

Job outlook by education, 2006–16

Drew Liming
and
Michael Wolf

Drew Liming and Michael Wolf are economists in the Office of Occupational Statistics and Employment Projections, BLS, (202) 691-5262 or liming.drew@bls.gov and (202) 691-5714 or wolf.michael@bls.gov, respectively.

What will you need to succeed in the job market of tomorrow? In an increasingly competitive world, the best advice for jobseekers is to develop new skills.

Education is a good way to develop skills—and it may lead to better employment prospects and higher earnings. But opportunities for secure, lucrative careers also exist for workers who prefer to acquire skills on the job. This article uses data from the U.S. Bureau of Labor Statistics (BLS) and the U.S. Census Bureau to analyze how workers' education or training relates to their job prospects and earnings. The information is useful for learning about occupations and possible career options at various education levels.

The first section of the article explains the methodology used. The second section looks at data and trends relating to the educational attainment of workers. The next sections analyze selected occupations grouped into categories that are based on the typical educational attainment of the workers in them: bachelor's or higher degree; a mix of levels; and high school diploma or less. The end of the article suggests additional sources of information.



Methods used

Wage data in this article come from the BLS Occupational Employment Statistics (OES) survey, and the earnings premium and educational attainment data are from the Census Bureau's American Community Survey (ACS). Analyses of job openings use data from the BLS Employment Projections program.

Wage data and earnings premiums

Median annual wages from the OES survey represent gross pay for wage and salary workers in the U.S. economy. 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 tables show that median wages were greater than or equal to (\geq) \$145,600.

And because the OES survey does not collect occupational data by educational attainment, earnings premiums are calculated from ACS data. The ACS data cover all workers in the economy, including the self-

employed. Earnings premiums are the variation in income between workers with different education levels in the same occupation.

Educational attainment

In this article, ACS data on educational attainment are for employed persons between 25 and 44 years of age. The age of the population surveyed is limited to these age cutoffs for two reasons. Many workers younger than age 25 have not yet reached their peak education level; becoming a doctor, for example, usually requires a professional degree and many years of study beyond the bachelor's degree level. And workers older than age 44 are excluded because, generally, the usual educational requirements for many occupations have increased over time, making data from older workers unrepresentative of current requirements.

Job openings

BLS projects opportunities for new workers from two sources: new openings resulting from growth, and openings resulting from

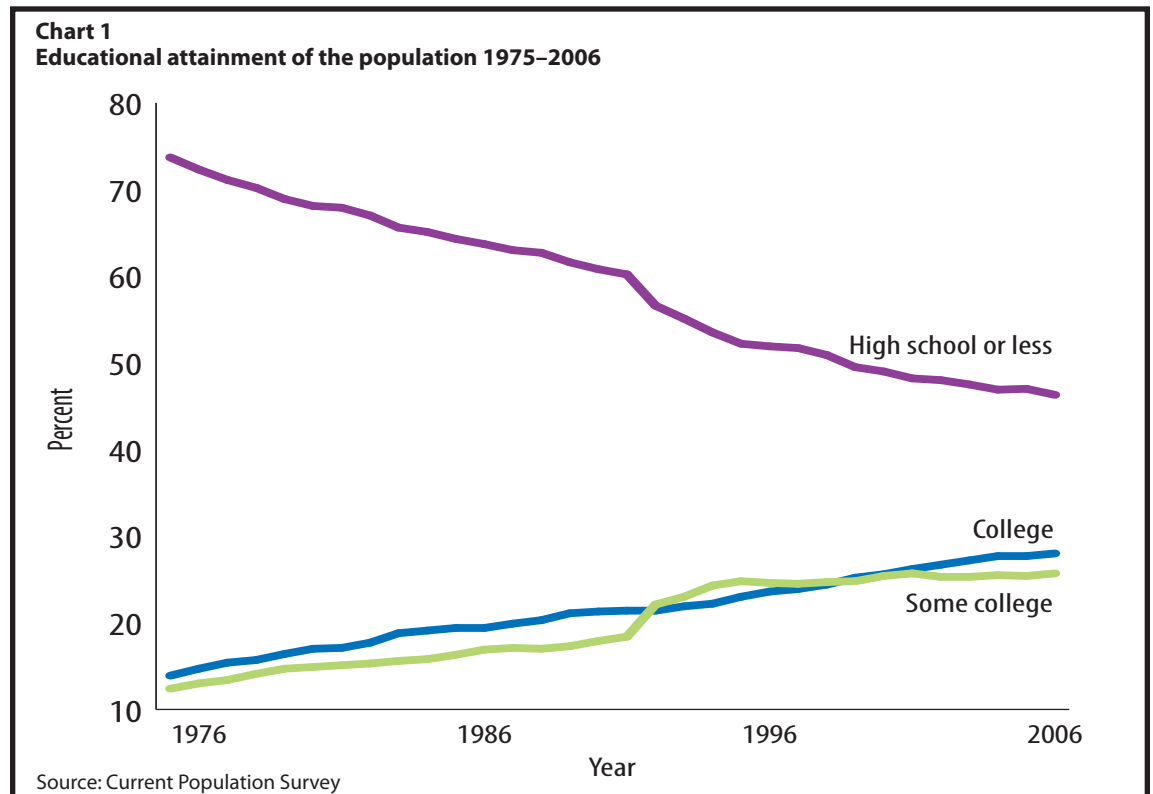
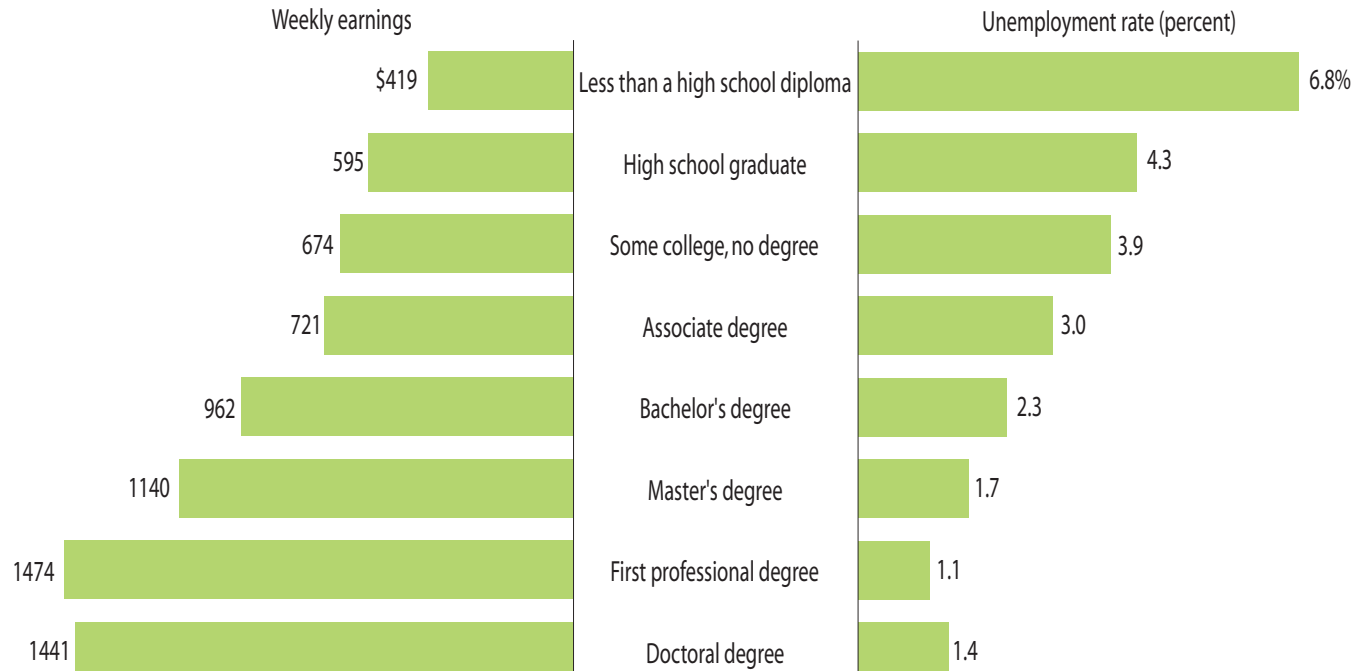


Chart 2
Earnings and unemployment rate by educational attainment, 2006



Source: Current Population Survey

workers who leave an occupation and need to be replaced.

Openings due to growth are based on projections of employment change between 2006 and 2016. Occupations grow as the demand increases for the goods they produce or services they provide. Most occupations grow over time, along with growth in the economy and the population. But some occupations decline due to factors such as automation or work restructuring.

Workers leave their occupations for many reasons, such as to retire from the workforce, take a new job, raise a family, or go back to school. These workers need to be replaced, and replacement needs are a major source of opportunities for new workers. Replacement needs are calculated for each occupation by looking at past trends of workers who leave the occupation and at the current demographic breakdown of the occupation.

Educational attainment data and trends

Data on workers' educational attainment are measured by the highest level of schooling

completed. Over the long term, there has been a trend toward increased educational attainment. According to data from the Current Population Survey—a survey of households that collects labor-force and demographic data—the share of the population aged 16 and over who have college degrees roughly doubled over the past three decades, as did the share of those with some college education. Over the same time, the share of those attaining a high school diploma or less declined. (See chart 1.)

These trends are a response to the career advantages of education. As shown in chart 2, every additional level of education completed leads to increased earnings and lower rates of unemployment. And the largest earnings increase, 42 percent, comes with earning a high school diploma. (More information about earnings premiums for completing high school begins on page 25.)

Employment of college graduates is projected to grow faster than average from 2006 to 2016. However, employment of workers with less education will also increase, and the need to replace workers who retire will create openings for workers of all education levels.

Grouping occupations by education level

In the three sections that follow, occupations are grouped into categories based on the educational composition of their workforce. These categories are: college, mixed education, and high school. Each section corresponds to one of these categories and is followed by tables of data that are discussed in the text.

For this analysis, an occupation is considered college level if more than 50 percent of its workers have at least a bachelor's degree; this includes those workers who have a graduate degree. Occupations in which most workers have less than a bachelor's degree but more than a high school diploma, or in which there is no majority of workers from a single education level, are in the mixed-education category. And occupations in which most workers have a high school diploma or less education are grouped as high school-level occupations.

These categories were created for purposes of analysis in this article only; they do not define the educational level of all workers in a category. For example, a college graduate may choose to work in an occupation in which most workers have a high school diploma or less. Similarly, a high school graduate may, in some cases, qualify to work in an occupation consisting primarily of college graduates.

Each of the following sections discusses common education and training options. The sections also present detailed occupations that are projected to have the most

openings over the 2006–16 decade. To provide a broader look at employment options, each section also describes major fields of work for people who have the corresponding education level. Accompanying tables display the projected growth rates and 2006 median annual wages of 10 selected occupations from each of these major fields for comparison with the national averages, roughly 10 percent and \$30,400, respectively, according to BLS. Some tables also show earnings premiums for workers within occupations who have additional education.

Earnings premiums and differences in wages presented in this article do not stem entirely from workers' educational attainment. For example, higher wages may be due to experience as well as education levels.



College-level occupations

Workers who have a bachelor's or higher degree usually expect a bright future. And with good reason: BLS data show that the number of jobs for workers with a bachelor's or higher degree is projected to increase from 38 million in 2006, or about 25 percent of the workforce, to more than 43 million by 2016. That's a growth rate of nearly 15 percent—faster than the average growth for all occupations, and faster than the rate for jobs at other education levels. Completing a college education also enhances workers' earning potential.

The tables accompanying this section are on pages 10–14.

Types of collegiate education. In this article, undergraduate and graduate levels of educational attainment are discussed together.

People earn an undergraduate degree when they graduate from a 4-year college or university. The most common undergraduate degrees are the bachelor of arts (B.A.) and the bachelor of science (B.S.), which are available in many fields of study.

Although many occupations are typically filled by workers who have a bachelor's degree, a few occupations usually require even more education in the form of a graduate degree. U.S. universities offer three principal types of graduate degrees: master's, doctoral, and first professional.

Master's degrees usually require 1 to 2 years of full-time study beyond a bachelor's degree. Common master's degrees include the master of business administration (M.B.A.), master of arts (M.A.), master of science (M.S.), and master of education (M.Ed.).

Doctoral degrees usually require 4 to 6 years of full-time study beyond a bachelor's degree and include completion of a dissertation, a lengthy work of independent research. The most common doctoral degree is the doctor of philosophy (Ph.D.), which is awarded in many academic fields.

First professional degrees prepare students for employment in a specific

occupation and typically take between 2 and 4 years of full-time graduate-level study. Common first professional degrees include the doctor of medicine (M.D.) and doctor of law (J.D.).

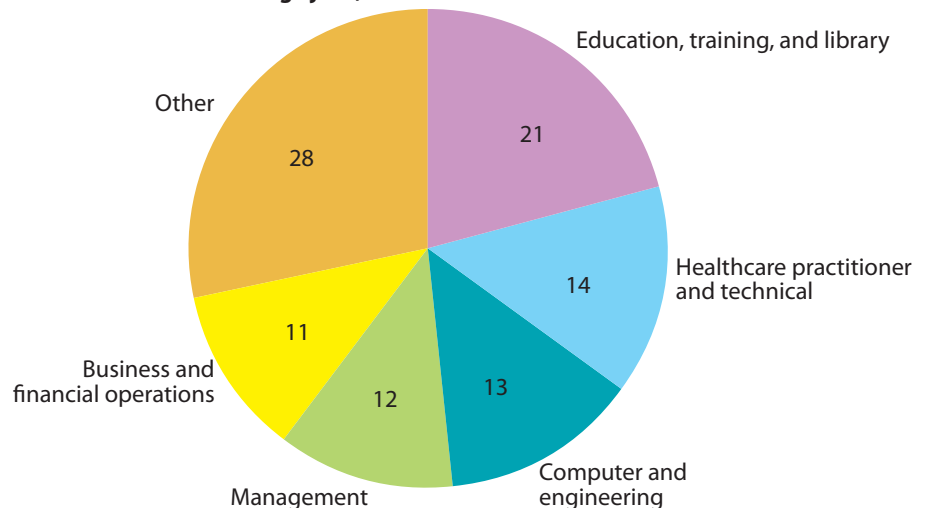
Occupations with many openings.

In which occupations do workers with a bachelor's or higher degree generally work? Although dispersed throughout the economy, these workers are more common in some occupations than in others. For example, BLS data show that in 2006, about half of all workers in college-level occupations were in jobs related to education, healthcare, and computers. (See chart 3.)

Chart 4 shows the detailed college-level occupations projected to provide the most job openings over the next 10 years, as well as 2006 wages in those occupations. The list is diverse, suggesting that there will be opportunities for these graduates in many fields. In addition, each of the listed occupations had wages above the annual median for all occupations in 2006.

Just as college-level occupations are, as a whole, growing faster than average, so too are many of the detailed occupations on the chart. In fact, 8 of the 10 occupations in chart 4 are projected to grow faster than the average for all occupations.

Chart 3
Percent distribution of college jobs, 2006



Note: Percents do not sum to 100 due to rounding.

But neither many openings nor fast growth guarantee that everyone who wants a job will get one. The high wages and prestige of many of the occupations on the chart make them popular choices for job entrants. If the number of jobseekers is higher than the number of openings, not everyone who wants to find employment and is qualified will be able to do so in these occupations.

Major fields of work. Jobs in healthcare, education, management, computer and engineering, and business and finance are popular choices for college-level workers.

Healthcare. Demand for healthcare is expected to increase to meet the needs of a growing and aging population. According to BLS, almost all healthcare occupations are growing faster than the average for all occupations through 2016. (See table 1.) Registered nurses are expected to be in especially high demand.

Usual education requirements and wages vary significantly among healthcare occupations. A bachelor's degree isn't always necessary to find work in all of these occupations—for example, nurse and lab technician. However, other healthcare occupations, including physician and dentist,

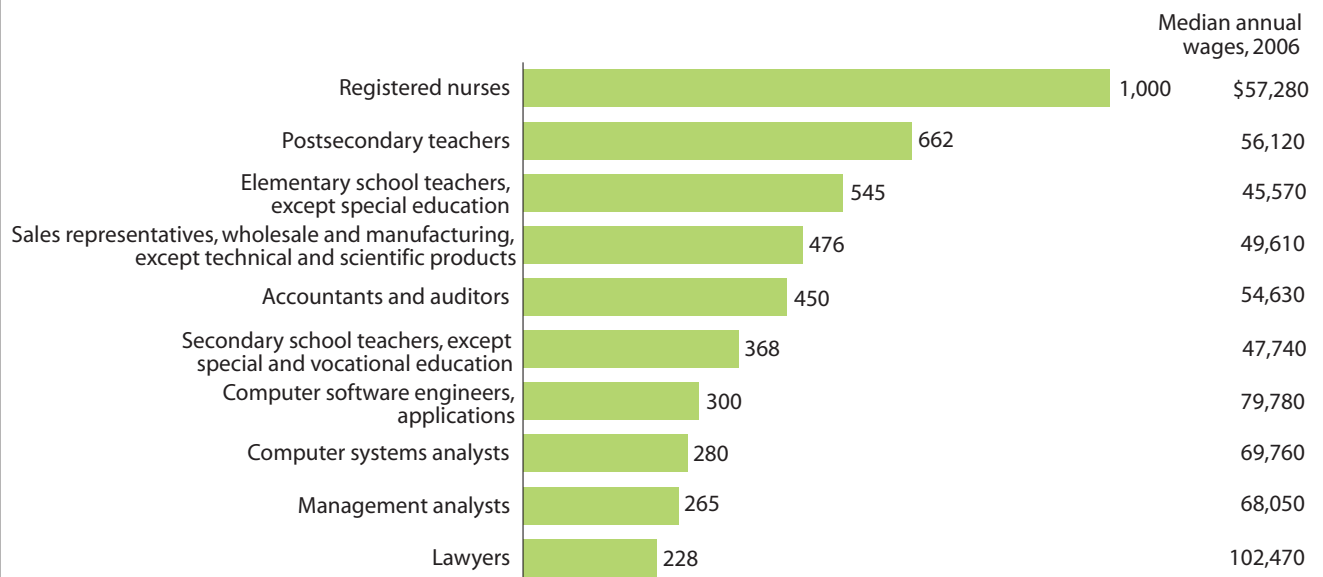
require a professional degree. The high levels of education and skill usually required in these healthcare occupations generally are rewarded by median wages that are higher than the average for all occupations.

Education. Growth in opportunities for postsecondary teachers, the largest occupation in education, is expected to be strong through 2016. Demand for other types of teachers—including those in elementary, middle, and secondary schools—is also expected to increase but will be limited by slow growth in the number of incoming students.

Most occupations in table 2 usually require at least a bachelor's degree; postsecondary teachers and librarians usually need a graduate degree. Wages for education workers are often lower than those in other college-level fields, but some teachers supplement their income by coaching sports or supervising clubs. And teachers often enjoy other benefits, such as significant job security through tenure programs and time off during summers and school vacation weeks.

Management. Management occupations are expected to be propelled by a growing global economy and increasing business opportunities. But projected growth of

Chart 4
College occupations with the most job openings, projected 2006–16
 (Openings in thousands)



specific types of management occupations, such as medical and health services managers and education administrators, depend on the expected growth in their respective industries. (See table 3.)

Usual educational requirements also vary by position. Engineering, natural sciences, and education managers usually have advanced degrees, for example, but not all management jobs require a college degree. Experience and a record of success may be more important than qualifications, such as for sales managers. Management positions often involve considerable responsibility and tend to be well compensated, but competition makes them difficult to attain.

Computer and engineering. Technological advances and the desire for increased productivity are expected to create growth for computer and engineering occupations. Table 4 shows some of the computer and engineering jobs that are projected to grow over the 2006–16 decade. In fact, all engineering occupations, especially biomedical and environmental engineers, are projected to have an increase in the number of jobs. Acquiring a position in computer and engineering usually requires a high level of technical skill, but workers often have high wages; all of the occupations in the table have median annual wages that are more than twice the median for all occupations.

Business and financial. Demand for workers in business fields is expected to stem from new financial regulations and increasingly complex budgets and investment strategies. As shown in table 5, many of these occupations have significant numbers of workers with less education than a college degree. Although a degree isn't always required in these occupations, it can often increase job prospects and potential earnings.

Occupations usually requiring a graduate degree. As mentioned previously, some occupations usually require more education than an undergraduate degree. Tables 6, 7, and 8 list the largest occupations identified by BLS as needing a master's, doctoral, or first professional degree.

Master's-level occupations primarily include counseling, education, and healthcare occupations. Despite the additional education needed for these occupations, their wages are not significantly higher than those of most college-level occupations. (See table 6.)

Doctoral-level occupations are primarily science or math occupations that do not have large numbers of workers. An exception is postsecondary teachers, which is one of the largest college-level occupations. Wages are high for all of these occupations, but because of the small numbers of workers in them, most are not expected to have many openings through 2016. (See table 7.)

Nearly all occupations that usually require a first professional degree are healthcare related. Many of these occupations are among those with the highest wages, reflecting the benefits of completing additional education. (See table 8.)

Earnings premiums for higher degrees. Occupations that typically require higher degrees often have higher wages. However, many workers who do have higher degrees are employed in occupations in which graduate-level study may not be required. Nonetheless, having a higher degree can still increase a worker's earnings. The specific benefits of additional education vary by occupation; some provide more of a premium for workers with a master's degree, others provide less.

Table 9 shows occupations in which there is a high earnings premium for workers who have a master's degree over workers who have a bachelor's degree. Several financial and education occupations have large premiums.

Table 10 shows occupations with earnings premiums of less than 10 percent for workers who have a master's degree over workers who have a bachelor's degree. Prominent among these are writing and computer occupations, which often favor demonstrated skill in the field over education and thus may account for lower earnings premiums. Although these premiums are relatively small, they show that in most cases additional education is linked to higher earnings.

Table 1**Selected healthcare occupations**

(Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006–16 (percent)	Net job openings, projected 2006–16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					High school diploma or less	Some college or associate degree	Bachelor's or higher degree
Registered nurses	2,505	24	1,000	\$57,280	1	43	56
Physicians and surgeons	633	14	204	≥145,600	0	0	100
Pharmacists	243	22	95	94,520	0	3	97
Physical therapists	173	27	68	66,200	2	9	89
Medical and clinical laboratory technologists	167	12	46	49,700	14	35	51
Medical and clinical laboratory technicians	151	15	46	32,840	14	35	51
Dentists, general	136	9	40	132,140	0	0	100
Speech-language pathologists	110	11	33	57,710	0	0	98
Occupational therapists	99	23	37	60,470	0	9	90
Physician assistants	66	27	27	74,980	8	26	67

* Percents may not sum to 100 due to rounding.

Table 2**Selected education occupations**

(Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006–16 (percent)	Net job openings, projected 2006–16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					High school diploma or less	Some college or associate degree	Bachelor's or higher degree
Postsecondary teachers	1,672	23	662	\$56,120	0	5	95
Elementary school teachers, except special education	1,540	14	545	45,570	0	5	95
Secondary school teachers, except special and vocational education	1,038	6	368	47,740	1	4	96
Middle school teachers, except special and vocational education	658	11	218	46,300	0	5	95
Self-enrichment education teachers	261	23	88	33,440	17	29	54
Special education teachers, preschool, kindergarten, and elementary school	219	20	92	46,360	5	8	87
Librarians	158	4	49	49,060	0	15	85
Special education teachers, secondary school	138	9	43	48,330	5	8	87
Instructional coordinators	129	23	47	52,790	4	17	79
Special education teachers, middle school	102	16	39	47,650	5	8	87

* Percents may not sum to 100 due to rounding.

Table 3
Selected management occupations
 (Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006-16 (percent)	Net job openings, projected 2006-16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					High school diploma or less	Some college or associate degree	Bachelor's or higher degree
Financial managers	506	13	138	\$90,970	13	27	60
Chief executives	402	2	118	≥145,600	13	22	65
Sales managers	318	10	104	91,560	9	22	69
Computer and information systems managers	264	16	86	101,580	5	23	73
Medical and health services managers	262	16	92	73,340	11	32	57
Education administrators, elementary and secondary school	226	8	80	77,740	6	15	78
Engineering managers	187	7	52	105,430	4	12	84
Marketing managers	167	14	61	98,720	9	22	69
Education administrators, postsecondary	131	14	56	73,990	6	15	78
Social and community service managers	130	25	57	52,070	9	20	72

* Percents may not sum to 100 due to rounding.

Table 4
Selected computer and engineering occupations
 (Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006-16 (percent)	Net job openings, projected 2006-16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					High school diploma or less	Some college or associate degree	Bachelor's or higher degree
Computer software engineers, applications	507	45	300	\$79,780	2	13	85
Computer systems analysts	504	29	280	69,760	7	25	68
Computer programmers	435	-4	91	65,510	6	22	73
Computer software engineers, systems software	350	28	150	85,370	2	13	85
Network systems and data communications analysts	262	53	193	64,600	8	35	57
Civil engineers	256	18	114	68,600	3	10	87
Mechanical engineers	226	4	58	69,850	4	18	78
Industrial engineers	201	20	89	68,620	8	19	74
Electrical engineers	153	6	46	75,930	3	17	81
Architects, except landscape and naval	132	18	48	64,150	2	10	88

* Percents may not sum to 100 due to rounding.

Table 5
Selected business and financial occupations
 (Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006-16 (percent)	Net job openings, projected 2006-16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					High school diploma or less	Some college or associate degree	Bachelor's or higher degree
Accountants and auditors	1,274	18	450	\$54,630	4	17	79
Management analysts	678	22	265	68,050	7	16	78
Compliance officers, except agriculture, construction, health and safety, and transportation	237	5	40	47,050	14	28	58
Financial analysts	221	34	88	66,590	3	10	87
Training and development specialists	210	18	83	47,830	14	30	56
Employment, recruitment, and placement specialists	197	18	78	42,420	14	30	56
Personal financial advisors	176	41	88	66,120	4	15	81
Compensation, benefits, and job analysis specialists	110	18	44	50,230	14	30	56
Insurance underwriters	104	6	35	52,350	16	32	53
Tax preparers	100	-8	18	27,360	15	31	54

* Percents may not sum to 100 due to rounding.

Table 6
Selected occupations requiring a master's degree
 (Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006-16 (percent)	Net job openings, projected 2006-16	Median annual wages, 2006
Clergy	404	19	130	\$39,680
Educational, vocational, and school counselors	260	13	84	47,530
Physical therapists	173	27	68	66,200
Librarians	158	4	49	49,060
Rehabilitation counselors	141	23	60	29,200
Instructional coordinators	129	23	47	52,790
Mental health and substance abuse social workers	122	30	63	35,410
Speech-language pathologists	110	11	33	57,710
Mental health counselors	100	30	50	34,380
Occupational therapists	99	23	37	60,470

Table 7
Selected occupations requiring a doctoral degree
 (Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006–16 (percent)	Net job openings, projected 2006–16	Median annual wages, 2006
Postsecondary teachers	1,672	23	662	\$56,120
Clinical, counseling, and school psychologists	152	16	47	59,440
Medical scientists, except epidemiologists	87	20	45	61,680
Biological scientists, all other	29	4	7	60,940
Computer and information scientists, research	25	22	12	93,950
Biochemists and biophysicists	20	16	7	76,320
Physicists	17	7	5	94,240
Microbiologists	17	11	6	57,980
Mathematicians	3	10	1	86,930
Astronomers	2	6	0	95,740

Table 8
Selected occupations requiring a first professional degree
 (Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006–16 (percent)	Net job openings, projected 2006–16	Median annual wages, 2006
Lawyers	761	11	228	\$102,470
Physicians and surgeons	633	14	204	≥145,600
Pharmacists	243	22	95	94,520
Dentists, general	136	9	40	132,140
Veterinarians	62	35	34	71,990
Chiropractors	53	14	14	65,220
Optometrists	33	11	10	91,040
Podiatrists	12	10	5	108,220
Audiologists	12	10	2	57,120
Orthodontists	9	9	3	≥145,600

Table 9
Selected occupations with high earnings premiums for graduate degrees, 2006

Occupation	Median earnings with...			Percent of workers aged 25 to 44 with...			Earnings premiums (percent)	
	Bachelor's degree	Master's degree	Doctoral degree	Bachelor's degree	Master's degree	Doctoral degree	Master's over bachelor's	Doctoral over master's
Financial analysts	\$74,760	\$109,983	-	51	32	-	47	-
Tax preparers	41,997	59,909	-	37	13	-	43	-
Financial managers	68,986	97,885	-	42	16	-	42	-
Education administrators	48,064	68,000	\$89,025	28	44	4	41	31
Counselors	32,035	45,091	50,002	31	40	1	41	11
Securities, commodities, and financial services sales agents	74,864	103,110	-	51	14	-	38	-
Librarians	34,962	48,007	-	27	54	-	37	-
Market and survey researchers	59,952	80,098	-	52	28	-	34	-
Environmental scientists and geoscientists	52,061	68,885	-	55	32	-	32	-
Elementary and middle school teachers	37,966	49,290	54,913	54	39	1	30	11

Source: Authors' calculations from American Community Survey microdata, 2006

Table 10
Selected occupations with low earnings premiums for graduate degrees, 2006

Occupation	Median earnings with...			Percent of workers aged 25 to 44 with...			Earnings premiums (percent)	
	Bachelor's degree	Master's degree	Doctoral degree	Bachelor's degree	Master's degree	Doctoral degree	Master's over bachelor's	Doctoral over master's
Editors	\$50,045	\$49,931	-	60	18	-	0	-
Writers and authors	48,967	50,015	\$43,884	55	24	3	2	-12
Architects, except naval	60,005	62,032	-	54	29	-	3	-
Occupational therapists	53,052	55,984	-	58	29	-	6	-
Archivists, curators, and museum technicians	37,902	40,038	-	36	43	-	6	-
Dietitians and nutritionists	44,942	47,498	-	44	25	-	6	-
Computer hardware engineers	74,834	79,949	-	44	23	-	7	-
Database administrators	69,991	74,948	-	51	20	-	7	-
Computer programmers	69,031	74,865	-	55	17	-	8	-
Computer software engineers	78,051	85,009	100,024	52	30	3	9	18

Source: Authors' calculations from American Community Survey microdata, 2006



This group can include workers with an associate degree, certificate, or other training through programs at community colleges, vocational or technical schools, or specially designed partnerships between businesses and academic institutions.

Community colleges are one of the primary sources of postsecondary training. Programs offered lead to either an associate degree, which usually takes 2 years of full-time study, or a certificate, which can take 1 to 3 years, depending on its type. Because most community colleges are public institutions, they are generally less expensive than other types of postsecondary education. They also usually have an open admissions policy, allowing anyone with a high

Mixed-education occupations

BLS projects that the number of jobs for workers who had some college education but not a bachelor's degree will increase from more than 46 million, or 30 percent of the workforce, in 2006 to about 51 million by 2016. That's a growth rate of almost 11 percent.

The tables accompanying this section are on pages 18–21.

Types of postsecondary training.

Workers in mixed-education occupations have a variety of educational backgrounds. Some of these workers have a bachelor's or higher degree, and others have no additional education beyond a high school diploma. They are in this category because workers in their occupation have such a wide range of education levels that it isn't easy to classify them into either of the other groups.

The mixed-education group is also made up of workers with some form of postsecondary education other than a bachelor's degree.

school diploma or equivalent to enroll. Some people enroll at community colleges with the goal of transferring to a 4-year institution to obtain a bachelor's degree.

Private institutions also offer associate degrees and certificate programs. These institutions are often referred to as junior colleges, although many public community colleges also use this term. Private 2-year institutions are less common than public ones: only about 5 percent of all students attending 2-year institutions were enrolled at private institutions in the fall of 2005, according to the U.S. Department of Education.

Many 2-year institutions, both public and private, work closely with local governments and businesses to design programs for postsecondary training. These programs provide practical training that helps workers gain skills needed for jobs in their area.

Occupations with many openings.

Although some groups predominate, occupations throughout the economy include work-

ers whose education levels are mixed. Office and administrative support, sales, and service occupations are the largest, accounting for more than two-thirds of all workers in 2006, according to BLS. (See chart 5.)

Chart 6 lists the mixed-education occupations with the most projected openings between 2006 and 2016, according to BLS, along with the 2006 wages in those occupations. Although many types of positions are represented, there is a significant number of sales and administrative occupations, such as secretaries and clerks. Wages vary, with four occupations having median wages above the median for all occupations.

BLS projects that mixed-education occupations as a whole will grow about as fast as the average for all occupations. However, 8 of the 10 occupations in chart 6 are projected to grow faster than the average. Most new jobs in these occupations are expected to result from the need to replace departing workers rather than from growth.

Major fields of work. Workers with diverse educational backgrounds are employed in a variety of office and administrative support, sales, service,

professional and related, and management occupations.

Office and administrative support. BLS projects that most occupations in office and administrative support, including all of those in table 11, will grow through 2016. In occupations that are not expected to have significant growth, the need to replace workers who have left is expected to create openings.

Although a college degree isn't necessary in these occupations, it may improve opportunities or earnings in some—especially administrative assistant and customer service representative. And computer and foreign language skills should greatly improve job prospects.

Sales. Job openings in sales occupations are expected to be plentiful through 2016, thanks to a growing population and rising consumer spending. Growth is expected to be particularly dependent on the future of the U.S. economy as a whole.

The educational composition of these occupations varies significantly. (See table 12.) Several of these occupations, including those in real estate and insurance, have higher educational attainment rates than other sales positions, and a college degree may be

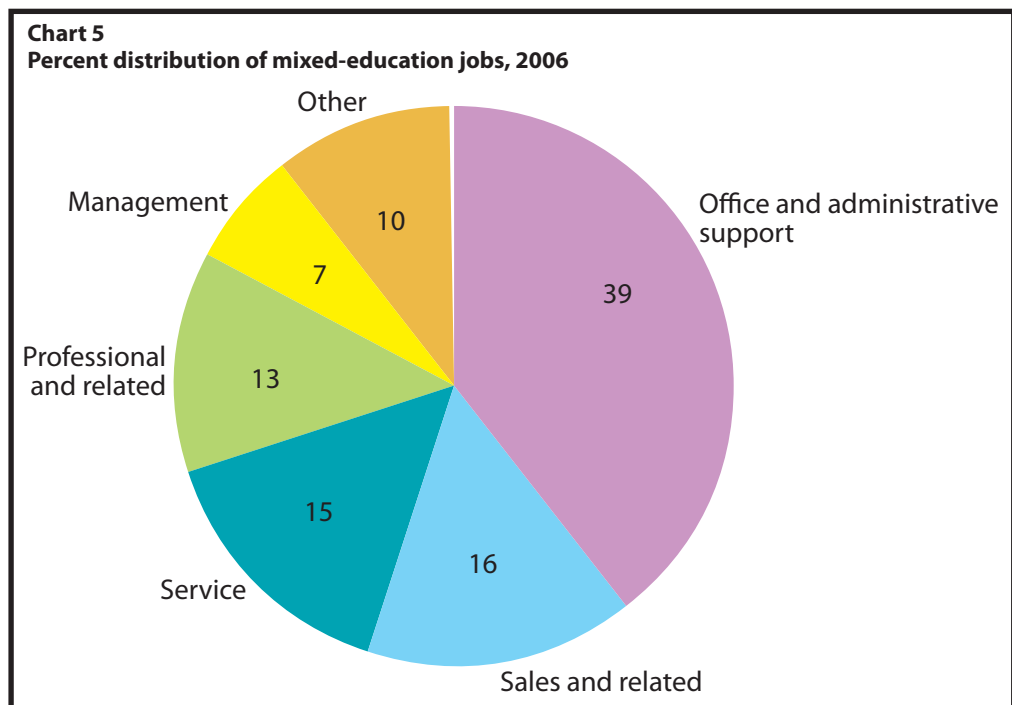
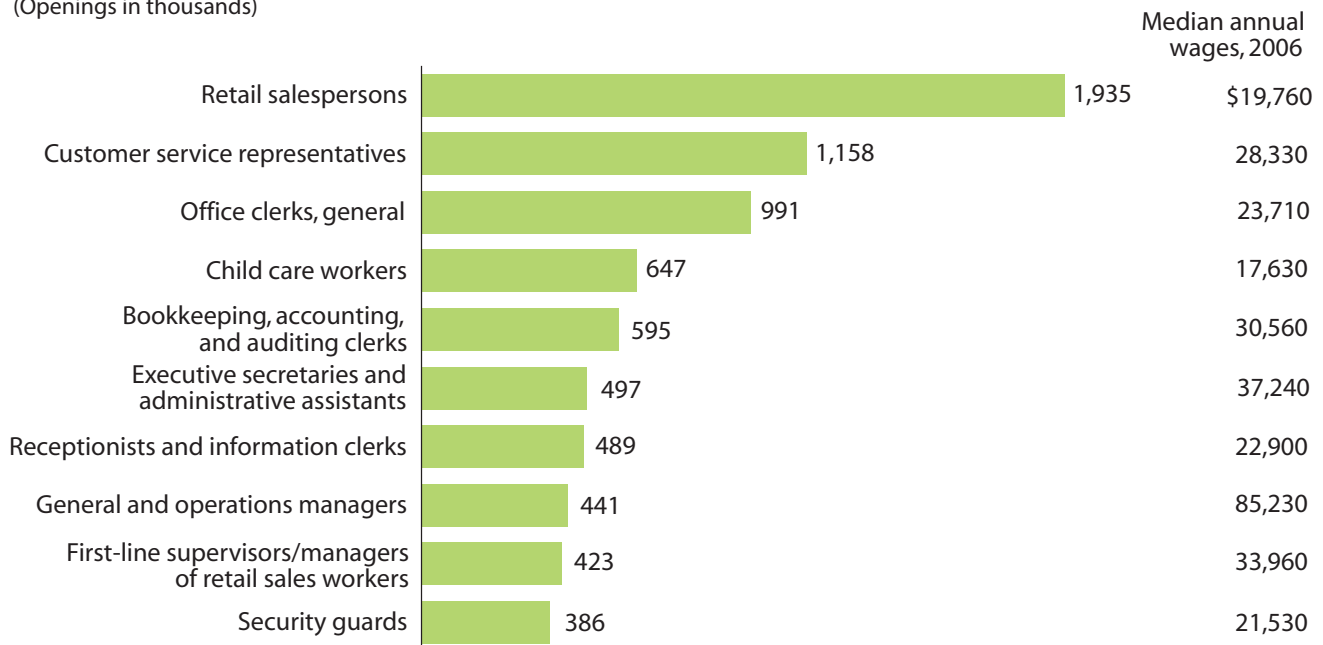


Chart 6
Mixed-education occupations with the most job openings, projected 2006–16
 (Openings in thousands)



important to success in finding work in these occupations. Strong customer-service and communication skills are essential for all sales occupations.

Service. Growth in service occupations is projected to increase along with the population between 2006 and 2016. In table 13, several of the occupations are in protective service occupations—police officers, security guards, and firefighters—that tend to be highly competitive and that often require specialized training or academy certification. Medical assistants, whose expected employment gains are due to the rising demand for healthcare, should have the most rapid growth of all service occupations.

Professional and related. The healthcare industry is expected to contribute significantly to the 2006–16 growth of many professional and related occupations. Half of the occupations in table 14 are healthcare related, and all of them are expected to grow faster than average. Pharmacy technicians, in particular, are projected to have excellent growth.

Mixed-education workers in professional and related occupations are usually highly skilled assistants and technicians. Therefore,

getting a job in this field may require more education than other mixed-education occupations. In some jobs, an associate degree might be a minimum requirement for entry.

Management. The relatively high wages in management occupations makes them highly competitive. Employment in most management occupations is expected to increase, but the individual growth rates depend on the industries in which each occupation is found.

These occupations are classified as mixed education, but the educational compositions in table 15 show that several management occupations—such as those in the food services and construction industries—include a significant number of workers whose highest education is a high school diploma. This level of attainment suggests that related work experience can be just as important as education in some of the occupations. Because of the high level of competition for these jobs, however, jobseekers who have postsecondary training may stand apart from others who don't.

Earnings premiums for higher education. Although mixed-education occupations generally have workers with diverse educational backgrounds, workers with more

education often enjoy an earnings premium over their counterparts. Within an occupation, higher educational attainment often gives workers an earnings premium over their counterparts. But the benefits of additional education vary by occupation. In some, workers with postsecondary education earn more of a premium; in others, they earn less.

Table 16 shows occupations in which workers with some college or a bachelor's or higher degree enjoy large earnings premiums over workers who have a high school diploma. Managerial and supervisory positions are well represented, which indicates that additional education is not always necessary to advance into higher level positions, but it may lead to higher earnings. A number of sales occupa-

tions also have large earnings premiums for workers with higher levels of education.

Table 17 shows occupations with earnings premiums of less than 10 percent for workers who have some postsecondary education over those who have a high school diploma or less. These occupations also have relatively low earnings premiums for workers who have a bachelor's or higher degree compared with workers who have some postsecondary education. In several of the occupations that have lower skill requirements, such as tellers and data entry keyers, additional education is unlikely to significantly impact productivity; as a result, wages are comparable for all education levels.

Table 11
Selected office and administrative support occupations
(Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006-16 (percent)	Net job openings, projected 2006-16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					High school diploma or less	Some college or associate degree	Bachelor's or higher degree
Office clerks, general	3,200	13	991	\$23,710	36	45	19
Customer service representatives	2,202	25	1,158	28,330	34	44	22
Bookkeeping, accounting, and auditing clerks	2,114	13	595	30,560	34	50	16
Secretaries, except legal, medical, and executive	1,940	1	331	27,450	33	49	18
Executive secretaries and administrative assistants	1,618	15	497	37,240	33	49	18
First-line supervisors/managers of office and administrative support workers	1,418	6	375	43,510	28	43	29
Receptionists and information clerks	1,173	17	489	22,900	42	46	13
Tellers	608	14	348	22,140	39	45	16
Billing and posting clerks and machine operators	542	4	93	28,850	36	49	15
Bill and account collectors	434	23	165	29,050	38	48	13

* Percents may not sum to 100 due to rounding.

Table 12
Selected sales occupations
 (Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006-16 (percent)	Net job openings, projected 2006-16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					High school diploma or less	Some college or associate degree	Bachelor's or higher degree
Retail salespersons	4,477	12	1,935	\$19,760	38	37	25
First-line supervisors/managers of retail sales workers	1,676	4	423	33,960	39	37	25
First-line supervisors/managers of non-retail sales workers	530	4	95	65,510	31	31	38
Insurance sales agents	436	13	151	43,870	18	36	45
Real estate sales agents	432	11	115	39,760	18	37	45
Door-to-door sales workers, news and street vendors, and related workers	200	4	34	20,190	47	32	21
Real estate brokers	131	11	36	60,790	18	37	45
Demonstrators and product promoters	105	18	49	22,150	38	36	26
Travel agents	101	1	8	29,210	25	49	26
Models	2	10	1	23,340	38	36	26

* Percents may not sum to 100 due to rounding.

Table 13
Selected service occupations
 (Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006-16 (percent)	Net job openings, projected 2006-16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					High school diploma or less	Some college or associate degree	Bachelor's or higher degree
Child care workers	1,388	18	647	\$17,630	48	38	15
Security guards	1,040	17	386	21,530	46	42	13
Police and sheriff's patrol officers	648	11	243	47,460	16	52	33
Bartenders	495	11	236	16,350	42	41	17
Correctional officers and jailers	442	17	176	35,760	40	49	11
Medical assistants	417	35	200	26,290	31	59	10
Recreation workers	320	13	101	20,470	21	32	47
Fire fighters	293	12	142	41,190	23	59	18
Dental assistants	280	29	131	30,220	34	58	9
Amusement and recreation attendants	247	24	182	16,290	46	32	22

* Percents may not sum to 100 due to rounding.

Table 14
Selected professional and related occupations
 (Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006-16 (percent)	Net job openings, projected 2006-16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					High school diploma or less	Some college or associate degree	Bachelor's or higher degree
Teacher assistants	1,312	10	351	\$20,740	37	45	18
Licensed practical and licensed vocational nurses	749	14	309	36,550	21	72	7
Computer support specialists	552	13	242	41,470	13	44	43
Preschool teachers, except special education	437	26	187	22,680	20	38	43
Pharmacy technicians	285	32	178	25,630	27	57	16
Paralegals and legal assistants	238	22	84	43,040	13	43	45
Emergency medical technicians and paramedics	201	19	62	27,070	18	68	14
Radiologic technologists and technicians	196	15	57	48,170	7	68	25
Electrical and electronic engineering technicians	170	4	39	50,660	27	54	18
Medical records and health information technicians	170	18	76	28,030	37	51	12

* Percents may not sum to 100 due to rounding.

Table 15
Selected management occupations
 (Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006-16 (percent)	Net job openings, projected 2006-16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					High school diploma or less	Some college or associate degree	Bachelor's or higher degree
General and operations managers	1,720	2	441	\$85,230	20	33	48
Construction managers	487	16	152	73,700	40	31	29
Food service managers	350	5	101	43,020	40	36	24
Property, real estate, and community association managers	329	15	95	43,070	27	37	36
Farm, ranch, and other agricultural managers	258	1	22	52,070	45	29	26
Administrative services managers	247	12	94	67,690	21	39	40
Industrial production managers	157	-6	54	77,670	25	32	43
Transportation, storage, and distribution managers	94	8	36	73,080	39	36	25
Lodging managers	71	12	25	42,320	23	32	45
Funeral directors	29	13	11	49,620	9	51	41

* Percents may not sum to 100 due to rounding.

Table 16
Selected occupations with high earnings premiums for postsecondary education, 2006

Occupation	Median earnings with...			Percent of workers aged 25 to 44 with...			Earnings premiums (percent)	
	High school diploma or less	Some college or associate degree	Bachelor's or higher degree	High school diploma or less	Some college or associate degree	Bachelor's or higher degree	Some college or associate degree over high school or less	Bachelor's or higher degree over some college or associate degree
Property, real estate, and community association managers	\$33,968	\$40,022	\$61,963	27	37	36	18	55
First-line supervisors/managers of non-retail sales workers	39,965	48,013	73,577	31	31	38	20	53
Insurance sales agents	32,938	39,936	60,010	18	36	45	21	51
Retail salespersons	24,974	29,987	38,999	38	36	25	20	30
Emergency medical technicians and paramedics	32,023	38,934	49,953	18	68	14	22	28
First-line supervisors/managers of retail sales workers	29,990	35,985	44,723	39	37	25	20	24
Farm, ranch, and other agricultural managers	30,015	37,975	46,015	45	29	26	27	21
Administrative services managers	43,959	53,914	65,017	21	39	40	23	21
Computer operators	30,013	36,050	43,007	27	46	27	20	19
Police and sheriffs patrol officers	41,076	49,975	58,055	16	52	33	22	16

Source: Authors' calculations from American Community Survey microdata, 2006

Table 17
Selected occupations with low earnings premiums for postsecondary education, 2006

Occupation	Median earnings with...			Percent of workers aged 25 to 44 with...			Earnings premiums (percent)	
	High school diploma or less	Some college or associate degree	Bachelor's or higher degree	High school diploma or less	Some college or associate degree	Bachelor's or higher degree	Some college or associate degree over high school or less	Bachelor's or higher degree over some college or associate degree
Postal service clerks	\$45,036	\$46,076	\$47,057	43	46	11	2	2
Tellers	21,197	22,015	23,025	39	45	16	4	5
Data entry keyers	25,018	26,023	28,001	35	47	18	4	8
Drafters	41,020	42,892	44,015	13	62	25	5	3
Massage therapists	23,317	25,009	25,005	19	49	32	7	0
Loan interviewers and clerks	32,016	34,288	35,020	32	45	24	7	2
Construction and building inspectors	39,966	42,971	47,078	31	46	23	8	10
Word processors and typists	26,497	29,027	29,963	29	52	19	10	3
Gaming services workers	32,985	35,033	36,030	45	44	11	6	3
Radio and telecommunications equipment installers and repairers	48,078	52,050	53,922	36	51	13	8	4

Source: Authors' calculations from American Community Survey microdata, 2006

High school-level occupations

For workers with a high school education or less, there were about 66 million jobs—almost 44 percent of the total—in 2006, according to BLS. And this number is projected to increase to more than 71 million by 2016, a growth rate of about 8 percent.

The tables accompanying this section are on pages 25–28.

Types of on-the-job training. This section on high school-level occupations includes both workers who have a high school diploma and those who don't. Overall, workers who complete high school have better job prospects and earn higher wages than their counterparts who lack a diploma.

Most workers who do not pursue formal education beyond high school are trained on the job. On-the-job training ranges from a brief lecture or demonstration to a multiyear apprenticeship program.

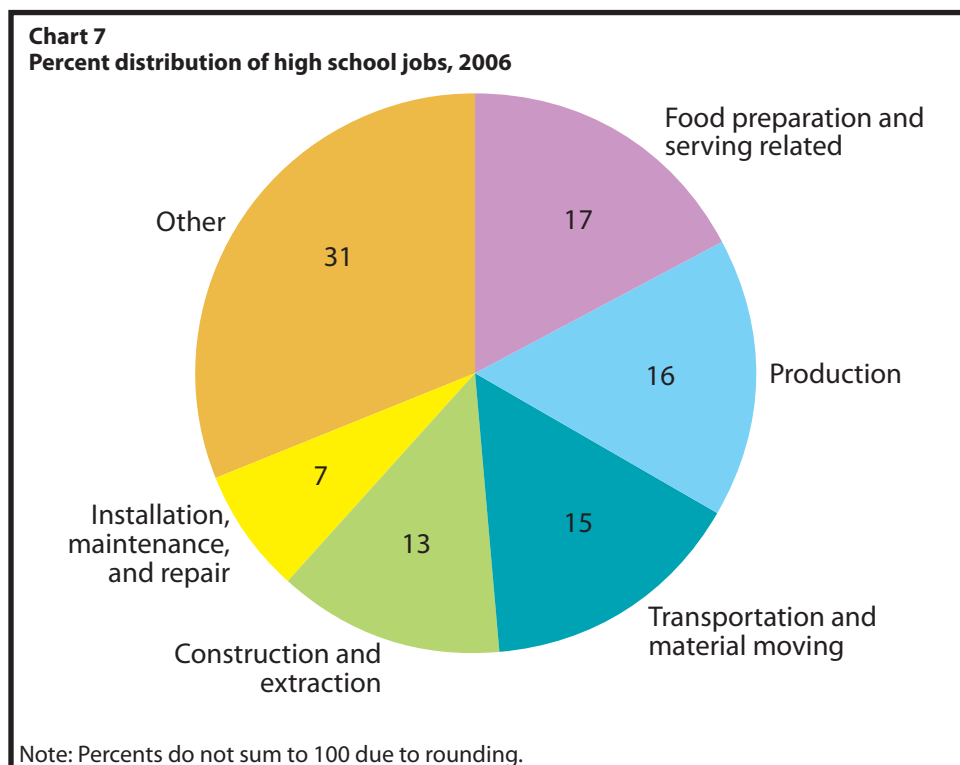
BLS classifies occupations that usually require on-the-job training into three categories, based on the length of time it takes workers to complete that training. Short-term on-the-job training includes programs that

take less than 1 month to complete, moderate-term on-the-job training takes between 1 month and 1 year, and long-term on-the-job training lasts longer than 1 year.

Short-term on-the-job training is most common for low-skilled occupations in which a brief demonstration of the work is sufficient. For example, new employees in food service occupations are often instructed in sanitary procedures for handling food and in preparing and serving menu items. These employees are then put to work, sometimes under the guidance of more skilled workers.

Moderate-term on-the-job training is common in occupations that have multiple job duties or usually require tasks that are too complex to learn in a few days or weeks. Newly hired painters, for example, complete simple preparation tasks for more experienced workers while learning about supplies, materials, and safety procedures. They then learn mixing and application techniques, and, eventually, decorating concepts, color coordination, and cost estimating.

Long-term on-the-job training is provided in higher skilled occupations, ones in which



learning the craft takes years of study or apprenticeship. For example, machinists may learn their job through an apprenticeship that lasts about 4 years. In addition to learning about and practice in using the tools of the trade, they also take courses in mathematics, materials science, mechanical drawing, and other subjects offered by either their employer or local schools. These programs may attract workers who have no formal education beyond a high school diploma, but many types of long-term on-the-job training require a time commitment similar to postsecondary education.

Workers in on-the-job training programs are paid during the learning process, although their wages are usually lower than those of fully trained employees. Usually, the longer the training required, the higher the wages. For example, according to BLS, the median annual wage for workers in occupations that typically require long-term on-the-job training was \$37,360 in 2006, compared with \$29,100 for those that usually require moderate-term on-the-job training and \$19,620 for those usually requiring short-term on-the-job training.

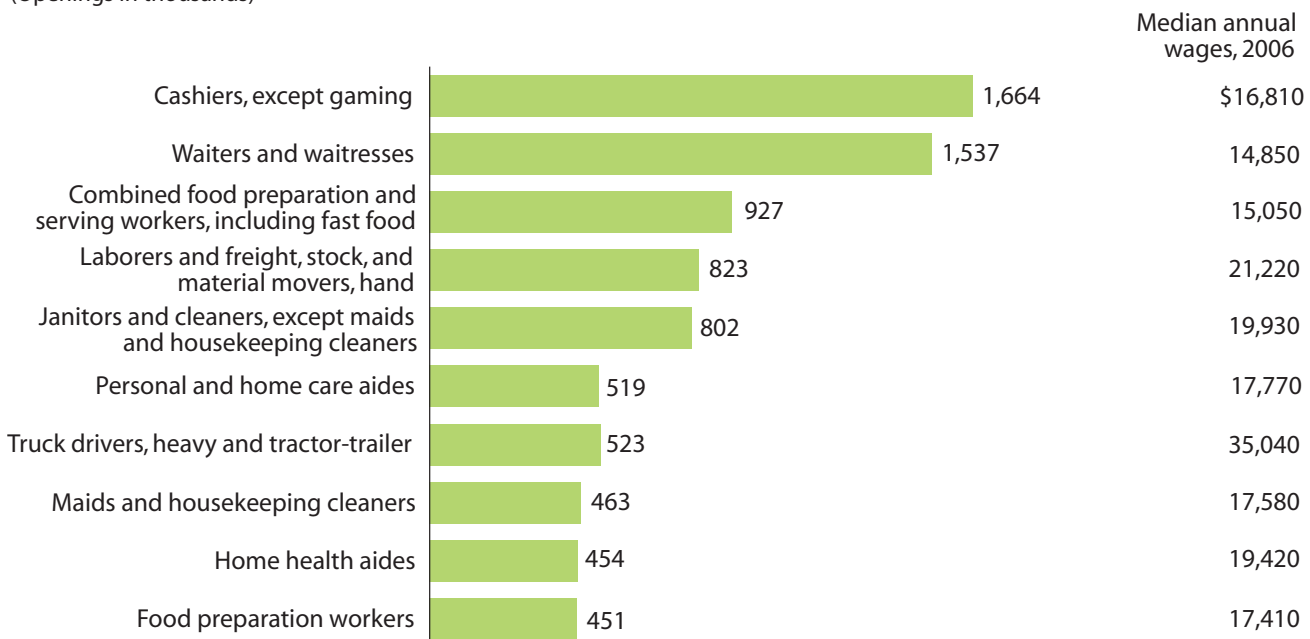
Occupations with many openings.

Occupations in which most workers have no formal education beyond high school are concentrated in specific areas of the economy. Food preparation and serving, production, and transportation and material moving occupations are the largest distinct occupational groups, accounting for half of all workers in 2006, according to BLS. (See chart 7.) However, the largest fields are not necessarily those that are projected to have the most favorable prospects.

Chart 8 lists the occupations in this category that are expected to have the most openings over the 2006–16 decade. These openings will result from both job growth and the need to replace workers who leave. Many types of occupations are represented, but there is a significant number of food preparation and serving jobs. Wages in these occupations are usually low, with one exception: Truck drivers had wages that were higher than the average for all occupations in 2006.

The average rate of growth projected for high school-level occupations is lower than the average for all occupations. And, as with

Chart 8
High school occupations with the most openings, projected 2006–16
 (Openings in thousands)



all jobs, competition may be a factor, especially for those that pay well. But there should still be many openings for jobseekers who have a high school diploma or less.

Major fields of work. Many workers whose highest level of educational attainment is a high school diploma or less have jobs in food preparation and serving; production; transportation and material moving; construction; and installation, maintenance, and repair occupations.

Food preparation and serving. Food preparation occupations are a common option for many of these workers. In 2006, BLS data show that the food services and drinking places industry was among the Nation's largest employers, with about 9.4 million wage and salary jobs. And these occupations are projected to grow with the U.S. population and the increased popularity of dining out. (See table 18.) The need to replace workers who leave means there should always be lots of openings.

Production. Although many of the production occupations in table 19 are not expected to grow through 2016, opportunities will result from the need to replace retiring workers. Employment in production occupations is projected to be adversely affected by increased automation and strong foreign competition. These same factors are causing an increase in the skill level of production occupations, so workers may need more training—but they may also earn higher wages.

Transportation and material moving. Most transportation and material moving occupations, including those shown in table 20, are projected to have many openings. Employment in these occupations is expected to grow along with the U.S. population, and most of the occupations are strongly affected by growth in the national economy and the rising demand for the movement of goods and people around the country.

In these occupations, as in most others, workers who have higher level skills usually have higher wages. Truck and bus drivers have the highest wages among transportation and material moving occupations, reflect-

ing the skill and training required to perform their jobs. Truck drivers, for example, must pass both written and field evaluations before receiving certification, and with more experience they earn both higher wages and more control over their routes. And workers in support occupations, such as freight laborers, can use on-the-job experience to advance to supervisory positions.

Construction. Some construction occupations usually require little training, but others demand significant skill and experience that are usually gained through formal instruction in an apprenticeship program or technical school. And some occupations in this field—including plumbers and electricians—are subject to licensing requirements. But higher level skills often mean higher wages; all but one of the occupations in table 21 have wages that are above the average for all occupations.

Construction workers are expected to have good prospects, especially those skilled in specialty trades who are frequently called upon to work as subcontractors. Population growth across the country, especially in the South and West, and the need to regularly maintain the Nation's infrastructure, are projected to spur new construction projects over the 2006–16 decade.

Installation, maintenance, and repair occupations. For workers with a high school-level education, these occupations are among those that offer the highest wages, a result of the significant skill and training usually required to enter them. Most of these workers have no formal postsecondary training, but significant portions do. Installation, maintenance and repair workers generally learn the skills they need either through formal postsecondary education programs or structured on-the-job training. Many of the occupations in table 22 require certification, and an associate degree can greatly enhance prospects.

The job outlook for installation, maintenance, and repair occupations is expected to be favorable. Many workers are nearing retirement age and will need to be replaced. In addition, the increasing number of cars, buses,

and machines will require more technicians who are qualified to maintain and repair them.

Earnings premiums for completing high school. Not all jobs usually require that workers have a high school diploma or its equivalent. However, completing high school or passing a General Educational Development (GED) exam—a test that certifies academic skills equivalent to a high school education—can lead to better opportunities and higher earnings.

Workers who have a high school diploma but no postsecondary training earn about \$8,000 more, on average, than workers who did not graduate from high school. The benefits of having more education vary by occupation; some provide more of a premium for those who have completed high school, but others provide less.

Table 23 shows occupations in which workers who have a high school diploma

enjoy large earnings premiums over those who don't. Earnings for workers who have some college education are also included for comparison purposes. Most of these occupations usually require significant training, although not usually through formal programs. Because of the amount of training needed, employers often prefer to hire people who have shown the ability and perseverance to finish high school.

Table 24 shows occupations that have low earnings premiums for occupations that usually require completion of high school. These occupations have lower skill requirements and typically require little training.

In both tables, there is a bigger jump in wages for having completed high school than for having some postsecondary education. This may serve as an indicator of the importance employers place on earning a high school diploma.

Table 18
Selected food preparation and serving related occupations
(Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006-16 (percent)	Net job openings, projected 2006-16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					Less than a high school diploma	High school diploma	Post-secondary education
Combined food preparation and serving workers, including fast food	2,503	18	927	\$15,050	26	45	29
Waiters and waitresses	2,361	11	1,537	14,850	15	35	49
Food preparation workers	902	15	451	17,410	35	39	26
Cooks, restaurant	850	12	328	20,340	35	42	24
First-line supervisors/managers of food preparation and serving workers	817	11	153	26,980	14	37	49
Cooks, fast food	629	8	222	15,410	35	42	24
Counter attendants, cafeteria, food concession, and coffee shop	533	10	424	16,130	23	49	27
Dishwashers	517	10	265	15,750	47	40	13
Dining room and cafeteria attendants and bartender helpers	416	12	223	15,310	33	43	24
Cooks, institution and cafeteria	401	11	152	20,410	35	42	24

* Percents may not sum to 100 due to rounding.

Table 19
Selected production occupations
 (Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006–16 (percent)	Net job openings, projected 2006–16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					Less than a high school diploma	High school diploma	Post-secondary education
Team assemblers	1,274	0	266	\$24,190	22	49	29
First-line supervisors/managers of production and operating workers	699	-5	117	47,300	12	41	47
Helpers—production workers	542	-1	133	20,740	39	41	19
Inspectors, testers, sorters, samplers, and weighers	491	-7	73	29,420	13	40	47
Welders, cutters, solderers, and brazers	409	5	108	31,400	23	51	27
Machinists	397	-3	61	34,770	11	48	41
Packaging and filling machine operators and tenders	386	-5	72	22,990	37	43	20
Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	272	-15	65	26,340	21	56	23
Laundry and dry-cleaning workers	239	10	77	17,850	35	44	21
Printing machine operators	198	-6	44	30,990	14	52	34

* Percents may not sum to 100 due to rounding.

Table 20
Selected transportation and material moving occupations
 (Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006–16 (percent)	Net job openings, projected 2006–16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					Less than a high school diploma	High school diploma	Post-secondary education
Laborers and freight, stock, and material movers, hand	2,416	2	823	\$21,220	23	49	28
Truck drivers, heavy and tractor-trailer	1,860	10	523	35,040	20	51	29
Truck drivers, light or delivery services	1,051	8	275	25,300	20	51	29
Packers and packagers, hand	834	-12	102	17,650	44	39	17
Industrial truck and tractor operators	637	-2	161	27,270	26	53	21
Bus drivers, school	455	9	102	24,820	11	50	39
Driver/sales workers	445	-5	79	20,770	20	51	29
Cleaners of vehicles and equipment	368	14	192	18,060	36	47	17
Taxi drivers and chauffeurs	229	13	60	20,350	17	41	43
Bus drivers, transit and intercity	198	13	51	32,090	11	50	39

* Percents may not sum to 100 due to rounding.

Table 21
Selected construction and extraction occupations
 (Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006–16 (percent)	Net job openings, projected 2006–16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					Less than a high school diploma	High school diploma	Post-secondary education
Carpenters	1,462	10	348	\$36,550	28	45	27
Construction laborers	1,232	11	227	26,320	38	41	21
First-line supervisors/managers of construction trades and extraction workers	772	9	178	53,850	17	43	40
Electricians	705	7	233	43,610	10	40	49
Plumbers, pipefitters, and steamfitters	502	11	157	42,770	20	48	32
Painters, construction and maintenance	463	12	136	31,190	38	39	24
Operating engineers and other construction equipment operators	424	8	117	36,890	25	53	22
Cement masons and concrete finishers	222	11	89	32,650	44	41	14
Sheet metal workers	189	7	59	37,360	18	46	37
Drywall and ceiling tile installers	186	7	40	36,140	47	38	15

* Percents may not sum to 100 due to rounding.

Table 22
Selected installation, maintenance, and repair occupations
 (Employment and openings in thousands)

Occupation	Employment, 2006	Projected growth rate, 2006–16 (percent)	Net job openings, projected 2006–16	Median annual wages, 2006	Percent of workers aged 25 to 44 with...*		
					Less than a high school diploma	High school diploma	Post-secondary education
Maintenance and repair workers, general	1,391	10	174	\$31,910	15	43	42
Automotive service technicians and mechanics	773	14	265	33,780	19	44	38
Heating, air conditioning, and refrigeration mechanics and installers	292	9	76	37,660	14	43	42
Bus and truck mechanics and diesel engine specialists	275	12	92	37,660	17	49	34
Industrial machinery mechanics	261	9	68	41,050	11	45	44
Automotive body and related repairers	183	12	64	35,180	23	52	26
Helpers—installation, maintenance, and repair workers	163	12	57	22,270	34	43	23
Mobile heavy equipment mechanics, except engines	131	12	42	40,440	15	47	38
Electrical power-line installers and repairers	112	7	43	50,780	7	49	44
Tire repairers and changers	106	20	42	21,340	28	46	26

* Percents may not sum to 100 due to rounding.

Table 23
Selected occupations with high earnings premiums for completing high school or some postsecondary education, 2006

Occupation	Median earnings with...			Percent of workers aged 25 to 44 with...			Earnings premiums (percent)	
	Less than a high school diploma	High school diploma	Some college or associate degree	Less than a high school diploma	High school diploma	Some college or associate degree	High school diploma over less than a high school diploma	Some college or associate degree over high school
Molders and molding machine setters, operators, and tenders, metal and plastic	\$20,802	\$32,017	\$37,946	20	52	25	54	19
Pipelayers, plumbers, pipefitters, and steamfitters	26,955	37,927	45,005	20	48	28	41	19
Crushing, grinding, polishing, mixing, and blending workers	21,786	29,969	36,799	28	48	20	38	23
Brickmasons, blockmasons, and stonemasons	22,012	29,987	39,983	37	44	15	36	33
Inspectors, testers, sorters, samplers, and weighers	22,011	29,959	38,005	13	40	33	36	27
Automotive service technicians and mechanics	24,988	33,870	37,992	19	44	34	36	12
Butchers and other meat, poultry, and fish processing workers	20,021	26,959	30,989	40	43	15	35	15
Electrical, electronics, and electromechanical assemblers	18,949	24,962	28,003	22	47	25	32	12
Structural iron and steel workers	29,051	37,900	40,025	22	45	29	30	6
Carpenters	24,042	29,988	33,917	28	45	22	25	13

Source: Authors' calculations from American Community Survey microdata, 2006

Table 24
Selected occupations with low earnings premiums for completing high school or some postsecondary education, 2006

Occupation	Median earnings with...			Percent of workers aged 25 to 44 with...			Earnings premiums (percent)	
	Less than a high school diploma	High school diploma	Some college or associate degree	Less than a high school diploma	High school diploma	Some college or associate degree	High school diploma over less than a high school diploma	Some college or associate degree over high school
Service station attendants	\$17,988	\$18,018	\$19,107	23	45	26	0	6
First-line supervisors/managers of food preparation and serving workers	21,798	21,960	25,152	14	37	35	1	15
Farmers and ranchers	24,053	24,625	27,005	13	41	30	2	10
Food preparation workers	15,004	15,899	16,476	35	39	19	6	4
Cooks	16,003	16,987	18,990	35	42	19	6	12
Taxi drivers and chauffeurs	20,013	21,968	23,036	17	41	27	10	5
Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	24,038	26,784	28,019	21	56	22	11	5
Industrial truck and tractor operators	24,965	27,988	28,488	26	53	19	12	2
Laundry and dry-cleaning workers	16,014	18,019	20,020	35	44	16	13	11
Maids and housekeeping cleaners	14,995	16,977	17,988	40	40	15	13	6

Source: Authors' calculations from American Community Survey microdata, 2006

For more information

To learn more about the occupations described in this article, see the 2008–09 edition of the BLS *Occupational Outlook Handbook*, available in many libraries and career centers and online at www.bls.gov/ooh. The *Handbook* describes the job outlook, usual education and training requirements, job duties, and more for about 270 occupations.

Another resource published by BLS, the 2008–09 *Occupational Projections and Training Data* bulletin, contains more detailed projections, data on worker education levels, and methodology descriptions. It is available online at www.bls.gov/emp/optd/home.htm.

Previous issues of the *Occupational Outlook Quarterly* also contain useful information for readers interested in topics related to educational attainment. Browse the article index online at www.bls.gov/ooq/ooqindex.htm.

For more job resources, jobseekers should consult their local career center. These centers can provide valuable information about the local job market. To find the career center nearest you, check online at www.servicelocator.org or call the U.S. Department of Labor's toll-free helpline, 1 (877) US2-JOBS (872-5627).

