EMPLOYMENT PROJECTIONS — 2018-2028

Employment is projected to grow by 8.4 million jobs to 169.4 million jobs over the 2018–28 decade, the U.S. Bureau of Labor Statistics (BLS) reported today. This expansion reflects an annual growth rate of 0.5 percent, which is slower than the 2008–18 annual growth rate of 0.8 percent. An aging population and labor force will contribute to changes expected over the coming decade including a continued decline in the labor force participation rate and continued growth in employment in healthcare and related industries and occupations. (See Chart 1.) Real Gross Domestic Product (GDP) is projected to grow at much the same rate from 2018 to 2028 as it did in the previous decade; labor productivity is projected to accelerate slightly from the previous decade to an annual rate of 1.6 percent, higher than the previous decade’s annual rate of 1.3 percent.

Chart 1. Ten fastest growing occupations, projected 2018-28

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percent change, projected 2018-28</th>
<th>Employment change, projected 2018-28 (in thousands)</th>
<th>Median annual wages, May 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar photovoltaic installers</td>
<td>63.3%</td>
<td>61,100</td>
<td>$42,680</td>
</tr>
<tr>
<td>Wind turbine service technicians</td>
<td>56.9%</td>
<td>30,480</td>
<td>$54,370</td>
</tr>
<tr>
<td>Home health aides</td>
<td>36.6%</td>
<td>80,100</td>
<td>$22,400</td>
</tr>
<tr>
<td>Personal care aides</td>
<td>36.4%</td>
<td>1,081,000</td>
<td>$24,020</td>
</tr>
<tr>
<td>Occupational therapy assistants</td>
<td>33.1%</td>
<td>14,500</td>
<td>$60,220</td>
</tr>
<tr>
<td>Information security analysts</td>
<td>31.6%</td>
<td>35,500</td>
<td>$98,350</td>
</tr>
<tr>
<td>Physician assistants</td>
<td>31.1%</td>
<td>37,000</td>
<td>$108,610</td>
</tr>
<tr>
<td>Statisticians</td>
<td>30.7%</td>
<td>13,600</td>
<td>$87,780</td>
</tr>
<tr>
<td>Nurse practitioners</td>
<td>28.2%</td>
<td>53,300</td>
<td>$107,030</td>
</tr>
<tr>
<td>Speech-language pathologists</td>
<td>27.3%</td>
<td>41,900</td>
<td>$77,510</td>
</tr>
</tbody>
</table>

Occupational Outlook Handbook

The projections are the foundation of the BLS Occupational Outlook Handbook (OOH), one of the nation’s most widely used career information resources. The OOH reflects BLS employment projections for the 2018–28 decade. The updated OOH is available online at www.bls.gov/ooh.
The following are highlights of BLS projections for the labor force, the macroeconomy, and industry and occupational employment.

**Labor Force**

- The labor force is projected to increase at an annual rate of 0.5 percent from 2018 to 2028. (See Chart 2.) This growth represents an increase of 8.9 million over the decade to 171 million by 2028. The labor force participation rate is projected to decline to 61.2 percent. See [www.bls.gov/emp/tables/civilian-labor-force-summary.htm](http://www.bls.gov/emp/tables/civilian-labor-force-summary.htm).

- Older workers, those ages 65 years and older, are increasingly staying in the workforce. The labor force participation rate for these workers is expected to increase to 23.3 percent by 2028. Conversely, the labor force participation rate for those ages 16 to 24 is projected to continue to decline, to 51.7 percent. This decline is expected due to increased time spent in school and displaced opportunities as older workers fill jobs historically held by younger workers. See [www.bls.gov/emp/tables/civilian-labor-force-participation-rate.htm](http://www.bls.gov/emp/tables/civilian-labor-force-participation-rate.htm).

- The share of workers ages 55 and older—a group that includes baby boomers, who are staying in the workforce longer—is projected to continue to increase over the 2018–28 decade, from 23.1 percent to 25.2 percent. (See Chart 3.)

- Much of the projected decline in the overall labor force participation rate from 2018 to 2028 is due to a decrease in the participation rate for men, from 69.1 percent to 66.1 percent. However, the participation rate for women is also expected to decline over the decade, from 57.1 percent to 56.6 percent. (See Chart 4.)
Macroeconomy

- Real Gross Domestic Product (GDP) in 2012 chained dollars is projected to grow at an annual rate of 1.8 percent from 2018 to 2028, the same rate as that of the 2008–18 decade. See www.bls.gov/emp/tables/real-gdp-major-demand-category.htm.

- Although GDP growth is projected to remain steady, labor productivity is expected to accelerate. Productivity is projected to grow at an annual rate of 1.6 percent from 2018 to 2028, slightly faster than the 2008–18 rate of 1.3 percent. The projected growth indicates a recovery back to long-run productivity growth rates, and is expected due to a combination of factors, such as capital investment, technological advancement, and workforce education. See www.bls.gov/emp/tables/labor-supply-factors-affecting-productivity.htm.
Industry Employment

- Industry employment is projected to grow at an annual rate of 0.5 percent from 2018 to 2028, slower than the annual rate of 0.8 percent from 2008 to 2018. Employment will increase to about 169.4 million over the projections decade. See www.bls.gov/emp/tables/employment-by-major-industry-sector.htm.

- The service-providing sector as a whole will grow at a projected rate of 0.6 percent annually, slightly faster than the annual rate of 0.5 percent for industry employment overall. This growth is projected to add more than 7.6 million jobs, resulting in 136.8 million jobs in the service-providing sector by 2028. After declining slightly from 2008 to 2018 (-0.3 percent annually), the goods-producing sector is expected to change little from 2018–28, with an annual growth rate of 0.1 percent.

- The sectors projected to experience the fastest annual employment growth are health care and social assistance (1.6 percent), private educational services (1.2 percent), and construction (1.1 percent). These three sectors alone are projected to add more than 4.6 million jobs by 2028—including 3.4 million new jobs projected in healthcare and social assistance. (See Chart 5.)

- Five sectors are projected to experience employment declines from 2018 to 2028: retail trade, wholesale trade, utilities, federal government, and manufacturing. Retail trade is projected to decline by 0.1 percent annually, resulting in an employment decrease of 153,700 jobs. One factor contributing to this decline is a shift to e-commerce, which is also driving employment growth in the transportation and warehousing sector.
Occupational Employment

- Occupational employment is projected to grow by 5.2 percent from 2018 to 2028, an increase of 8.4 million jobs. Many of the fastest growing occupations are in healthcare and related services. Other rapid-growth occupations are in computer and mathematics and in renewable energy fields. See www.bls.gov/emp/tables/emp-by-major-occupational-group.htm.

- Employment in nearly all major occupational groups is projected to increase from 2018 to 2028. The fastest growing groups include healthcare support occupations (18.2 percent), personal care and service occupations (17.4 percent), computer and mathematical occupations (12.7 percent), healthcare practitioners and technical occupations (11.9 percent), and community and social service occupations (11.2 percent).

- Three occupational groups are projected to have declining employment over the 2018–28 decade. Employment in sales and related occupations is expected to decline by 0.5 percent as consumers increasingly make purchases online through e-commerce. Office and administrative support occupations and production occupations are also expected to have employment declines, 2.6 percent and 4.5 percent, respectively, as advancements in technology and automation increase productivity or shift work to other occupations.

- Of the 30 fastest growing occupations, 18 are in healthcare and related occupations. Increased demand for healthcare services from an aging population and people with chronic conditions will drive much of the expected employment growth. The fastest growing among these occupations are home health aides and personal care aides. Other healthcare occupations with rapid projected growth—including nurse practitioners, physician assistants, and medical assistants—will be in greater demand as the healthcare industry moves toward delivery of team-based care. See www.bls.gov/emp/tables/fastest-growing-occupations.htm.

- Computer and mathematical occupations account for 6 of the 30 fastest growing occupations. Increasing use of mobile and connected devices will drive demand for application software developers, which is projected to experience employment growth of 25.6 percent. The need for robust online security will also rise as more connected devices enter homes and workplaces. This increased need for cybersecurity will drive demand for information security analysts, employment of which is projected to grow by 31.6 percent.

- Advances in, and implementation of, renewable energy technologies are expected to drive employment growth in the two occupations with the highest projected growth rates: solar photovoltaic installers (63.3 percent) and wind turbine technicians (56.9 percent). Despite the rapid growth projected in these occupations, their small employment size means that the growth is projected to yield only 6,100 new jobs and 3,800 new jobs, respectively.

More Information

- The Occupational Outlook Handbook (OOH) includes information about 568 detailed occupations in 325 occupational profiles, covering about 4 out of 5 jobs in the economy. Each profile features the 2018–28 projections, along with assessments of the job outlook, work activities, wages, education and training requirements, and more.

- Many profiles in the OOH now include career videos produced by the U.S. Department of Labor (DOL) CareerOneStop. Links to videos appear on the Summary tab of profiles to the right of the Quick Facts box. In addition, projections data and wage information in the OOH are now updated on an annual basis. The
The OOH reflects the 2018–28 projections and May 2018 wages from the Occupational Employment Statistics (OES) program. The OOH will be updated with May 2019 wages in the spring of 2020.

- The OOH is available online at www.bls.gov/ooh.


- Tables with detailed, comprehensive statistics used in preparing the projections are available online at www.bls.gov/emp/tables.htm.

- Definitions for terms used in this news release are available in the BLS Glossary at www.bls.gov/bls/glossary.htm.

Information from this news release will be made available to sensory impaired individuals upon request. Voice phone: (202) 691-5200; Federal Relay Services: (800) 877-8339.
Technical Note

BLS publishes projections for the labor force, the macroeconomy, industry employment, and occupational employment. More information is available online:

- Labor force:  
  www.bls.gov/emp/data/labor-force.htm

- Macroeconomy:  
  www.bls.gov/emp/data/aggregate-economy.htm

- Industry employment:  
  www.bls.gov/emp/data/industry-out-and-emp.htm

- Occupational employment:  
  www.bls.gov/emp/data/occupational-data.htm

The projections data provide an overview of expected changes in the economy over a 10-year period. The projections are focused on long-term structural trends of the economy and do not try to anticipate future business cycle activity. To meet this objective, specific assumptions are made about the labor force, macroeconomy, industry employment, and occupational employment. Critical to the production of these projections is the assumption of full employment for the economy in the projected year. The projections are not intended to be a forecast of what the future will be but instead are a description of what would be expected to happen under these specific assumptions and circumstances. When these assumptions are not realized, actual values will differ from projections.

The difference between projected changes in the labor force and in employment does not imply a labor shortage or surplus. The BLS projections assume labor market equilibrium; that is, one in which labor supply meets labor demand except for some level of frictional unemployment. In addition, the employment and labor force measures use different definitional and statistical concepts. For example, employment is a count of jobs, and one person may hold more than one job. Labor force is a count of employed people, and a person is counted only once regardless of how many jobs he or she holds.

For more information, visit the Employment Projections Methodology page online at www.bls.gov/emp/documentation/projections-methods.htm.

Frequently asked questions about the employment projections are online at www.bls.gov/emp/frequently-asked-questions.htm.

Users and Uses

The BLS projections are used by high school and college students, their teachers and parents, jobseekers, career counselors, and guidance specialists to determine jobs in demand. The projections also are used by state workforce agencies to prepare state and area projections that, together with the national projections, are widely used by policymakers to make decisions about education and training, funding allocations, and program offerings. These projections of jobs in demand help improve the alignment between education and training and the hiring demands of business. In addition, other federal agencies, researchers, and academics use the projections to understand trends in the economy and labor market.

Projections of industry and occupational employment are prepared by each state, using input from the BLS National projections. State projections data are available at Projections Central www.projectionscentral.com.