Getting started

by Dixie Sommers

In almost anything you do, you're more likely to succeed if you have a plan. Deciding on a career is no exception.

If you're making a decision about education, training, or a career—or if you are helping someone else who is making such decisions—you need to know how the labor market is expected to unfold in the future. How many jobs are likely to be available in the career you want? How much will they pay? What kind of training will you need?

Projections and related information from the U.S. Bureau of Labor Statistics (BLS) provide the answers to these questions. In a changing economy, these projections help you to glimpse the future—and to plan for it.

This special issue of the *Occupational Outlook Quarterly* provides a graphic summary of the latest projections, those covering the decade from 2008 to 2018. We also invite readers to examine our detailed profiles of occupations in the 2010–11 *Occupational Outlook Handbook* and of industries in the 2010–11 *Career Guide to Industries.* The November 2009 issue of the *Monthly Labor Review* includes more detailed descriptions of the data, analysis, and methods BLS uses in the projections. (For details about these and related publications, see the list on page 49.)

Total employment is projected to reach 166 million by 2018, reflecting the addition of about 15 million new jobs between 2008 and 2018. Behind this total employment projection are trends and major findings depicted in charts for four areas: occupations, the labor force, industries, and the overall economy.

Occupations

- Among all occupational groups, the professional and related occupations group and the service occupations group are expected to gain the most new jobs and produce the largest numbers of job openings. (See page 10.)
- Within the professional and related occupations group, healthcare practitioner and technical occupations are projected to gain the most jobs, about 1.6 million. Education, training, and library occupations are projected to gain more than 1.3 million jobs. (See page 11.)

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♦ Registered nurses, home health aides, and customer service representatives are expected to gain the most new jobs. Registered nurses will add more than half a million jobs. (See page 13.)

♦ Most job openings for workers entering an occupation come from the need to replace workers who have left the occupation, rather than from the need to fill newly created jobs. The 20 occupations that are expected to have the most openings from growth and replacement include jobs in a variety of fields, such as office support, sales, and service occupations. (See page 14.)

♦ The 20 occupations expected to have the most openings also range widely in median annual wages, from more than $91,000 for general and operations managers to nearly $59,000 for postsecondary teachers to less than $17,000 for waiters and waitresses. (See page 14.)

♦ Job openings are expected in occupations that require every level of education and training. But, in general, workers in occupations with higher education and training requirements earn higher wages. (See pages 15–27.)

The labor force

♦ By 2018, the number of people in the labor force—those working or looking for work—is expected to increase by nearly 13 million people between 2008 and 2018. This is a smaller gain than the nearly 17 million people added to the labor force during the previous decade. (See page 30.)

♦ As the baby-boom generation ages, the number of people in the labor force aged 65 and older is projected to grow very rapidly, by 78 percent over the projections decade. At the same time, the labor force in younger age groups is expected to either decline or increase at much slower rates. (See page 32.)

♦ The labor force will continue to become more diverse. The share of the labor force that is Asian, black, or in other non-white race groups is expected to increase to 21 percent, up from 19 percent a decade earlier. And Hispanics are expected to constitute 18 percent of the labor force in 2018, up from 14 percent in 2008. (See pages 34 and 36.)

Industries

♦ Job growth over the 2008–18 decade will be concentrated in service-providing industries. In 2018, service-providing industries are expected to account for 131 million out of 154 million wage and salary jobs overall. (See page 38.)

♦ The professional and business services sector is projected to gain the most new jobs, nearly 4.2 million. Two sectors—health care and social assistance and professional and business services—are each projected to grow 24 percent over the decade, the fastest rate for all sectors. (See pages 40 and 41.)

♦ Among goods-producing industries, construction is projected to gain about 1.3 million jobs from 2008 to 2018. Some of this growth will be recovering jobs lost between 2006 and 2008, however. Employment is expected to decline in manufacturing and natural resources and mining, the other goods-producing sectors. (See page 40.)

♦ Among detailed industries, the management, scientific, and technical consulting services industry is projected to be the fastest growing. It is also expected to provide the most new jobs. (See pages 42 and 43.)

(Continued on page 5)

Defining the sections

The charts project 2008–18 changes in occupational employment, the labor force, industry employment, and the overall economy. You will get the most out of the charts if you understand how BLS defines these areas.

"Occupation" is a way of classifying jobs according to the type of work performed. People who supervise children are in the occupation of child care worker, for example.

"Industry," on the other hand, is a way of classifying jobs and businesses according to the type of good produced or service provided. For example, any job in a child daycare center—from child care worker to cook—is classified as part of the child daycare services industry.

"Labor force" is a measure of the number of people available for work. It includes both individuals who are employed and those who are unemployed (those not working but actively looking for a job).

"Overall economy" includes several concepts. The most important is the value of final goods produced and services provided, which is known as the gross domestic product, or GDP.

Reading the charts

The charts provide graphic answers to some basic questions about employment: How many new jobs there will be, how fast the number of jobs is changing, and how many job openings will be available for new entrants to the labor force.

How many new jobs there will be. Charts that show numeric change illustrate how many new jobs there will be (the actual number of jobs gained or lost over the projections decade). In general, the occupations and industries with the greatest numeric increases are those that already have large numbers of workers.

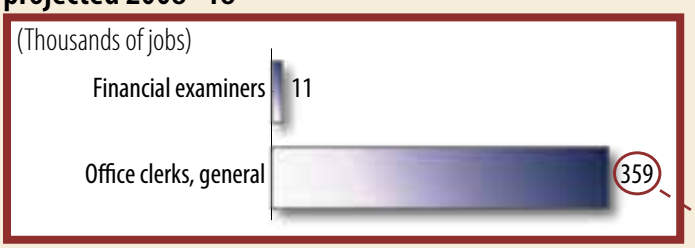
How fast the number of jobs is changing. Charts showing percent change illustrate how fast the number of jobs is changing (the rate of job growth or decline during the decade). The fastest rates of growth are usually found in occupations and industries that have fewer workers.

Fast growth does not always mean many new jobs. See, for example, the charts below. They show the projected increase in employment for general office clerks compared with that for financial examiners. In numeric terms, as shown in the chart at upper left, more than 30 times as many new jobs are projected for office clerks as for financial examiners between 2008 and 2018.

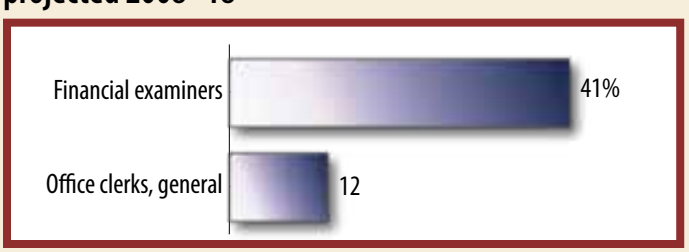
Percent change tells a different story. As the chart at lower left shows, employment of financial examiners is expected to grow more than 3 times as fast as that of general office clerks—even though financial examiners are projected to gain fewer jobs.

How many job openings there will be. Some charts go beyond showing the expected change in the total number of jobs and show how many job openings are expected for workers who are new to an occupation. Job openings for workers new to an occupation include not only openings from growth in the number of jobs but also openings from the need to replace workers who retire or leave an occupation permanently for some other reason. The chart below at right shows how many job openings for general office clerks are expected to result from job growth and how many are expected to result from the need to replace existing clerks who leave the occupation.

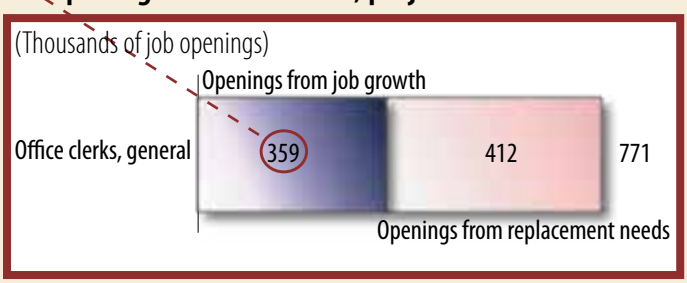
Numeric employment growth in two occupations, projected 2008–18



Percent employment growth in two occupations, projected 2008–18



Job openings for office clerks, projected 2008–18



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Overall economy

♦ Personal consumption expenditures on goods are projected to grow an average of 2.3 percent each year between 2008 and 2018. The largest growth in personal consumption expenditures on goods is expected to be for computers and software. (See page 48).

♦ Personal consumption expenditures on services are projected to increase by 2.6 percent annually. Spending on medical care and insurance services will add the most to expenditures on services. (See page 48.)

How we develop the BLS projections

BLS economists in the Office of Occupational Statistics and Employment Projections develop the projections in a number of steps, first analyzing broad trends and then examining several hundred industries and occupations.

We begin with 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 combine the population projections with our own estimates of what portion of the population will be in the labor force, based on historical trends for each age, gender, and race or ethnic group. The result is a projection of the labor force—the total supply of workers to the future 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 this output is used by other industries; for example, steel is used in making cars. Other output—such as the cars themselves or the repair services for maintaining them—is sold directly to consumers.

We also study trends in productivity—the amount of output produced per worker—and use this information to translate projected output into the number of jobs needed in each industry to produce these goods and provide these services.

Next, we project how the jobs in each industry will be distributed by occupation. To do this, we make extensive use of the BLS Occupational Employment Statistics survey, as well as of information from other sources for sectors that are not covered by the survey, to depict how employment in each of nearly 300 industries is distributed across more than 700 occupations. (For the 2008–18 projections, we used 2008 employment data.) We analyze how this distribution is likely to change over the decade by studying 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, for 2018.

Our projection methods are based on the fact that employment trends in most occupations are closely tied to the trends in particular industries. For example, in 2008, about 60 percent of registered nurses worked in hospitals. So an increase in the demand for hospital services between 2008 and 2018 will increase the need for these workers. Based on changes in demand, we project that the real output of the hospital industry will increase over the decade, and about 274,000 more registered nurses will be needed in hospitals to provide this output. As a result, this industry is projected to account for about 47 percent of the roughly 582,000 new jobs for registered nurses.

A note about the economy in 2008

Our usual practice is to prepare new projections every other year, with the base year of the projections period being an even-numbered year. For this set of projections, the base year, 2008, happens to be during a significant downturn in the U.S. economy. Total employment of wage and salary workers fell by 532,000 between 2007 and 2008, and it continued to fall in 2009. The construction, manufacturing, and financial activities industry sectors, along with occupations that are concentrated in these industries, were hit particularly hard.

When developing long-term projections, however, our focus is on long-term trends in population, labor force, productivity, and output growth. The population and the labor force have been aging and their growth rates slowing. These long-term trends are expected to continue, regardless of the fluctuations in the economy. Readers should keep in mind, however, that the projected changes in employment between 2008 and 2018 usually include regaining jobs that have been lost during the downturn.