



Understanding the 2014–24 projections

Every 2 years, the [U.S. Bureau of Labor Statistics \(BLS\)](#) releases projections of the [labor force](#), the [overall economy](#), [industry employment](#), and [occupational employment](#). Economists in the BLS Office of Occupational Statistics and Employment Projections develop these data in a number of steps, first analyzing broad trends and then examining several hundred industries and occupations.

Population and labor force. We begin developing projections by analyzing how much the U.S. population and labor force are expected to grow over the next 10 years. We use population projections from the [U.S. Census Bureau](#), which take into account trends in births, deaths, and immigration.

We use the population projections to produce our own estimates of the labor force—the civilian, noninstitutional population ages 16 and older that is working or actively seeking work. We do this by looking at historical trends in labor force participation for each age, gender, and race or ethnic group. The result is a projection of the labor force: an estimate of the total supply of workers in the economy over the 2014–24 decade.

Overall economy. We then create a model of an economy that is operating at full potential, given the labor force and several other factors. Using this framework, we estimate the dollar value of each industry's total output of goods or services. Some of these goods and services are sold to other industries; for example, corn is used in making cereal. Other output, such as the cereal itself or grocery delivery services, is sold directly to consumers.

Industry employment. We also study trends in productivity—the amount of output produced per hour of work. Because of technological advances, for example, some industries are able to increase output without increasing the number of hours worked by employees. We use this information to translate projected output into the number of jobs that each industry needs to produce its goods and provide its services.

Occupational employment. Next, we project how the jobs in each industry are expected to be distributed by occupation. We depict how employment in each of more than 300 detailed industries is distributed across more than 800 detailed occupations. To do this, we make extensive use of the BLS [Occupational Employment Statistics \(OES\)](#) survey and obtain information from other sources for sectors that are not covered by the survey. (For the 2014–24 projections, we used 2014 employment data.)

We then analyze how the distribution we obtain is likely to change over the decade. Toward that end, we study trends in technology, changing skill requirements, and other factors. Using this analysis, along with the survey data and our industry employment projections, we project employment by occupation—in this set of projections, to 2024. Our projection methods are based on the fact that employment trends in most occupations are closely tied to the trends in particular industries.



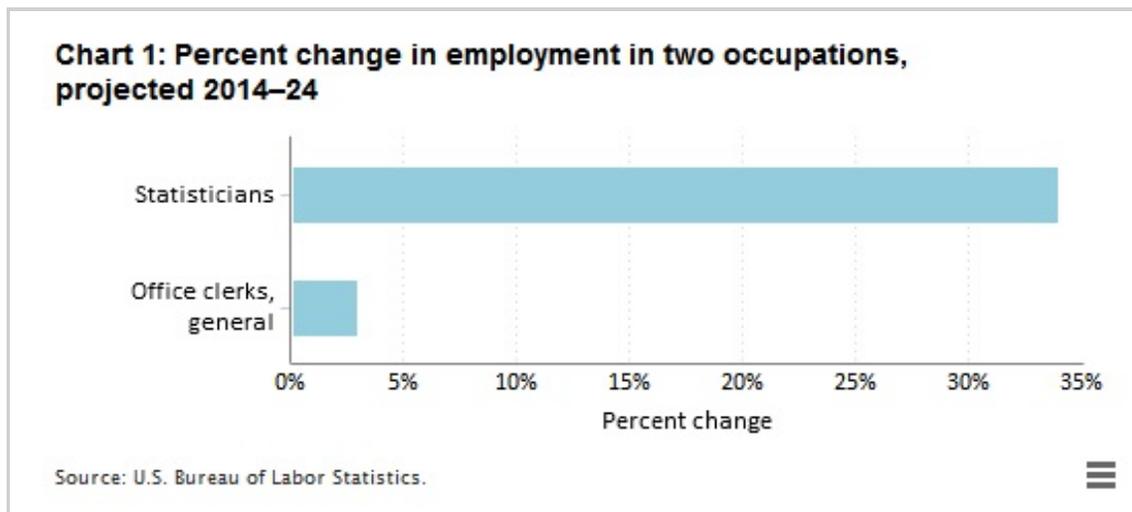
Reading the charts

Most of the charts presenting these latest projections provide graphic answers to some basic questions about occupational employment and industry employment:

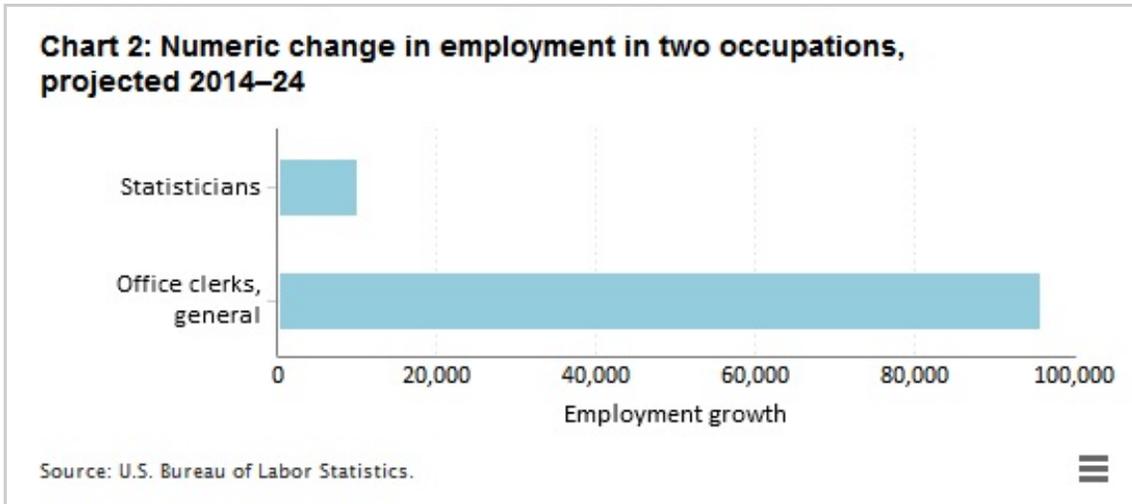
How many new jobs are projected? Charts that show numeric change illustrate how many jobs an occupation or industry is projected to gain or lose. In general, the occupations and industries with the greatest numeric increases are those that already have large numbers of workers.

How fast is the number of jobs projected to change? Charts showing percent change illustrate how fast the number of jobs in an occupation or industry is projected to change (the rate of job growth or decline during the 2014–24 decade). Sometimes, occupations and industries that have fast rates of growth do not have a lot of workers.

Fast growth does not always mean many new jobs. As Chart 1 illustrates, employment of statisticians is expected to grow about 11 times faster than that of general office clerks.

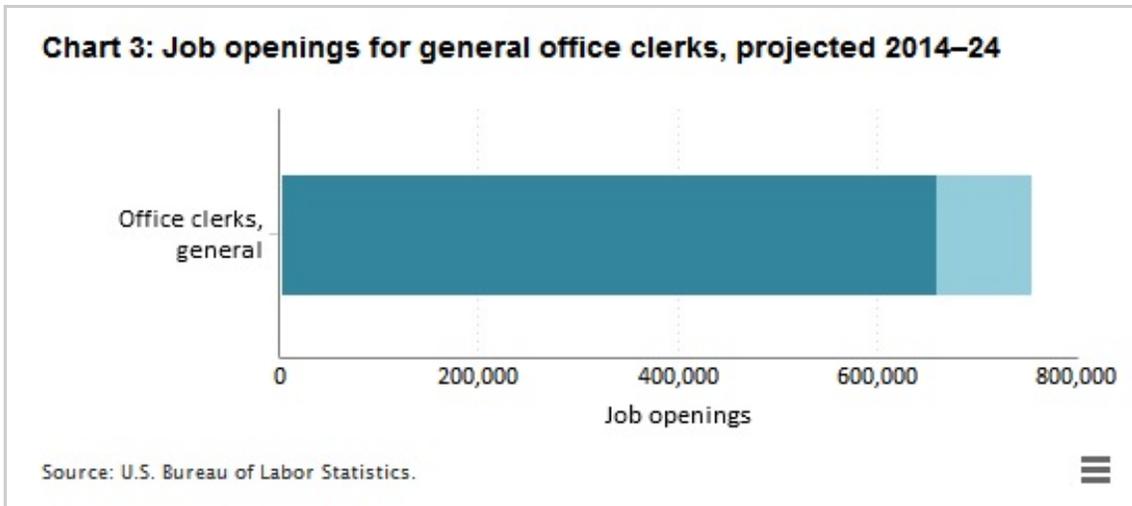


But, in numeric terms, that faster growth doesn't mean a greater number of new jobs. As Chart 2 shows, more than 9 times as many new jobs are projected for general office clerks as for statisticians from 2014 to 2024.



How many job openings are expected? Some charts show how many job openings are expected for workers entering an occupation. Job openings come from growth in the number of jobs and from the need to replace workers who retire or leave an occupation permanently.

Chart 3 shows employment growth as part of total job openings projected for general office clerks. But most openings for these workers are expected to come from the need to replace existing clerks who leave the occupation.



A word about wages

Some of the charts in the [occupational projections article](#) include data on wages. Wages include hourly, weekly, or annual pay that people receive for the work that they do. Sales commissions, tips, and production bonuses also are part of the wages shown in these charts, but overtime pay and nonproduction bonuses are not.

For individual occupations, charts include May 2014 median annual wage data from OES. The median wage is the point at which half of the workers in an occupation earned more than the amount shown, and half earned less.

In May 2014, the median annual wage for all workers was \$35,540. For occupations with a median annual wage of at least \$187,200, a specific wage is not shown because the OES survey does not publish wage data above that amount. In these cases, the charts show that the median wage was greater than or equal to (\geq) \$187,200.

Wages in these charts are for wage and salary workers only. Self-employed workers are not included in these measurements.



Learning more

For more information about employment projections and related data, see these other resources from BLS:

- News releases, tables, databases, and more from the [Employment Projections program](#) provide details about the labor market over the 2014–24 decade.
- The 2016–17 [Occupational Outlook Handbook](#) covers hundreds of occupations in detail, describing data and information on employment, wages, projections, education, and job duties.
- Several articles in the [Monthly Labor Review](#) include comprehensive descriptions of the data and methods BLS uses in its projections, along with analysis of the results.

SUGGESTED CITATION:

"Understanding the 2014–24 projections," *Career Outlook*, U.S. Bureau of Labor Statistics, December 2015.

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