-4	-0.71%
481200	Nonscheduled Air Transportation	83	100	17	20.48%
483000	Water Transportation	18	20	2	11.11%
484000	Truck Transportation	32,423	32,726	303	0.93%
484100	General Freight Trucking	26,208	26,689	481	1.84%
484200	Specialized Freight Trucking	6,215	6,037	-178	-2.86%

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NAICS Code	North American Industry Classification System Title	2016 Estimated Employment	2018 Projected Employment	Numeric Change	Percent Change
485000	Transit and Ground Passenger Transportation	1,975	2,052	77	3.90%
485300	Taxi and Limousine Service	413	424	11	2.66%
485400	School and Employee Bus Transportation	473	489	16	3.38%
485900	Other Transit and Ground Passenger Transportation	723	759	36	4.98%
	Other	366	380	14	3.83%
486000	Pipeline Transportation	474	441	-33	-6.96%
488000	Support Activities for Transportation	5,035	5,056	21	0.42%
488100	Support Activities for Air Transportation	968	845	-123	-12.71%
488200	Support Activities for Rail Transportation	640	630	-10	-1.56%
488300	Support Activities for Water Transportation	682	712	30	4.40%
488400	Support Activities for Road Transportation	822	904	82	9.98%
488500	Freight Transportation Arrangement	1,833	1,871	38	2.07%
488900	Other Support Activities for Transportation	90	94	4	4.44%
493000	Warehousing and Storage	8,097	8,969	872	10.77%
	OTHER	6,665	6,878	213	3.20%
220000	Utilities	7,771	7,611	-160	-2.06%
221100	Electric Power Generation, Transmission and Distribution	5,598	5,496	-102	-1.82%
221200	Natural Gas Distribution	1,205	1,137	-68	-5.64%
221300	Water, Sewage and Other Systems	968	978	10	1.03%
102200	INFORMATION	13,630	13,386	-244	-1.79%
511000	Publishing Industries (except Internet)	3,556	3,297	-259	-7.28%
511100	Newspaper, Periodical, Book, and Directory Publishers	3,195	2,905	-290	-9.08%
511200	Software Publishers	361	392	31	8.59%
512000	Motion Picture and Sound Recording Industries	1,050	1,075	25	2.38%
512100	Motion Picture and Video Industries	1,024	1,050	26	2.54%
512200	Sound Recording Industries	26	25	-1	-3.85%
515000	Broadcasting (except Internet)	1,597	1,583	-14	-0.88%
515100	Radio and Television Broadcasting	1,571	1,561	-10	-0.64%
515200	Cable and Other Subscription Programming	26	22	-4	-15.38%
517000	Telecommunications	5,767	5,688	-79	-1.37%
517100	Wired Telecommunications Carriers	3,777	3,663	-114	-3.02%
517200	Wireless Telecommunications Carriers (except Satellite)	1,710	1,777	67	3.92%
517900	Other Telecommunications	280	248	-32	-11.43%

NAICS Code	North American Industry Classification System Title	2016 Estimated Employment	2018 Projected Employment	Numeric Change	Percent Change
518000	Data Processing, Hosting and Related Services	1,314	1,378	64	4.87%
519000	Other Information Services	346	365	19	5.49%
102300	FINANCIAL ACTIVITIES	50,979	52,727	1,748	3.43%
520000	Finance and Insurance	37,934	39,214	1,280	3.37%
522000	Credit Intermediation and Related Activities	19,023	19,588	565	2.97%
522100	Depository Credit Intermediation	16,115	16,517	402	2.49%
522200	Nondepository Credit Intermediation	1,805	1,875	70	3.88%
522300	Activities Related to Credit Intermediation	1,103	1,196	93	8.43%
523000	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	3,116	3,121	5	0.16%
523100	Securities and Commodity Contracts Intermediation and Brokerage	2,184	2,164	-20	-0.92%
523900	Other Financial Investment Activities	932	957	25	2.68%
524000	Insurance Carriers and Related Activities	15,682	16,385	703	4.48%
524100	Insurance Carriers	7,466	7,960	494	6.62%
524200	Agencies, Brokerages, and Other Insurance Related Activities	8,216	8,425	209	2.54%
	OTHER		120	7	6.19%
530000	Real Estate and Rental and Leasing	13,045	13,513	468	3.59%
531000	Real Estate	8,929	9,299	370	4.14%
531100	Lessors of Real Estate	4,059	4,152	93	2.29%
531200	Offices of Real Estate Agents and Brokers	1,725	1,840	115	6.67%
531300	Activities Related to Real Estate	3,145	3,307	162	5.15%
532000	Rental and Leasing Services	4,062	4,169	107	2.63%
532100	Automotive Equipment Rental and Leasing	945	994	49	5.19%
532200	Consumer Goods Rental	1,959	2,094	135	6.89%
532300	General Rental Centers	227	237	10	4.41%
532400	Commercial and Industrial Machinery and Equipment Rental and Leasing	931	844	-87	-9.34%
533000	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	54	45	-9	-16.67%
102400	PROFESSIONAL AND BUSINESS SERVICES	139,887	146,516	6,629	4.74%
540000	Professional, Scientific, and Technical Services	42,948	45,012	2,064	4.81%
541100	Legal Services	5,940	6,053	113	1.90%
541200	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	6,368	6,705	337	5.29%
541300	Architectural, Engineering, and Related Services	6,000	6,438	438	7.30%

NAICS Code	North American Industry Classification System Title	2016 Estimated Employment	2018 Projected Employment	Numeric Change	Percent Change
541400	Specialized Design Services	404	316	-88	-21.78%
541500	Computer Systems Design and Related Services	10,215	10,838	623	6.10%
541600	Management, Scientific, and Technical Consulting Services	5,871	6,104	233	3.97%
541700	Scientific Research and Development Services	855	870	15	1.75%
541800	Advertising, Public Relations, and Related Services	3,560	3,753	193	5.42%
541900	Other Professional, Scientific, and Technical Services	3,735	3,935	200	5.35%
550000	Management of Companies and Enterprises	34,355	36,616	2,261	6.58%
560000	Administrative and Support and Waste Management and Remediation Services	62,584	64,888	2,304	3.68%
561000	Administrative and Support Services	59,628	61,767	2,139	3.59%
561100	Office Administrative Services	3,919	4,080	161	4.11%
561200	Facilities Support Services	1,047	1,078	31	2.96%
561300	Employment Services	26,708	28,097	1,389	5.20%
561400	Business Support Services	8,181	8,067	-114	-1.39%
561500	Travel Arrangement and Reservation Services	369	376	7	1.90%
561600	Investigation and Security Services	4,633	4,733	100	2.16%
561700	Services to Buildings and Dwellings	13,442	14,004	562	4.18%
561900	Other Support Services	1,329	1,332	3	0.23%
562000	Waste Management and Remediation Services	2,956	3,121	165	5.58%
562100	Waste Collection	1,144	1,182	38	3.32%
562200	Waste Treatment and Disposal	825	927	102	12.36%
562900	Remediation and Other Waste Management Services	987	1,012	25	2.53%
102500	EDUCATION AND HEALTH SERVICES	293,242	302,879	9,637	3.29%
610000	Educational Services	115,077	118,434	3,357	2.92%
611100	Elementary and Secondary Schools	77,887	80,238	2,351	3.02%
611200	Junior Colleges	7,290	7,287	-3	-0.04%
611300	Colleges, Universities, and Professional Schools	26,314	27,105	791	3.01%
611400	Business Schools and Computer and Management Training	123	121	-2	-1.63%
611500	Technical and Trade Schools	1,155	1,178	23	1.99%
611600	Other Schools and Instruction	1,133	1,822	151	9.04%
611700	Educational Support Services	637	683	46	7.22%

NAICS Code	North American Industry Classification System Title	2016 Estimated Employment	2018 Projected Employment	Numeric Change	Percent Change
620000	Health Care and Social Assistance	178,165	184,445	6,280	3.52%
621000	Ambulatory Health Care Services	52,545	55,526	2,981	5.67%
621100	Offices of Physicians	23,820	25,138	1,318	5.53%
621200	Offices of Dentists	7,086	7,360	274	3.87%
621300	Offices of Other Health Practitioners	8,063	8,583	520	6.45%
621400	Outpatient Care Centers	4,797	5,178	381	7.94%
621500	Medical and Diagnostic Laboratories	1,116	1,174	58	5.20%
621600	Home Health Care Services	5,011	5,235	224	4.47%
621900	Other Ambulatory Health Care Services	2,652	2,858	206	7.77%
622000	Hospitals	55,033	56,046	1,013	1.84%
622100	General Medical and Surgical Hospitals	49,923	50,763	840	1.68%
622200	Psychiatric and Substance Abuse Hospitals	2,787	2,752	-35	-1.26%
622300	Specialty (except Psychiatric and Substance Abuse) Hospitals	2,323	2,531	208	8.95%
623000	Nursing and Residential Care Facilities	31,283	31,939	656	2.10%
623100	Nursing Care Facilities (Skilled Nursing Facilities)	21,995	22,253	258	1.17%
623200	Residential Intellectual & Developmental Disability, Mental Health, & Substance Abuse Facilities	4,381	4,631	250	5.71%
623300	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	3,820	4,060	240	6.28%
623900	Other Residential Care Facilities	1,087	995	-92	-8.46%
624000	Social Assistance	39,304	40,934	1,630	4.15%
624100	Individual and Family Services	24,642	25,896	1,254	5.09%
624200	Community Food and Housing, and Emergency and Other Relief Services	1,312	1,347	35	2.67%
624300	Vocational Rehabilitation Services	3,231	3,311	80	2.48%
624400	Child Day Care Services	10,119	10,380	261	2.58%
102600	LEISURE AND HOSPITALITY	111,140	116,667	5,527	4.97%
710000	Arts, Entertainment, and Recreation	9,871	10,420	549	5.56%
711000	Performing Arts, Spectator Sports, and Related Industries	2,832	3,002	170	6.00%
711100	Performing Arts Companies	335	301	-34	-10.15%
711200	Spectator Sports	1,760	1,894	134	7.61%
711300	Promoters of Performing Arts, Sports, and Similar Events	658	724	66	10.03%
711400	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	28	28	0	0.00%
711500	Independent Artists, Writers, and Performers	51	55	4	7.84%
712000	Museums, Historical Sites, and Similar Institutions	610	692	82	13.44%

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NAICS Code	North American Industry Classification System Title	2016 Estimated Employment	2018 Projected Employment	Numeric Change	Percent Change
713000	Amusement, Gambling, and Recreation Industries	6,429	6,726	297	4.62%
713100	Amusement Parks and Arcades	308	304	-4	-1.30%
713900	Other Amusement and Recreation Industries	6,121	6,422	301	4.92%
720000	Accommodation and Food Services	101,269	106,247	4,978	<b>4.92%</b>
721000	Accommodation, including Hotels and Motels	10,452	10,661	209	2.00%
721100	Traveler Accommodation	9,957	10,145	188	1.89%
721200	RV (Recreational Vehicle) Parks and Recreational Camps	369	371	2	0.54%
721300	Rooming and Boarding Houses	126	145	19	15.08%
722000	Food Services and Drinking Places	90,817	95,586	4,769	5.25%
722300	Special Food Services	3,883	4,243	360	9.27%
722400	Drinking Places (Alcoholic Beverages)	1,084	1,133	49	4.52%
722500	Restaurants and Other Eating Places	85,850	90,210	4,360	5.08%
102700	OTHER SERVICES (EXCEPT GOVERNMENT)	48,849	50,738	1,889	3.87%
811000	Repair and Maintenance	10,043	10,598	555	5.53%
811100	Automotive Repair and Maintenance	6,312	6,691	379	6.00%
811200	Electronic and Precision Equipment Repair and Maintenance	896	993	97	10.83%
811300	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	2,255	2,329	74	3.28%
811400	Personal and Household Goods Repair and Maintenance	580	585	5	0.86%
812000	Personal and Laundry Services	7,851	8,014	163	2.08%
812100	Personal Care Services	2,981	3,114	133	4.46%
812200	Death Care Services	1,623	1,663	40	2.46%
812300	Drycleaning and Laundry Services	2,418	2,311	-107	-4.43%
812900	Other Personal Services	829	926	97	11.70%
813000	Religious, Grantmaking, Civic, Professional, and Similar Organizations	28,800	30,094	1,294	4.49%
813100	Religious Organizations	19,565	20,771	1,206	6.16%
813200	Grantmaking and Giving Services	863	953	90	10.43%
813300	Social Advocacy Organizations	2,356	2,462	106	4.50%
813400	Civic and Social Organizations	1,141	1,142	1	0.09%
813900	Business, Professional, Labor, Political, and Similar Organizations	4,875	4,766	-109	-2.24%
814000	Private Households	2,155	2,032	-123	-5.71%

NAICS Code	North American Industry Classification System Title	2016 Estimated Employment	2018 Projected Employment	Numeric Change	Percent Change
102800	GOVERNMENT	96,787	97,998	1,211	1.25%
910000	Total Federal Government Employment	20,547	20,496	-51	-0.25%
491100	Postal Service	5,490	5,596	106	1.93%
999100	Federal Government, Excluding Post Office	15,057	14,900	-157	-1.04%
999200	State Government, Excluding Education and Hospitals	36,216	36,773	557	1.54%
999300	Local Government, Excluding Education and Hospitals	40,024	40,729	705	1.76%

### EXPLANATION OF OCCUPATIONAL PROJECTIONS DATA ARKANSAS-STATEWIDE 2016-2018

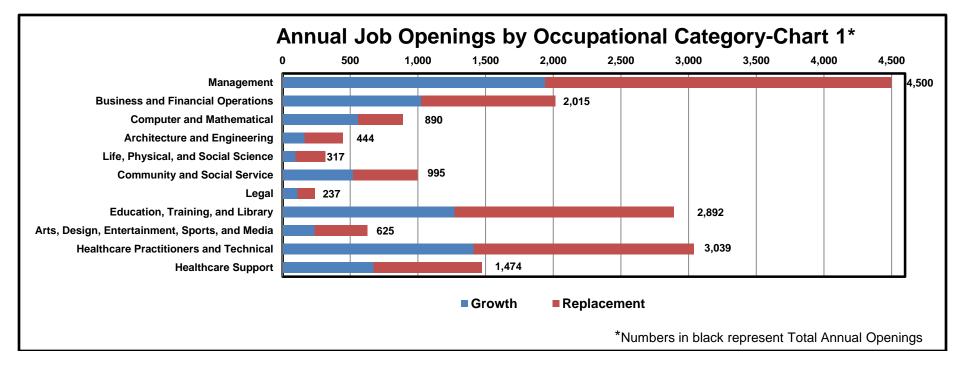
SOC Code	SOC Title	2016 Estimated Employment	2018 Projected Employment	Net Growth	Percent Growth	Annual Openings- Growth	Annual Openings- Replacement	Total Annual Openings	Education/ Training Codes
Occupational	on the Standard	An estimate of the number of jobs in an occupation in 2016	The projected number of jobs expected to be in an occupation in	expected to gain or lose over the 2016 to 2018	in the number of jobs in an occupation over the 2016 to 2018 period	Average number of annual job openings expected to be created during the projection period	annual job openings expected to be created during the projection period due to the need to replace workers who leave	openings expected to be created during the projection period due to employment growth and	Level of training needed by most workers to become fully qualified in the occupation according to the Bureau of Labor Statistics. See page 85 for definitions.

	Standard Occupational Classification (SOC)	Emplo	yment	Ch	ange		Annual Openings	
Code	Title	Estimated 2016	Projected 2018	Net	Percent	Growth	Replacements	Total
00-000	Total, All Occupations	1,366,577	1,408,327	41,750	3.06%	21,696	31,902	53,598
11-0000	Management Occupations	132,670	136,551	3,881	2.93%	1,940	2,560	4,500
13-0000	Business and Financial Operations Occupations	52,442	54,480	2,038	3.89%	1,022	993	2,015
15-0000	Computer and Mathematical Occupations	24,483	25,604	1,121	4.58%	560	330	890
17-0000	Architecture and Engineering Occupations	11,804	12,116	312	2.64%	162	282	444
19-0000	Life, Physical, and Social Science Occupations	7,897	8,080	183	2.32%	96	221	317
21-0000	Community and Social Service Occupations	23,125	24,164	1,039	4.49%	520	475	995
23-0000	Legal Occupations	8,002	8,224	222	2.77%	111	126	237
25-0000	Education, Training, and Library Occupations	77,252	79,793	2,541	3.29%	1,271	1,621	2,892
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	16,065	16,444	379	2.36%	235	390	625
29-0000	Healthcare Practitioners and Technical Occupations	77,976	80,781	2,805	3.60%	1,410	1,629	3,039
31-0000	Healthcare Support Occupations	38,051	39,393	1,342	3.53%	672	802	1,474
33-0000	Protective Service Occupations	25,899	26,419	520	2.01%	262	640	902
35-0000	Food Preparation and Serving Related Occupations	103,352	108,212	4,860	4.70%	2,430	4,087	6,517
37-0000	Building and Grounds Cleaning and Maintenance Occupations	43,109	44,445	1,336	3.10%	668	810	1,478
39-0000	Personal Care and Service Occupations	47,444	49,307	1,863	3.93%	936	954	1,890
41-0000	Sales and Related Occupations	138,191	142,558	4,367	3.16%	2,210	4,568	6,778
43-0000	Office and Administrative Support Occupations	187,489	191,794	4,305	2.30%	2,196	3,864	6,060
45-0000	Farming, Fishing, and Forestry Occupations	16,347	16,811	464	2.84%	239	412	651
47-0000	Construction and Extraction Occupations	54,281	56,707	2,426	4.47%	1,382	863	2,245
49-0000	Installation, Maintenance, and Repair Occupations	54,804	56,531	1,727	3.15%	884	1,234	2,118
51-0000	Production Occupations	116,090	116,957	867	0.75%	886	2,550	3,436
53-0000	Transportation and Material Moving Occupations	109,804	112,956	3,152	2.87%	1,604	2,492	4,096

### 2016-2018 Arkansas Statewide Occupational Projections by Major Group

### **Occupational Outlook**

The Arkansas labor market is expected to see a growth of 41,750 jobs over the 2016-2018 projection period, an increase of 3.06 percent, with many job opportunities for recent graduates and other job seekers. Of the 53,598 total annual job openings expected during the projection period, 21,696 jobs are estimated to come from growth and expansion of businesses. The other 31,902 jobs are expected to be available due to the need to replace workers who leave their jobs for various reasons. All major occupational groups are estimated to see net gains in employment.



#### **Management Occupations**

The **Management Occupations** major group is projected to gain 3,881 jobs between 2016 and 2018, an increase of 2.93 percent. During the projection period, 4,500 job openings are expected to be available annually, of which 2,560 jobs are estimated to be for replacement and 1,940 for growth and expansion. *Other Management Occupations* is predicted to add 2,489 new jobs and account for 63.8 percent of the total annual openings among **Management Occupations**. Farmers, Ranchers, and Other Agricultural Managers could account for more than one-third of the new jobs in the major group making it the top growing occupation in the major group and third in the state on the Top 20 Growing Occupations list. *Top Executives* is predicted to add 777 to its workforce, while *Operations Specialties Managers* could experience a net gain of 416 jobs. General and Operations Managers is predicted to add an additional 705 jobs.

#### **Business and Financial Operations**

The **Business and Financial Operations Occupations** major group is estimated to gain 2,038 new jobs by the first quarter of 2018, an increase of 3.89 percent. Around 2,015 job openings are projected to be available each year of the projection period. The major group is one of four where growth openings could lead replacement openings with 1,022 for growth and expansion and 993 jobs for replacement. *Business Operations Specialists* is projected to gain the most jobs with 1,421 on the horizon, accounting for nearly 70 percent of the job growth in this major group, while *Financial Specialists* is predicted to gain an additional 617. Several occupations are predicted to gain over 150 new jobs during the projection period with Accountants and Auditors expected to add 324 new jobs and have 342 annual job openings.

#### **Computer and Mathematical**

The **Computer and Mathematical Occupations** major group is projected to add 1,121 new jobs and have 890 annual job openings. It is projected to have more growth openings than replacement openings with 560 for growth and expansion and 330 for replacement. At 4.58 percent, **Computer and Mathematical Occupations** is expected to be the second fastest growing major group in the state. The majority of this major group's growth is likely to be in *Computer Occupations* with a gain of 1,094 new jobs and 869 annual openings. Five occupations in this group are estimated to grow by at least 100 jobs with Computer Systems Analysts leading with 203 new jobs. Web Developers could be the fastest growing occupation in the major group with an increase of 7.43 percent. The *Mathematical Science Occupations* occupational family is expected to add 27 new jobs to the labor market.

#### **Architecture and Engineering**

The Architecture and Engineering Occupations major group is expected to experience a growth of 312 jobs, a 2.64 percent increase between 2016 and 2018. The major group is expected to have 444 annual job openings, of which 282 would be for replacement. A little more than half of the growth is expected to occur in the *Engineers* occupational family with 157 new jobs, a 2.28 percent increase. Civil Engineers is predicted to lead occupations in this major group with 59 new jobs. Cartographers and Photogrammetrists makes the Top 20 Fastest Growing Occupations list with an 8.47 percent growth.

#### Life, Physical, and Social Science

Life, Physical, and Social Science Occupations is projected to have 183 new jobs during the projection period, the smallest growth in the state. *Life, Physical, and Social Science Technicians* is estimated to add 85 to its workforce, while *Social Scientists and Related Workers* is forecast to have 53 new jobs. Clinical, Counseling, and School Psychologists are set to add the most in this major group with 37 new jobs anticipated between 2016 and 2018. In all, six occupations are expected to gain at least 10 new jobs. Forensic Science Technicians are estimated to increase over the 2016-2018 projection period by 6.04 percent

#### **Community and Social Service**

The **Community and Social Service Occupations** major group is expected to gain 1,039 jobs by the first quarter of 2018. Around 995 annual job openings are projected to be available with 520 for growth and expansion and 475 for replacement. *Religious Workers* is forecast to gain 573 new jobs with Clergy claiming 501. *Counselors, Social Workers, and Other Community and Social Service Specialists* is predicted to add an additional 466 jobs. Social and Human Service Assistants is predicted to add 144 jobs, while seven other occupations in this occupational group are predicted to add at least 20.

#### Legal

The **Legal Occupations** major group is projected to gain 222 jobs during the projection period. This occupational group is expected to have the fewest annual openings with 237 anticipated with 111 for growth and expansion and 126 for replacement. The majority of the growth is likely to come in *Lawyers, Judges, and Related Workers* with an anticipated growth of 143 jobs with 133 coming among Lawyers. *Legal Support Workers* is estimated to add 79 new jobs with Paralegals and Legal Assistants adding 56 of those.

#### **Education, Training, and Library**

The **Education, Training, and Library Occupations** major group is forecast to add 2,541 jobs and have 2,892 annual openings each year of the projection period. *Preschool, Primary, Secondary, and Special Education School Teachers* is set to add 1,249 jobs to the Arkansas workforce and have 1,502 annual openings. Elementary School Teachers, Except Special Education leads all occupations in the major group with 404 new jobs. Museum Technicians and Conservators is estimated to increase by 10.34 percent and be among the 10 fastest growing occupations in the state. In all, four occupations are expected to add over 200 new jobs between 2016 and 2018.

#### Arts, Design, Entertainment, Sports, and Media

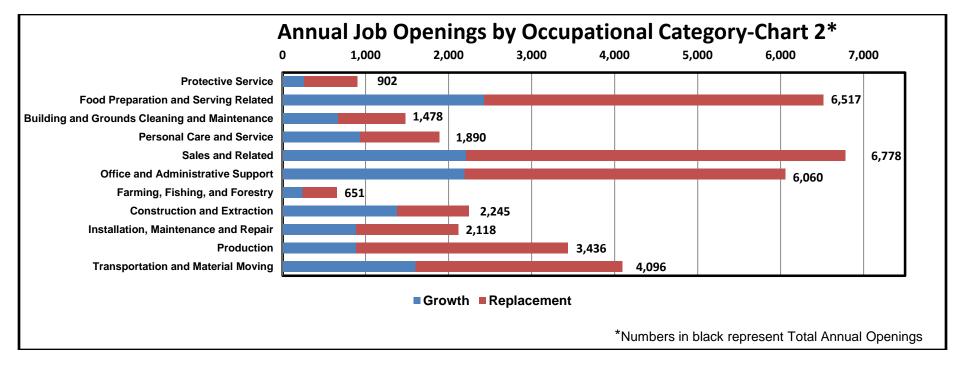
The Arts, Design, Entertainment, Sports, and Media Occupations major group is expected to add 379 jobs between 2016 and 2018. Around 625 jobs are projected to be available each year during the projection period. The *Entertainers and Performers, Sports and Related Workers* family could add the most jobs with 278 on the horizon. Music Directors and Composers could lead the major group in net change with 92 new jobs. Coaches and Scouts is estimated to increase by 66. On the negative side of the labor market, Editors could lose 25 jobs, or just over 4 percent of its workforce, while Reporters and Correspondents could see a cut of 4.87 percent to its own workforce.

#### **Healthcare Practitioners and Technical**

The **Healthcare Practitioners and Technical Occupations** major group is projected to add 2,805 jobs between 2016 and 2018. It is expected to have 3,039 job openings each year, 1,629 of which would be for replacement. *Health Diagnosing and Treating Practitioners* is expected to have the most new jobs with 1,740 on the horizon. Registered Nurses is estimated to add 737 and have 876 annual openings, placing it among the Top Ten on both the Top 20 Annual Openings list as well as the Top 20 Growing Occupations list. At 7.91 percent, Physician Assistants make the Top 20 Fastest Growing Occupations list. *Health Technologists and Technicians* is projected to increase by an additional 1,028 jobs with Licensed Practical and Licensed Vocational Nurses adding 284. Veterinary Technologists and Technicians could increase by 6.51 percent.

#### **Healthcare Support Occupations**

**Healthcare Support Occupations** is expected to increase employment by 3.53 percent, equivalent to 1,342 new jobs and 1,474 annual job openings between 2016 and 2018. The occupational family *Nursing, Psychiatric, and Home Health Aides* is estimated to gain the most new jobs with 792 on the horizon. Nursing Assistants is estimated to lead the major group in net change with a growth of 484. *Other Healthcare Support Occupations* could add 444 new jobs to its workforce. Medical Assistants leads this occupational family with 173 new jobs, anticipated. Occupational Therapy Assistants is forecast to be the fastest growing occupation in the Healthcare Support Occupations major group with a 7.58 percent growth.



#### **Protective Service**

The **Protective Service Occupations** major group is expected to add 520 new jobs to the Arkansas job market. This major group is predicted to have 902 annual job openings with about 640 for replacement. *Law Enforcement Workers* is forecast to add 207 new jobs with Police and Sheriff's Patrol Officers adding 114 and Correctional Officers and Jailers adding 85. *Other Protective Service Workers* is estimated to see a growth of 202 new jobs with Security Guards adding 155.

#### **Food Preparation and Serving Related**

**Food Preparation and Serving Related Occupations** is expected to increase employment over the next two years adding 4,860 jobs to the Arkansas labor market, an increase of 4.70 percent making it the top and fastest growing occupational major group in the state. It is projected to have 6,517 annual job openings with 4,087 of those for replacement. *Food and Beverage Serving Workers* is projected to have 2,751 new jobs and 3,716 annual job openings during the projection period. Combined Food Preparation and Serving Workers, Including Fast Food is estimated to be the top growing occupation in the state with 1,661 new jobs. Waiters and Waitresses is expected to add 833 to its workforce. In all, four occupations in this major group are in the Top 20 Growing Occupations list.

#### **Building and Grounds Cleaning and Maintenance**

The **Building and Grounds Cleaning and Maintenance Occupations** major group is projected to add 1,336 jobs by the first quarter of 2018 as well as having 1,478 annual openings. *Building Cleaning and Pest Control Workers* is predicted to see 885 new jobs, 66.2 percent of this major group's job growth. Janitors and Cleaners, Except Maids and Housekeeping Cleaners is estimated to gain 681 of those jobs, placing the occupation in the

Top 20 Growing Occupations list. *Grounds Maintenance Workers* is also forecast to see strong growth with a gain of 317 jobs. Landscaping and Groundskeeping Workers will likely claim the majority of those jobs with 283 on the horizon.

### **Personal Care and Service**

The **Personal Care and Service Occupations** major group is projected to increase employment by 1,863, an increase of 3.93 percent. Around 1,890 annual openings are forecast for this major group with 954 for replacement and 936 for growth and expansion. The *Other Personal Care and Service Workers* occupational family could account for 74.4 percent of the new jobs in this major group with 1,386 expected. Personal Care Aides could add 865 new jobs to its workforce placing it sixth in net growth, while Childcare Workers is predicted to add 366 to its workforce.

### Sales and Related

**Sales and Related Occupations** is expected to be the second highest growing major group with an anticipated gain of 4,367 new jobs by March 2018 and have 6,778 annual openings during the projection period, the most among the major groups. Of these, 4,568 are estimated to be for replacement, while 2,210 would be for growth and expansion. The *Retail Sales Workers* occupational family is predicted to add 2,894 to the Arkansas job market. Retail Salespersons is predicted to add the majority of those jobs with a forecasted growth of 1,535, while Cashiers is estimated to gain an additional 1,139 jobs, placing the occupations second and fourth, respectively, among the Top 10 growing occupations. The occupations are slated to be the Top two in the number of annual openings. *Supervisors of Sales Workers* is anticipated to add 630 jobs between 2016 and 2018.

### **Office and Administrative Support**

The **Office and Administrative Support Occupations** major group is predicted to add 4,305 new jobs and have 6,060 annual openings. Of the total annual openings, 3,864 would be for replacement and 2,196 for growth and expansion. The *Information and Record Clerks* family is projected to add 1,018 new jobs. Customer Service Representatives is projected to add 502 jobs to the economy, while Receptionists and Information Clerks is set to have 231 new jobs. The two occupations are predicted to have more than 1,000 openings annually between them. *Secretaries and Administrative Assistants* are projected to increase by 860, while *Other Office and Administrative Support Workers* is forecast to raise employment by 807. Office Clerks, General is expected to lead all occupations in the major group with 697 new jobs and 982 annual job openings.

### **Farming, Fishing, and Forestry**

The **Farming, Fishing, and Forestry Occupations** major group is projected to see an increase over the next two years with a gain of 464, a 2.84 percent increase. It is also expected to have 651 annual job openings with 412 for replacements and 239 for growth and expansion. The majority of the jobs are likely to come in the *Agricultural Workers* occupational family with a gain of 416, almost 90 percent of the total growth. Farmworkers, Farm, Ranch, and Aquacultural Animals is estimated to add the most jobs with 195 on the horizon, while Farmworkers and Laborers, Crop, Nursery, and Greenhouse is estimated to grow by 168.

### **Construction and Extraction**

The **Construction and Extraction Occupations** major group is expected to experience a net gain of 2,426 jobs by March 2018. The major group is estimated to have more growth openings than those for replacements with 1,382 for growth and 863 for replacement and bringing total annual openings to 2,245. The outlook for this major group is mixed with many occupations making it on at least one of the Top 20 lists. Helpers-Painters, Paperhangers, Plasterers, and Stucco Masons is predicted to be the second fastest growing occupation in the state with a 14.98 percent growth. In all,

11 occupations in this major group are included in the Top 20 Fastest Growing occupations list. Overall, the *Construction Trades Workers* family is predicted to add 2,256 jobs accounting for almost 93 percent of the total growth in the major group. On the flip side of the economy, the *Extraction Workers* family is projected to lose 338 jobs or 18.42 percent of its workforce. A downturn in the oil and gas industry could be a contributing factor in the decline. Service Unit Operators, Oil, Gas, and Mining is forecast to be the top declining occupation in the state with a loss of 111, while Derrick Operators, Oil and Gas is projected to be the fastest declining occupation in the state with a decline of 29.49 percent. In all, four occupations in this major group are included in the Top 20 Declining Occupations list and five are included in the Top 20 Fastest Declining Occupations list.

### **Installation, Maintenance, and Repair**

The **Installation, Maintenance, and Repair Occupations** major group is projected to gain 1,727 jobs over the next two years. About 2,118 job openings are forecast to be available each year during the projection period with 1,234 due to replacement. The *Other Installation, Maintenance, and Repair Occupations* family is predicted to see the most growth with an increase of 973 jobs. Maintenance and Repair Workers, General is projected to add 403 new jobs to its workforce, while Industrial Machinery Mechanics is predicted to add 229 jobs. The *Vehicle and Mobile Equipment Mechanics, Installers, and Repairers* family is expected to add an additional 555 jobs to the Arkansas labor market.

### **Production Occupations**

The **Production Occupations** major group is predicted to experience a net gain of 867 jobs during the projection period. Its 0.75 percent increase is the slowest among occupational major groups. Of the 3,436 annual job openings, 2,550 job openings are estimated to be for replacement and 886 for growth and expansion. The outlook in this major group is mixed with some gains and losses. Among growing occupational families, *Food Processing Workers* is estimated to gain 659 jobs. Meat, Poultry, and Fish Cutters and Trimmers leads all occupations in net growth with a gain of 266 new jobs. While no occupations in the **Production Occupations** major group made the Top 20 Growing Occupation list, two made the Top 20 Fastest Growing Occupations list, including the top growing occupations made the Top 20 Declining Occupations list. Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic is leading in decline for this major group with an anticipated loss of 89 jobs. Eleven occupations made the Top 20 Fastest Declining occupations list with Layout Workers, Metal and Plastic losing the most with a decrease of 14.63 percent of its workforce.

#### **Transportation and Material Moving**

The **Transportation and Material Moving Occupations** major group is projected to gain 3,152 employees by the first quarter of 2018. Around 4,096 jobs are expected to be available each year of the projection period, of which 2,492 would be for replacement. *Material Moving Workers* is projected to add 1,569 new jobs with Laborers and Freight, Stock, and Material Movers, Hand predicted to gain 963 placing among the Top 5 on the Top 20 Growing Occupations list. *Motor Vehicle Operators* is expected to add 714 jobs to its workforce, placing it among the Top 10 on the Top 20 Growing Occupations list. Wellhead Pumpers with a 22.84 percent decline could be among the five fastest declining occupations in the state.

# Top 20 Growing Occupations by Net Growth

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacements	Total Annual Openings
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	27,172	28,833	1,661	6.11%	830	1,058	1,888
41-2031	Retail Salespersons	39,797	41,332	1,535	3.86%	768	1,488	2,256
11-9013	Farmers, Ranchers, and Other Agricultural Managers	59,892	61,357	1,465	2.45%	732	992	1,724
41-2011	Cashiers	34,387	35,526	1,139	3.31%	570	1,742	2,312
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	26,678	27,641	963	3.61%	482	824	1,306
39-9021	Personal Care Aides	17,186	18,051	865	5.03%	432	110	542
35-3031	Waiters and Waitresses	19,107	19,940	833	4.36%	416	998	1,414
29-1141	Registered Nurses	23,040	23,777	737	3.20%	368	508	876
53-3032	Heavy and Tractor-Trailer Truck Drivers	35,834	36,548	714	1.99%	357	571	928
11-1021	General and Operations Managers	20,388	21,093	705	3.46%	352	479	831
43-9061	Office Clerks, General	30,076	30,773	697	2.32%	348	634	982
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	19,172	19,853	681	3.55%	340	345	685
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	24,193	24,867	674	2.79%	337	256	593
35-2014	Cooks, Restaurant	9,349	9,997	648	6.93%	324	252	576
41-1011	First-Line Supervisors of Retail Sales Workers	17,472	18,012	540	3.09%	270	397	667
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	9,343	9,861	518	5.54%	259	298	557
47-2061	Construction Laborers	9,942	10,459	517	5.20%	258	196	454
43-4051	Customer Service Representatives	18,936	19,438	502	2.65%	251	440	691
21-2011	Clergy	7,887	8,388	501	6.35%	250	166	416
43-1011	First-Line Supervisors of Office and Administrative Support Workers	15,284	15,783	499	3.26%	250	240	490

### Top 20 Fastest Growing Occupations by Percent Growth (Minimum Employment of 50)

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SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacements	Total Annual Openings
51-4052	Pourers and Casters, Metal	123	142	19	15.45%	10	4	14
47-3014	HelpersPainters, Paperhangers, Plasterers, and Stucco Masons	247	284	37	14.98%	18	4	22
49-3052	Motorcycle Mechanics	206	234	28	13.59%	14	4	18
47-2081	Drywall and Ceiling Tile Installers	653	738	85	13.02%	42	4	46
47-2131	Insulation Workers, Floor, Ceiling, and Wall	241	270	29	12.03%	14	8	22
25-4013	Museum Technicians and Conservators	87	96	9	10.34%	4	2	6
49-3051	Motorboat Mechanics and Service Technicians	199	219	20	10.05%	10	4	14
47-2132	Insulation Workers, Mechanical	176	192	16	9.09%	8	6	14
25-4012	Curators	69	75	6	8.70%	3	2	5
47-3011	HelpersBrickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	290	315	25	8.62%	12	4	16
47-2141	Painters, Construction and Maintenance	2,082	2,261	179	8.60%	90	32	122
17-1021	Cartographers and Photogrammetrists	59	64	5	8.47%	2	2	4
47-3012	HelpersCarpenters	378	409	31	8.20%	16	6	22
29-1071	Physician Assistants	417	450	33	7.91%	16	8	24
47-4021	Elevator Installers and Repairers	64	69	5	7.81%	2	1	3
47-3013	HelpersElectricians	372	401	29	7.80%	14	6	20
51-6091	Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	90	97	7	7.78%	4	1	5
47-2044	Tile and Marble Setters	143	154	11	7.69%	6	2	8
47-2161	Plasterers and Stucco Masons	78	84	6	7.69%	3	0	3
51-9081	Dental Laboratory Technicians	442	476	34	7.69%	17	12	29

# Top 20 Occupations by Total Annual Openings

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacements	Total Annual Openings
41-2011	Cashiers	34,387	35,526	1,139	3.31%	570	1,742	2,312
41-2031	Retail Salespersons	39,797	41,332	1,535	3.86%	768	1,488	2,256
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	27,172	28,833	1,661	6.11%	830	1,058	1,888
11-9013	Farmers, Ranchers, and Other Agricultural Managers	59,892	61,357	1,465	2.45%	732	992	1,724
35-3031	Waiters and Waitresses	19,107	19,940	833	4.36%	416	998	1,414
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	26,678	27,641	963	3.61%	482	824	1,306
43-9061	Office Clerks, General	30,076	30,773	697	2.32%	348	634	982
53-3032	Heavy and Tractor-Trailer Truck Drivers	35,834	36,548	714	1.99%	357	571	928
29-1141	Registered Nurses	23,040	23,777	737	3.20%	368	508	876
11-1021	General and Operations Managers	20,388	21,093	705	3.46%	352	479	831
43-5081	Stock Clerks and Order Fillers	16,053	16,534	481	3.00%	240	544	784
43-4051	Customer Service Representatives	18,936	19,438	502	2.65%	251	440	691
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	19,172	19,853	681	3.55%	340	345	685
41-1011	First-Line Supervisors of Retail Sales Workers	17,472	18,012	540	3.09%	270	397	667
31-1014	Nursing Assistants	18,667	19,151	484	2.59%	242	394	636
39-9011	Childcare Workers	13,945	14,311	366	2.62%	183	426	609
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	24,193	24,867	674	2.79%	337	256	593
35-2014	Cooks, Restaurant	9,349	9,997	648	6.93%	324	252	576
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	9,343	9,861	518	5.54%	259	298	557
39-9021	Personal Care Aides	17,186	18,051	865	5.03%	432	110	542

# Top 20 Declining Occupations by Net Growth

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacements	Total Annual Openings
47-5013	Service Unit Operators, Oil, Gas, and Mining	450	339	-111	-24.67%	0	15	15
47-5071	Roustabouts, Oil and Gas	366	273	-93	-25.41%	0	6	6
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	2,848	2,759	-89	-3.13%	0	39	39
51-7011	Cabinetmakers and Bench Carpenters	1,244	1,174	-70	-5.63%	0	10	10
51-6042	Shoe Machine Operators and Tenders	541	486	-55	-10.17%	0	6	6
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	1,300	1,246	-54	-4.15%	0	36	36
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,503	1,453	-50	-3.33%	0	28	28
51-2022	Electrical and Electronic Equipment Assemblers	1,014	965	-49	-4.83%	0	13	13
47-5011	Derrick Operators, Oil and Gas	156	110	-46	-29.49%	0	5	5
51-9196	Paper Goods Machine Setters, Operators, and Tenders	1,949	1,906	-43	-2.21%	0	34	34
51-4111	Tool and Die Makers	535	493	-42	-7.85%	0	2	2
41-9041	Telemarketers	1,633	1,594	-39	-2.39%	0	36	36
47-5081	HelpersExtraction Workers	197	160	-37	-18.78%	0	2	2
53-7073	Wellhead Pumpers	162	125	-37	-22.84%	0	6	6
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	1,678	1,643	-35	-2.09%	0	27	27
43-2011	Switchboard Operators, Including Answering Service	738	707	-31	-4.20%	0	10	10
51-2021	Coil Winders, Tapers, and Finishers	531	503	-28	-5.27%	0	7	7
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	1,478	1,450	-28	-1.89%	0	32	32
51-4121	Welders, Cutters, Solderers, and Brazers	5,058	5,032	-26	-0.51%	0	142	142
27-3041	Editors	623	598	-25	-4.01%	0	22	22

# Top 20 Fastest Declining Occupations by Percent Growth (Minimum Decline of 5)

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacements	Total Annual Openings
47-5011	Derrick Operators, Oil and Gas	156	110	-46	-29.49%	0	5	5
47-5012	Rotary Drill Operators, Oil and Gas	68	48	-20	-29.41%	0	2	2
47-5071	Roustabouts, Oil and Gas	366	273	-93	-25.41%	0	6	6
47-5013	Service Unit Operators, Oil, Gas, and Mining	450	339	-111	-24.67%	0	15	15
53-7073	Wellhead Pumpers	162	125	-37	-22.84%	0	6	6
47-5081	HelpersExtraction Workers	197	160	-37	-18.78%	0	2	2
51-4192	Layout Workers, Metal and Plastic	41	35	-6	-14.63%	0	0	0
51-6042	Shoe Machine Operators and Tenders	541	486	-55	-10.17%	0	6	6
51-8092	Gas Plant Operators	137	125	-12	-8.76%	0	4	4
51-4111	Tool and Die Makers	535	493	-42	-7.85%	0	2	2
51-6062	Textile Cutting Machine Setters, Operators, and Tenders	91	85	-6	-6.59%	0	2	2
51-5111	Prepress Technicians and Workers	283	267	-16	-5.65%	0	4	4
51-7011	Cabinetmakers and Bench Carpenters	1,244	1,174	-70	-5.63%	0	10	10
39-6011	Baggage Porters and Bellhops	163	154	-9	-5.52%	0	3	3
51-2021	Coil Winders, Tapers, and Finishers	531	503	-28	-5.27%	0	7	7
27-3022	Reporters and Correspondents	472	449	-23	-4.87%	0	16	16
51-2022	Electrical and Electronic Equipment Assemblers	1,014	965	-49	-4.83%	0	13	13
51-6021	Pressers, Textile, Garment, and Related Materials	398	380	-18	-4.52%	0	10	10
43-2011	Switchboard Operators, Including Answering Service	738	707	-31	-4.20%	0	10	10
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	361	346	-15	-4.16%	0	9	9

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
00-0000	TOTAL, ALL OCCUPATIONS	1,366,577	1,408,327	41,750	3.06%	21,696	31,902	53,598			
11-0000	MANAGEMENT OCCUPATIONS	132,670	136,551	3,881	2.93%	1,940	2,560	4,500			
11-1000	Top Executives	25,602	26,379	777	3.03%	388	570	958			
11-1021	General and Operations Managers	20,388	21,093	705	3.46%	352	479	831	3	1	6
11-2000	Advertising, Marketing, Promotions, Public Relations, and Sales Managers	5,214	5,413	199	3.82%	100	120	220			
11-2011	Advertising and Promotions Managers	129	131	2	1.55%	1	4	5	3	2	6
11-2021	Marketing Managers	1,266	1,333	67	5.29%	34	28	62	3	1	6
11-2022	Sales Managers	3,468	3,585	117	3.37%	58	76	134	3	2	6
11-2031	Public Relations and Fundraising Managers	351	364	13	3.70%	6	12	18	3	1	6
11-3000	Operations Specialties Managers	12,361	12,777	416	3.37%	208	242	450			
11-3011	Administrative Services Managers	1,971	2,039	68	3.45%	34	32	66	3	2	6
11-3021	Computer and Information Systems Managers	2,142	2,251	109	5.09%	54	18	72	3	1	6
11-3031	Financial Managers	2,937	3,042	105	3.58%	52	64	116	3	1	6
11-3051	Industrial Production Managers	1,924	1,955	31	1.61%	16	50	66	3	1	6
11-3061	Purchasing Managers	513	527	14	2.73%	7	10	17	3	1	6
11-3071	Transportation, Storage, and Distribution Managers	1,474	1,515	41	2.78%	20	29	49	7	1	6
11-3111	Compensation and Benefits Managers	162	169	7	4.32%	4	4	8	3	1	6
11-3121	Human Resources Managers	859	888	29	3.38%	14	24	38	3	1	6
11-3131	Training and Development Managers	379	391	12	3.17%	6	10	16	3	1	6
11-9000	Other Management Occupations	89,493	91,982	2,489	2.78%	1,244	1,627	2,871			
11-9013	Farmers, Ranchers, and Other Agricultural Managers	59,892	61,357	1,465	2.45%	732	992	1,724	7	1	6
11-9021	Construction Managers	2,713	2,841	128	4.72%	64	40	104	3	3	4
11-9031	Education Administrators, Preschool and Childcare Center/Program	682	705	23	3.37%	12	20	32	3	2	6
11-9032	Education Administrators, Elementary and Secondary School	2,363	2,444	81	3.43%	40	70	110	2	1	6
11-9033	Education Administrators, Postsecondary	1,693	1,737	44	2.60%	22	50	72	2	2	6
11-9039	Education Administrators, All Other	116	118	2	1.72%	1	4	5	3	2	6
11-9041	Architectural and Engineering Managers	554	559	5	0.90%	2	15	17	3	1	6
11-9051	Food Service Managers	2,335	2,435	100	4.28%	50	44	94	7	2	6
11-9061	Funeral Service Managers	462	475	13	2.81%	6	10	16	4	2	6
11-9081	Lodging Managers	514	527	13	2.53%	6	10	16	7	2	6
11-9111	Medical and Health Services Managers	3,415	3,533	118	3.46%	59	80	139	3	2	6

\*For training codes, refer to page 85.

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
11-9121	Natural Sciences Managers	326	335	9	2.76%	4	6	10	3	1	6
11-9131	Postmasters and Mail Superintendents	215	220	5	2.33%	2	4	6	7	2	4
11-9141	Property, Real Estate, and Community Association Managers	3,173	3,285	112	3.53%	56	50	106	7	2	6
11-9151	Social and Community Service Managers	1,472	1,518	46	3.13%	23	38	61	3	1	6
11-9161	Emergency Management Directors	116	118	2	1.72%	1	1	2	3	1	6
11-9199	Managers, All Other	9,452	9,775	323	3.42%	162	193	355	3	2	6
13-0000	BUSINESS AND FINANCIAL OPERATIONS OCCUPATIONS	52,442	54,480	2,038	3.89%	1,022	993	2,015			
13-1000	Business Operations Specialists	36,891	38,312	1,421	3.85%	714	629	1,343			
13-1021	Buyers and Purchasing Agents, Farm Products	132	137	5	3.79%	2	2	4	3	3	3
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	1,526	1,551	25	1.64%	12	42	54	3	3	3
13-1031	Claims Adjusters, Examiners, and Investigators	1,482	1,519	37	2.50%	18	34	52	7	3	3
13-1041	Compliance Officers	2,104	2,156	52	2.47%	26	27	53	3	3	4
13-1051	Cost Estimators	1,362	1,442	80	5.87%	40	37	77	3	3	6
13-1071	Human Resources Specialists	2,719	2,784	65	2.39%	32	62	94	3	3	6
13-1075	Labor Relations Specialists	836	830	-6	-0.72%	0	19	19	3	2	6
13-1081	Logisticians	997	1,039	42	4.21%	21	8	29	3	3	6
13-1111	Management Analysts	4,928	5,110	182	3.69%	91	58	149	3	2	6
13-1121	Meeting, Convention, and Event Planners	492	509	17	3.46%	8	5	13	3	3	6
13-1131	Fundraisers	320	336	16	5.00%	8	4	12	3	3	6
13-1141	Compensation, Benefits, and Job Analysis Specialists	685	704	19	2.77%	10	16	26	3	2	6
13-1151	Training and Development Specialists	2,850	2,923	73	2.56%	36	66	102	3	2	6
13-1161	Market Research Analysts and Marketing Specialists	2,933	3,099	166	5.66%	83	30	113	3	3	6
13-1199	Business Operations Specialists, All Other	9,692	10,107	415	4.28%	208	101	309	3	3	6
13-2000	Financial Specialists	15,551	16,168	617	3.97%	308	364	672			
13-2011	Accountants and Auditors	6,901	7,225	324	4.69%	162	180	342	3	3	6
13-2021	Appraisers and Assessors of Real Estate	913	937	24	2.63%	12	16	28	3	3	3
13-2031	Budget Analysts	472	480	8	1.69%	4	12	16	3	3	6
13-2041	Credit Analysts	330	347	17	5.15%	8	14	22	3	3	6
13-2051	Financial Analysts	868	879	11	1.27%	6	15	21	3	3	6
13-2052	Personal Financial Advisors	1,085	1,129	44	4.06%	22	26	48	3	3	3

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
13-2053	Insurance Underwriters	146	149	3	2.05%	2	2	4	3	3	4
13-2061	Financial Examiners	174	180	6	3.45%	3	4	7	3	3	4
13-2071	Credit Counselors	90	93	3	3.33%	2	2	4	3	3	4
13-2072	Loan Officers	2,063	2,162	99	4.80%	50	35	85	3	3	4
13-2081	Tax Examiners and Collectors, and Revenue Agents	590	595	5	0.85%	2	22	24	3	3	4
13-2082	Tax Preparers	1,345	1,401	56	4.16%	28	30	58	7	3	4
13-2099	Financial Specialists, All Other	574	591	17	2.96%	8	4	12	3	3	4
15-0000	COMPUTER AND MATHEMATICAL OCCUPATIONS	24,483	25,604	1,121	4.58%	560	330	890			
15-1100	Computer Occupations	23,961	25,055	1,094	4.57%	547	322	869			
15-1111	Computer and Information Research Scientists	22	22	0	0.00%	0	0	0	1	3	6
15-1121	Computer Systems Analysts	3,200	3,403	203	6.34%	102	36	138	3	3	6
15-1122	Information Security Analysts	2,283	2,446	163	7.14%	82	26	108	3	2	6
15-1131	Computer Programmers	3,455	3,538	83	2.40%	42	84	126	3	3	6
15-1132	Software Developers, Applications	2,017	2,136	119	5.90%	60	25	85	3	3	6
15-1133	Software Developers, Systems Software	1,051	1,063	12	1.14%	6	13	19	3	3	6
15-1134	Web Developers	673	723	50	7.43%	25	8	33	4	3	6
15-1141	Database Administrators	787	827	40	5.08%	20	14	34	3	2	6
15-1142	Network and Computer Systems Administrators	3,331	3,466	135	4.05%	68	37	105	3	3	6
15-1143	Computer Network Architects	1,424	1,496	72	5.06%	36	16	52	3	1	6
15-1151	Computer User Support Specialists	4,096	4,268	172	4.20%	86	46	132	6	3	6
15-1152	Computer Network Support Specialists	994	1,028	34	3.42%	17	11	28	4	3	6
15-1199	Computer Occupations, All Other	628	639	11	1.75%	6	7	13	3	3	6
15-2000	Mathematical Science Occupations	522	549	27	5.17%	14	8	22			
15-2031	Operations Research Analysts	286	298	12	4.20%	6	4	10	3	3	6
15-2041	Statisticians	179	189	10	5.59%	5	3	8	2	3	6
17-0000	ARCHITECTURE AND ENGINEERING OCCUPATIONS	11,804	12,116	312	2.64%	162	282	444			
17-1000	Architects, Surveyors, and Cartographers	1,509	1,587	78	5.17%	39	34	73			
17-1011	Architects, Except Landscape and Naval	773	825	52	6.73%	26	13	39	3	3	2
17-1012	Landscape Architects	109	115	6	5.50%	3	2	5	3	3	2
17-1021	Cartographers and Photogrammetrists	59	64	5	8.47%	2	2	4	3	3	6
17-1022	Surveyors	568	583	15	2.64%	8	17	25	3	2	6
17-2000	Engineers	6,872	7,029	157	2.28%	83	183	266			

\*For training codes, refer to page 85.

SOC	Standard Occupational Classification	Estimated	Projected	Net	Percent	Annual Openings	Annual Openings	Total Annual	Education	Work	Job Training
Code	(SOC) Title	Employment 2016	Employment 2018	Growth	Growth	due to Growth	due to Replacement	Openings	Code	Experience Code	Training Code
17-2041	Chemical Engineers	208	210	2	0.96%	1	6	7	3	3	6
17-2051	Civil Engineers	1,317	1,376	59	4.48%	30	38	68	3	3	6
17-2061	Computer Hardware Engineers	201	211	10	4.98%	5	4	9	3	3	6
17-2071	Electrical Engineers	769	774	5	0.65%	2	17	19	3	3	6
17-2072	Electronics Engineers, Except Computer	261	269	8	3.07%	4	6	10	3	3	6
17-2081	Environmental Engineers	169	179	10	5.92%	5	5	10	3	3	6
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	103	108	5	4.85%	2	3	5	3	3	6
17-2112	Industrial Engineers	1,574	1,592	18	1.14%	9	44	53	3	3	6
17-2131	Materials Engineers	57	58	1	1.75%	0	2	2	3	3	6
17-2141	Mechanical Engineers	1,217	1,225	8	0.66%	4	38	42	3	3	6
17-2199	Engineers, All Other	541	568	27	4.99%	14	10	24	3	3	6
17-3000	Drafters, Engineering Technicians, and Mapping Technicians	3,423	3,500	77	2.25%	40	65	105			
17-3011	Architectural and Civil Drafters	477	497	20	4.19%	10	6	16	4	3	6
17-3012	Electrical and Electronics Drafters	143	152	9	6.29%	4	2	6	4	3	6
17-3013	Mechanical Drafters	322	330	8	2.48%	4	4	8	4	3	6
17-3019	Drafters, All Other	66	67	1	1.52%	0	1	1	4	3	6
17-3022	Civil Engineering Technicians	264	279	15	5.68%	8	6	14	4	3	6
17-3023	Electrical and Electronics Engineering Technicians	550	555	5	0.91%	2	13	15	4	3	6
17-3025	Environmental Engineering Technicians	189	194	5	2.65%	2	4	6	4	3	6
17-3026	Industrial Engineering Technicians	315	316	1	0.32%	0	8	8	4	3	6
17-3027	Mechanical Engineering Technicians	217	220	3	1.38%	2	5	7	4	3	6
17-3029	Engineering Technicians, Except Drafters, All Other	339	336	-3	-0.88%	0	8	8	4	3	6
17-3031	Surveying and Mapping Technicians	460	471	11	2.39%	6	6	12	7	3	4
19-0000	LIFE, PHYSICAL, AND SOCIAL SCIENCE OCCUPATIONS	7,897	8,080	183	2.32%	96	221	317			
19-1000	Life Scientists	2,247	2,271	24	1.07%	14	70	84			
19-1011	Animal Scientists	65	65	0	0.00%	0	2	2	3	3	6
19-1012	Food Scientists and Technologists	357	368	11	3.08%	6	12	18	3	3	6
19-1013	Soil and Plant Scientists	136	138	2	1.47%	1	4	5	3	3	6
19-1021	Biochemists and Biophysicists	77	80	3	3.90%	2	2	4	1	3	6
19-1022	Microbiologists	186	188	2	1.08%	1	4	5	3	3	6

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
19-1023	Zoologists and Wildlife Biologists	202	204	2	0.99%	1	5	6	3	3	6
19-1031	Conservation Scientists	253	258	5	1.98%	2	10	12	3	3	6
19-1032	Foresters	391	391	0	0.00%	0	15	15	3	3	6
19-1041	Epidemiologists	50	51	1	2.00%	0	2	2	2	3	6
19-1042	Medical Scientists, Except Epidemiologists	231	234	3	1.30%	2	7	9	1	3	6
19-2000	Physical Scientists	1,086	1,107	21	1.93%	12	26	38			
19-2021	Atmospheric and Space Scientists	32	32	0	0.00%	0	0	0	3	3	6
19-2031	Chemists	547	554	7	1.28%	4	12	16	3	3	6
19-2041	Environmental Scientists and Specialists, Including Health	312	325	13	4.17%	6	9	15	3	3	6
19-2042	Geoscientists, Except Hydrologists and Geographers	71	71	0	0.00%	0	2	2	3	3	6
19-2043	Hydrologists	27	28	1	3.70%	0	1	1	3	3	6
19-2099	Physical Scientists, All Other	49	47	-2	-4.08%	0	0	0	3	3	6
19-3000	Social Scientists and Related Workers	1,500	1,553	53	3.53%	26	26	52			
19-3011	Economists	95	98	3	3.16%	2	2	4	2	3	6
19-3022	Survey Researchers	60	64	4	6.67%	2	0	2	2	3	6
19-3031	Clinical, Counseling, and School Psychologists	794	831	37	4.66%	18	16	34	1	3	2
19-3039	Psychologists, All Other	107	108	1	0.93%	0	2	2	2	3	2
19-3051	Urban and Regional Planners	104	106	2	1.92%	1	2	3	2	3	6
19-3091	Anthropologists and Archeologists	23	24	1	4.35%	0	0	0	2	3	6
19-3099	Social Scientists and Related Workers, All Other	300	304	4	1.33%	2	3	5	3	3	6
19-4000	Life, Physical, and Social Science Technicians	3,064	3,149	85	2.77%	43	100	143			
19-4011	Agricultural and Food Science Technicians	663	682	19	2.87%	10	17	27	4	3	4
19-4021	Biological Technicians	597	605	8	1.34%	4	18	22	3	3	6
19-4031	Chemical Technicians	675	704	29	4.30%	14	20	34	4	3	4
19-4091	Environmental Science and Protection Technicians, Including Health	169	175	6	3.55%	3	7	10	4	3	6
19-4092	Forensic Science Technicians	149	158	9	6.04%	4	6	10	3	3	4
19-4093	Forest and Conservation Technicians	255	255	0	0.00%	0	10	10	4	3	6
19-4099	Life, Physical, and Social Science Technicians, All Other	441	455	14	3.17%	7	18	25	4	3	6
21-0000	COMMUNITY AND SOCIAL SERVICE OCCUPATIONS	23,125	24,164	1,039	4.49%	520	475	995			

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
21-1000	Counselors, Social Workers, and Other Community and Social Service Specialists	14,092	14,558	466	3.31%	233	283	516			
21-1011	Substance Abuse and Behavioral Disorder Counselors	735	774	39	5.31%	20	14	34	3	3	6
21-1012	Educational, Guidance, School, and Vocational Counselors	2,181	2,249	68	3.12%	34	44	78	2	3	6
21-1013	Marriage and Family Therapists	77	80	3	3.90%	2	2	4	2	3	2
21-1014	Mental Health Counselors	697	723	26	3.73%	13	14	27	2	3	2
21-1015	Rehabilitation Counselors	278	287	9	3.24%	4	6	10	2	3	6
21-1019	Counselors, All Other	126	130	4	3.17%	2	2	4	2	3	6
21-1021	Child, Family, and School Social Workers	1,421	1,451	30	2.11%	15	33	48	3	3	6
21-1022	Healthcare Social Workers	1,345	1,400	55	4.09%	28	32	60	2	3	6
21-1023	Mental Health and Substance Abuse Social Workers	738	767	29	3.93%	14	17	31	3	3	6
21-1029	Social Workers, All Other	615	620	5	0.81%	2	14	16	3	3	6
21-1091	Health Educators	388	399	11	2.84%	6	7	13	3	3	6
21-1092	Probation Officers and Correctional Treatment Specialists	877	892	15	1.71%	8	16	24	3	3	5
21-1093	Social and Human Service Assistants	3,880	4,024	144	3.71%	72	70	142	7	3	5
21-1094	Community Health Workers	422	440	18	4.27%	9	8	17	7	3	5
21-1099	Community and Social Service Specialists, All Other	312	322	10	3.21%	5	6	11	2	3	6
21-2000	Religious Workers	9,033	9,606	573	6.34%	286	192	478			
21-2011	Clergy	7,887	8,388	501	6.35%	250	166	416	3	3	4
23-0000	LEGAL OCCUPATIONS	8,002	8,224	222	2.77%	111	126	237			
23-1000	Lawyers, Judges, and Related Workers	4,996	5,139	143	2.86%	72	66	138			
23-1011	Lawyers	4,130	4,263	133	3.22%	66	54	120	1	3	6
23-1012	Judicial Law Clerks	76	76	0	0.00%	0	2	2	1	3	6
23-1021	Administrative Law Judges, Adjudicators, and Hearing Officers	422	427	5	1.18%	2	6	8	1	1	5
23-1022	Arbitrators, Mediators, and Conciliators	38	39	1	2.63%	0	0	0	3	2	4
23-1023	Judges, Magistrate Judges, and Magistrates	330	334	4	1.21%	2	4	6	1	1	5
23-2000	Legal Support Workers	3,006	3,085	79	2.63%	40	60	100			
23-2011	Paralegals and Legal Assistants	1,562	1,618	56	3.59%	28	31	59	4	3	6
23-2091	Court Reporters	225	226	1	0.44%	0	4	4	5	3	5
23-2093	Title Examiners, Abstractors, and Searchers	956	973	17	1.78%	8	19	27	7	3	5

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
23-2099	Legal Support Workers, All Other	263	268	5	1.90%	2	5	7	7	3	5
25-0000	EDUCATION, TRAINING, AND LIBRARY OCCUPATIONS	77,252	79,793	2,541	3.29%	1,271	1,621	2,892			
25-1000	Postsecondary Teachers	15,276	15,709	433	2.83%	217	249	466			
25-1011	Business Teachers, Postsecondary	866	889	23	2.66%	12	14	26	1	3	6
25-1021	Computer Science Teachers, Postsecondary	366	375	9	2.46%	4	6	10	1	3	6
25-1022	Mathematical Science Teachers, Postsecondary	544	560	16	2.94%	8	9	17	1	3	6
25-1031	Architecture Teachers, Postsecondary	105	108	3	2.86%	2	2	4	1	3	6
25-1032	Engineering Teachers, Postsecondary	366	379	13	3.55%	6	6	12	1	3	6
25-1041	Agricultural Sciences Teachers, Postsecondary	279	286	7	2.51%	4	4	8	1	3	6
25-1042	Biological Science Teachers, Postsecondary	449	465	16	3.56%	8	8	16	1	3	6
25-1051	Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary	95	96	1	1.05%	0	2	2	1	3	6
25-1052	Chemistry Teachers, Postsecondary	261	271	10	3.83%	5	4	9	1	3	6
25-1053	Environmental Science Teachers, Postsecondary	62	64	2	3.23%	1	1	2	1	3	6
25-1054	Physics Teachers, Postsecondary	132	137	5	3.79%	2	2	4	1	3	6
25-1061	Anthropology and Archeology Teachers, Postsecondary	147	151	4	2.72%	2	2	4	1	3	6
25-1062	Area, Ethnic, and Cultural Studies Teachers, Postsecondary	37	39	2	5.41%	1	0	1	1	3	6
25-1063	Economics Teachers, Postsecondary	118	121	3	2.54%	2	2	4	1	3	6
25-1064	Geography Teachers, Postsecondary	44	46	2	4.55%	1	0	1	1	3	6
25-1065	Political Science Teachers, Postsecondary	129	133	4	3.10%	2	2	4	1	3	6
25-1066	Psychology Teachers, Postsecondary	282	292	10	3.55%	5	4	9	1	3	6
25-1067	Sociology Teachers, Postsecondary	166	171	5	3.01%	2	2	4	1	3	6
25-1069	Social Sciences Teachers, Postsecondary, All Other	55	56	1	1.82%	0	1	1	1	3	6
25-1071	Health Specialties Teachers, Postsecondary	1,382	1,437	55	3.98%	28	22	50	1	2	6
25-1072	Nursing Instructors and Teachers, Postsecondary	663	689	26	3.92%	13	11	24	2	2	6
25-1081	Education Teachers, Postsecondary	888	912	24	2.70%	12	14	26	1	2	6
25-1111	Criminal Justice and Law Enforcement Teachers, Postsecondary	145	152	7	4.83%	4	2	6	1	3	6
25-1112	Law Teachers, Postsecondary	154	162	8	5.19%	4	2	6	1	3	6
25-1113	Social Work Teachers, Postsecondary	143	148	5	3.50%	2	2	4	1	3	6

\*For training codes, refer to page 85.

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SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
25-1121	Art, Drama, and Music Teachers, Postsecondary	755	778	23	3.05%	12	12	24	2	3	6
25-1122	Communications Teachers, Postsecondary	368	378	10	2.72%	5	6	11	1	3	6
25-1123	English Language and Literature Teachers, Postsecondary	655	670	15	2.29%	8	10	18	1	3	6
25-1124	Foreign Language and Literature Teachers, Postsecondary	239	246	7	2.93%	4	4	8	1	3	6
25-1125	History Teachers, Postsecondary	299	306	7	2.34%	4	5	9	1	3	6
25-1126	Philosophy and Religion Teachers, Postsecondary	217	224	7	3.23%	4	4	8	1	3	6
25-1191	Graduate Teaching Assistants	1,688	1,723	35	2.07%	18	28	46	3	3	6
25-1192	Home Economics Teachers, Postsecondary	79	78	-1	-1.27%	0	2	2	2	3	6
25-1193	Recreation and Fitness Studies Teachers, Postsecondary	231	238	7	3.03%	4	4	8	1	3	6
25-1194	Vocational Education Teachers, Postsecondary	1,368	1,389	21	1.54%	10	22	32	3	2	6
25-1199	Postsecondary Teachers, All Other	1,448	1,488	40	2.76%	20	24	44	1	3	6
25-2000	Preschool, Primary, Secondary, and Special Education School Teachers	37,478	38,727	1,249	3.33%	624	878	1,502			
25-2011	Preschool Teachers, Except Special Education	2,514	2,590	76	3.02%	38	73	111	4	3	6
25-2012	Kindergarten Teachers, Except Special Education	2,029	2,099	70	3.45%	35	59	94	3	3	2
25-2021	Elementary School Teachers, Except Special Education	11,853	12,257	404	3.41%	202	263	465	3	3	2
25-2022	Middle School Teachers, Except Special and Career/Technical Education	6,228	6,438	210	3.37%	105	138	243	3	3	2
25-2023	Career/Technical Education Teachers, Middle School	178	184	6	3.37%	3	4	7	3	2	2
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	10,233	10,574	341	3.33%	170	255	425	3	3	2
25-2032	Career/Technical Education Teachers, Secondary School	893	913	20	2.24%	10	22	32	3	2	2
25-2051	Special Education Teachers, Preschool	464	484	20	4.31%	10	8	18	3	3	2
25-2052	Special Education Teachers, Kindergarten and Elementary School	1,053	1,088	35	3.32%	18	19	37	3	3	2
25-2053	Special Education Teachers, Middle School	633	654	21	3.32%	10	12	22	3	3	2
25-2054	Special Education Teachers, Secondary School	1,263	1,305	42	3.33%	21	23	44	3	3	2
25-2059	Special Education Teachers, All Other	137	141	4	2.92%	2	2	4	3	3	2
25-3000	Other Teachers and Instructors	10,448	10,852	404	3.87%	202	190	392			

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
25-3011	Adult Basic and Secondary Education and Literacy Teachers and Instructors	1,154	1,176	22	1.91%	11	21	32	3	3	2
25-3021	Self-Enrichment Education Teachers	884	931	47	5.32%	24	16	40	7	2	6
25-3097	Teachers and Instructors, All Other, Except Substitute Teachers	1,386	1,429	43	3.10%	22	25	47	3	3	2
25-4000	Librarians, Curators, and Archivists	2,434	2,495	61	2.51%	30	75	105			
25-4011	Archivists	87	89	2	2.30%	1	2	3	2	3	6
25-4012	Curators	69	75	6	8.70%	3	2	5	2	3	6
25-4013	Museum Technicians and Conservators	87	96	9	10.34%	4	2	6	3	3	6
25-4021	Librarians	1,463	1,488	25	1.71%	12	30	42	2	3	6
25-4031	Library Technicians	728	747	19	2.61%	10	38	48	5	3	6
25-9000	Other Education, Training, and Library Occupations	11,616	12,010	394	3.39%	197	228	425			
25-9011	Audio-Visual and Multimedia Collections Specialists	151	155	4	2.65%	2	1	3	3	2	6
25-9021	Farm and Home Management Advisors	297	310	13	4.38%	6	2	8	2	3	6
25-9031	Instructional Coordinators	1,651	1,705	54	3.27%	27	10	37	2	1	6
25-9041	Teacher Assistants	9,343	9,661	318	3.40%	159	214	373	6	3	6
25-9099	Education, Training, and Library Workers, All Other	174	179	5	2.87%	2	1	3	3	3	6
27-0000	ARTS, DESIGN, ENTERTAINMENT, SPORTS, AND MEDIA OCCUPATIONS	16,065	16,444	379	2.36%	235	390	625			
27-1000	Art and Design Workers	3,515	3,547	32	0.91%	30	80	110			
27-1011	Art Directors	243	243	0	0.00%	0	4	4	3	1	6
27-1013	Fine Artists, Including Painters, Sculptors, and Illustrators	165	171	6	3.64%	3	3	6	3	3	3
27-1014	Multimedia Artists and Animators	151	154	3	1.99%	2	3	5	3	3	4
27-1019	Artists and Related Workers, All Other	23	23	0	0.00%	0	0	0	8	3	3
27-1021	Commercial and Industrial Designers	112	117	5	4.46%	2	2	4	3	3	6
27-1023	Floral Designers	425	428	3	0.71%	2	10	12	7	3	4
27-1024	Graphic Designers	1,279	1,258	-21	-1.64%	0	30	30	3	3	6
27-1025	Interior Designers	253	250	-3	-1.19%	0	6	6	3	3	6
27-1026	Merchandise Displayers and Window Trimmers	568	586	18	3.17%	9	14	23	7	3	4
27-2000	Entertainers and Performers, Sports and Related Workers	6,568	6,846	278	4.23%	142	194	336			
27-2012	Producers and Directors	359	366	7	1.95%	4	11	15	3	2	6

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
27-2021	Athletes and Sports Competitors	177	187	10	5.65%	5	6	11	8	3	3
27-2022	Coaches and Scouts	1,896	1,962	66	3.48%	33	64	97	3	3	6
27-2041	Music Directors and Composers	1,823	1,915	92	5.05%	46	50	96	3	2	6
27-2099	Entertainers and Performers, Sports and Related Workers, All Other	25	25	0	0.00%	0	1	1	8	3	5
27-3000	Media and Communication Workers	4,337	4,368	31	0.71%	44	84	128			
27-3011	Radio and Television Announcers	340	332	-8	-2.35%	0	9	9	3	3	5
27-3021	Broadcast News Analysts	46	46	0	0.00%	0	2	2	3	3	6
27-3022	Reporters and Correspondents	472	449	-23	-4.87%	0	16	16	3	3	6
27-3031	Public Relations Specialists	1,818	1,866	48	2.64%	24	19	43	3	3	6
27-3041	Editors	623	598	-25	-4.01%	0	22	22	3	2	6
27-3042	Technical Writers	196	200	4	2.04%	2	4	6	3	2	5
27-3043	Writers and Authors	559	575	16	2.86%	8	8	16	3	3	4
27-3091	Interpreters and Translators	209	225	16	7.66%	8	2	10	3	3	5
27-4000	Media and Communication Equipment Workers	1,645	1,683	38	2.31%	20	32	52			
27-4011	Audio and Video Equipment Technicians	241	248	7	2.90%	4	4	8	5	3	5
27-4012	Broadcast Technicians	131	131	0	0.00%	0	2	2	4	3	5
27-4014	Sound Engineering Technicians	42	42	0	0.00%	0	0	0	5	3	5
27-4021	Photographers	956	978	22	2.30%	11	23	34	7	3	3
27-4031	Camera Operators, Television, Video, and Motion Picture	99	101	2	2.02%	1	0	1	3	3	6
27-4032	Film and Video Editors	138	146	8	5.80%	4	1	5	3	3	6
29-0000	HEALTHCARE PRACTITIONERS AND TECHNICAL OCCUPATIONS	77,976	80,781	2,805	3.60%	1,410	1,629	3,039			
29-1000	Health Diagnosing and Treating Practitioners	45,372	47,112	1,740	3.83%	870	995	1,865			
29-1011	Chiropractors	536	554	18	3.36%	9	10	19	1	3	6
29-1021	Dentists, General	977	1,019	42	4.30%	21	16	37	1	3	6
29-1029	Dentists, All Other Specialists	39	38	-1	-2.56%	0	0	0	1	3	2
29-1031	Dietitians and Nutritionists	592	615	23	3.89%	12	4	16	3	3	2
29-1041	Optometrists	451	475	24	5.32%	12	15	27	1	3	6
29-1051	Pharmacists	3,353	3,459	106	3.16%	53	72	125	1	3	6
29-1061	Anesthesiologists	192	203	11	5.73%	6	5	11	1	3	2
29-1062	Family and General Practitioners	1,782	1,845	63	3.54%	32	46	78	1	3	2
29-1063	Internists, General	364	376	12	3.30%	6	10	16	1	3	2

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29-1064	Obstetricians and Gynecologists	144	152	8	5.56%	4	4	8	1	3	2
29-1065	Pediatricians, General	184	191	7	3.80%	4	4	8	1	3	2
29-1066	Psychiatrists	360	376	16	4.44%	8	10	18	1	3	2
29-1067	Surgeons	639	676	37	5.79%	18	16	34	1	3	2
29-1069	Physicians and Surgeons, All Other	2,733	2,828	95	3.48%	48	70	118	1	3	2
29-1071	Physician Assistants	417	450	33	7.91%	16	8	24	2	3	6
29-1081	Podiatrists	69	70	1	1.45%	0	1	1	1	3	2
29-1122	Occupational Therapists	970	1,021	51	5.26%	26	14	40	2	3	6
29-1123	Physical Therapists	2,069	2,193	124	5.99%	62	50	112	1	3	6
29-1124	Radiation Therapists	230	242	12	5.22%	6	5	11	4	3	6
29-1125	Recreational Therapists	109	111	2	1.83%	1	2	3	3	3	6
29-1126	Respiratory Therapists	1,094	1,124	30	2.74%	15	22	37	4	3	6
29-1127	Speech-Language Pathologists	1,892	1,997	105	5.55%	52	44	96	2	3	6
29-1128	Exercise Physiologists	103	106	3	2.91%	2	0	2	3	3	6
29-1129	Therapists, All Other	73	75	2	2.74%	1	0	1	3	3	6
29-1131	Veterinarians	673	707	34	5.05%	17	8	25	1	3	6
29-1141	Registered Nurses	23,040	23,777	737	3.20%	368	508	876	3	3	6
29-1151	Nurse Anesthetists	538	567	29	5.39%	14	12	26	2	3	6
29-1171	Nurse Practitioners	1,424	1,532	108	7.58%	54	32	86	2	3	6
29-1181	Audiologists	36	37	1	2.78%	0	1	1	1	3	6
29-1199	Health Diagnosing and Treating Practitioners, All Other	194	197	3	1.55%	2	4	6	2	3	6
29-2000	Health Technologists and Technicians	31,394	32,422	1,028	3.27%	522	616	1,138			
29-2011	Medical and Clinical Laboratory Technologists	1,100	1,132	32	2.91%	16	27	43	3	3	6
29-2012	Medical and Clinical Laboratory Technicians	1,578	1,631	53	3.36%	26	38	64	4	3	6
29-2021	Dental Hygienists	1,422	1,479	57	4.01%	28	20	48	4	3	6
29-2031	Cardiovascular Technologists and Technicians	577	602	25	4.33%	12	9	21	4	3	6
29-2032	Diagnostic Medical Sonographers	374	393	19	5.08%	10	6	16	4	3	6
29-2033	Nuclear Medicine Technologists	131	132	1	0.76%	0	2	2	4	3	6
29-2034	Radiologic Technologists	1,906	1,950	44	2.31%	22	30	52	4	3	6
29-2035	Magnetic Resonance Imaging Technologists	297	305	8	2.69%	4	4	8	4	2	6
29-2041	Emergency Medical Technicians and Paramedics	2,319	2,448	129	5.56%	64	34	98	5	3	6
29-2051	Dietetic Technicians	180	187	7	3.89%	4	2	6	4	3	6
29-2052	Pharmacy Technicians	3,649	3,829	180	4.93%	90	30	120	7	3	4

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29-2053	Psychiatric Technicians	723	713	-10	-1.38%	0	6	6	5	2	5
29-2054	Respiratory Therapy Technicians	274	269	-5	-1.82%	0	2	2	4	3	6
29-2055	Surgical Technologists	920	947	27	2.93%	14	8	22	5	3	6
29-2056	Veterinary Technologists and Technicians	307	327	20	6.51%	10	2	12	4	3	6
29-2057	Ophthalmic Medical Technicians	385	404	19	4.94%	10	3	13	5	3	6
29-2061	Licensed Practical and Licensed Vocational Nurses	12,057	12,341	284	2.36%	142	338	480	5	3	6
29-2071	Medical Records and Health Information Technicians	1,908	1,984	76	3.98%	38	38	76	5	3	6
29-2081	Opticians, Dispensing	487	509	22	4.52%	11	12	23	7	3	3
29-2099	Health Technologists and Technicians, All Other	702	735	33	4.70%	16	6	22	7	3	6
29-9000	Other Healthcare Practitioners and Technical Occupations	1,210	1,247	37	3.06%	18	18	36			
29-9011	Occupational Health and Safety Specialists	531	540	9	1.69%	4	8	12	3	3	6
29-9091	Athletic Trainers	220	233	13	5.91%	6	4	10	3	3	6
29-9099	Healthcare Practitioners and Technical Workers, All Other	281	288	7	2.49%	4	4	8	5	3	6
31-0000	HEALTHCARE SUPPORT OCCUPATIONS	38,051	39,393	1,342	3.53%	672	802	1,474			
31-1000	Nursing, Psychiatric, and Home Health Aides	26,536	27,328	792	2.98%	396	560	956			
31-1011	Home Health Aides	7,485	7,776	291	3.89%	146	158	304	8	3	5
31-1014	Nursing Assistants	18,667	19,151	484	2.59%	242	394	636	5	3	6
31-2000	Occupational Therapy and Physical Therapist Assistants and Aides	1,647	1,753	106	6.44%	53	44	97			
31-2011	Occupational Therapy Assistants	211	227	16	7.58%	8	6	14	4	3	6
31-2012	Occupational Therapy Aides	51	54	3	5.88%	2	2	4	7	3	5
31-2021	Physical Therapist Assistants	1,039	1,101	62	5.97%	31	28	59	4	3	6
31-2022	Physical Therapist Aides	346	371	25	7.23%	12	10	22	7	3	5
31-9000	Other Healthcare Support Occupations	9,868	10,312	444	4.50%	222	197	419			
31-9011	Massage Therapists	504	531	27	5.36%	14	3	17	5	3	6
31-9091	Dental Assistants	2,540	2,645	105	4.13%	52	62	114	5	3	6
31-9092	Medical Assistants	3,008	3,181	173	5.75%	86	58	144	5	3	6
31-9094	Medical Transcriptionists	750	749	-1	-0.13%	0	14	14	5	3	6
31-9095	Pharmacy Aides	550	568	18	3.27%	9	10	19	7	3	5
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	795	837	42	5.28%	21	16	37	7	3	5
31-9097	Phlebotomists	909	964	55	6.05%	28	18	46	5	3	6

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
33-0000	PROTECTIVE SERVICE OCCUPATIONS	25,899	26,419	520	2.01%	262	640	902			
33-1000	Supervisors of Protective Service Workers	2,905	2,961	56	1.93%	28	96	124			
33-1011	First-Line Supervisors of Correctional Officers	323	329	6	1.86%	3	8	11	7	2	4
33-1012	First-Line Supervisors of Police and Detectives	1,328	1,355	27	2.03%	14	44	58	7	2	4
33-1021	First-Line Supervisors of Fire Fighting and Prevention Workers	751	765	14	1.86%	7	31	38	5	2	4
33-1099	First-Line Supervisors of Protective Service Workers, All Other	503	512	9	1.79%	4	12	16	7	2	6
33-2000	Fire Fighting and Prevention Workers	2,743	2,798	55	2.01%	28	76	104			
33-2011	Firefighters	2,531	2,579	48	1.90%	24	70	94	5	3	3
33-2021	Fire Inspectors and Investigators	40	41	1	2.50%	0	1	1	5	1	4
33-2022	Forest Fire Inspectors and Prevention Specialists	172	178	6	3.49%	3	5	8	7	2	4
33-3000	Law Enforcement Workers	12,058	12,265	207	1.72%	104	358	462			
33-3011	Bailiffs	101	103	2	1.98%	1	3	4	7	3	4
33-3012	Correctional Officers and Jailers	5,343	5,428	85	1.59%	42	148	190	7	3	4
33-3021	Detectives and Criminal Investigators	490	495	5	1.02%	2	10	12	7	2	4
33-3031	Fish and Game Wardens	180	183	3	1.67%	2	6	8	3	3	4
33-3051	Police and Sheriff's Patrol Officers	5,900	6,014	114	1.93%	57	190	247	7	3	4
33-9000	Other Protective Service Workers	8,193	8,395	202	2.47%	102	110	212			
33-9011	Animal Control Workers	189	193	4	2.12%	2	4	6	7	3	4
33-9021	Private Detectives and Investigators	174	177	3	1.72%	2	4	6	7	2	4
33-9032	Security Guards	6,399	6,554	155	2.42%	78	82	160	7	3	5
33-9091	Crossing Guards	135	139	4	2.96%	2	2	4	8	3	5
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	544	557	13	2.39%	6	7	13	8	3	5
33-9099	Protective Service Workers, All Other	538	560	22	4.09%	11	7	18	7	3	5
35-0000	FOOD PREPARATION AND SERVING RELATED OCCUPATIONS	103,352	108,212	4,860	4.70%	2,430	4,087	6,517			
35-1000	Supervisors of Food Preparation and Serving Workers	10,060	10,616	556	5.53%	278	308	586			
35-1011	Chefs and Head Cooks	717	755	38	5.30%	19	10	29	7	1	6
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	9,343	9,861	518	5.54%	259	298	557	7	2	6
35-2000	Cooks and Food Preparation Workers	34,052	35,334	1,282	3.76%	641	950	1,591			
35-2011	Cooks, Fast Food	8,634	8,708	74	0.86%	37	232	269	8	3	5

\*For training codes, refer to page 85.

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
35-2012	Cooks, Institution and Cafeteria	7,106	7,273	167	2.35%	84	192	276	8	3	5
35-2013	Cooks, Private Household	158	161	3	1.90%	2	4	6	5	2	6
35-2014	Cooks, Restaurant	9,349	9,997	648	6.93%	324	252	576	8	2	4
35-2015	Cooks, Short Order	865	891	26	3.01%	13	24	37	8	3	5
35-2019	Cooks, All Other	121	127	6	4.96%	3	4	7	8	3	4
35-2021	Food Preparation Workers	7,819	8,177	358	4.58%	179	242	421	8	3	5
35-3000	Food and Beverage Serving Workers	52,160	54,911	2,751	5.27%	1,376	2,340	3,716			
35-3011	Bartenders	2,116	2,235	119	5.62%	60	78	138	8	3	5
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	27,172	28,833	1,661	6.11%	830	1,058	1,888	8	3	5
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	1,680	1,756	76	4.52%	38	156	194	8	3	5
35-3031	Waiters and Waitresses	19,107	19,940	833	4.36%	416	998	1,414	8	3	5
35-3041	Food Servers, Nonrestaurant	2,085	2,147	62	2.97%	31	49	80	8	3	5
35-9000	Other Food Preparation and Serving Related Workers	7,080	7,351	271	3.83%	136	489	625			
35-9021	Dishwashers	3,471	3,566	95	2.74%	48	192	240	8	3	5
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	1,922	2,016	94	4.89%	47	190	237	8	3	6
37-0000	BUILDING AND GROUNDS CLEANING AND MAINTENANCE OCCUPATIONS	43,109	44,445	1,336	3.10%	668	810	1,478			
37-1000	Supervisors of Building and Grounds Cleaning and Maintenance Workers	4,288	4,422	134	3.13%	67	64	131			
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	2,370	2,441	71	3.00%	36	36	72	7	2	6
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	1,918	1,981	63	3.28%	32	28	60	7	2	6
37-2000	Building Cleaning and Pest Control Workers	30,174	31,059	885	2.93%	442	594	1,036			
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	19,172	19,853	681	3.55%	340	345	685	8	3	5
37-2012	Maids and Housekeeping Cleaners	9,828	9,995	167	1.70%	84	222	306	8	3	5
37-3000	Grounds Maintenance Workers	8,647	8,964	317	3.67%	158	152	310			
37-3011	Landscaping and Groundskeeping Workers	7,152	7,435	283	3.96%	142	126	268	8	3	5
37-3013	Tree Trimmers and Pruners	820	840	20	2.44%	10	14	24	7	3	5
39-0000	PERSONAL CARE AND SERVICE OCCUPATIONS	47,444	49,307	1,863	3.93%	936	954	1,890			

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
39-1000	Supervisors of Personal Care and Service Workers	1,933	2,006	73	3.78%	36	34	70			
39-1011	Gaming Supervisors	94	99	5	5.32%	2	3	5	7	2	6
39-1021	First-Line Supervisors of Personal Service Workers	1,839	1,907	68	3.70%	34	32	66	7	2	6
39-2000	Animal Care and Service Workers	2,869	3,032	163	5.68%	82	66	148			
39-2011	Animal Trainers	819	845	26	3.17%	13	29	42	7	3	4
39-2021	Nonfarm Animal Caretakers	2,050	2,187	137	6.68%	68	37	105	7	3	5
39-3000	Entertainment Attendants and Related Workers	1,998	2,069	71	3.55%	36	107	143			
39-3021	Motion Picture Projectionists	147	146	-1	-0.68%	0	6	6	8	3	5
39-3031	Ushers, Lobby Attendants, and Ticket Takers	470	489	19	4.04%	10	36	46	8	3	5
39-3091	Amusement and Recreation Attendants	1,051	1,087	36	3.43%	18	52	70	8	3	5
39-4000	Funeral Service Workers	892	915	23	2.58%	12	19	31			
39-4011	Embalmers	88	89	1	1.14%	0	2	2	5	3	5
39-4021	Funeral Attendants	411	419	8	1.95%	4	9	13	7	3	5
39-4031	Morticians, Undertakers, and Funeral Directors	393	407	14	3.56%	7	8	15	4	3	3
39-5000	Personal Appearance Workers	3,765	3,907	142	3.77%	71	87	158			
39-5012	Hairdressers, Hairstylists, and Cosmetologists	3,399	3,527	128	3.77%	64	85	149	5	3	6
39-5092	Manicurists and Pedicurists	255	265	10	3.92%	5	2	7	5	3	6
39-5094	Skincare Specialists	105	109	4	3.81%	2	0	2	5	3	6
39-6000	Baggage Porters, Bellhops, and Concierges	188	180	-8	-4.26%	0	4	4			
39-6011	Baggage Porters and Bellhops	163	154	-9	-5.52%	0	3	3	7	3	5
39-6012	Concierges	25	26	1	4.00%	0	0	0	7	3	4
39-7000	Tour and Travel Guides	210	223	13	6.19%	6	8	14			
39-9000	Other Personal Care and Service Workers	35,589	36,975	1,386	3.89%	693	629	1,322			
39-9011	Childcare Workers	13,945	14,311	366	2.62%	183	426	609	7	3	5
39-9021	Personal Care Aides	17,186	18,051	865	5.03%	432	110	542	8	3	5
39-9031	Fitness Trainers and Aerobics Instructors	1,349	1,427	78	5.78%	39	24	63	7	3	5
39-9032	Recreation Workers	1,916	1,966	50	2.61%	25	34	59	7	3	5
39-9041	Residential Advisors	893	908	15	1.68%	8	30	38	7	3	5
39-9099	Personal Care and Service Workers, All Other	300	312	12	4.00%	6	7	13	7	3	5
41-0000	SALES AND RELATED OCCUPATIONS	138,191	142,558	4,367	3.16%	2,210	4,568	6,778			
41-1000	Supervisors of Sales Workers	21,572	22,202	630	2.92%	315	445	760			
41-1011	First-Line Supervisors of Retail Sales Workers	17,472	18,012	540	3.09%	270	397	667	7	2	6

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SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
41-1012	First-Line Supervisors of Non-Retail Sales Workers	4,100	4,190	90	2.20%	45	48	93	7	2	6
41-2000	Retail Sales Workers	80,648	83,542	2,894	3.59%	1,447	3,384	4,831			
41-2011	Cashiers	34,387	35,526	1,139	3.31%	570	1,742	2,312	8	3	5
41-2021	Counter and Rental Clerks	3,288	3,385	97	2.95%	48	86	134	8	3	5
41-2031	Retail Salespersons	39,797	41,332	1,535	3.86%	768	1,488	2,256	8	3	5
41-3000	Sales Representatives, Services	12,148	12,463	315	2.59%	158	286	444			
41-3011	Advertising Sales Agents	1,155	1,153	-2	-0.17%	0	32	32	7	3	4
41-3021	Insurance Sales Agents	5,445	5,665	220	4.04%	110	140	250	7	3	4
41-3031	Securities, Commodities, and Financial Services Sales Agents	1,295	1,303	8	0.62%	4	24	28	3	3	4
41-3041	Travel Agents	218	220	2	0.92%	1	4	5	7	3	4
41-3099	Sales Representatives, Services, All Other	4,035	4,122	87	2.16%	44	86	130	7	3	4
41-4000	Sales Representatives, Wholesale and Manufacturing	16,252	16,577	325	2.00%	168	326	494			
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	2,310	2,299	-11	-0.48%	0	46	46	3	3	4
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	13,942	14,278	336	2.41%	168	280	448	7	3	4
41-9000	Other Sales and Related Workers	7,571	7,774	203	2.68%	121	128	249			
41-9021	Real Estate Brokers	157	165	8	5.10%	4	1	5	7	2	6
41-9022	Real Estate Sales Agents	2,521	2,631	110	4.36%	55	18	73	7	3	4
41-9031	Sales Engineers	137	137	0	0.00%	0	4	4	3	3	4
41-9041	Telemarketers	1,633	1,594	-39	-2.39%	0	36	36	8	3	5
41-9091	Door-to-Door Sales Workers, News and Street Vendors, and Related Workers	567	572	5	0.88%	2	5	7	8	3	5
41-9099	Sales and Related Workers, All Other	823	852	29	3.52%	14	10	24	7	3	6
43-0000	OFFICE AND ADMINISTRATIVE SUPPORT OCCUPATIONS	187,489	191,794	4,305	2.30%	2,196	3,864	6,060			
43-1000	Supervisors of Office and Administrative Support Workers	15,284	15,783	499	3.26%	250	240	490			
43-1011	First-Line Supervisors of Office and Administrative Support Workers	15,284	15,783	499	3.26%	250	240	490	7	2	6
43-2000	Communications Equipment Operators	761	729	-32	-4.20%	0	11	11			
43-2011	Switchboard Operators, Including Answering Service	738	707	-31	-4.20%	0	10	10	7	3	5

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
43-3000	Financial Clerks	27,829	28,179	350	1.26%	175	596	771			
43-3011	Bill and Account Collectors	1,875	1,896	21	1.12%	10	46	56	7	3	4
43-3021	Billing and Posting Clerks	4,023	4,184	161	4.00%	80	76	156	7	3	4
43-3031	Bookkeeping, Accounting, and Auditing Clerks	13,241	13,304	63	0.48%	32	129	161	6	3	4
43-3051	Payroll and Timekeeping Clerks	1,509	1,525	16	1.06%	8	38	46	7	3	4
43-3061	Procurement Clerks	605	607	2	0.33%	1	20	21	7	3	4
43-3071	Tellers	6,496	6,578	82	1.26%	41	286	327	7	3	5
43-4000	Information and Record Clerks	40,178	41,196	1,018	2.53%	510	971	1,481			
43-4011	Brokerage Clerks	228	226	-2	-0.88%	0	6	6	7	3	4
43-4021	Correspondence Clerks	147	146	-1	-0.68%	0	4	4	7	3	5
43-4031	Court, Municipal, and License Clerks	1,162	1,184	22	1.89%	11	8	19	7	3	4
43-4041	Credit Authorizers, Checkers, and Clerks	115	118	3	2.61%	2	1	3	7	3	4
43-4051	Customer Service Representatives	18,936	19,438	502	2.65%	251	440	691	7	3	5
43-4061	Eligibility Interviewers, Government Programs	1,732	1,758	26	1.50%	13	15	28	7	3	4
43-4071	File Clerks	647	651	4	0.62%	2	13	15	7	3	5
43-4081	Hotel, Motel, and Resort Desk Clerks	2,448	2,501	53	2.17%	26	135	161	7	3	5
43-4111	Interviewers, Except Eligibility and Loan	1,052	1,071	19	1.81%	10	22	32	7	3	5
43-4121	Library Assistants, Clerical	683	700	17	2.49%	8	21	29	7	3	5
43-4131	Loan Interviewers and Clerks	1,630	1,711	81	4.97%	40	26	66	7	3	5
43-4141	New Accounts Clerks	561	568	7	1.25%	4	14	18	7	3	4
43-4151	Order Clerks	1,055	1,079	24	2.27%	12	28	40	7	3	5
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	1,405	1,428	23	1.64%	12	13	25	4	3	6
43-4171	Receptionists and Information Clerks	6,863	7,094	231	3.37%	116	194	310	7	3	5
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	475	479	4	0.84%	2	6	8	7	3	5
43-4199	Information and Record Clerks, All Other	1,039	1,044	5	0.48%	2	25	27	7	3	5
43-5000	Material Recording, Scheduling, Dispatching, and Distributing Workers	33,954	34,757	803	2.36%	412	930	1,342			
43-5011	Cargo and Freight Agents	687	699	12	1.75%	6	20	26	7	3	5
43-5021	Couriers and Messengers	624	646	22	3.53%	11	8	19	7	3	5
43-5031	Police, Fire, and Ambulance Dispatchers	1,133	1,137	4	0.35%	2	28	30	7	3	4
43-5032	Dispatchers, Except Police, Fire, and Ambulance	1,697	1,741	44	2.59%	22	43	65	7	3	4
43-5041	Meter Readers, Utilities	630	609	-21	-3.33%	0	14	14	7	3	5
43-5051	Postal Service Clerks	1,116	1,141	25	2.24%	12	14	26	7	3	5

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SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
43-5052	Postal Service Mail Carriers	3,012	3,078	66	2.19%	33	58	91	7	3	5
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	585	585	0	0.00%	0	8	8	7	3	5
43-5061	Production, Planning, and Expediting Clerks	2,926	3,015	89	3.04%	44	80	124	7	3	4
43-5071	Shipping, Receiving, and Traffic Clerks	4,546	4,606	60	1.32%	30	90	120	7	3	5
43-5081	Stock Clerks and Order Fillers	16,053	16,534	481	3.00%	240	544	784	8	3	5
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	945	966	21	2.22%	10	24	34	7	3	5
43-6000	Secretaries and Administrative Assistants	32,022	32,882	860	2.69%	430	338	768			
43-6011	Executive Secretaries and Executive Administrative Assistants	3,210	3,246	36	1.12%	18	34	52	7	2	6
43-6012	Legal Secretaries	1,316	1,329	13	0.99%	6	14	20	7	3	4
43-6013	Medical Secretaries	3,303	3,440	137	4.15%	68	35	103	7	3	4
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	24,193	24,867	674	2.79%	337	256	593	7	3	5
43-9000	Other Office and Administrative Support Workers	37,461	38,268	807	2.15%	420	778	1,198			
43-9011	Computer Operators	1,031	1,038	7	0.68%	4	8	12	7	3	4
43-9021	Data Entry Keyers	1,186	1,200	14	1.18%	7	16	23	7	3	4
43-9031	Desktop Publishers	72	70	-2	-2.78%	0	2	2	4	3	5
43-9041	Insurance Claims and Policy Processing Clerks	971	1,014	43	4.43%	22	24	46	7	3	4
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	483	470	-13	-2.69%	0	10	10	7	3	5
43-9061	Office Clerks, General	30,076	30,773	697	2.32%	348	634	982	7	3	5
43-9071	Office Machine Operators, Except Computer	256	251	-5	-1.95%	0	6	6	7	3	5
43-9081	Proofreaders and Copy Markers	101	97	-4	-3.96%	0	2	2	3	3	6
43-9199	Office and Administrative Support Workers, All Other	2,725	2,803	78	2.86%	39	72	111	7	3	5
45-0000	FARMING, FISHING, AND FORESTRY OCCUPATIONS	16,347	16,811	464	2.84%	239	412	651			
45-2000	Agricultural Workers	13,454	13,870	416	3.09%	212	344	556			
45-2011	Agricultural Inspectors	413	416	3	0.73%	2	10	12	3	3	4
45-2041	Graders and Sorters, Agricultural Products	1,715	1,706	-9	-0.52%	0	22	22	8	3	5
45-2091	Agricultural Equipment Operators	1,018	1,061	43	4.22%	22	28	50	8	3	5
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	6,559	6,727	168	2.56%	84	180	264	8	3	5

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45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	3,163	3,358	195	6.17%	98	87	185	8	3	5
45-4000	Forest, Conservation, and Logging Workers	2,081	2,119	38	1.83%	22	50	72			
45-4022	Logging Equipment Operators	1,364	1,395	31	2.27%	16	33	49	7	3	4
45-4023	Log Graders and Scalers	231	240	9	3.90%	4	6	10	7	3	4
47-0000	CONSTRUCTION AND EXTRACTION OCCUPATIONS	54,281	56,707	2,426	4.47%	1,382	863	2,245			
47-1000	Supervisors of Construction and Extraction Workers	5,948	6,201	253	4.25%	126	52	178			
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	5,948	6,201	253	4.25%	126	52	178	7	1	6
47-2000	Construction Trades Workers	40,870	43,126	2,256	5.52%	1,128	658	1,786			
47-2011	Boilermakers	23	24	1	4.35%	0	0	0	7	3	1
47-2021	Brickmasons and Blockmasons	613	651	38	6.20%	19	6	25	7	3	1
47-2022	Stonemasons	62	66	4	6.45%	2	0	2	7	3	1
47-2031	Carpenters	6,722	7,123	401	5.97%	200	80	280	7	3	1
47-2041	Carpet Installers	289	311	22	7.61%	11	4	15	8	3	5
47-2044	Tile and Marble Setters	143	154	11	7.69%	6	2	8	8	3	3
47-2051	Cement Masons and Concrete Finishers	1,121	1,190	69	6.16%	34	14	48	8	3	4
47-2061	Construction Laborers	9,942	10,459	517	5.20%	258	196	454	8	3	5
47-2071	Paving, Surfacing, and Tamping Equipment Operators	1,263	1,289	26	2.06%	13	28	41	7	3	4
47-2073	Operating Engineers and Other Construction Equipment Operators	3,614	3,711	97	2.68%	48	60	108	7	3	4
47-2081	Drywall and Ceiling Tile Installers	653	738	85	13.02%	42	4	46	8	3	4
47-2111	Electricians	5,923	6,262	339	5.72%	170	90	260	7	3	1
47-2121	Glaziers	454	466	12	2.64%	6	8	14	7	3	1
47-2131	Insulation Workers, Floor, Ceiling, and Wall	241	270	29	12.03%	14	8	22	8	3	5
47-2132	Insulation Workers, Mechanical	176	192	16	9.09%	8	6	14	7	3	1
47-2141	Painters, Construction and Maintenance	2,082	2,261	179	8.60%	90	32	122	8	3	4
47-2142	Paperhangers	68	72	4	5.88%	2	1	3	8	3	3
47-2151	Pipelayers	500	514	14	2.80%	7	6	13	8	3	5
47-2152	Plumbers, Pipefitters, and Steamfitters	3,511	3,711	200	5.70%	100	47	147	7	3	1
47-2161	Plasterers and Stucco Masons	78	84	6	7.69%	3	0	3	8	3	3
47-2171	Reinforcing Iron and Rebar Workers	23	24	1	4.35%	0	0	0	7	3	1
47-2181	Roofers	855	895	40	4.68%	20	13	33	8	3	4

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47-2211	Sheet Metal Workers	1,456	1,530	74	5.08%	37	30	67	7	3	1
47-2221	Structural Iron and Steel Workers	867	919	52	6.00%	26	17	43	7	3	1
47-3000	Helpers, Construction Trades	2,261	2,433	172	7.61%	86	36	122			
47-3011	HelpersBrickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	290	315	25	8.62%	12	4	16	8	3	5
47-3012	HelpersCarpenters	378	409	31	8.20%	16	6	22	8	3	5
47-3013	HelpersElectricians	372	401	29	7.80%	14	6	20	7	3	5
47-3014	HelpersPainters, Paperhangers, Plasterers, and Stucco Masons	247	284	37	14.98%	18	4	22	8	3	5
47-3015	HelpersPipelayers, Plumbers, Pipefitters, and Steamfitters	451	480	29	6.43%	14	8	22	7	3	5
47-3016	HelpersRoofers	208	218	10	4.81%	5	4	9	8	3	5
47-3019	Helpers, Construction Trades, All Other	315	326	11	3.49%	6	5	11	8	3	5
47-4000	Other Construction and Related Workers	3,367	3,450	83	2.47%	42	74	116			
47-4011	Construction and Building Inspectors	618	638	20	3.24%	10	16	26	7	1	4
47-4021	Elevator Installers and Repairers	64	69	5	7.81%	2	1	3	7	3	1
47-4041	Hazardous Materials Removal Workers	146	148	2	1.37%	1	2	3	7	3	4
47-4051	Highway Maintenance Workers	1,816	1,851	35	1.93%	18	43	61	7	3	4
47-4061	Rail-Track Laying and Maintenance Equipment Operators	107	108	1	0.93%	0	2	2	7	3	4
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	111	117	6	5.41%	3	2	5	8	3	4
47-5000	Extraction Workers	1,835	1,497	-338	-18.42%	0	42	42			
47-5011	Derrick Operators, Oil and Gas	156	110	-46	-29.49%	0	5	5	8	3	5
47-5012	Rotary Drill Operators, Oil and Gas	68	48	-20	-29.41%	0	2	2	8	3	4
47-5013	Service Unit Operators, Oil, Gas, and Mining	450	339	-111	-24.67%	0	15	15	8	3	4
47-5031	Explosives Workers, Ordnance Handling Experts, and Blasters	138	135	-3	-2.17%	0	2	2	7	2	3
47-5041	Continuous Mining Machine Operators	187	181	-6	-3.21%	0	3	3	8	3	4
47-5071	Roustabouts, Oil and Gas	366	273	-93	-25.41%	0	6	6	8	3	4
47-5081	HelpersExtraction Workers	197	160	-37	-18.78%	0	2	2	7	3	4
49-0000	INSTALLATION, MAINTENANCE, AND REPAIR OCCUPATIONS	54,804	56,531	1,727	3.15%	884	1,234	2,118			
49-1000	Supervisors of Installation, Maintenance, and Repair Workers	4,811	4,928	117	2.43%	58	92	150			
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	4,811	4,928	117	2.43%	58	92	150	7	2	6

\*For training codes, refer to page 85.

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
49-2000	Electrical and Electronic Equipment Mechanics, Installers, and Repairers	5,438	5,520	82	1.51%	48	86	134			
49-2011	Computer, Automated Teller, and Office Machine Repairers	1,042	1,073	31	2.98%	16	20	36	6	3	5
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	2,281	2,299	18	0.79%	9	24	33	5	3	4
49-2091	Avionics Technicians	128	131	3	2.34%	2	2	4	4	3	6
49-2092	Electric Motor, Power Tool, and Related Repairers	365	368	3	0.82%	2	10	12	5	3	3
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	446	435	-11	-2.47%	0	8	8	5	3	3
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	88	88	0	0.00%	0	2	2	5	3	3
49-2097	Electronic Home Entertainment Equipment Installers and Repairers	290	299	9	3.10%	4	4	8	5	3	5
49-2098	Security and Fire Alarm Systems Installers	507	531	24	4.73%	12	10	22	7	3	4
49-3000	Vehicle and Mobile Equipment Mechanics, Installers, and Repairers	15,785	16,340	555	3.52%	284	378	662			
49-3011	Aircraft Mechanics and Service Technicians	768	759	-9	-1.17%	0	17	17	5	3	6
49-3021	Automotive Body and Related Repairers	1,326	1,396	70	5.28%	35	30	65	7	3	3
49-3022	Automotive Glass Installers and Repairers	211	222	11	5.21%	6	3	9	7	3	4
49-3023	Automotive Service Technicians and Mechanics	5,690	5,910	220	3.87%	110	148	258	5	3	5
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	3,263	3,386	123	3.77%	62	58	120	7	3	3
49-3041	Farm Equipment Mechanics and Service Technicians	960	976	16	1.67%	8	23	31	7	3	3
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	964	970	6	0.62%	3	23	26	7	3	3
49-3043	Rail Car Repairers	333	329	-4	-1.20%	0	8	8	7	3	3
49-3051	Motorboat Mechanics and Service Technicians	199	219	20	10.05%	10	4	14	7	3	3
49-3052	Motorcycle Mechanics	206	234	28	13.59%	14	4	18	5	3	5
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	406	425	19	4.68%	10	8	18	7	3	4
49-3093	Tire Repairers and Changers	1,257	1,290	33	2.63%	16	45	61	7	3	5
49-9000	Other Installation, Maintenance, and Repair Occupations	28,770	29,743	973	3.38%	493	678	1,171			
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	435	423	-12	-2.76%	0	14	14	7	3	4

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49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	2,839	3,016	177	6.23%	88	44	132	5	3	3
49-9031	Home Appliance Repairers	287	290	3	1.05%	2	7	9	7	3	4
49-9041	Industrial Machinery Mechanics	4,581	4,810	229	5.00%	114	108	222	7	3	3
49-9043	Maintenance Workers, Machinery	682	712	30	4.40%	15	13	28	7	3	4
49-9044	Millwrights	606	630	24	3.96%	12	14	26	7	3	1
49-9051	Electrical Power-Line Installers and Repairers	1,551	1,552	1	0.06%	0	60	60	7	3	3
49-9052	Telecommunications Line Installers and Repairers	1,031	1,047	16	1.55%	8	19	27	7	3	3
49-9062	Medical Equipment Repairers	429	432	3	0.70%	2	6	8	4	3	4
49-9063	Musical Instrument Repairers and Tuners	42	42	0	0.00%	0	0	0	7	3	1
49-9069	Precision Instrument and Equipment Repairers, All Other	53	55	2	3.77%	1	1	2	7	3	3
49-9071	Maintenance and Repair Workers, General	13,068	13,471	403	3.08%	202	314	516	7	3	3
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	306	315	9	2.94%	4	4	8	7	3	5
49-9094	Locksmiths and Safe Repairers	116	115	-1	-0.86%	0	5	5	7	3	3
49-9096	Riggers	95	102	7	7.37%	4	2	6	7	3	5
49-9097	Signal and Track Switch Repairers	142	142	0	0.00%	0	2	2	7	3	4
49-9098	HelpersInstallation, Maintenance, and Repair Workers	1,171	1,231	60	5.12%	30	40	70	7	3	5
49-9099	Installation, Maintenance, and Repair Workers, All Other	1,023	1,028	5	0.49%	2	16	18	7	3	4
51-0000	PRODUCTION OCCUPATIONS	116,090	116,957	867	0.75%	886	2,550	3,436			
51-1000	Supervisors of Production Workers	8,123	8,218	95	1.17%	48	128	176			
51-1011	First-Line Supervisors of Production and Operating Workers	8,123	8,218	95	1.17%	48	128	176	7	2	6
51-2000	Assemblers and Fabricators	19,341	19,527	186	0.96%	138	394	532			
51-2021	Coil Winders, Tapers, and Finishers	531	503	-28	-5.27%	0	7	7	7	3	4
51-2022	Electrical and Electronic Equipment Assemblers	1,014	965	-49	-4.83%	0	13	13	7	3	4
51-2023	Electromechanical Equipment Assemblers	46	44	-2	-4.35%	0	0	0	7	3	4
51-2041	Structural Metal Fabricators and Fitters	1,602	1,670	68	4.24%	34	28	62	7	3	4
51-2091	Fiberglass Laminators and Fabricators	847	898	51	6.02%	26	18	44	7	3	4
51-2092	Team Assemblers	13,189	13,313	124	0.94%	62	284	346	7	3	4
51-2099	Assemblers and Fabricators, All Other	1,540	1,555	15	0.97%	8	33	41	7	3	4
51-3000	Food Processing Workers	17,856	18,515	659	3.69%	330	334	664			

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51-3011	Bakers	1,205	1,264	59	4.90%	30	24	54	8	3	3
51-3021	Butchers and Meat Cutters	1,161	1,203	42	3.62%	21	21	42	8	3	3
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	7,607	7,873	266	3.50%	133	138	271	8	3	5
51-3023	Slaughterers and Meat Packers	2,128	2,203	75	3.52%	38	38	76	8	3	5
51-3091	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	192	205	13	6.77%	6	4	10	8	3	4
51-3092	Food Batchmakers	1,829	1,874	45	2.46%	22	38	60	7	3	4
51-3093	Food Cooking Machine Operators and Tenders	848	900	52	6.13%	26	16	42	7	3	4
51-3099	Food Processing Workers, All Other	2,886	2,993	107	3.71%	54	54	108	8	3	4
51-4000	Metal Workers and Plastic Workers	20,713	20,466	-247	-1.19%	66	490	556			
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	1,473	1,529	56	3.80%	28	40	68	7	3	4
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	167	172	5	2.99%	2	4	6	7	3	3
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	628	615	-13	-2.07%	0	16	16	7	3	4
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	90	95	5	5.56%	2	2	4	7	3	4
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	162	167	5	3.09%	2	4	6	7	3	4
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	2,848	2,759	-89	-3.13%	0	39	39	7	3	4
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	111	112	1	0.90%	0	2	2	7	3	4
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	685	662	-23	-3.36%	0	28	28	7	3	4
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	165	161	-4	-2.42%	0	4	4	7	3	4
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	169	171	2	1.18%	1	3	4	7	3	4
51-4041	Machinists	2,834	2,858	24	0.85%	12	81	93	7	3	3
51-4051	Metal-Refining Furnace Operators and Tenders	253	266	13	5.14%	6	8	14	7	3	4
51-4052	Pourers and Casters, Metal	123	142	19	15.45%	10	4	14	7	3	4
51-4062	Patternmakers, Metal and Plastic	39	35	-4	-10.26%	0	0	0	7	3	4
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	1,678	1,643	-35	-2.09%	0	27	27	7	3	4

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,503	1,453	-50	-3.33%	0	28	28	7	3	4
51-4111	Tool and Die Makers	535	493	-42	-7.85%	0	2	2	7	3	3
51-4121	Welders, Cutters, Solderers, and Brazers	5,058	5,032	-26	-0.51%	0	142	142	7	3	4
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	1,300	1,246	-54	-4.15%	0	36	36	7	3	4
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	224	217	-7	-3.13%	0	4	4	7	3	4
51-4192	Layout Workers, Metal and Plastic	41	35	-6	-14.63%	0	0	0	7	3	4
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	361	346	-15	-4.16%	0	9	9	7	3	4
51-4194	Tool Grinders, Filers, and Sharpeners	153	154	1	0.65%	0	4	4	7	3	4
51-4199	Metal Workers and Plastic Workers, All Other	73	66	-7	-9.59%	0	2	2	7	3	4
51-5100	Printing Workers	2,368	2,336	-32	-1.35%	0	36	36			
51-5111	Prepress Technicians and Workers	283	267	-16	-5.65%	0	4	4	5	3	6
51-5112	Printing Press Operators	1,759	1,747	-12	-0.68%	0	26	26	7	3	4
51-5113	Print Binding and Finishing Workers	326	322	-4	-1.23%	0	5	5	7	3	5
51-6000	Textile, Apparel, and Furnishings Workers	5,123	5,018	-105	-2.05%	10	80	90			
51-6011	Laundry and Dry-Cleaning Workers	1,758	1,754	-4	-0.23%	0	26	26	8	3	5
51-6021	Pressers, Textile, Garment, and Related Materials	398	380	-18	-4.52%	0	10	10	8	3	5
51-6031	Sewing Machine Operators	959	939	-20	-2.09%	0	6	6	8	3	5
51-6041	Shoe and Leather Workers and Repairers	32	29	-3	-9.38%	0	0	0	7	3	4
51-6042	Shoe Machine Operators and Tenders	541	486	-55	-10.17%	0	6	6	7	3	5
51-6052	Tailors, Dressmakers, and Custom Sewers	286	288	2	0.70%	1	10	11	8	3	4
51-6062	Textile Cutting Machine Setters, Operators, and Tenders	91	85	-6	-6.59%	0	2	2	7	3	4
51-6063	Textile Knitting and Weaving Machine Setters, Operators, and Tenders	194	194	0	0.00%	0	3	3	7	3	5
51-6091	Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	90	97	7	7.78%	4	1	5	7	3	4
51-6093	Upholsterers	574	555	-19	-3.31%	0	14	14	7	3	4
51-6099	Textile, Apparel, and Furnishings Workers, All Other	55	57	2	3.64%	1	0	1	7	3	5

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
51-7000	Woodworkers	3,924	3,909	-15	-0.38%	30	74	104			
51-7011	Cabinetmakers and Bench Carpenters	1,244	1,174	-70	-5.63%	0	10	10	7	3	4
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	1,364	1,420	56	4.11%	28	40	68	7	3	5
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	1,006	1,002	-4	-0.40%	0	18	18	7	3	5
51-8000	Plant and System Operators	3,813	3,772	-41	-1.08%	24	104	128			
51-8012	Power Distributors and Dispatchers	161	158	-3	-1.86%	0	6	6	7	3	3
51-8013	Power Plant Operators	429	423	-6	-1.40%	0	16	16	7	3	3
51-8021	Stationary Engineers and Boiler Operators	325	326	1	0.31%	0	8	8	7	3	3
51-8031	Water and Wastewater Treatment Plant and System Operators	1,843	1,882	39	2.12%	20	38	58	7	3	3
51-8091	Chemical Plant and System Operators	204	206	2	0.98%	1	7	8	7	3	3
51-8092	Gas Plant Operators	137	125	-12	-8.76%	0	4	4	7	3	3
51-8099	Plant and System Operators, All Other	124	129	5	4.03%	2	4	6	7	3	3
51-9000	Other Production Occupations	34,829	35,196	367	1.05%	242	908	1,150			
51-9011	Chemical Equipment Operators and Tenders	1,180	1,201	21	1.78%	10	34	44	7	3	4
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	482	479	-3	-0.62%	0	14	14	7	3	4
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	443	441	-2	-0.45%	0	9	9	7	3	4
51-9022	Grinding and Polishing Workers, Hand	84	82	-2	-2.38%	0	2	2	8	3	4
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	1,605	1,638	33	2.06%	16	32	48	7	3	4
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	1,478	1,450	-28	-1.89%	0	32	32	7	3	5
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	1,061	1,061	0	0.00%	0	38	38	7	3	4
51-9051	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	454	462	8	1.76%	4	12	16	7	3	4
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	6,112	6,220	108	1.77%	54	151	205	7	3	4
51-9071	Jewelers and Precious Stone and Metal Workers	204	199	-5	-2.45%	0	3	3	7	3	3
51-9081	Dental Laboratory Technicians	442	476	34	7.69%	17	12	29	7	3	4
51-9082	Medical Appliance Technicians	143	153	10	6.99%	5	4	9	7	3	3
51-9083	Ophthalmic Laboratory Technicians	406	424	18	4.43%	9	11	20	7	3	4

SOC	Standard Occupational Classification	Estimated	Projected	Net	Percent	Annual Openings	Annual Openings	Total	Education	Work	Job
Code	(SOC) Title	Employment 2016	Employment 2018	Growth	Growth	due to Growth	due to Replacement	Annual Openings	Code	Experience Code	Training Code
51-9111	Packaging and Filling Machine Operators and Tenders	3,926	4,025	99	2.52%	50	134	184	7	3	4
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	1,044	1,035	-9	-0.86%	0	20	20	7	3	4
51-9122	Painters, Transportation Equipment	964	989	25	2.59%	12	18	30	7	3	4
51-9151	Photographic Process Workers and Processing Machine Operators	67	64	-3	-4.48%	0	2	2	7	3	5
51-9191	Adhesive Bonding Machine Operators and Tenders	388	376	-12	-3.09%	0	10	10	7	3	4
51-9192	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	364	378	14	3.85%	7	10	17	8	3	4
51-9193	Cooling and Freezing Equipment Operators and Tenders	686	703	17	2.48%	8	13	21	7	3	4
51-9194	Etchers and Engravers	20	21	1	5.00%	0	0	0	7	3	4
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	372	374	2	0.54%	1	12	13	7	3	3
51-9196	Paper Goods Machine Setters, Operators, and Tenders	1,949	1,906	-43	-2.21%	0	34	34	7	3	4
51-9198	HelpersProduction Workers	7,106	7,112	6	0.08%	3	224	227	8	3	5
51-9199	Production Workers, All Other	3,197	3,281	84	2.63%	42	60	102	7	3	4
53-0000	TRANSPORTATION AND MATERIAL MOVING OCCUPATIONS	109,804	112,956	3,152	2.87%	1,604	2,492	4,096			
53-1000	Supervisors of Transportation and Material Moving Workers	4,052	4,166	114	2.81%	57	122	179			
53-1011	Aircraft Cargo Handling Supervisors	39	39	0	0.00%	0	1	1	7	2	6
53-1021	First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	1,348	1,405	57	4.23%	28	41	69	7	2	6
53-1031	First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	2,665	2,722	57	2.14%	28	80	108	7	2	6
53-2011	Airline Pilots, Copilots, and Flight Engineers	123	123	0	0.00%	0	2	2	3	2	4
53-2012	Commercial Pilots	582	594	12	2.06%	6	12	18	7	3	4
53-2021	Air Traffic Controllers	99	95	-4	-4.04%	0	3	3	4	3	3
53-3000	Motor Vehicle Operators	53,665	55,039	1,374	2.56%	687	834	1,521			
53-3022	Bus Drivers, School or Special Client	5,876	6,037	161	2.74%	80	70	150	7	3	5
53-3031	Driver/Sales Workers	2,799	2,895	96	3.43%	48	44	92	7	3	5
53-3032	Heavy and Tractor-Trailer Truck Drivers	35,834	36,548	714	1.99%	357	571	928	5	3	5
53-3033	Light Truck or Delivery Services Drivers	6,496	6,760	264	4.06%	132	104	236	7	3	5

### 2016-2018 Arkansas Statewide Occupational Projections

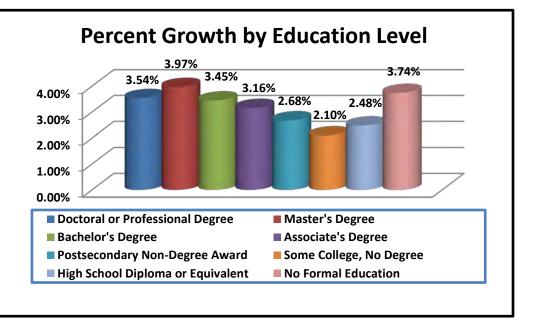
SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment 2016	Projected Employment 2018	Net Growth	Percent Growth	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Education Code	Work Experience Code	Job Training Code
53-3041	Taxi Drivers and Chauffeurs	2,064	2,186	122	5.91%	61	35	96	8	3	5
53-3099	Motor Vehicle Operators, All Other	147	152	5	3.40%	2	4	6	8	3	5
53-6000	Other Transportation Workers	1,942	2,008	66	3.40%	35	83	118			
53-6021	Parking Lot Attendants	227	241	14	6.17%	7	14	21	8	3	5
53-6031	Automotive and Watercraft Service Attendants	1,124	1,176	52	4.63%	26	49	75	8	3	5
53-6041	Traffic Technicians	35	36	1	2.86%	0	2	2	7	3	4
53-6061	Transportation Attendants, Except Flight Attendants	127	124	-3	-2.36%	0	2	2	7	3	5
53-6099	Transportation Workers, All Other	206	208	2	0.97%	1	9	10	7	3	5
53-7000	Material Moving Workers	47,349	48,918	1,569	3.31%	806	1,362	2,168			
53-7011	Conveyor Operators and Tenders	626	640	14	2.24%	7	18	25	8	3	5
53-7021	Crane and Tower Operators	654	697	43	6.57%	22	22	44	7	2	4
53-7032	Excavating and Loading Machine and Dragline Operators	541	553	12	2.22%	6	7	13	7	2	4
53-7051	Industrial Truck and Tractor Operators	6,493	6,700	207	3.19%	104	156	260	8	3	5
53-7061	Cleaners of Vehicles and Equipment	3,186	3,328	142	4.46%	71	114	185	8	3	5
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	26,678	27,641	963	3.61%	482	824	1,306	8	3	5
53-7063	Machine Feeders and Offbearers	1,711	1,759	48	2.81%	24	39	63	8	3	5
53-7064	Packers and Packagers, Hand	5,131	5,239	108	2.10%	54	128	182	8	3	5
53-7073	Wellhead Pumpers	162	125	-37	-22.84%	0	6	6	7	2	4
53-7081	Refuse and Recyclable Material Collectors	1,883	1,945	62	3.29%	31	40	71	8	3	5
53-7121	Tank Car, Truck, and Ship Loaders	81	83	2	2.47%	1	2	3	8	3	5
53-7199	Material Moving Workers, All Other	96	98	2	2.08%	1	3	4	8	3	5

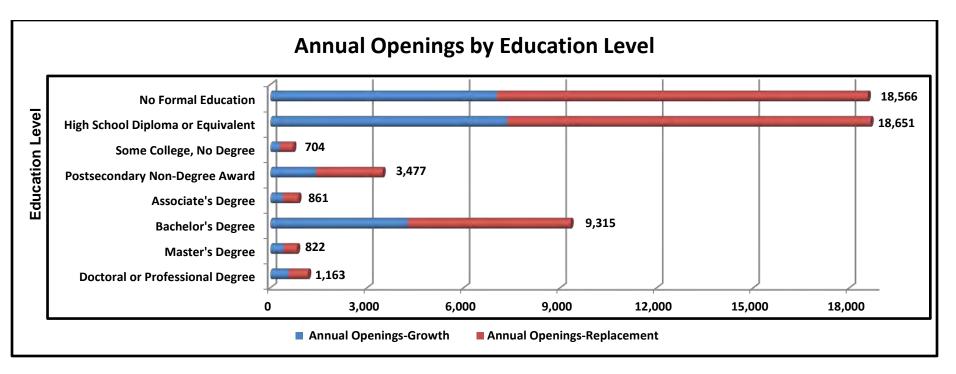
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Education Title	2016 Estimated Employment	2018 Projected Employment	Net Change	Percent Change	Annual Openings- Growth	Annual Openings- Replacement	Annual Openings- Total
Doctoral or Professional Degree	31,545	32,663	1,118	3.54%	561	602	1,163
Master's Degree	20,254	21,058	804	3.97%	400	422	822
Bachelor's Degree	244,082	252,499	8,417	3.45%	4,266	5,049	9,315
Associate's Degree	23,834	24,587	753	3.16%	382	479	861
Postsecondary Non-Degree Award	103,176	105,938	2,762	2.68%	1,407	2,070	3,477
Some College, No Degree	27,800	28,383	583	2.10%	293	411	704
High School Diploma or Equivalent	549,996	563,639	13,643	2.48%	7,349	11,302	18,651
No Formal Educational Credential	365,890	379,560	13,670	3.74%	7,026	11,540	18,566

### **Education Outlook**

Every education category is projected to see positive net growth between 2016 and 2018. Occupations needing a high school diploma or equivalent are expected to add 13,643 new jobs and 18,651 annual job openings, while those that do not require formal education are estimated to add 13,670 jobs and have 18,566 annual job openings. At 3.97 percent, occupations requiring a Master's Degree are growing the fastest. Occupations requiring a college degree are forecast to add 11,092 jobs into the Arkansas job market and have a combined 12,161 annual openings.





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#### Hot Jobs by Educational Level (Ordered by Education Type and Total Annual Openings)

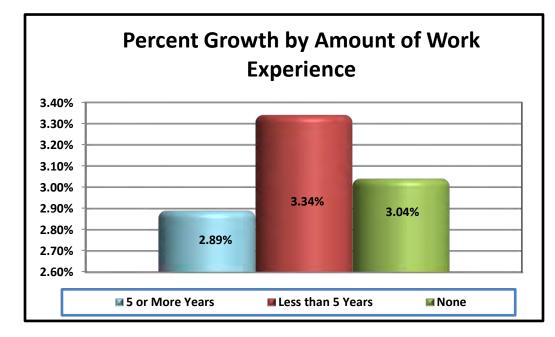
		2016	2018			Annual	Annual	Total	Work	
SOC Code	Standard Occupational Classification Titles	Estimated Employment	Projected Employment	Net Growth	Percent Growth	Openings due to Growth	Openings due to Replacement	Annual Openings	Experience	Training
Doctoral o	r Professional Degree									
29-1051	Pharmacists	3,353	3,459	106	3.16%	53	72	125	None	None
23-1011	Lawyers	4,130	4,263	133	3.22%	66	54	120	None	None
29-1123	Physical Therapists	2,069	2,193	124	5.99%	62	50	112	None	None
Master's D	Degree									
11-9032	Education Administrators, Elementary and Secondary School	2,363	2,444	81	3.43%	40	70	110	5 years or more	None
29-1127	Speech-Language Pathologists	1,892	1,997	105	5.55%	52	44	96	None	None
29-1171	Nurse Practitioners	1,424	1,532	108	7.58%	54	32	86	None	None
Bachelor's	Degree									
29-1141	Registered Nurses	23,040	23,777	737	3.20%	368	508	876	None	None
11-1021	General and Operations Managers	20,388	21,093	705	3.46%	352	479	831	5 years or more	None
25-2021	Elementary School Teachers, Except Special Education	11,853	12,257	404	3.41%	202	263	465	None	Internship/ Residency
Associate <sup>2</sup>	's Degree									
25-2011	Preschool Teachers, Except Special Education	2,514	2,590	76	3.02%	38	73	111	None	None
29-2012	Medical and Clinical Laboratory Technicians	1,578	1,631	53	3.36%	26	38	64	None	None
23-2011	Paralegals and Legal Assistants	1,562	1,618	56	3.59%	28	31	59	None	None
31-2021	Physical Therapist Assistants	1,039	1,101	62	5.97%	31	28	59	None	None
Postsecon	dary Non-Degree Award/Some College, No Degr	ee								
53-3032	Heavy and Tractor-Trailer Truck Drivers	35,834	36,548	714	1.99%	357	571	928	None	Short-Term OJT
31-1014	Nursing Assistants	18,667	19,151	484	2.59%	242	394	636	None	None
29-2061	Licensed Practical and Licensed Vocational Nurses	12,057	12,341	284	2.36%	142	338	480	None	None
High Scho	ol Diploma or Equivalent									
11-9013	Farmers, Ranchers, and Other Agricultural Managers	59,892	61,357	1,465	2.45%	732	992	1,724	5 years or more	None
43-9061	Office Clerks, General	30,076	30,773	697	2.32%	348	634	982	None	Short-Term OJT
43-4051	Customer Service Representatives	18,936	19,438	502	2.65%	251	440	691	None	Short-Term OJT
No Formal	Education Required									
41-2011	Cashiers	34,387	35,526	1,139	3.31%	570	1742	2,312	None	Short-Term OJT
41-2031	Retail Salespersons	39,797	41,332	1,535	3.86%	768	1,488	2,256	None	Short-Term OJT
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	27,172	28,833	1,661	6.11%	830	1,058	1,888	None	Short-Term OJT

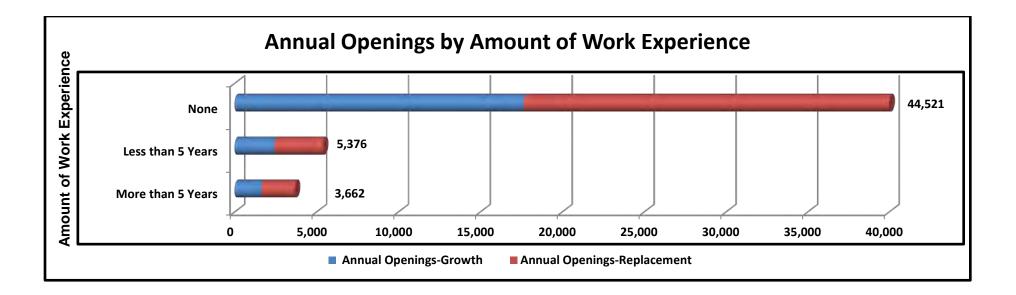
While formal education training is important, other factors are important or required by employers to receive competency in a particular job or to even be considered for certain jobs. One factor is work experience. Many occupations require some work experience in the line of work, especially those in career ladder occupations. For example, to become a manager, most employees need experience working in the line of work they will be managing. The following table shows projections by length of experience generally recommended or required.

#### 2016-2018 Projections by Amount of Work Experience

Work Experience Title	2016 Estimated Employment	2018 Projected Employment	Net Change	Percent Change	Annual Openings- Growth	Annual Openings- Replacement	Annual Openings- Total
5 years or more	112,638	115,894	3,256	2.89%	1,623	2,039	3,662
Less than 5 years	142,153	146,904	4,751	3.34%	2,418	2,958	5,376
None	1,111,786	1,145,529	33,743	3.04%	17,643	26,878	44,521

#### Work Experience Outlook



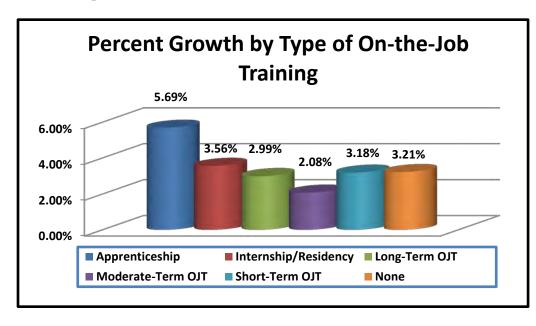


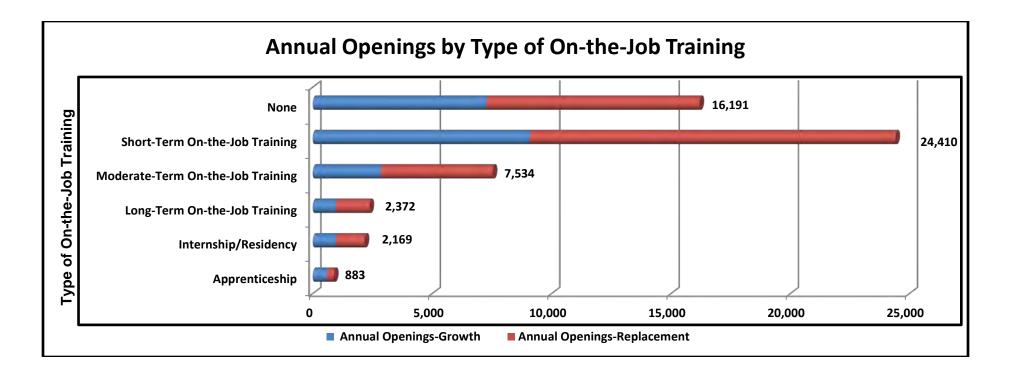
Another factor in determining full competency in an occupation is on-the-job training. Many occupations require additional training beyond formal education. Many jobs in education and the medical field require internships or residency. Many skills-trade occupations recommend or require apprenticeship programs. The following table shows projections by type of training needed.

Job Training Title	2016 Estimated Employment	2018 Projected Employment	Net Change	Percent Change	Annual Openings- Growth	Annual Openings- Replacement	Annual Openings- Total
Apprenticeship	20,568	21,738	1,170	5.69%	584	299	883
Internship/Residency	54,326	56,261	1,935	3.56%	969	1,200	2,169
Long-Term On-the-Job Training	58,640	60,396	1,756	2.99%	959	1,413	2,372
Moderate-Term On-the-Job							
Training	225,722	230,414	4,692	2.08%	2,836	4,698	7,534
Short-Term On-the-Job Training	559,510	577,318	17,808	3.18%	9,078	15,332	24,410
None	447,811	462,200	14,389	3.21%	7,258	8,933	16,191

#### 2016-2018 Projections by Type of On-the-Job Training

#### **Training Outlook**





What matters most when looking for a job is not necessarily education alone or even your experience or additional on-the-job training, but it's the total package. Each occupation has a recommended path to become competent in that field. Each contains the recommended level of education, the length of work experience generally needed, and any additional on-the-job training needed. However, keep in mind that some employers may have more requirements and some may even have less. The following table shows projections by education/training path.

### 2016-2018 Projections by Education Training Path

Education	Work Experience	Additional Training	2016 Estimated Employment	2018 Projected Employment	Net Change	Percent Change	Annual Openings- Growth	Annual Openings- Replacement	Annual Openings- Total
Doctoral or Professional Degree	5 years or more	Short-Term On- the-Job Training	752	761	9	1.20%	4	10	14
Doctoral or Professional Degree	Less than 5 years	None	2,270	2,349	79	3.48%	40	36	76
Doctoral or Professional Degree	None	Internship/ Residency	7,395	7,685	290	3.92%	146	184	330
Doctoral or Professional Degree	None	None	21,128	21,868	740	3.50%	371	372	743
Master's Degree	5 years or more	None	4,014	4,149	135	3.36%	67	80	147
Master's Degree	Less than 5 years	None	2,356	2,426	70	2.97%	35	61	96
Master's Degree	None	Internship/ Residency	929	963	34	3.66%	17	18	35
Master's Degree	None	None	12,955	13,520	565	4.36%	281	263	544
Bachelor's Degree	5 years or more	None	39,122	40,410	1,288	3.29%	642	847	1,489
Bachelor's Degree	Less than 5 years	Internship/ Residency	1,071	1,097	26	2.43%	13	26	39
Bachelor's Degree	Less than 5 years	Moderate-Term On-the-Job Training	161	162	1	0.62%	0	2	2
Bachelor's Degree	Less than 5 years	None	38,458	39,756	1,298	3.38%	666	775	1,441
Bachelor's Degree	Less than 5 years	Short-Term On- the-Job Training	196	200	4	2.04%	2	4	6
Bachelor's Degree	None	Internship/ Residency	44,931	46,516	1,585	3.53%	793	972	1,765
Bachelor's Degree	None	Long-Term On- the-Job Training	7,602	7,940	338	4.45%	167	206	373
Bachelor's Degree	None	Moderate-Term On-the-Job Training	21,535	22,380	845	3.92%	429	409	838

Education	Work Experience	Additional Training	2016 Estimated Employment	2018 Projected Employment	Net Change	Percent Change	Annual Openings- Growth	Annual Openings- Replacement	Annual Openings- Total
Bachelor's Degree	None	None	89,580	92,589	3,009	3.36%	1,538	1,781	3,319
Bachelor's Degree	None	Short-Term On- the-Job Training	1,426	1,449	23	1.61%	16	27	43
Associate's Degree	Less than 5 years	None	759	780	21	2.77%	10	14	24
Associate's Degree	None	Long-Term On- the-Job Training	554	566	12	2.17%	8	12	20
Associate's Degree	None	Moderate-Term On-the-Job Training	1,891	1,944	53	2.80%	26	45	71
Associate's Degree	None	None	20,427	21,096	669	3.28%	338	404	742
Associate's Degree	None	Short-Term On- the-Job Training	203	201	-2	-0.99%	0	4	4
Postsecondary Non- Degree Award	5 years or more	Moderate-Term On-the-Job Training	40	41	1	2.50%	0	1	1
Postsecondary Non- Degree Award	Less than 5 years	Moderate-Term On-the-Job Training	751	765	14	1.86%	7	31	38
Postsecondary Non- Degree Award	Less than 5 years	None	367	380	13	3.54%	7	10	17
Postsecondary Non- Degree Award	Less than 5 years	Short-Term On- the-Job Training	723	713	-10	-1.38%	0	6	6
Postsecondary Non- Degree Award	None	Long-Term On- the-Job Training	6,463	6,688	225	3.48%	118	138	256
Postsecondary Non- Degree Award	None	Moderate-Term On-the-Job Training	2,379	2,401	22	0.92%	11	26	37
Postsecondary Non- Degree Award	None	None	49,792	51,313	1,521	3.05%	775	1,120	1,895
Postsecondary Non- Degree Award	None	Short-Term On- the-Job Training	42,661	43,637	976	2.29%	489	738	1,227
Some College, No Degree	None	Long-Term On- the-Job Training	78	77	-1	-1.28%	0	2	2
Some College, No Degree	None	Moderate-Term On-the-Job Training	13,241	13,304	63	0.48%	32	129	161
Some College, No Degree	None	None	13,439	13,929	490	3.65%	245	260	505
Some College, No Degree	None	Short-Term On- the-Job Training	1,042	1,073	31	2.98%	16	20	36

Education	Work Experience	Additional Training	2016 Estimated Employment	2018 Projected Employment	Net Change	Percent Change	Annual Openings- Growth	Annual Openings- Replacement	Annual Openings- Total
High School Diploma Or Equivalent	5 years or more	Long-Term On- the-Job Training	61	67	6	9.84%	3	2	5
High School Diploma Or Equivalent	5 years or more	Moderate-Term On-the-Job Training	618	638	20	3.24%	10	16	26
High School Diploma Or Equivalent	5 years or more	None	68,031	69,828	1,797	2.64%	897	1,083	1,980
High School Diploma Or Equivalent	Less than 5 years	Long-Term On- the-Job Training	138	135	-3	-2.17%	0	2	2
High School Diploma Or Equivalent	Less than 5 years	Moderate-Term On-the-Job Training	4,561	4,636	75	1.64%	57	130	187
High School Diploma Or Equivalent	Less than 5 years	None	80,993	83,508	2,515	3.11%	1,257	1,609	2,866
High School Diploma Or Equivalent	None	Apprenticeship	20,568	21,738	1,170	5.69%	584	299	883
High School Diploma Or Equivalent	None	Long-Term On- the-Job Training	38,619	39,553	934	2.42%	536	937	1,473
High School Diploma Or Equivalent	None	Moderate-Term On-the-Job Training	157,499	160,009	2,510	1.59%	1,604	3,407	5,011
High School Diploma Or Equivalent	None	None	2,184	2,269	85	3.89%	42	28	70
High School Diploma Or Equivalent	None	Short-Term On- the-Job Training	176,724	181,258	4,534	2.57%	2,359	3,789	6,148
No Formal Educational Credential	Less than 5 years	Moderate-Term On-the-Job Training	9,349	9,997	648	6.93%	324	252	576
No Formal Educational Credential	None	Long-Term On- the-Job Training	5,125	5,370	245	4.78%	127	114	241
No Formal Educational Credential	None	Moderate-Term On-the-Job Training	13,697	14,137	440	3.21%	336	250	586
No Formal Educational Credential	None	None	1,936	2,030	94	4.86%	47	190	237
No Formal Educational Credential	None	Short-Term On- the-Job Training	335,783	348,026	12,243	3.65%	6,192	10,734	16,926

## Top 15 Content Skills

(Learned capabilities that allow workers to master and perform the specific activities of their jobs)

Skills	Total Demand	Definition
Active Listening	20,669	Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
Speaking	20,470	Talking to others to convey information effectively.
Reading Comprehension	9,767	Understanding written sentences and paragraphs in work related documents.
Social Perceptiveness	9,494	Being aware of other's reactions and understanding why they react as they do.
Critical Thinking	6,046	Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
Monitoring	5,584	Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.
Service Orientation	5,579	Actively looking for ways to help people.
Coordination	4,987	Adjusting actions in relation to others' actions.
Instructing	4,949	Teaching others how to do something.
Writing	4,889	Communicating effectively in writing as appropriate for the needs of the audience.
Judgment and Decision Making	3,723	Considering the relative costs and benefits of potential actions to choose the most appropriate one.
Learning Strategies	3,449	Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.
Time Management	1,952	Managing one's own time and the time of others.
Repairing	1,668	Repairing machines or systems using the needed tools.
Equipment Maintenance	1,593	Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.

## Top 15 Knowledge Domains

(Learned sets of facts and standards required by many work situations)

Knowledge Domains	Total Demand	Definition
Customer and Personal Service	41,654	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
English Language	19,027	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
Administration and Management	9,608	Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
Education and Training	6,740	Knowledge of principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.
Psychology	5,768	Knowledge of human behavior and performance; individual differences in ability, personality, and interests; learning and motivation; psychological research methods; and the assessment and treatment of behavioral and affective disorders.
Clerical	5,625	Knowledge of administrative and clerical procedures and systems such as word processing, managing files and records, stenography and transcription, designing forms, and other office procedures and terminology.
Medicine and Dentistry	5,514	Knowledge of the information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.
Mechanical	3,954	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
Sales and Marketing	3,841	Knowledge of principles and methods for showing, promoting, and selling products or services. This includes marketing strategy and tactics, product demonstration, sales techniques, and sales control systems.
Building and Construction	3,803	Knowledge of materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.
Mathematics	2,723	Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
Computers and Electronics	2,482	Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
Public Safety and Security	2,131	Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.
Production and Processing	1,767	Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.
Economics and Accounting	1,487	Knowledge of economic and accounting principles and practices, the financial markets, banking and the analysis and reporting of financial data.

# Appendix: Definition of Education/Training Codes

Education Code	Type of Education	Definition
1	Doctoral or Professional Degree	Requires at least three years of full-time academic study beyond a Bachelor's Degree.
2	Master's Degree	Requires one or two years of full-time academic study beyond a Bachelor's Degree.
3	Bachelor's Degree	Requires four to five years of full-time academic study beyond High School.
4	Associate's Degree	Requires at least two years of full-time academic study beyond High School.
5	Postsecondary Non-Degree Award	Programs last a few weeks to more than a year; leads to a certificate or other award, but not a degree.
6	Some College, No Degree	Signifies the completion of a High School Diploma or equivalent program and one or more postsecondary courses that did not result in a degree or award.
7	High School Diploma or Equivalent	Signifies completion of high school or an equivalent program resulting in an award of a High School Diploma or an equivalent.
8	No Formal Education Credential	Signifies completion of any level of primary or secondary education that did not result in a High School Diploma or equivalent.

Work Experience Code	Amount of Work Experience
1	5 or More Years
2	Less than 5 Years
3	None

Job Training Code	Type of Training	Definition
1	Apprenticeship	Combination of on-the-job training and related classroom instruction in which workers learn the practical and theoretical aspects of an occupation.
2	Internship/Residency	Involves preparation in a field under supervision in a professional setting. Commonly results in a license upon completion.
3	Long-Term On-the-Job Training	Requires twelve months of training or a combination of work experience and classroom instruction.
4	Moderate-Term On-the-Job Training	Requires one to twelve months of a combination of work experience and classroom instruction.
5	Short-Term On-the-Job Training	Requires a short demonstration of job duties or one month or less of training or work experience.
6	None	No additional training or preparation required.

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