L 2.3: 2450-1 Tomorrow's Jobs

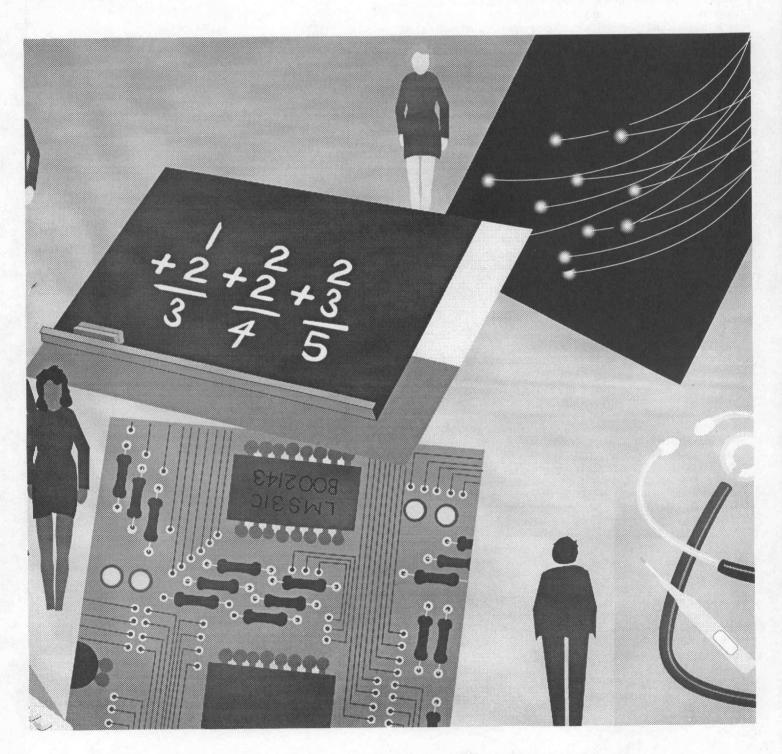


Reprinted from the Occupational Outlook Handbook, 1994-95 Edition

U.S. Department of Labor Bureau of Labor Statistics

Bulletin 2450-1





Tomorrow's Jobs

Every 2 years, the Bureau of Labor Statistics develops projections of the labor force, economic growth, industry output and employment, and occupational employment under three sets of alternative assumptions—low, moderate, and high. These projections cover a 10-to 15-year period and provide a framework for the discussion of job outlook in each occupational statement in the *Handbook*. All of the approximately 250 statements in this edition of the *Handbook* identify the principal factors affecting job prospects, then discuss how these factors are expected to affect the occupation. This chapter uses the moderate alternative of each projection to provide a framework for the individual job outlook discussions.

Population Trends

Employment opportunities are affected by population trends in several ways. Changes in the size and composition of the population between 1992 and 2005 will influence the demand for goods and services. For example, the population aged 85 and over will grow about four times as fast as the total population, increasing the demand for health services. Population changes also produce corresponding changes in the size and characteristics of the labor force.

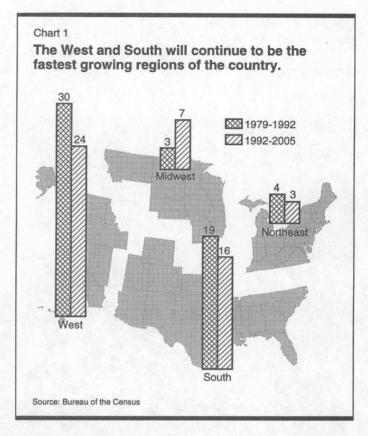
The U.S. civilian noninstitutional population, aged 16 and over, is expected to increase from about 192 to 219 million over the 1992-2005 period—growing more slowly than it did during the previous 13-year period, 1979-92. However, even slower population growth will increase the demand for goods and services, as well as the demand for workers in many occupations and industries.

The age distribution will shift toward relatively fewer children and teenagers and a growing proportion of middle-aged and older people into the 21st century. The decline in the proportion of teenagers reflects the lower birth rates that prevailed during the 1980's; the impending large increase in the middle-aged population reflects the aging of the "baby boom" generation born between 1946 and 1964; and the very rapid growth in the number of old people is attributable to high birth rates prior to the 1930's, together with improvements in medical technology that have allowed most Americans to live longer.

Minorities and immigrants will constitute a larger share of the U.S. population in 2005 than they do today. Substantial increases in the number of Hispanics, Asians, and Blacks are anticipated, reflecting immigration, and higher birth rates among Blacks and Hispanics. Substantial inflows of immigrants will continue to have significant implications for the labor force. Immigrants tend to be of working age but of different educational and occupational backgrounds than the U.S. population as a whole.

Population growth varies greatly among geographic regions, affecting the demand for goods and services and, in turn, workers in various occupations and industries. Between 1979 and 1992, the population of the Midwest and the Northeast grew by only 3 percent and 4 percent, respectively, compared with 19 percent in the South and 30 percent in the West. These differences reflect the movement of people seeking new jobs or retiring, as well as higher birth rates in some areas than in others.

Projections by the Bureau of the Census indicate that the West and South will continue to be the fastest growing regions, increasing 24 percent and 16 percent, respectively, between 1992 and 2005. The Midwest population is expected to grow by 7 percent, while the number of people in the Northeast is projected to increase by only 3 percent.

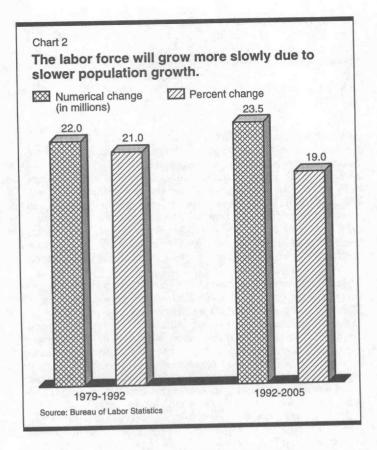


Geographic shifts in the population alter the demand for and the supply of workers in local job markets. Moreover, in areas dominated by one or two industries, local job markets may be extremely sensitive to the economic conditions of those industries. For these and other reasons, local employment opportunities may differ substantially from the projections for the Nation as a whole presented in the *Handbook*. Sources of information on State and local employment prospects are identified on page 13.

Labor Force Trends

Population is the single most important factor governing the size and composition of the labor force, which includes people who are working, or looking for work. The civilian labor force, 127 million in 1992, is expected to reach 151 million by 2005. This projected 19-percent increase represents a slight slowdown in the rate of labor force growth, largely due to slower population growth (chart 2).

America's workers will be an increasingly diverse group as we move toward 2005. White non-Hispanic men will make up a slightly smaller proportion of the labor force, and women and minority group members will comprise a larger share than in 1992. White non-Hispanics have historically been the largest component of the labor force, but their share has been dropping, and is expected to fall from 78 percent in 1992 to 73 percent by 2005. Whites are projected to grow more slowly than Blacks, Asians, and others, but because of their size, whites will experience the largest numerical increase. Hispanics will add about 6.5 million workers to the labor force from 1992 to 2005, increasing by 64 percent. Despite this dramatic



growth, Hispanics' share of the labor force will only increase from 8 percent to 11 percent, as shown in chart 3. Blacks, Hispanics, and Asians and other racial groups will account for roughly 35 percent of all labor force entrants between 1992 and 2005.

Women will continue to join the labor force in growing numbers. The percentage increase of women in the labor force between 1992 and 2005 will be larger than the percentage increase in the total labor force, but smaller than the percentage increase for women in the previous 13-year period. In the late 1980's, the labor force participation of women under age 40 began to increase more slowly than in the past. Women were only 42 percent of the labor force in 1979; by 2005, they are expected to constitute 48 percent.

The changing age structure of the population will directly affect tomorrow's labor force. Compared to young workers, the pool of experienced workers will increase. In 1992, the median age of the labor force was 37.2 years; by 2005, it will be 40.5 years.

Between 1979 and 1992, the youth labor force (16 to 24 years of age) dropped by 5 million, a 20-percent decline. In contrast, the number of youths in the labor force will increase by 3.7 million over the 1992-2005 period, reflecting an increase of 18 percent, compared to 19 percent growth for the total labor force. As a result, young people are expected to comprise roughly the same percentage of the labor force in 2005 as in 1992. Among youths, the teenage labor force (16 to 19 years of age) will increase by 31 percent over the 1992-2005 period, a numerical increase of 2.1 million. The labor force 20 to 24 years of age is projected to increase by 12 percent, a numerical increase of 1.6 million. The total youth labor force accounted for 24 percent of the entire labor force in 1979, fell to 16 percent in 1992, and should stay about the same through 2005.

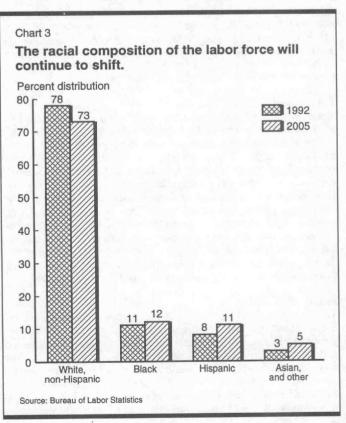
The scenario should be somewhat different for prime-age workers (25 to 54 years of age). The baby boom generation will continue to add members to the labor force, but their share of the labor force peaked in 1985. These workers accounted for 62 percent of the labor force in 1979, and rose significantly to 72 percent in 1992, but should decline slightly to 70 percent by 2005. The proportion of workers in the 25-34 age range will decline dramatically, from 28

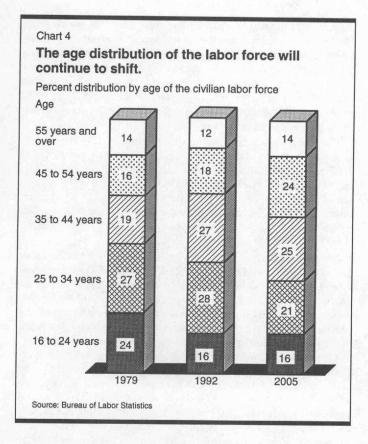
percent to 21 percent in 2005. On the other hand, the growing proportion of workers between the ages of 45 and 54 is equally striking. These workers should account for 24 percent of the labor force by the year 2005, up from 18 percent in 1992. Because workers in their mid-forties to mid-fifties usually have substantial work experience and tend to be more stable than younger workers, this could result in improved productivity and a larger pool of experienced applicants from which employers may choose.

The number of older workers, aged 55 and above, is projected to grow about twice as fast as the total labor force between 1992 and 2005, and about 15 times as fast as the number of workers aged 55 and above grew between 1979 and 1992. As the baby boomers grow older, the number of workers aged 55 to 64 will increase; they exhibit higher labor force participation than their older counterparts. By 2005, workers aged 55 and over will comprise 14 percent of the labor force, up from 12 percent in 1992.

In recent years, the level of educational attainment of the labor force has risen dramatically. In 1992, 27 percent of all workers aged 25 and over had a bachelor's degree or higher, while only 12 percent did not possess a high school diploma. The trend toward higher educational attainment is expected to continue. Projected rates of employment growth are faster for occupations requiring higher levels of education or training than for those requiring less.

Three out of the 4 fastest growing occupational groups will be executive, administrative, and managerial; professional specialty; and technicians and related support occupations. These occupations generally require the highest levels of education and skill, and will make up an increasing proportion of new jobs. Office and factory automation, changes in consumer demand, and movement of production facilities to offshore locations are expected to cause employment to stagnate or decline in many occupations that require little formal education—apparel workers and textile machinery operators, for example. Opportunities for those who do not finish high school will be increasingly limited, and workers who are not literate may not even be considered for most jobs.





Those who do not complete high school and are employed are more likely to have low paying jobs with little advancement potential, while workers in occupations requiring higher levels of education have higher incomes. In addition, many of the occupations projected to grow most rapidly between 1992 and 2005 are among those with higher earnings.

Nevertheless, even slower growing occupations that have a large number of workers will provide many job openings, because the need to replace workers who leave the labor force or transfer to other occupations account for most job openings. Consequently, workers with all levels of education and training will continue to be in demand, although advancement opportunities generally will be best for those with the most education and training.

Employment Change

Total employment is expected to increase from 121.1 million in 1992 to 147.5 million in 2005, or by 22 percent. The 26.4 million jobs that will be added to the U.S. economy by 2005 will not be evenly distributed across major industrial and occupational groups, causing some restructuring of employment. Continued faster than average employment growth among occupations that require relatively high levels of eduction or training is expected. The following two sections examine projected employment change from both industrial and occupational perspectives. The industrial profile is discussed in terms of wage and salary employment, except for agriculture, forestry, and fishing, which includes self-employed and unpaid family workers. The occupational profile is viewed in terms of total employment (wage and salary, self-employed, and unpaid family workers).

Industrial Profile

The long-term shift from goods-producing to service-producing employment is expected to continue (chart 5). For example, service-producing industries, including transportation, communications, and utilities; retail and wholesale trade; services; government; and finance, insurance, and real estate are expected to account for approximately 24.5 million of the 26.4 million job growth over the 1992-2005 period. In addition, the services division within this sector—which includes health, business, and educational services—

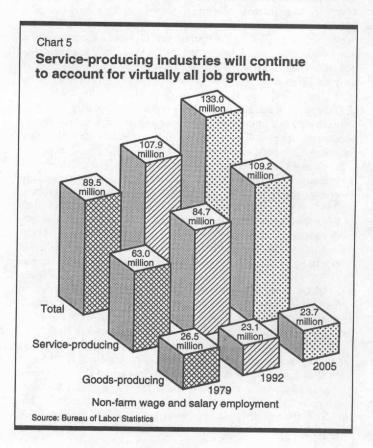
contains 15 of the 20 fastest growing industries. Expansion of service sector employment is linked to a number of factors, including changes in consumer tastes and preferences, legal and regulatory changes, advances in science and technology, and changes in the way businesses are organized and managed. Specific factors responsible for varying growth prospects in major industry divisions are discussed below.

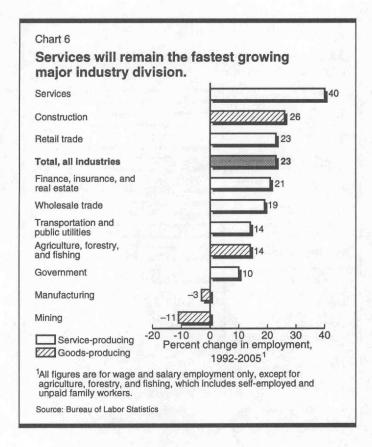
Service-Producing Industries

Services. Services is both the largest and the fastest growing division within the service-producing sector (chart 6). This division provided 38.6 million jobs in 1992; employment is expected to rise 40 percent to 54.2 million by 2005, accounting for almost two-thirds of all new jobs. Jobs will be found in small firms and in large corporations, and in industries as diverse as hospitals, data processing, and management consulting. Health services and business services are projected to continue to grow very fast. In addition, social, legal, and engineering and management services industries further illustrate this division's strong growth.

Health services will continue to be one of the fastest growing industries in the economy with employment increasing from 9.6 to 13.8 million. Improvements in medical technology, and a growing and aging population will increase the demand for health services. Employment in home health care services—the second fastest growing industry in the economy—nursing homes, and offices and clinics of physicians and other health practitioners is projected to increase rapidly. However, not all health industries will grow at the same rate. Despite being the largest health care industry, hospitals will grow more slowly than most other health services industries.

Business services industries also will generate many jobs. Employment is expected to grow from 5.3 million in 1992 to 8.3 million in 2005. Personnel supply services, made up primarily of temporary help agencies, is the largest sector in this group and will increase by 57 percent, from 1.6 to 2.6 million jobs. However, due to the slow-down in labor force participation by young women, and the proliferation of personnel supply firms in recent years, this industry will grow more slowly than during the 1979-92 period. Business services





also includes one of the fastest growing industries in the economy, computer and data processing services. This industry's rapid growth stems from advances in technology, world wide trends toward office and factory automation, and increases in demand from business firms, government agencies, and individuals.

Education is expected to add 2.8 million jobs to the 9.7 million in 1992. This increase reflects population growth and, in turn, rising enrollments projected for elementary, secondary, and postsecondary schools. The elementary school age population (ages 5-13) will rise by 2.8 million between 1992 and 2005, the secondary school age (14-17) by 3.4 million, and the traditional postsecondary school age (18-24) by 2.2 million. In addition, continued rising enrollments of older, foreign, and part-time students are expected to enhance employment in postsecondary education. Not all of the increase in employment in education, however, will be for teachers; teacher aides, counselors, and administrative staff also are projected to increase.

Employment in social services is expected to increase by 1.7 million, bringing the total to 3.7 million by 2005, reflecting the growing elderly population. For example, residential care institutions, which provide around-the-clock assistance to older persons and others who have limited ability for self-care, is projected to be the fastest growing industry in the U.S. economy. Other social services industries that are projected to grow rapidly include child daycare services and individual and miscellaneous social services, which includes elderly daycare and family social services.

Wholesale and retail trade. Employment in wholesale and retail trade is expected to rise by 19 and 23 percent, respectively; from 6 to 7.2 million in wholesale trade and from 19.3 to 23.8 million in retail trade. Spurred by higher levels of personal income, the fastest projected job growth in retail trade is in apparel and accessory stores, and appliance, radio, television, and music stores. Substantial numerical increases in retail employment are anticipated in large industries, including eating and drinking places, food stores, automotive dealers and service stations, and general merchandise stores.

Finance, insurance, and real estate. Employment is expected to increase by 21 percent—adding 1.4 million jobs to the 1992 level of 6.6 million. The strong demand for financial services is expected to continue. Bank mergers, consolidations, and closings—resulting from

overexpansion and competition from nonbank corporations that offer bank-like services—are expected to limit job growth among commercial banks and savings and loan associations. The fastest growing industries within this sector are expected to be holding and investment offices and mortgage bankers and brokers. Insurance agents, brokers, and services is expected to register the largest numerical increase in jobs.

Transportation, communications, and public utilities. Overall employment will increase by 14 percent. Employment in the transportation sector is expected to increase by 24 percent, from 3.5 to 4.3 million jobs. Truck transportation will account for 50 percent of all new jobs; air transportation will account for 29 percent. The projected gains in transportation jobs reflect the continued shift from rail to road freight transportation, rising personal incomes, and growth in foreign trade. In addition, deregulation in the transportation industry has increased personal and business travel options, spurring strong job growth in the passenger transportation arrangement industry, which includes travel agencies. Reflecting laborsaving technology and industry competition, employment in communications is projected to decline by 12 percent. Employment in utilities, however, is expected to grow, adding 117,000 new jobs, highlighted by strong growth in water supply and sanitary services.

Government. Between 1992 and 2005, government employment, excluding public education and public hospitals, is expected to increase 10 percent, from 9.5 million to 10.5 million jobs. Growth will be driven by State and local government. Employment in the Federal Government and U.S. Postal Service is expected to decline by 113,000 and 41,000 jobs, respectively.

Goods-Producing Industries

Employment in this sector has not recovered from the recessionary period of the early 1980's and the trade imbalances that began in the mid-1980's. Although overall employment in goods-producing industries is expected to show little change, growth prospects within the sector vary considerably.

Construction. Construction is expected to increase by 26 percent from 4.5 to 5.6 million. The need to improve the Nation's infrastructure, resulting in increases in road, bridge, and tunnel construction, will offset the slowdown in demand for new housing, reflecting the slowdown in population growth and the overexpansion of office building construction in recent years.

Agriculture, forestry, and fishing. After declining for many decades, overall employment in agriculture, forestry, and fishing is projected to grow by 14 percent, from 1.7 million to 2 million jobs. Strong growth in agricultural services will more than offset an expected continued decline in crops, livestock and livestock products.

Manufacturing. Manufacturing employment is expected to decline by 3 percent from the 1992 level of 18 million. The projected loss of manufacturing jobs reflects productivity gains achieved from increased investment in manufacturing technologies.

The composition of manufacturing employment is expected to shift since most of the jobs that will disappear are production jobs. On the other hand, the number of professional positions in manufacturing firms will increase.

Mining. Mining employment is expected to decline 11 percent from 631,000 to 562,000. Underlying this projection is the assumption that domestic oil production will drop and oil imports will rise, reducing employment in the crude petroleum industry. In addition, employment in coal mining should continue to decline sharply due to the expanded use of laborsaving machinery.

Occupational Profile

Continued expansion of the service-producing sector conjures up an image of a work force dominated by cashiers, retail sales workers, and waiters. Although service sector growth will generate millions of these jobs, it also will create jobs for financial managers, engineers, nurses, electrical and electronics technicians, and many other managerial, professional, and technical workers. As indicated earlier, the fastest growing occupations will be those that require the most formal education and training.

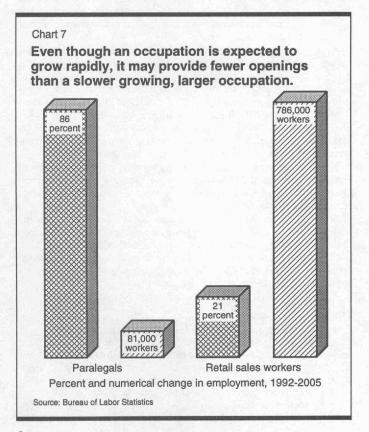
This section furnishes an overview of projected employment in 12 categories or "clusters" of occupations based on the Standard Occupational Classification (SOC). The SOC is used by all Federal agencies that collect occupational employment data, and is the organizational framework for grouping statements in the *Handbook*.

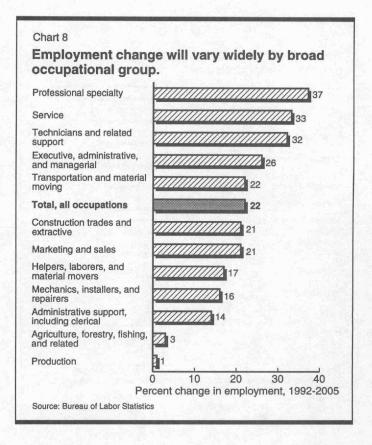
In the discussion that follows, projected employment change is described as growing faster, slower, or the same as the average for all occupations. (These phrases are explained on page 2.) While occupations that are growing fast generally offer good opportunities, the numerical change in employment also is important because large occupations, such as retail sales workers, may offer many more new jobs than a small, fast-growing occupation, such as paralegals (chart 7). For a more detailed discussion of occupational growth, see the discussion of job outlook in an earlier chapter, Keys to Understanding What's in the *Handbook*.

Professional specialty occupations. Workers in these occupations perform a wide variety of duties, and are employed in almost every industry. Employment in this cluster is expected to grow by 37 percent, from 16.6 to 22.8 million jobs, making it the fastest growing occupational cluster in the economy (chart 8). Human services workers, computer scientists and systems analysts, physical therapists, special education teachers, and operations research analysts are among the fastest growing professional specialty occupations.

Service occupations. This group includes a wide range of workers in protective services, food and beverage preparation, health services, and cleaning and personal services. Employment in these occupations is expected to grow by 33 percent, faster than average, from 19.4 to 25.8 million. Service occupations that are expected to experience both fast growth and large job growth include homemaker-home health aides, nursing aides, child care workers, guards, and correction officers.

Technicians and related support occupations. Workers in this group provide technical assistance to engineers, scientists, physicians, and other professional workers, as well as operate and program technical equipment. Employment in this cluster is expected to increase 32 percent, faster than average, from 4.3 to 5.7 million. Employment of paralegals is expected to increase much faster than average as use of these workers in the rapidly expanding legal services industry increases. Health technicians and technologists, such as licensed practical nurses and radiological technologists, will add





large numbers of jobs. Growth in other occupations, such as broadcast technicians, will be limited by laborsaving technological advances.

Executive, administrative, and managerial occupations. Workers in this cluster establish policies, make plans, determine staffing requirements, and direct the activities of businesses, government agencies, and other organizations. Employment in this cluster is expected to increase by 26 percent, from 12.1 to 15.2 million, reflecting average growth. Growth will be spurred by the increasing number and complexity of business operations and result in large employment gains, especially in the services industry division. However, many businesses will streamline operations by employing fewer managers, thus offsetting increases in employment.

Like other occupations, changes in managerial and administrative employment reflect industry growth, and utilization of managers and administrators. For example, employment of health services managers will grow much faster than average, while wholesale and retail buyers are expected to grow more slowly than average.

Hiring requirements in many managerial and administrative jobs are becoming more stringent. Work experience, specialized training, or graduate study will be increasingly necessary. Familiarity with computers will continue to be important as a growing number of firms rely on computerized management information systems.

Transportation and material moving occupations. Workers in this cluster operate the equipment used to move people and equipment. Employment in this group is expected to increase by 22 percent, from 4.7 to 5.7 million jobs. Average growth is expected for bus drivers, reflecting rising school enrollments. Similar growth is expected for truck drivers and railroad transportation workers due to growing demand for transportation services. Technological improvements and automation should result in material moving equipment operators increasing more slowly than the average. Water transportation workers are projected to show little change in employment as technological advances increase productivity.

Construction trades and extractive occupations. Workers in this group construct, alter, and maintain buildings and other structures, and operate drilling and mining equipment. Overall employment in this group is expected to increase 21 percent, about as fast as average, from 3.7 to 4.5 million. Virtually all of the new jobs will be in construction. Spurred by new projects and alterations to existing

structures, average employment growth is expected in construction. On the other hand, increased automation, continued stagnation in the oil and gas industries, and slow growth in demand for coal, metal, and other materials will result a decline in employment of extractive workers.

Marketing and sales occupations. Workers in this cluster sell goods and services, purchase commodities and property for resale, and stimulate consumer interest. Employment in this cluster is projected to increase by 21 percent, from 13 to 15.7 million jobs, about as fast as average. Demand for travel agents is expected to grow much faster than average. Due to strong growth in the industries that employ them, services sales representatives, securities and financial services sales workers, and real estate appraisers will experience faster than average growth. Many part- and full-time job openings are expected for retail sales workers and cashiers due to the large size and high turnover associated with these occupations. Opportunities for higher paying sales jobs, however, will tend to be more competitive.

Helpers, laborers, and material movers. Workers in this group assist skilled workers and perform routine, unskilled tasks. Overall employment is expected to increase by 17 percent, about as fast as average, from 4.5 to 5.2 million jobs. Some routine tasks will become increasingly automated, limiting employment growth among machine feeders and offbearers. Employment of service station attendants will decline, reflecting the trend toward self-service gas stations. Employment of construction laborers, however, is expected to increase about as fast as average, reflecting growth in the construction industry.

Mechanics, installers, and repairers. These workers adjust, maintain, and repair automobiles, industrial equipment, computers, and many other types of equipment. Overall employment in these occupations is expected to grow by 16 percent, from 4.8 to 5.6 million, due to increased use of mechanical and electronic equipment. The fastest growing occupation in this group is expected to be data processing equipment repairers, reflecting the increased use of these types of machines. Communications equipment mechanics, installers, and repairers, and telephone and cable television line installers and repairers, in sharp contrast, are expected to record a decline in employment due to laborsaving advances.

Administrative support occupations, including clerical. Workers in this largest major occupational group perform a wide variety of administrative tasks necessary to keep organizations functioning smoothly. The group as a whole is expected to grow by 14 percent, from 22.3 to 25.4 million jobs, about as fast as the average. Technological advances are projected to slow employment growth for stenographers and typists and word processors. Receptionists and information clerks will grow faster than average, spurred by rapidly expanding industries such as business services. Because of their large size and substantial turnover, clerical occupations will offer abundant opportunities for qualified jobseekers in the years ahead.

Agriculture, forestry, fishing, and related occupations. Workers in these occupations cultivate plants, breed and raise livestock, and catch animals. Although demand for food, fiber, and wood is expected to increase as the world's population grows, the use of more productive farming and forestry methods and the consolidation of smaller farms are expected to result in only a 3-percent increase in employment, from 3.5 to 3.6 million jobs. Employment of farm operators and farm workers is expected to rapidly decline, reflecting greater productivity; the need for skilled farm managers, on the other hand, should result in average employment growth in that occupation.

Production occupations. Workers in these occupations set up, install, adjust, operate, and tend machinery and equipment and use hand tools to fabricate and assemble products. Little change in the 1992 employment level of 12.2 million is expected due to increases in imports, overseas production, and automation. Relative to other occupations, employment in many production occupations is more sensitive to the business cycle and competition from imports.

Replacement Needs

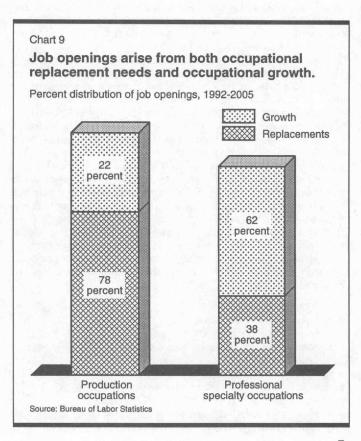
Most jobs through the year 2005 will become available as a result of replacement needs. Thus, even occupations with little or no employment growth or slower than average employment growth still may offer many job openings.

Replacement openings occur as people leave occupations. Some transfer to other occupations as a step up the career ladder or change careers. Others stop working in order to return to school, assume household responsibilities, or retire.

The number of replacement openings and the proportion of job openings made up by replacement needs varies by occupation. Occupations with the most replacement openings generally are large, with low pay and status, low training requirements, and a high proportion of young and part-time workers. Occupations with relatively few replacement openings tend to be associated with high pay and status, lengthy training requirements, and a high proportion of prime working age, full-time workers. Workers in these occupations generally acquire education or training that often is not applicable to other occupations. For example, among professional specialty occupations, only 38 percent of total job opportunities result from replacement needs, as opposed to 78 percent among production occupations (chart 9).

Interested in More Detail?

Readers interested in more information about projections and detail on the labor force, economic growth, industry and occupational employment, or methods and assumptions should consult the November 1993 Monthly Labor Review or The American Work Force: 1992-2005, BLS Bulletin 2452. Information on the limitations inherent in economic projections also can be found in either of these two publications. For additional occupational data, as well as statistics on educational and training completions, see the 1994 edition of Occupational Projections and Training Data, BLS Bulletin 2451.



Sources of Information on Career Preparation and Training

This chapter identifies selected sources of information about occupations, counseling, training and education, financial aid, and finding and evaluating potential jobs. Also, read the occupational statements in the Handbook, including the section on sources of additional information, which lists organizations you can contact for more information about particular occupations.

Career Information

A good place to start collecting information you need is from the people closest to you, your family and friends. These **personal contacts** are often overlooked, but can be extremely helpful. They may be able to answer your questions directly or, more importantly, put you in touch with someone else who can. This "networking" can lead to an "informational interview," where you can meet with someone who is willing to answer your questions about a career or a company, and who can provide inside information on related fields and other helpful hints. This is a highly effective way to learn the recommended type of training for certain positions, how someone in that position entered and advanced, and what he or she likes and dislikes about the work. While developing your network of contacts, you may want to begin exploring other avenues.

Public libraries, career centers, and guidance offices have a great deal of career material. To begin your library search, look in the card catalog or at the computer listings under "vocations" or "careers" and then under specific fields. Also, leaf through the file of pamphlets that describe employment in different organizations. Check the periodicals section, where you will find trade and professional magazines and journals about specific occupations and industries. Familiarize yourself with the concerns and activities of potential employers by skimming their annual reports and other information they distribute to the public.

You can also find occupational information on video cassettes, in kits, and through computerized information systems. Check career centers for programs such as individual counseling, group discussions, guest speakers, field trips, and career days.

Always assess career guidance materials carefully. Information should be current. Beware of materials produced by schools for recruitment purposes that seem to glamorize the occupation, overstate the earnings, or exaggerate the demand for workers.

You may wish to seek help from a counselor. Counselors are trained to help you discover your strengths and weaknesses, guide you through an evaluation of your goals and values, and help you determine what you want in a career. The counselor will not tell you what to do, but will administer interest inventories and aptitude tests, interpret the results, and help you explore your options. Counselors also may be able to discuss local job markets, and the entry requirements and costs of the schools, colleges, or training programs offering preparation for the kind of work that interests you. You can find counselors in:

- high school guidance offices,
- college career planning and placement offices,
- placement offices in private vocational/technical schools and institutions
- vocational rehabilitation agencies,
- counseling services offered by community organizations,
- private counseling agencies and private practices,
- State employment service offices affiliated with the U.S. Employment Service.

Before employing the services of a private counselor or agency, seek recommendations and check their credentials. The International Association of Counseling Services (IACS) accredits counseling services throughout the country. To receive the listing of accredited services for your region, send a self-addressed, stamped, business-size envelope to IACS, 101 South Whiting St., Suite 211, Alexandria, VA 22304. The *Directory of Counseling Services*, an IACS publication providing employment counseling and other assistance, may be available in your library or school career counseling center. For a list of certified career counselors by State, contact the National Board of Certified Counselors, 3-D Terrace Way, Greensboro, NC 27403. Phone: (919) 547-0607.

Professional societies, trade associations, labor unions, business firms, and educational institutions provide a variety of free or inexpensive career material. Many of these are identified in the Sources of Additional Information section of each Handbook statement. For information on occupations not covered in the Handbook, consult directories in your library's reference section for the names of potential sources. You may need to start with The Guide to American Directories or The Directory of Directories. Another useful resource is The Encyclopedia of Associations, an annual multivolume publication listing trade associations, professional societies, labor unions, and fraternal and patriotic organizations.

The National Audiovisual Center, a central source for all audiovisual material produced by the U.S. Government, rents and sells material on jobs and careers. For a catalog, contact the National Audiovisual Center, 8700 Edgeworth Dr., Capitol Heights, MD 20743. Phone: 1-800-788-6282.

For first-hand experience in an occupation, you may wish to intern, or take a summer or part-time job. Some internships offer academic credit or pay a stipend. Check with guidance offices, college career resource centers, or directly with employers.

State and Local Information

The *Handbook* provides information for the Nation as a whole. For help in locating State or local area information, contact your **State occupational information coordinating committee** (**SOICC**). These committees may provide the information directly, or refer you to other sources. Refer to the chapter beginning on page 13 for addresses and telephone numbers of the SOICC's.

Most States have career information delivery systems (CIDS). Look for these systems in secondary schools, postsecondary institutions, libraries, job training sites, vocational rehabilitation centers, and employment service offices. Jobseekers can use the systems' computers, printed material, microfiche, and toll-free hotlines to obtain information on occupations, educational opportunities, student financial aid, apprenticeships, and military careers. Ask counselors and SOICC's for specific locations.

State employment security agencies develop detailed information about local labor markets, such as current and projected employment by occupation and industry, characteristics of the work force, and changes in State and local area economic activity. Addresses and telephone numbers of the directors of research and analysis in these agencies are listed in the chapter beginning on page 13.

Education and Training Information

Colleges, schools, and training institutes normally readily reply to requests for information. When contacting these institutions, you may want to keep in mind the following items:

- admission requirements
- courses offered
- · certificates or degrees awarded
- cost
- available financial aid
- location and size of school

Check with professional and trade associations for lists of schools that offer career preparation in a field you're interested in. Guidance offices and libraries usually have copies of the kinds of directories listed below, as well as college catalogs that can provide more information on specific institutions. Be sure to use the latest edition because these directories and catalogs are often revised annually.

Information about home study programs appears in the *Directory of Accredited Home Study Schools*, published by the National Home Study Council. Send requests for the *Directory* and a list of other publications to the National Home Study Council, 1601 18th St. NW., Washington, DC 20009. Phone: (202) 234-5100.

Local labor unions, school guidance counselors, and State employment offices provide information about apprenticeships. Copies of *The National Apprenticeship Program and Apprenticeship Information* are available from the Bureau of Apprenticeship and Training, U.S. Department of Labor, 200 Constitution Ave. NW., Washington, DC 20210. Phone: (202) 219-5921.

Financial Aid Information

Information about financial aid is available from a variety of sources. Contact your high school guidance counselor and college financial aid officer for information concerning scholarships, fellowships, grants, loans, and work-study programs. In addition, every State administers financial aid programs; contact State Departments of Education for information. Banks and credit unions can provide information about student loans. You also may want to consult the directories and guides to sources of student financial aid available in guidance offices and public libraries.

The Federal Government provides grants, loans, work-study programs, and other benefits to students. Information about programs administered by the U.S. Department of Education is presented in *The Student Guide to Federal Financial Aid Programs*, updated annually. To get a copy, write to the Federal Student Aid Information Center, c/o Federal Student Aid Programs, P.O. Box 84, Washington, DC 20044, or phone, toll-free, 1-800-433-3243.

The National and Community Service Trust Act of 1993 allows individuals aged 17 and over, to serve in approved local programs before, during, or after postsecondary education, to earn money for education. A participant must complete at least 1 year of full-time or 2 years of part-time service to qualify. Awards may be used for past, present, or future expenses, including 2- and 4-year colleges, training programs, and graduate or professional programs. Information about service appointments may be found in high schools, colleges, and other placement offices, or can be obtained by contacting the commission on national service in your State, or by calling 1-800-94-ACORPS.

Meeting College Costs, an annual publication of the College Board, explains how student financial aid works and how to apply for it. The current edition is available to high school students through guidance counselors.

Need a Lift?, an annual publication of the American Legion, contains career and scholarship information. Copies cost \$2 each, prepaid (including postage), and can be obtained from the American Legion, Attn: Emblem Sales, P.O. Box 1050, Indianapolis, IN 46206. Phone: (317) 635-8411.

Some student aid programs are designed to assist specific groups—Hispanics, blacks, native Americans, or women, for example. Higher Education Opportunities for Minorities and Women, published in 1991 by the U.S. Department of Education, is a guide to organizations offering assistance. This publication can be found in libraries and guidance offices, or copies may be obtained from the U.S. Department of Education, 400 Maryland Ave. SW., Washington, DC 20202. Phone: (202) 401-3550.

The Armed Forces have several educational assistance programs. These include the Reserve Officers' Training Corps (ROTC), the New G.I. bill, and tuition assistance. Information can be obtained from military recruiting centers, located in most cities.

Information on Finding a Job

It takes some people a great deal of time and effort to find a job they enjoy. Others may walk right into an ideal employment situation. Don't be discouraged if you have to pursue many leads. Friends, neighbors, teachers, and counselors may know of available jobs in your field of interest. Read the want ads. Consult State employment service offices and private or nonprofit employment agencies or contact employers directly.

Where To Learn About Job Openings

- Parents, friends, and neighbors
- School or college placement services
- Classified ads
 - -Local and out-of-town newspapers
 - -Professional journals
 - —Trade magazines
- Employment agencies and career consultants
- State employment service offices
- Civil service announcements (Federal, State, local)
- Labor unions
- Professional associations (State and local chapters)
- Libraries and community centers
- Women's counseling and employment programs
- Youth programs
- Employers

Informal job search methods. It is possible to apply directly to employers without a referral. You may locate a potential employer in the Yellow Pages, in directories of local chambers of commerce, and in other directories that provide information about employers. When you find an employer you are interested in, you can file an application even if you don't know for certain that an opening exists.

Want ads. The "Help Wanted" ads in newspapers list hundreds of jobs. Realize, however, that many job openings are not listed there. Also, be aware that the classified ads sometimes do not give some important information. Many offer little or no description of the job, working conditions, or pay. Some ads do not identify the employer. They may simply give a post office box for sending your resume. This makes follow-up inquiries very difficult. Furthermore, some ads offer out-of-town jobs; others advertise employment agencies rather than employment.

Keep the following in mind if you are using want ads:

- Do not rely solely on the classifieds to find a job; follow other leads as well.
- Answer ads promptly, since openings may be filled quickly, even before the ad stops appearing in the paper.
- Follow the ads diligently. Check them every day, as early as possible, to give yourself an advantage.
- Beware of "no experience necessary" ads. These ads often signal low wages, poor working conditions, or straight commission work
- Keep a record of all ads to which you have responded, including the specific skills, educational background, and personal qualifications required for the position.

Public employment service. The State employment service, sometimes called the Job Service, operates in coordination with the Labor Department's U.S. Employment Service. About 1,700 local offices, also known as employment service centers, help jobseekers locate employment and help employers find qualified workers at no cost to themselves. To find the office nearest you, look in the State

What Goes Into a Resume

A resume summarizes your qualifications and employment history. It usually is required when applying for managerial, administrative, professional, or technical positions. Although there is no set format, it should contain the following information:

• Name, address, and telephone number.

 Employment objective. State the type of work or specific job you are seeking.

 Education, including school name and address, dates of attendance, curriculum, and highest grade completed or degree awarded.

 Experience, paid or volunteer. Include the following for each job: Job title, name and address of employer, and dates of employment. Describe your job duties.

 Special skills, knowledge of machinery, proficiency in foreign languages, honors received, awards, or membership in organizations.

Note on your resume that "references are available upon request." On a separate sheet, list the name, address, telephone number, and job title of three references.

government telephone listings under "Job Service" or "Employment."

A computerized job network system—America's Job Bank—run by the U.S. Department of Labor, lists 50,000 or so job openings each week, with plans to list 75,000 or more in the future. Jobseekers can access these listings through the use of a personal computer in any local public employment service office, as well as in several hundred military installations. In addition, some State employment ageencies have set up America's Job Bank in other settings, including libraries, schools, shopping malls, and correctional facilities. A wide range of jobs are listed.

Tips for Finding the Right Job, a U.S. Department of Labor pamphlet, offers advice on determining your job skills, organizing your job search, writing a resume, and making the most of an interview. Job Search Guide: Strategies For Professionals, another U.S. Department of Labor publication, also descusses specific steps that job-seekers can follow to identify employment opportunities. This publication includes sections on handling your job loss, managing your personal resources, assessing your skills and interests, researching the job market, conducting the job search and networking, writing resumes and cover letters, employment interviewing and testing, and sources of additional information. Check with your State employment service office, or order a copy of these publications from the U.S. Government Printing Office. Phone: (202) 783-3238 for price and ordering information.

Job matching and referral. At a State employment service office, an interviewer will determine if you are "job ready" or if counseling and testing services would be helpful before you begin your job search. After you are "job ready," you may examine America's Job Bank, a computerized listing of public- and private-sector job openings that is updated daily. Select openings that interest you, then get more details from a staff member who can describe the job openings in detail and arrange for interviews with prospective employers.

Counseling and testing. Centers can test for occupational aptitudes and interests and then help you choose and prepare for a career.

Services for special groups. By law, veterans are entitled to priority at State employment service centers. Veterans' employment representatives can inform you of available assistance and help you deal with any problems.

Summer Youth Programs provide summer jobs in city, county, and State government agencies for low-income youth. Students, school dropouts, or graduates entering the labor market who are between 16 and 21 years of age are eligible. In addition, the Job Corps,

with more than 100 centers throughout the United States, helps young people learn skills or obtain education.

Service centers also refer applicants to opportunities available under the Job Training Partnership Act (JTPA) of 1982. JTPA prepares economically disadvantaged persons and those facing barriers to employment for jobs.

Federal job information. For information about employment with the U.S. Government, call the Federal Job Information Center, operated by the Office of Personnel Management. The phone number is (202) 606-2700, or write to Federal Job Information Center, 1900 E St. NW., Room 1416, Washington, DC 20415.

Private employment agencies. These agencies can be very helpful, but don't forget that they are in business to make money. Most agencies operate on a commission basis, with the fee dependent upon a successful match. You or the hiring company will have to pay a fee for the matching service. Find out the exact cost and who is responsible for paying it before using the service.

While employment agencies can help you save time and contact employers who otherwise may be difficult to locate, in some cases, your costs may outweigh the benefits. Consider any guarantee they offer when figuring the cost.

College career planning and placement offices. College placement offices facilitate matching job openings with suitable jobseekers. You can set up schedules and use available facilities for interviews with recruiters or scan lists of part-time, temporary, and summer jobs maintained in many of these offices. You also can get counseling, testing, and job search advice and take advantage of their career resource library. Here you also will be able to identify and evaluate your interests, work values, and skills; attend workshops on such topics as job search strategy, resume writing, letter writing, and effective interviewing; critique drafts of resumes and videotapes of mock interviews; explore files of resumes and references; and attend job fairs conducted by the office.

Community agencies. Many nonprofit organizations offer counseling, career development, and job placement services, generally targeted to a particular group, such as women, youth, minorities, ex-offenders, or older workers.

Many communities have career counseling, training, placement, and support services for employment. These programs are sponsored by a variety of organizations, including churches and synagogues, nonprofit organizations, social service agencies, the State employment service, and vocational rehabilitation agencies. Many cities have commissions that provide services for these special groups.

Evaluating a Job Offer

Once you receive a job offer, you are faced with a difficult decision. Fortunately, most organizations will not expect you to accept or reject an offer on the spot. You probably will be given at least a week to make up your mind. Although there is no way to remove all risks from this career decision, you will increase your chances of making the right choice by thoroughly evaluating each offer—weighing all the advantages against all the disadvantages of taking the job.

There are many issues to consider when assessing a job offer. Will the organization be a good place to work? Will the job be interesting? How are opportunities for advancement? Is the salary fair? Does the employer offer good benefits? If you have not already figured out exactly what you want, the following discussion may help you develop a set of criteria for judging job offers, whether you are starting a career, reentering the labor force after a long absence, or planning a career change.

The Organization. Background information on the organization—be it a company, government agency, or nonprofit concern—can help you decide whether it is a good place for you to work. Factors to consider include the organization's business or activity, financial condition, age, size, and location. Information on growth prospects for the industry or industries that the company represents also is important. Here are some questions to ask.

Job Interview Tips

Preparation:

- Learn about the organization.
- Have a specific job or jobs in mind.
- Review your qualifications for the job.
- Prepare answers to broad questions about yourself.
- · Review your resume.
- Practice an interview with a friend or relative.
- Arrive before the scheduled time of your interview.

Personal Appearance:

- Be well groomed.
- Dress appropriately.
- Do not chew gum or smoke.

The Interview:

- Answer each question concisely.
- Respond promptly.
- Use good manners. Learn the name of your interviewer and shake hands as you meet.
- Use proper English and avoid slang.
- Be cooperative and enthusiastic.
- Ask questions about the position and the organization.
- Thank the interviewer, and follow up with a letter.

Test (if employer gives one):

- Listen closely to instructions.
- Read each question carefully.
- Write legibly and clearly.
- Budget your time wisely and don't dwell on one question.

Information To Bring to an Interview:

- Social Security number.
- Driver's license number.
- Resume. Although not all employers require applicants to bring a resume, you should be able to furnish the interviewer with information about your education, training, and previous employment.
- Usually an employer requires three references. Get permission from people before using their names, and make sure they will give you a good reference. Try to avoid using relatives. For each reference, provide the following information: Name, address, telephone number, and job title.

Is the organization's business or activity in keeping with your own interests and beliefs? It will be easier to apply yourself to the work if you are enthusiastic about what the organization does.

How will the size of the organization affect you? Large firms generally offer a greater variety of training programs and career paths, more managerial levels for advancement, and better employee benefits than small firms. Large employers also have more advanced technologies in their laboratories, offices, and factories. However, jobs in large firms tend to be highly specialized—workers are assigned relatively narrow responsibilities. On the other hand, jobs in small firms may offer broader authority and responsibility, a closer working relationship with top management, and a chance to clearly see your contribution to the success of the organization.

Should you work for a fledgling organization or one that is well established? New businesses have a high failure rate, but for many people, the excitement of helping create a company and the potential for sharing in its success more than offset the risk of job loss. It may be almost as exciting and rewarding, however, to work for a young firm which already has a foothold on success.

Does it make any difference to you whether the company is private or public? A private company may be controlled by an individual or a family, which can mean that key jobs are reserved for relatives and

friends. A public company is controlled by a board of directors responsible to the stockholders. Key jobs are open to anyone with talent

Is the organization in an industry with favorable long-term prospects? The most successful firms tend to be in industries that are

growing rapidly.

Where is the job located? If it is in another city, you need to consider the cost of living, the availability of housing and transportation, and the quality of educational and recreational facilities in the new location. Even if the place of work is in your area, consider the time and expense of commuting and whether it can be done by public transportation.

Where are the firm's headquarters and branches located? Although a move may not be required now, future opportunities could

depend on your willingness to move to these places.

It frequently is easy to get background information on an organization simply by telephoning its public relations office. A public company's annual report to the stockholders tells about its corporate philosophy, history, products or services, goals, and financial status. Most government agencies can furnish reports that describe their programs and missions. Press releases, company newsletters or magazines, and recruitment brochures also can be useful. Ask the organization for any other items that might interest a prospective employee.

Background information on the organization also may be available at your public or school library. If you cannot get an annual report, check the library for reference directories that provide basic facts about the company, such as earnings, products and services, and number of employees. Some directories widely available in libraries include the following: Dun & Bradstreet's Million Dollar Directory; Standard and Poor's Register of Corporations, Directors and Executives; Moody's Industrial Manual; Thomas' Register of American Manufacturers; and Ward's Business Directory. If you plan to continue your job search, these directories also will list the names and addresses of other firms that might hire you.

Stories about an organization in magazines and newspapers can tell a great deal about its successes, failures, and plans for the future. You can identify articles on a company by looking under its name in periodical or computerized indexes—such as the Business Periodicals Index, Reader's Guide to Periodical Literature, Newspaper Index, Wall Street Journal Index, and New York Times Index. It probably will not be useful to look back more than 2 or 3 years.

The library also may have government publications that present projections of growth for the industry in which the organization is classified. Long-term projections of employment and output for more than 200 industries, covering the entire economy, are developed by the Bureau of Labor Statistics and revised every other year—see the November 1993 Monthly Labor Review for the most recent projections. The U.S. Industrial Outlook, published annually by the U.S. Department of Commerce, presents detailed analyses of growth prospects for a large number of industries. Trade magazines also have frequent articles on the trends for specific industries.

Career centers at colleges and universities often have information on employers that is not available in libraries. Ask the career center librarian how to find out about a particular organization. The career center may have an entire file of information on the company.

The Nature of the Work. Even if everything else about the job is good, you will be unhappy if you dislike the day-to-day work. Determining in advance whether you will like the work may be difficult. However, the more you find out about it before accepting or rejecting the job offer, the more likely you are to make the right choice. Ask yourself questions like the following.

Does the work match your interests and make good use of your skills? The duties and responsibilities of the job should be explained

in enough detail to answer this question.

How important is the job in this company? An explanation of where you fit in the organization and how you are supposed to contribute to its overall objectives should give an idea of the job's importance.

Are you comfortable with the supervisor?

Do the other employees seem friendly and cooperative?

Does the work require travel?

Does the job call for irregular hours?

How long do most people who enter this job stay with the company? High turnover can mean dissatisfaction with the nature of the work or something else about the job.

The Opportunities. A good job offers you opportunities to grow and move up. It gives you chances to learn new skills, increase your earnings, and rise to positions of greater authority, responsibility, and prestige. A lack of opportunities can dampen interest in the work and result in frustration and boredom.

The company should have a training plan for you. You know what your abilities are now. What valuable new skills does the company plan to teach you?

The employer should give you some idea of promotion possibilities within the organization. What is the next step on the career ladder? If you have to wait for a job to become vacant before you can be promoted, how long does this usually take? Employers differ on their policies regarding promotion from within the organization. When opportunities for advancement do arise, will you compete with applicants from outside the company? Can you apply for jobs for which you qualify elsewhere within the organization or is mobility within the firm limited?

The Salary and Benefits. Wait for the employer to introduce these subjects. Most companies will not talk about pay until they have decided to hire you. In order to know if their offer is reasonable, you need a rough estimate of what the job should pay. You may have to go to several sources for this information. Talk to friends who recently were hired in similar jobs. Ask your teachers and the staff in the college placement office about starting pay for graduates with your qualifications. Scan the help-wanted ads in newspapers. Check the library or your school's career center for salary surveys, such as the College Placement Council Salary Survey and Bureau of Labor Statistics occupational wage surveys. If you are considering the salary and benefits for a job in another geographic area, make allowances for differences in the cost of living, which may be significantly higher in a large metropolitan area than in a smaller city, town, or rural area. Use the research to come up with a base salary range for yourself, the top being the best you can hope to get and the bottom being the least you will take. An employer cannot be specific about the amount of pay if it includes commissions and bonuses. The way the plan works, however, should be explained. The employer also should be able to tell you what most people in the job

You also should learn the organization's policy regarding overtime. Depending on the job, you may or may not be exempt from laws requiring the employer to compensate you for overtime. Find out how many hours you will be expected to work each week and whether you receive overtime pay or compensatory time off for working more than the specified number of hours in a week.

Also take into account that the starting salary is just that, the start. Your salary should be reviewed on a regular basis—many organizations do it every 12 months. If the employer is pleased with your performance, how much can you expect to earn after 1, 2, or 3 or more years?

Don't think of your salary as the only compensation you will receive—consider benefits. Benefits can add a lot to your base pay. Health insurance and pension plans are among the most important benefits. Other common benefits include life insurance, paid vacations and holidays, and sick leave. Benefits vary widely among smaller and larger firms, among full-time and part-time workers, and between the public and private sectors. Find out exactly what the benefit package includes and how much of the costs you must bear.

When you evaluate a job offer, you have many things to consider. Only you will be able to weigh the advantages of a job that is more compatible with your interests and skills against a job that offers a higher salary and more promising advancement opportunities, or weigh the advantages of a job that offers better benefits against a job that is much closer to your home. Asking yourself these kinds of questions won't guarantee that you make the best career decision—only hindsight could do that—but you probably will make a better choice than if you act on impulse.

Detailed data on wages and benefits is available from the Bureau of Labor Statistics, Office of Compensation and Working Conditions, Division of Occupational Pay and Employee Benefit Levels, 2 Massachusetts Ave. NE., Room 4160, Washington, DC 20212-0001. Phone: (202) 606-6225. Data on weekly earnings, based on the Current Population Survey, is available from the Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, 2 Massachusetts Ave. NE., Room 4945, Washington, DC 20212-0001. Phone: (202) 606-6400.

Organizations for Specific Groups

The organizations listed below provide information on career planning, training, or public policy support for specific groups.

Disabled: President's Committee on Employment of People with Disabilities, 1331 F St. NW., 3rd Floor, Washington, DC 20004. Phone: (202) 376-6200.

The blind: Information on the free national reference and referral service provided by the Federation of the Blind can be obtained by contacting Job Opportunities for the Blind (JOB), National Federation of the Blind, 1800 Johnson St., Baltimore, MD 21230. Phone: toll-free, 1-800-638-7518, or locally (410) 659-9314.

Minorities: National Association for the Advancement of Colored People (NAACP), 4805 Mount Hope Dr., Baltimore, MD 21215Á3297. Phone: (410) 358-8900.

The National Urban League is a nonprofit community-based social service and civil rights organization that assists African-Americans in the achievement of social and economic equality. There are 113 local affiliates throughout the country that provide services related to employment and job training, and education and career development. Contact the affiliate nearest you for information.

Older workers: National Association of Older Workers Employment Services, c/o National Council on the Aging, 409 3rd St. SW., Suite 200, Washington, DC 20024. Phone: (202) 479-1200.

For publications on job opportunities, contact the American Association of Retired Persons, Workforce Program Department, 601 E St. NW., Floor A5, Washington, DC 20049. Phone: (202) 434-2040.

Asociacion Nacional Por Personas Mayores (National Association for Hispanic Elderly), 2727 W. 6th St., Suite 270, Los Angeles, CA 90057. Phone: (213) 487-1922. This organization specifically serves low-income, minority persons who are 55 years of age and older.

National Caucus/Center on Black Aged, Inc., 1424 K St. NW., Suite 500, Washington, DC 20005. Phone: (202) 637-8400.

Veterans: Contact the nearest regional office of the Department of Veterans Affairs.

Veterans' Employment and Training Service (VETS), 200 Constitution Ave. NW., Room S-1313, Washington, DC 20210. Phone: (202) 219-9116.

Women: U.S. Department of Labor, Women's Bureau, 200 Constitution Ave. NW., Washington, DC 20210. Phone: (202) 219-6652.

Catalyst, 250 Park Ave. South, 5th floor, New York, NY 10003. Phone: (212) 777-8900.

Wider Opportunities for Women, 1325 G St. NW., Lower Level, Washington, DC 20005. Phone: (202) 638-3143.

Federal laws, executive orders, and selected Federal grant programs bar discrimination in employment based on race, color, religion, sex, national origin, age, and handicap. Information on how to file a charge of discrimination is available from U.S. Equal Employment Opportunity Commission offices around the country. Their addresses and telephone numbers are listed in telephone directories under U.S. Government, EEOC, or are available from the Equal Employment Opportunity Commission, 1801 L St. NW., Washington, DC 20507. Phone: (202) 663-4264.

Information on Federal laws concerning fair labor standards such as the minimum wage and equal employment opportunity can be obtained from the Office of Information and Consumer Affairs, Employment Standards Administration, U.S. Department of Labor, Room C-4331, 200 Constitution Ave. NW., Washington, DC 20210. Phone: (202) 523-8743.

Sources of State and Local Job Outlook Information

State and local job market and career information is available from State employment security agencies and State Occupational Information Coordinating Committees (SOICC's). State employment security agencies develop occupational employment projections and other job market information. SOICC's provide or help locate labor market and career information. The following list provides the title, address, and telephone number of State employment security agency directors of research and SOICC directors.

Chief, Labor Market Information, Alabama Department of Industrial Relations, 649 Monroe St., Room 422, Montgomery, AL 36131. Phone: (205) 242-8855.

Director, Alabama Occupational Information Coordinating Committee, Alabama Center for Commerce, Room 364, 401 Adams Ave., P.O. Box 5690, Montgomery, AL 36103-5690. Phone: (205) 242-2990.

Chief, Research and Analysis Section, Alaska Department of Labor, P.O. Box 25501, Juneau, AK 99802-5501. Phone: (907) 465-4500.

Executive Director, Alaska Department of Labor, Research and Analysis Section, P.O. Box 25501, Juneau, AK 99802-5501. Phone: (907) 465-4518.

American Samoa

Statistical Analyst, Research and Statistics, Office of Manpower Resources, American Samoa Government, Pago Pago, AS 96799. Phone: (684) 633-

Director, American Samoa State Occupational Information Coordinating Committee, Office of Manpower Resources, American Samoa Government, Pago Pago, AS 96799. Phone: (684) 633-4485.

Research Administrator, Arizona Department of Economic Security, P.O. Box 6123, Site Code 733A, Phoenix, AZ 85005-6123. Phone: (602) 542-

Executive Director, Arizona State Occupational Information Coordinating Committee, P.O. Box 6123, Site Code 897J, 1789 West Jefferson St., First Floor North, Phoenix, AZ 85005-6123. Phone: (602) 542-6466.

Manager, Labor Market Information, Arkansas Employment Security Division, P.O. Box 2981, Little Rock, AR 72203-2981. Phone: (501) 682-3198.

Executive Director, Arkansas Occupational Information Coordinating Committee, Arkansas Employment Security Division, Employment and Training Services, P.O. Box 2981, Little Rock, AR 72203. Phone: (501) 682-3159

Chief, Labor Market Information Division, Employment Development Department, P.O. Box 942880, MIC 57, Sacramento, CA 94280-0001. Phone: (916) 427-4675.

Executive Director, California Occupational Information Coordinating Committee, 1116 9th St., Lower Level, P.O. Box 94244-2220, Sacramento, CA 95814. Phone: (916) 323-6544.

Director, Labor Market Information, Colorado Department of Labor and Employment, 393 S. Harlan St., 2nd Floor, Lakewood, CO 80226-3509. Phone: (303) 937-4947.

Director, Colorado Occupational Information Coordinating Committee, State Board Community College, 1391 Speer Blvd., Suite 600, Denver, CO 80204-2554. Phone: (303) 866-4488.

Director, Research and Information, Employment Security Division, 200 Folly Brook Blvd., Wethersfield, CT 06109. Phone: (203) 566-2120.

Executive Director, Connecticut Occupational Information Coordinating Committee, Connecticut Department of Education, 25 Industrial Park Rd., Middletown, CT 06457. Phone: (203) 638-4042.

Chief, Office of Occupational and Labor Market Information, Delaware Department of Labor, P.O. Box 9029, Newark, DE 19702-9029. Phone: (302)

Executive Director, Office of Occupational and Labor Market Information, Delaware Department of Labor, University Office Plaza, P.O. Box 9029, Newark, DE 19714-9029. Phone: (302) 368-6963.

District of Columbia

Chief, Division of Labor Market Information, District of Columbia Department of Employment Services, 500 C St. NW., Room 201, Washington, DC 20001. Phone: (202) 724-7213.

Executive Director, District of Columbia Occupational Information Coordinating Committee, Department of Employment Security Services, 500 C St. NW., Room 215, Washington, DC 20001. Phone: (202) 639-1090.

Chief, Bureau of Labor Market Information, Florida Department of Labor and Employment Security, 2012 Capitol Circle SE., Room 200, Tallahassee, FL 32399-2151. Phone: (904) 488-1048.

Manager, Florida Department of Labor and Employment Security, Bureau of Labor Market Information, 2012 Capitol Circle SE., Hartman Bldg., Suite 200, Tallahassee, FL 32399-0673. Phone: (904) 488-1048.

Director, Labor Information Systems, Georgia Department of Labor, 148 International Blvd. NE., Atlanta, GA 30303. Phone: (404) 656-3177.

Executive Director, Georgia Occupational Information Coordinating Committee, Department of Labor, 148 International Blvd., Sussex Place, Atlanta, GA 30303. Phone: (404) 656-9639.

Administrator, Department of Labor, Bureau of Labor Statistics, Government of Guam, P.O. Box 9970, Tamuning, GU 96911-9970.

Executive Director, Guam State Occupational Information Coordinating Committee, Human Resource Development Agency, Jay Ease Bldg., Third Floor, P.O. Box 2817, Agana, GU 96910. Phone: (671) 646-9341.

Chief, Research and Statistics Office, Department of Labor and Industrial Relations, P.O. Box 3680, Honolulu, HI 96813. Phone: (808) 548-7639.

Executive Director, Hawaii State Occupational Information Coordinating Committee, 830 Punchbowl St., Room 315, Honolulu, HI 96813. Phone: (808) 586-8750.

Idaho

Chief, Research and Analysis, Idaho Department of Employment, 317 Main St., Boise, ID 83735-0670. Phone: (208) 334-6169.

Director, Idaho Occupational Information Coordinating Committee, Len B. Jordan Bldg., Room 301, 650 West State St., Boise, ID 83720. Phone: (208) 334-3705.

Director, Economic Information and Analysis, Illinois Department of Employment Security, 401 South State St., Room 215, Chicago, IL 60605. Phone: (312) 793-2316.

Executive Director, Illinois Occupational Information Coordinating Committee, 217 East Monroe, Suite 203, Springfield, IL 62706. Phone: (217) 785-

Program Manager, Labor Marker Information, Indiana Workforce Development, 10 North Senate Ave., Indianapolis, IN 46204. Phone: (317) 232Executive Director, Indiana Occupational Information Coordinating Committee, 309 West Washington St., Room 309, Indianapolis, IN 46204. Phone: (317) 232-8528.

Supervisor, Audit and Analysis Department, Iowa Department of Employment Services, 1000 East Grand Ave., Des Moines, IA 50319-0209. Phone: (515) 281-8181.

Acting Executive Director, Iowa Occupational Information Coordinating Committee, Iowa Department of Economic Development, 200 East Grand Ave., Des Moines, IA 50309. Phone: (515) 242-4890.

Chief, Labor Market Information Services, Kansas Department of Human Resources, 401 SW. Topeka Blvd., Topeka, KS 66603-3182. Phone: (913) 296-5058.

Director, Kansas Occupational Information Coordinating Committee, 401 Topeka Ave., Topeka, KS 66603. Phone: (913) 296-2387.

Branch Manager, Research and Statistics, Department for Employment Services, 275 East Main St., Frankfort, KY 40621. Phone: (502) 564-7976.

Information Liaison/Manager, Kentucky Occupational Information Coordinating Committee, Workforce Development Cabinet, 500 Mero St., Capital Plaza Tower, Room 305, Frankfort, KY 40601. Phone: (502) 564-4258.

Director, Research and Statistics Section, Louisiana State Department of Labor, P.O. Box 94094, Baton Rouge, LA 70804-4094. Phone: (504) 342-

Acting Director, Louisiana Occupational Information Coordinating Committee, P.O. Box 94094, Baton Rouge, LA 70804-9094. Phone: (504) 342-

Maine

Director, Division of Economic Analysis and Research, Maine Department of Labor, Bureau of Employment Security, 20 Union St., Augusta, ME 04330. Phone: (207) 289-2271.

Acting Executive Director, Maine Occupational Information Coordinating Committee, State House Station 71, Augusta, ME 04333. Phone: (207) 624-

Maryland

Director, Office of Labor Market Analysis and Information, Economic and Employment Development, 1100 North Eutaw St., Room 601, Baltimore, MD 21201. Phone: (410) 333-5000.

Director, Maryland State Occupational Information Coordinating Committee, State Department of Employment and Training, 1100 North Eutaw St., Room 205, Baltimore, MD 21201. Phone: (410) 333-5478.

Massachusetts

Director of Research, Massachusetts Department of Employment and Training, 19 Staniford St., 2nd Floor, Boston, MA 02114. Phone: (617) 727-

Director, Massachusetts Occupational Information Coordinating Committee, Massachusetts Division of Employment Security, Charles F. Hurley Bldg., 2nd Floor, Government Center, Boston, MA 02114. Phone: (617)

Michigan

Deputy Director, Financial and Management Services, Michigan Employment Security Commission, 7310 Woodward Ave., Detroit, MI 48202. Phone: (313) 876-5904.

Executive Coordinator, Michigan Occupational Information Coordinating Committee, Victor Office Center, Third Floor, 201 North Washington Square, Box 30015, Lansing, MI 48909. Phone: (517) 373-0363.

Director, Research and Statistics Office, Minnesota Department of Jobs and Training, 390 North Robert St., St. Paul, MN 55101. Phone: (612) 296-6546.

Director, Minnesota Occupational Information Coordinating Committee, Department of Jobs and Training, 390 North Robert Street, St. Paul, MN 55101. Phone: (612) 296-2072.

Mississippi

Chief, Labor Market Information Division, Mississippi Employment Security Commission, P.O. Box 1699, Jackson, MS 39215-1699. Phone: (601) 961-7424.

Director, Mississippi Occupational Information Coordinating Committee Office, 301 West Pearl St., Jackson, MS 39203-3089. Phone: (601) 949-2240.

Missouri

Chief, Research and Analysis, Missouri Division of Employment Security, P.O. Box 59, Jefferson City, MO 65104-0059. Phone: (314) 751-3591.

Director, Missouri Occupational Information Coordinating Committee, 400 Dix Rd., Jefferson City, MO 65109. Phone: (314) 751-3800.

Chief, Research and Analysis, Department of Labor and Industry, P.O. Box 1728, Helena, MT 59624-1728. Phone: (406) 444-2430.

Program Manager, Montana Occupational Information Coordinating Committee, P.O. Box 1728, 1327 Lockey St., Second Floor, Helena, MT 59624. Phone: (406) 444-2741.

Nebraska

Director, Labor Market Information, Nebraska Department of Labor, P.O. Box 94600, Lincoln, NE 68509-4600. Phone: (402) 471-9964.

Administrator, Nebraska Occupational Information Coordinating Committee, P.O. Box 94600, State House Station, Lincoln, NE 68509-4600. Phone: (402) 471-4845.

Nevada

Chief, Employment Security Research, Nevada Employment Security Department, 500 East Third St., Carson City, NV 89713. Phone: (702) 687-

Director, Nevada Occupational Information Coordinating Committee, 1923 North Carson St., Suite 211, Carson City, NV 89710. Phone: (702) 687-4577.

New Hampshire

Director, Economic Analysis and Reports, New Hampshire Department of Employment Security, 32 South Main St., Concord, NH 03301-4587. Phone: (603) 228-4123.

Director, New Hampshire State Occupational Information Coordinating Committee, 64B Old Suncook Rd., Concord, NH 03301. Phone: (603) 228-3349.

Assistant Commissioner, Policy and Planning, New Jersey Department of Labor, Labor and Industry Bldg., P.O. Box CN056, Trenton, NJ 08625-0056. Phone: (609) 292-2643.

Staff Director, New Jersey Occupational Information Coordinating Committee, 609 Labor and Industry Bldg., CN056, Trenton, NJ 08625-0056. Phone: (609) 292-2682.

New Mexico

Chief, Economic Research and Analysis Bureau, Employment Security Department, P.O. Box 1928, Albuquerque, NM 87103. Phone: (505) 841-8645.

Director, New Mexico Occupational Information Coordinating Committee, 401 Broadway NE., Tiwa Bidg., P.O. Box 1928, Albuquerque, NM 87103. Phone: (505) 841-8455.

New York

Director, Division of Research and Statistics, New York State Department of Labor, State Campus, Bldg. 12, Room 400, Albany, NY 12240-0020. Phone: (518) 457-6181.

Executive Director, New York Occupational Information Coordinating Committee, Department of Labor, Research and Statistics Division, State Campus, Bldg. 12, Room 400, Albany, NY 12240. Phone: (518) 457-6182.

North Carolina

Director, Labor Market Information Division, Employment Security Commission of North Carolina, P.O. Box 25903, Raleigh, NC 27611-5903. Phone: (919) 733-2936.

Executive Director, North Carolina Occupational Information Coordinating Committee, 1311 Saint Mary's St., Suite 250, P.O. Box 27625, Raleigh, NC 27611. Phone: (919) 733-6700.

North Dakota

Director, Research and Statistics, Job Service of North Dakota, P.O. Box 1537, Bismarck, ND 58502-1537. Phone: (701) 224-2868.

Coordinator, North Dakota State Occupational Information Coordinating Committee, 1720 Burnt Boat Dr., P.O. Box 1537, Bismarck, ND 58502-1537. Phone: (701) 224-2733.

Northern Mariana Islands

Executive Director, Northern Mariana Islands Occupational Information Coordinating Committee, P.O. Box 149, Room N-1, Building N, Northern Mariana College, Saipan, CM 96950. Phone: (670) 234-1457.

Ohio

Director, Labor Market Information Division, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43215. Phone: (614) 752-9494.

Director, Ohio Occupational Information Coordinating Committee, Division of Labor Market Information, Ohio Bureau of Employment Services, 1160 Dublin Rd., Bldg. A, Columbus, OH 43215. Phone: (614) 752-6863.

Director, Research and Planning Division, Oklahoma Employment Security Commission, 2401 North Lincoln, Room 310, Oklahoma City, OK 73105. Phone: (405) 557-7116.

Executive Director, Oklahoma Occupational Information Coordinating Committee, Department of Voc/Tech Education, 1500 W. 7th Ave., Stillwater, OK 74074. Phone: (405) 743-5198.

Oregon

Assistant Administrator, Research and Statistics, Employment Division, Oregon Department of Human Resources, 875 Union St. NE., Room 207, Salem, OR 97311-9986. Phone: (503) 378-3220.

Acting Director, Oregon Occupational Information Coordinating Committee, 875 Union St. NE., Salem, OR 97311. Phone: (503) 378-5490.

Pennsylvania

Director, Research and Statistics Division, Department of Labor and Industry, 1213 Labor and Industry Building, Harrisburg, PA 17121. Phone: (717) 787-6466.

Director, Pennsylvania Occupational Information Coordinating Committee, Pennsylvania Department of Labor and Industry, 1224 Labor and Industry Bldg., Harrisburg, PA 17120. Phone: (717) 787-8646.

Puerto Rico

Director of Bureau of Labor Statistics, Department of Labor and Human Resources, Research and Analysis Division, 505 Munoz Rivera Ave., 17th Floor, Hato Rey, PR 00918. Phone: (809) 754-5332.

Director, Puerto Rico Occupational Information Coordinating Committee, 202 Del Cristo St., P.O. Box 366212, San Juan, PR 00936-6212. Phone: (809) 723-7110.

Rhode Island

Supervisor, Labor Market Information and Management Services, Rhode Island Department of Employment, 107 Friendship St., Providence, RI 02903. Phone: (401) 277-3704.

Director, Rhode Island Occupational Information Coordinating Committee, 22 Hayes St., Room 133, Providence, RI 02908. Phone: (401) 272-0830.

South Carolina

Director, Labor Market Information Division, South Carolina Employment Security Commission, P.O. Box 995, Columbia, SC 29202-0995. Phone: (803) 737-2660.

Director, South Carolina Occupational Information Coordinating Committee, 1550 Gadsden St., P.O. Box 995, Columbia, SC 29202. Phone: (803) 737-2733.

Director, Labor Market Information Division, South Dakota Department of Labor, P.O. Box 4730, Aberdeen, SD 57402-4730. Phone: (605) 622-2314.

Director, South Dakota Occupational Information Coordinating Committee, South Dakota Department of Labor, 420 South Roosevelt St., P.O. Box 4730, Aberdeen, SD 57402-4730. Phone: (605) 622-2314.

Tennessee

Director, Research and Statistics Division, Tennessee Department of Employment Security, 500 James Robertson Pkwy., 11th Floor, Nashville, TN 37245-1000. Phone: (615) 741-2284.

Executive Director, Tennessee Occupational Information Coordinating Committee, 500 James Robertson Pkwy., 11th Floor Volunteer Plaza, Nashville, TN 37219. Phone: (615) 741-6451.

Chief, Economic Research and Analysis, Texas Employment Commission, 1117 Trinity St., Room 208-T, Austin, TX 78778. Phone: (512) 463-2616.

Director, Texas Occupational Information Coordinating Committee, Texas Employment Commission Building, 3520 Executive Center Dr., Suite 205, Austin, TX 78731. Phone: (512) 502-3750.

Director, Labor Market Information, Utah Department of Employment Security, P.O. Box 11249, Salt Lake City, UT 84147-1249. Phone: (801) 536-

Executive Director, Utah Occupational Information Coordinating Committee-c/o Utah Department of Employment Security, P.O. Box 11249, 140 East 300 South, Salt Lake City, UT 84147. Phone: (801) 536-7806.

Vermont

Chief, Policy and Public Information, Vermont Department of Employment and Training, P.O. Box 488, Montpelier, VT 05602. Phone: (802) 229-0311.

Director, Vermont Occupational Information Coordinating Committee, 5 Green Mountain Dr., P.O. Box 488, Montpelier, VT 05601-0488. Phone: (802) 229-0311.

Virginia

Director, Economic Information Service, Virginia Employment Commission, P.O. Box 1358, Richmond, VA 23211. Phone: (804) 786-7496.

Executive Director, Virginia Occupational Information Coordinating Committee, Virginia Employment Commission, 703 East Main St., P.O. Box 1358, Richmond, VA 23211. Phone: (804) 786-7496.

Virgin Islands

Director, Virgin Islands Department of Labor, Bureau of Labor Statistics, Labor/Research and Analysis Division, P.O. Box 3359, St. Thomas, U.S. Virgin Islands 00801-3359. Phone: (809) 776-3700.

Coordinator, Virgin Islands Occupational Information Coordinating Committee, P.O. Box 3359, St. Thomas, U.S. Virgin Islands 00801. Phone: (809) 776-3700.

Washington

Director, Labor Market and Economic Analysis, Washington Employment Security Department, 605 Woodview Dr., SE, Lacey, WA 98503. Phone: (206) 438-4800.

Acting Executive Director, Washington Occupational Information Coordinating Committee, c/o Employment Security Department, P.O. Box 9046, Olympia, WA 98507-9046. Phone: (206) 438-4803.

West Virginia

Director, Labor and Economic Research Section, West Virginia Bureau of Employment Security, 112 California Ave., Charleston, WV 25305-0112. Phone: (304) 348-2660.

Executive Director, West Virginia Occupational Information Coordinating Committee, One Dunbar Plaza, Suite E, Dunbar, WV 25064. Phone: (304)

Wisconsin

Director, Bureau of Workforce Policy and Information, Department of Industry, Labor, and Human Relations, P.O. Box 7944, Madison, WI 53707-7944. Phone: (608) 266-5843.

Administrative Director, Wisconsin Occupational Information Coordinating Council, Division of Employment and Training Policy, 201 East Washington Ave., P.O. Box 7972, Madison, WI 53707. Phone: (608) 266-8012.

Wyoming

Manager, Research and Planning, Employment Security Commission, P.O. Box 2760, Casper, WY 82602-2760. Phone: (307) 265-6715.

Executive Director, Wyoming Occupational Information Coordinating Council, Post Office Box 2760, 100 West Midwest, Casper, WY 82602. Phone: (307) 265-7017.

15

Selected items from The Bureau of Labor Statistics library of

Career and Job Outlook Publications Do you have the latest editions?

Occupational Outlook Handbook - 1994-95 Edition

The original, and still leading source of authoritative, nontechnical career information for about 250 occupations. Each description includes information on nature of the work, training required, earnings, job prospects, and sources of additional information. 473 pp., \$26, hard cover; \$23, soft cover.

Occupational Outlook Handbook Reprints

Groups of related jobs covered in the 1994-95 *Occupational Outlook Handbook* are available as individual reprints. These reprints are especially useful for jobseekers who want to know about a single field and for counselors who need to stretch the contents of a single *Handbook* among many students.

No. 2450 2450-1 2450-2 2450-3 2450-4 2450-5 2450-6 2450-7 2450-8 2450-9 2450-10 2450-11 2450-12 2450-13 2450-14 2450-15 2450-16 2450-17	Collated set of all 20 reprints Tomorrow's Jobs: Overview Business and Managerial Occupations Engineering, Scientific, and Related Occupations Computer and Mathematics-Related Occupations Social Science and Legal Occupations Education and Social Service Occupations and Clergy Health Diagnosing Occupations and Assistants Dietetics, Nursing, Pharmacy, and Therapy Occupations Health Technologists and Technicians Communications, Design, Performing Arts, and Related Occupations Technologists and Technicians, Except Health Sales Occupations Clerical and Other Administrative Support Occupations Protective Service Occupations and Compliance Inspectors Service Occupations: Cleaning, Food, Health, and Personal Mechanics, Equipment Installers and Repairers Construction Trade and Extractive Occupations	Price \$24.00 1.25 2.75 1.75 2.00 1.50 2.00 1.50 1.50 1.50 1.50 1.50 2.00 1.50 2.00 1.50
2450-17	Mechanics, Equipment Installers and Repairers Construction Trade and Extractive Occupations	1.50
2450-18 2450-19 2450-20	Metalworking, Plastic-working, and Woodworking Occupations Production Occupations Transportation and Forestry, Fishing, and Related Occupations	2.00 1.50 2.00
	y, and notated observations	2.00

Occupational Outlook Quarterly

Keeps you informed about new studies by the Bureau of Labor Statistics. Articles cover a wide range of subjects useful to job counselors, labor force analysts, and people choosing careers. New and emerging jobs, unusual jobs, employment projections and trends, and changing technology are a few of the areas covered by this award-winning magazine. Four issues, 40 pages each, in color, \$8.00; single copy \$2.75.

Publications can be purchased from New Orders, Superintendent from New Orders, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954; Payment or GPO deposit account 15250-7954; Pa

