Arkansas-Statewide

Short-Term Industry and Occupational Projections







2017-2019



ARKANSAS SHORT-TERM INDUSTRY AND OCCUPATIONAL PROJECTIONS 2017-2019





Asa Hutchinson, Governor State of Arkansas

Daryl Bassett, Director Department of Workforce Services

ARKANSAS SHORT-TERM INDUSTRY AND OCCUPATIONAL PROJECTIONS 2017-2019

Published By:

Department of Workforce Services

Labor Market Information

Occupational Career Information

"Equal Opportunity Employer/Program"

"Auxiliary aids and services are available upon request to individuals with disabilities."

P.O. Box 2981 Little Rock, AR 72203 Phone: (501) 682-3123 Fax: (501) 682-3186 TTD/TTY Voice: 1-800-285-1121

TDD: 1-800-285-1131

State of Arkansas Home Page: http://www.arkansas.gov Department of Workforce Services Home Page: http://dws.arkansas.gov Labor Market Information Web Portal: http://www.discover.arkansas.gov

We would like to give special thanks to the following people who helped with the projections process:

John Shelnutt, Department of Finance and Administration

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.

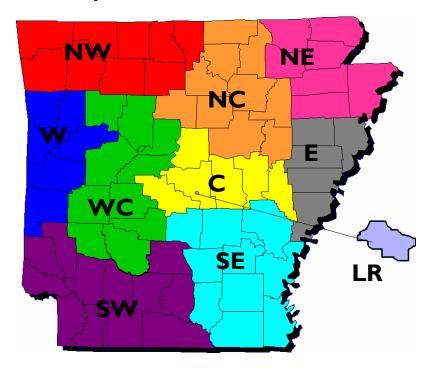
Subsector – A level of industry classification under sector according to the NAICS structure.

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

Table of Contents

ocal Workforce Development Areas	5
ntroduction	6
State of Arkansas Profile	7
Methodology	8
Explanation of Industry Projections Data	10
ndustry Projections by Major Division	11
ndustry Outlook	12
ndustry Rankings	
op 20 Growing Industries by Numeric Change	18
op 20 Fastest Growing Industries by Percent Change	19
op 20 Declining Industries by Numeric Change	20
op 20 Fastest Declining Industries by Percent Change	21
ndustry Projections	22
lew Separations Methodology	33
Explanation of Occupational Projections Data	34
Occupational Projections by Major Group	35
Occupational Outlook	36
Occupational Rankings	
op 20 Growing Occupations by Numeric Change	43
op 20 Fastest Growing Occupations by Percent Change	44
op 20 Occupations by Annual Exits	45
op 20 Occupations by Annual Transfers	46
op 20 Occupations by Total Annual Openings	47
op 20 Declining Occupations by Numeric Change	48
op 20 Fastest Declining Occupations by Percent Change	49
Occupational Projections	50
Projections by Educational Level	80
Education Outlook (includes charts)	80
lot Jobs by Educational Level	82
Projections by Amount of Work Experience	83
Vork Experience Outlook (includes charts)	83
Projections by Type of On-the-Job Training	85
raining Outlook (includes charts)	85
Projections by Education Training Path	87
op 15 Content Skills	91
op 15 Knowledge Domains	92
Appendix: Definition of Education/Training Codes	93

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. Based on new Bureau of Labor Statistics (BLS) methodology, job openings are classified in three categories: Occupational Exits, Occupational Transfers, and Occupational Growth. It is important to look at all of these components when looking at specific occupations or occupational groups. A detailed description of the new methodology will appear later in this publication.

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, as well as top knowledge domains.

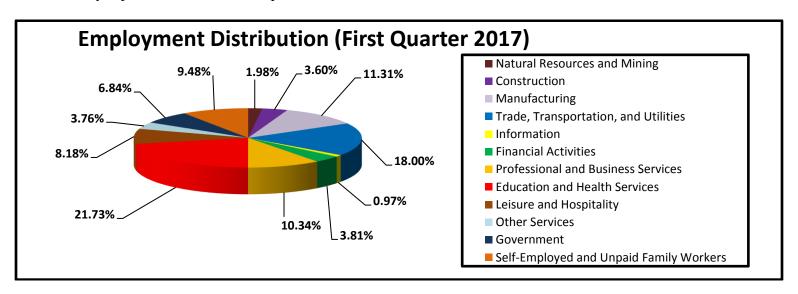
State of Arkansas Profile

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 3,004,279, as of July 1, 2017, which is an increase of 16,031 residents from the July 1, 2016 estimate of 2,988,248. The non-seasonally adjusted average unemployment rate for first quarter 2017 was 4.0 percent, while the seasonally adjusted number was 3.7 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 levels from the three sources listed above with a time period of January 1990 to March of the base year 2017. 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 2016 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 2019. 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 2017-2019

NAICS Code	NAICS Title	2017 Estimated Employment	2019 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 2017	The projected number of jobs expected to be in an industry in 2019	Total number of jobs an industry is expected to gain or lose over the 2017 to 2019 period	Percent change in the number of jobs in an industry over the 2017 to 2019 period

2017-2019 Arkansas Statewide Industry Projections by Major Division

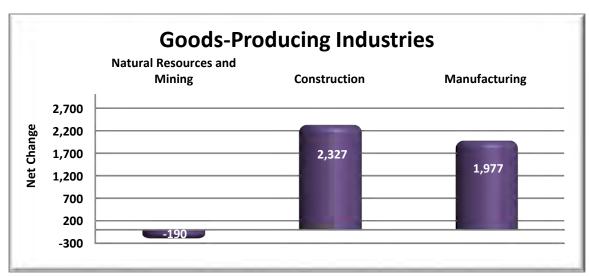
	North American Industry Classification System			Change	
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent
000000	TOTAL ALL INDUSTRIES	1,380,666	1,413,430	32,764	2.37%
000671	Total Self Employed and Unpaid Family Workers, All Jobs	130,938	133,342	2,404	1.84%
006010	Self Employed Workers, All Jobs	126,180	128,961	2,781	2.20%
007010	Unpaid Family Workers, All Jobs	4,758	4,381	-377	-7.92%
101000	Goods Producing	233,188	237,302	4,114	1.76%
101100	NATURAL RESOURCES AND MINING	27,396	27,206	-190	-0.69%
110000	Agriculture, Forestry, Fishing and Hunting	23,682	23,711	29	0.12%
210000	Mining	3,714	3,495	-219	-5.90%
101200	CONSTRUCTION	49,678	52,005	2,327	4.68%
101300	MANUFACTURING	156,114	158,091	1,977	1.27%
	Non-Durable Goods Manufacturing	81,649	83,570	1,921	2.35%
	Durable Goods Manufacturing	74,465	74,521	56	0.08%
102000	Services Providing	1,016,540	1,042,786	26,246	2.58%
102100	TRADE, TRANSPORTATION, AND UTILITIES	248,588	252,093	3,505	1.41%
420000	Wholesale Trade	46,567	47,166	599	1.29%
440000	Retail Trade	139,894	141,172	1,278	0.91%
480000	Transportation and Warehousing	54,480	56,130	1,650	3.03%
220000		7,647	7,625	-22	-0.29%
	INFORMATION	13,352	13,472	120	0.90%
	FINANCIAL ACTIVITIES	52,570	54,512	1,942	3.69%
520000	Finance and Insurance	39,537	41,110	1,573	3.98%
530000		13,033	13,402	369	2.83%
	PROFESSIONAL AND BUSINESS SERVICES	142,809	147,827	5,018	3.51%
540000	Professional, Scientific, and Technical Services	43,299	44,801	1,502	3.47%
550000		35,989	37,128	1,139	3.16%
560000	Administrative and Support and Waste Management and Remediation Services	63,521	65,898	2,377	3.74%
	EDUCATION AND HEALTH SERVICES	300,055	309,138	9,083	3.03%
610000		115,145	116,888	1,743	1.51%
	Health Care and Social Assistance	184,910	192,250	7,340	3.97%
	LEISURE AND HOSPITALITY	112,886	116,914	4,028	3.57%
	Arts, Entertainment, and Recreation	9,974	10,449	475	4.76%
	Accommodation and Food Services	102,912	106,465	3,553	3.45%
	OTHER SERVICES (EXCEPT GOVERNMENT)	51,869	53,459	1,590	3.07%
102800	GOVERNMENT	94,411	95,371	960	1.02%

Industry Outlook

Between first quarter 2016 and first quarter 2017, an increase of just 9,624 jobs was seen in the Arkansas economy, which translates to a 0.81 percent increase in jobs. The job market is expected to continue this growth with an increase of 32,764 jobs, equivalent to a 2.37 percent rise in employment by 2019. Goods-Producing industries are estimated to see a net gain of 4,114 jobs, while the Services-Providing industries are forecast to increase employment by 26,246. Arkansas's self-employed and unpaid family workers ranks are estimated to experience a net gain of 2,404, an increase of 1.84 percent.

Natural Resources and Mining

Employment in Natural Resources and Mining is expected to fall by 190 jobs, or 0.69 percent. The significant source of the decline is in the Mining sector, which is expected to lose 219 jobs, or 5.90 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 198 jobs projected to be cut, a decline of 15.18 percent, placing it in the Top 10 of both the Top 25 Declining Industries and the Top 25 Fastest Declining Industries lists. Oil



and Gas Extraction is predicted to lose 77, or 9.96 percent of its workforce. These two industries have lost 865 jobs between first quarter 2016 and first quarter 2017. The **Agriculture, Forestry, Fishing and Hunting** sector is projected to soften the loss some with a net gain of 29 jobs. *Crop Production* is anticipating a loss of 156 jobs, while *Animal Production* could see a gain off 223.

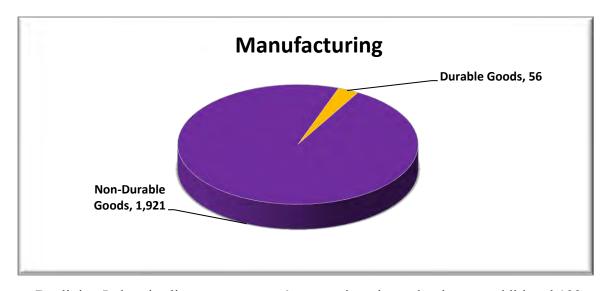
Construction

Construction is expected to grow by 2,327 jobs between 2017 and 2019. Its projected growth of 4.68 percent is highest in the state among the supersectors. The *Specialty Trade Contractors* subsector is estimated to gain 1,598 jobs during the projection period, or 68.67 percent of the total growth in Construction. Building Equipment Contractors could account for 1,296 of those jobs, placing third in the Top 20 Growing Industries list. Other Heavy and Civil Engineering Construction is placing third on the Top 20 Growing Industries list with a 17.66 percent gain, while Highway, Street, and Bridge Construction is predicted to place seventh with a 13.58 percent change. The *Construction of Buildings* subsector is predicted to experience a slow gain with 90 new jobs, a growth of less than one percent, while *Heavy and Civil Engineering Construction* could add a modest 639 jobs, a 7.26 percent rise in employment.

Non-Durable Goods Manufacturing

Non-Durable Goods Manufacturing is projected to experience a net gain of 1,921 jobs. *Food Manufacturing* is the biggest driver of the growth with an anticipated gain of 1,970 jobs. Animal Slaughtering and Processing could see strong growth during the projection period with an anticipated

increase of 1,261 jobs, placing it among the Top 10 on the Top 20 Growing Industries list. Animal Food Manufacturing is predicted to gain 15.46 percent, placing the industry fifth on the Top 20 Fastest Growing Industries list for the state. Other highlights in Non-Durable Goods Manufacturing include Pharmaceutical and Medicine Manufacturing placing as the second fastest growing industry in the state with a projected gain of 18.01 percent. Not all areas in Non-Durable Goods Manufacturing are seeing a favorable outlook. Leather and Allied Product Manufacturing could lose nearly a quarter of its workforce with a 25.45 percent employment decline. Footwear Manufacturing is estimated to lose 252 jobs or 30.77 percent of its workforce, placing fourth in



both the Top 20 Declining Industries and the Top 20 Fastest Declining Industries list. *Paper Manufacturing* is estimated to lose an additional 193 jobs, 2.05 percent of its workforce.

Durable Goods Manufacturing

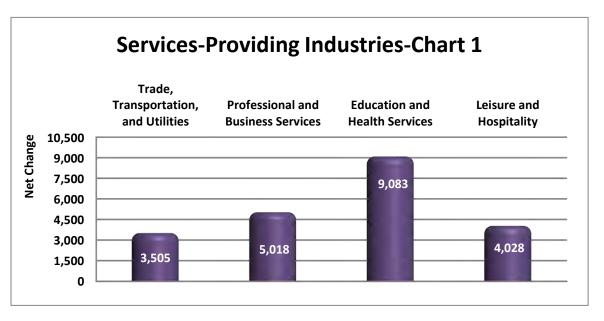
Durable Goods Manufacturing is forecast to see a mixed outlook between 2017 and 2019 with a net gain of just 56 jobs. The brightest outlook could come in *Transportation Equipment Manufacturing* with a gain of 641 jobs, an increase of 4.71 percent. Ship and Boat Building is estimated to increase by more than ten percent and places in the Top 20 Fastest Growing Industries list. Other strong growth industries include Architectural and Structural Metals Manufacturing, which is estimated to be the top growing industry among **Durable Goods Manufacturing**. Seven industries in **Durable Goods Manufacturing** are included in the Top 20 Declining Industries list. Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing and Electrical Equipment Manufacturing are estimated to lose a combined 618 jobs, placing second and third respectively in the state for net decline. Twelve industries in **Durable Goods Manufacturing** are among the Top 20 Fastest Declining Industries. Household Appliance Manufacturing could be the fastest declining industry in the state with a projected loss of 48.84 percent of its workforce. In all, 17 of the 20 industries on the Top 20 Declining Industries list are expected to lose more than 10 percent of its respective workforce with an average of more than 20 percent.

Wholesale Trade

The **Wholesale Trade** sector is projected to have a net gain of 599 jobs, a 1.29 percent increase. Wholesale Electronic Markets and Agents and Brokers is predicted to be the highlight of this sector adding 629 jobs, an increase of 5.34 percent to the Arkansas labor market, placing the industry in the Top 20 Growing Industries list. The other subsectors in **Wholesale Trade** are forecast to experience net losses with Merchant Wholesalers, Durable Goods experiencing a net loss of four jobs, while Merchant Wholesalers, Nondurable Goods is expected to lose 26 jobs. Machinery, Equipment, and Supplies Merchant Wholesalers is projected to lose 205 jobs, or 3.16 percent of its workforce, placing it in the Top 10 of the Top 20 Declining Industries list.

Retail Trade

Retail Trade is projected to see a mixed outlook, but manage to add a modest 1,271 jobs, a growth of less than one percent. Department Stores has seen a major loss of retail establishments recently and is projected to be the top declining industry in the state losing 430 jobs between the first quarter of 2017 to the first quarter of 2019. Other General Merchandise Stores is expected to gain jobs at a much slower rate, but is expected to gain 842 jobs. The top subsector is estimated to be *Motor Vehicle and Parts Dealers* with a net gain of 505 new jobs. *Miscellaneous Store* Retailers is estimated to lose the most among Retail Trade subsectors losing 226 jobs, or 3.20 percent of its workforce. Driving this decline is likely a loss in Office Supplies, Stationery, and Gift Stores losing 201 jobs, a 12.14 percent decline placing them eighth



in net decline and included in the Top 20 Fastest Declining Industries list. Electronics and Appliance Stores is also forecast to see losses with a decline of 167, a 4.61 percent decline of its workforce.

Transportation and Warehousing

The **Transportation and Warehousing** sector is predicted to have a net gain of 1,650 jobs over the projection period. *Truck Transportation* is projected to lead all subsectors in this sector with 747 new jobs. Driving this growth is General Freight Trucking with a gain of 646. *Support Activities for Transportation* is estimated to add an additional 428 jobs to its workforce. Support Activities for Rail Transportation is predicted to be the fastest growing industry in the state raising employment by 42.35. On the negative side, *Pipeline Transportation* could see a drop of 50 jobs, or 11.79 percent of its workforce.

Utilities

The **Utilities** sector could see a drop in employment by March 2019 with a loss of 22 jobs, or 0.29 percent of its workforce. Electric Power Generation, Transmission and Distribution is estimated to lose 16 jobs, while Natural Gas Distribution could take the brunt of the loss with a decline of 36 jobs, or 3.38 percent of its workforce. Water, Sewage and Other Systems could offset the loss a bit with a gain of 30 new jobs to its workforce.

Information

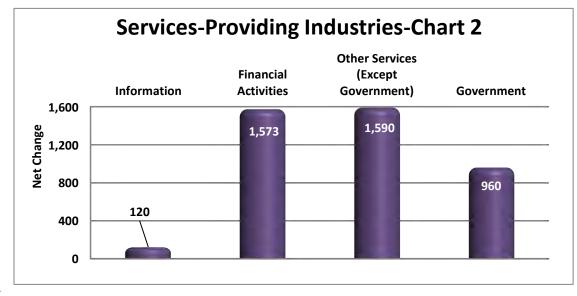
Information is expected to experience a small growth of 120 new jobs, an increase of less than one percent. *Data Processing, Hosting and Related Services* is slated to add 101 new jobs between 2017 and 2019. The *Telecommunications* subsector is expected to lose 64 jobs during the projection period. Sound Recording Industries, of the Motion Picture and Sound Recording Industries subsector, could be the fifth fastest declining industry losing more than 30 percent of its workforce.

Finance and Insurance

The **Finance and Insurance** sector is predicted to experience a net gain of 1,573 jobs between 2017 and 2019, a 3.98 percent rise in employment. *Insurance Carriers and Related Activities* could see a rise in employment over the 2017-2019 period with 1,257 new jobs. Insurance Carriers are likely to drive this growth adding 1,290 jobs, or 13.57 percent increase, placing the industry fourth in the Top 20 Growing Industries list and eighth in the Top 20 Fastest Growing Industries list. *Credit Intermediation and Related Activities* could see a net gain of 211 new jobs.



The **Real Estate and Rental and Leasing** sector is expected to see a net gain of 369 jobs during the projection



period, equivalent to a 2.83 percent increase. The *Real Estate* subsector is predicted to dominate the growth in the sector adding 267 new jobs to its workforce, while the *Rental and Leasing Services* subsector is predicted to gain 119 jobs. Automotive Equipment Rental and Leasing is slated to add 139 jobs, an increase of 13.96 percent, placing the industry sixth on the Top 20 Fastest Growing Industries list. On the negative side, *Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)* could be the second fastest declining industry in the state losing 36.96 percent of its workforce.

Professional, Scientific, and Technical Services

The **Professional, Scientific, and Technical Services** sector is predicted to add 1,502 new jobs, an increase of 3.47 percent. Architectural, Engineering, and Related Services is estimated to be the top and fastest growing industry in this subsector adding 516 new jobs, an increase of 8.05 percent. Specialized Design Services is slated to lose jobs, cutting 49 from its workforce, or 12.63 percent, and making the Top 20 Fastest Declining Industries list.

Management of Companies and Enterprises

Between first quarter 2016 and first quarter 2017, the **Management of Companies and Enterprises** sector experienced a growth of 1,583 new jobs. The industry is estimated to continue strong growth during the projection period with 1,139 new jobs, a 3.16 percent increase. The industry is seventh 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 2,377 new jobs, a 3.74 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 2,201 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 add 659 new jobs, while Services to Buildings and Dwellings is anticipated to add 624 to its workforce. *Waste Management and Remediation Services* is predicted to have a gain of 176 jobs between 2017 and 2019.

Educational Services

The **Educational Services** sector is predicted to experience a net gain of 1,743 jobs during the projection period. Elementary and Secondary Schools could see a gain 1,072, placing the industry in the Top 10 of the Top 20 Growing Industries list, while Colleges, Universities, and Professional Schools is estimated to add 673 jobs to its workforce. On the negative side, Technical and Trade Schools as well as Junior Colleges could see a reduction in the workforce with losses of 72 and 64 jobs respectively.

Health Care and Social Assistance

The **Health Care and Social Assistance** sector is projected to add 7,340 jobs, making it the top growing industry sector in the state and responsible for more than 80 percent of the growth in **Education and Health Services**, which is expected to be the top growing supersector with an increase of 9,083 jobs. The *Ambulatory Health Care Services* subsector is estimated to add 2,769 jobs to the Arkansas labor market, while *Hospitals* is predicted to add a total of 1,963 to its workforce. Offices of Physicians is estimated to add 1,021 new jobs placing it among the Top 10 on the Top 20 Growing Industries list. General Medical and Surgical Hospitals is estimated to experience the second highest growth with a gain of 1,703. The *Social Assistance* subsector is projected to have a net gain of 1,485 jobs, while *Nursing and Residential Care Facilities* is projected to add 1,123. Individual and Family Services is third in net change in **Health Care and Social Assistance** and tenth overall in the state with an anticipated growth of 915 jobs.

Arts, Entertainment, and Recreation

The Arts, Entertainment, and Recreation sector is projected to experience a net gain of 475 jobs. Almost 75 percent of the growth is likely to come in Amusement, Gambling, and Recreation Industries, which is projected to gain 354 jobs between 2017 and 2019, while Performing Arts, Spectator Sports, and Related Industries is predicted to have a net gain of 68 jobs. Other Amusement and Recreation Industries is predicted to add 354 jobs to the labor force, an increase of 5.54 percent. Museums, Historical Sites, and Similar Institutions could be included in the Top 20 Fastest Growing Industries list with an 8.47 percent rise in employment. Performing Arts Companies is predicted to lose 10.86 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 3,553 jobs. The *Food Services and Drinking Places* subsector will likely drive the growth with a net gain of 3,331 jobs. Restaurants and Other Eating Places is projected to be the top growing industry in the state with a gain of 3,004 jobs. The industry added 2,781 jobs between first quarter 2016 and first quarter 2017. *Accommodation, including Hotels and Motels* could gain an additional 222 jobs during the projection period.

Other Services (Except Government)

The **Other Services** (**Except Government**) supersector is expected to experience a net gain of 1,590 jobs between 2017 and 2019. *Religious*, *Grantmaking, Civic, Professional, and Similar Organizations* is predicted to experience a net gain of 1,313 jobs, while *Repair and Maintenance* is projected to see a net gain of 532 jobs. Religious Organizations is the top growing industry in **Other Services** (**Except Government**) with an anticipated 1,287 new jobs. Private Households is estimated to lose 225 jobs, or 6.24 percent of its workforce.

Government

The **Government** supersector is projected to see a net gain of 960 jobs during the projection period. Local Government, Excluding Education and Hospitals is predicted to have the brightest outlook with 828 new jobs, while State Government, Excluding Education and Hospitals could add 154. Federal Government, Excluding Post Office could see a loss of 153 jobs during the projection period, while Postal Service could see an increase of 131 jobs.

Top 20 Growing Industries by Numeric Change

•		•			
NAICS Code	NAICS Title	2017 Estimated Employment	2019 Projected Employment	Numeric Change	Percent Change
722500	Restaurants and Other Eating Places	86,725	89,729	3,004	3.46%
622100	General Medical and Surgical Hospitals	51,927	53,630	1,703	3.28%
238200	Building Equipment Contractors	16,998	18,294	1,296	7.62%
524100	Insurance Carriers	9,505	10,795	1,290	13.57%
813100	Religious Organizations	19,533	20,820	1,287	6.59%
311600	Animal Slaughtering and Processing	31,341	32,602	1,261	4.02%
551000	Management of Companies and Enterprises	35,989	37,128	1,139	3.16%
611100	Elementary and Secondary Schools	77,617	78,689	1,072	1.38%
621100	Offices of Physicians	24,430	25,451	1,021	4.18%
624100	Individual and Family Services	24,382	25,297	915	3.75%
452900	Other General Merchandise Stores	31,493	32,335	842	2.67%
999300	Local Government, Excluding Education and Hospitals	39,886	40,714	828	2.08%
623100	Nursing Care Facilities (Skilled Nursing Facilities)	22,716	23,400	684	3.01%
611300	Colleges, Universities, and Professional Schools	27,090	27,763	673	2.48%
561300	Employment Services	26,508	27,167	659	2.49%
621300	Offices of Other Health Practitioners	8,562	9,209	647	7.56%
484100	General Freight Trucking	24,818	25,464	646	2.60%
425000	Wholesale Electronic Markets and Agents and Brokers	11,770	12,399	629	5.34%
561700	Services to Buildings and Dwellings	14,308	14,932	624	4.36%
541300	Architectural, Engineering, and Related Services	6,410	6,926	516	8.05%

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

NAICS Code	NAICS Title	2017 Estimated Employment	2019 Projected Employment	Numeric Change	Percent Change
488200	Support Activities for Rail Transportation	614	874	260	42.35%
325400	Pharmaceutical and Medicine Manufacturing	433	511	78	18.01%
237900	Other Heavy and Civil Engineering Construction	668	786	118	17.66%
485900	Other Transit and Ground Passenger Transportation	780	907	127	16.28%
311100	Animal Food Manufacturing	1,766	2,039	273	15.46%
532100	Automotive Equipment Rental and Leasing	996	1,135	139	13.96%
237300	Highway, Street, and Bridge Construction	3,055	3,470	415	13.58%
524100	Insurance Carriers	9,505	10,795	1,290	13.57%
561200	Facilities Support Services	1,075	1,217	142	13.21%
711400	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	52	58	6	11.54%
336600	Ship and Boat Building	1,947	2,144	197	10.12%
481100	Scheduled Air Transportation	607	668	61	10.05%
333900	Other General Purpose Machinery Manufacturing	2,465	2,702	237	9.61%
813200	Grantmaking and Giving Services	1,499	1,643	144	9.61%
331100	Iron and Steel Mills and Ferroalloy Manufacturing	2,835	3,101	266	9.38%
327400	Lime and Gypsum Product Manufacturing	295	322	27	9.15%
711300	Promoters of Performing Arts, Sports, and Similar Events	619	673	54	8.72%
488900	Other Support Activities for Transportation	106	115	9	8.49%
712000	Museums, Historical Sites, and Similar Institution	626	679	53	8.47%
333200	Industrial Machinery Manufacturing	691	749	58	8.39%

Top 20 Declining Industries by Numeric Change

NAICS Code	NAICS Title	2017 Estimated Employment	2019 Projected Employment	Numeric Change	Percent Change
452100	Department Stores	7,805	7,375	-430	-5.51%
333400	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	2,956	2,609	-347	-11.74%
335300	Electrical Equipment Manufacturing	3,128	2,857	-271	-8.66%
316200	Footwear Manufacturing	819	567	-252	-30.77%
814000	Private Households	3,608	3,383	-225	-6.24%
423800	Machinery, Equipment, and Supplies Merchant Wholesalers	6,497	6,292	-205	-3.16%
336400	Aerospace Product and Parts Manufacturing	3,126	2,925	-201	-6.43%
453200	Office Supplies, Stationery, and Gift Stores	1,656	1,455	-201	-12.14%
213000	Support Activities for Mining	1,304	1,106	-198	-15.18%
311400	Fruit and Vegetable Preserving and Specialty Food Manufacturing	4,214	4,022	-192	-4.56%
332200	Cutlery and Handtool Manufacturing	571	386	-185	-32.40%
337200	Office Furniture (including Fixtures) Manufacturing	570	403	-167	-29.30%
443000	Electronics and Appliance Stores	3,621	3,454	-167	-4.61%
331500	Foundries	1,687	1,530	-157	-9.31%
111000	Crop Production	8,123	7,967	-156	-1.92%
236200	Nonresidential Building Construction	6,424	6,271	-153	-2.38%
999100	Federal Government, Excluding Post Office	14,763	14,610	-153	-1.04%
812300	Drycleaning and Laundry Services	2,308	2,168	-140	-6.07%
331200	Steel Product Manufacturing from Purchased Steel	1,775	1,652	-123	-6.93%
813900	Business, Professional, Labor, Political, and Similar Organizations	4,240	4,122	-118	-2.78%

Top 20 Fastest Declining Industries by Percent Change (Numeric Change No Greater than -5)

NAICS Code	NAICS Title	2017 Estimated Employment	2019 Projected Employment	Numeric Change	Percent Change
335200	Household Appliance Manufacturing	43	22	-21	-48.84%
533000	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	46	29	-17	-36.96%
332200	Cutlery and Handtool Manufacturing	571	386	-185	-32.40%
316200	Footwear Manufacturing	819	567	-252	-30.77%
512200	Sound Recording Industries	23	16	-7	-30.43%
337200	Office Furniture (including Fixtures) Manufacturing	570	403	-167	-29.30%
337900	Other Furniture Related Product Manufacturing	93	72	-21	-22.58%
331400	Nonferrous Metal (except Aluminum) Production and Processing	376	298	-78	-20.74%
213000	Support Activities for Mining	1,304	1,106	-198	-15.18%
481200	Nonscheduled Air Transportation	70	60	-10	-14.29%
327900	Other Nonmetallic Mineral Product Manufacturing	407	353	-54	-13.27%
541400	Specialized Design Services	388	339	-49	-12.63%
453200	Office Supplies, Stationery, and Gift Stores	1,656	1,455	-201	-12.14%
331300	Alumina and Aluminum Production	970	853	-117	-12.06%
333400	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	2,956	2,609	-347	-11.74%
711100	Performing Arts Companies	359	320	-39	-10.86%
332400	Boiler, Tank, and Shipping Container Manufacturing	658	592	-66	-10.03%
211000	Oil and Gas Extraction	773	696	-77	-9.96%
331500	Foundries	1,687	1,530	-157	-9.31%
453100	Florists	647	588	-59	-9.12%

	North American Industry Classification System	Employment		Cha	nge
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent
000000	TOTAL ALL INDUSTRIES	1,380,666	1,413,430	32,764	2.37%
000671	Total Self Employed and Unpaid Family Workers, All Jobs	130,938	133,342	2,404	1.84%
006010	Self Employed Workers, All Jobs	126,180	128,961	2,781	2.20%
007010	Unpaid Family Workers, All Jobs	4,758	4,381	-377	-7.92%
404000	O corto Donato do como	000.400	007.000	4 4 4 4	4.700/
101000	Goods Producing	233,188	237,302	4,114	1.76%
101100	NATURAL RESOURCES AND MINING	27,396	27,206	-190	-0.69%
101100	NATURAL RESOURCES AND WIINING	21,390	21,200	-130	-0.09 /6
110000	Agriculture, Forestry, Fishing and Hunting	23,682	23,711	29	0.12%
111000	Crop Production	8,123	7,967	-156	-1.92%
112000	Animal Production	7,363	7,586	223	3.03%
115000	Support Activities for Agriculture and Forestry	5,716	5,718	2	0.03%
	OTHER	2,480	2,440	-40	-1.61%
210000	Mining	3,714	3,495	-219	-5.90%
211000	Oil and Gas Extraction	773	696	-77	-9.96%
212000	Mining (except Oil and Gas)	1,637	1,693	56	3.42%
213000	Support Activities for Mining	1,304	1,106	-198	-15.18%
101200	CONSTRUCTION	49,678	52,005	2,327	4.68%
000000		0.000	0.700	0.0	0.000/
236000	Construction of Buildings	9,630	9,720	90	0.93%
236100	Residential Building Construction	3,206	3,449	243	7.58%
236200	Nonresidential Building Construction	6,424	6,271	-153	-2.38%
237000	Heavy and Civil Engineering Construction	8,807	9,446	639	7.26%
237100	Utility System Construction Land Subdivision	4,993	5,105	112	2.24%
237200		91	85	-6	-6.59%
237300	Highway, Street, and Bridge Construction	3,055	3,470	415	13.58%
237900 238000	Other Heavy and Civil Engineering Construction Specialty Trade Contractors	668 31,241	786 32,839	118 1,598	17.66% <i>5.12%</i>
238000	Foundation, Structure, and Building Exterior Contractors	5,893	6,138	245	4.16%
238100	Building Equipment Contractors	16,998	18,294	1,296	7.62%
238300	Building Finishing Contractors Building Finishing Contractors	3,924	3,834	-90	-2.29%
238900	Other Specialty Trade Contractors	4,426	4,573	147	3.32%
230900	Other Specialty Trade Contractors	4,420	4,573	14/	J.JZ70

	North American Industry Classification System	Emplo	yment	Cha	nge
Code	Title	2017	2019	Numeric	Percent
		Estimated	Projected		
101300	MANUFACTURING	156,114	158,091	1,977	1.27%
					/
	Non-Durable Goods Manufacturing	81,649	83,570	1,921	2.35%
311000	Food Manufacturing	46,514	48,484	1,970	4.24%
311100	Animal Food Manufacturing	1,766	2,039	273	15.46%
311200	Grain and Oilseed Milling	2,670	2,835	165	6.18%
311400	Fruit and Vegetable Preserving and Specialty Food Manufacturing	4,214	4,022	-192	-4.56%
311600	Animal Slaughtering and Processing	31,341	32,602	1,261	4.02%
311800	Bakeries and Tortilla Manufacturing	3,805	4,081	276	7.25%
311900	Other Food Manufacturing	2,115	2,277	162	7.66%
	Other	603	628	25	4.15%
312000	Beverage and Tobacco Product Manufacturing	1,419	1,493	74	5.21%
313000	Textile Mills	113	127	14	12.39%
314000	Textile Product Mills	986	1,022	36	3.65%
314100	Textile Furnishings Mills	35	36	1	2.86%
314900	Other Textile Product Mills	951	986	35	3.68%
315000	Apparel Manufacturing	888	906	18	2.03%
315100	Apparel Knitting Mills	640	672	32	5.00%
	Other	248	234	-14	-5.65%
316000	Leather and Allied Product Manufacturing	1,010	753	-257	-25.45%
316200	Footwear Manufacturing	819	567	-252	-30.77%
316900	Other Leather and Allied Product Manufacturing	191	186	-5	-2.62%
322000	Paper Manufacturing	9,425	9,232	-193	-2.05%
322100	Pulp, Paper, and Paperboard Mills	3,740	3,631	-109	-2.91%
322200	Converted Paper Product Manufacturing	5,685	5,601	-84	-1.48%
323000	Printing and Related Support Activities	3,970	3,898	-72	-1.81%
324000	Petroleum and Coal Products Manufacturing	1,240	1,319	79	6.37%
325000	Chemical Manufacturing	5,327	<i>5,4</i> 35	108	2.03%
325100	Basic Chemical Manufacturing	1,810	1,796	-14	-0.77%
325200	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing	474	445	-29	-6.12%
325300	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	453	436	-17	-3.75%
325400	Pharmaceutical and Medicine Manufacturing	433	511	78	18.01%
325500	Paint, Coating, and Adhesive Manufacturing	247	229	-18	-7.29%
325600	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	1,206	1,262	56	4.64%
325900	Other Chemical Product and Preparation Manufacturing	704	756	52	7.39%

	North American Industry Classification System		yment	Change	
Code	Title	2017	2019	Numeric	Percent
		Estimated	Projected		
326000	Plastics and Rubber Products Manufacturing	10,757	10,901	144	1.34%
326100	Plastics Product Manufacturing	6,631	6,857	226	3.41%
326200	Rubber Product Manufacturing	4,126	4,044	-82	-1.99%
	Durable Goods Manufacturing	74,465	74,521	56	0.08%
321000	Wood Product Manufacturing	9,519	9,720	201	2.11%
321100	Sawmills and Wood Preservation	4,553	4,721	168	3.69%
321200	Veneer, Plywood, and Engineered Wood Product Manufacturing	1,826	1,752	-74	-4.05%
321900	Other Wood Product Manufacturing	3,140	3,247	107	3.41%
327000	Nonmetallic Mineral Product Manufacturing	3,554	3,552	-2	-0.06%
327100	Clay Product and Refractory Manufacturing	457	475	18	3.94%
327200	Glass and Glass Product Manufacturing	347	332	-15	-4.32%
327300	Cement and Concrete Product Manufacturing	2,048	2,070	22	1.07%
327400	Lime and Gypsum Product Manufacturing	295	322	27	9.15%
327900	Other Nonmetallic Mineral Product Manufacturing	407	353	-54	-13.27%
331000	Primary Metal Manufacturing	7,643	7,434	-209	-2.73%
331100	Iron and Steel Mills and Ferroalloy Manufacturing	2,835	3,101	266	9.38%
331200	Steel Product Manufacturing from Purchased Steel	1,775	1,652	-123	-6.93%
331300	Alumina and Aluminum Production	970	853	-117	-12.06%
331400	Nonferrous Metal (except Aluminum) Production and Processing	376	298	-78	-20.74%
331500	Foundries	1,687	1,530	-157	-9.31%
332000	Fabricated Metal Product Manufacturing	15,228	15,493	265	1.74%
332100	Forging and Stamping	416	410	-6	-1.44%
332200	Cutlery and Handtool Manufacturing	571	386	-185	-32.40%
332300	Architectural and Structural Metals Manufacturing	4,397	4,760	363	8.26%
332400	Boiler, Tank, and Shipping Container Manufacturing	658	592	-66	-10.03%
332500	Hardware Manufacturing	245	247	2	0.82%
332600	Spring and Wire Product Manufacturing	375	364	-11	-2.93%
332700	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	1,802	1,764	-38	-2.11%
332800	Coating, Engraving, Heat Treating, and Allied Activities	624	608	-16	-2.56%
332900	Other Fabricated Metal Product Manufacturing	6,140	6,362	222	3.62%
333000	Machinery Manufacturing	11,134	11,157	23	0.21%
333100	Agriculture, Construction, and Mining Machinery Manufacturing	2,668	2,845	177	6.63%
333200	Industrial Machinery Manufacturing	691	749	58	8.39%
333300	Commercial and Service Industry Machinery Manufacturing	722	736	14	1.94%
	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment				
333400	Manufacturing	2,956	2,609	-347	-11.74%

	North American Industry Classification System		yment	Cha	nge
Code	Title	2017	2019	Numeric	Percent
		Estimated	Projected		
333500	Metalworking Machinery Manufacturing	1,025	943	-82	-8.00%
333600	Engine, Turbine, and Power Transmission Equipment Manufacturing	607	573	-34	-5.60%
333900	Other General Purpose Machinery Manufacturing	2,465	2,702	237	9.61%
334000	Computer and Electronic Product Manufacturing	2,110	1,972	-138	-6.54%
334400	Semiconductor and Other Electronic Component Manufacturing	1,468	1,393	-75	-5.11%
334500	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	419	411	-8	-1.91%
	Other	223	168	-55	-24.66%
335000	Electrical Equipment, Appliance, and Component Manufacturing	4,792	4,392	-400	-8.35%
335100	Electric Lighting Equipment Manufacturing	377	354	-23	-6.10%
335200	Household Appliance Manufacturing	43	22	-21	-48.84%
335300	Electrical Equipment Manufacturing	3,128	2,857	-271	-8.66%
335900	Other Electrical Equipment and Component Manufacturing	1,244	1,159	-85	-6.83%
336000	Transportation Equipment Manufacturing	13,607	14,248	641	4.71%
336200	Motor Vehicle Body and Trailer Manufacturing	1,960	2,058	98	5.00%
336300	Motor Vehicle Parts Manufacturing	5,222	5,419	197	3.77%
336400	Aerospace Product and Parts Manufacturing	3,126	2,925	-201	-6.43%
336600	Ship and Boat Building	1,947	2,144	197	10.12%
	Other	1,352	1,702	350	25.89%
337000	Furniture and Related Product Manufacturing	3,568	3,282	-286	-8.02%
337100	Household and Institutional Furniture & Kitchen Cabinet Manufacturing	2,905	2,807	-98	-3.37%
337200	Office Furniture (including Fixtures) Manufacturing	570	403	-167	-29.30%
337900	Other Furniture Related Product Manufacturing	93	72	-21	-22.58%
339000	Miscellaneous Manufacturing	3,310	3,271	-39	-1.18%
339100	Medical Equipment and Supplies Manufacturing	1,624	1,625	1	0.06%
339900	Other Miscellaneous Manufacturing	1,686	1,646	-40	-2.37%
	3	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,		
102000	Services Providing	1,016,540	1,042,786	26,246	2.58%
	,	, , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	-, -	
102100	TRADE, TRANSPORTATION, AND UTILITIES	248,588	252,093	3,505	1.41%
	,	,	ĺ	,	
420000	Wholesale Trade	46,567	47,166	599	1.29%
423000	Merchant Wholesalers, Durable Goods	20,280	20,276	-4	-0.02%
423100	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	2,624	2,661	37	1.41%
423200	Furniture and Home Furnishing Merchant Wholesalers	471	509	38	8.07%
423300	Lumber and Other Construction Materials Merchant Wholesalers	1,417	1,454	37	2.61%
423400	Professional and Commercial Equipment and Supplies Merchant Wholesalers	2,369	2,417	48	2.03%
423500	Metal and Mineral (except Petroleum) Merchant Wholesalers	830	834	4	0.48%

	North American Industry Classification System	Emplo	yment	Cha	nge
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent
423600	Household Appliances & Electrical and Electronic Goods Merchant Wholesalers	2,036	2,118	82	4.03%
423700	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	2,289	2,307	18	0.79%
423800	Machinery, Equipment, and Supplies Merchant Wholesalers	6,497	6,292	-205	-3.16%
423900	Miscellaneous Durable Goods Merchant Wholesalers	1,747	1,684	-63	-3.61%
424000	Merchant Wholesalers, Nondurable Goods	14,517	14,491	-26	-0.18%
424100	Paper and Paper Product Merchant Wholesalers	1,164	1,150	-14	-1.20%
424200	Drugs and Druggists' Sundries Merchant Wholesalers	709	755	46	6.49%
424300	Apparel, Piece Goods, and Notions Merchant Wholesalers	642	660	18	2.80%
424400	Grocery and Related Product Wholesalers	4,374	4,462	88	2.01%
424500	Farm Product Raw Material Merchant Wholesalers	766	732	-34	-4.44%
424600	Chemical and Allied Products Merchant Wholesalers	625	620	-5	-0.80%
424700	Petroleum and Petroleum Products Merchant Wholesalers	1,228	1,141	-87	-7.08%
424800	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	1,593	1,633	40	2.51%
424900	Miscellaneous Nondurable Goods Merchant Wholesalers	3,416	3,338	-78	-2.28%
425000	Wholesale Electronic Markets and Agents and Brokers	11,770	12,399	629	5.34%
	•				
440000	Retail Trade	139,894	141,172	1,278	0.91%
441000	Motor Vehicle and Parts Dealers	19,362	19,867	505	2.61%
441100	Automobile Dealers	12,080	12,407	327	2.71%
441200	Other Motor Vehicle Dealers	1,602	1,717	115	7.18%
441300	Automotive Parts, Accessories, and Tire Stores	5,680	5,743	63	1.11%
442000	Furniture and Home Furnishings Stores	3,701	3,798	97	2.62%
442100	Furniture Stores	2,060	2,062	2	0.10%
442200	Home Furnishings Stores	1,641	1,736	95	5.79%
443000	Electronics and Appliance Stores	3,621	3,454	-167	-4.61%
444000	Building Material and Garden Equipment and Supplies Dealers	11,194	11,449	255	2.28%
444100	Building Material and Supplies Dealers	9,248	9,438	190	2.05%
444200	Lawn and Garden Equipment and Supplies Stores	1,946	2,011	65	3.34%
445000	Food and Beverage Stores	19,958	20,131	173	0.87%
445100	Grocery Stores	17,139	17,242	103	0.60%
445200	Specialty Food Stores	1,066	1,151	85	7.97%
445300	Beer, Wine, and Liquor Stores	1,753	1,738	-15	-0.86%
446000	Health and Personal Care Stores	8,671	9,128	457	5.27%
447000	Gasoline Stations	12,022	11,924	-98	-0.82%
448000	Clothing and Clothing Accessories Stores	8,546	8,442	-104	-1.22%
448100	Clothing Stores	6,578	6,542	-36	-0.55%
448200	Shoe Stores	1,219	1,166	-53	-4.35%

	North American Industry Classification System	Emplo	yment	Change		
Code	Title	2017	2019	Numeric	Percent	
		Estimated	Projected			
448300	Jewelry, Luggage, and Leather Goods Stores	749	734	-15	-2.00%	
451000	Sporting Goods, Hobby, Book, and Music Stores	4,526	4,546	20	0.44%	
451100	Sporting Goods, Hobby, and Musical Instrument Stores	4,003	4,030	27	0.67%	
451200	Book, Periodical, and Music Stores	523	516	-7	-1.34%	
452000	General Merchandise Stores	39,298	39,710	412	1.05%	
452100	Department Stores	7,805	7,375	-430	-5.51%	
452900	Other General Merchandise Stores	31,493	32,335	842	2.67%	
453000	Miscellaneous Store Retailers	7,069	6,843	-226	-3.20%	
453100	Florists	647	588	-59	-9.12%	
453200	Office Supplies, Stationery, and Gift Stores	1,656	1,455	-201	-12.14%	
453300	Used Merchandise Stores	2,133	2,126	-7	-0.33%	
453900	Other Miscellaneous Store Retailers	2,633	2,674	41	1.56%	
454000	Nonstore Retailers	1,926	1,880	-46	-2.39%	
454100	Electronic Shopping and Mail Order Houses	765	764	-1	-0.13%	
454200	Vending Machine Operators	460	453	-7	-1.52%	
454300	Direct Selling Establishments	701	663	-38	-5.42%	
480000	Transportation and Warehousing	54,480	56,130	1,650	3.03%	
481000	Air Transportation	677	728	51	7.53%	
481100	Scheduled Air Transportation	607	668	61	10.05%	
481200	Nonscheduled Air Transportation	70	60	-10	-14.29%	
483000	Water Transportation	20	21	1	5.00%	
484000	Truck Transportation	31,076	31,823	747	2.40%	
484100	General Freight Trucking	24,818	25,464	646	2.60%	
484200	Specialized Freight Trucking	6,258	6,359	101	1.61%	
485000	Transit and Ground Passenger Transportation	1,909	2,029	120	6.29%	
485300	Taxi and Limousine Service	409	420	11	2.69%	
485400	School and Employee Bus Transportation	405	384	-21	-5.19%	
485900	Other Transit and Ground Passenger Transportation	780	907	127	16.28%	
	Other	315	318	3	0.95%	
486000	Pipeline Transportation	424	374	-50	-11.79%	
487000	Scenic and Sightseeing Transportation	20	20	0	0.00%	
488000	Support Activities for Transportation	5,026	5,454	428	8.52%	
488100	Support Activities for Air Transportation	978	1,019	41	4.19%	
488200	Support Activities for Rail Transportation	614	874	260	42.35%	
488300	Support Activities for Water Transportation	677	702	25	3.69%	
700000	- Support to it title in trater transportation					

	North American Industry Classification System	Emplo	yment	Change		
Code	Title	2017	2019	Numeric	Percent	
		Estimated	Projected			
488500	Freight Transportation Arrangement	1,820	1,875	55	3.02%	
488900	Other Support Activities for Transportation	106	115	9	8.49%	
493000	Warehousing and Storage	8,479 6,849	8,652	173	2.04%	
	OTHER		7,029	180	2.63%	
220000	Utilities	7,647	7,625	-22	-0.29%	
221100	Electric Power Generation, Transmission and Distribution	5,663	5,647	-16	-0.28%	
221200	Natural Gas Distribution	1,065	1,029	-36	-3.38%	
221300	Water, Sewage and Other Systems	919	949	30	3.26%	
	, , ,					
102200	INFORMATION	13,352	13,472	120	0.90%	
511000	Publishing Industries (except Internet)	3,613	3,667	54	1.49%	
511100	Newspaper, Periodical, Book, and Directory Publishers	3,221	3,256	35	1.09%	
511200	Software Publishers	392	411	19	4.85%	
512000	Motion Picture and Sound Recording Industries	1,064	1,087	23	2.16%	
512100	Motion Picture and Video Industries	1,041	1,071	30	2.88%	
512200	Sound Recording Industries	23	16	-7	-30.43%	
515000	Broadcasting (except Internet)	1,626	1,640	14	0.86%	
515100	Radio and Television Broadcasting	1,601	1,615	14	0.87%	
515200	Cable and Other Subscription Programming	25	25	0	0.00%	
517000	Telecommunications	5,399	5,335	-64	-1.19%	
517100	Wired Telecommunications Carriers	3,542	3,586	44	1.24%	
517200	Wireless Telecommunications Carriers (except Satellite)	1,545	1,449	-96	-6.21%	
517900	Other Telecommunications	312	300	-12	-3.85%	
518000	Data Processing, Hosting and Related Services	1,380	1,481	101	7.32%	
519000	Other Information Services	270	262	-8	-2.96%	
102300	FINANCIAL ACTIVITIES	52,570	54,512	1,942	3.69%	
520000	Finance and Insurance	39,537	41,110	1,573	3.98%	
522000	Credit Intermediation and Related Activities	19,068	19,279	211	1.11%	
522100	Depository Credit Intermediation	16,132	16,208	76	0.47%	
522200	Nondepository Credit Intermediation	1,800	1,876	76	4.22%	
522300	Activities Related to Credit Intermediation	1,136	1,195	59	5.19%	
523000	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	3,086	3,192	106	3.43%	
523100	Securities and Commodity Contracts Intermediation and Brokerage	2,206	2,264	58	2.63%	

	North American Industry Classification System	Emplo	yment	Change		
Code	Title	2017	2019	Numeric	Percent	
		Estimated	Projected			
523900	Other Financial Investment Activities	880	928	48	5.45%	
524000	Insurance Carriers and Related Activities	17,286	18,543	1,257	7.27%	
524100	Insurance Carriers	9,505 7,781	10,795	1,290	13.57%	
524200	U , U ,		7,748	-33	-0.42%	
	Other	97	96	-1	-1.03%	
530000	Real Estate and Rental and Leasing	13,033	13,402	369	2.83%	
531000	Real Estate	9,018	9,285	267	2.96%	
531100	Lessors of Real Estate	4,037	4,131	94	2.33%	
531200	Offices of Real Estate Agents and Brokers	1,752	1,794	42	2.40%	
531300	Activities Related to Real Estate	3,229	3,360	131	4.06%	
532000	Rental and Leasing Services	3,969	4,088	119	3.00%	
532100	Automotive Equipment Rental and Leasing	996	1,135	139	13.96%	
532200	Consumer Goods Rental	1,840	1,811	-29	-1.58%	
532300	General Rental Centers	241	253	12	4.98%	
532400	Commercial and Industrial Machinery and Equipment Rental and Leasing		889	-3	-0.34%	
533000	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	46	29	-17	-36.96%	
102400	PROFESSIONAL AND BUSINESS SERVICES	142,809	147,827	5,018	3.51%	
540000	Professional, Scientific, and Technical Services	43,299	44,801	1,502	3.47%	
541000	Professional, Scientific, and Technical Services	43,299	44,801	1,502	3.47%	
541100	Legal Services	5,972	6,084	112	1.88%	
541200	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	6,802	7,043	241	3.54%	
541300	Architectural, Engineering, and Related Services	6,410	6,926	516	8.05%	
541400	Specialized Design Services	388	339	-49	-12.63%	
541500	Computer Systems Design and Related Services	9,707	9,768	61	0.63%	
541600	Management, Scientific, and Technical Consulting Services	5,800	6,118	318	5.48%	
541700	Scientific Research and Development Services	750	758	8	1.07%	
541800	Advertising, Public Relations, and Related Services	3,686	3,887	201	5.45%	
541900	Other Professional, Scientific, and Technical Services	3,784	3,878	94	2.48%	
	, ,	-, -				
550000	Management of Companies and Enterprises	35,989	37,128	1,139	3.16%	
		,	, ,	, , , ,		
560000	Administrative and Support and Waste Management and Remediation Services	63,521	65,898	2,377	3.74%	
561000	Administrative and Support Services	60,435	62,636	2,201	3.64%	
561100	Office Administrative Services	4,141	4,325	184	4.44%	

	North American Industry Classification System	Emplo	yment	Change		
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	
561200	Facilities Support Services	1,075	1,217	142	13.21%	
561300	Employment Services	26,508	27,167	659	2.49%	
561400	Business Support Services	7,903	8,277	374	4.73%	
561500	Travel Arrangement and Reservation Services	371	374	3	0.81%	
561600	Investigation and Security Services	4,810	4,980	170	3.53%	
561700	Services to Buildings and Dwellings	14,308	14,932	624	4.36%	
561900	Other Support Services	1,319	1,364	45	3.41%	
562000	Waste Management and Remediation Service	3,086	3,262	176	5.70%	
562100	Waste Collection	1,188	1,238	50	4.21%	
562200	Waste Treatment and Disposal	876	931	55	6.28%	
562900	Remediation and Other Waste Management Services	1,022	1,093	71	6.95%	
102500	EDUCATION AND HEALTH SERVICES	300,055	309,138	9,083	3.03%	
610000	Educational Services	115,145	116,888	1,743	1.51%	
611100	Elementary and Secondary Schools	77,617	78,689	1,072	1.38%	
611200	Junior Colleges	6,958	6,894	-64	-0.92%	
611300	Colleges, Universities, and Professional Schools	27,090	27,763	673	2.48%	
611400	Business Schools and Computer and Management Training	131	126	-5	-3.82%	
611500	Technical and Trade Schools	1,112	1,040	-72	-6.47%	
611600	Other Schools and Instruction	1,743	1,876	133	7.63%	
611700	Educational Support Services	494	500	6	1.21%	
620000	Health Care and Social Assistance	184,910	192,250	7,340	3.97%	
621000	Ambulatory Health Care Services	55,487	58,256	2,769	4.99%	
621100	Offices of Physicians	24,430	25,451	1,021	4.18%	
621200	Offices of Dentists	7,132	7,371	239	3.35%	
621300	Offices of Other Health Practitioners	8,562	9,209	647	7.56%	
621400	Outpatient Care Centers	4,974	5,358	384	7.72%	
621500	Medical and Diagnostic Laboratories	1,216	1,293	77	6.33%	
621600	Home Health Care Services	6,495	6,779	284	4.37%	
621900	Other Ambulatory Health Care Services	2,678	2,795	117	4.37%	
622000	Hospitals	58,319	60,282	1,963	3.37%	
622100	General Medical and Surgical Hospitals	51,927	53,630	1,703	3.28%	
622200	Psychiatric and Substance Abuse Hospitals	3,175	3,216	41	1.29%	
622300	Specialty (except Psychiatric and Substance Abuse) Hospitals	3,217	3,436	219	6.81%	

	North American Industry Classification System	Emplo	yment	Change		
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	
623000	Nursing and Residential Care Facilities	32,038	33,161	1,123	3.51%	
623100	Nursing Care Facilities (Skilled Nursing Facilities)	22,716	23,400	684	3.01%	
623200	Posidential Intellectual & Developmental Disability Mental Health & Substance Abuse		4,817	249	5.45%	
623300	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	3,975	4,153	178	4.48%	
623900	Other Residential Care Facilities	779	791	12	1.54%	
624000	Social Assistance	39,066	40,551	1,485	3.80%	
624100	Individual and Family Services	24,382	25,297	915	3.75%	
624200	Community Food and Housing, and Emergency and Other Relief Services	1,344	1,419	75	5.58%	
624300	Vocational Rehabilitation Services	3,147	3,224	77	2.45%	
624400	Child Day Care Services	10,193	10,611	418	4.10%	
102600	LEISURE AND HOSPITALITY	112,886	116,914	4,028	3.57%	
			10.110		4 = 20/	
710000	Arts, Entertainment, and Recreation	9,974	10,449	475	4.76%	
711000	Performing Arts, Spectator Sports, and Related Industries	2,799	2,867	68	2.43%	
711100	Performing Arts Companies	359	320	-39	-10.86%	
711200	Spectator Sports	1,714	1,761	47	2.74%	
711300	Promoters of Performing Arts, Sports, and Similar Events	619	673	54	8.72%	
711400	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	52	58	6	11.54%	
711500	Independent Artists, Writers, and Performers	55	55	0	0.00%	
712000	Museums, Historical Sites, and Similar Institutions	626	679	53	8.47%	
713000	Amusement, Gambling, and Recreation Industries	6,549	6,903	354	5.41%	
713100	Amusement Parks and Arcades	160	160	0	0.00%	
713900	Other Amusement and Recreation Industries	6,389	6,743	354	5.54%	
720000	Accommodation and Food Services	102,912	106,465	3,553	3.45%	
721000	Accommodation, including Hotels and Motels	10,885	11,107	222	2.04%	
721100	Traveler Accommodation	10,376	10,594	218	2.10%	
721200	RV (Recreational Vehicle) Parks and Recreational Camps	391	393	2	0.51%	
721300	Rooming and Boarding Houses	118	120	2	1.69%	
722000	Food Services and Drinking Places	92,027	95,358	3,331	3.62%	
722300	Special Food Services	4,310	4,658	348	8.07%	
722400	Drinking Places (Alcoholic Beverages)	992	971	-21	-2.12%	
722500	Restaurants and Other Eating Places	86,725	89,729	3,004	3.46%	
400700	OTHER OFRIVIORS (EVOERT COVERNMENT)	E4 000	F0 450	4 500	0.070/	
102700	OTHER SERVICES (EXCEPT GOVERNMENT)	51,869	53,459	1,590	3.07%	

	North American Industry Classification System			Change		
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	
811000	Repair and Maintenance	10,368	10,900	532	5.13%	
811100	Automotive Repair and Maintenance	6,504	6,888	384	5.90%	
811200	Electronic and Precision Equipment Repair and Maintenance	874	909	35	4.00%	
811300	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	2,441	2,573	132	5.41%	
811400	Personal and Household Goods Repair and Maintenance	549	530	-19	-3.46%	
812000	Personal and Laundry Services	7,811	7,781	-30	-0.38%	
812100	Personal Care Services	3,013	3,087	74	2.46%	
812200	Death Care Services	1,573	1,560	-13	-0.83%	
812300	Drycleaning and Laundry Services		2,168	-140	-6.07%	
812900	Other Personal Services		966	49	5.34%	
813000	Religious, Grantmaking, Civic, Professional, and Similar Organizations	30,082	31,395	1,313	4.36%	
813100	Religious Organizations	19,533	20,820	1,287	6.59%	
813200	Grantmaking and Giving Services	1,499	1,643	144	9.61%	
813300	Social Advocacy Organizations	3,666	3,674	8	0.22%	
813400	Civic and Social Organizations	1,144	1,136	-8	-0.70%	
813900	Business, Professional, Labor, Political, and Similar Organizations	4,240	4,122	-118	-2.78%	
814000	Private Households	3,608	3,383	-225	-6.24%	
102800	GOVERNMENT	94,411	95,371	960	1.02%	
910000	Total Federal Government Employment	20,369	20,347	-22	-0.11%	
491100	Postal Service	5,606	5,737	131	2.34%	
999100	Federal Government, Excluding Post Office	14,763	14,610	-153	-1.04%	
999200	State Government, Excluding Education and Hospitals	34,156	34,310	154	0.45%	
999300	0 Local Government, Excluding Education and Hospitals		40,714	828	2.08%	

Bureau of Labor Statistics rolls out new Separations methodology

To better measure occupational openings, the Bureau of Labor Statistics (BLS) has implemented a new Separations methodology. The Separations methodology was developed to better capture a more accurate picture of the workforce and give BLS the ability to differentiate between workers who are leaving the labor force entirely and those who are changing jobs and leaving an occupation.

Projections are utilized to predict what will happen in the future in regard to occupations, and help stakeholders determine what areas of the economy are expected to see growth and decline. Projections help higher education professionals, labor market analysts, and employers determine what occupations will have more openings than others to best train and prepare the workforce.

Workers once entered the labor force at a young age, working until retirement in the same occupation. New, younger workers would replace them once they retired. It's no secret the workforce has changed. From technology advancements and trends in the workforce, to policy updates and new standards in human resources, the U.S. labor force is vastly different.

These changes in the workforce have brought about the need for a new methodology.

Workers today are more likely to be transient and work in a number of occupations during their lifetime. The Separations methodology accounts for this workforce trend, capturing reasons workers leave an occupation other than retirement, such as changing careers, being promoted into management or completing a retraining program.

The Separations methodology incorporates past data, patterns and trends to generate employment projections. Projections from the past Replacements methodology should not be compared with projections created using the new Separations methodology. Past projections become outdated when actual employment catches up with them or new projections are released. These are no longer an accurate representation of the workforce.

Projections produced using the new Separations methodology will vary from the projections derived from the Replacements methodology. This is due to methodological, not conceptual, factors. To compare historical trends to current projections, a practitioner should use actual employment figures from the time period. When new projections are released, old projections become obsolete.

For more information about the new Separations methodology, please visit: www.bls.gov/emp/ep_separations.htm.

EXPLANATION OF OCCUPATIONAL PROJECTIONS DATA ARKANSAS-STATEWIDE 2017-2019

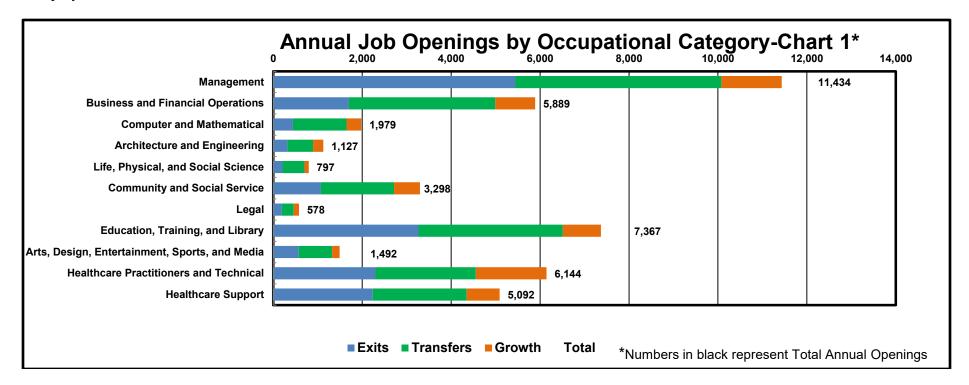
Standard O	ccupational Classification (SOC)	Emplo	yment	Cha	inge		Annual	Openings		Education/
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Training Codes
The occupational code based on the Standard Occupational Classification (SOC) Coding and Title Structure	The occupational title based on the Standard Occupational Classification (SOC) Coding and Title Structure	An estimate of the number of jobs in an occupation in 2017	The projected number of jobs expected to be in an occupation in 2019	Total number of jobs an occupation is expected to gain or lose over the 2017 to 2019 period	Percent change in the number of jobs in an occupation over the 2017 to 2019 period	Average number of annual job openings expected to be created during the projection period due to those leaving the workforce for four months or more	Average number of annual job openings expected to be created during the projection period due to those transferring to an occupation in a different SOC Major Group	Average number of annual job openings expected to be created during the projection period due to the gain or decline in an occupation	Average number of annual job openings expected to be created during the projection period due to employment growth and separations	Level of training needed by most workers to become fully qualified in the occupation according to the Bureau of Labor Statistics. See page 93 for definitions.

2017-2019 Arkansas Statewide Occupational Projections by Major Group

	Standard Occupational Classification (SOC)	Employment Change Annual Openings							
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total
00-0000	Total, All Occupations	1,380,666	1,413,430	32,764	2.37%	65,630	84,886	16,382	166,898
11-0000	Management Occupations	132,671	135,384	2,713	2.04%	5,446	4,632	1,356	11,434
13-0000	Business and Financial Operations Occupations	55,145	56,938	1,793	3.25%	1,700	3,293	896	5,889
15-0000	Computer and Mathematical Occupations	24,993	25,655	662	2.65%	440	1,208	331	1,979
17-0000	Architecture and Engineering Occupations	12,286	12,751	465	3.78%	317	578	232	1,127
19-0000	Life, Physical, and Social Science Occupations	7,631	7,825	194	2.54%	208	492	97	797
21-0000	Community and Social Service Occupations	24,774	25,942	1,168	4.71%	1,071	1,643	584	3,298
23-0000	Legal Occupations	7,583	7,817	234	3.09%	193	268	117	578
25-0000	Education, Training, and Library Occupations	78,683	80,393	1,710	2.17%	3,268	3,244	855	7,367
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	13,572	13,909	337	2.48%	572	752	168	1,492
29-0000	Healthcare Practitioners and Technical Occupations	83,406	86,585	3,179	3.81%	2,298	2,256	1,590	6,144
31-0000	Healthcare Support Occupations	38,094	39,578	1,484	3.90%	2,238	2,112	742	5,092
33-0000	Protective Service Occupations	26,447	26,924	477	1.80%	1,130	1,352	238	2,720
35-0000	Food Preparation and Serving Related Occupations	105,094	108,662	3,568	3.40%	7,841	9,938	1,784	19,563
37-0000	Building and Grounds Cleaning and Maintenance Occupations	45,300	46,766	1,466	3.24%	2,798	2,916	733	6,447
39-0000	Personal Care and Service Occupations	46,604	48,232	1,628	3.49%	3,618	3,176	814	7,608
41-0000	Sales and Related Occupations	136,065	138,058	1,993	1.46%	8,208	10,496	996	19,700
43-0000	Office and Administrative Support Occupations	185,930	188,584	2,654	1.43%	9,569	11,131	1,327	22,027
45-0000	Farming, Fishing, and Forestry Occupations	18,080	18,040	-40	-0.22%	664	1,950	-20	2,594
47-0000	Construction and Extraction Occupations	54,174	55,958	1,784	3.29%	1,937	3,657	892	6,486
49-0000	Installation, Maintenance, and Repair Occupations	56,188	57,837	1,649	2.93%	1,962	3,371	824	6,157
51-0000	Production Occupations	118,671	119,709	1,038	0.87%	4,898	8,702	519	14,119
53-0000	Transportation and Material Moving Occupations	109,275	111,883	2,608	2.39%	5,254	7,720	1,304	14,278

Occupational Outlook

The Arkansas labor market is expected to see a growth of 32,764 jobs over the 2017-2019 projection period, an increase of 2.37 percent, with many job opportunities for recent graduates and other job seekers. There is expected to be 166,898 total annual job openings during the projection period with 65,630 openings available due to employees exiting the workforce. Another 84,886 are estimated to be available due to employees changing jobs, while 16,382 would be due to the growth and decline of an occupation. All major occupational groups except one are estimated to see net gains in employment.



Management Occupations

The **Management Occupations** major group is projected to gain 2,713 jobs between 2017 and 2019, an increase of 2.04 percent. During the projection period, 11,434 job openings are expected to be available annually, of which 5,446 jobs are estimated to be due to exiting of the workforce, and 4,632 due to employees transferring to other occupational groups. Another 1,356 would be for growth and expansion. *Other Management Occupations* is predicted to add 1,533 new jobs and account for 65.3 percent of the total annual openings among **Management Occupations**. Farmers, Ranchers, and Other Agricultural Managers is estimated to be the top growing occupation in the major group and seventh statewide, adding 642 jobs to the labor market, but they are also the top occupation statewide for the most annual exits expected with 3,642, almost 75 percent of its

total annual openings. *Top Executives* is predicted to add 613 to its workforce, while *Operations Specialties Managers* could experience a net gain of 397 jobs. General and Operations Managers is predicted to add an additional 591 jobs. No major declines are expected from this major group.

Business and Financial Operations

The **Business and Financial Operations Occupations** major group is estimated to gain 1,793 new jobs by the first quarter of 2019, an increase of 3.25 percent. Around 5,889 job openings are projected to be available in the 2017-2019 projection period. The number of annual exits is expected to be 1,700, while the number of transfers is predicted to be 3,293. Growth and expansion could add 896 jobs annually. *Business Operations Specialists* is projected to gain the most jobs with 1,185 on the horizon, accounting for nearly 66.1 percent of the job growth in this major group, while *Financial Specialists* is predicted to gain an additional 608. Accountants and Auditors are predicted to be the top occupation in the major group adding 267 jobs to its workforce. Insurance Underwriters makes the top 10 of the Top 20 Fastest Growing Occupations by Percent Change list with an anticipated 9.17 percent increase. Labor Relations Specialists is expected to lose the most jobs in the major group with a decline of 13 jobs, or 1.78 percent of its workforce.

Computer and Mathematical

The Computer and Mathematical Occupations major group is projected to add 662 new jobs and have 1,979 annual job openings. It is projected to have 440 annual exits and 1,208 annual transfers. Growth and expansion is estimated to account for 331 annual openings. The majority of this major group's growth is likely to be in *Computer Occupations* with a gain of 614 new jobs and 1,907 annual openings. Two occupations in this group are estimated to grow by at least 100 jobs with Computer User Support Specialists adding 103 and Software Developers, Applications increasing by 120. One downside is among Computer Programmers, which is predicted to lose 35 jobs during the projection period. The *Mathematical Science Occupations* occupational family is expected to add 48 new jobs to the labor market. Actuaries is expected to be the second fastest growing occupation in the state adding 9 jobs, or 15.79 percent increase.

Architecture and Engineering

The **Architecture and Engineering Occupations** major group is expected to experience a growth of 465 jobs, a 3.78 percent increase between 2017 and 2019. The major group is expected to have 1,127 annual job openings, of which 317 would be from those exiting the workforce, 578 from those transferring to other occupations, and 232 from growth and expansion. A little more than half of the growth is expected to occur in the *Engineers* occupational family with 238 new jobs, a 3.31 percent increase. Civil Engineers is predicted to lead occupations in this major group with 79 new jobs. Architectural and Civil Drafters leads the major group in percent change with a 7.88 percent growth and places in the Top 20 Fastest Growing Occupations list. Two other occupations in the major group also made the list.

Life, Physical, and Social Science

Life, Physical, and Social Science Occupations is projected to have 194 new jobs during the projection period, the smallest growth in the state. Of the 797 total annual openings, 208 would be created from those exiting the workforce, 492 from those transferring jobs, and 97 due to growth and expansion. *Life, Physical, and Social Science Technicians* is estimated to add 74 to its workforce, while *Life Scientists* and *Physical Scientists* are forecast to add 43 jobs each. Environmental Scientists and Specialists, Including Health is slated to add the most jobs with 28 on the horizon, while Survey Researchers could be the fastest growing in the major group increasing by 10.34 percent.

Community and Social Service

The Community and Social Service Occupations major group is expected to gain 1,168 jobs by the first quarter of 2019. Around 3,298 annual job openings are projected to be available with 584 for growth and expansion, 1,071 for exits, and 1,643 for occupational transfers. *Religious Workers* is forecast to gain 713 new jobs with Clergy claiming 615. *Counselors, Social Workers, and Other Community and Social Service Specialists* is predicted to add an additional 455 jobs. Social and Human Service Assistants is predicted to add 109 jobs, while six other occupations in this occupational group are predicted to add at least 38.

Legal

The **Legal Occupations** major group is projected to gain 234 jobs during the projection period. This occupational group is expected to have the fewest annual openings with 578 anticipated with 117 for growth and expansion, 193 for those exiting the labor market, and 268 for those transferring to other occupational groups. *Lawyers, Judges, and Related Workers* is set for an anticipated growth of 129 jobs with 120 coming among Lawyers. *Legal Support Workers* is estimated to add 105 new jobs with Paralegals and Legal Assistants adding 66 of those. The one downside is expected to be in Arbitrators, Mediators, and Conciliators losing 5.66 percent of its workforce.

Education, Training, and Library

The **Education, Training, and Library Occupations** major group is forecast to add 1,710 jobs and have 7,367 annual openings each year of the projection period. Of these, 3,268 could come from employees leaving the workforce, and 3,244 coming from those transferring to other occupational groups. About 855 annual openings are due to growth and expansion. *Preschool, Primary, Secondary, and Special Education School Teachers* is set to add 818 jobs to the Arkansas workforce and have 3,344 annual openings. Elementary School Teachers, Except Special Education leads all occupations in the major group with 245 new jobs. Teacher Assistants is slated to increase employment by 233. Museum Technicians and Conservators is estimated to increase by 6.49 percent. In all, six occupations are expected to add at least 116 new jobs between 2017 and 2019. One downside is Vocational Education Teachers, Postsecondary, which is projected to lose 42 jobs, or 3.54 percent.

Arts, Design, Entertainment, Sports, and Media

The Arts, Design, Entertainment, Sports, and Media Occupations major group is expected to add 337 jobs between 2017 and 2019. Around 1,492 jobs are projected to be available each year during the projection period. Of these, 572 will be due to employees leaving the workforce, 752 for those who transferred to other occupational groups, and 168 for growth and expansion. The *Entertainers and Performers, Sports and Related Workers* family could add the most jobs with 175 on the horizon. Coaches and Scouts leads with 72 new jobs. Film and Video Editors could be the fastest growing occupation in the major group increasing employment by 6.19 percent. On the negative side of the labor market, Floral Designers is estimated to lose 17 jobs, or 4.47 percent of its workforce.

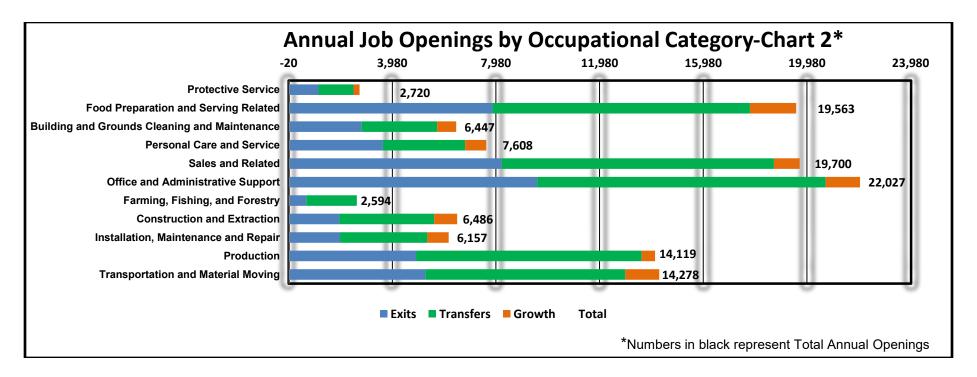
Healthcare Practitioners and Technical

The **Healthcare Practitioners and Technical Occupations** major group is projected to add 3,179 jobs between 2017 and 2019. It is expected to have 6,144 job openings each year, 2,298 of which would be from those leaving the workforce, 2,256 from those transferring to other occupational groups, and 1,590 due to growth and expansion. *Health Diagnosing and Treating Practitioners* is expected to have the most new jobs with 2,050 on the horizon. Registered Nurses is estimated to add 1,001 new jobs and have 1,794 annual openings, placing it second in the Top 20 Growing Occupations list. At 7.94 percent, Physician Assistants makes the Top 10 of the Top 20 Fastest Growing Occupations list. In all, nine occupations in the occupational family are expecting at least 50 new jobs. *Health Technologists and Technicians* is projected to increase by an additional 1,085 jobs

with Licensed Practical and Licensed Vocational Nurses adding 322 and Pharmacy Technicians adding 206. One downside is in Respiratory Therapy Technicians, which could lose 9.07 percent of its workforce.

Healthcare Support Occupations

Healthcare Support Occupations is expected to increase employment by 3.90 percent, equivalent to 1,484 new jobs and 5,092 annual job openings between 2017 and 2019. Of these annual openings, 2,238 is expected to come from employees leaving the workforce, while 2,112 would come from those transferring to other occupational groups. Another 742 openings are estimated to be available due to growth and expansion. The occupational family *Nursing, Psychiatric, and Home Health Aides* is estimated to gain the most new jobs with 937 on the horizon. Nursing Assistants is estimated to lead the major group in net change with a growth of 619, placing it among the Top 10 of the Top 20 Growing Occupations list. Occupational Therapy Assistants could be the fastest growing occupation in the major group, increasing by 7.09 percent. *Other Healthcare Support Occupations* could add 430 new jobs to its workforce. Medical Assistants leads this occupational family with 190 new jobs anticipated.



Protective Service

The **Protective Service Occupations** major group is expected to add 477 new jobs to the Arkansas job market. This major group is predicted to have 2,720 annual job openings with about 1,130 due to those exiting the workforce, 1,352 related to transferring to a new occupational group, and 238 due to growth and expansion. *Other Protective Service Workers* is estimated to lead the major group with 239 new jobs. Security Guards is

forecast to add 196 jobs, a gain of 2.99 percent. *Law Enforcement Workers* is forecast to add 98 new jobs with Police and Sheriff's Patrol Officers adding 142. However, Correctional Officers and Jailers could see a drop in employment with 53 job losses.

Food Preparation and Serving Related

Food Preparation and Serving Related Occupations is expected to increase employment over the next two years adding 3,568 jobs to the Arkansas labor market, an increase of 3.40 percent, making it the top growing occupational major group in the state. It is projected to have 19,563 annual job openings with 7,841 of those created from those leaving the workforce, 9,938 from those transferring to other occupational groups, and 1,784 for growth and expansion. Food and Beverage Serving Workers is projected to have 2,164 new jobs and 11,392 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 1,460 new jobs. The occupation is also ranked third in the state for occupations where employees are most likely to exit the workforce or transfer to other occupational groups with about 5,700 job openings due to exits or transfers. In all, six occupations are estimated to add more than 175 jobs. The Cooks and Food Preparation Workers occupational family is slated to add 854 new jobs.

Building and Grounds Cleaning and Maintenance

The **Building and Grounds Cleaning and Maintenance Occupations** major group is projected to add 1,466 jobs by the first quarter of 2019 as well as having 6,447 annual openings. Of these, 2,798 could come from those exiting the workforce, 2,916 from those who transfer to other occupational groups and 733 due to growth and expansion. *Building Cleaning and Pest Control Workers* is predicted to see 970 new jobs, 66.2 percent of this major group's job growth. Janitors and Cleaners, Except Maids and Housekeeping Cleaners is estimated to gain 758 of those jobs, placing the occupation among the Top 5 of the Top 20 Growing Occupations list. *Grounds Maintenance Workers* is also forecast to see strong growth with a gain of 328 jobs. Landscaping and Groundskeeping Workers will likely claim the majority of those jobs with 301 on the horizon and be the fastest growing occupation in the major group with a 4.06 percent rise in employment.

Personal Care and Service

The **Personal Care and Service Occupations** major group is projected to increase employment by 1,628, an increase of 3.49 percent. Around 7,608 annual openings are forecast for this major group with 3,618 created from those leaving the workforce, 3,176 from those transferring to other occupational groups, and 814 for growth and expansion. The *Other Personal Care and Service Workers* occupational family could account for 77.8 percent of the new jobs in this major group with 1,266 expected. Personal Care Aides could add 738 new jobs to its workforce, placing it fifth in net growth, while Childcare Workers is predicted to add 405 to its workforce. Fitness Trainers and Aerobics Instructors is slated to be the fastest growing occupation in the major group, increasing by 5.25 percent.

Sales and Related

Sales and Related Occupations is expected to experience a gain of 1,993 new jobs by March 2019 and have 19,700 annual openings during the projection period, the second most among the major groups. Of these, 8,208 are estimated to be available due to employees leaving the workforce, and 10,496 due to employees transferring to other occupations. In addition, about 996 openings are expected to be available due to growth and expansion. The *Retail Sales Workers* occupational family is predicted to add 516 to the Arkansas job market. Retail Salespersons is predicted to add the majority of those jobs with a forecasted growth of 309. Cashiers are estimated to transfer in and out of jobs the most, creating 3,104 annual job

openings from transfers alone, and second among those leaving the workforce for four months or more, creating another 3,180 annual job openings. All five occupational families in the Sales and Related Occupations major group are anticipating at least 250 new jobs.

Office and Administrative Support

The **Office and Administrative Support Occupations** major group is predicted to add 2,654 new jobs and have 22,027 annual openings, the most among the major groups. Of the total annual openings, 9,569 would be created due to employees leaving the workforce, 11,131 from those transferring to other occupational groups, and 1,327 for growth and expansion. The *Information and Record Clerks* family is projected to add 827 new jobs. Customer Service Representatives is projected to add 379 jobs to the economy, while Receptionists and Information Clerks is set to have 183 new jobs. The two occupations are predicted to have more than 1,000 job openings annually each. *Material Recording, Scheduling, Dispatching, and Distributing Workers* could see a growth of 582, while *Other Office and Administrative Support Workers* is slated to add 557. Insurance Claims and Policy Processing Clerks is estimated to add 288 jobs, and increase of 10.71 percent, making it the fastest growing occupation in the major group and third fastest statewide. Office Clerks, General is expected to lead all occupations in the major group in the number of annual openings with 3,474.

Farming, Fishing, and Forestry

The **Farming, Fishing, and Forestry Occupations** major group is projected to be the only major group to experience a net loss of jobs during the 2017-2019 projections period. However, job opportunities are expected to be available with 2,594 job openings annually. Of these, 664 could be created from those leaving the workforce and 1,950 from those transferring to other occupational groups. The general decline in this occupational group could set the annual job opening back by about 20 jobs annually. The outlook in this major group is mixed as the biggest gain in jobs could come in Farmworkers, Farm, Ranch, and Aquacultural Animals with an increase of 85 new jobs. This will likely be offset by a loss in Farmworkers and Laborers, Crop, Nursery, and Greenhouse with a loss of 132 jobs.

Construction and Extraction

The Construction and Extraction Occupations major group is expected to experience a net gain of 1,784 jobs by March 2019. The major group is estimated to have 1,937 annual openings created from employees leaving the workforce, 3,657 created from employees transferring to other occupational groups, and 892 due to growth and expansion. The outlook for this major group is mixed with many occupations making it on at least one of the Top 20 lists. The *Construction Trades Workers* occupational family is estimated to experience a net gain of 1,491 jobs, about 83.6 percent of the total net growth in the major group. Four occupations are slated to grow by more than 200 jobs with Electricians adding 330, making the Top 20 Growing Occupations list. Insulation Workers, Mechanical is set to be the fastest growing occupation in the major group and ninth overall statewide with an 8.19 percent gain. On the negative side of the economy, Service Unit Operators, Oil, Gas, and Mining and Roustabouts, Oil and Gas are included in the Top 20 Declining Occupations list with an estimated decline of 36 and 30 jobs, respectively. These two occupations also made the Top 10 of the Top 20 Fastest Declining occupations. The top two fastest declining occupations in the state are also in the Construction and Extraction major group. The fastest declining occupation in the state is slated to be Helpers--Extraction Workers with a 13.73 percent decline followed by Derrick Operators, Oil and Gas with a 13.41 percent loss.

Installation, Maintenance, and Repair

The **Installation**, **Maintenance**, and **Repair Occupations** major group is projected to gain 1,649 jobs over the next two years. About 6,157 job openings are forecast to be available each year during the projection period with 1,962 due to employees leaving the workforce and 3,371 due to employees changing jobs. Growth and expansion is estimated to account for 824 annual job openings. The *Other Installation*, *Maintenance*, and *Repair Occupations* family is predicted to see the most growth with an increase of 909 jobs. Maintenance and Repair Workers, General is projected to add 367 new jobs to its workforce, while Heating, Air Conditioning, and Refrigeration Mechanics and Installers is predicted to add 213 jobs. The *Vehicle and Mobile Equipment Mechanics*, *Installers*, and *Repairers* family is expected to add an additional 541 jobs to the Arkansas labor market. Rail Car Repairers is anticipated to be the fastest growing occupation in the state as a strong growth in railcar-related jobs is forecast to come to the state or has come already.

Production Occupations

The **Production Occupations** major group is predicted to experience a net gain of 1,038 jobs during the projection period. Its 0.87 percent increase is the slowest among growing occupational major groups. Of the 14,119 annual job openings, 4,898 job openings are estimated to be created from those leaving the workforce, 8,702 created from employees transferring to other occupational groups and 519 due to 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 716 jobs. Meat, Poultry, and Fish Cutters and Trimmers leads all occupations in net growth with a gain of 310 new jobs. The *Other Production Occupations* occupational family is slated to add 697 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. Textile Knitting and Weaving Machine Setters, Operators, and Tenders is estimated to increase employment by 9.41 percent, while Fiberglass Laminators and Fabricators is forecast to raise staff by 9.29 percent. On the negative side of the economy, *Assemblers and Fabricators* is projected to lose 289 jobs. Team Assemblers could experience a loss of 137 of those jobs, becoming the top declining occupation in Arkansas. In all, half of the Top 20 Declining Occupations list and eleven of the Top 20 Fastest Declining Occupations are in the **Production Occupations** major group. Coil Winders, Tapers, and Finishers is expected to be the fastest declining occupation in the major group with a loss of 10.80 percent.

Transportation and Material Moving

The **Transportation and Material Moving Occupations** major group is projected to gain 2,608 employees by the first quarter of 2019. Around 14,278 jobs are expected to be available each year of the projection period, of which 5,254 would be created from those leaving the workforce, 7,720 created from those changing jobs, and 1,304 due to growth and expansion. *Motor Vehicle Operators* is expected to experience a net gain of 1,251 jobs during the projection period. Heavy and Tractor-Trailer Truck Drivers drives the growth in the occupational family gaining 854 new jobs and have more than 63 percent of the total annual job openings in the group, placing third in the state for net change. *Material Moving Workers* is projected to add 1,114 new jobs with Laborers and Freight, Stock, and Material Movers, Hand predicted to gain 644, placing among the Top 10 on the Top 20 Growing Occupations list. One downside is predicted for Wellhead Pumpers with a 12.10 percent decline, which would place it among the five fastest declining occupations in the state.

Top 20 Growing Occupations by Numeric Change

	Standard Occupational Classification (SOC)	Emplo	yment	Cha	nge		Annual	Openings	
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	30,737	32,197	1,460	4.75%	2,786	2,914	730	6,430
29-1141	Registered Nurses	25,182	26,183	1,001	3.98%	736	558	500	1,794
53-3032	Heavy and Tractor-Trailer Truck Drivers	35,258	36,112	854	2.42%	1,513	2,242	427	4,182
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	19,690	20,448	758	3.85%	1,306	1,262	379	2,947
39-9021	Personal Care Aides	17,248	17,986	738	4.28%	1,406	1,059	369	2,834
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	24,214	24,858	644	2.66%	1,216	2,098	322	3,636
11-9013	Farmers, Ranchers, and Other Agricultural Managers	61,973	62,615	642	1.04%	3,642	925	321	4,888
31-1014	Nursing Assistants	18,593	19,212	619	3.33%	1,148	956	310	2,414
21-2011	Clergy	8,582	9,197	615	7.17%	408	546	308	1,262
11-1021	General and Operations Managers	21,142	21,733	591	2.80%	444	1,278	296	2,018
35-3031	Waiters and Waitresses	19,053	19,612	559	2.93%	1,431	2,192	280	3,903
35-2014	Cooks, Restaurant	10,131	10,540	409	4.04%	606	827	204	1,637
39-9011	Childcare Workers	12,788	13,193	405	3.17%	1,060	804	202	2,066
43-4051	Customer Service Representatives	17,045	17,424	379	2.22%	881	1,293	190	2,364
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	14,661	15,036	375	2.56%	490	994	188	1,672
49-9071	Maintenance and Repair Workers, General	12,620	12,987	367	2.91%	522	712	184	1,418
51-9198	HelpersProduction Workers	9,431	9,796	365	3.87%	516	916	182	1,614
47-2111	Electricians	6,162	6,492	330	5.36%	220	470	165	855
29-2061	Licensed Practical and Licensed Vocational Nurses	12,854	13,176	322	2.51%	459	452	161	1,072
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	9,601	9,921	320	3.33%	438	932	160	1,530

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

	Standard Occupational Classification (SOC)	Emplo	yment	Cha	nge		Annual C	penings	
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total
49-3043	Rail Car Repairers	357	448	91	25.49%	12	26	46	84
15-2011	Actuaries	57	66	9	15.79%	1	3	4	8
43-9041	Insurance Claims and Policy Processing Clerks	2,688	2,976	288	10.71%	121	159	144	424
19-3022	Survey Researchers	58	64	6	10.34%	2	4	3	9
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	389	426	37	9.51%	18	24	18	60
51-6063	Textile Knitting and Weaving Machine Setters, Operators, and Tenders	170	186	16	9.41%	10	12	8	30
51-2091	Fiberglass Laminators and Fabricators	409	447	38	9.29%	18	31	19	68
13-2053	Insurance Underwriters	589	643	54	9.17%	16	33	27	76
47-2132	Insulation Workers, Mechanical	171	185	14	8.19%	5	14	7	26
29-1071	Physician Assistants	617	666	49	7.94%	11	22	24	57
17-3011	Architectural and Civil Drafters	520	561	41	7.88%	16	29	20	65
53-7041	Hoist and Winch Operators	89	96	7	7.87%	4	8	4	16
17-3012	Electrical and Electronics Drafters	150	161	11	7.33%	4	8	6	18
29-1171	Nurse Practitioners	1,719	1,844	125	7.27%	34	51	62	147
21-2011	Clergy	8,582	9,197	615	7.17%	408	546	308	1,262
17-1022	Surveyors	618	662	44	7.12%	18	26	22	66
47-3015	HelpersPipelayers, Plumbers, Pipefitters, and Steamfitters	450	482	32	7.11%	20	45	16	81
31-2011	Occupational Therapy Assistants	296	317	21	7.09%	16	22	10	48
31-2021	Physical Therapist Assistants	1,111	1,187	76	6.84%	50	84	38	172
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	3,144	3,357	213	6.77%	90	218	106	414

Top 20 Occupations by Annual Exits

	Standard Occupational Classification (SOC)	Emplo	yment	Cha	nge		Annual C	penings	
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total
11-9013	Farmers, Ranchers, and Other Agricultural Managers	61,973	62,615	642	1.04%	3,642	925	321	4,888
41-2011	Cashiers	33,839	33,901	62	0.18%	3,180	3,104	31	6,315
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	30,737	32,197	1,460	4.75%	2,786	2,914	730	6,430
41-2031	Retail Salespersons	37,585	37,894	309	0.82%	2,390	2,995	154	5,539
43-9061	Office Clerks, General	28,637	28,917	280	0.98%	1,688	1,646	140	3,474
53-3032	Heavy and Tractor-Trailer Truck Drivers	35,258	36,112	854	2.42%	1,513	2,242	427	4,182
35-3031	Waiters and Waitresses	19,053	19,612	559	2.93%	1,431	2,192	280	3,903
39-9021	Personal Care Aides	17,248	17,986	738	4.28%	1,406	1,059	369	2,834
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	19,690	20,448	758	3.85%	1,306	1,262	379	2,947
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	24,214	24,858	644	2.66%	1,216	2,098	322	3,636
31-1014	Nursing Assistants	18,593	19,212	619	3.33%	1,148	956	310	2,414
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	20,942	20,967	25	0.12%	1,129	1,098	12	2,239
39-9011	Childcare Workers	12,788	13,193	405	3.17%	1,060	804	202	2,066
43-5081	Stock Clerks and Order Fillers	17,551	17,793	242	1.38%	965	1,259	121	2,345
43-4051	Customer Service Representatives	17,045	17,424	379	2.22%	881	1,293	190	2,364
43-3031	Bookkeeping, Accounting, and Auditing Clerks	13,628	13,784	156	1.14%	848	658	78	1,584
37-2012	Maids and Housekeeping Cleaners	11,044	11,210	166	1.50%	824	622	83	1,529
29-1141	Registered Nurses	25,182	26,183	1,001	3.98%	736	558	500	1,794
35-2014	Cooks, Restaurant	10,131	10,540	409	4.04%	606	827	204	1,637
25-9041	Teacher Assistants	10,799	11,032	233	2.16%	599	498	116	1,213

Top 20 Occupations by Annual Transfers

	Standard Occupational Classification (SOC)	Emplo	yment	Cha	nge		Annual C	penings	
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total
41-2011	Cashiers	33,839	33,901	62	0.18%	3,180	3,104	31	6,315
41-2031	Retail Salespersons	37,585	37,894	309	0.82%	2,390	2,995	154	5,539
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	30,737	32,197	1,460	4.75%	2,786	2,914	730	6,430
53-3032	Heavy and Tractor-Trailer Truck Drivers	35,258	36,112	854	2.42%	1,513	2,242	427	4,182
35-3031	Waiters and Waitresses	19,053	19,612	559	2.93%	1,431	2,192	280	3,903
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	24,214	24,858	644	2.66%	1,216	2,098	322	3,636
43-9061	Office Clerks, General	28,637	28,917	280	0.98%	1,688	1,646	140	3,474
43-4051	Customer Service Representatives	17,045	17,424	379	2.22%	881	1,293	190	2,364
11-1021	General and Operations Managers	21,142	21,733	591	2.80%	444	1,278	296	2,018
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	19,690	20,448	758	3.85%	1,306	1,262	379	2,947
43-5081	Stock Clerks and Order Fillers	17,551	17,793	242	1.38%	965	1,259	121	2,345
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	20,942	20,967	25	0.12%	1,129	1,098	12	2,239
41-1011	First-Line Supervisors of Retail Sales Workers	16,109	16,323	214	1.33%	598	1,091	107	1,796
39-9021	Personal Care Aides	17,248	17,986	738	4.28%	1,406	1,059	369	2,834
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	14,661	15,036	375	2.56%	490	994	188	1,672
31-1014	Nursing Assistants	18,593	19,212	619	3.33%	1,148	956	310	2,414
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	9,601	9,921	320	3.33%	438	932	160	1,530
11-9013	Farmers, Ranchers, and Other Agricultural Managers	61,973	62,615	642	1.04%	3,642	925	321	4,888
51-9198	HelpersProduction Workers	9,431	9,796	365	3.87%	516	916	182	1,614
51-2092	Team Assemblers	12,596	12,459	-137	-1.09%	535	908	-68	1,375

Top 20 Occupations by Total Annual Openings

	Standard Occupational Classification (SOC)	Employ	yment	Cha	nge		Annual C	penings	
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	30,737	32,197	1,460	4.75%	2,786	2,914	730	6,430
41-2011	Cashiers	33,839	33,901	62	0.18%	3,180	3,104	31	6,315
41-2031	Retail Salespersons	37,585	37,894	309	0.82%	2,390	2,995	154	5,539
11-9013	Farmers, Ranchers, and Other Agricultural Managers	61,973	62,615	642	1.04%	3,642	925	321	4,888
53-3032	Heavy and Tractor-Trailer Truck Drivers	35,258	36,112	854	2.42%	1,513	2,242	427	4,182
35-3031	Waiters and Waitresses	19,053	19,612	559	2.93%	1,431	2,192	280	3,903
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	24,214	24,858	644	2.66%	1,216	2,098	322	3,636
43-9061	Office Clerks, General	28,637	28,917	280	0.98%	1,688	1,646	140	3,474
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	19,690	20,448	758	3.85%	1,306	1,262	379	2,947
39-9021	Personal Care Aides	17,248	17,986	738	4.28%	1,406	1,059	369	2,834
31-1014	Nursing Assistants	18,593	19,212	619	3.33%	1,148	956	310	2,414
43-4051	Customer Service Representatives	17,045	17,424	379	2.22%	881	1,293	190	2,364
43-5081	Stock Clerks and Order Fillers	17,551	17,793	242	1.38%	965	1,259	121	2,345
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	20,942	20,967	25	0.12%	1,129	1,098	12	2,239
39-9011	Childcare Workers	12,788	13,193	405	3.17%	1,060	804	202	2,066
11-1021	General and Operations Managers	21,142	21,733	591	2.80%	444	1,278	296	2,018
41-1011	First-Line Supervisors of Retail Sales Workers	16,109	16,323	214	1.33%	598	1,091	107	1,796
29-1141	Registered Nurses	25,182	26,183	1,001	3.98%	736	558	500	1,794
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	14,661	15,036	375	2.56%	490	994	188	1,672
35-2014	Cooks, Restaurant	10,131	10,540	409	4.04%	606	827	204	1,637

Top 20 Declining Occupations by Numeric Change

	Standard Occupational Classification (SOC)	Emplo	yment	Cha	nge		Annual C	Openings	
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total
51-2092	Team Assemblers	12,596	12,459	-137	-1.09%	535	908	-68	1,375
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	6,870	6,738	-132	-1.92%	249	776	-66	959
51-2022	Electrical and Electronic Equipment Assemblers	1,097	1,006	-91	-8.30%	54	68	-46	76
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,640	1,577	-63	-3.84%	60	112	-32	140
51-7011	Cabinetmakers and Bench Carpenters	1,573	1,515	-58	-3.69%	72	86	-29	129
43-6011	Executive Secretaries and Executive Administrative Assistants	4,176	4,121	-55	-1.32%	224	218	-28	414
51-2021	Coil Winders, Tapers, and Finishers	500	446	-54	-10.80%	24	31	-27	28
33-3012	Correctional Officers and Jailers	5,344	5,291	-53	-0.99%	188	239	-26	401
43-3071	Tellers	6,137	6,089	-48	-0.78%	313	393	-24	682
25-1194	Vocational Education Teachers, Postsecondary	1,187	1,145	-42	-3.54%	42	44	-21	65
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	400	362	-38	-9.50%	16	24	-19	21
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	2,629	2,592	-37	-1.41%	94	198	-18	274
47-5013	Service Unit Operators, Oil, Gas, and Mining	382	346	-36	-9.42%	9	34	-18	25
15-1131	Computer Programmers	3,854	3,819	-35	-0.91%	67	171	-18	220
29-2054	Respiratory Therapy Technicians	375	341	-34	-9.07%	12	16	-17	11
43-9021	Data Entry Keyers	1,249	1,219	-30	-2.40%	64	80	-15	129
47-5071	Roustabouts, Oil and Gas	318	288	-30	-9.43%	10	26	-15	21
51-9196	Paper Goods Machine Setters, Operators, and Tenders	1,619	1,589	-30	-1.85%	58	104	-15	147
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	509	480	-29	-5.70%	17	34	-14	37
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers	605	577	-28	-4.63%	14	44	-14	44

Top 20 Fastest Declining Occupations by Percent Change (Numeric Change No Greater than - 5)

	Standard Occupational Classification (SOC)	Emplo	yment	Cha	nge		Annual O	penings	
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total
47-5081	HelpersExtraction Workers	51	44	-7	-13.73%	2	4	-4	2
47-5011	Derrick Operators, Oil and Gas	82	71	-11	-13.41%	2	7	-6	3
53-7073	Wellhead Pumpers	124	109	-15	-12.10%	4	10	-8	6
51-2021	Coil Winders, Tapers, and Finishers	500	446	-54	-10.80%	24	31	-27	28
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	400	362	-38	-9.50%	16	24	-19	21
47-5071	Roustabouts, Oil and Gas	318	288	-30	-9.43%	10	26	-15	21
47-5013	Service Unit Operators, Oil, Gas, and Mining	382	346	-36	-9.42%	9	34	-18	25
29-2054	Respiratory Therapy Technicians	375	341	-34	-9.07%	12	16	-17	11
51-2022	Electrical and Electronic Equipment Assemblers	1,097	1,006	-91	-8.30%	54	68	-46	76
51-6021	Pressers, Textile, Garment, and Related Materials	364	342	-22	-6.04%	21	23	-11	33
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	509	480	-29	-5.70%	17	34	-14	37
23-1022	Arbitrators, Mediators, and Conciliators	106	100	-6	-5.66%	2	2	-3	1
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	186	177	-9	-4.84%	4	14	-4	14
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers	605	577	-28	-4.63%	14	44	-14	44
27-1023	Floral Designers	380	363	-17	-4.47%	13	21	-8	26
51-4111	Tool and Die Makers	471	452	-19	-4.03%	18	25	-10	33
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,640	1,577	-63	-3.84%	60	112	-32	140
51-7011	Cabinetmakers and Bench Carpenters	1,573	1,515	-58	-3.69%	72	86	-29	129
51-9123	Painting, Coating, and Decorating Workers	139	134	-5	-3.60%	4	10	-2	12
25-1194	Vocational Education Teachers, Postsecondary	1,187	1,145	-42	-3.54%	42	44	-21	65

	Lo 10 / tilitarioao ota			<u> </u>	011001	<u>J</u>	001101	. •				50
Stand	dard Occupational Classification (SOC)	Emplo		Cha	ınge		Annual C	penings		Educat	ion/Training C	Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
00-000	TOTAL, ALL OCCUPATIONS	1,380,666	1,413,430	32,764	2.37%	65,630	84,886	16,382	166,898		,	
11-0000	MANAGEMENT OCCUPATIONS	132,671	135,384	2,713	2.04%	5,446	4,632	1,356	11,434			
11-1000	Top Executives	26,003	26,616	613	2.36%	583	1,480	306	2,369			
11-1011	Chief Executives	3,794	3,792	-2	-0.05%	110	156	-1	265	3	1	6
11-1021	General and Operations Managers	21,142	21,733	591	2.80%	444	1,278	296	2,018	3	1	6
11-1031	Legislators	1,067	1,091	24	2.25%	29	46	12	87	3	2	6
11-2000	Advertising, Marketing, Promotions, Public Relations, and Sales Managers	4,559	4,729	170	3.73%	106	282	85	473			
11-2011	Advertising and Promotions Managers	120	124	4	3.33%	3	9	2	14	3	2	6
11-2021	Marketing Managers	1,158	1,204	46	3.97%	27	72	23	122	3	1	6
11-2022	Sales Managers	2,880	2,985	105	3.65%	66	178	52	296	3	2	6
11-2031	Public Relations and Fundraising Managers	401	416	15	3.74%	9	24	8	41	3	1	6
11-3000	Operations Specialties Managers	12,369	12,766	397	3.21%	298	635	198	1,131			
11-3011	Administrative Services Managers	2,011	2,073	62	3.08%	61	100	31	192	3	2	6
11-3021	Computer and Information Systems Managers	2,089	2,148	59	2.82%	38	116	30	184	3	1	6
11-3031	Financial Managers	3,264	3,428	164	5.02%	77	166	82	325	3	1	6
11-3051	Industrial Production Managers	1,708	1,745	37	2.17%	40	79	18	137	3	1	6
11-3061	Purchasing Managers	541	551	10	1.85%	16	27	5	48	3	1	6
11-3071	Transportation, Storage, and Distribution Managers	1,292	1,326	34	2.63%	30	68	17	115	7	1	6
11-3111	Compensation and Benefits Managers	155	161	6	3.87%	4	8	3	15	3	1	6
11-3121	Human Resources Managers	1,005	1,023	18	1.79%	25	54	9	88	3	1	6
11-3131	Training and Development Managers	304	311	7	2.30%	8	18	4	30	3	1	6
11-9000	Other Management Occupations	89,740	91,273	1,533	1.71%	4,459	2,236	766	7,461			
11-9013	Farmers, Ranchers, and Other Agricultural Managers	61,973	62,615	642	1.04%	3,642	925	321	4,888	7	1	6
11-9021	Construction Managers	2,478	2,551	73	2.95%	58	112	36	206	3	3	4
11-9031	Education Administrators, Preschool and Childcare Center/Program	570	591	21	3.68%	16	26	10	52	3	2	6
11-9032	Education Administrators, Elementary and Secondary School	2,459	2,506	47	1.91%	70	113	24	207	2	1	6
11-9033	Education Administrators, Postsecondary	1,363	1,397	34	2.49%	38	63	17	118	2	2	6
11-9039	Education Administrators, All Other	219	221	2	0.91%	6	10	1	17	3	2	6
11-9041	Architectural and Engineering Managers	638	656	18	2.82%	13	31	9	53	3	1	6

Stand	dard Occupational Classification (SOC)	Emplo	yment	Cha	nge		Annual C	penings		Educa	tion/Training (Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
11-9051	Food Service Managers	2,037	2,111	74	3.63%	66	153	37	256	7	2	6
11-9061	Funeral Service Managers	388	397	9	2.32%	10	16	4	30	4	2	6
11-9081	Lodging Managers	360	370	10	2.78%	12	24	5	41	7	2	6
11-9111	Medical and Health Services Managers	3,986	4,171	185	4.64%	111	199	92	402	3	2	6
11-9121	Natural Sciences Managers	346	359	13	3.76%	8	20	6	34	3	1	6
11-9131	Postmasters and Mail Superintendents	215	216	1	0.47%	6	9	0	15	7	2	4
11-9141	Property, Real Estate, and Community Association Managers	2,898	2,975	77	2.66%	122	98	38	258	7	2	6
11-9151	Social and Community Service Managers	1,751	1,814	63	3.60%	58	93	32	183	3	2	6
11-9161	Emergency Management Directors	131	135	4	3.05%	5	5	2	12	3	1	6
11-9199	Managers, All Other	7,928	8,188	260	3.28%	218	338	130	686	3	2	6
13-0000	BUSINESS AND FINANCIAL OPERATIONS OCCUPATIONS	55,145	56,938	1,793	3.25%	1,700	3,293	896	5,889			
10.1000			00.470		0.100/		0.054	500				
13-1000	Business Operations Specialists	37,987	39,172	1,185	3.12%	1,186	2,354	592	4,132			
13-1021	Buyers and Purchasing Agents, Farm Products	120	119	-1	-0.83%	6	8	0	14	3	3	4
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	1,450	1,459	9	0.62%	43	80	4	127	3	3	4
13-1031	Claims Adjusters, Examiners, and Investigators	1,512	1,548	36	2.38%	38	85	18	141	7	3	3
13-1041	Compliance Officers	2,431	2,493	62	2.55%	69	124	31	224	3	3	4
13-1051	Cost Estimators	1,123	1,165	42	3.74%	36	74	21	131	3	3	4
13-1071	Human Resources Specialists	2,962	3,024	62	2.09%	87	196	31	314	3	3	6
13-1075	Labor Relations Specialists	731	718	-13	-1.78%	21	48	-6	63	3	2	6
13-1081	Logisticians	1,425	1,482	57	4.00%	36	102	28	166	3	3	6
13-1111	Management Analysts	4,479	4,661	182	4.06%	147	236	91	474	3	2	6
13-1121	Meeting, Convention, and Event Planners	671	692	21	3.13%	26	51	10	87	3	3	6
13-1131	Fundraisers	476	494	18	3.78%	15	32	9	56	3	3	6
13-1141	Compensation, Benefits, and Job Analysis Specialists	764	789	25	3.27%	20	42	12	74	3	2	6
13-1151	Training and Development Specialists	2,770	2,839	69	2.49%	86	180	34	300	3	2	6
13-1161	Market Research Analysts and Marketing Specialists	3,397	3,612	215	6.33%	93	240	108	441	3	3	6
13-1199	Business Operations Specialists, All Other	9,901	10,233	332	3.35%	316	581	166	1,063	3	3	6

Ctores	derd Occupational Classification (COC)									Educasi	tion/Training of	Sodoo
Stand	dard Occupational Classification (SOC)	Emplo 2017	yment 2019	Cna	inge I	-	Annual C	penings	I	Educa	tion/Training (
Code	Title	2017 Estimated	Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
13-2000	Financial Specialists	17,158	17,766	608	3.54%	514	938	304	1,756			
13-2011	Accountants and Auditors	7,840	8,107	267	3.41%	236	459	134	829	3	3	6
13-2021	Appraisers and Assessors of Real Estate	803	829	26	3.24%	28	24	13	65	3	3	3
13-2031	Budget Analysts	474	479	5	1.05%	13	22	2	37	3	3	6
13-2041	Credit Analysts	521	540	19	3.65%	12	30	10	52	3	3	6
13-2051	Financial Analysts	944	978	34	3.60%	19	60	17	96	3	3	6
13-2052	Personal Financial Advisors	1,185	1,244	59	4.98%	30	60	30	120	3	3	3
13-2053	Insurance Underwriters	589	643	54	9.17%	16	33	27	76	3	3	4
13-2061	Financial Examiners	194	197	3	1.55%	6	9	2	17	3	3	3
13-2071	Credit Counselors	129	131	2	1.55%	3	7	1	11	3	3	4
13-2072	Loan Officers	2,443	2,516	73	2.99%	60	138	36	234	3	3	4
13-2081	Tax Examiners and Collectors, and Revenue Agents	542	549	7	1.29%	16	21	4	41	3	3	4
13-2082	Tax Preparers	1,162	1,210	48	4.13%	64	58	24	146	7	3	4
13-2099	Financial Specialists, All Other	332	343	11	3.31%	10	18	6	34	3	3	4
15-0000	COMPUTER AND MATHEMATICAL OCCUPATIONS	24,993	25,655	662	2.65%	440	1,208	331	1,979			
15-1100	Computer Occupations	24,249	24,863	614	2.53%	424	1,176	307	1,907			
15-1121	Computer Systems Analysts	2,960	3,055	95	3.21%	55	134	48	237	3	3	6
15-1131	Computer Programmers	3,854	3,819	-35	-0.91%	67	171	-18	220	3	3	6
15-1132	Software Developers, Applications	2,247	2,367	120	5.34%	32	114	60	206	3	3	6
15-1133	Software Developers, Systems Software	1,022	1,030	8	0.78%	14	50	4	68	3	3	6
15-1134	Web Developers	812	844	32	3.94%	16	42	16	74	4	3	6
15-1141	Database Administrators	719	741	22	3.06%	16	30	11	57	3	3	6
15-1142	Network and Computer Systems Administrators	3,228	3,297	69	2.14%	46	154	34	234	3	3	6
15-1143	Computer Network Architects	1,487	1,529	42	2.82%	21	74	21	116	3	1	6
15-1151	Computer User Support Specialists	4,134	4,237	103	2.49%	85	216	52	353	6	3	6
15-1152	Computer Network Support Specialists	1,415	1,465	50	3.53%	30	74	25	129	4	3	6
15-1199	Computer Occupations, All Other	724	734	10	1.38%	14	34	5	53	3	3	6
15-2000	Mathematical Science Occupations	744	792	48	6.45%	16	33	24	73			
15-2011	Actuaries	57	66	9	15.79%	1	3	4	8	3	3	3
15-2031	Operations Research Analysts	439	465	26	5.92%	10	17	13	40	3	3	6
15-2041	Statisticians	240	253	13	5.42%	5	13	6	24	2	3	6

Stand	dard Occupational Classification (SOC)	Emplo		Cha	inge		Annual C)penings		Educa	tion/Training (Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
17-0000	ARCHITECTURE AND ENGINEERING OCCUPATIONS	12,286	12,751	465	3.78%	317	578	232	1,127			
17-1000	Architects, Surveyors, and Cartographers	1,575	1,671	96	6.10%	44	70	48	162			
17-1011	Architects, Except Landscape and Naval	752	794	42	5.59%	20	34	21	75	3	3	2
17-1012	Landscape Architects	136	144	8	5.88%	4	6	4	14	3	3	2
17-1021	Cartographers and Photogrammetrists	69	71	2	2.90%	2	3	1	6	3	3	6
17-1022	Surveyors	618	662	44	7.12%	18	26	22	66	3	3	2
17-2000	Engineers	7,187	7,425	238	3.31%	161	310	119	590			
17-2021	Agricultural Engineers	54	57	3	5.56%	2	2	2	6	3	3	6
17-2031	Biomedical Engineers	65	68	3	4.62%	2	3	2	7	3	3	6
17-2041	Chemical Engineers	132	137	5	3.79%	3	6	2	11	3	3	6
17-2051	Civil Engineers	1,461	1,540	79	5.41%	32	74	40	146	3	3	6
17-2061	Computer Hardware Engineers	191	194	3	1.57%	4	8	2	14	3	3	6
17-2071	Electrical Engineers	899	924	25	2.78%	20	36	12	68	3	3	6
17-2072	Electronics Engineers, Except Computer	349	360	11	3.15%	8	14	6	28	3	3	6
17-2081	Environmental Engineers	188	199	11	5.85%	4	8	6	18	3	3	6
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	203	208	5	2.46%	4	8	2	14	3	3	6
17-2112	Industrial Engineers	1,505	1,543	38	2.52%	34	62	19	115	3	3	6
17-2131	Materials Engineers	48	51	3	6.25%	2	2	2	6	3	3	6
17-2141	Mechanical Engineers	1,160	1,200	40	3.45%	24	49	20	93	3	3	6
17-2171	Petroleum Engineers	82	78	-4	-4.88%	2	4	-2	4	3	3	6
17-2199	Engineers, All Other	559	585	26	4.65%	13	23	13	49	3	3	6
17-3000	Drafters, Engineering Technicians, and Mapping Technicians	3,524	3,655	131	3.72%	112	198	66	376			
17-3011	Architectural and Civil Drafters	520	561	41	7.88%	16	29	20	65	4	3	6
17-3012	Electrical and Electronics Drafters	150	161	11	7.33%	4	8	6	18	4	3	
17-3013	Mechanical Drafters	244	256	12	4.92%	8	14	6	28	4	3	6
17-3019	Drafters, All Other	95	100	5	5.26%	3	6	2	11	4	3	6
17-3022	Civil Engineering Technicians	209	221	12	5.74%	7	12	6	25	4	3	6
17-3023	Electrical and Electronics Engineering Technicians	606	610	4	0.66%	20	32	2	54	4	3	6
17-3025	Environmental Engineering Technicians	192	198	6	3.13%	6	10	3	19	4	3	6
17-3026	Industrial Engineering Technicians	352	352	0	0.00%	11	18	0	29	4	3	6

Stand	dard Occupational Classification (SOC)		yment		inge	<u> </u>	Annual C	Inonings		Educat	ion/Training C	odos.
Starit	Jaru Occupational Classification (SOC)	2017	2019	CHa	nige I		Allitual C	periings		Euucai	Work	Job
Code	Title	Estimated	Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Experience	Training
17-3027	Mechanical Engineering Technicians	218	221	3	1.38%	7	12	2	21	4	3	6
17-3029	Engineering Technicians, Except Drafters, All Other	480	492	12	2.50%	16	26	6	48	4	3	6
17-3031	Surveying and Mapping Technicians	368	391	23	6.25%	12	27	12	51	7	3	4
19-0000	LIFE, PHYSICAL, AND SOCIAL SCIENCE OCCUPATIONS	7,631	7,825	194	2.54%	208	492	97	797			
19-1000	Life Scientists	2,255	2,298	43	1.91%	48	148	22	218			
19-1012	Food Scientists and Technologists	182	190	8	4.40%	5	14	4	23	3	3	6
19-1013	Soil and Plant Scientists	177	181	4	2.26%	5	13	2	20	3	3	6
19-1021	Biochemists and Biophysicists	79	83	4	5.06%	2	5	2	9	1	3	6
19-1022	Microbiologists	175	178	3	1.71%	4	12	2	18	3	3	6
19-1023	Zoologists and Wildlife Biologists	171	171	0	0.00%	4	11	0	15	3	3	6
19-1029	Biological Scientists, All Other	314	314	0	0.00%	6	20	0	26	3	3	6
19-1031	Conservation Scientists	288	291	3	1.04%	6	18	2	26	3	3	6
19-1032	Foresters	322	327	5	1.55%	6	20	2	28	3	3	6
19-1041	Epidemiologists	54	54	0	0.00%	1	4	0	5	2	3	6
19-1042	Medical Scientists, Except Epidemiologists	374	387	13	3.48%	7	24	6	37	1	3	6
19-2000	Physical Scientists	1,169	1,212	43	3.68%	28	78	22	128			
19-2021	Atmospheric and Space Scientists	29	29	0	0.00%	0	2	0	2	3	3	6
19-2031	Chemists	407	418	11	2.70%	10	26	6	42	3	3	6
19-2041	Environmental Scientists and Specialists, Including Health	510	538	28	5.49%	12	36	14	62	3	3	6
19-2042	Geoscientists, Except Hydrologists and Geographers	81	82	1	1.23%	2	6	0	8	3	3	6
19-2043	Hydrologists	24	25	1	4.17%	0	2	0	2	3	3	6
19-2099	Physical Scientists, All Other	42	43	1	2.38%	1	2	0	3	3	3	6
19-3000	Social Scientists and Related Workers	1,285	1,319	34	2.65%	32	61	17	110			
19-3011	Economists	99	100	1	1.01%	2	6	0	8	2	3	6
19-3022	Survey Researchers	58	64	6	10.34%	2	4	3	9	2	3	6
19-3031	Clinical, Counseling, and School Psychologists	649	670	21	3.24%	16	25	10	51	1	3	2
19-3039	Psychologists, All Other	110	111	1	0.91%	3	4	0	7	2	3	2
19-3051	Urban and Regional Planners	94	97	3	3.19%	2	6	2	10	2	3	6
19-3091	Anthropologists and Archeologists	32	32	0	0.00%	1	2	0	3	2	3	6

Stand	dard Occupational Classification (SOC)	Emplo	yment	Cha	inge		Annual C	penings (Educat	tion/Training (Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
19-4000	Life, Physical, and Social Science Technicians	2,922	2,996	74	2.53%	101	205	37	343			
19-4011	Agricultural and Food Science Technicians	539	552	13	2.41%	15	39	6	60	4	3	4
19-4021	Biological Technicians	424	428	4	0.94%	11	29	2	42	3	3	6
19-4031	Chemical Technicians	661	687	26	3.93%	22	40	13	75	4	3	4
19-4061	Social Science Research Assistants	144	147	3	2.08%	6	11	2	19	3	3	6
19-4091	Environmental Science and Protection Technicians, Including Health	179	187	8	4.47%	8	14	4	26	4	3	6
19-4092	Forensic Science Technicians	151	156	5	3.31%	6	12	2	20	3	3	4
19-4093	Forest and Conservation Technicians	270	270	0	0.00%	11	20	0	31	4	3	6
19-4099	Life, Physical, and Social Science Technicians, All Other	466	480	14	3.00%	19	35	7	61	4	3	6
21-0000	COMMUNITY AND SOCIAL SERVICE OCCUPATIONS	24,774	25,942	1,168	4.71%	1,071	1,643	584	3,298			
21-1000	Counselors, Social Workers, and Other Community and Social Service Specialists	14,797	15,252	455	3.07%	582	995	228	1,805			
21-1011	Substance Abuse and Behavioral Disorder Counselors	754	792	38	5.04%	28	50	19	97	3	3	6
21-1012	Educational, Guidance, School, and Vocational Counselors	2,251	2,310	59	2.62%	84	149	30	263	2	3	6
21-1013	Marriage and Family Therapists	80	84	4	5.00%	3	6	2	11	2	3	2
21-1014	Mental Health Counselors	849	889	40	4.71%	32	57	20	109	2	3	2
21-1015	Rehabilitation Counselors	415	428	13	3.13%	16	28	6	50	2	3	6
21-1019	Counselors, All Other	125	127	2	1.60%	4	8	1	13	2	3	6
21-1021	Child, Family, and School Social Workers	1,624	1,663	39	2.40%	59	104	20	183	3	3	6
21-1022	Healthcare Social Workers	1,441	1,499	58	4.02%	53	94	29	176	2	3	2
21-1023	Mental Health and Substance Abuse Social Workers	889	932	43	4.84%	32	58	22	112	2	3	2
21-1029	Social Workers, All Other	614	619	5	0.81%	22	39	2	63	3	3	6
21-1091	Health Educators	243	250	7	2.88%	11	18	4	33	3	3	6
21-1092	Probation Officers and Correctional Treatment Specialists	935	948	13	1.39%	28	50	6	84	3	3	5
21-1093	Social and Human Service Assistants	3,872	3,981	109	2.82%	176	281	54	511	7	3	
21-1094	Community Health Workers	354	372	18	5.08%	16	27	9	52	7	3	

	Standard Occupational Classification (SOC) Employme					<u> </u>				1		30
Stand	dard Occupational Classification (SOC)			Cha	inge		Annual C)penings	1	Educa	tion/Training (
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
21-1099	Community and Social Service Specialists, All Other	351	358	7	1.99%	16	26	4	46	3	3	6
21-2000	Religious Workers	9,977	10,690	713	7.15%	490	648	356	1,494			
21-2011	Clergy	8,582	9,197	615	7.17%	408	546	308	1,262	3	3	4
23-0000	LEGAL OCCUPATIONS	7,583	7,817	234	3.09%	193	268	117	578			
23-1000	Lawyers, Judges, and Related Workers	4,791	4,920	129	2.69%	96	106	64	266			
23-1011	Lawyers	3,885	4,005	120	3.09%	78	86	60	224	1	3	6
23-1012	Judicial Law Clerks	77	79	2	2.60%	1	2	1	4	1	3	6
23-1021	Administrative Law Judges, Adjudicators, and Hearing Officers	390	397	7	1.79%	8	8	4	20	1	1	5
23-1022	Arbitrators, Mediators, and Conciliators	106	100	-6	-5.66%	2	2	-3	1	3	2	4
23-1023	Judges, Magistrate Judges, and Magistrates	333	339	6	1.80%	6	8	3	17	1	1	5
23-2000	Legal Support Workers	2,792	2,897	105	3.76%	97	162	52	311			
23-2011	Paralegals and Legal Assistants	1,542	1,608	66	4.28%	52	105	33	190	4	3	6
23-2091	Court Reporters	198	203	5	2.53%	7	9	2	18	5	3	5
23-2093	Title Examiners, Abstractors, and Searchers	744	773	29	3.90%	27	34	14	75	7	3	4
23-2099	Legal Support Workers, All Other	308	313	5	1.62%	11	14	2	27	4	3	6
25-0000	EDUCATION, TRAINING, AND LIBRARY OCCUPATIONS	78,683	80,393	1,710	2.17%	3,268	3,244	855	7,367			
25-1000	Postsecondary Teachers	15,134	15,516	382	2.52%	560	585	191	1,336			
25-1011	Business Teachers, Postsecondary	756	784	28	3.70%	28	30	14	72	1	3	6
25-1021	Computer Science Teachers, Postsecondary	294	297	3	1.02%	11	12	2	25	1	3	6
25-1022	Mathematical Science Teachers, Postsecondary	465	471	6	1.29%	17	18	3	38	1	3	6
25-1031	Architecture Teachers, Postsecondary	67	69	2	2.99%	2	2	1	5	1	3	6
25-1032	Engineering Teachers, Postsecondary	342	352	10	2.92%	12	13	5	30	1	3	6
25-1041	Agricultural Sciences Teachers, Postsecondary	151	153	2	1.32%	6	6	1	13	1	3	6
25-1042	Biological Science Teachers, Postsecondary	491	505	14	2.85%	18	19	7	44	1	3	6

Stand	dard Occupational Classification (SOC)	Emplo	yment	Cha	inge		Annual C	penings		Educa	tion/Training C	Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
25-1051	Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary	97	98	1	1.03%	4	4	0	8	1	3	6
25-1052	Chemistry Teachers, Postsecondary	193	197	4	2.07%	7	8	2	17	1	3	6
25-1053	Environmental Science Teachers, Postsecondary	50	51	1	2.00%	2	2	0	4	1	3	6
25-1054	Physics Teachers, Postsecondary	126	129	3	2.38%	4	5	2	11	1	3	6
25-1061	Anthropology and Archeology Teachers, Postsecondary	51	52	1	1.96%	2	2	0	4	1	3	6
25-1062	Area, Ethnic, and Cultural Studies Teachers, Postsecondary	83	85	2	2.41%	3	3	1	7	1	3	6
25-1063	Economics Teachers, Postsecondary	119	122	3	2.52%	4	4	2	10	1	3	6
25-1064	Geography Teachers, Postsecondary	37	37	0	0.00%	2	2	0	4	1	3	6
25-1065	Political Science Teachers, Postsecondary	153	157	4	2.61%	6	6	2	14	1	3	6
25-1066	Psychology Teachers, Postsecondary	342	351	9	2.63%	12	13	4	29	1	3	6
25-1067	Sociology Teachers, Postsecondary	132	135	3	2.27%	5	5	2	12	1	3	6
25-1069	Social Sciences Teachers, Postsecondary, All Other	118	119	1	0.85%	4	4	0	8	1	3	6
25-1071	Health Specialties Teachers, Postsecondary	2,720	2,882	162	5.96%	102	107	81	290	1	2	6
25-1072	Nursing Instructors and Teachers, Postsecondary	560	588	28	5.00%	21	22	14	57	1	2	6
25-1081	Education Teachers, Postsecondary	525	537	12	2.29%	20	20	6	46	1	2	6
25-1082	Library Science Teachers, Postsecondary	43	44	1	2.33%	2	2	0	4	1	3	6
25-1112	Law Teachers, Postsecondary	150	154	4	2.67%	6	6	2	14	1	2	6
25-1121	Art, Drama, and Music Teachers, Postsecondary	840	859	19	2.26%	31	32	10	73	2	3	6
25-1122	Communications Teachers, Postsecondary	252	257	5	1.98%	10	10	2	22	1	3	6
25-1123	English Language and Literature Teachers, Postsecondary	633	642	9	1.42%	24	24	4	52	1	3	6
25-1124	Foreign Language and Literature Teachers, Postsecondary	238	243	5	2.10%	9	9	2	20	1	3	6
25-1125	History Teachers, Postsecondary	198	202	4	2.02%	8	8	2	18	1	3	6
25-1126	Philosophy and Religion Teachers, Postsecondary	217	223	6	2.76%	8	8	3	19	1	3	6
25-1191	Graduate Teaching Assistants	1,329	1,361	32	2.41%	50	52	16	118	3	3	6
25-1193	Recreation and Fitness Studies Teachers, Postsecondary	154	157	3	1.95%	6	6	2	14	1	3	6

Stand	lard Occupational Classification (SOC)	Emplo	yment	Cha	nge	,	Annual C	penings		Educat	ion/Training C	Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
25-1194	Vocational Education Teachers, Postsecondary	1,187	1,145	-42	-3.54%	42	44	-21	65	3	2	6
25-1199	Postsecondary Teachers, All Other	1,738	1,768	30	1.73%	64	67	15	146	1	3	6
25-2000	Preschool, Primary, Secondary, and Special Education School Teachers	39,879	40,697	818	2.05%	1,356	1,579	409	3,344			
25-2011	Preschool Teachers, Except Special Education	3,368	3,484	116	3.44%	148	183	58	389	4	3	6
25-2012	Kindergarten Teachers, Except Special Education	1,824	1,863	39	2.14%	80	98	20	198	3	3	6
25-2021	Elementary School Teachers, Except Special Education	12,896	13,141	245	1.90%	430	482	122	1,034	3	3	6
25-2022	Middle School Teachers, Except Special and Career/Technical Education	6,149	6,270	121	1.97%	205	230	60	495	3	3	6
25-2023	Career/Technical Education Teachers, Middle School	95	96	1	1.05%	3	4	0	7	3	2	6
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	10,507	10,699	192	1.83%	325	396	96	817	3	3	6
25-2032	Career/Technical Education Teachers, Secondary School	1,195	1,214	19	1.59%	37	45	10	92	3	2	6
25-2051	Special Education Teachers, Preschool	636	659	23	3.62%	22	24	12	58	3	3	6
25-2052	Special Education Teachers, Kindergarten and Elementary School	1,076	1,097	21	1.95%	36	40	10	86	3	3	6
25-2053	Special Education Teachers, Middle School	644	655	11	1.71%	22	24	6	52	3	3	6
25-2054	Special Education Teachers, Secondary School	1,358	1,384	26	1.91%	46	50	13	109	3	3	6
25-2059	Special Education Teachers, All Other	131	135	4	3.05%	4	5	2	11	3	3	6
25-3000	Other Teachers and Instructors	8,214	8,384	170	2.07%	506	388	85	979			
25-3021	Self-Enrichment Education Teachers	761	788	27	3.55%	47	36	14	97	7	2	6
25-3097	Teachers and Instructors, All Other, Except Substitute Teachers	1,499	1,528	29	1.93%	92	71	14	177	3	3	6
25-4000	Librarians, Curators, and Archivists	2,203	2,262	59	2.68%	129	92	30	251			
25-4011	Archivists	53	53	0	0.00%	2	3	0	5	2	3	6
25-4012	Curators	67	69	2	2.99%	3	4	1	8	2	3	6
25-4013	Museum Technicians and Conservators	77	82	5	6.49%	4	4	2	10	3	3	6
25-4021	Librarians	1,626	1,669	43	2.64%	90	62	22	174	2	3	6
25-4031	Library Technicians	380	389	9	2.37%	30	20	4	54	5	3	6

	_ • · • · · · · · · · · · · · · · · · ·			0. 0. 0.		· · <u> </u>						
Stand	dard Occupational Classification (SOC)	Emplo		Cha	inge		Annual C)penings		Educat	tion/Training (Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
25-9000	Other Education, Training, and Library Occupations	13,253	13,534	281	2.12%	718	599	140	1,457			
25-9011	Audio-Visual and Multimedia Collections Specialists	78	80	2	2.56%	4	3	1	8	3	2	6
25-9021	Farm and Home Management Advisors	279	284	5	1.79%	14	12	2	28	2	3	6
25-9031	Instructional Coordinators	1,621	1,655	34	2.10%	78	67	17	162	2	1	6
25-9041	Teacher Assistants	10,799	11,032	233	2.16%	599	498	116	1,213	6	3	6
25-9099	Education, Training, and Library Workers, All Other	476	483	7	1.47%	23	20	4	47	3	3	6
27-0000	ARTS, DESIGN, ENTERTAINMENT, SPORTS, AND MEDIA OCCUPATIONS	13,572	13,909	337	2.48%	572	752	168	1,492			
27-1000	Art and Design Workers	3,884	3,942	58	1.49%	147	204	29	380			
27-1011	Art Directors	168	172	4	2.38%	8	5	2	15	3	1	6
27-1013	Fine Artists, Including Painters, Sculptors, and Illustrators	280	293	13	4.64%	14	8	6	28	3	3	3
27-1014	Multimedia Artists and Animators	127	130	3	2.36%	6	4	2	12	3	3	6
27-1019	Artists and Related Workers, All Other	21	22	1	4.76%	1	0	0	1	8	3	3
27-1021	Commercial and Industrial Designers	124	128	4	3.23%	4	7	2	13	3	3	6
27-1023	Floral Designers	380	363	-17	-4.47%	13	21	-8	26	7	3	4
27-1024	Graphic Designers	1,547	1,567	20	1.29%	55	88	10	153	3	3	6
27-1025	Interior Designers	269	272	3	1.12%	10	15	2	27	3	3	6
27-1026	Merchandise Displayers and Window Trimmers	673	689	16	2.38%	24	38	8	70	7	3	5
27-2000	Entertainers and Performers, Sports and Related Workers	4,098	4,273	175	4.27%	224	244	88	556			
27-2012	Producers and Directors	395	409	14	3.54%	10	25	7	42	3	2	6
27-2022	Coaches and Scouts	1,647	1,719	72	4.37%	94	127	36	257	3	3	6
27-2041	Music Directors and Composers	603	636	33	5.47%	36	23	16	75	3	2	6
27-3000	Media and Communication Workers	3,619	3,691	72	1.99%	126	216	36	378			
27-3011	Radio and Television Announcers	435	435	0	0.00%	18	22	0	40	3	3	6
27-3021	Broadcast News Analysts	36	37	1	2.78%	1	2	0	3	3	3	6
27-3022	Reporters and Correspondents	386	388	2	0.52%	12	26	1	39	3	3	6
27-3031	Public Relations Specialists	1,123	1,143	20	1.78%	32	76	10	118	3	3	6
27-3041	Editors	713	732	19	2.66%	24	46	10	80	3	2	6
27-3042	Technical Writers	191	198	7	3.66%	6	12	4	22	3	2	5
27-3043	Writers and Authors	395	408	13	3.29%	17	17	6	40	3	3	3

27-3099 Media and Communi Other 27-4000 Media and Commun Workers 27-4011 Audio and Video Equ 27-4012 Broadcast Technician 27-4014 Sound Engineering T 27-4021 Photographers	Title ication Workers, All nication Equipment uipment Technicians ns Technicians Television, Video, and	Emplo 2017 Estimated 53 1,971 268 107 46 1,305	2019 Projected 54 2,003 279 110 42	Channeric 1 32 11 3 11	Percent 1.89% 1.62% 4.10%	Exits 2	Annual C Transfers 2 88	Change 0	Total 4	Education 7	ion/Training C Work Experience 3	Codes Job Training 5
27-3099 Media and Communi Other 27-4000 Media and Commun Workers 27-4011 Audio and Video Equ 27-4012 Broadcast Technician 27-4014 Sound Engineering T 27-4021 Photographers 27-4031 Camera Operators, T Motion Picture	ication Workers, All nication Equipment uipment Technicians ns Technicians Television, Video, and	Estimated 53 1,971 268 107 46 1,305	Projected 54 2,003 279 110 42	1 32 11	1.89% 1.62%	2 75	2	0	4		Experience	Training
27-4000 Other 27-4000 Media and Commun Workers 27-4011 Audio and Video Equ 27-4012 Broadcast Technician 27-4014 Sound Engineering T 27-4021 Photographers 27-4031 Camera Operators, T Motion Picture	nication Equipment uipment Technicians ns Technicians Television, Video, and	1,971 268 107 46 1,305	2,003 279 110 42	32	1.62%	75				7	3	5
27-4000 Workers 27-4011 Audio and Video Equ 27-4012 Broadcast Technician 27-4014 Sound Engineering T 27-4021 Photographers 27-4031 Camera Operators, T Motion Picture	uipment Technicians ns Technicians Television, Video, and	268 107 46 1,305	279 110 42	11			88	16	179			
27-4012 Broadcast Technician 27-4014 Sound Engineering T 27-4021 Photographers 27-4031 Camera Operators, T Motion Picture	rs Technicians Television, Video, and	107 46 1,305	110 42		4.10%		i)		I	İ		
27-4014 Sound Engineering T 27-4021 Photographers 27-4031 Camera Operators, T Motion Picture	Technicians Television, Video, and	46 1,305	42	3		8	17	6	31	5	3	5
27-4021 Photographers 27-4031 Camera Operators, T Motion Picture	Television, Video, and	1,305			2.80%	3	6	2	11	4	3	5
27-4031 Camera Operators, T Motion Picture			4 04 '	-4	-8.70%	1	2	-2	1	5	3	5
Motion Picture		100	1,316	11	0.84%	56	46	6	108	7	3	3
27-4032 Film and Video Edito	nrs	100	103	3	3.00%	3	6	2	11	3	3	6
	JI 3	113	120	7	6.19%	4	8	4	16	3	3	6
29-0000 HEALTHCARE PRA TECHNICAL OCCUP		83,406	86,585	3,179	3.81%	2,298	2,256	1,590	6,144			
29-1000 Health Diagnosing a	and Treating	48,195	50,245	2,050	4.25%	1,186	1,019	1,025	3,230			
29-1011 Chiropractors		501	523	22	4.39%	8	4	11	23	1	3	6
29-1021 Dentists, General		876	911	35	4.00%	16	6	18	40	1	3	6
29-1023 Orthodontists		39	40	1	2.56%	0	0	0	0	1	3	2
29-1029 Dentists, All Other Sp	1	27	28	1	3.70%	0	0	0	0	1	3	2
29-1031 Dietitians and Nutrition	onists	539	558	19	3.53%	17	16	10	43	3	3	2
29-1041 Optometrists		370	390	20	5.41%	6	5	10	21	1	3	6
29-1051 Pharmacists		3,646	3,772	126	3.46%	86	72	63	221	1	3	6
29-1061 Anesthesiologists		140	146	6	4.29%	2	2	3	7	1	3	2
29-1062 Family and General F	Practitioners	1,492	1,546	54	3.62%	22	17	27	66	1	3	2
29-1063 Internists, General		387	400	13	3.36%	6	4	6	16	1	3	2
29-1064 Obstetricians and Gy	ynecologists	202	207	5	2.48%	3	2	2	7	1	3	2
29-1065 Pediatricians, Genera	al	143	149	6	4.20%	2	2	3	7	1	3	2
29-1066 Psychiatrists		334	349	15	4.49%	5	4	8	17	1	3	2
29-1067 Surgeons		482	499	17	3.53%	7	6	8	21	1	3	2
29-1069 Physicians and Surgo	eons, All Other	2,968	3,040	72	2.43%	44	33	36	113	1	3	2
29-1071 Physician Assistants	5	617	666	49	7.94%	11	22	24	57	2	3	6
29-1081 Podiatrists		78	80	2	2.56%	2	2	1	5	1	3	2
29-1122 Occupational Therap	oists	1,185	1,259	74	6.24%	25	34	37	96	2	3	6
29-1123 Physical Therapists		2,274	2,415	141	6.20%	45	49	70	164	1	3	6
29-1124 Radiation Therapists		340	357	17	5.00%	9	8	8	25	4	3	6

				apati		· · · · <u> </u>		-		ı		
Stand	dard Occupational Classification (SOC)		yment	Cha	nge		Annual C)penings		Educat	ion/Training (
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
29-1125	Recreational Therapists	66	66	0	0.00%	2	2	0	4	3	3	6
29-1126	Respiratory Therapists	938	998	60	6.40%	23	22	30	75	4	3	6
29-1127	Speech-Language Pathologists	2,115	2,231	116	5.48%	40	68	58	166	2	3	2
29-1128	Exercise Physiologists	88	91	3	3.41%	2	2	2	6	3	3	6
29-1129	Therapists, All Other	41	42	1	2.44%	1	1	0	2	3	3	6
29-1131	Veterinarians	716	740	24	3.35%	14	12	12	38	1	3	6
29-1141	Registered Nurses	25,182	26,183	1,001	3.98%	736	558	500	1,794	3	3	6
29-1151	Nurse Anesthetists	348	363	15	4.31%	5	12	8	25	2	3	6
29-1171	Nurse Practitioners	1,719	1,844	125	7.27%	34	51	62	147	2	3	6
29-1181	Audiologists	78	82	4	5.13%	2	2	2	6	1	3	6
29-1199	Health Diagnosing and Treating Practitioners, All Other	198	201	3	1.52%	8	2	2	12	2	3	6
29-2000	Health Technologists and Technicians	33,737	34,822	1,085	3.22%	1,080	1,196	542	2,818			
29-2011	Medical and Clinical Laboratory Technologists	1,153	1,191	38	3.30%	36	36	19	91	3	3	6
29-2012	Medical and Clinical Laboratory Technicians	1,471	1,519	48	3.26%	46	45	24	115	4	3	6
29-2021	Dental Hygienists	1,439	1,490	51	3.54%	53	33	26	112	4	3	6
29-2031	Cardiovascular Technologists and Technicians	635	659	24	3.78%	16	16	12	44	4	3	6
29-2032	Diagnostic Medical Sonographers	527	558	31	5.88%	14	14	16	44	4	3	6
29-2033	Nuclear Medicine Technologists	187	193	6	3.21%	5	4	3	12	4	3	6
29-2034	Radiologic Technologists	2,179	2,254	75	3.44%	58	55	38	151	4	3	6
29-2035	Magnetic Resonance Imaging Technologists	367	380	13	3.54%	10	10	6	26	4	2	6
29-2041	Emergency Medical Technicians and Paramedics	2,137	2,211	74	3.46%	38	90	37	165	5	3	6
29-2051	Dietetic Technicians	175	180	5	2.86%	6	8	2	16	4	3	6
29-2052	Pharmacy Technicians	4,034	4,240	206	5.11%	134	184	103	421	7	3	4
29-2053	Psychiatric Technicians	857	863	6	0.70%	28	38	3	69	5	2	5
29-2054	Respiratory Therapy Technicians	375	341	-34	-9.07%	12	16	-17	11	4	3	6
29-2055	Surgical Technologists	1,125	1,167	42	3.73%	37	51	21	109	5	3	6
29-2056	Veterinary Technologists and Technicians	375	387	12	3.20%	12	17	6	35	4	3	6
29-2057	Ophthalmic Medical Technicians	256	270	14	5.47%	8	12	7	27	5	3	6
29-2061	Licensed Practical and Licensed Vocational Nurses	12,854	13,176	322	2.51%	459	452	161	1,072	5	3	6

Stand	dard Occupational Classification (SOC)	Emplo			nge		Annual C			Educat	tion/Training C	Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
29-2071	Medical Records and Health Information Technicians	1,985	2,061	76	3.83%	60	60	38	158	5	3	6
29-2081	Opticians, Dispensing	493	516	23	4.67%	16	18	12	46	7	3	3
29-2099	Health Technologists and Technicians, All Other	1,015	1,063	48	4.73%	29	34	24	87	5	3	6
29-9000	Other Healthcare Practitioners and Technical Occupations	1,474	1,518	44	2.99%	33	42	22	97			
29-9011	Occupational Health and Safety Specialists	553	562	9	1.63%	12	16	4	32	3	3	6
29-9012	Occupational Health and Safety Technicians	203	211	8	3.94%	4	6	4	14	7	3	4
29-9099	Healthcare Practitioners and Technical Workers, All Other	552	570	18	3.26%	12	16	9	37	5	3	6
31-0000	HEALTHCARE SUPPORT OCCUPATIONS	38,094	39,578	1,484	3.90%	2,238	2,112	742	5,092			
31-1000	Nursing, Psychiatric, and Home Health Aides	26,401	27,338	937	3.55%	1,632	1,358	468	3,458			
31-1011	Home Health Aides	7,330	7,625	295	4.02%	454	378	148	980	7	3	5
31-1013	Psychiatric Aides	323	340	17	5.26%	20	17	8	45	7	3	5
31-1014	Nursing Assistants	18,593	19,212	619	3.33%	1,148	956	310	2,414	5	3	6
31-1015	Orderlies	155	161	6	3.87%	10	8	3	21	7	3	5
31-2000	Occupational Therapy and Physical Therapist Assistants and Aides	1,756	1,873	117	6.66%	82	133	58	273			
31-2011	Occupational Therapy Assistants	296	317	21	7.09%	16	22	10	48	4	3	6
31-2012	Occupational Therapy Aides	38	39	1	2.63%	2	3	0	5	7	3	5
31-2021	Physical Therapist Assistants	1,111	1,187	76	6.84%	50	84	38	172	4	3	6
31-2022	Physical Therapist Aides	311	330	19	6.11%	14	24	10	48	7	3	5
31-9000	Other Healthcare Support Occupations	9,937	10,367	430	4.33%	524	620	215	1,359			
31-9011	Massage Therapists	472	503	31	6.57%	32	18	16	66	5	3	6
31-9091	Dental Assistants	2,656	2,750	94	3.54%	138	154	47	339	5	3	6
31-9092	Medical Assistants	3,210	3,400	190	5.92%	145	203	95	443	5	3	6
31-9093	Medical Equipment Preparers	224	233	9	4.02%	14	14	4	32	7	3	4
31-9094	Medical Transcriptionists	536	536	0	0.00%	36	27	0	63	5	3	6
31-9095	Pharmacy Aides	529	538	9	1.70%	36	36	4	76	7	3	5
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	857	885	28	3.27%	50	82	14	146	7	3	5

Stand	dard Occupational Classification (SOC)	Emplo	yment	Cha	nge		Annual C	penings		Educa ⁻	tion/Training (Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
31-9097	Phlebotomists	1,019	1,074	55	5.40%	45	60	28	133	5	3	6
31-9099	Healthcare Support Workers, All Other	434	448	14	3.23%	28	26	7	61	7	3	6
33-0000	PROTECTIVE SERVICE OCCUPATIONS	26,447	26,924	477	1.80%	1,130	1,352	238	2,720			
33-1000	Supervisors of Protective Service Workers	3,190	3,256	66	2.07%	106	110	33	249			
33-1011	First-Line Supervisors of Correctional Officers	369	367	-2	-0.54%	12	12	-1	23	7	2	6
33-1012	First-Line Supervisors of Police and Detectives	1,456	1,490	34	2.34%	41	46	17	104	7	2	4
33-1021	First-Line Supervisors of Fire Fighting and Prevention Workers	827	849	22	2.66%	28	26	11	65	5	2	4
33-1099	First-Line Supervisors of Protective Service Workers, All Other	538	550	12	2.23%	25	27	6	58	7	2	6
33-2000	Fire Fighting and Prevention Workers	2,710	2,784	74	2.73%	67	118	37	222			
33-2011	Firefighters	2,504	2,570	66	2.64%	57	108	33	198	5	3	3
33-2021	Fire Inspectors and Investigators	42	42	0	0.00%	2	2	0	4	5	1	4
33-2022	Forest Fire Inspectors and Prevention Specialists	164	172	8	4.88%	8	8	4	20	7	2	4
33-3000	Law Enforcement Workers	12,205	12,303	98	0.80%	364	506	49	919			
33-3011	Bailiffs	103	104	1	0.97%	4	4	0	8	7	3	4
33-3012	Correctional Officers and Jailers	5,344	5,291	-53	-0.99%	188	239	-26	401	7	3	4
33-3021	Detectives and Criminal Investigators	508	516	8	1.57%	14	18	4	36	7	2	4
33-3041	Parking Enforcement Workers	31	29	-2	-6.45%	2	1	-1	2	7	3	5
33-3051	Police and Sheriff's Patrol Officers	6,014	6,156	142	2.36%	147	237	71	455	7	3	4
33-9000	Other Protective Service Workers	8,342	8,581	239	2.87%	593	616	120	1,329			
33-9011	Animal Control Workers	177	182	5	2.82%	8	10	2	20	7	3	4
33-9032	Security Guards	6,557	6,753	196	2.99%	394	470	98	962	7	3	5
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	510	527	17	3.33%	72	54	8	134	8	3	5
33-9093	Transportation Security Screeners	157	156	-1	-0.64%	8	6	0	14	7	3	5
33-9099	Protective Service Workers, All Other	570	580	10	1.75%	80	60	5	145	7	3	5
35-0000	FOOD PREPARATION AND SERVING RELATED OCCUPATIONS	105,094	108,662	3,568	3.40%	7,841	9,938	1,784	19,563			

	Standard Occupational Classification (SOC) Employment					<u> </u>						0-1
Stand	lard Occupational Classification (SOC)	Emplo		Cha	inge		Annual C	penings	1	Educa	ion/Training (
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
35-1000	Supervisors of Food Preparation and Serving Workers	10,391	10,740	349	3.36%	464	1,005	174	1,643			
35-1011	Chefs and Head Cooks	790	819	29	3.67%	26	74	14	114	7	1	6
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	9,601	9,921	320	3.33%	438	932	160	1,530	7	2	6
35-2000	Cooks and Food Preparation Workers	32,120	32,974	854	2.66%	2,060	2,652	427	5,139			
35-2011	Cooks, Fast Food	6,957	7,008	51	0.73%	409	558	26	993	8	3	5
35-2012	Cooks, Institution and Cafeteria	7,167	7,344	177	2.47%	425	580	88	1,093	8	3	5
35-2013	Cooks, Private Household	110	111	1	0.91%	6	9	0	15	5	2	6
35-2014	Cooks, Restaurant	10,131	10,540	409	4.04%	606	827	204	1,637	8	2	4
35-2015	Cooks, Short Order	564	571	7	1.24%	33	46	4	83	8	3	5
35-2019	Cooks, All Other	72	73	1	1.39%	4	6	0	10	8	3	4
35-2021	Food Preparation Workers	7,119	7,327	208	2.92%	578	626	104	1,308	8	3	5
35-3000	Food and Beverage Serving Workers	55,393	57,557	2,164	3.91%	4,668	5,642	1,082	11,392			
35-3011	Bartenders	2,071	2,106	35	1.69%	100	240	18	358	8	3	5
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	30,737	32,197	1,460	4.75%	2,786	2,914	730	6,430	8	3	5
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	1,766	1,814	48	2.72%	215	169	24	408	8	3	5
35-3031	Waiters and Waitresses	19,053	19,612	559	2.93%	1,431	2,192	280	3,903	8	3	5
35-3041	Food Servers, Nonrestaurant	1,766	1,828	62	3.51%	136	126	31	293	8	3	5
35-9000	Other Food Preparation and Serving Related Workers	7,190	7,391	201	2.80%	648	639	100	1,387			
35-9021	Dishwashers	3,407	3,493	86	2.52%	256	275	43	574	8	3	5
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	1,940	1,995	55	2.84%	226	216	28	470	8	3	5
37-0000	BUILDING AND GROUNDS CLEANING AND MAINTENANCE OCCUPATIONS	45,300	46,766	1,466	3.24%	2,798	2,916	733	6,447			
37-1000	Supervisors of Building and Grounds Cleaning and Maintenance Workers	4,822	4,990	168	3.48%	210	296	84	590			
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	2,728	2,827	99	3.63%	140	168	50	358	7	2	6
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	2,094	2,163	69	3.30%	69	128	34	231	7	2	6

Stand	ard Occupational Classification (SOC)	Emplo	yment	Cha	nge		Annual C	penings		Educa	tion/Training (Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
37-2000	Building Cleaning and Pest Control Workers	32,040	33,010	970	3.03%	2,187	2,004	485	4,676			
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	19,690	20,448	758	3.85%	1,306	1,262	379	2,947	8	3	5
37-2012	Maids and Housekeeping Cleaners	11,044	11,210	166	1.50%	824	622	83	1,529	8	3	5
37-3000	Grounds Maintenance Workers	8,438	8,766	328	3.89%	402	614	164	1,180			
37-3011	Landscaping and Groundskeeping Workers	7,405	7,706	301	4.06%	353	540	150	1,043	8	3	5
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	379	388	9	2.37%	18	28	4	50	7	3	4
37-3013	Tree Trimmers and Pruners	491	505	14	2.85%	24	36	7	67	7	3	5
37-3019	Grounds Maintenance Workers, All Other	163	167	4	2.45%	8	12	2	22	8	3	5
39-0000	PERSONAL CARE AND SERVICE OCCUPATIONS	46,604	48,232	1,628	3.49%	3,618	3,176	814	7,608			
39-1000	Supervisors of Personal Care and Service Workers	1,690	1,747	57	3.37%	82	82	28	192			
39-1011	Gaming Supervisors	78	80	2	2.56%	4	8	1	13	7	2	6
39-1021	First-Line Supervisors of Personal Service Workers	1,612	1,667	55	3.41%	78	74	28	180	7	2	6
39-2000	Animal Care and Service Workers	3,769	3,895	126	3.34%	234	284	63	581			
39-2011	Animal Trainers	1,389	1,420	31	2.23%	68	88	16	172	7	3	4
39-2021	Nonfarm Animal Caretakers	2,380	2,475	95	3.99%	166	196	48	410	7	3	5
39-3000	Entertainment Attendants and Related Workers	2,117	2,191	74	3.50%	231	246	37	514			
39-3021	Motion Picture Projectionists	64	63	-1	-1.56%	3	5	0	8	8	3	5
39-3031	Ushers, Lobby Attendants, and Ticket Takers	527	546	19	3.61%	70	60	10	140	8	3	5
39-3091	Amusement and Recreation Attendants	1,218	1,264	46	3.78%	131	148	23	302	8	3	5
39-3093	Locker Room, Coatroom, and Dressing Room Attendants	60	62	2	3.33%	6	8	1	15	7	3	5
39-3099	Entertainment Attendants and Related Workers, All Other	104	108	4	3.85%	11	12	2	25	7	3	5
39-4000	Funeral Service Workers	842	841	-1	-0.12%	58	56	0	114			
39-4011	Embalmers	129	127	-2	-1.55%	12	8	-1	19	4	3	3
39-4021	Funeral Attendants	307	306	-1	-0.33%	27	19	0	46	7	3	5

Stand	dard Occupational Classification (SOC)	Emplo	vment	Cha	nge		Annual C	neninas		Educat	ion/Training C	odes.
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
39-4031	Morticians, Undertakers, and Funeral Directors	406	408	2	0.49%	20	30	1	51	4	3	3
39-5000	Personal Appearance Workers	3,271	3,364	93	2.84%	218	166	46	430			
39-5012	Hairdressers, Hairstylists, and Cosmetologists	2,852	2,933	81	2.84%	193	144	40	377	5	3	6
39-5092	Manicurists and Pedicurists	239	246	7	2.93%	14	12	4	30	5	3	6
39-6000	Baggage Porters, Bellhops, and Concierges	150	154	4	2.67%	8	14	2	24			
39-7000	Tour and Travel Guides	198	207	9	4.55%	18	17	4	39			
39-7011	Tour Guides and Escorts	198	207	9	4.55%	18	17	4	39	7	3	4
39-9000	Other Personal Care and Service Workers	34,567	35,833	1,266	3.66%	2,768	2,312	633	5,713			
39-9011	Childcare Workers	12,788	13,193	405	3.17%	1,060	804	202	2,066	7	3	5
39-9021	Personal Care Aides	17,248	17,986	738	4.28%	1,406	1,059	369	2,834	7	3	5
39-9031	Fitness Trainers and Aerobics Instructors	1,275	1,342	67	5.25%	86	131	34	251	7	3	5
39-9032	Recreation Workers	1,946	2,002	56	2.88%	129	198	28	355	7	3	5
39-9041	Residential Advisors	797	823	26	3.26%	54	80	13	147	7	3	5
39-9099	Personal Care and Service Workers, All Other	513	487	-26	-5.07%	34	39	-13	60	7	3	5
41-0000	SALES AND RELATED OCCUPATIONS	136,065	138,058	1,993	1.46%	8,208	10,496	996	19,700			
41-1000	Supervisors of Sales Workers	20,235	20,544	309	1.53%	738	1,324	154	2,216			
41-1011	First-Line Supervisors of Retail Sales Workers	16,109	16,323	214	1.33%	598	1,091	107	1,796	7	2	6
41-1012	First-Line Supervisors of Non-Retail Sales Workers	4,126	4,221	95	2.30%	139	232	48	419	7	2	6
41-2000	Retail Sales Workers	77,950	78,466	516	0.66%	5,888	6,600	258	12,746			
41-2011	Cashiers	33,839	33,901	62	0.18%	3,180	3,104	31	6,315	8	3	5
41-2021	Counter and Rental Clerks	3,422	3,516	94	2.75%	182	254	47	483	8	3	5
41-2022	Parts Salespersons	3,104	3,155	51	1.64%	136	248	26	410	8	3	4
41-2031	Retail Salespersons	37,585	37,894	309	0.82%	2,390	2,995	154	5,539	8	3	5
41-3000	Sales Representatives, Services	12,159	12,579	420	3.45%	445	850	210	1,505			
41-3011	Advertising Sales Agents	1,137	1,167	30	2.64%	43	100	15	158	7	3	4
41-3021	Insurance Sales Agents	5,462	5,761	299	5.47%	228	302	150	680	7	3	4

					<u> </u>	<u> </u>		. •				
Stanc	dard Occupational Classification (SOC)	Emplo		Cha	nge		Annual C)penings		Educa	tion/Training (Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
41-3031	Securities, Commodities, and Financial Services Sales Agents	1,443	1,485	42	2.91%	38	96	21	155	3	3	4
41-3041	Travel Agents	207	208	1	0.48%	11	12	0	23	7	3	4
41-3099	Sales Representatives, Services, All Other	3,910	3,958	48	1.23%	124	340	24	488	7	3	4
41-4000	Sales Representatives, Wholesale and Manufacturing	17,523	18,013	490	2.80%	586	1,190	245	2,021			
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	2,862	2,977	115	4.02%	96	196	58	350	3	3	4
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	14,661	15,036	375	2.56%	490	994	188	1,672	7	3	4
41-9000	Other Sales and Related Workers	8,198	8,456	258	3.15%	552	532	129	1,213			
41-9021	Real Estate Brokers	274	284	10	3.65%	14	11	5	30	7	2	6
41-9022	Real Estate Sales Agents	2,393	2,462	69	2.88%	124	94	34	252	7	3	4
41-9031	Sales Engineers	128	129	1	0.78%	3	10	0	13	3	3	4
41-9041	Telemarketers	2,138	2,196	58	2.71%	129	204	29	362	8	3	5
41-9099	Sales and Related Workers, All Other	659	680	21	3.19%	36	51	10	97	7	3	6
43-0000	OFFICE AND ADMINISTRATIVE SUPPORT OCCUPATIONS	185,930	188,584	2,654	1.43%	9,569	11,131	1,327	22,027			
43-1000	Supervisors of Office and Administrative Support Workers	15,276	15,546	270	1.77%	598	890	135	1,623			
43-1011	First-Line Supervisors of Office and Administrative Support Workers	15,276	15,546	270	1.77%	598	890	135	1,623	7	2	6
43-2000	Communications Equipment Operators	721	703	-18	-2.50%	44	48	-9	83			
43-2011	Switchboard Operators, Including Answering Service	694	677	-17	-2.45%	43	46	-8	81	7	3	5
43-3000	Financial Clerks	28,003	28,314	311	1.11%	1,510	1,542	156	3,208			
43-3011	Bill and Account Collectors	1,668	1,689	21	1.26%	63	110	10	183	7	3	4
43-3021	Billing and Posting Clerks	4,265	4,427	162	3.80%	186	240	81	507	7	3	4
43-3031	Bookkeeping, Accounting, and Auditing Clerks	13,628	13,784	156	1.14%	848	658	78	1,584	6	3	4
43-3051	Payroll and Timekeeping Clerks	1,470	1,487	17	1.16%	62	83	8	153	7	3	4
43-3061	Procurement Clerks	647	644	-3	-0.46%	27	42	-2	67	7	3	4
43-3071	Tellers	6,137	6,089	-48	-0.78%	313	393	-24	682	7	3	5

	2010 / tillanoad Gta					<u> </u>		. –		_		00
Stand	dard Occupational Classification (SOC)	Emplo		Cha	nge		Annual C	penings	r	Educat	tion/Training (
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
43-4000	Information and Record Clerks	38,567	39,394	827	2.14%	2,026	2,716	414	5,156			
43-4011	Brokerage Clerks	165	170	5	3.03%	4	12	2	18	7	3	4
43-4021	Correspondence Clerks	90	90	0	0.00%	4	6	0	10	7	3	5
43-4031	Court, Municipal, and License Clerks	1,054	1,079	25	2.37%	48	42	12	102	7	3	4
43-4041	Credit Authorizers, Checkers, and Clerks	105	105	0	0.00%	4	7	0	11	7	3	4
43-4051	Customer Service Representatives	17,045	17,424	379	2.22%	881	1,293	190	2,364	7	3	5
43-4061	Eligibility Interviewers, Government Programs	1,681	1,699	18	1.07%	67	80	9	156	7	3	4
43-4071	File Clerks	714	699	-15	-2.10%	44	42	-8	78	7	3	5
43-4081	Hotel, Motel, and Resort Desk Clerks	2,382	2,435	53	2.23%	133	238	26	397	7	3	5
43-4111	Interviewers, Except Eligibility and Loan	1,316	1,351	35	2.66%	71	84	18	173	7	3	5
43-4121	Library Assistants, Clerical	682	694	12	1.76%	54	42	6	102	7	3	5
43-4131	Loan Interviewers and Clerks	1,914	1,991	77	4.02%	70	113	38	221	7	3	5
43-4141	New Accounts Clerks	450	451	1	0.22%	20	28	0	48	7	3	4
43-4151	Order Clerks	919	927	8	0.87%	43	60	4	107	7	3	5
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	1,314	1,324	10	0.76%	56	88	5	149	4	3	6
43-4171	Receptionists and Information Clerks	7,336	7,519	183	2.49%	462	493	92	1,047	7	3	5
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	389	426	37	9.51%	18	24	18	60	7	3	5
43-4199	Information and Record Clerks, All Other	1,011	1,010	-1	-0.10%	49	63	0	112	7	3	5
43-5000	Material Recording, Scheduling, Dispatching, and Distributing Workers	36,094	36,676	582	1.61%	1,676	2,189	291	4,156			
43-5011	Cargo and Freight Agents	803	836	33	4.11%	26	40	16	82	7	3	5
43-5021	Couriers and Messengers	642	661	19	2.96%	30	28	10	68	7	3	5
43-5031	Police, Fire, and Ambulance Dispatchers	1,035	1,061	26	2.51%	37	56	13	106	7	3	4
43-5032	Dispatchers, Except Police, Fire, and Ambulance	1,599	1,628	29	1.81%	57	87	14	158	7	3	4
43-5041	Meter Readers, Utilities	772	777	5	0.65%	25	32	2	59	7	3	5
43-5051	Postal Service Clerks	1,122	1,151	29	2.58%	58	31	14	103	7	3	5
43-5052	Postal Service Mail Carriers	3,119	3,199	80	2.56%	122	89	40	251	7	3	5
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	599	608	9	1.50%	26	17	4	47	7	3	5
43-5061	Production, Planning, and Expediting Clerks	3,719	3,797	78	2.10%	130	244	39	413	7	3	4
43-5071	Shipping, Receiving, and Traffic Clerks	4,377	4,387	10	0.23%	171	261	5	437	7	3	5
43-5081	Stock Clerks and Order Fillers	17,551	17,793	242	1.38%	965	1,259	121	2,345	7	3	5

Stand	dard Occupational Classification (SOC)	Emplo	yment	Cha	inge		Annual C)penings		Educa	tion/Training (Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	756	778	22	2.91%	30	44	11	85	7	3	5
43-6000	Secretaries and Administrative Assistants	29,913	30,038	125	0.42%	1,615	1,570	62	3,247			
43-6011	Executive Secretaries and Executive Administrative Assistants	4,176	4,121	-55	-1.32%	224	218	-28	414	7	2	6
43-6012	Legal Secretaries	1,103	1,081	-22	-1.99%	59	57	-11	105	7	3	4
43-6013	Medical Secretaries	3,692	3,869	177	4.79%	204	198	88	490	7	3	4
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	20,942	20,967	25	0.12%	1,129	1,098	12	2,239	7	3	5
43-9000	Other Office and Administrative Support Workers	37,356	37,913	557	1.49%	2,099	2,176	278	4,553			
43-9011	Computer Operators	970	946	-24	-2.47%	38	58	-12	84	7	3	4
43-9021	Data Entry Keyers	1,249	1,219	-30	-2.40%	64	80	-15	129	7	3	5
43-9041	Insurance Claims and Policy Processing Clerks	2,688	2,976	288	10.71%	121	159	144	424	7	3	4
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	770	769	-1	-0.13%	42	43	0	85	7	3	5
43-9061	Office Clerks, General	28,637	28,917	280	0.98%	1,688	1,646	140	3,474	7	3	5
43-9071	Office Machine Operators, Except Computer	208	207	-1	-0.48%	9	14	0	23	7	3	5
43-9081	Proofreaders and Copy Markers	127	130	3	2.36%	10	9	2	21	3	3	6
43-9111	Statistical Assistants	48	50	2	4.17%	2	4	1	7	3	3	6
43-9199	Office and Administrative Support Workers, All Other	2,242	2,301	59	2.63%	99	144	30	273	7	3	5
45-0000	FARMING, FISHING, AND FORESTRY OCCUPATIONS	18,080	18,040	-40	-0.22%	664	1,950	-20	2,594			
45-2000	Agricultural Workers	14,716	14,693	-23	-0.16%	546	1,632	-12	2,166			
45-2011	Agricultural Inspectors	384	386	2	0.52%	16	34	1	51	3	3	
45-2041	Graders and Sorters, Agricultural Products	1,688	1,722	34	2.01%	68	160	17	245	8	3	5
45-2091	Agricultural Equipment Operators	961	957	-4	-0.42%	35	110	-2	143	8	3	4
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	6,870	6,738	-132	-1.92%	249	776	-66	959	8	3	5
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	4,256	4,341	85	2.00%	157	490	42	689	8	3	5

	dard Occupational Classification (SOC)					<u>,</u>	Annual C	nonings		Educa	odoc	
Sidfic	iaru occupationai Ciassincation (SOC)	Emplo 2017	2019	Una	inge I		AHHUƏLC	penings I		Euuca	tion/Training (Work	
Code	Title	Estimated	Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Experience	Job Training
45-4000	Forest, Conservation, and Logging Workers	2,455	2,442	-13	-0.53%	88	228	-6	310			
45-4021	Fallers	209	203	-6	-2.87%	8	19	-3	24	7	3	4
45-4022	Logging Equipment Operators	1,688	1,678	-10	-0.59%	60	154	-5	209	7	3	4
45-4023	Log Graders and Scalers	290	296	6	2.07%	10	27	3	40	7	3	4
47-0000	CONSTRUCTION AND EXTRACTION OCCUPATIONS	54,174	55,958	1,784	3.29%	1,937	3,657	892	6,486			
47-1000	Supervisors of Construction and Extraction Workers	5,339	5,509	170	3.18%	174	342	85	601			
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	5,339	5,509	170	3.18%	174	342	85	601	7	1	6
47-2000	Construction Trades Workers	41,168	42,659	1,491	3.62%	1,452	2,736	746	4,934			
47-2011	Boilermakers	109	114	5	4.59%	4	8	2	14	7	3	1
47-2021	Brickmasons and Blockmasons	647	672	25	3.86%	19	36	12	67	7	3	1
47-2031	Carpenters	6,684	6,848	164	2.45%	232	376	82	690	7	3	1
47-2041	Carpet Installers	271	277	6	2.21%	8	14	3	25	8	3	5
47-2043	Floor Sanders and Finishers	168	169	1	0.60%	6	9	0	15	8	3	4
47-2044	Tile and Marble Setters	114	115	1	0.88%	4	6	0	10	8	3	3
47-2051	Cement Masons and Concrete Finishers	1,189	1,244	55	4.63%	46	82	28	156	8	3	4
47-2061	Construction Laborers	10,077	10,390	313	3.11%	357	674	156	1,187	8	3	5
47-2071	Paving, Surfacing, and Tamping Equipment Operators	1,146	1,213	67	5.85%	39	80	34	153	7	3	4
47-2073	Operating Engineers and Other Construction Equipment Operators	3,593	3,732	139	3.87%	140	257	70	467	7	3	4
47-2081	Drywall and Ceiling Tile Installers	660	645	-15	-2.27%	20	36	-8	48	8	3	4
47-2111	Electricians	6,162	6,492	330	5.36%	220	470	165	855	7	3	1
47-2121	Glaziers	413	429	16	3.87%	16	32	8	56	7	3	1
47-2131	Insulation Workers, Floor, Ceiling, and Wall	309	303	-6	-1.94%	8	24	-3	29	8	3	
47-2132	Insulation Workers, Mechanical	171	185	14	8.19%	5	14	7	26	7	3	
47-2141	Painters, Construction and Maintenance	2,138	2,158	20	0.94%	74	107	10	191	8	3	4
47-2151	Pipelayers	526	544	18	3.42%	20	36	9	65	8	3	5
47-2152	Plumbers, Pipefitters, and Steamfitters	3,364	3,572	208	6.18%	126	232	104	462	7	3	1
47-2161	Plasterers and Stucco Masons	80	79	-1	-1.25%	3	4	0	7	8	3	3
47-2171	Reinforcing Iron and Rebar Workers	70	72	2	2.86%	2	6	1	9	7	3	1
47-2181	Roofers	955	994	39	4.08%	28	66	20	114	8	3	4

Stand	dard Occupational Classification (SOC)	Emplo	yment	Cha	nge		Annual C	penings		Educat	tion/Training C	Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
47-2211	Sheet Metal Workers	1,268	1,319	51	4.02%	44	88	26	158	7	3	1
47-2221	Structural Iron and Steel Workers	877	911	34	3.88%	26	68	17	111	7	3	1
47-3000	Helpers, Construction Trades	2,035	2,125	90	4.42%	88	201	45	334			
47-3011	HelpersBrickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	223	231	8	3.59%	10	22	4	36	8	3	5
47-3012	HelpersCarpenters	262	273	11	4.20%	12	26	6	44	8	3	5
47-3013	HelpersElectricians	299	319	20	6.69%	13	30	10	53	7	3	5
47-3014	HelpersPainters, Paperhangers, Plasterers, and Stucco Masons	253	249	-4	-1.58%	10	24	-2	32	8	3	5
47-3015	HelpersPipelayers, Plumbers, Pipefitters, and Steamfitters	450	482	32	7.11%	20	45	16	81	7	3	5
47-3016	HelpersRoofers	234	244	10	4.27%	10	23	5	38	8	3	5
47-3019	Helpers, Construction Trades, All Other	314	327	13	4.14%	14	31	6	51	8	3	5
47-4000	Other Construction and Related Workers	4,269	4,383	114	2.67%	184	262	57	503			
47-4011	Construction and Building Inspectors	705	731	26	3.69%	36	40	13	89	7	1	4
47-4031	Fence Erectors	200	207	7	3.50%	7	15	4	26	8	3	4
47-4041	Hazardous Materials Removal Workers	226	238	12	5.31%	9	18	6	33	7	3	4
47-4051	Highway Maintenance Workers	2,502	2,555	53	2.12%	107	145	26	278	7	3	4
47-4061	Rail-Track Laying and Maintenance Equipment Operators	114	112	-2	-1.75%	4	7	-1	10	7	3	4
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	140	149	9	6.43%	7	10	4	21	7	3	4
47-5000	Extraction Workers	1,363	1,282	-81	-5.94%	40	116	-40	116			
47-5011	Derrick Operators, Oil and Gas	82	71	-11	-13.41%	2	7	-6	3	8	3	5
47-5012	Rotary Drill Operators, Oil and Gas	26	22	-4	-15.38%	0	2	-2	0	8	3	4
47-5013	Service Unit Operators, Oil, Gas, and Mining	382	346	-36	-9.42%	9	34	-18	25	8	3	4
47-5031	Explosives Workers, Ordnance Handling Experts, and Blasters	122	121	-1	-0.82%	6	8	0	14	7	2	3
47-5041	Continuous Mining Machine Operators	236	249	13	5.51%	7	21	6	34	8	3	4
47-5051	Rock Splitters, Quarry	49	52	3	6.12%	2	4	2	8	8	3	5
47-5071	Roustabouts, Oil and Gas	318	288	-30	-9.43%	10	26	-15	21	8	3	4
47-5081	HelpersExtraction Workers	51	44	-7	-13.73%	2	4	-4	2	7	3	4
49-0000	INSTALLATION, MAINTENANCE, AND REPAIR OCCUPATIONS	56,188	57,837	1,649	2.93%	1,962	3,371	824	6,157			

Stand	ard Occupational Classification (SOC)	Emplo	yment	Cha	nge		Annual C)penings		Educa	tion/Training (Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
49-1000	Supervisors of Installation, Maintenance, and Repair Workers	4,895	5,034	139	2.84%	161	256	70	487		,	
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	4,895	5,034	139	2.84%	161	256	70	487	7	2	6
49-2000	Electrical and Electronic Equipment Mechanics, Installers, and Repairers	5,824	5,884	60	1.03%	185	397	30	612			
49-2011	Computer, Automated Teller, and Office Machine Repairers	773	781	8	1.03%	26	50	4	80	6	3	5
49-2021	Radio, Cellular, and Tower Equipment Installers and Repairs	50	52	2	4.00%	2	4	1	7	4	3	4
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	2,742	2,745	3	0.11%	91	194	2	287	5	3	4
49-2091	Avionics Technicians	111	109	-2	-1.80%	2	6	-1	7	4	3	6
49-2092	Electric Motor, Power Tool, and Related Repairers	275	280	5	1.82%	8	17	2	27	7	2	4
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	503	506	3	0.60%	12	30	2	44	5	3	3
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	109	109	0	0.00%	2	6	0	8	5	2	4
49-2097	Electronic Home Entertainment Equipment Installers and Repairers	340	348	8	2.35%	12	23	4	39	5	3	5
49-2098	Security and Fire Alarm Systems Installers	691	723	32	4.63%	23	53	16	92	7	3	4
49-3000	Vehicle and Mobile Equipment Mechanics, Installers, and Repairers	16,066	16,607	541	3.37%	532	1,008	270	1,810			
49-3011	Aircraft Mechanics and Service Technicians	654	666	12	1.83%	20	29	6	55	5	3	6
49-3021	Automotive Body and Related Repairers	1,488	1,556	68	4.57%	52	91	34	177	7	3	3
49-3023	Automotive Service Technicians and Mechanics	6,210	6,390	180	2.90%	198	380	90	668	5	3	5
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	3,060	3,166	106	3.46%	96	178	53	327	7	3	3
49-3041	Farm Equipment Mechanics and Service Technicians	888	878	-10	-1.13%	28	56	-5	79	7	3	3
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	999	1,013	14	1.40%	32	64	7	103	7	3	3
49-3043	Rail Car Repairers	357	448	91	25.49%	12	26	46	84	7	3	3
49-3051	Motorboat Mechanics and Service Technicians	195	205	10	5.13%	8	12	5	25	7	3	3
49-3052	Motorcycle Mechanics	188	200	12	6.38%	8	12	6	26	5	3	5

Stand	dard Occupational Classification (SOC)	Emplo	yment	Cha	inge		Annual C)penings		Educa	tion/Training (Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	436	452	16	3.67%	18	28	8	54	7	3	4
49-3092	Recreational Vehicle Service Technicians	148	156	8	5.41%	6	13	4	23	7	3	3
49-3093	Tire Repairers and Changers	1,277	1,302	25	1.96%	48	110	12	170	7	3	5
49-9000	Other Installation, Maintenance, and Repair Occupations	29,403	30,312	909	3.09%	1,084	1,710	454	3,248			
49-9011	Mechanical Door Repairers	123	130	7	5.69%	3	6	4	13	7	3	4
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	328	329	1	0.30%	8	16	0	24	7	3	4
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	3,144	3,357	213	6.77%	90	218	106	414	5	3	3
49-9031	Home Appliance Repairers	212	208	-4	-1.89%	10	9	-2	17	7	3	4
49-9041	Industrial Machinery Mechanics	5,207	5,359	152	2.92%	178	273	76	527	7	3	3
49-9043	Maintenance Workers, Machinery	857	893	36	4.20%	38	50	18	106	7	3	3
49-9044	Millwrights	473	486	13	2.75%	15	27	6	48	7	3	1
49-9051	Electrical Power-Line Installers and Repairers	1,807	1,826	19	1.05%	46	96	10	152	7	3	3
49-9052	Telecommunications Line Installers and Repairers	1,147	1,178	31	2.70%	28	86	16	130	7	3	3
49-9062	Medical Equipment Repairers	494	505	11	2.23%	19	24	6	49	4	3	4
49-9063	Musical Instrument Repairers and Tuners	34	34	0	0.00%	2	2	0	4	7	3	1
49-9069	Precision Instrument and Equipment Repairers, All Other	62	65	3	4.84%	2	3	2	7	7	3	3
49-9071	Maintenance and Repair Workers, General	12,620	12,987	367	2.91%	522	712	184	1,418	7	3	4
49-9081	Wind Turbine Service Technicians	33	33	0	0.00%	1	2	0	3	5	3	3
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	281	285	4	1.42%	12	19	2	33	7	3	5
49-9094	Locksmiths and Safe Repairers	134	134	0	0.00%	6	6	0	12	7	3	3
49-9096	Riggers	46	49	3	6.52%	2	3	2	7	7	3	4
49-9098	HelpersInstallation, Maintenance, and Repair Workers	1,085	1,133	48	4.42%	53	84	24	161	7	3	5
49-9099	Installation, Maintenance, and Repair Workers, All Other	961	963	2	0.21%	36	55	1	92	7	3	4
51-0000	PRODUCTION OCCUPATIONS	118,671	119,709	1,038	0.87%	4,898	8,702	519	14,119			

Stand	dard Occupational Classification (SOC)	Emplo	vment		inge	<u>,</u>	Annual C)peninas		Educat	ion/Training C	Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
51-1000	Supervisors of Production Workers	8,534	8,686	152	1.78%	274	551	76	901		'	J
51-1011	First-Line Supervisors of Production and Operating Workers	8,534	8,686	152	1.78%	274	551	76	901	7	2	6
51-2000	Assemblers and Fabricators	18,109	17,820	-289	-1.60%	764	1,287	-144	1,907			
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	400	362	-38	-9.50%	16	24	-19	21	7	3	4
51-2021	Coil Winders, Tapers, and Finishers	500	446	-54	-10.80%	24	31	-27	28	7	3	4
51-2022	Electrical and Electronic Equipment Assemblers	1,097	1,006	-91	-8.30%	54	68	-46	76	7	3	4
51-2023	Electromechanical Equipment Assemblers	49	47	-2	-4.08%	2	3	-1	4	7	3	4
51-2031	Engine and Other Machine Assemblers	204	205	1	0.49%	5	15	0	20	7	3	4
51-2041	Structural Metal Fabricators and Fitters	1,478	1,508	30	2.03%	52	109	15	176	7	3	4
51-2091	Fiberglass Laminators and Fabricators	409	447	38	9.29%	18	31	19	68	7	3	4
51-2092	Team Assemblers	12,596	12,459	-137	-1.09%	535	908	-68	1,375	7	3	4
51-2099	Assemblers and Fabricators, All Other	1,376	1,340	-36	-2.62%	58	98	-18	138	7	3	4
51-3000	Food Processing Workers	18,601	19,317	716	3.85%	896	1,434	358	2,688			
51-3011	Bakers	1,170	1,207	37	3.16%	76	90	18	184	8	3	3
51-3021	Butchers and Meat Cutters	1,464	1,506	42	2.87%	66	113	21	200	8	3	3
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	7,551	7,861	310	4.11%	346	587	155	1,088	8	3	5
51-3023	Slaughterers and Meat Packers	2,316	2,410	94	4.06%	106	180	47	333	8	3	5
51-3091	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	99	103	4	4.04%	4	7	2	13	8	3	4
51-3092	Food Batchmakers	1,922	1,976	54	2.81%	107	163	27	297	7	3	4
51-3093	Food Cooking Machine Operators and Tenders	966	1,016	50	5.18%	54	80	25	159	7	3	4
51-3099	Food Processing Workers, All Other	3,113	3,238	125	4.02%	136	214	62	412	8	3	4
51-4000	Metal Workers and Plastic Workers	20,497	20,563	66	0.32%	651	1,500	33	2,184			
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	1,167	1,178	11	0.94%	32	82	6	120	7	3	4
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	95	98	3	3.16%	2	7	2	11	5	3	4
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	901	888	-13	-1.44%	22	67	-6	83	7	3	4
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	122	120	-2	-1.64%	4	8	-1	11	7	3	4

Stand	lard Occupational Classification (SOC)	Emplo	vment	Cha	nge		Annual C)peninas		Educat	tion/Training (Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	2,629	2,592	-37	-1.41%	94	198	-18	274	7	3	4
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	96	94	-2	-2.08%	4	6	-1	9	7	3	4
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	509	480	-29	-5.70%	17	34	-14	37	7	3	4
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	368	373	5	1.36%	11	26	2	39	7	3	4
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	95	95	0	0.00%	4	6	0	10	7	3	4
51-4041	Machinists	2,630	2,649	19	0.72%	92	172	10	274	7	3	3
51-4051	Metal-Refining Furnace Operators and Tenders	244	257	13	5.33%	8	16	6	30	7	3	4
51-4052	Pourers and Casters, Metal	108	115	7	6.48%	4	7	4	15	7	3	4
51-4071	Foundry Mold and Coremakers	53	50	-3	-5.66%	2	4	-2	4	7	3	4
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	1,973	1,946	-27	-1.37%	72	148	-14	206	7	3	4
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,640	1,577	-63	-3.84%	60	112	-32	140	7	3	4
51-4111	Tool and Die Makers	471	452	-19	-4.03%	18	25	-10	33	5	3	3
51-4121	Welders, Cutters, Solderers, and Brazers	5,218	5,368	150	2.87%	141	414	75	630	7	3	4
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	408	400	-8	-1.96%	15	28	-4	39	7	3	4
51-4192	Layout Workers, Metal and Plastic	55	52	-3	-5.45%	2	4	-2	4	7	3	4
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	186	177	-9	-4.84%	4	14	-4	14	7	3	4
51-4194	Tool Grinders, Filers, and Sharpeners	164	166	2	1.22%	5	16	1	22	7	3	4
51-4199	Metal Workers and Plastic Workers, All Other	29	29	0	0.00%	1	2	0	3	7	3	4
51-5100	Printing Workers	2,062	2,038	-24	-1.16%	90	134	-12	212			
51-5111	Prepress Technicians and Workers	248	241	-7	-2.82%	10	18	-4	24	5	3	6
51-5112	Printing Press Operators	1,549	1,536	-13	-0.84%	60	100	-6	154	7	3	4
51-5113	Print Binding and Finishing Workers	265	261	-4	-1.51%	20	14	-2	32	7	3	4

	2010 / tillalload ota					<u> </u>		<u> </u>		1		70
Stand	dard Occupational Classification (SOC)		yment	Cha	nge		Annual C	penings		Educat	ion/Training C	
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
51-6000	Textile, Apparel, and Furnishings Workers	5,044	4,819	-225	-4.46%	310	303	-112	501			
51-6011	Laundry and Dry-Cleaning Workers	1,755	1,736	-19	-1.08%	117	118	-10	225	8	3	5
51-6021	Pressers, Textile, Garment, and Related Materials	364	342	-22	-6.04%	21	23	-11	33	8	3	5
51-6031	Sewing Machine Operators	1,103	1,089	-14	-1.27%	62	53	-7	108	8	3	5
51-6052	Tailors, Dressmakers, and Custom Sewers	254	249	-5	-1.97%	22	10	-2	30	8	3	4
51-6063	Textile Knitting and Weaving Machine Setters, Operators, and Tenders	170	186	16	9.41%	10	12	8	30	7	3	5
51-6093	Upholsterers	547	529	-18	-3.29%	24	31	-9	46	7	3	4
51-7000	Woodworkers	4,328	4,318	-10	-0.23%	187	275	-5	457			
51-7011	Cabinetmakers and Bench Carpenters	1,573	1,515	-58	-3.69%	72	86	-29	129	7	3	4
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	1,391	1,433	42	3.02%	57	104	21	182	7	3	4
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	1,053	1,071	18	1.71%	41	74	9	124	7	3	4
51-8000	Plant and System Operators	4,024	3,979	-45	-1.12%	106	248	-22	332			
51-8012	Power Distributors and Dispatchers	267	264	-3	-1.12%	6	16	-2	20	7	3	3
51-8013	Power Plant Operators	297	297	0	0.00%	8	18	0	26	7	3	3
51-8021	Stationary Engineers and Boiler Operators	299	297	-2	-0.67%	10	21	-1	30	7	3	3
51-8031	Water and Wastewater Treatment Plant and System Operators	1,953	1,971	18	0.92%	56	104	9	169	7	3	3
51-8091	Chemical Plant and System Operators	294	284	-10	-3.40%	6	22	-5	23	7	3	4
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers	605	577	-28	-4.63%	14	44	-14	44	7	3	4
51-8099	Plant and System Operators, All Other	92	95	3	3.26%	2	7	2	11	7	3	4
51-9000	Other Production Occupations	37,472	38,169	697	1.86%	1,618	2,970	348	4,936			
51-9011	Chemical Equipment Operators and Tenders	1,324	1,321	-3	-0.23%	36	104	-2	138	7	3	4
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	665	692	27	4.06%	18	53	14	85	7	3	4
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	425	439	14	3.29%	16	32	7	55	7	3	4
51-9022	Grinding and Polishing Workers, Hand	315	321	6	1.90%	12	24	3	39	8	3	4
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	1,906	1,971	65	3.41%	70	145	32	247	7	3	4

Stand	dard Occupational Classification (SOC)	Employment Change			Annual C	penings		Educat	ion/Training (Codes		
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	1,389	1,373	-16	-1.15%	50	106	-8	148	7	3	4
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	948	950	2	0.21%	37	76	1	114	7	3	4
51-9051	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	466	471	5	1.07%	20	26	2	48	7	3	4
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	5,981	5,975	-6	-0.10%	248	458	-3	703	7	3	4
51-9071	Jewelers and Precious Stone and Metal Workers	221	219	-2	-0.90%	13	10	-1	22	7	3	3
51-9081	Dental Laboratory Technicians	473	487	14	2.96%	20	32	7	59	7	3	4
51-9082	Medical Appliance Technicians	87	90	3	3.45%	4	6	2	12	7	3	4
51-9083	Ophthalmic Laboratory Technicians	351	370	19	5.41%	16	24	10	50	7	3	4
51-9111	Packaging and Filling Machine Operators and Tenders	4,066	4,195	129	3.17%	195	274	64	533	7	3	4
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	980	971	-9	-0.92%	28	73	-4	97	7	3	4
51-9122	Painters, Transportation Equipment	1,014	1,067	53	5.23%	30	78	26	134	7	3	4
51-9123	Painting, Coating, and Decorating Workers	139	134	-5	-3.60%	4	10	-2	12	8	3	4
51-9191	Adhesive Bonding Machine Operators and Tenders	358	350	-8	-2.23%	16	22	-4	34	7	3	4
51-9192	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	318	329	11	3.46%	15	26	6	47	7	3	4
51-9193	Cooling and Freezing Equipment Operators and Tenders	723	743	20	2.77%	29	54	10	93	7	3	4
51-9194	Etchers and Engravers	23	22	-1	-4.35%	2	2	0	4	7	3	4
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	387	392	5	1.29%	15	24	2	41	7	3	3
51-9196	Paper Goods Machine Setters, Operators, and Tenders	1,619	1,589	-30	-1.85%	58	104	-15	147	7	3	4
51-9198	HelpersProduction Workers	9,431	9,796	365	3.87%	516	916	182	1,614	7	3	5
51-9199	Production Workers, All Other	3,072	3,127	55	1.79%	122	226	28	376	7	3	4
53-0000	TRANSPORTATION AND MATERIAL MOVING OCCUPATIONS	109,275	111,883	2,608	2.39%	5,254	7,720	1,304	14,278			

Stand	dard Occupational Classification (SOC)	Emplo		Cha	nge		Annual C	penings	T	Educat	ion/Training C	
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
53-1000	Supervisors of Transportation and Material Moving Workers	3,935	4,035	100	2.54%	128	274	50	452			
53-1011	Aircraft Cargo Handling Supervisors	37	40	3	8.11%	1	2	2	5	7	2	6
53-1021	First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	1,402	1,437	35	2.50%	46	98	18	162	7	2	6
53-1031	First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	2,496	2,558	62	2.48%	81	174	31	286	7	2	6
53-2021	Air Traffic Controllers	101	101	0	0.00%	3	6	0	9	4	3	3
53-3000	Motor Vehicle Operators	55,386	56,637	1,251	2.26%	2,682	3,300	626	6,608			
53-3011	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	50	51	1	2.00%	3	4	0	7	7	3	4
53-3021	Bus Drivers, Transit and Intercity	467	480	13	2.78%	37	20	6	63	7	3	4
53-3022	Bus Drivers, School or Special Client	6,292	6,323	31	0.49%	495	258	16	769	7	3	5
53-3031	Driver/Sales Workers	3,197	3,236	39	1.22%	136	202	20	358	7	3	5
53-3032	Heavy and Tractor-Trailer Truck Drivers	35,258	36,112	854	2.42%	1,513	2,242	427	4,182	5	3	5
53-3033	Light Truck or Delivery Services Drivers	6,954	7,119	165	2.37%	298	442	82	822	7	3	5
53-3041	Taxi Drivers and Chauffeurs	3,045	3,193	148	4.86%	186	126	74	386	8	3	5
53-3099	Motor Vehicle Operators, All Other	123	123	0	0.00%	14	7	0	21	8	3	5
53-6000	Other Transportation Workers	2,282	2,374	92	4.03%	125	216	46	387			
53-6021	Parking Lot Attendants	322	330	8	2.48%	19	28	4	51	8	3	5
53-6031	Automotive and Watercraft Service Attendants	1,335	1,380	45	3.37%	73	148	22	243	8	3	5
53-6041	Traffic Technicians	42	44	2	4.76%	2	3	1	6	7	3	4
53-6061	Transportation Attendants, Except Flight Attendants	145	150	5	3.45%	12	7	2	21	7	3	5
53-7000	Material Moving Workers	44,851	45,965	1,114	2.48%	2,241	3,748	557	6,546			
53-7011	Conveyor Operators and Tenders	429	438	9	2.10%	22	36	4	62	8	3	5
53-7021	Crane and Tower Operators	434	447	13	3.00%	14	31	6	51	7	2	4
53-7032	Excavating and Loading Machine and Dragline Operators	399	418	19	4.76%	15	29	10	54	7	2	4
53-7041	Hoist and Winch Operators	89	96	7	7.87%	4	8	4	16	8	3	5
53-7051	Industrial Truck and Tractor Operators	6,495	6,612	117	1.80%	228	490	58	776	8	3	5
53-7061	Cleaners of Vehicles and Equipment	3,645	3,803	158	4.33%	192	323	79	594	8	3	5
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	24,214	24,858	644	2.66%	1,216	2,098	322	3,636	8	3	5
53-7063	Machine Feeders and Offbearers	1,833	1,873	40	2.18%	100	149	20	269	8	3	5

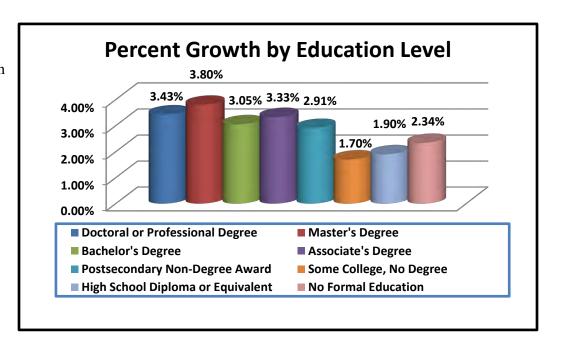
Stand	dard Occupational Classification (SOC)	Emplo	yment	Cha	nge		Annual C	penings		Educat	ion/Training C	Codes
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Education	Work Experience	Job Training
53-7064	Packers and Packagers, Hand	5,223	5,281	58	1.11%	356	428	29	813	8	3	5
53-7072	Pump Operators, Except Wellhead Pumpers	24	23	-1	-4.17%	1	2	0	3	7	3	4
53-7073	Wellhead Pumpers	124	109	-15	-12.10%	4	10	-8	6	7	2	4
53-7081	Refuse and Recyclable Material Collectors	1,831	1,892	61	3.33%	84	136	30	250	8	3	5
53-7121	Tank Car, Truck, and Ship Loaders	44	46	2	4.55%	2	4	1	7	8	3	5

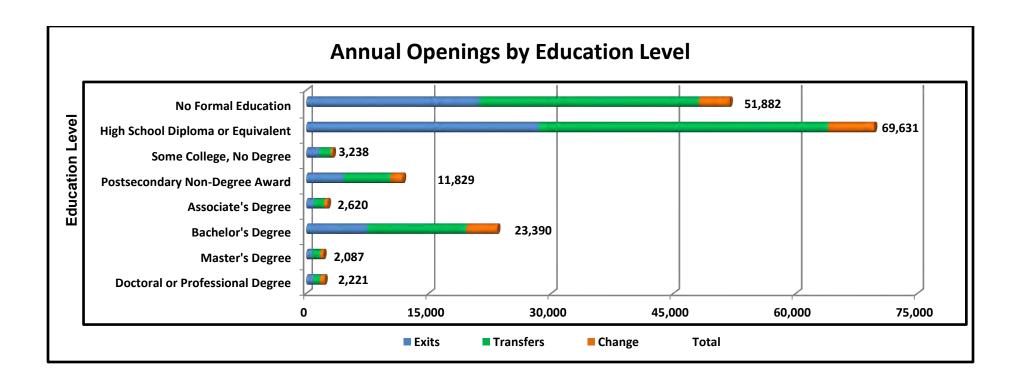
2017-2019 Projections by Education Level

Education	2017 Estimated Employment	2019 Projected Employment	Numeric Change	Percent Change	Annual Exits	Annual Transfers	Annual Change	Annual Openings- Total
Doctoral or Professional Degree	32,433	33,546	1,113	3.43%	829	840	552	2,221
Master's Degree	21,378	22,191	813	3.80%	692	989	406	2,087
Bachelor's Degree	246,909	254,452	7,543	3.05%	7,460	12,154	3,776	23,390
Associate's Degree	26,340	27,216	876	3.33%	894	1,289	437	2,620
Postsecondary Non-Degree Award	105,266	108,328	3,062	2.91%	4,559	5,738	1,532	11,829
Some College, No Degree	29,416	29,917	501	1.70%	1,562	1,426	250	3,238
High School Diploma or Equivalent	597,653	608,988	11,335	1.90%	28,469	35,495	5,667	69,631
No Formal Educational Credential	321,271	328,792	7,521	2.34%	21,170	26,957	3,755	51,882

Education Outlook

Every education category is projected to see positive net growth between 2017 and 2019. Occupations needing a high school diploma or equivalent are expected to add 11,335 new jobs and 69,631 annual job openings, while those that do not require formal education are estimated to add 7,521 jobs and have 51,882 annual job openings. At 3.80 percent, occupations requiring a Master's Degree are growing the fastest. Occupations requiring a college degree are forecast to add 10,345 jobs into the Arkansas job market and have a combined 30,318 annual openings.





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

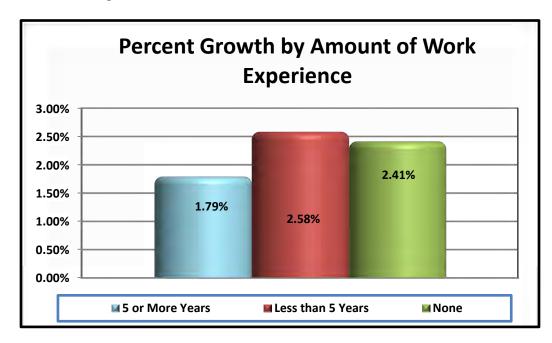
Standa	ard Occupational Classification (SOC)	Emplo	yment	Cha	nge		Annual O	penings		Education/Tr	raining Assignments
Code	Title	2017 Estimated	2019 Projected	Numeric	Percent	Exits	Transfers	Change	Total	Work Experience	Job Training
Doctoral	l or Professional Degree										
25-1071	Health Specialties Teachers, Postsecondary	2,720	2,882	162	5.96%	102	107	81	290	Less than 5 years	None
23-1011	Lawyers	3,885	4,005	120	3.09%	78	86	60	224	None	None
29-1051	Pharmacists	3,646	3,772	126	3.46%	86	72	63	221	None	None
Master's											
21-1012	Educational, Guidance, School, and Vocational Counselors	2,251	2,310	59	2.62%	84	149	30	263	None	None
11-9032	Education Administrators, Elementary and Secondary School	2,459	2,506	47	1.91%	70	113	24	207	5 years or more	None
21-1022	Healthcare Social Workers	1,441	1,499	58	4.02%	53	94	29	176	None	Internship/Residency
Bachelo	r's Degree										
11-1021	General and Operations Managers	21,142	21,733	591	2.80%	444	1,278	296	2,018	5 years or more	None
29-1141	Registered Nurses	25,182	26,183	1,001	3.98%	736	558	500	1,794	None	None
21-2011	Clergy	8,582	9,197	615	7.17%	408	546	308	1,262	None	Moderate-Term OJT
Associa	te's Degree										
25-2011	Preschool Teachers, Except Special Education	3,368	3,484	116	3.44%	148	183	58	389	None	None
23-2011	Paralegals and Legal Assistants	1,542	1,608	66	4.28%	52	105	33	190	None	None
31-2021	Physical Therapist Assistants	1,111	1,187	76	6.84%	50	84	38	172	None	None
Postsec	ondary Non-Degree Award/Some Co	llege, No D	egree e								
53-3032	Heavy and Tractor-Trailer Truck Drivers	35,258	36,112	854	2.42%	1,513	2,242	427	4,182	None	Short-Term OJT
31-1014	Nursing Assistants	18,593	19,212	619	3.33%	1,148	956	310	2,414	None	None
43-3031	Bookkeeping, Accounting, and Auditing Clerks	13,628	13,784	156	1.14%	848	658	78	1,584	None	Moderate-Term OJT
High Sch	nool Diploma or Equivalent										
11-9013	Farmers, Ranchers, and Other Agricultural Managers	61,973	62,615	642	1.04%	3,642	925	321	4,888	5 years or more	None
43-9061	Office Clerks, General	28,637	28,917	280	0.98%	1,688	1,646	140	3,474	None	Short-Term OJT
39-9021	Personal Care Aides	17,248	17,986	738	4.28%	1,406	1,059	369	2,834	None	Short-Term OJT
No Form	nal Educational Credential										
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	30,737	32,197	1,460	4.75%	2,786	2,914	730	6,430	None	Short-Term OJT
41-2011	Cashiers	33,839	33,901	62	0.18%	3,180	3,104	31	6,315	None	Short-Term OJT
41-2031	Retail Salespersons	37,585	37,894	309	0.82%	2,390	2,995	154	5,539	None	Short-Term OJT

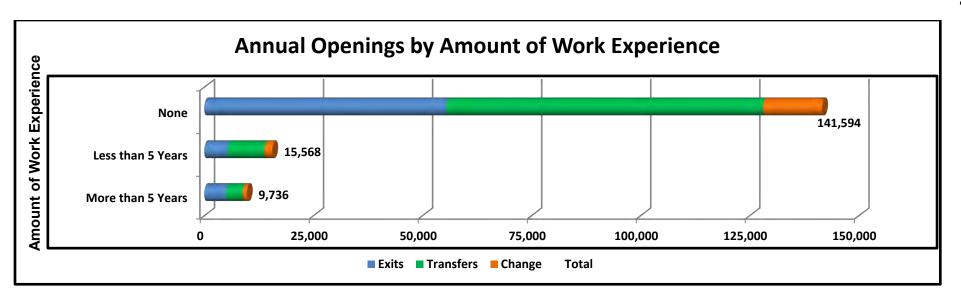
While formal education training is important, other factors are important or required by employers to receive competency in a particular job or to even be considered for certain jobs. One factor is work experience. Many occupations require some work experience in the line of work, especially those in 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.

2017-2019 Projections by Amount of Work Experience

Work Experience	2017 Estimated Employment	2019 Projected Employment	Numeric Change	Percent Change	Annual Exits	Annual Transfers	Annual Change	Annual Openings- Total
5 Years or More	113,378	115,409	2,031	1.79%	4,931	3,788	1,017	9,736
Less than 5 Years	140,241	143,857	3,616	2.58%	5,268	8,494	1,806	15,568
None	1,127,047	1,154,164	27,117	2.41%	55,436	72,606	13,552	141,594

Work Experience Outlook



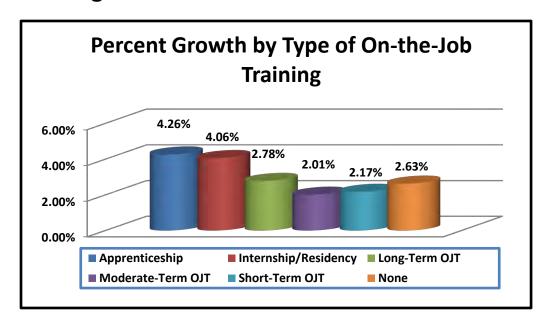


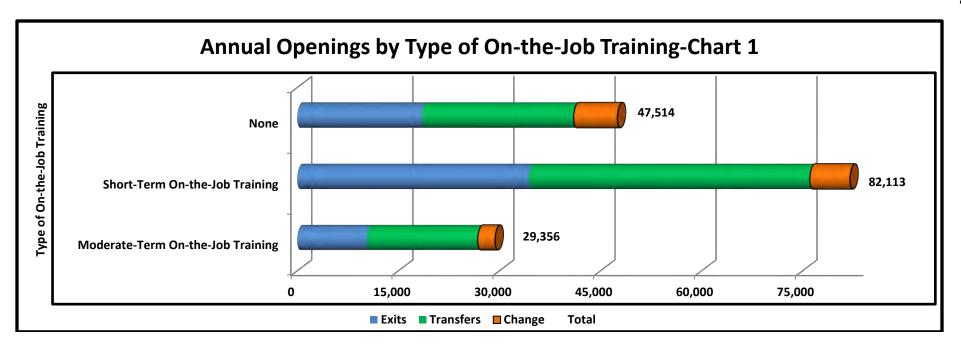
Another factor in determining full competency in an occupation is on-the-job training. Many occupations require additional training beyond formal education. Many jobs in education and the medical field require internships or residency. Many skills-trade occupations recommend or require apprenticeship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

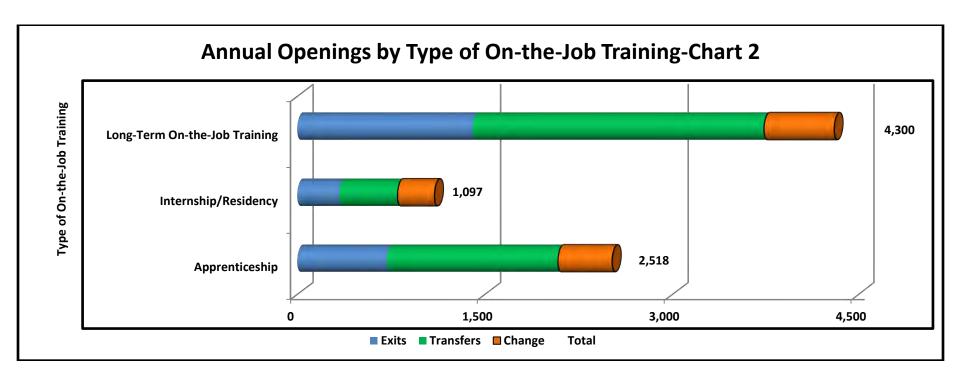
2017-2019 Projections by Type of On-the-Job Training

Job Training	2017 Estimated Employment	2019 Projected Employment	Numeric Change	Percent Change	Annual Exits	Annual Transfers	Annual Change	Annual Openings- Total
Apprenticeship	20,421	21,290	869	4.26%	716	1,369	433	2,518
Internship/Residency	14,592	15,185	593	4.06%	334	468	295	1,097
Long-Term On-the-Job Training	40,818	41,952	1,134	2.78%	1,401	2,332	567	4,300
Moderate-Term On-the-Job Training	255,915	261,071	5,156	2.01%	10,310	16,471	2,575	29,356
Short-Term On-the-Job Training	555,126	567,169	12,043	2.17%	34,349	41,744	6,020	82,113
None	493,794	506,763	12,969	2.63%	18,525	22,504	6,485	47,514

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.

2017-2019 Projections by Education Training Path

Education	Work Experience	Additional Training	2017 Estimated Employment	2019 Projected Employment	Numeric Change	Percent Change	Annual Exits	Annual Transfers	Annual Change	Total Annual Openings
Doctoral or Professional Degree	5 years or more	Short-Term On-the-Job Training	723	736	13	1.80%	14	16	7	37
Doctoral or Professional Degree	Less than 5 years	None	3,955	4,161	206	5.21%	149	155	103	407
Doctoral or Professional Degree	None	Internship/ Residency	7,006	7,222	216	3.08%	110	97	106	313
Doctoral or Professional Degree	None	None	20,749	21,427	678	3.27%	556	572	336	1,464
Master's Degree	5 years or more	None	4,080	4,161	81	1.99%	148	180	41	369
Master's Degree	Less than 5 years	None	1,363	1,397	34	2.49%	38	63	17	118
Master's Degree	None	Internship/ Residency	5,541	5,805	264	4.76%	165	289	132	586
Master's Degree	None	None	10,394	10,828	434	4.18%	341	457	216	1,014
Bachelor's Degree	5 years or more	None	38,331	39,363	1,032	2.69%	853	2,133	517	3,503
Bachelor's Degree	Less than 5 years	Moderate-Term On-the-Job Training	224	222	-2	-0.89%	6	10	-1	15
Bachelor's Degree	Less than 5 years	None	35,745	36,917	1,172	3.28%	1,055	1,821	584	3,460
Bachelor's Degree	Less than 5 years	Short-Term On-the-Job Training	191	198	7	3.66%	6	12	4	22

Education	Work Experience	Additional Training	2017 Estimated Employment	2019 Projected Employment	Numeric Change	Percent Change	Annual Exits	Annual Transfers	Annual Change	Total Annual Openings
Bachelor's Degree	None	Internship/ Residency	2,045	2,158	113	5.53%	59	82	57	198
Bachelor's Degree	None	Long-Term On-the-Job Training	2,914	3,037	123	4.22%	96	121	61	278
Bachelor's Degree	None	Moderate-Term On-the-Job Training	29,000	30,178	1,178	4.06%	1,039	1,779	589	3,407
Bachelor's Degree	None	None	137,524	141,431	3,907	2.84%	4,318	6,146	1,959	12,423
Bachelor's Degree	None	Short-Term On-the-Job Training	935	948	13	1.39%	28	50	6	84
Associate's Degree	Less than 5 years	None	755	777	22	2.91%	20	26	10	56
Associate's Degree	None	Long-Term On-the-Job Training	636	636	0	0.00%	35	44	0	79
Associate's Degree	None	Moderate-Term On-the-Job Training	1,832	1,885	53	2.89%	61	114	26	201
Associate's Degree	None	None	22,989	23,788	799	3.48%	774	1,097	399	2,270
Associate's Degree	None	Short-Term On-the-Job Training	128	130	2	1.56%	4	8	2	14
Postsecondary Non-Degree Award	5 years or more	Moderate-Term On-the-Job Training	42	42	0	0.00%	2	2	0	4
Postsecondary Non-Degree Award	Less than 5 years	Moderate-Term On-the-Job Training	936	958	22	2.35%	30	32	11	73
Postsecondary Non-Degree Award	Less than 5 years	None	227	231	4	1.76%	10	17	2	29
Postsecondary Non-Degree Award	Less than 5 years	Short-Term On-the-Job Training	857	863	6	0.70%	28	38	3	69

Education	Work Experience	Additional Training	2017 Estimated Employment	2019 Projected Employment	Numeric Change	Percent Change	Annual Exits	Annual Transfers	Annual Change	Total Annual Openings
Postsecondary Non-Degree Award	None	Long-Term On-the-Job Training	6,868	7,133	265	3.86%	184	396	132	712
Postsecondary Non-Degree Award	None	Moderate-Term On-the-Job Training	2,885	2,894	9	0.31%	94	204	6	304
Postsecondary Non-Degree Award	None	None	50,943	52,633	1,690	3.32%	2,464	2,364	845	5,673
Postsecondary Non-Degree Award	None	Short-Term On-the-Job Training	42,508	43,574	1,066	2.51%	1,747	2,685	533	4,965
Some College, No Degree	None	Moderate-Term On-the-Job Training	13,628	13,784	156	1.14%	848	658	78	1,584
Some College, No Degree	None	None	14,933	15,269	336	2.25%	684	714	168	1,566
Some College, No Degree	None	Short-Term On-the-Job Training	773	781	8	1.03%	26	50	4	80
High School Diploma or Equivalent	5 years or more	Moderate-Term On-the-Job Training	705	731	26	3.69%	36	40	13	89
High School Diploma or Equivalent	5 years or more	None	69,394	70,269	875	1.26%	3,872	1,409	437	5,718
High School Diploma or Equivalent	Less than 5 years	Long-Term On-the-Job Training	122	121	-1	-0.82%	6	8	0	14
High School Diploma or Equivalent	Less than 5 years	Moderate-Term On-the-Job Training	4,343	4,416	73	1.68%	134	207	35	376
High School Diploma or Equivalent	Less than 5 years	None	81,307	82,971	1,664	2.05%	3,178	5,272	834	9,284
High School Diploma or Equivalent	None	Apprenticeship	20,421	21,290	869	4.26%	716	1,369	433	2,518

Education	Work Experience	Additional Training	2017 Estimated Employment	2019 Projected Employment	Numeric Change	Percent Change	Annual Exits	Annual Transfers	Annual Change	Total Annual Openings
High School Diploma or Equivalent	None	Long-Term On-the-Job Training	26,012	26,625	613	2.36%	850	1,487	310	2,647
High School Diploma or Equivalent	None	Moderate-Term On-the-Job Training	177,604	180,600	2,996	1.69%	6,884	11,551	1,496	19,931
High School Diploma or Equivalent	None	None	1,093	1,128	35	3.20%	64	77	17	158
High School Diploma or Equivalent	None	Short-Term On-the-Job Training	216,549	220,730	4,181	1.93%	12,723	14,067	2,090	28,880
No Formal Educational Credential	Less than 5 years	Moderate-Term On-the-Job Training	10,131	10,540	409	4.04%	606	827	204	1,637
No Formal Educational Credential	None	Long-Term On-the-Job Training	4,081	4,210	129	3.16%	220	264	62	546
No Formal Educational Credential	None	Moderate-Term On-the-Job Training	14,585	14,821	236	1.62%	570	1,047	118	1,735
No Formal Educational Credential	None	Short-Term On-the-Job Training	292,377	299,124	6,747	2.31%	19,771	24,812	3,371	47,954

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	57,495	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	55,450	Talking to others to convey information effectively.
Reading Comprehension	26,097	Understanding written sentences and paragraphs in work-related documents.
Social Perceptiveness	24,665	Being aware of other's reactions and understanding why they react as they do
Service Orientation	15,686	Actively looking for ways to help people.
Monitoring	14,645	Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.
Writing	14,405	Communicating effectively in writing as appropriate for the needs of the audience.
Critical Thinking	14,172	Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
Coordination	12,908	Adjusting actions in relation to others' actions.
Instructing	12,264	Teaching others how to do something.
Judgment and Decision Making	9,419	Considering the relative costs and benefits of potential actions to choose the most appropriate one.
Learning Strategies	8,391	Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.
Time Management	4,895	Managing one's own time and the time of others.
Repairing	4,449	Repairing machines or systems using the needed tools.
Equipment Maintenance	4,279	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)

Knowledges	Total Demand	Definition
Customer and Personal Service	121,816	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	50,717	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Administration and Management	25,618	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.
Clerical	22,550	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.
Education and Training	15,430	Knowledge of principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.
Psychology	13,278	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.
Sales and Marketing	12,799	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.
Medicine and Dentistry	11,472	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	11,333	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
Building and Construction	10,591	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	7,284	Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
Production and Processing	6,807	Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.
Computers and Electronics	6,336	Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
Public Safety and Security	4,980	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.
Economics and Accounting	3,911	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	This category signifies that a formal credential issued by an educational institution, such as a high school diploma or postsecondary certificate, is not typically needed for entry into the occupation.						

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 occupation-specific technical instruction in which workers learn the practical and theoretical aspects of an occupation.
2	Internship/Residency	A formal period of training during which individuals work under the supervision of experienced workers in a professional setting. Many internships and residencies are required for state licensure in many fields.
3	Long-Term On-the-Job Training	Requires more than 12 months of on-the-job training or a combination of work experience and classroom instruction.
4	Moderate-Term On-the-Job Training	Requires 1 to 12 months of a combination of on-the-job experience and informal training.
5	Short-Term On-the-Job Training	Requires a short demonstration of job duties or one month or less of on-the-job experience and informal training.
6	None	No additional training or preparation required.

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the recipient and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.