

Career Guide to Industries

Overview and Outlook

The U.S. economy is comprised of industries with diverse characteristics. For each industry covered in the *Career Guide*, detailed information is provided about specific characteristics: The nature of the industry, working conditions, employment, occupational composition, training and advancement requirements, earnings, and job outlook. This chapter provides an overview of these characteristics and the outlook for the various industries and economy as a whole.

Nature of the Industry

Industries are defined by the processes they use to produce goods and services. Workers in the United States produce and provide a wide variety of products and services and as a result, the types of industries in the U.S. economy range widely—from agriculture, forestry, and fishing to aerospace manufacturing. Although many of these industries are related, each industry has a unique combination of occupations, production techniques, inputs and outputs, and business characteristics. Understanding the nature of the industry is important, because it is this unique combination that determines working conditions, educational requirements, and the job outlook for each of the industries discussed in the *Career Guide*.

Industries consist of many different places of work, called *establishments*, which range from large factories and office complexes employing thousands of workers to small businesses employing only a few workers. Not to be confused with companies, which are legal entities, establishments are physical locations in which people work, such as the branch office of a bank. Thus, a company may have more than one establishment. Establishments that use the same or similar processes to produce goods or services are organized together into *industries*. Industries are, in turn, organized together into *industry groups*. These are further organized into industry subsectors and then ultimately into *industry sectors*. For the purposes of labor market analysis, the Bureau of Labor Statistics organized industry sectors into *industry supersectors* and then divided the supersectors into two broad groups: *Goods-producing industries* (natural resources and mining; construction; and manufacturing) and *service-providing industries* (trade, transportation, and utilities; information; financial activities; professional and business services; education and health services; leisure and hospitality; other services; and public administration).

Each industry subsector is made up of a number of industry groups, which are, as mentioned, determined by differences in production processes. An easily recognized example of these distinctions is in the food manufacturing subsector, which is made up of industry groups that produce meat products, preserved fruits and vegetables, bakery items, and dairy products, among others. Each of these industry groups requires workers with varying skills and employs unique production techniques. Another example of these distinctions is found in utilities, which

employs workers in establishments that provide electricity, natural gas, and water.

There were almost 7.8 million private business establishments in the United States in 2002. The average size of these establishments varies widely across industries.

Most establishments in the construction, wholesale trade, retail trade, finance and insurance, real estate and rental and leasing, and professional, scientific, and technical services industries are small, averaging fewer than 15 employees per establishment. However, wide differences within industries can exist. Hospitals, for example, employ an average of 712.4 workers, while physicians' offices employ an average of 9.3. Similarly, although there is an average of 13.3 employees per establishment for all of retail trade, department stores employ an average of 166.5 people.

Business establishments in the United States are predominantly small; 59.6 percent of all establishments employed fewer than 5 workers in 2002. However, the medium-sized to large establishments employ a greater proportion of all workers. For example, establishments that employed 50 or more workers accounted for only 4.7 percent of all establishments, yet employed 57.4 percent of all workers. The large establishments—those with more than 500 workers—accounted for only 0.2 percent of all establishments, but employed 18.2 percent of all workers. Table 1 presents the percent distribution of employment according to establishment size.

Table 1. Percent distribution of establishments and employment in all private industries by establishment size, March 2002

Establishment size (number of workers)	Establishments	Employment
Total	100.0	100.0
1 to 4	59.6	6.6
5 to 9	16.9	8.2
10 to 19	11.1	10.9
20 to 49	7.7	17.0
50 to 99	2.6	13.3
100 to 249	1.5	16.4
250 to 499	0.4	9.5
500 to 999	0.1	7.0
1,000 or more	0.1	11.2

Establishment size can play a role in the characteristics of each job. Large establishments generally offer workers greater occupational mobility and advancement potential, whereas small establishments may provide their employees with broader experience by requiring them to assume a wider range of responsibilities. Also, small establishments are distributed throughout the Nation; every locality has a few small businesses. Large establishments, in contrast, employ more workers and are less common, but they play a much more prominent role in the economies of the areas in which they are located.

Working Conditions

Just as the goods and services produced in each industry are different, working conditions vary significantly among industries. In some industries, the work setting is quiet, temperature-controlled, and virtually hazard free; while other industries are characterized by noisy, uncomfortable, and sometimes dangerous work environments. Some industries require long workweeks and shift work; in many industries, standard 40-hour workweeks are common. Still other industries can be seasonal, requiring long hours during busy periods and abbreviated schedules during slower months. Production processes, establishment size, and the physical location of work usually determine these varying conditions.

One of the most telling indicators of working conditions is an industry's injury and illness rate. Overexertion, being struck by an object, and falls on the same level, are among the most common incidents causing work-related injury or illness. In 2002, approximately 4.7 million nonfatal injuries and illnesses were reported throughout private industry. Among major industry divisions, manufacturing had the highest rate of injury and illness—7.2 cases for every 100 full time workers—while finance, insurance, and real estate had the lowest rate—1.7 cases. About 5,500 work-related fatalities were reported in 2002; the most common events resulting in fatal injuries were transportation incidents, contact with objects and equipment, assaults and violent acts, and falls.

Work schedules are another important reflection of working conditions, and the operational requirements of each industry lead to large differences in hours worked and in part-time versus full-time status. In food services and drinking places, for example, 37.9 percent of employees worked part time in 2002 compared with only 1.3 percent in mining. Table 2 presents industries having relatively high and low percentages of part-time workers.

The low proportion of part-time workers in some manufacturing industries often reflects the continuous nature of the pro-

Table 2. Part-time workers as a percent of total employment, selected industries, 2002

Industry	Percent part-time
All industries	15.8
Many part-time workers	
Food services and drinking places	37.9
Grocery stores	30.1
Clothing, accessory, and general merchandise stores	29.2
Child day care services	29.1
Arts, entertainment, and recreation	28.1
Motion picture and video industries	24.8
Social assistance, except child day care	21.8
Educational services	21.1
Few part-time workers	
Chemical manufacturing, except drugs	3.1
Pharmaceutical and medicine manufacturing	3.1
Computer and electronic product manufacturing	2.6
Utilities	2.5
Aerospace product and parts manufacturing	2.1
Motor vehicle and parts manufacturing	1.8
Steel manufacturing	1.8
Mining	1.3

duction processes that makes it difficult to adapt the volume of production to short-term fluctuations in product demand. Once begun, it is costly to halt these processes; machinery must be tended and materials must be moved continuously. For example, the chemical manufacturing industry produces many different chemical products through controlled chemical reactions. These processes require chemical operators to monitor and adjust the flow of materials into and out of the line of production. Because production may continue 24 hours a day, 7 days a week, under the watchful eyes of chemical operators who work in shifts, full-time workers are more likely to be employed. Retail trade and service industries, on the other hand, have seasonal cycles marked by various events that affect the hours worked, such as school openings or important holidays. During busy times of the year, longer hours are common, whereas slack periods lead to cutbacks in work hours and shorter workweeks. Jobs in these industries are generally appealing to students and others who desire flexible, part-time schedules.

Employment

The total number of jobs in the United States in 2002 was 144 million. This included 11.4 million self-employed workers, 140,000 unpaid workers in family businesses, and 132.3 million wage and salary workers—including primary and secondary job holders. The total number of jobs is projected to increase to 165.3 million by 2012, and wage and salary jobs are projected to account for more than 153.8 million of them.

As shown in table 3, although wage and salary jobs are the vast majority of all jobs, they are not evenly divided among the various industries. The education and health services industry supersector is the largest source of employment, with about 26 million workers in 2002. The trade, transportation, and utilities supersector is next largest, followed by professional and business services, employing 25.5 million and 16 million workers, respectively. Among the industries covered in the *Career Guide*, wage and salary employment ranged from only 122,500 in oil and gas extraction to 12.5 million in educational services. Three industries—educational services, health services, and food services and drinking places—together accounted for 33.5 million jobs, or one quarter of the Nation's wage and salary employment.

Although workers of all ages are employed in each industry, certain industries tend to possess workers of distinct age groups. For the previously mentioned reasons, retail trade employs a relatively high proportion of younger workers to fill part-time and temporary positions. The manufacturing sector, on the other hand, has a relatively high median age because many jobs in the sector require a number of years to learn and perfect specialized skills that do not easily transfer to other firms. Also, manufacturing employment has been declining, providing fewer opportunities for younger workers to get jobs. As a result, one-fourth of the workers in retail trade were 24 years of age or younger in 2002, compared with only 8.4 percent of workers in manufacturing. Table 4 contrasts the age distribution of workers in all industries with the distributions in five very different industries.

Employment in some industries is concentrated in one region of the country. Such industries often are located near a source of raw or unfinished materials upon which the industry relies. For example, oil and gas extraction jobs are concentrated in Texas,

Table 3. Wage and salary employment in industries covered in the *Career Guide*, 2002 and projected change, 2002-12
(Employment in thousands)

Industry	2002		2012		2002-12	
	Employment	Percent distribution	Employment	Percent distribution	Percent change	Employment change
All industries	132,279	100.0	153,883	100.0	16.3	21,603
Goods-producing industries	23,766	18.0	24,539	15.9	3.2	772
Natural resources and mining	1,728	1.3	1,644	1.1	-4.9	-84
Agriculture, forestry, fishing, and hunting	1,216	0.9	1,192	0.8	-1.9	-24
Oil and gas extraction	123	0.1	88	0.1	-27.8	-34
Mining	212	0.2	180	0.1	-15.0	-32
Construction	6,732	5.1	7,745	5.0	15.1	1,014
Manufacturing	15,307	11.6	15,149	9.8	-1.0	-157
Aerospace product and parts manufacturing	468	0.4	386	0.3	-17.6	-83
Apparel manufacturing	358	0.3	112	0.1	-68.6	-245
Chemical manufacturing, except drugs	636	0.5	530	0.3	-16.7	-106
Computer and electronic product manufacturing	1,521	1.1	1,333	0.9	-12.4	-189
Food manufacturing	1,525	1.2	1,597	1.0	4.7	72
Motor vehicle and parts manufacturing	1,152	0.9	1,181	0.8	2.6	29
Pharmaceutical and medicine manufacturing	293	0.2	361	0.2	23.2	68
Printing	710	0.5	734	0.5	3.3	24
Steel manufacturing	170	0.1	136	0.1	-20.0	-34
Textile mills and products	489	0.4	338	0.2	-31.0	-152
Service-providing industries	108,513	82.0	129,344	84.1	19.2	20,831
Trade, transportation, and utilities	25,493	19.3	29,093	18.9	14.1	3,600
Automobile dealers	1,250	0.9	1,408	0.9	12.6	158
Clothing, accessory, and general merchandise stores	4,129	3.1	4,473	2.9	8.3	344
Grocery stores	2,478	1.9	2,611	1.7	5.4	133
Wholesale trade	5,641	4.3	6,279	4.1	11.3	638
Air transportation	559	0.4	626	0.4	12.0	67
Truck transportation and warehousing	1,853	1.4	2,274	1.5	22.7	422
Utilities	600	0.5	565	0.4	-5.7	-34
Information	3,420	2.6	4,052	2.6	18.5	632
Broadcasting	334	0.3	362	0.2	8.5	28
Motion picture and video industries	360	0.3	472	0.3	31.1	112
Publishing, except software	714	0.5	703	0.5	-1.5	-11
Software publishers	256	0.2	430	0.3	67.9	174
Telecommunications	1,201	0.9	1,281	0.8	6.7	80
Financial activities	5,815	4.4	6,405	4.2	10.1	590
Banking	1,761	1.3	1,873	1.2	6.4	112
Insurance	2,223	1.7	2,391	1.6	7.5	168
Securities, commodities, and other investments	801	0.6	925	0.6	15.5	124
Professional and business services	16,010	12.1	20,876	13.6	30.4	4,866
Advertising and public relations services	442	0.3	525	0.3	18.9	84
Computer systems design and related services	1,163	0.9	1,798	1.2	54.6	635
Employment services	3,249	2.5	5,012	3.3	54.3	1,764
Management, scientific, and technical consulting services	732	0.6	1,137	0.7	55.4	406
Education and health services	26,060	19.7	32,935	21.4	26.4	6,875
Child day care services	734	0.6	1,050	0.7	43.1	316
Educational services	12,527	9.5	15,016	9.8	19.9	2,489
Health services	12,524	9.5	16,025	10.4	28.0	3,501
Social assistance, except child day care	1,269	1.0	1,867	1.2	47.1	597
Leisure and hospitality	11,969	9.0	14,104	9.2	17.8	2,135
Arts, entertainment, and recreation	1,778	1.3	2,275	1.5	28.0	497
Food services and drinking places	8,412	6.4	9,749	6.3	15.9	1,337
Hotels and other accommodations	1,780	1.3	2,080	1.4	16.9	301
Public administration	9,774	7.4	10,582	6.9	8.3	808
Federal Government, excluding the postal service	1,922	1.5	1,972	1.3	2.6	50
State and local government, except education and health	7,851	5.9	8,610	5.6	9.7	759

NOTE: May not add to totals due to omission of industries not covered in the *Career Guide*.

Table 4. Percent distribution of wage and salary workers by age group, selected industries, 2002

Industry	Age group			
	16 to 24	25 to 44	45 to 64	65 and older
All industries	15	48	34	3
Computer systems design and related services	7	68	25	1
Educational services	10	43	44	3
Food services and drinking places	45	39	15	2
Telecommunications	10	58	32	1
Utilities	6	47	45	2

Louisiana, and Oklahoma; many textile mills and products manufacturing jobs are found in North Carolina, South Carolina, and Georgia; and a significant proportion of motor vehicle manufacturing jobs are located in Michigan and Ohio. On the other hand, some industries—such as grocery stores and educational services—have jobs distributed throughout the Nation, reflecting the general population density.

Occupations in the Industry

The occupations found in each industry depend on the types of services provided or goods produced. For example, because construction companies require skilled trades workers to build and renovate buildings, these companies employ large numbers of carpenters, electricians, plumbers, painters, and sheet metal workers. Other occupations common to construction include construction equipment operators and mechanics, installers, and repairers. Retail trade, on the other hand, displays and sells manufactured goods to consumers. As a result, retail trade employs numerous sales clerks and other workers, including more than three-fourths of all cashiers. Table 5 shows the industry sectors and the occupational groups that predominate in each.

Table 5. Industry sectors and their largest occupational group, 2002

Industry sector	Largest occupational group	Percent of industry wage and salary jobs
Agriculture, forestry, fishing, and hunting	Farming, fishing, and forestry occupations	61.1
Mining	Construction and extraction occupations	33.3
Construction	Construction and extraction occupations	66.2
Manufacturing	Production occupations	52.1
Wholesale trade	Sales and related occupations	24.7
Retail trade	Sales and related occupations	52.5
Transportation and warehousing	Transportation and material moving occupations	56.0
Utilities	Installation, maintenance, and repair occupations	25.6
Information	Professional and related occupations	29.1
Finance and insurance	Office and administrative support occupations	51.4
Real estate and rental and leasing	Sales and related occupations	22.7
Professional, scientific, and technical services	Professional and related occupations	42.6
Management of companies and enterprises	Office and administrative support occupations	33.6
Administrative and support and waste management and remediation services	Office and administrative support occupations	23.2
Educational services, private	Professional and related occupations	59.6
Health care and social assistance	Professional and related occupations	42.6
Arts, entertainment, and recreation	Service occupations	57.2
Accommodation and food services	Service occupations	84.0
Government	Professional and related occupations	43.7

The Nation's occupational distribution clearly is influenced by its industrial structure, yet there are many occupations, such as general manager or secretary, that are found in all industries. In fact, some of the largest occupations in the U.S. economy are dispersed across many industries. For example, the office and administrative support occupational group is among the largest in the Nation since nearly every industry relies on administrative support workers. (See table 6.) Other large occupational groups include professional and related occupations, service occupations, management, business, and financial occupations, and sales and related occupations.

Table 6. Total employment and projected change by broad occupational group, 2002-12
(Employment in thousands)

Occupational group	Employment, 2002	Percent change, 2002-12
Total, all occupations	144,014	14.8
Professional and related occupations	27,687	23.3
Service occupations	26,569	20.1
Office and administrative support occupations	23,851	6.8
Management, business, and financial occupations	15,501	15.4
Sales and related occupations	15,260	12.9
Production occupations	11,258	3.2
Transportation and material moving occupations	9,828	13.1
Construction and extraction occupations	7,292	15.0
Installation, maintenance, and repair occupations	5,696	13.6
Farming, fishing, and forestry occupations	1,072	3.3

Training and Advancement

Workers prepare for employment in many ways, but the most fundamental form of job training in the United States is a high school education. Fully 88 percent of the Nation's workforce

possessed a high school diploma or its equivalent in 2002. However, many occupations require more training, so growing numbers of workers pursue additional training or education after high school. In 2002, 28.7 percent of the Nation's workforce reported having completed some college or an associate's degree as their highest level of education, while an additional 28.7 percent continued in their studies and attained a bachelor's or higher degree. In addition to these types of formal education, other sources of qualifying training include formal company-provided training, apprenticeships, informal on-the-job training, correspondence courses, the Armed Forces vocational training, and non-work-related training.

The unique combination of training required to succeed in each industry is determined largely by the industry's production process and the mix of occupations it requires. For example, manufacturing employs many machine operators who generally need little formal education after high school, but sometimes complete considerable on-the-job training. In contrast, educational services employs many types of teachers, most of whom require a bachelor's or higher degree. Training requirements by industry sector are shown in table 7.

Persons with no more than a high school diploma accounted for about 65.4 percent of all workers in agriculture, forestry, fishing, and hunting; 64.7 percent in construction; 63.3 percent in accommodation and food services; 56.9 percent in mining; 52.9 percent in manufacturing; and 52.7 in retail trade. On the other hand, those who had acquired a bachelor's or higher degree

accounted for 61.6 percent of all workers in educational services, private; 60.4 percent in professional, scientific, and technical services; 41.9 percent in finance and insurance; 39.3 percent in information; and 37.8 percent in government.

Education and training also are important factors in the variety of advancement paths found in different industries. Each industry has some unique advancement paths, but workers who complete additional on-the-job training or education generally help their chances of being promoted. In much of the manufacturing sector, for example, production workers who receive training in management and computer skills increase their likelihood of being promoted to supervisory positions. Other factors that impact advancement and that may figure prominently in the industries covered in the *Career Guide* include the size of the establishments, institutionalized career tracks, and the mix of occupations. As a result, persons who seek jobs in particular industries should be aware of how these advancement paths and other factors may later shape their careers.

Earnings

Like other characteristics, earnings differ by industry, the result of a highly complicated process that reflects a number of factors. For example, earnings may vary due to the nature of occupations in the industry, average hours worked, geographical location, workers' average age, educational requirements, industry profits, and union penetration of the workforce. In general, wages are highest in metropolitan areas to compensate for the higher cost of living. Also, as would be expected, industries that employ a large proportion of unskilled minimum-wage or part time workers tend to have lower earnings.

The difference in earnings of all wage and salary workers in computer systems design and related services, which averaged \$1,112 a week in 2002, and those in food service and drinking places, where the weekly average was \$359, provide a good illustration of how various factors can affect earnings. The difference is so large primarily because computer systems design and related services establishments employ more highly skilled, full-time workers, while food service and drinking places employ many lower skilled, part-time workers. In addition, many workers in food service and drinking places are able to supplement their low wages with money they receive as tips, which is not included in the industry wages data. Table 8 highlights the industries with the highest and lowest average weekly earnings.

Employee benefits, once a minor addition to wages and salaries, continue to grow in diversity and cost. In addition to traditional benefits—including paid vacations, life and health insurance, and pensions—many employers now offer various benefits to accommodate the needs of a changing labor force. Such benefits include childcare, employee assistance programs that provide counseling for personal problems, and wellness programs that encourage exercise, stress management, and self-improvement. Benefits vary among occupational groups, full- and part-time workers, public and private sector workers, regions, unionized and nonunionized workers, and small and large establishments. Data indicate that full-time workers and those in medium-sized and large establishments—those with 100 or more workers—receive better benefits than do part-time workers and those in smaller establishments.

Table 7. Percent distribution of workers by highest grade completed or degree received, by industry sector, 2002

Industry sector	High school diploma or less	Some college or associate's degree	Bachelor's or higher degree
All industries	42.5	28.7	28.7
Agriculture, forestry, fishing, and hunting	65.4	21.2	13.4
Mining	57.0	23.5	19.5
Construction	64.7	25.1	10.2
Manufacturing	52.9	25.7	21.4
Wholesale trade	44.8	27.9	27.3
Retail trade	52.7	31.1	16.1
Transportation and warehousing	52.9	32.1	15.1
Utilities	39.8	35.3	25.0
Information	27.6	33.0	39.3
Finance and insurance	26.1	32.0	41.9
Real estate and rental and leasing	38.9	31.5	29.6
Professional, scientific, and technical services	15.3	24.3	60.4
Administrative and support and waste management and remediation services	54.9	27.3	17.9
Educational services, private	18.9	19.5	61.6
Health care and social assistance	31.9	34.4	33.7
Arts, entertainment, and recreation	41.4	30.7	27.8
Accommodation and food services	63.3	26.4	10.3
Government	25.6	36.7	37.8

Table 8. Average weekly earnings of production or nonsupervisory workers on private nonfarm payrolls, selected industries, 2002

Industry	Earnings
All industries	\$610
Industries with high earnings	
Computer systems design and related services	1,112
Management, scientific, and technical consulting services	992
Securities, commodities, and other investments	971
Aerospace product and parts manufacturing	952
Pharmaceutical and medicine manufacturing	940
Software publishers	921
Computer and electronic product manufacturing	859
Telecommunications	836
Industries with low earnings	
Textile mills and products	446
Grocery stores	424
Clothing, accessory, and general merchandise stores	418
Hotels and other accommodations	410
Agriculture, forestry, fishing, and hunting	376
Food services and drinking places	359
Apparel manufacturing	348
Child day care services	348

Union penetration of the workforce varies widely by industry, and it also may play a role in earnings and benefits. In 2002, about 14.5 percent of workers throughout the Nation were union members or covered by union contracts. As table 9 demonstrates, union affiliation of workers varies widely by industry. Almost 45 percent of the workers in air transportation were union members, the highest rate of all the industries, followed by 38.5 percent in educational services, and 36.9 percent in steel manufacturing. Industries with the lowest unionization rate include software publishers, 0 percent; food services and drinking places, 1.8 percent; and computer systems design and related services, 1.9 percent.

Outlook

Total employment in the United States is projected to increase by about 15 percent over the 2002-12 period. Employment growth, however, is only one source of job openings. The total number of openings in any industry also depends on the industry's current employment level and its need to replace workers who leave their jobs. Throughout the economy, in fact, replacement needs will create more job openings than will employment growth. Employment size is a major determinant of job openings—larger industries generally have larger numbers of workers who must be replaced and provide more openings. The occupational composition of an industry is another factor. Industries with high concentrations of professional, technical, and other jobs that require more formal education—occupations in which workers tend to leave their jobs less frequently—generally have fewer openings resulting from replacement needs. On the other hand, more replacement openings generally occur in industries with high concentrations of service, laborer, and other jobs that re-

quire little formal education and have lower wages because workers in these jobs are more likely to leave their occupations.

Employment growth is determined largely by changes in the demand for the goods and services provided by an industry, worker productivity, and foreign competition. Each industry is affected by a different set of variables that determines the number and composition of jobs that will be available. Even within an industry, employment may grow at different rates in different occupations. For example, changes in technology, production methods, and business practices in an industry might eliminate some jobs, while creating others. Some industries may be growing rapidly overall, yet opportunities for workers in occupations that are adversely affected by technological change could be stagnant or even declining. Similarly, employment of some occupations may be declining in the economy as a whole, yet may be increasing in a rapidly growing industry.

As shown above in table 3, employment growth rates over the next decade will vary widely among industries. Employment in goods-producing industries is expected to increase as growth in construction is partially offset by declining employment in agriculture, forestry, fishing, and hunting; mining; and manufacturing. Growth in construction employment will stem from new factory construction as existing facilities are modernized; from new school construction, reflecting growth in the school-age population; and from infrastructure improvements, such as road and bridge construction. Employment in mining is expected to decline due to laborsaving technology and continued reliance on foreign sources of energy.

Manufacturing employment will decrease slightly—employment declines in apparel manufacturing, computer and electronic product manufacturing, and textile mills and products manufacturing will be partially offset by employment gains in food manufacturing and pharmaceutical and medicine manufacturing. Apparel manufacturing is projected to lose about 245,000 jobs over the 2002-12 period—more than any other manufacturing industry—due primarily to increasing imports replacing domestic products. Employment growth in food manufacturing is expected, as

Table 9. Union members and other workers covered by union contracts as a percent of total employment, selected industries, 2002

Industry	Percent union members or covered by union contract
All industries	14.5
Industries with high unionization rates	
Air transportation	44.8
Educational services	38.5
Steel manufacturing	36.9
Government	35.2
Motor vehicle and parts manufacturing	32.3
Industries with low unionization rates	
Banking	2.1
Advertising and public relations services	2.0
Computer systems design and related services	1.9
Food services and drinking places	1.8
Software publishers	0.0

a growing and ever more diverse population increase the demand for manufactured food products. Employment growth in pharmaceutical and medicine manufacturing is expected, as sales of pharmaceuticals increase with growth in the population, particularly among the elderly, and with the introduction of new medicines to the market. Both food and pharmaceutical and medicine manufacturing also have growing export markets.

Growth in overall employment will result primarily from growth in service-providing industries over the 2002-12 period, almost all of which are expected to have increasing employment. Rising employment in service-providing industries is expected to occur predominately in health services and educational services—the two largest industries discussed in the *Career Guide*—as well as in employment services, food services and drinking places, state and local government, and wholesale trade. When combined, these sectors will account for almost half of all new wage and salary jobs across the Nation.

Health services will account for the most new wage and salary jobs, about 3.5 million over the 2002-12 period. Population growth, advances in medical technologies that increase the number of treatable diseases, and a growing share of the population in older age groups will drive employment growth. Offices of physicians, the largest health services industry group, is expected to account for about 770,000 of these new jobs as patients seek more healthcare outside of the traditional inpatient hospital setting.

Educational services is expected to grow by nearly 20 percent over the 2002-12 period, adding about 2.5 million new jobs. A growing emphasis on improving education and making it available to more children and young adults will be the primary factors contributing to employment growth. Employment growth at all levels of education is expected, particularly at the postsecondary level, as children of the baby boomers continue to reach college age, and as more adults pursue continuing education to enhance or update their skills.

Employment in one of the Nation's fastest growing industries—employment services—is expected to increase by more than 50 percent, adding another 1.8 million jobs over the 2002-12

period. Employment will increase, particularly in temporary help services and professional employer organizations, as businesses seek new ways to make their workforces more specialized and responsive to changes in demand.

The food services and drinking places industry is expected to add more than 1.3 million new jobs over the 2002-12 projection period. Increases in population, dual-income families, and dining sophistication will contribute to job growth. In addition, the increasing diversity of the population will contribute to job growth in food service and drinking places that offer a wider variety of ethnic foods and drinks.

Almost 760,000 new jobs are expected to arise in State and local government, adding almost 10 percent over the 2002-12 period. Job growth will result primarily from growth in the population and its demand for public services. Additional job growth will result as State and local governments continue to receive greater responsibility for administering federally funded programs from the Federal Government.

Wholesale trade is expected to add almost 640,000 new jobs over the coming decade, reflecting growth both in trade and in the overall economy. Most new jobs will be in durable goods merchant wholesalers, such as professional and commercial equipment and supplies; electrical and electronic goods; and furniture and home furnishing. However, industry consolidation and the growth of electronic commerce using the Internet are expected to limit job growth to 11 percent over the 2002-12 period, less than the 15 percent projected for all industries.

Continual changes in the economy have far-reaching and complex effects on employment in each of the industries covered in the *Career Guide*. Jobseekers should be aware of these changes, keeping alert for developments that can affect job opportunities in industries and the variety of occupations that are found in each industry. For more detailed information on specific occupations, consult the 2004-05 edition of the *Occupational Outlook Handbook*, which provides information on more than 275 occupations.