Occupational employment

When choosing a career, jobseekers often want to know which occupations offer the best prospects. Generally, occupations with rapid job growth, many new jobs, or many job openings promise better opportunities.

This section shows how employment in occupations is projected to change over the 2006-16 decade. Many of the charts show which occupations or occupational groups are expected to grow fastest (percent growth) or gain the most jobs (numeric growth).

Overall employment growth is projected to average about 10 percent between 2006 and 2016. This average is shown as a dotted vertical line in some charts.

But when it comes to employment prospects, job growth tells only part of the story. Job openings for workers also come from the need to replace workers who retire or leave an occupation permanently for other reasons. Some charts show which occupations are expected to have the most openings for workers who are entering the occupation for the first time. These charts show projected openings both from job growth and from replacement needs (the need to replace workers who leave).

Growth by occupational group

Most charts in this section focus on detailed occupations. To better explain employment trends, however, six charts at the beginning of the section show employment growth in groups of similar occupations.

The following are descriptions of the 10 occupational groups, listed according to their order in the Standard Occupational Classification:

- ***Management, business, and financial operations occupations.*** Many of these workers direct the activities of business, government, and other organizations and perform tasks related to finance and business. Examples include school administrators, financial managers, accountants, and food service managers.
- ***Professional and related occupations.*** These workers are in educational, healthcare, scientific, artistic, and a variety of other jobs. Examples are physical therapists, engineering technicians, lawyers, writers, interior designers, and computer software engineers.
- ***Service occupations.*** This group includes workers who assist the public. Police, cooks, home health aides, flight attendants, child care workers, and cosmetologists are examples.
- ***Sales and related occupations.*** Workers in this group are involved in the sale of goods and services, both to businesses and to consumers. Examples include cashiers, insurance sales agents, retail salespersons, telemarketers, and real estate agents.
- ***Office and administrative support occupations.*** Workers in this group prepare and file documents, deal with the public, and gather and distribute goods and information. Examples include secretaries, stock clerks, mail carriers, computer operators, and receptionists.
- ***Farming, fishing, and forestry occupations.*** Workers in this group tend and harvest renewable resources. Examples include farmworkers, fishing vessel captains, and logging equipment operators. Workers who

manage farms or ranches are counted in the management occupations group rather than in this group.

♦ ***Construction and extraction occupations.*** This group includes workers in construction and building trades, such as carpenters and electricians. It also includes occupations in oil and gas extraction and mining, such as roustabouts and mining machine operators.

♦ ***Installation, maintenance, and repair occupations.*** Workers in this group install and maintain all types of equipment. They include avionics technicians, automotive service technicians and mechanics, computer repairers, industrial machinery mechanics, and millwrights.

♦ ***Production occupations.*** Most people in these occupations work as assemblers or machine operators, primarily in manufacturing industries. Examples include computer-controlled machine tool operators, machinists, textile occupations, power plant operators, and chemical equipment operators.

♦ ***Transportation and material moving occupations.*** Workers in this group include airline pilots, truck drivers, locomotive engineers, and parking lot attendants.

Classification by postsecondary education and training obtained

As an aid to jobseekers and counselors, some charts focus on occupations that have similar education and training requirements. For each occupation they analyze, BLS economists choose the education and training category that is most significant for workers in that occupation—either the category that is most common among workers currently in the occupation or the category that gives new workers the best chance of qualifying for a job. In nearly all occupations, however, workers have a variety of educational backgrounds.

Occupations fall within 1 of 11 education and training categories, ranging from a doctoral degree to short-term on-the-job training.

The postsecondary education and training categories are as follows:

♦ ***First professional degree.*** Completion of a first professional degree, such as a medical or law degree, usually requires at least 3 years of full-time academic study beyond a bachelor's degree.

♦ ***Doctoral degree.*** Completion of a doctoral degree, such as a Ph.D., usually requires at least 3 years of full-time academic study beyond a bachelor's degree.

♦ ***Master's degree.*** Completion of a master's degree usually requires 1 or 2 years of full-time academic study beyond a bachelor's degree.

♦ ***Bachelor's or graduate degree plus work experience.*** Qualifying for occupations in this category often requires a bachelor's or graduate degree and experience in a closely related occupation.

♦ ***Bachelor's degree.*** Completion of a bachelor's degree usually requires at least 4 years of full-time academic study beyond high school.

♦ ***Associate degree.*** Completion of an associate degree usually requires 2 years of full-time academic study beyond high school.

♦ ***Postsecondary vocational training.*** Postsecondary vocational programs vary in length, ranging from several weeks to 1 year or more. Completion of these programs often leads to a certificate or other award but not an academic degree.

♦ ***Work experience in a related occupation.*** Occupations in this category are often supervisory and require workers to have experience in the occupation that is being supervised.

♦ ***Long-term on-the-job training.*** Occupations in this category usually require workers to have 1 year or more of on-the-job training. Apprenticeships and long-term employer-sponsored training are classified here.

♦ ***Moderate-term on-the-job training.*** For occupations in this category, workers develop the skills that they need during 1 to 12 months of combined on-the-job experience and informal training.

♦ ***Short-term on-the-job training.*** For occupations in this category, workers develop the skills that they need after a short demonstration of job duties or during 1 month or less of on-the-job experience or instruction.

BLS has another educational classification system based entirely on current educational attainment data. That system is featured in other, more technical, BLS publications. (See page 39.)

Earnings

Many people consider earnings an important job characteristic. BLS defines earnings to include wages and other payments, such as commissions, overtime, and bonuses. Benefits, such as insurance and paid leave, and other compensation are not considered part of earnings.

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 wages, but overtime and nonproduction bonuses are not.

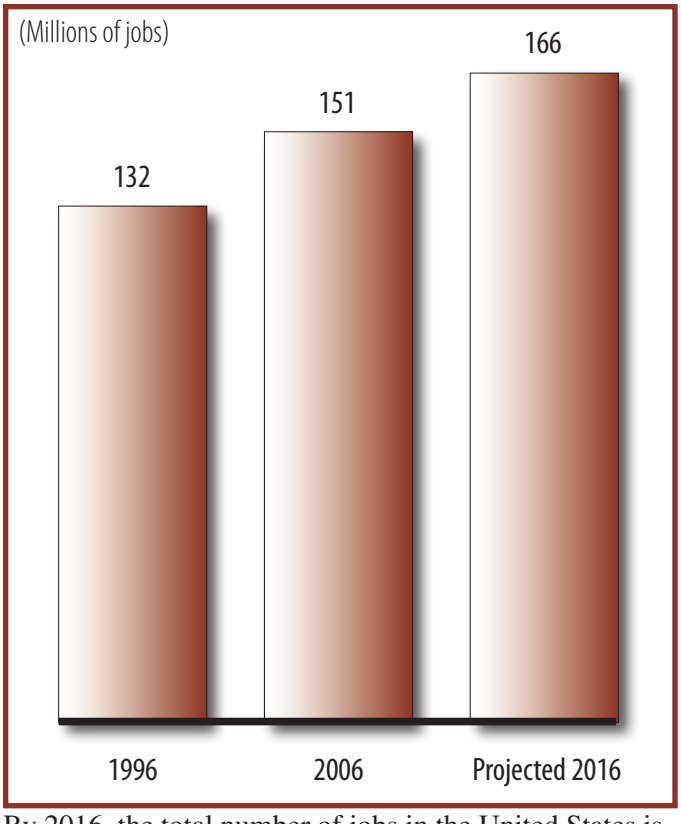
For individual occupations, most charts include May 2006 median annual wage data from the BLS Occupational Employment Statistics (OES) program. Median wages are the point at which half of the workers in an occupation earned more than the amount, and half earned less. In May 2006, median annual wages for all workers were $30,400.

The highest wages among the occupations in a given chart are in **boldface** type. For occupations with median annual wages of more than $145,600, a specific wage figure is not given because the OES survey does not publish wage data above this amount. In these cases, the charts show that median wages were greater than or equal to (≥) $145,600.

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

Other payments. Wages are the major portion of earnings for most workers. But other payments, such as those for overtime and nonproduction bonuses, can affect overall earnings. Some BLS data include information about such payments. For more information, see "Earnings data from BLS: What we have and how to find it" in the summer 2007 *Quarterly*.

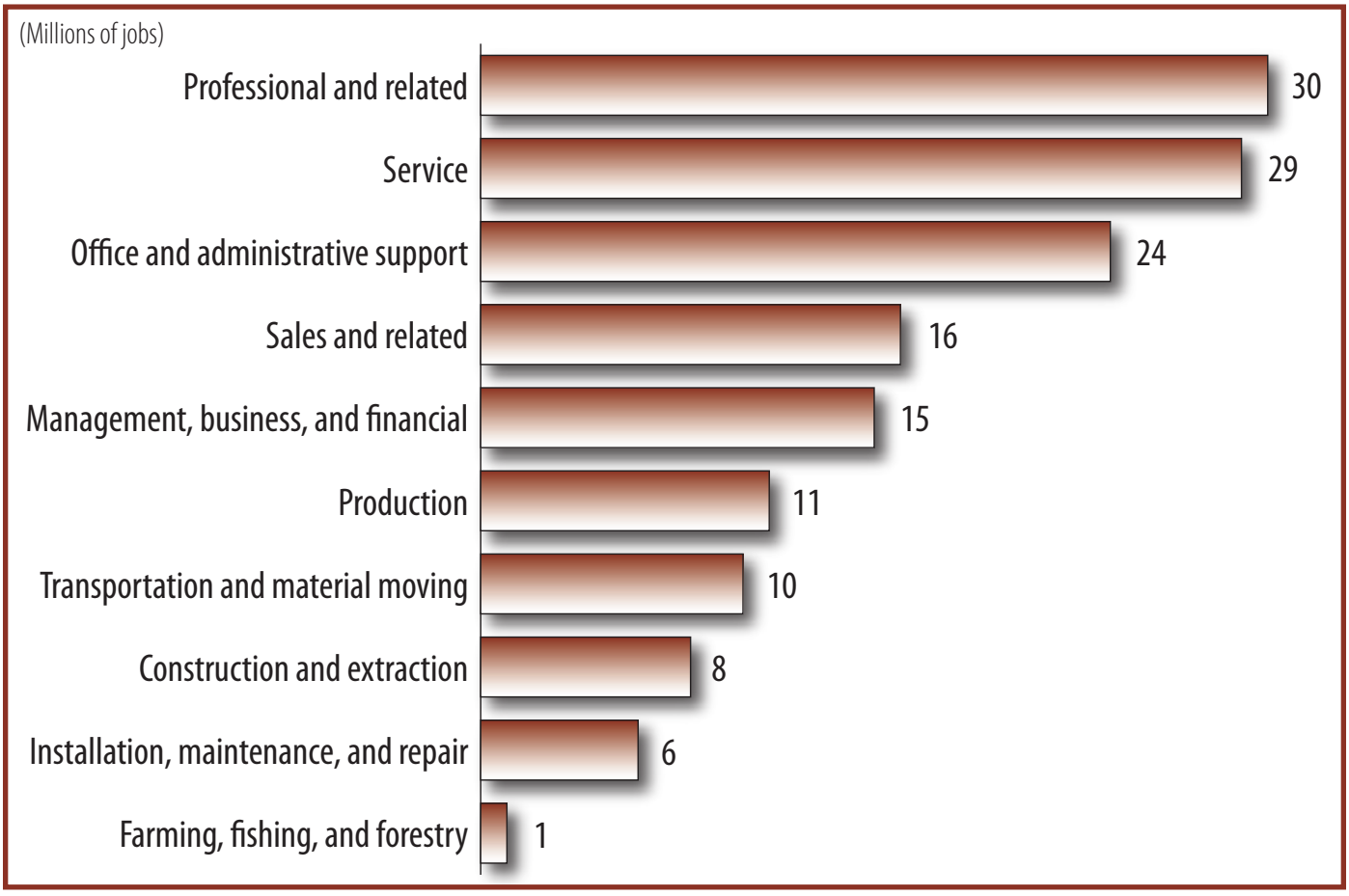
Employment, 1996, 2006, and projected 2016



By 2016, the total number of jobs in the United States is projected to reach about 166 million.

Employment, 2006

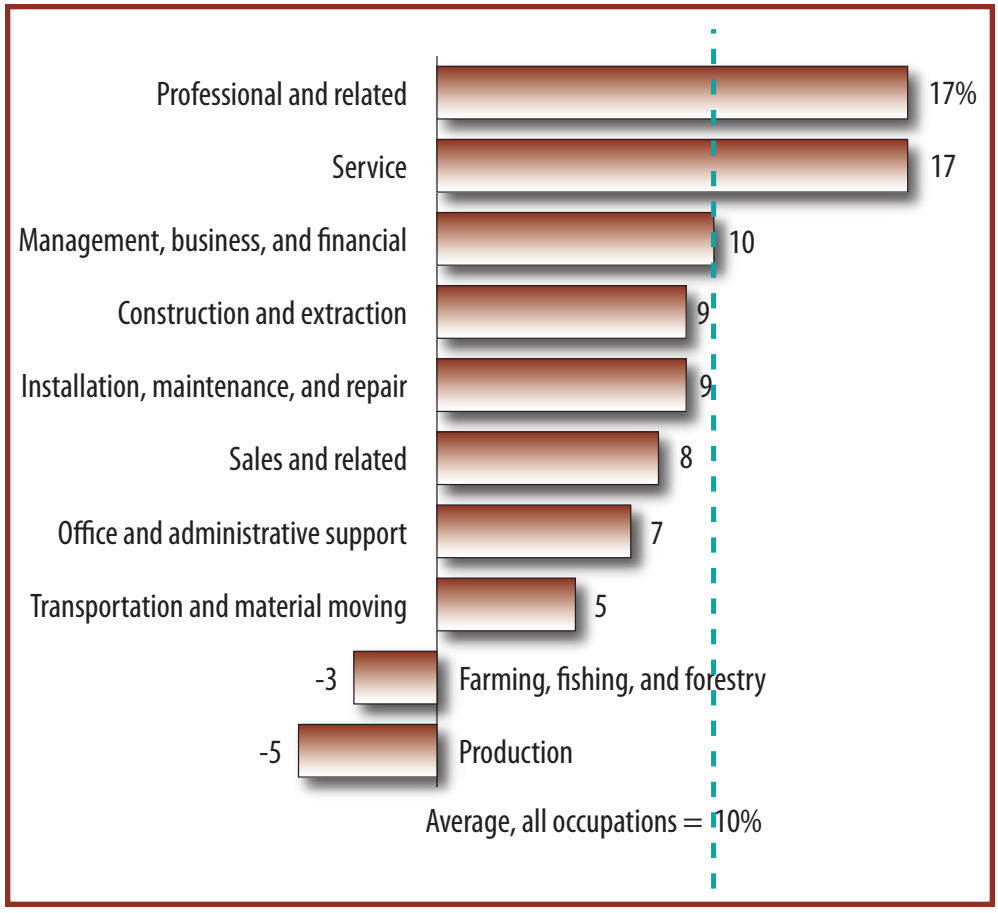
Employment by major occupational group, 2006



Occupations are grouped broadly, based on the tasks that the workers in them perform. In 2006, the largest of the major groups were professional and related occupations and service occupations.

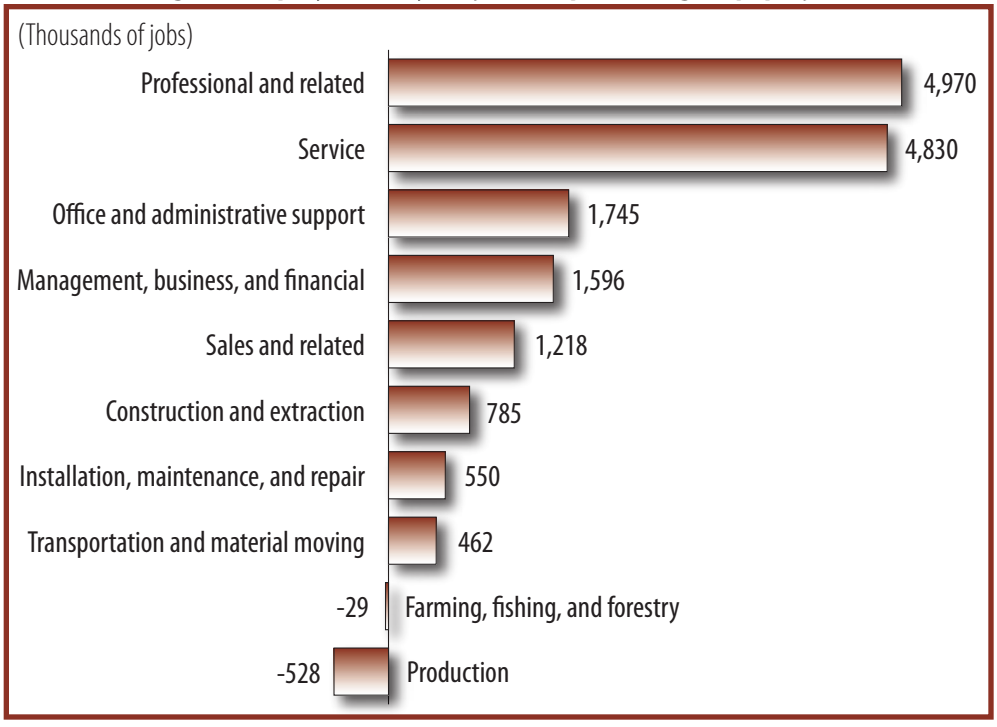
Occupational employment

Percent change in employment by major occupational group, projected 2006-16



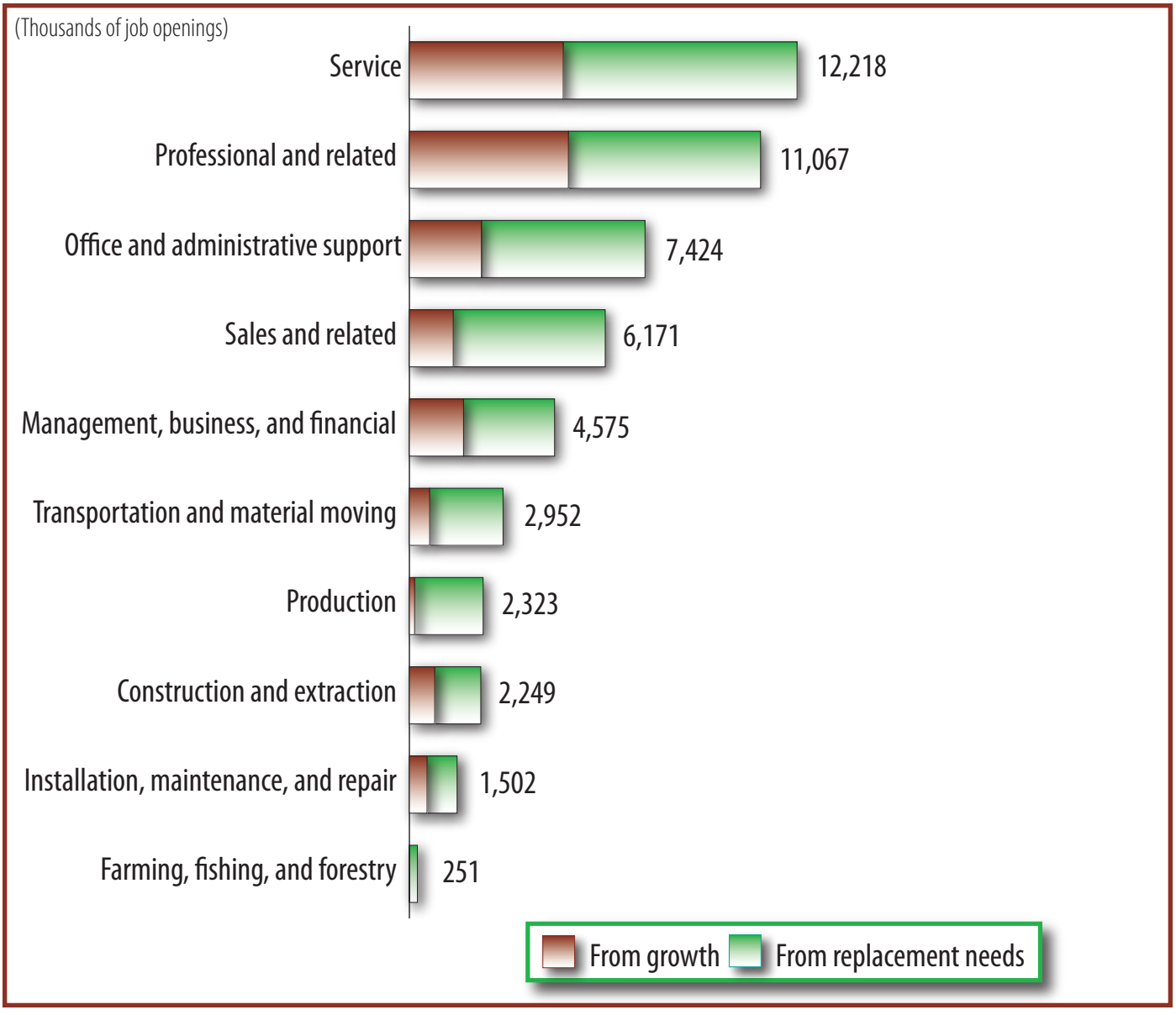
Over the 2006-16 decade, professional and related occupations and service occupations are expected to grow faster than any other occupational group.

Numeric change in employment by major occupational group, projected 2006-16



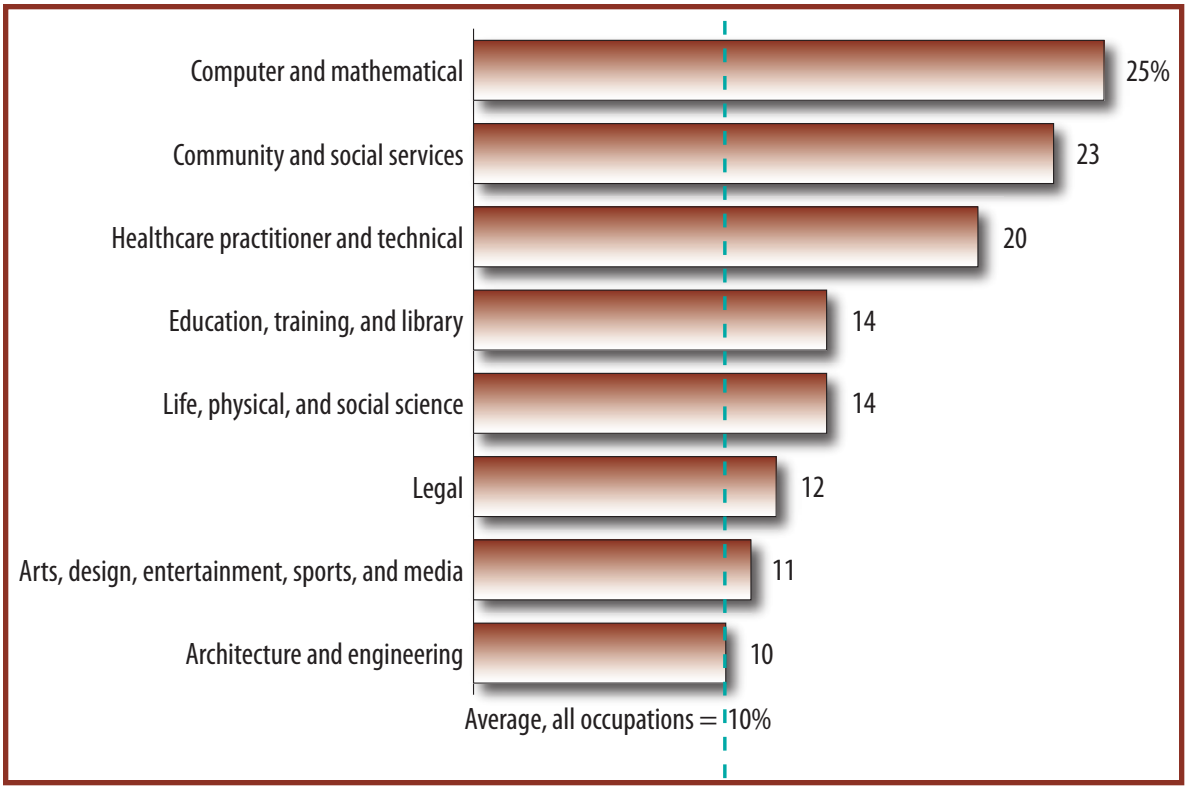
Professional and related occupations and service occupations are also projected to add the most new jobs to the U.S. economy between 2006 and 2016. Two occupational groups are projected to lose jobs, in part because technology is increasing worker productivity.

Job openings by major occupational group, projected 2006-16



Employment prospects depend on more than job growth. This chart shows the job openings that are projected to be available for workers who are new to an occupation. Openings for new workers occur not only when jobs are added to the economy but also when current workers leave an occupation permanently. In fact, the need to replace workers who leave an occupation is expected to create more openings than job growth will.

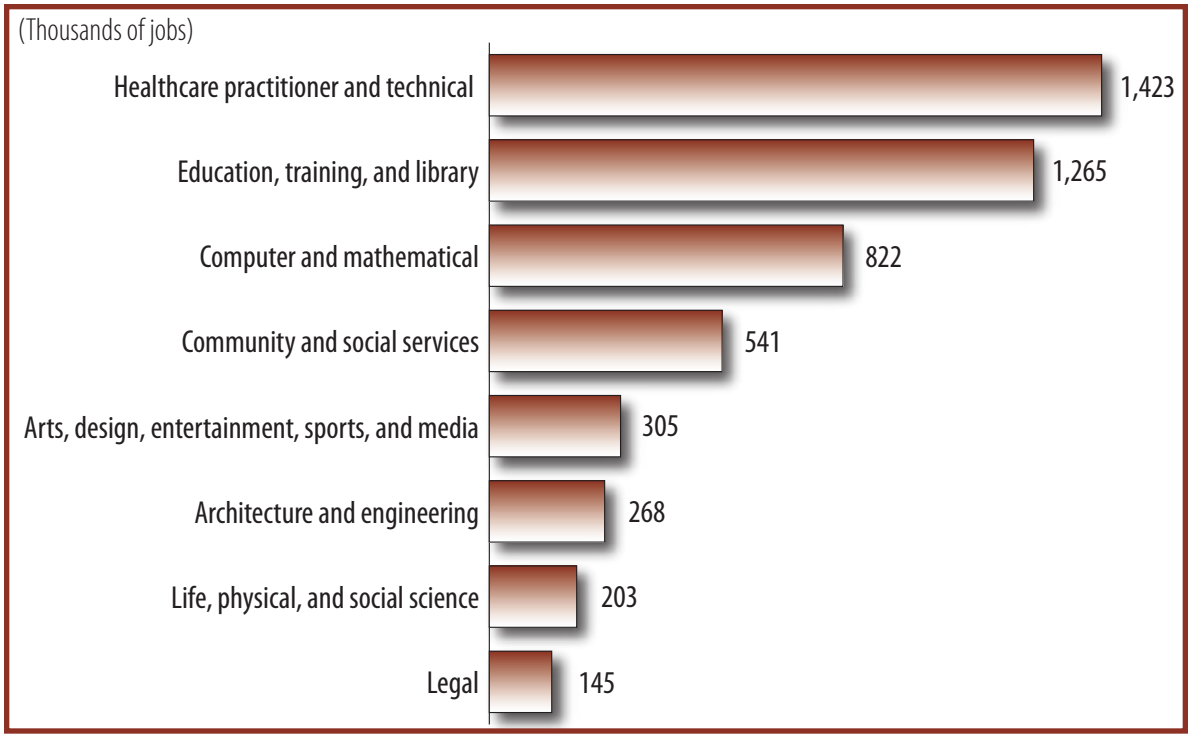
Percent growth in employment in professional and related occupations, projected 2006-16



Computer and mathematical science occupations are projected to grow more than twice as fast as the average for all occupations. But growth is projected to be slower than it was during the previous decade as the software industry matures and as routine work is increasingly outsourced abroad. Fast growth in community and social services occupations reflects an aging population expected to require assistance from social service workers.

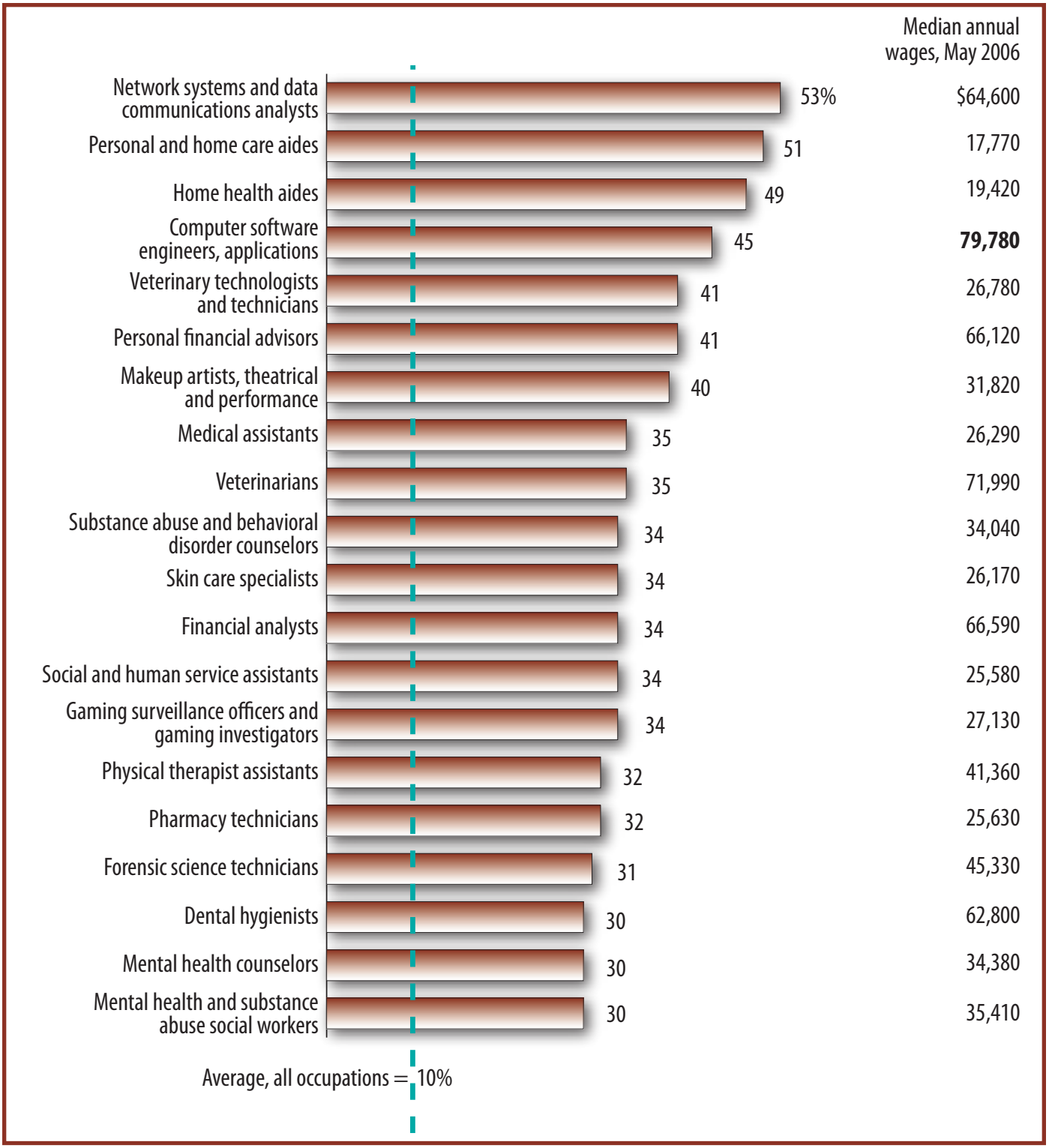
Numeric growth in employment in professional and related occupations, projected 2006-16

Within the professional and related group, healthcare practitioner and technical occupations and education, training, and library occupations are both expected to gain more than 1 million new jobs.



Fastest growing occupations

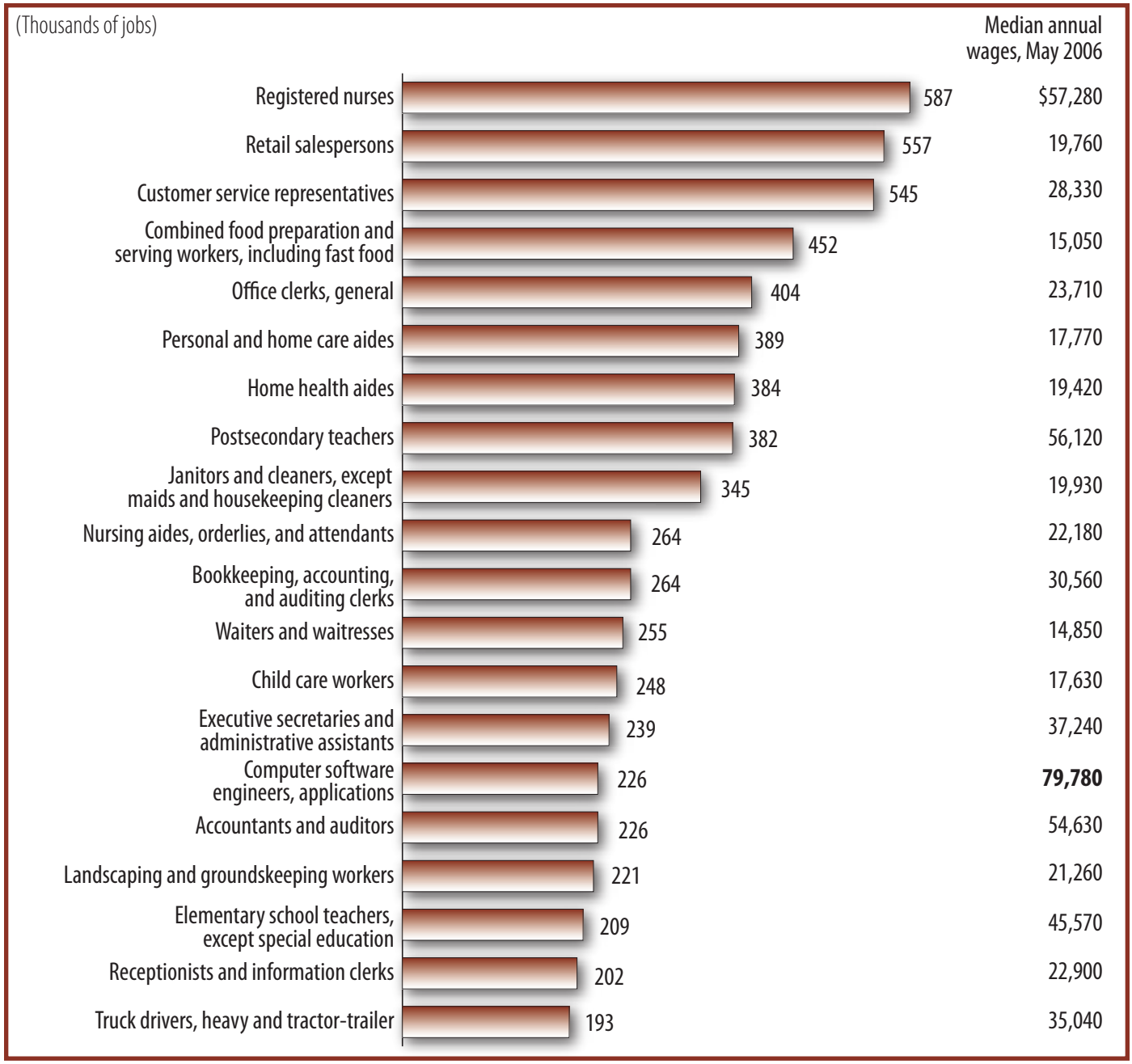
Percent growth in employment, projected 2006-16



Of these occupations, computer applications software engineers had the highest median annual wages in May 2006. Many of the occupations projected to grow the fastest relate to healthcare and care of the elderly.

Most new jobs

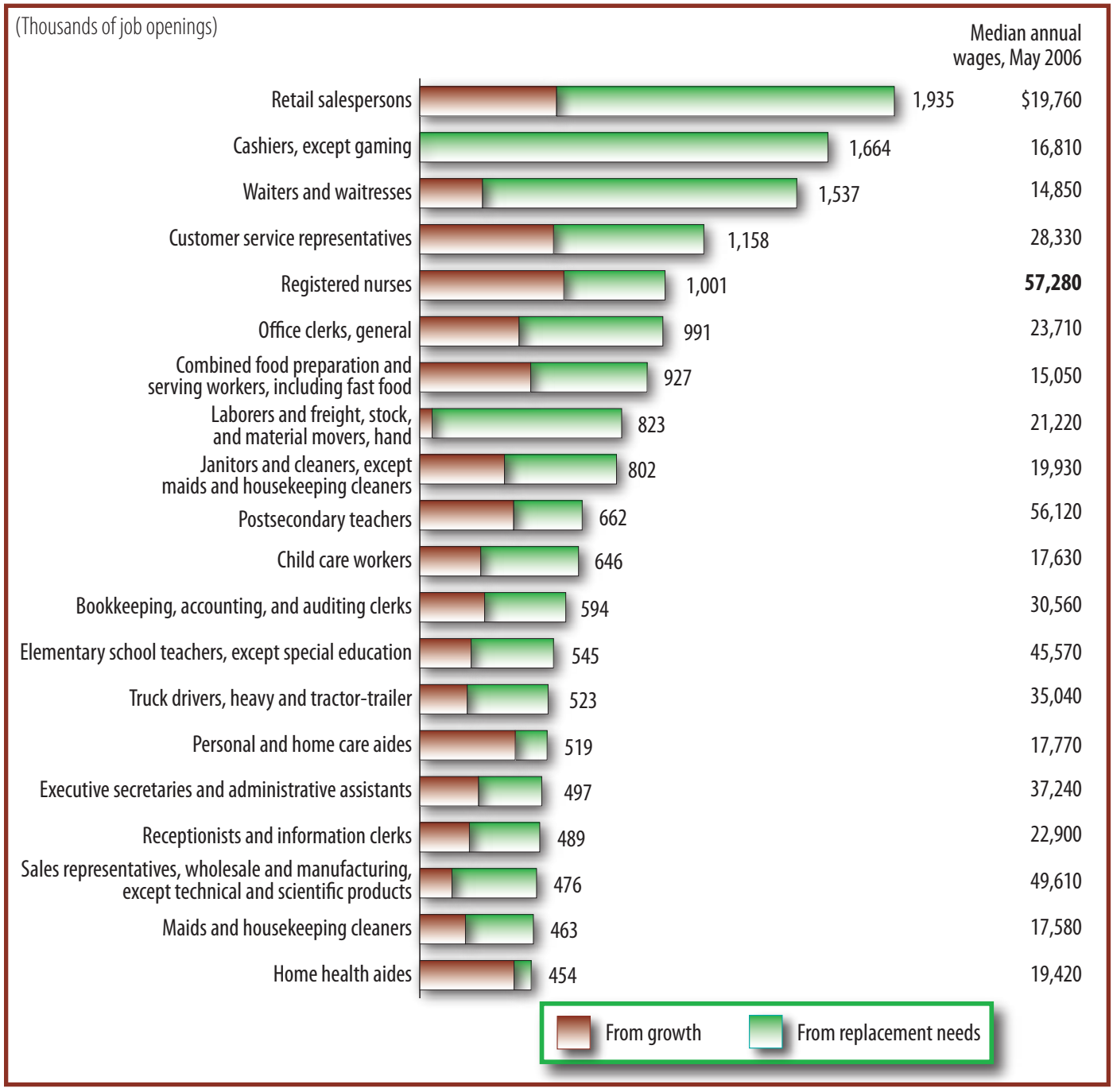
Numeric growth in employment, projected 2006-16



The specific occupations expected to gain the most new jobs have a wide range of wages, responsibilities, and education and training requirements. These 20 occupations account for almost 45 percent of all new jobs projected over the 2006-16 decade.

Most job openings for workers new to an occupation

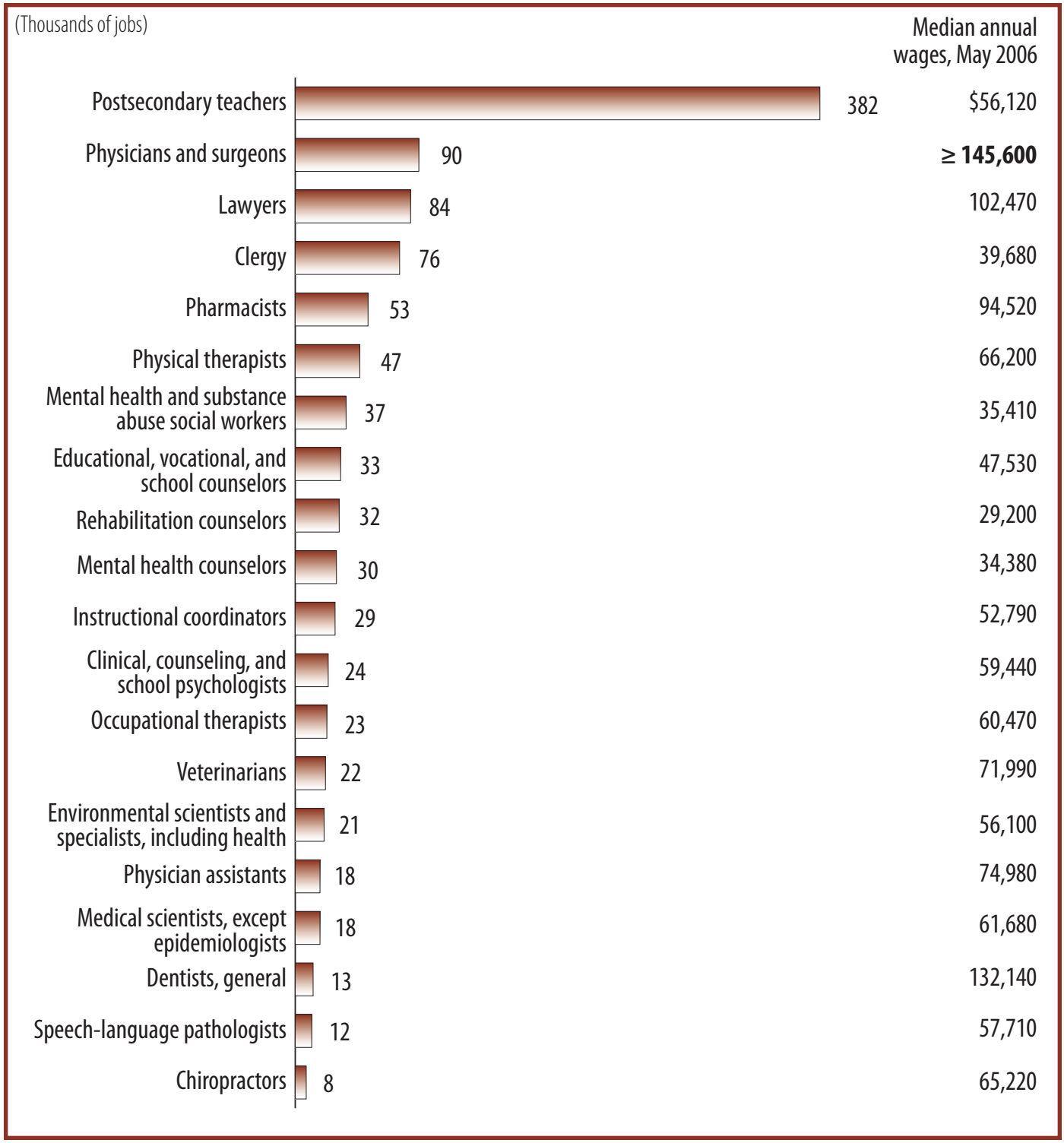
Job openings due to growth and net replacement needs, projected 2006-16



Of the occupations in this chart, registered nurses had the highest median annual wages in May 2006. Most openings for registered nurses are expected to come from employment growth.

Graduate degree

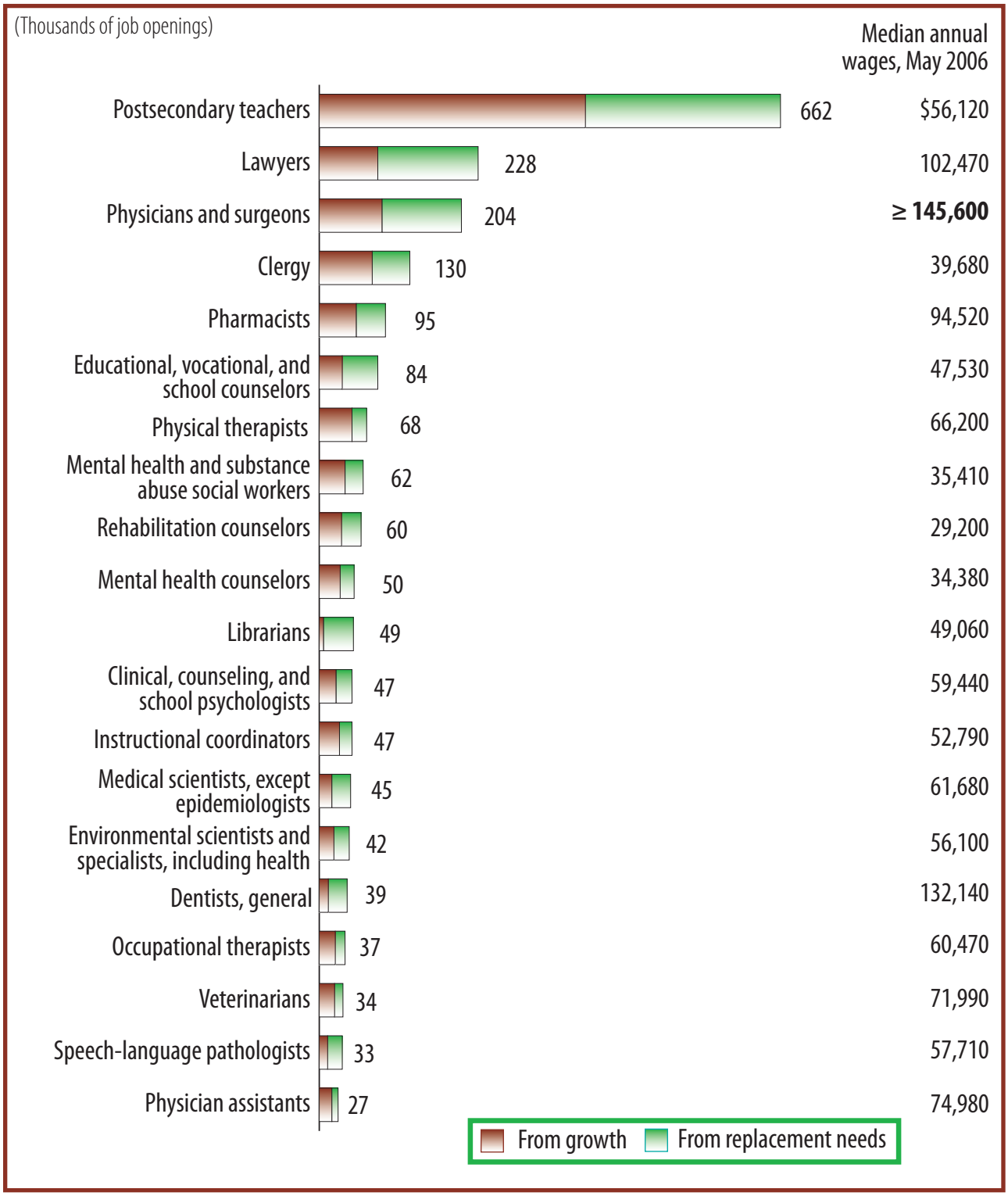
Occupations that have the most growth and that usually require a master's, doctoral, or first-professional degree, projected 2006-16



The projected increase in the number of postsecondary teachers reflects expanding college enrollments. Most other high-growth occupations in this educational category are related to healthcare and counseling.

Graduate degree

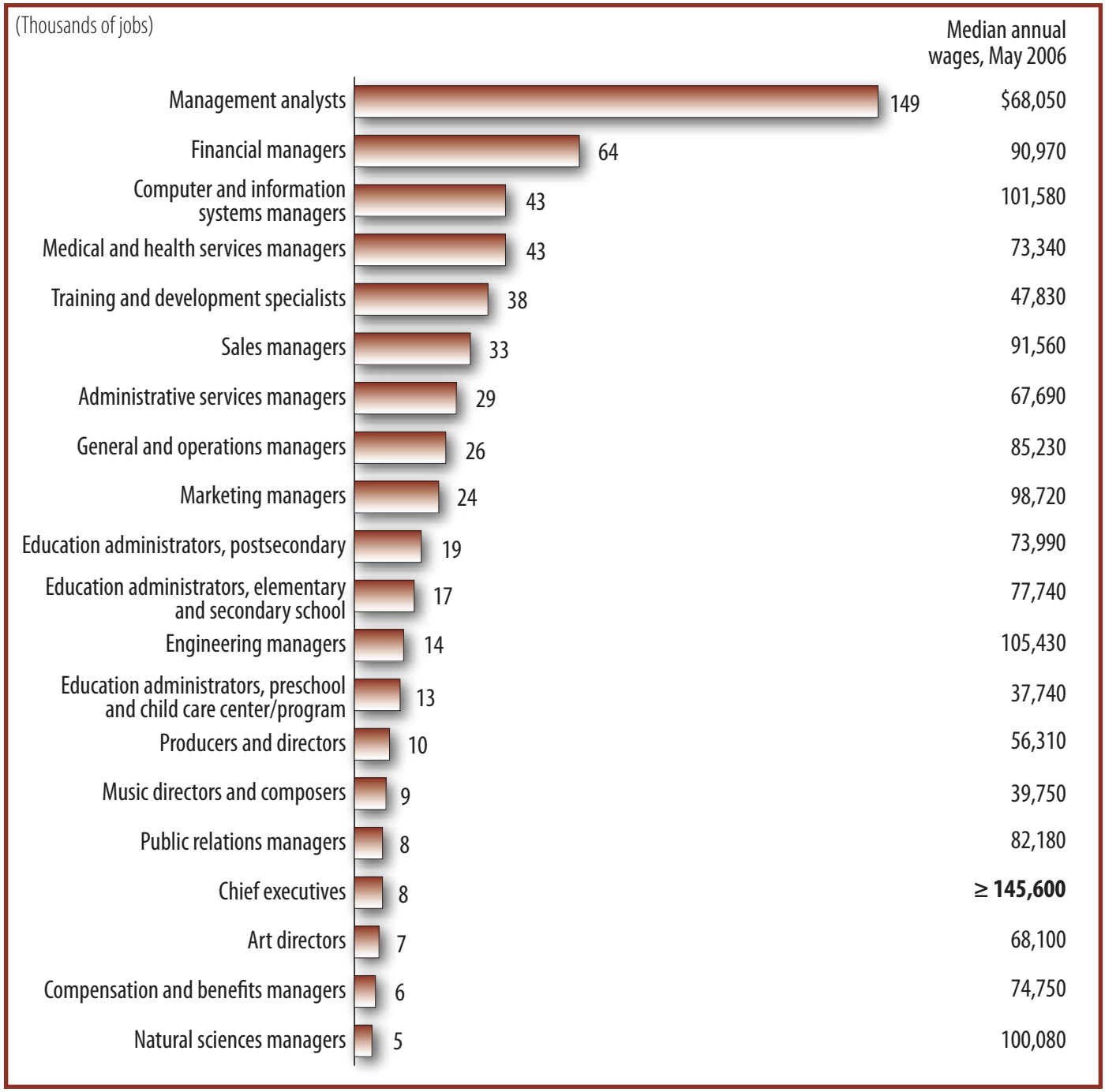
Occupations that have the most job openings and that usually require a master's, doctoral, or first-professional degree, projected 2006-16



Nearly 300,000 job openings for postsecondary teachers are expected to arise from the need to replace existing teachers who retire or leave the occupation permanently for other reasons.

Bachelor's or graduate degree plus work experience

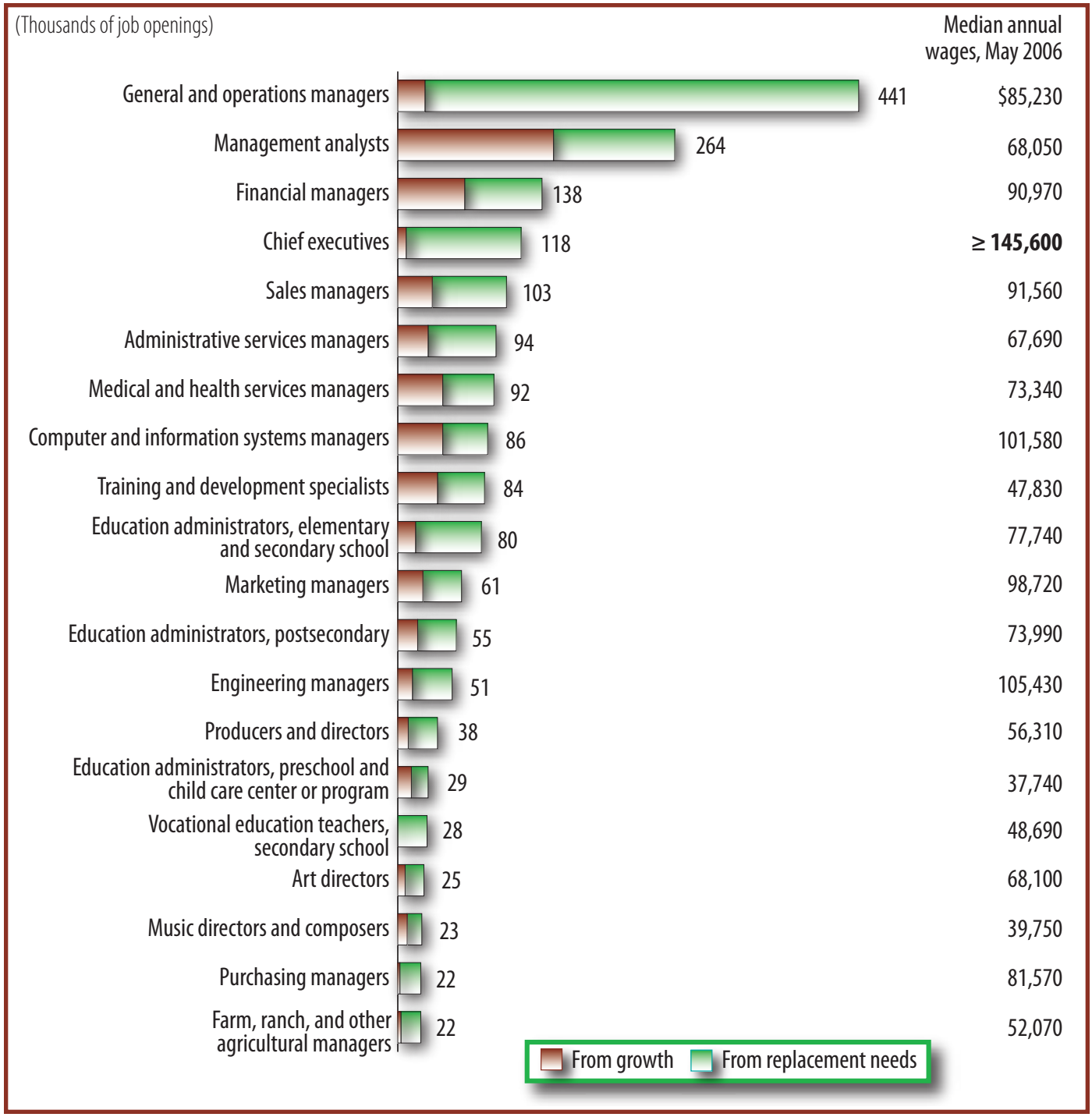
Occupations that have the most growth and that usually require a bachelor's or graduate degree plus work experience, projected 2006-16



A steadily expanding economy is one reason for job growth in these occupations. Nearly all of these occupations have managerial responsibilities.

Bachelor's or graduate degree plus work experience

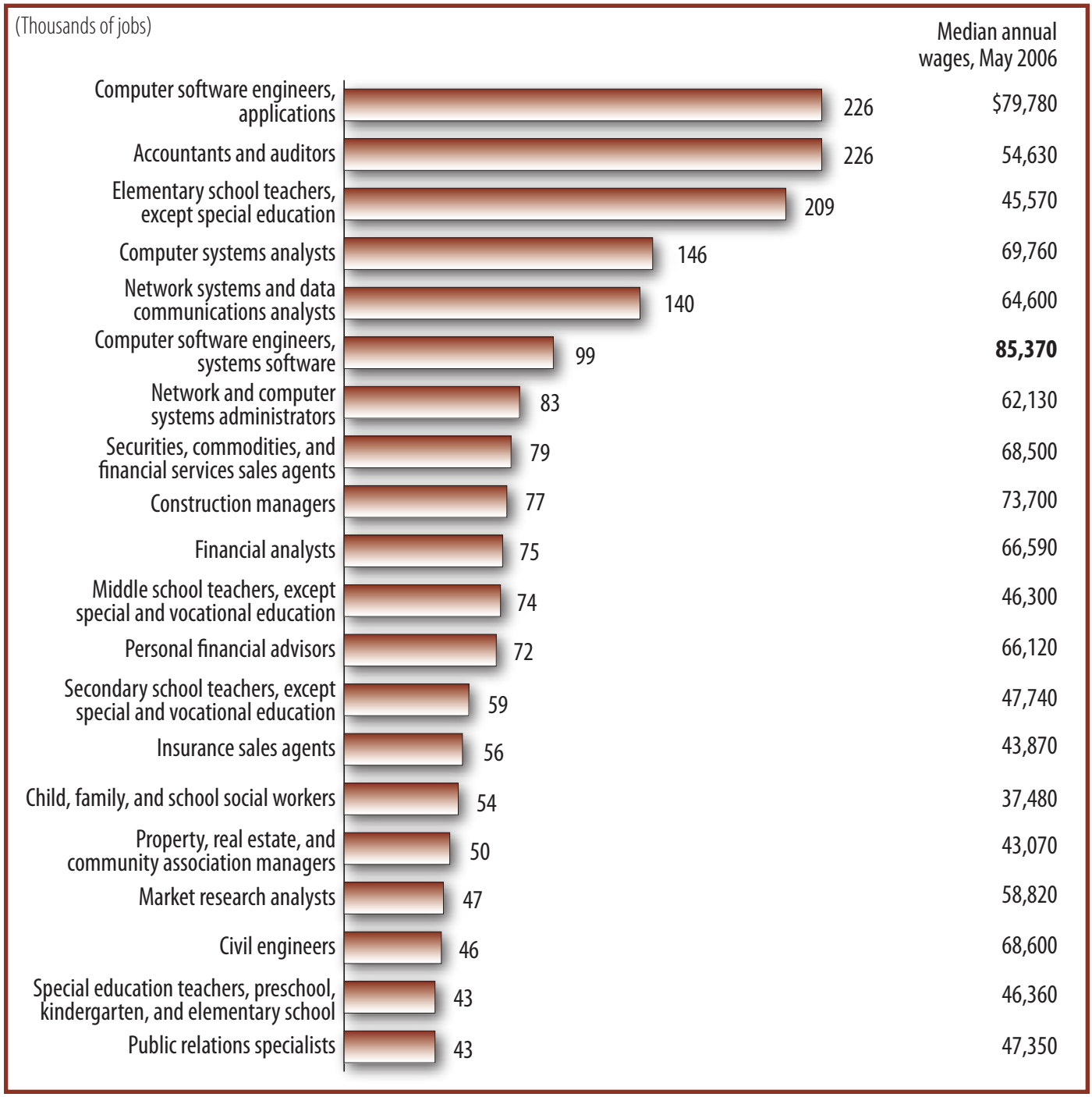
Occupations that have the most job openings and that usually require a bachelor's or graduate degree plus work experience, projected 2006-16



Within this category, general and operations managers are expected to offer the most job openings over the 2006-16 decade. Because this occupation is large, many new workers will be needed to replace those who retire or leave permanently for other reasons.

Bachelor's degree

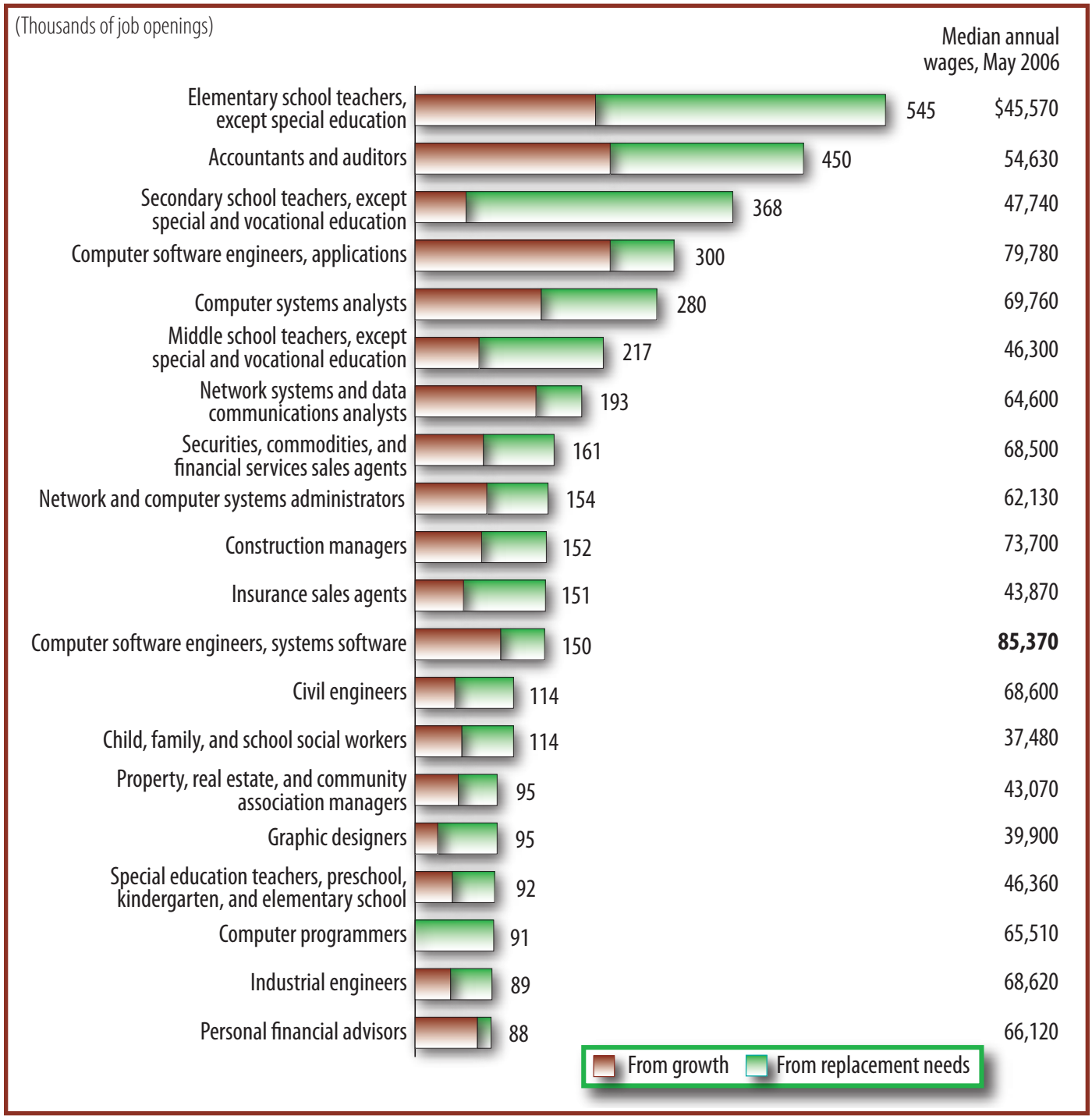
Occupations that have the most growth and that usually require a bachelor's degree, projected 2006-16



Most of these occupations relate to business, computers, or education. In May 2006, all had annual wages above $30,400, the median for all workers.

Bachelor's degree

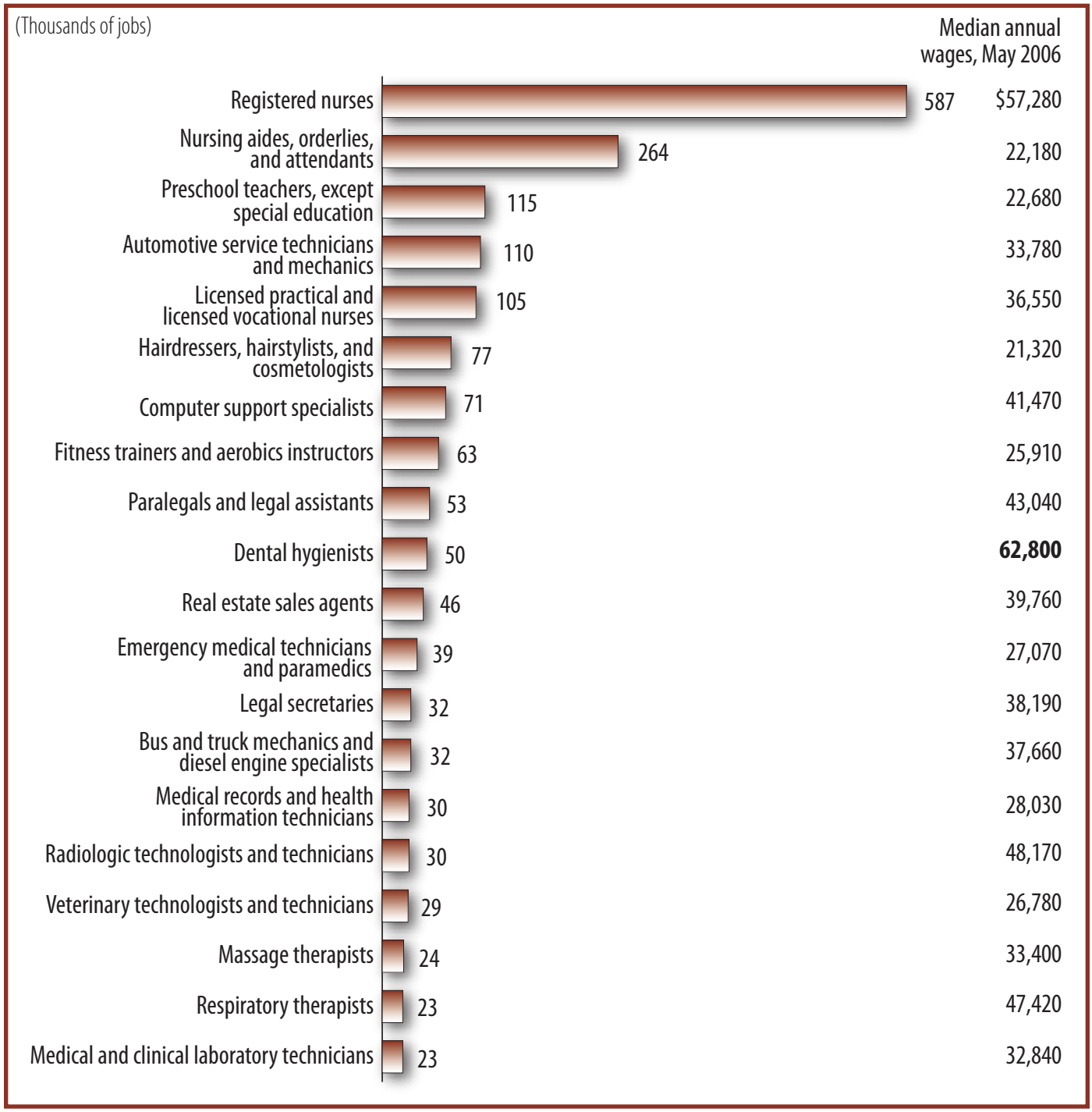
Occupations that have the most job openings and that usually require a bachelor's degree, projected 2006-16



Thousands of openings for bachelor's degree holders are expected in a variety of occupations. The large number of openings for teachers reflects these occupations' size, expected retirements, and rising student enrollments.

Associate degree or postsecondary vocational award

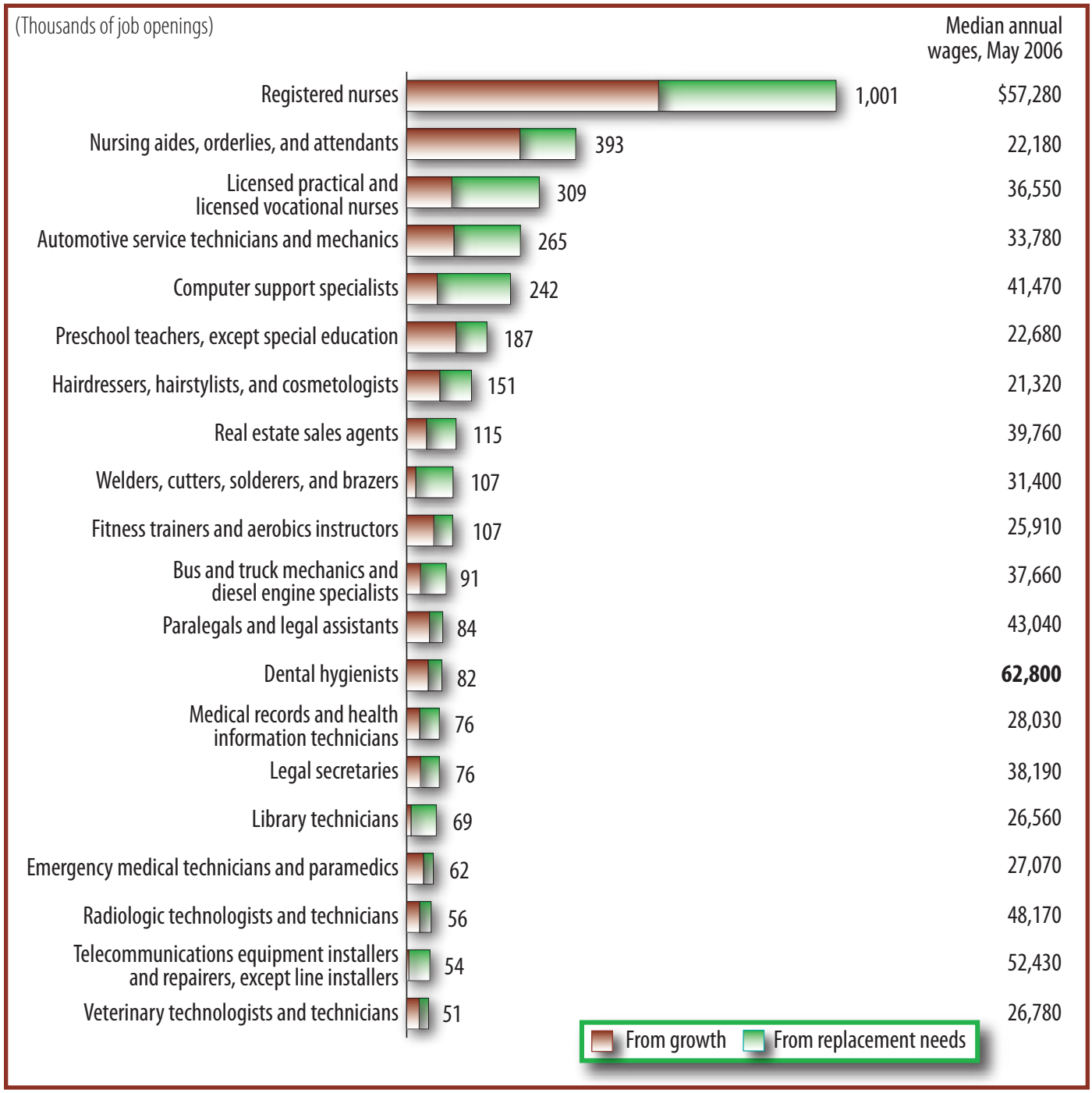
Occupations that have the most growth and that usually require an associate degree or postsecondary vocational award, projected 2006-16



At this level of training, more than half of the occupations that are projected to gain the most jobs relate to healthcare, reflecting the growing medical needs of an aging population.

Associate degree or postsecondary vocational award

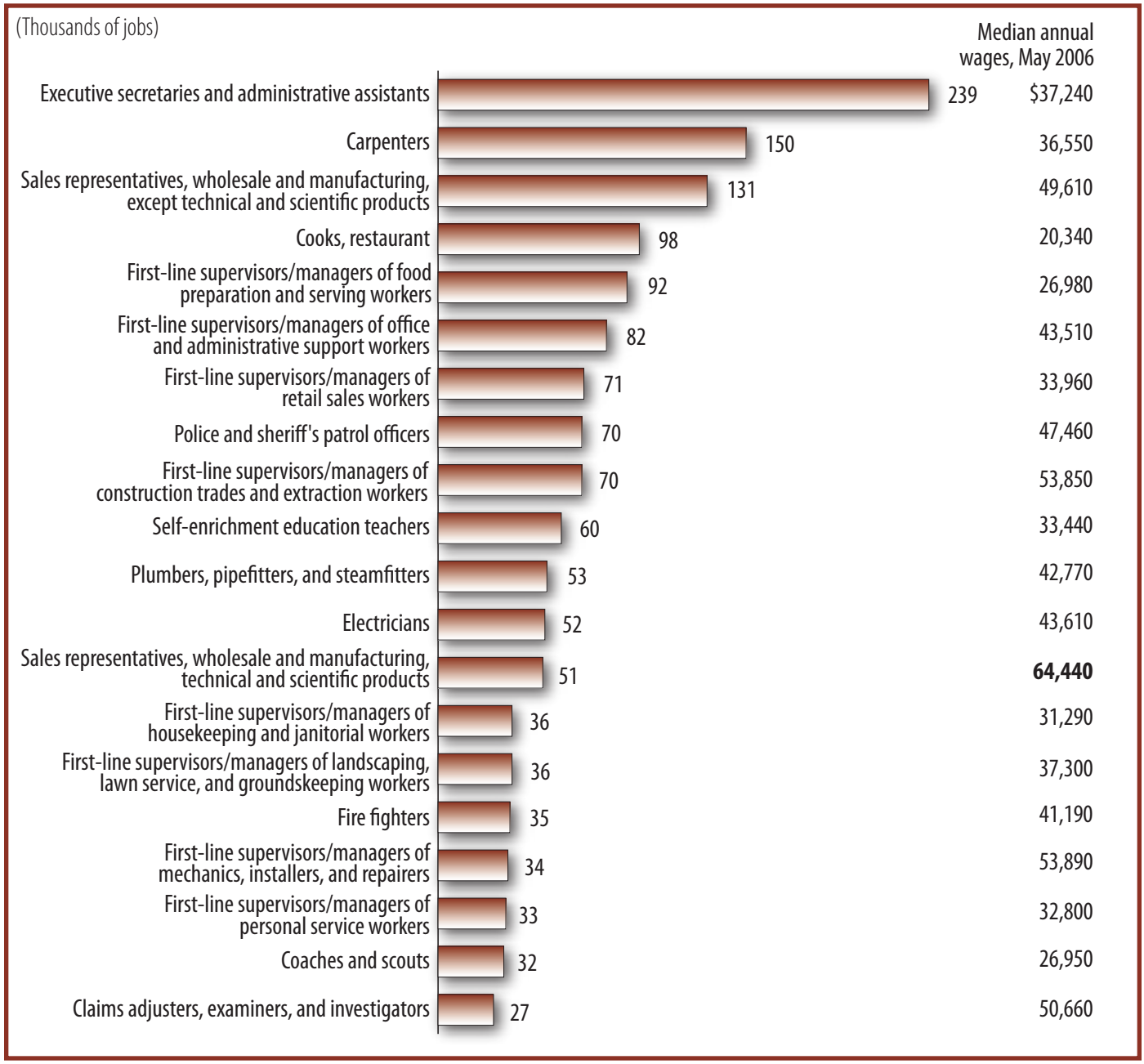
Occupations that have the most job openings and that usually require an associate degree or postsecondary vocational award, projected 2006-16



Over the 2006-16 decade, more than 1 million job openings are expected for registered nurses seeking employment in the occupation for the first time.

Work experience or long-term on-the-job training

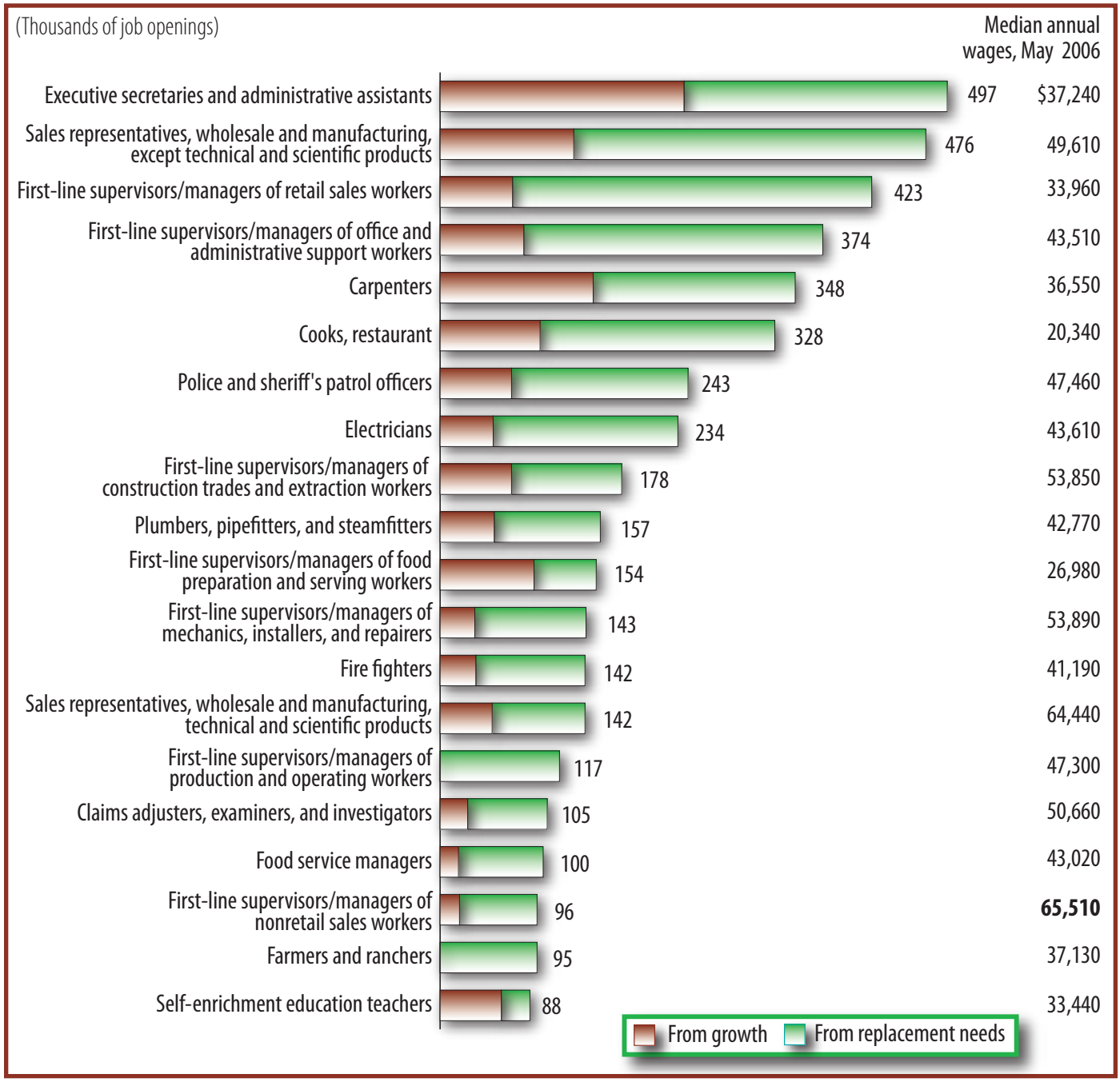
Occupations that have the most growth and that usually require work experience or long-term on-the-job training, projected 2006-16



Increased activity in building and remodeling is expected to create growth in construction occupations. Supervisory occupations are also projected to gain many jobs over the 2006-16 decade.

Work experience or long-term on-the-job training

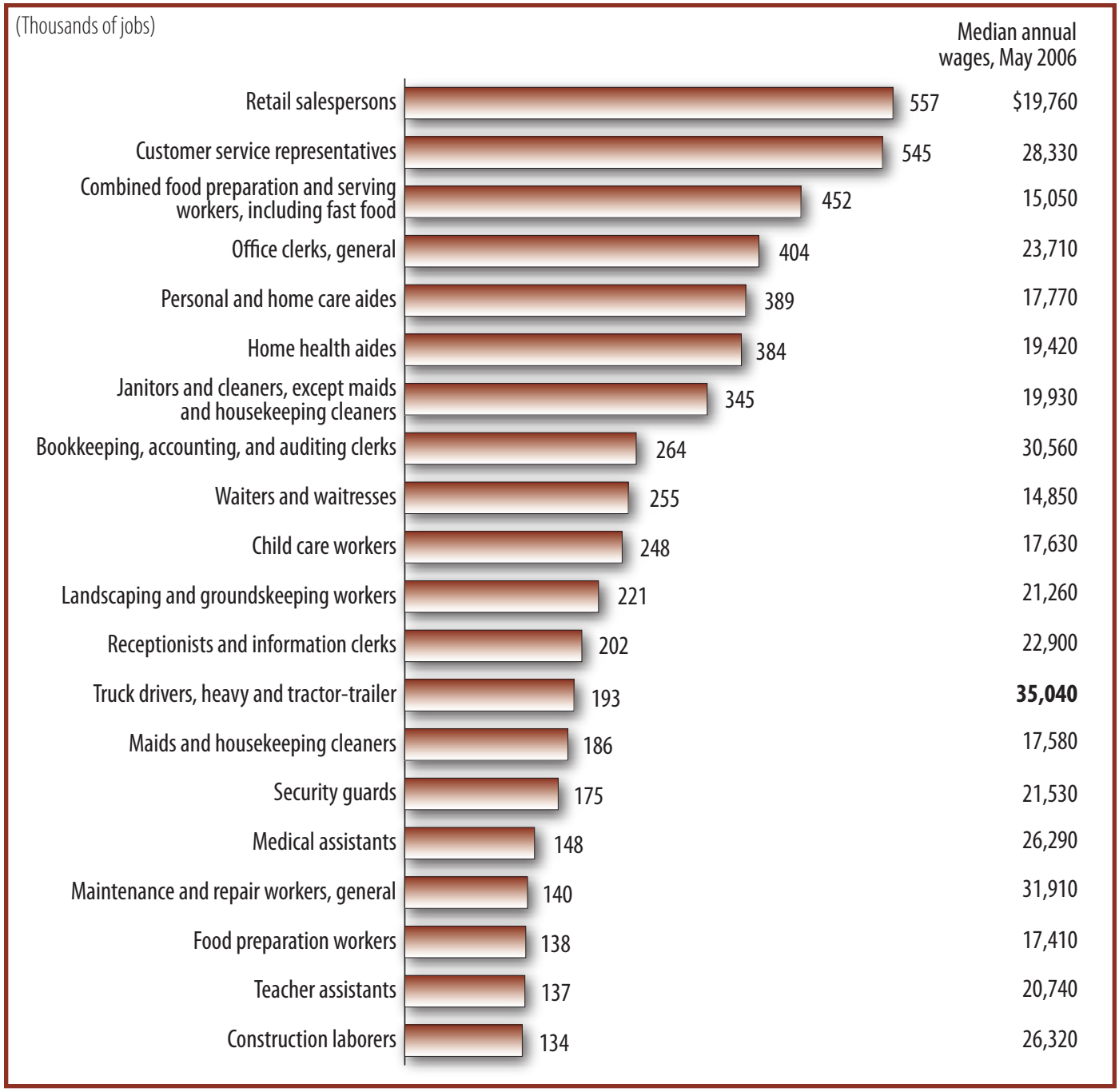
Occupations that have the most job openings and that usually require work experience or long-term on-the-job training, projected 2006-16



Replacement needs are expected to account for most of the job openings in these occupations. Even occupations that are not expected to gain new jobs—such as farmers and ranchers—will offer some job openings because of the need to replace existing workers.

Short- or moderate-term on-the-job training

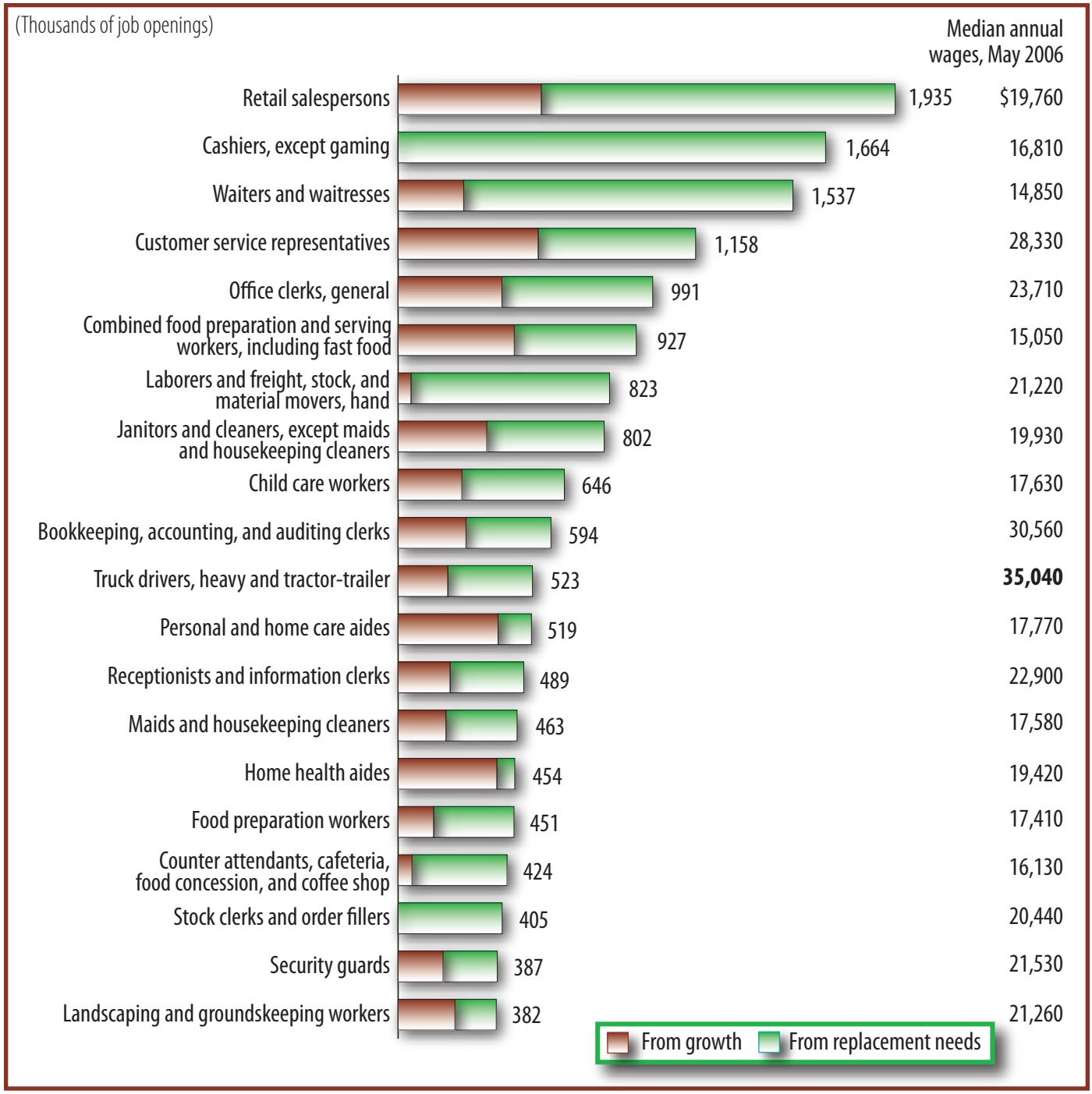
Occupations that have the most growth and that usually require short- or moderate-term on-the-job training, projected 2006-16



Each of the occupations shown here is projected to gain more than 100,000 new jobs between 2006 and 2016. Many of these occupations involve customer service.

Short- or moderate-term on-the-job training

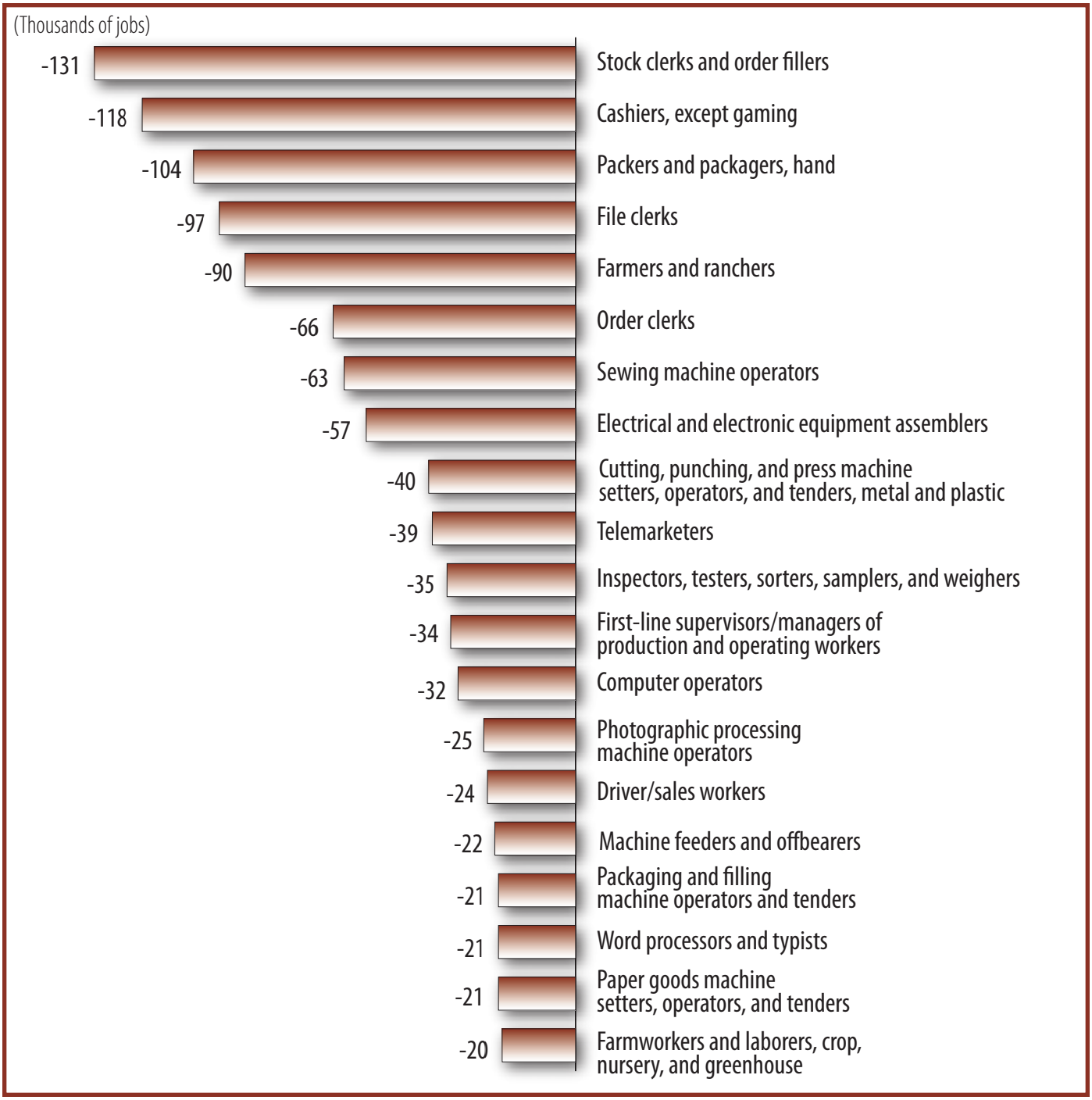
Occupations that have the most job openings and that usually require short- or moderate-term on-the-job training, projected 2006-16



Among occupations that require relatively little training, the need to replace workers is expected to account for the bulk of job openings. Replacement needs in these occupations are due, in part, to many workers leaving these occupations after a short time.

Most job losses

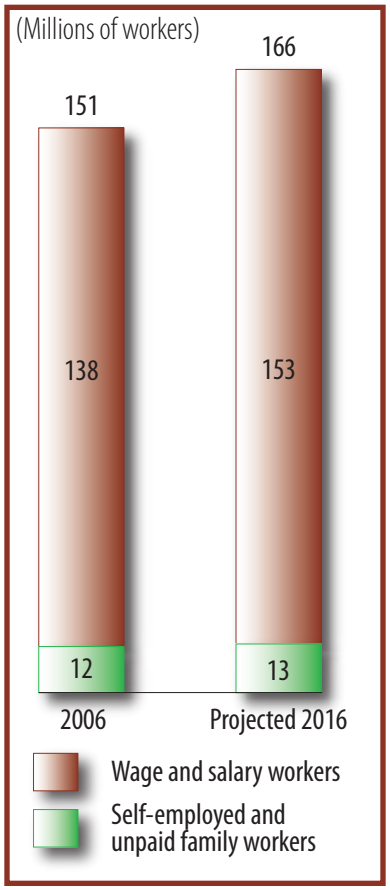
Decline in employment by occupation, projected 2006-16



The occupations that are expected to have the largest employment declines—in part because technology is increasing worker productivity—include stock clerks and order fillers and lower skilled production occupations. Even in occupations that are not expected to gain new jobs, however, the need to replace existing workers will create some opportunities.

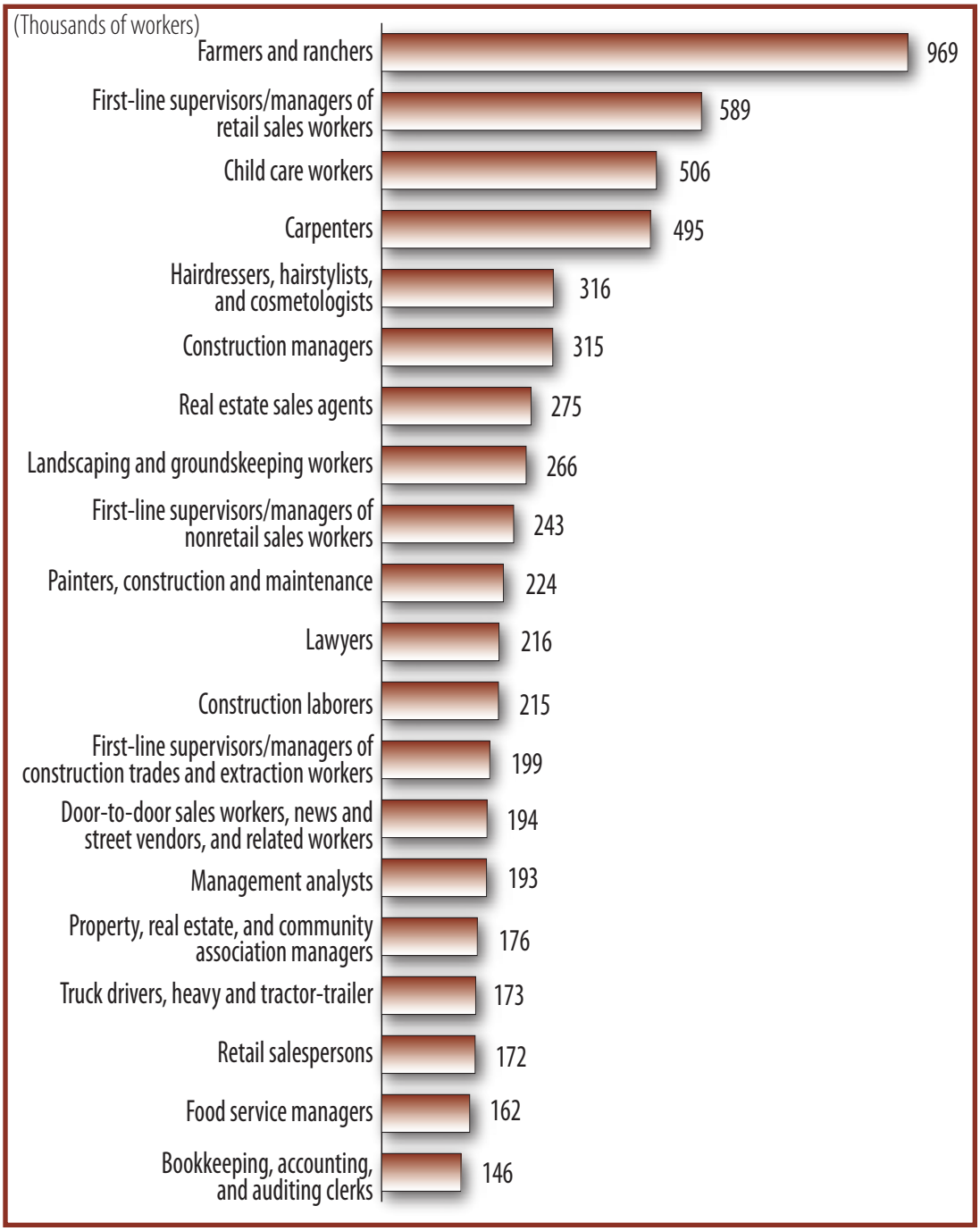
Self employment

Employment by class of worker, 2006 and projected 2016



Most of the new jobs added to the economy are expected to be for wage and salary workers. Employment of these workers is expected to increase from 138 million to 153 million, a gain of about 15 million jobs. Employment of self-employed and unpaid family workers is projected to change little through 2016. (Note: In the chart at left, the sum of the data does not equal the total due to rounding.)

Occupations with the most self-employed workers, projected 2016



Farmers and ranchers are projected to have the highest levels of self-employment in 2016. But self-employment is also expected to be common in business, service, and other types of occupations.