

OCCUPATIONS IN THE TELEPHONE INDUSTRY

Just about everyone has a telephone. Many households have two or more, and large businesses and organizations have hundreds. Some people have telephones in their cars and on their boats. A few even have portable telephones that they carry with them like briefcases. There also are thousands of public telephones on street corners and in airports, restaurants, and stores. Altogether, more than 155 million telephones were in use in the United States in 1976, and people made over 600 million local and long-distance calls every day.

To provide all this service, telephone companies employed approximately 920,000 persons in 1976. Most worked in telephone craft occupations, in clerical occupations, or as telephone operators.

The telephone industry offers steady, year-round employment in jobs requiring a variety of skills and training. Most require a high school education; some can be learned on the job. Many require particular skills that may take several years of experience, in addition to 9 months of training, to learn completely.

Telephone jobs are found in almost every community, but most telephone employees work in cities that have large concentrations of industrial and business establishments. The nerve center of every local telephone system is the central office that contains the switching equipment through which one telephone may be connected with any other telephone. When a call is made, the signals travel from the caller's telephone through wires and cables to the cable vault in the central office. Here thousands of pairs of wires, including a pair for the caller's telephone, fan out to a distributing frame where each pair is attached to

switching equipment. As the number is dialed, electromechanical and electronic switching equipment make the connection automatically, and, in seconds, the caller hears the telephone ringing. Only in a few remaining switchboards and in unusual situations does an operator make the connection.

Because some customers make and receive more calls than a single telephone line can handle, a system somewhat similar to a miniature central office may be installed on the customer's premises. This system is the private branch exchange (PBX), usually found in office buildings, hotels, department stores, and other business firms.

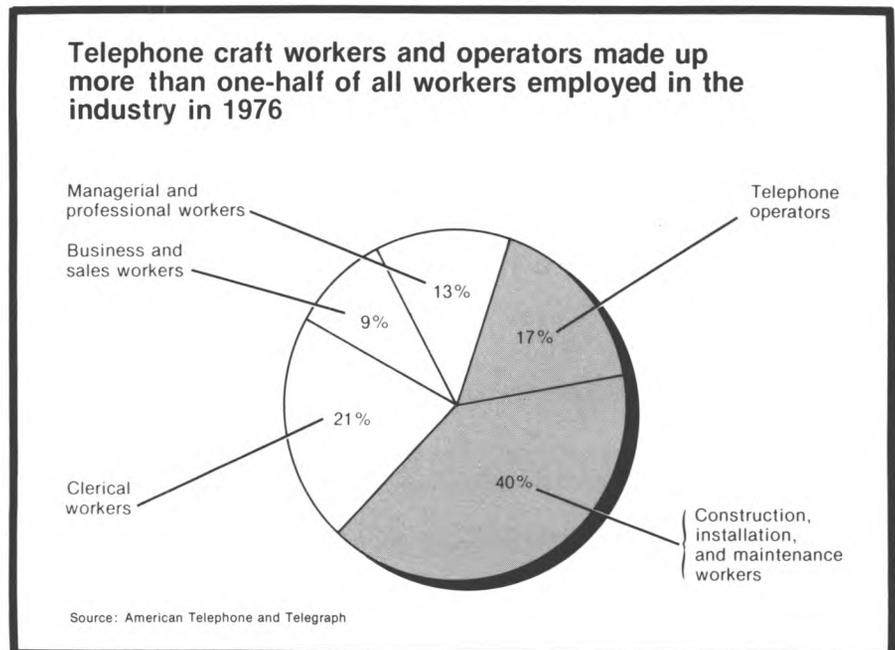
Another type of service for businesses is called CENTREX, in which incoming calls can be dialed to any extension without an operator's assistance, and outgoing and interoffice calls can be dialed by the extension users. This equipment can be

located either on telephone company premises or on the customer's premises. CENTREX has replaced PBX in popularity among business and industrial users that handle a very large volume of calls. However, PBX is still more popular with smaller users.

Other communications services provided by telephone companies include conference equipment installed at a PBX to permit conversations among several telephone users simultaneously; mobile radio-telephones in automobiles, boats, airplanes, and trains; and telephones equipped to answer calls automatically and to give and take messages by recordings.

Besides providing telephones and switching equipment, telephone companies build and maintain most of the vast network of cables and radio-relay systems needed for communications services, including those that join the thousands of broadcasting stations around the country. These services are leased to networks and their affiliated stations. Telephone companies also lease data and private wire services to business and government offices.

The Bell System owns more than 4 out of 5 of the Nation's telephones. Independent telephone companies own the remainder. There are approximately 1,600 independent telephone companies in the United



States. General Telephone and Electronics Corp., United Utilities, Inc., and Continental Telephone Corp., service about 2 out of every 3 telephones owned by independent companies.

Telephone Occupations

Although the telephone industry requires workers in many different occupations, telephone craft workers and operators make up more than one-half of all workers. (See accompanying chart.)

Telephone craft workers install, repair, and maintain telephones, cables, switching equipment, and message accounting systems. These workers can be grouped by the type of work they perform. Construction workers place, splice, and maintain telephone wires and cables; installers and repairers place, maintain, and repair telephones and private branch exchanges (PBX) in homes and offices and other places of business; and central office craft workers test, maintain, and repair equipment in central offices.

Operators make telephone connections; assist customers in specialized services, such as reverse-charge calls; and provide information. Detailed discussions of telephone craft occupations and telephone and PBX operators are presented elsewhere in the *Handbook*.

More than one-fifth of all telephone industry employees are clerical workers. They include stenographers, typists, bookkeepers, office machine and computer operators, keypunch operators, cashiers, receptionists, file clerks, accounting and auditing clerks, and payroll clerks. Clerical workers keep records of services, make up and send bills to customers, and prepare statistical and other reports.

About one-tenth of the industry's employees are professional workers. Many of these are scientific and technical personnel such as engineers and drafters. Engineers plan cable and microwave routes, central office and PBX equipment installations, new buildings, and the expansion of existing structures, and solve other engineering problems.



Traffic operator uses computer terminal to complete customer's call.

Some engineers also engage in research and development of new equipment, and persons with engineering backgrounds often advance to fill top managerial and administrative positions. Other professional and technical workers are accountants, personnel and labor relations workers, public relations specialists and publicity writers, computer systems analysts, computer programmers, and lawyers.

About 1 in every 12 of the industry's employees is a business and sales representative. These employees sell new communications services and directory advertising and handle requests for installing or discontinuing telephone service.

About 3 percent of the industry's workers maintain buildings, offices, and warehouses; operate and service motor vehicles; and do other maintenance

jobs in offices and plants. Skilled maintenance workers include stationary engineers, carpenters, painters, electricians, and plumbers. Other workers employed by the telephone industry are janitors, porters, and guards.

Employment Outlook

Telephone industry employment is expected to increase about as fast as the average for all industries through the mid-1980's. In addition to the jobs from employment growth, tens of thousands of openings will arise each year because of the need to replace experienced workers who retire, die, or leave their jobs for other reasons.

Employment will grow primarily because higher incomes and a larger and more mobile population will in-

crease the use of telephone service. Greater demand for transmission of computer-processed data and other information via telephone company lines also will stimulate employment growth. Laborsaving innovations, however, will keep employment from growing as rapidly as telephone service.

Employment of telephone operators is expected to decline. As the number of telephone companies charging customers for directory assistance calls increases, more people will dial numbers directly and use telephone directories to locate needed numbers, thus reducing the need for operators. Also, improved switching equipment will allow more calls to be connected without an operator's assistance, and more advanced billing systems will automatically relay billing information to computerized files that are used in preparing customer's billing statements. Technological innovations will restrict employment growth in some skilled crafts. For example, mechanical improvements, such as pole-lifting equipment and earth-boring tools, have limited the employment of line installers by increasing their efficiency.

New technology, however, is expected to increase the demand for engineering and technical personnel, especially electrical and electronic engineers and technicians, computer programmers, and systems analysts. Employment in administrative and sales occupations will rise as telephone business increases.

Earnings and Working Conditions

In 1976, earnings for nonsupervisory telephone employees averaged \$6.46 an hour. In comparison, nonsupervisory workers in all private industries, except farming, averaged \$4.87 an hour.

In late 1975, basic rates ranged from an average of \$3.75 an hour for telephone operator trainees to \$10.76 for professional and semiprofessional workers other than drafters.

A telephone employee usually starts at the minimum wage for the particular job. Advancement from the starting rate to the maximum rate

generally takes 5 years, but operators and clerical employees of some companies may reach the maximum rate in 4 years.

More than two-thirds of the workers in the industry, mainly telephone operators and craft workers, are members of labor unions. The two principal unions representing workers in the telephone industry are the Communications Workers of America and the International Brotherhood of Electrical Workers, but many other employees are members of the 15 independent unions that form the Telecommunications International Union.

Union contracts govern wage rates, wage increases, and the amount of time required to advance from one step to the next for most telephone workers. The contracts also call for extra pay for work beyond the normal 8 hours a day, or 5 days a week, and for all Sunday and holiday work. Most contracts provide a pay differential for night work.

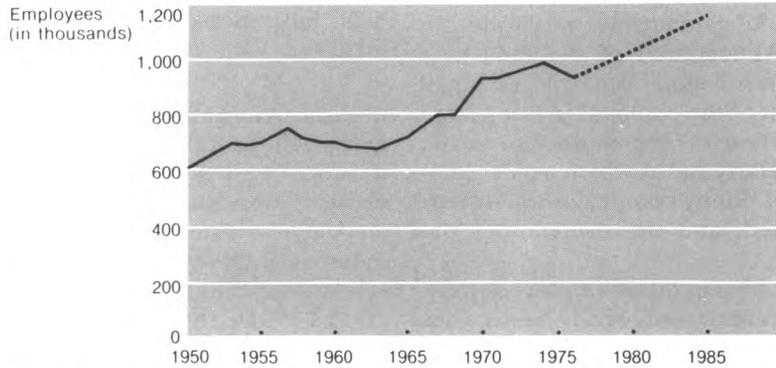
Overtime work sometimes is required, especially during emergencies, such as floods, hurricanes, or bad storms. During an "emergency call-out," which is a short-notice request to report for work during non-scheduled hours, workers are guar-



Some line installers work underground.

Although employment in the telephone industry will fluctuate due to economic cycles, moderate long-term growth is expected

Wage and salary workers in telephone communication, 1950-76 and projected 1985



Source: Bureau of Labor Statistics

anted a minimum period of pay at the basic hourly rate. Travel time between jobs is counted as worktime for craft workers under some contracts.

Paid vacations are granted according to length of service. Usually, con-

tracts provide for a 1-week vacation beginning with 6 months of service; 2 weeks for 1 to 7 years; 3 weeks for 8 to 15 years; 4 weeks for 16 to 24 years; and 5 weeks for 25 years and over. Depending on locality, holidays range from 9 to 11 days a year. Most

telephone workers are covered by paid sick leave plans and group insurance which usually provide sickness, accident, and death benefits and retirement and disability pensions.

The telephone industry has one of the best safety records in American industry. The number of disabling injuries has been well below the average.

Sources of Additional Information

More details about employment opportunities are available from the telephone company in your community or local offices of the unions that represent telephone workers. If no local union is listed in the telephone directory, write to:

Telecommunications International Union,
P.O. Box 5462, Hamden, Conn. 06518.

International Brotherhood of Electrical Workers, 1200 15th St. NW., Washington, D.C. 20005.

United States Independent Telephone Association, 1801 K St. NW., Suite 1201, Washington, D.C. 20006.

OCCUPATIONS IN THE TRUCKING INDUSTRY

In 1976, the trucking industry employed approximately 1.2 million workers—more than the rival rail, air, and pipeline transportation industries combined. It is a major employer of persons not planning to attend college, since nearly 90 percent of its employees are freight handlers, drivers, truck maintenance personnel, or clerical workers—occupations which only require a high school education.

Nature and Location of the Industry

The trucking industry is made up of companies that sell transportation and storage services. Although many trucking companies serve only a single city and its suburbs, and others carry goods only between distant cities, most large trucking firms provide both types of service. Some firms operate one type of truck and specialize in one type of product. For example, they may carry steel rods on flat trailers or grain in open top vans. In addition, trucking companies may operate as either contract or common carriers. Contract carriers haul commodities of one or a few shippers exclusively; common carriers offer transportation services to businesses in general.

Trucking companies vary widely in size. Almost half of the industry's workers are employed by less than 10 percent of the companies. But a large proportion of companies are small, particularly those which serve a single city. Many companies are owner-operated, and the owner does the driving.

Trucking industry employees work in cities and towns of all sizes and are distributed much the same as the Nation's population.

Occupations in the Industry

About four-fifths of all trucking industry employees have blue-collar jobs, including about 620,000 truckdrivers. Other large blue-collar occupations are material handlers, mechanics, washers and lubricators, and supervisors. Most white-collar employees are clerical workers, such as secretaries and rate clerks, and administrative personnel, such as terminal managers and accountants.

The duties and training requirements of some of these occupations are described briefly in the following sections.

Truckdriving Occupations. More than half of the industry's employees are drivers. *Long-distance truckdrivers*

(D.O.T. 904.883) spend nearly all their working hours driving large trucks or tractor trailers between terminals. Some drivers load and unload their trucks, but the usual practice is to have other employees do this work. *Local truckdrivers* (D.O.T. 906.883) operate trucks over short distances, usually within one city and its suburbs. They pick up goods from, and deliver goods to, trucking terminals, businesses, and homes in the area.

Clerical Occupations. About 1 out of every 8 of the industry's employees is a clerical worker. Many have general clerical jobs, such as secretary or clerk-typist, which are common to all industries. Others have specialized jobs. For example, *dispatchers* (D.O.T. 919.168) coordinate the movement of trucks and freight into and out of terminals; make up loads for specific destinations; assign drivers and develop delivery schedules; handle customers' requests for pick-up of freight, and provide information on deliveries. *Claims adjusters* (D.O.T. 241.368) handle claims for freight lost or damaged during transit. *Manifest clerks* (D.O.T. 222.488) prepare forms that list details of freight shipments. *Parts-order clerks* (D.O.T. 223.387) supply mechanics with replacement parts for trucks; they also take care of most of the



The trucking industry employed about 1.2 million workers in 1976.



Rate clerk calculates the cost for shipping each item.

clerical duties needed to maintain a truck repair shop.

Administrative and Related Occupations. More than 1 out of 15 employees is an administrator. Top executives manage companies and make policy decisions. Middle managers supervise the operation of individual departments, terminals, or warehouses. A small number of accountants and lawyers are employed by these companies. The industry also employs sales representatives to solicit freight business.

Material Handling Occupations. About 1 out of 12 employees moves freight into and out of trucks and

warehouses. Much of this work is done by *material handlers* (D.O.T. 929.887) who work in groups of three or four under the direction of a dock supervisor or gang leader. Material handlers load and unload freight with the aid of handtrucks, conveyors, and other devices. Heavy items are moved by *power truck operators* (D.O.T. 922.883) and *crane operators* (D.O.T. 921.280). Gang leaders determine the order in which items will be loaded, so that the cargo is balanced and items to be unloaded first are near the truck's door. *Truckdrivers' helpers* (D.O.T. 905.887) travel with drivers to unload and pick up freight. Occasionally, helpers may do relief driving.

Truck Maintenance Occupations. About 1 out of every 20 employees takes care of the trucks. *Truck mechanics* (D.O.T. 620.281) keep trucks and trailers in good running condition. Much time is spent in preventive maintenance to assure safe operation, to check wear and damage to parts, and to reduce breakdowns. When breakdowns do occur, these workers determine the cause and make the necessary repairs. *Truck mechanic helpers* (D.O.T. 620.884) and apprentices assist experienced mechanics in inspection and repair work. *Truck lubricators and washers* (D.O.T. 915.887 and 919.887) clean, lubricate, and refuel trucks, change tires, and do other routine maintenance.

Training, Other Qualifications, and Advancement

Workers in blue-collar occupations usually are hired at the unskilled level, as material handlers, truckdrivers' helpers, lubricators, and washers. No formal training is required for these jobs, but many employers prefer high school graduates. Applicants must be in good physical condition. New employees work under the guidance of experienced workers and supervisors while learning their jobs; this usually takes no more than a few weeks. As vacancies occur, workers advance to more skilled blue-collar jobs, such as power truck operator and truckdriver. The ability to do the job and length of service with the firm are the primary qualifications for promotion. Material handlers who demonstrate supervisory ability can become gang leaders or dock supervisors.

Qualifications for truckdriving jobs vary and depend on individual employers, the type of truck, and other factors. In most States, drivers must have a chauffeur's license, which is a commercial driving permit obtained from State motor vehicle departments. The U.S. Department of Transportation establishes minimum qualifications for drivers who transport goods between States. They must be at least 21 years old, be able-bodied, have good hearing, and have at least 20/40 vision with or without glasses. However, many



Much of the truck mechanic's time is spent in preventive maintenance.

firms will not hire long-distance drivers under 25 years of age. Drivers also must be able to read, speak, and write English well enough to complete required reports. Drivers must have good driving records.

People interested in professional driving should take the driver-training courses offered by many high schools. A course in automotive mechanics also is helpful. Private truck-driving training schools offer another opportunity to prepare for a driving job; however, completion of such a course does not assure employment as a driver.

Most truck mechanics learn their skills informally on the job as helpers to experienced mechanics. Others complete formal apprenticeship programs that generally last 4 years and include on-the-job training and related classroom instruction. Unskilled workers, such as lubricators and washers, frequently are promoted to jobs as helpers and apprentices. However, many firms will hire inexperienced people, especially those who have completed courses in automotive mechanics, for helper or apprentice jobs.

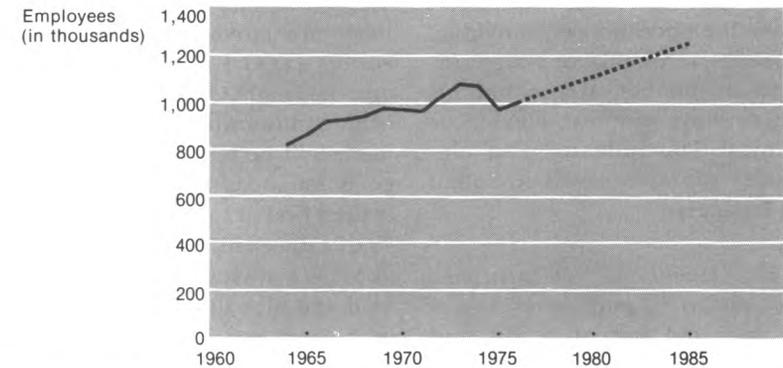
Completion of commercial courses in high school or in a private business school is usually adequate for entry into general clerical occupations such as secretary or typist. Additional on-the-job training is needed for specialized clerical occupations such as claims adjuster.

Generally, no specialized education is needed for dispatcher jobs. Openings are filled by truckdrivers, claims adjusters, or other workers who know their company's operations and are familiar with State and Federal driving regulations. Candidates may improve their qualifications by taking college or technical school courses in transportation.

Administrative and sales positions frequently are filled by college graduates who have majored in business administration, marketing, accounting, industrial relations, or transportation. Some companies have management training programs for college graduates in which trainees work for brief periods in various departments to get a broad understanding of trucking operations before they are assigned to a particular

Substantial long-term employment growth is expected in the trucking industry, although declines may occur during economic downturns

Wage and salary employees in trucking and trucking terminals, 1964-76 and projected 1985



Source: Bureau of Labor Statistics

department. High school graduates may be promoted to administrative and sales positions.

Employment Outlook

Employment in the trucking industry is expected to grow about as fast as the average for all industries through the mid-1980's. In addition to the large number of job openings created by employment growth, thousands more will arise as experienced workers retire, die, or transfer to other fields. The number of jobs may vary from year to year, however, because the amount of freight fluctuates with ups and downs in the economy.

Trucks carry virtually all freight for local distribution and a great deal of freight between distant cities. As the volume of freight increases with the Nation's economic growth, employment in the trucking industry will rise. More employees also will be needed to serve the many factories, warehouses, stores, and homes being built where railroad transportation is not available.

Employment will not increase as fast as the demand for trucking services because technological developments will increase output per worker. For example, more efficient freight-handling methods—such as conveyors and draglines to move freight in and out of terminals and

warehouses—will increase the efficiency of material handlers. Larger trucks as well as more efficient packaging techniques will allow truckdrivers to carry more cargo.

Earnings and Working Conditions

In 1976, nonsupervisory workers in the trucking industry averaged \$6.57 an hour, compared with \$4.87 an hour for their counterparts in all private industry, except farming. Earnings are relatively high in the trucking industry, because highly paid drivers represent a large proportion of employment; many long-distance drivers earn more than \$300 a week.

Most employees are paid an hourly rate or a weekly or monthly salary. However, truckdrivers on the longer runs generally are paid on a mileage basis while driving. For all other worktime, they are paid an hourly rate.

Working conditions vary greatly among occupations in the industry. While maneuvering large trucks in fast-moving traffic can cause tension, more comfortable seating, power steering, and air-conditioned cabs have reduced physical strain. Long-distance drivers frequently work at night and may spend time away from home; local drivers usually work during the day. Material handlers and

truckdrivers' helpers have strenuous jobs, although conveyor systems and other freight handling equipment have reduced some of the heavier lifting, making the work easier and safer. Truck mechanics and other maintenance personnel may have to work in awkward or cramped positions while servicing vehicles, and frequently get dirty because of the grease and oil on the trucks. In addition, most maintenance shops are hot in summer and drafty in the winter.

Mechanics occasionally make repairs outdoors when a truck breaks down on the road.

Many large organizations operate around the clock and require some material handling and maintenance personnel to work evenings, nights, and weekends.

A large number of trucking industry employees are members of the International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America (Ind).

Sources of Additional Information

For general information about career opportunities in the trucking industry, write to:

American Trucking Associations, Inc., 1616 P St. NW., Washington, D.C. 20036.

Information about specific jobs may be available from the personnel departments of local trucking companies or the local office of your State employment service.

WHOLESALE AND RETAIL TRADE

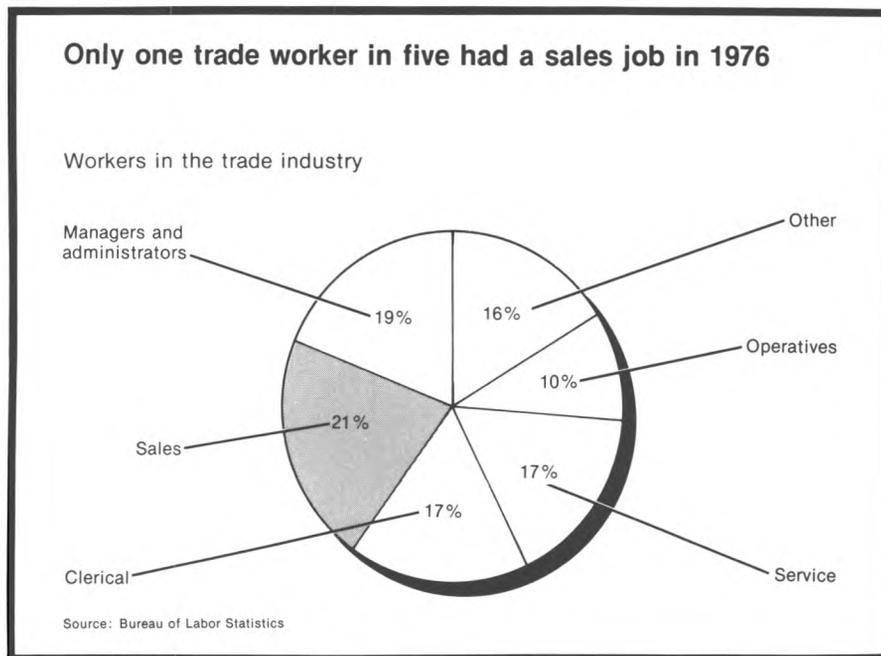
Wholesaling and retailing are the final stages in the transfer of goods from producers to consumers. Wholesalers assemble goods in large lots for distribution to retail stores, industrial firms, and institutions such as schools and hospitals. Retailers sell goods directly to consumers in a variety of ways—in stores, by mail, or through door-to-door selling. A list of the items sold by wholesale and retail businesses would include almost every item produced by industry—automobiles, clothing, food, furniture, and countless others.

In 1976, about 17.7 million people (not counting an estimated 1.7 million who were self-employed persons or unpaid family workers) worked in wholesale and retail trade. The largest number of workers—13.4 million or about three-fourths of them—were employed in retail trade. The majority of these workers held jobs in department stores, food stores, and restaurants and other eating places. About 4.3 million people worked in wholesale trade.

Workers with a wide range of education, training, and skills hold jobs in wholesale and retail trade. As shown in the accompanying tabulation, almost 3 out of 5 workers in these industry divisions are white-collar workers (professional, managerial, clerical, and sales). Sales workers, the largest single group, make up more than one-fifth of total industry employment. Managers and proprietors, the second largest group, constitute nearly one-fifth of the industry's work force. Many managers and proprietors own and operate small wholesale houses or retail outlets such as food stores and gas stations. Clerical workers make up over one-sixth of the work force; many hold jobs as cashiers, especially in supermarkets and other food stores. Important clerical occupations in retail trade also include sec-

retaries, typists, office machine operators, bookkeepers, and accounting clerks. Large numbers of shipping and receiving clerks work in both wholesale and retail trade.

Blue-collar workers (craftworkers, operatives, and laborers) constitute nearly one-fourth of the industry's jobholders. Many work as mechanics and repairers, gas station attendants,



drivers and delivery workers, meatcutters, and materials handlers. Most mechanics work for motor vehicle dealers and gasoline service stations. A large number of meatcutters work in wholesale grocery establishments and in supermarkets and other food stores.

Service workers, employed mostly in retail trade, constitute about 1 out of 6 workers in the industry. Food service workers, such as waitresses and cooks, make up by far the largest

concentration of service workers. Other large groups of service workers are janitors, cleaners, and guards.

Employment in wholesale and retail trade is expected to increase by about the same rate as the average for all industries through mid-1980's as sales rise in response to growth in population and income. Due to labor-saving innovations, however, employment is not expected to grow as fast as sales. The use of computers for inventory control and billing, for

example, may limit the need for additional clerical workers. Improved methods of handling and storing merchandise will limit the demand for laborers.

The statements that follow discuss job opportunities in restaurants and food stores. More detailed information about occupations that cut across many industries appears elsewhere in the *Handbook*.

OCCUPATIONS IN THE RESTAURANT INDUSTRY

In 1976, the restaurant industry was the third largest industry in the country, employing 3.7 million people in establishments ranging from roadside diners to luxurious restaurants. The type of food and service a restaurant offers varies with its size and location, as well as with the kind of customer it seeks to attract. Fast-food restaurants and cafeterias in suburban shopping centers emphasize rapid service and inexpensive meals. Steak houses and pizza places consider the quality of their specialty most important. Some restaurants cater to customers who wish to eat a leisurely meal in elegant surroundings and their menus often include unusual dishes or "specialties of the house."

Most restaurants are small and have fewer than 10 paid employees; some of these are operated by their owners. An increasing proportion of

restaurants, however, are part of a chain operation.

Restaurant jobs are found almost everywhere. Although employment is concentrated in the States with the largest populations and particularly in large cities, even very small communities have sandwich shops and roadside diners.

Restaurant Workers

About three-fourths of all restaurant employees prepare and serve food, and keep cooking and eating areas clean. Waiters and waitresses, and cooks and chefs make up the two largest groups of workers. Others are counter workers, who serve food in cafeterias and fast-food restaurants; bartenders, who mix and serve drinks; dining room attendants, who clear tables, carry dirty dishes back

to the kitchen, and sometimes set tables; dishwashers, who wash dishes and help keep the kitchen clean; pantry workers, who prepare salads, sandwiches, and certain other dishes; and janitors and porters, who dispose of trash, sweep and mop floors, and keep the restaurant clean. Some of these workers operate mechanical equipment such as dishwashers, floor polishers, and vegetable slicers. (Detailed information on cooks and chefs, waiters and waitresses, bartenders, food counter workers, and dining room attendants and dishwashers is given elsewhere in the *Handbook*.)

Another large group of restaurant workers—about one-seventh of the total—are managers and proprietors. Many are owners and operators of small restaurants and, in addition to acting as managers, may cook and do other work. Some are salaried employees who manage restaurants for others.

All other restaurant workers combined account for about one-sixth of total industry employment. Most are clerical workers—cashiers who receive payments and make change for customers; food checkers who total the cost of items selected by cafeteria customers; and bookkeepers, typists, and other office workers. A few restaurants employ dietitians to plan menus, supervise food preparation, and enforce sanitary regulations. Restaurant chains and some large restaurants employ mechanics and other maintenance workers, accountants, advertising or public relations directors, personnel workers, and musicians and other entertainers.

Training, Other Qualifications, and Advancement

The skills and experience needed for restaurant work vary from one occupation to another. Many jobs require no special training or experience, while others require some college or managerial experience. Requirements also vary from one restaurant to another; large or expensive restaurants usually have higher educational and experience standards than diners or small restaurants.



With 3.7 million employees in 1976, restaurants made up the third largest industry in the country.

Persons who have less than a high school education and no previous experience often qualify for jobs as kitchen workers, dishwashers, or dining room attendants. Although a high school education is not mandatory, some restaurants hire only those with a diploma and some hire only experienced waiters and waitresses, cooks, and bartenders. Special training or many years of experience or both usually are required for chefs' positions.

Newly hired restaurant workers generally are trained on the job. Kitchen workers, for example, may be taught to operate a lettuce-shredder and make salads. Waiters and waitresses are taught to set tables, take orders from customers, and serve food in a courteous and efficient manner. In many restaurants, new employees receive their training under the close supervision of an experienced employee or the manager. Large restaurants and some chain restaurant operations may have more formal programs that often include several days of training sessions for beginners. Some employers, such as fast-food restaurants, use instructional booklets and audio-visual aids to train new employees.

Many public and private high schools offer vocational courses for persons interested in restaurant training. Usually included are food preparation, catering, restaurant management, and other related subjects. Similar training programs are available for a variety of occupations through hotel and motel associations, restaurant associations and trade unions, technical schools, junior and community colleges, and 4-year colleges. Programs range in length from a few months to 2 years or more. The Armed Forces are another good source of training and experience in food service work.

When hiring food service workers such as waiters and waitresses and cooks and chefs, employers look for applicants who have good health and physical stamina because the work is often tiring. Because of the need to work closely with others and under considerable pressure, applicants should be able to remain calm under stress. In addition, a neat appearance and a pleasant manner are important

for bartenders, waiters and waitresses and other employees who meet the public. Advancement opportunities in restaurants vary among the occupations. They are best for cooks who may advance to chef, or supervisory or management positions, particularly in hotels, clubs, or larger, more elegant restaurants. Experience as maitre d'hotel may lead to a position as director of food and beverage services in a large chain organization. For most other restaurant occupations, however, advancement is limited, principally because of the small size of most food service establishments. For some occupations, such as food counter workers in fast-food restaurants, advancement is further limited because most workers remain employed for only a short time.

Although many restaurant managers obtain their positions through hard work and advancement within a restaurant's staff, it is becoming increasingly important for restaurant managers to have a college degree in hotel, restaurant or institutional management. Graduates employed by hotels and restaurants usually go through a management training program before being given much supervisory and administrative responsibility. They often are hired as assistant

managers and subsequently advance to manager. From there it is possible, particularly in the large restaurant chains, to advance to a top management position. Those with the necessary capital may open their own eating establishments.

Employment Outlook

Employment in the restaurant industry is expected to increase faster than the average for all industries through the mid-1980's. In addition to the openings arising from employment growth, thousands of openings are expected each year due to turnover—the need to replace experienced employees who find other jobs or who retire, die, or stop working for other reasons. Turnover is particularly high among part-time workers, many of whom are students. As a result, there are plenty of jobs available in this industry for interested persons, including those with limited skills.

Most openings will be for waiters and waitresses and cooks—both because of their high replacement needs and because these workers make up a very large proportion of all restaurant employees. High school students make up a large percentage of the workers in fast-food

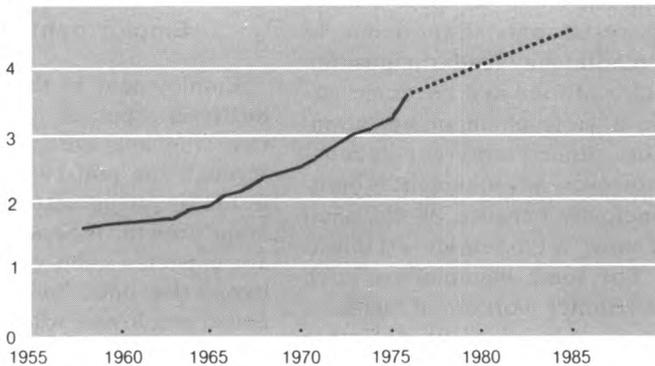


Employment in restaurants is expected to increase faster than the average for all industries.

Continued rapid employment growth resulting from population growth, rising personal incomes, and more leisure time is expected in the restaurant industry

Wage and salary workers in eating and drinking places, 1958-76 and projected 1985

Employees
(in millions)



restaurants. Employment opportunities also are expected to be favorable for food counter workers. The number of openings in clerical jobs, such as cashier, will be relatively small. A few openings will occur in specialized positions, such as food manager and dietitian.

Population growth, rising personal incomes, and more leisure time will contribute to a growing demand for restaurant services. Also, as an increasing number of wives work, more and more families may find dining out a welcome convenience. Fast-food and other multiunit restaurants constitute the fastest growing segment of this industry. Many food service workers will be needed to serve the increasing number of customers served by these restaurants. Increasing worker productivity, however, will prevent employment from growing as rapidly as demand for restaurant services. Restaurants have become more efficient as fast-food service counters have become more popular, and as managers have centralized the purchase of food supplies, introduced self-service, and used precut meats and modern equipment. Many restaurants now use frozen entrees in individual portions, which require less time and skill to prepare than fresh foods.

Earnings and Working Conditions

Earnings of restaurant workers depend on the location, size, type, and degree of unionization of the restaurant in which they work. Also, workers in some occupations receive tips in addition to their wages.

In 1976, nonsupervisory workers in the restaurant industry averaged \$2.50 an hour (excluding tips). Data from union contracts covering eating and drinking places in several large cities indicate the following range of hourly earnings for individual occupations:

	Hourly rate range ¹
Chefs.....	\$3.11-6.01
Bartenders.....	2.85-5.33
Cooks.....	2.81-5.19
Pantry workers.....	2.08-4.38
Kitchen helpers.....	2.12-4.14
Assistant cooks.....	2.02-4.05
Checkers.....	2.25-3.94
Food counter workers.....	1.67-3.79
Porters.....	2.24-3.75
Dishwashers.....	1.94-3.75
Cashiers.....	2.24-3.58
Dining room attendants.....	1.26-3.41
Waiters and waitresses.....	1.25-2.95

¹ Tips not included.

Salaries of managerial workers differ widely because of differences in duties and responsibilities. Many college graduates who had specialized training in restaurant management received starting salaries ranging from \$10,000 to \$12,000 annually in 1976. Managerial trainees without this background often started at lower salaries. Many experienced managers earned between \$15,000 and \$30,000 a year.

In addition to wages, restaurant employees usually get at least one free meal a day, and often are provided with uniforms. Waiters, waitresses, and bartenders also may receive tips.

Most full-time restaurant employees work 30 to 48 hours a week; scheduled hours may include evenings, holidays, and weekends. Some work on split shifts, which means they are on duty for several hours during one meal, take some time off, and then return to work for the next busy period.

Many restaurants have convenient work areas, and are furnished with the latest equipment and laborsaving devices. Others, particularly small restaurants, offer less desirable working conditions. In all restaurants, workers may stand much of the time, have to lift heavy trays and pots, or work near hot ovens or steam tables. Work hazards include the possibility of burns; sprains from lifting heavy trays and other items; and slips and falls on wet floors.

The principal union in the restaurant industry is the Hotel and Restaurant Employees and Bartenders International Union (AFL-CIO). The proportion of workers covered by union contracts varies greatly from city to city.

Sources of Additional Information

For additional information about careers in the restaurant industry, write to:

National Institute for the Foodservice Industry, 120 South Riverside Plaza, Chicago, Ill. 60606.

The Educational Institute, American Hotel and Motel Association, 1407 S. Harrison

Rd., Michigan State University, East Lansing, Mich. 48823.

Information on vocational education courses for restaurant work may

be obtained from the local director of vocational education, the superintendent of schools in the local community, or the State director of voca-

tional education in the department of education in the State capital.

OCCUPATIONS IN RETAIL FOODSTORES

In the United States, grocery stores and supermarkets are as common as baseballs in summer, and almost always near at hand. The local foodstore is a small part of a large industry—the retail foodstore industry—which employs about 2.3 million workers.

Jobs in foodstores vary, and workers range in education and training from high school dropouts to college-educated managerial and marketing professionals. Jobs in foodstores are especially attractive because employers often provide training and because the opportunities for promotion are good. The large number of opportunities for part-time employment may be of special interest to homemakers and students who do not want full-time jobs. In fact, part-time workers account for over 50 percent of the work force in supermarkets, according to a recent survey.

Nature of the Work

The industry pioneered self-service marketing techniques that permit customers to select items from shelves and refrigerated display cases and bring them to checkout stands. Self-service methods reduce the number of employees needed. Therefore the cost of operating a store is lower. As a result, food sold in large self-service foodstores, or supermarkets, generally is less expensive than food sold in small stores.

There are three basic types of foodstores: supermarkets, which sell many items; small grocery stores, including convenience stores; and specialty food stores, which emphasize a particular type of food or service.

Supermarkets are large, self-service grocery stores that may sell meat; canned, frozen, or fresh vegetables; dairy products; delicatessen; baked foods; and other items. Many now

have large specialty food and non-food departments and offer a wide range of services. Pharmacies, liquor departments, film processing, check cashing, money orders, and catering services are common.

Supermarkets and small grocery stores account for the overwhelming majority of establishments and employees in the industry. While a supermarket generally employs between 25 and 75 persons, the average number of paid employees in all retail food stores is between 10 and 15. Because prices generally are lower than at any other type of foodstore, supermarkets attract customers who make many purchases. When only a loaf of bread or a quart of milk is needed, however, consumers may prefer a nearby neighborhood grocery store or a specialty foodstore.

Small neighborhood grocery stores are the most numerous of all foodstores. Besides a small selection of popular food items, they may feature ethnic foods. Usually, owners personally manage these stores and only employ additional help as needed. Few owners operate more than one store.

Convenience stores are small grocery stores that specialize in a rather limited selection of items that customers might want in a hurry. Although many items are priced higher than in supermarkets, customers are attracted by longer hours, fast service, and convenient location. As a result, supermarkets have lost some business to convenience stores in recent years.

Specialty food stores operate in much the same manner as small neighborhood grocery stores. However, they may feature only one type of food, such as dietetic or health food, bakery products, dairy products, or candy. Most are small and usually are operated by the owner and a few clerks. In recent years, as

supermarkets have expanded their selection of goods and services, they have taken considerable business away from specialty stores.

Occupations in the Industry

About 40 percent of foodstore workers are either clerical employees—stock clerks, cashiers, and bookkeepers—or semiskilled workers—meatcutters, meatwrappers, fruit and vegetable processors, and packers. Laborers, including stock and material handlers, order fillers, and warehouse selectors, make up about 25 percent of employment. Managers and administrators including buyers make up an additional 20 percent of total employment. The remaining 15 percent are accountants, personnel and labor relations workers, route drivers, truckdrivers, cleaning, food, and other service workers, sales workers, bakers, mechanics, and others. (Separate statements on many of these occupations found in retail foodstores, as well as in other industries, appear elsewhere in the *Handbook*.)

Retail foodstore managers (D.O.T. 185.168) coordinate store operations. They often plan work schedules, deal with advertising and merchandising, and always are concerned with customer relations. Other major responsibilities include store security, personnel matters, expense control, and planning possible competitive maneuvers.

Clerks in supermarkets usually are called stock, grocery, or produce clerks. In the grocery department, stock clerks keep shelves filled with merchandise. For example, they may count the cans of soup on the shelves and in the stockroom and decide how much to reorder from the warehouse. Since storage space is limited, the order should include only as much as might be sold before another delivery from the warehouse will be made.

Stock clerks frequently rearrange food to create an attractive display. They help customers find what they want and perform general clean-up duties. In supermarkets, stock clerks occasionally may operate cash registers or bag groceries.

Produce clerks maintain the displays of fruits and vegetables. Be-



Produce clerk arranges food to create an attractive display.

cause fruits and vegetables are perishable, clerks use special techniques to keep the stock attractive. Fruits and vegetables are rotated so that goods received in the store first are sold first. Lettuce and other greens are moistened and chilled to preserve crispness. In addition to caring for the displays, produce clerks help unload delivery trucks, keep the produce department clean, answer customers' questions, and weigh and bag produce.

In large stores that have bakery and delicatessen departments, other clerks may work behind counters selling cakes or lunchmeats.

Meatcutters and wrappers order and prepare meats for sale. Since meat often is delivered to the store in large pieces, meatcutters use saws and knives to cut the large pieces into roasts, steaks, stew meats, and other meal-size portions. After the fat is cut away and bone chips are removed, the meat is placed in plastic trays ready to be wrapped.

Meatwrappers use a machine to wrap the package of meat in clear plastic. Then, the wrappers weigh the packages and attach labels the weighing machine has printed which identify the type of meat, weight, price per pound, and total price for each package.

At the checkout counter, cashiers ring up the price of each item on the cash register, add sales tax, receive checks or money, make change, and bag purchases. An increasing number of stores have computerized checkout systems that automatically perform some of these functions in addition to others.

Cashiers, who are often the only employees customers meet, must be pleasant, courteous, fast, and accurate. Cashiers must detect price changes on cans and boxes. For produce and other items that change price frequently, price lists may be used. When not serving customers, cashiers clean counters and restock small convenience items, such as razor blades and candy, displayed near the checkout counter.

Many supermarkets also employ workers to bag and carry groceries from the checkout counter to customers' cars. Cleaning and other service workers polish floors, clean windows, sanitize meat preparation rooms, and do other housekeeping jobs. The store manager observes the activities of each department, corrects problems as they arise, and is responsible for all activities and the store's success.

The central administrative offices of supermarket chains employ ac-

countants, bookkeepers, buyers, personnel specialists, computer specialists, clerks, secretaries, and other office workers. Chain stores also employ many truckdrivers, stock clerks, and laborers in warehouses.

Training, Other Qualifications, and Advancement

In a large supermarket, a new employee usually begins as a trainee in one of the following occupations: cashier, stock clerk, produce clerk, meatwrapper, or meatcutter. In smaller stores, however, new employees usually are trained as combination cashiers-clerks.

When hiring trainees, employers look for high school graduates who are good at arithmetic and who make a neat appearance. An outgoing personality and the ability to get along with people also are important, particularly for cashiers. Applicants who have less than a high school education may be hired if they qualify in other respects.

New workers learn their jobs mostly by helping and observing experienced employees. A few years may be needed to qualify as a skilled meatcutter, but cashiers and produce clerks generally can learn their jobs in several months. Jobs as stock clerks and meatwrappers can be learned in even less time.

Before being assigned to a store, cashier trainees may attend a school operated by a supermarket chain. These short-term courses, which emphasize rapid and accurate operation of cash registers and computer assisted checkout systems, include instructions for treating customers courteously and for handling complaints. Trainees who pass the examination are assigned to a store to finish their training; those who fail may be hired for other jobs, such as stock or produce clerk.

Some stores have meatcutter apprenticeship programs, which generally last 2 to 3 years, and include classroom instruction as well as on-the-job training.

Foodstores provide ambitious employees with excellent opportunities for advancement. In supermarkets, stock clerks frequently move up to better paying jobs as head clerks or

grocery department managers. Produce clerks may advance to jobs as produce managers, produce buyers, or produce supervisors of several stores. Meatwrappers can learn to be cutters, and then advance to meat department managers. Cashiers and department managers may be promoted to assistant managers and, eventually, managers of a supermarket. Advancement in small foodstores usually is limited, but employees may get all-round experience to start their own small businesses.

Many large firms have systematic training programs for manager trainees. Several years of experience generally are required before one becomes a store manager. Some attend a college or a training school or take special correspondence courses, often paid for by the company.

Some supermarket employees and managers advance to administrative jobs in their company's central offices. They may specialize in personnel, labor relations, buying, merchandising, advertising, consumer affairs, or research, or may become dairy, meat, delicatessen, produce, grocery, or nonfood specialists. Many of these jobs may require college training.

In cooperation with the Food Marketing Institute, Cornell University offers about 20 home study courses in management for food industry employees who wish to improve their chances for advancement. All employees are eligible to take these courses. Included are courses on food distribution, food warehousing and transportation, checkout management, store security, accounting, economics of food retailing, and others.

Several universities offer bachelor's, master's, and doctoral programs in food distribution. These curriculums include special courses related to the retail food store industry in addition to general courses in management, marketing, finance, business, law, accounting, economics, and other disciplines. A number of other colleges, junior colleges, and technical institutes offer programs, courses, and workshops in this field.

As the industry becomes more com-

plex, firms may increasingly seek persons with formal training.

A person graduating from a food management curriculum with a bachelor's degree generally enters a store management trainee program or a sales position with a supplier. A graduate with an advanced degree generally enters a research or planning position with a firm.

Employment Outlook

The outlook for jobs in the foodstore industry is good. Employment through the mid-1980's is expected to grow about as fast as the average for all industries. Large supermarkets and small convenience stores are expected to grow faster than other types of stores. In addition to new jobs created by growth, many openings will occur every year because of death, retirements, and other separations from the labor force. Relatively high turnover among nonmanagerial workers will continue to create many openings.

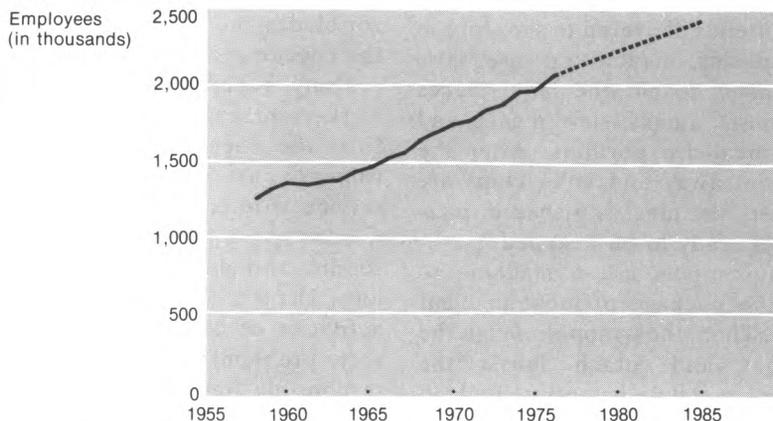
As population increases, more food will have to be distributed; this will increase foodstore sales and employment. However, employment is not expected to increase as rapidly as foodstore sales because technological innovations will increase employee productivity. For example, computer assisted checkout systems now are being used in some stores as re-

placements for cash registers. An optical or magnetic scanner transmits the code number (Universal Product Code—UPC) of each purchase to a computer that is programmed to record a description and the price of the item, add the tax, and print out a receipt. The computer can improve warehouse productivity by keeping track of the store's inventory and placing orders with the warehouse when needed. The development of scales for weighing and simultaneously marking meat and produce with UPC should assist the diffusion of the system. However, the high cost of electronic registers and computers and controversy among labor, consumer, and industry groups may slow adoption of the system. Another innovation likely to affect future employment growth is central cutting and packaging of meat and poultry. As these practices become more widespread, growth may be slowed for many workers, including cashiers and other clerks, meatcutters, meatwrappers, and material handlers. Overall, however, employment is expected to rise and many workers will be hired as additional supermarkets are built to keep up with the development of new communities.

Persons with college backgrounds in business administration, marketing, and related disciplines, and particularly graduates of food industry

Employment in retail food stores has grown, slowly but steadily, even during economic downturns

Wage and salary workers in retail food stores, 1958-76 and projected 1985



Source: Bureau of Labor Statistics

management curriculums, are expected to have the best opportunities for managerial, sales, research, planning, and other professional positions.

The outlook for part-time jobs as cashiers and stock clerks is very good. Large numbers of foodstore employees are students who are supplementing their income while attending school. After completing school, many leave for jobs in other industries. Other part-time employees also may work only for short periods. As a result, there are many part-time job opportunities that frequently can lead to full-time jobs.

Earnings and Working Conditions

Earnings of nonsupervisory workers in foodstores are among the highest in retail trade. In 1976, they averaged \$4.31 an hour, compared with \$3.55 an hour for nonsupervisory workers in retail stores as a whole.

Earnings vary considerably by occupation. Based on a 1975 Bureau of Labor Statistics Survey of grocery stores, average hourly wages for all workers were \$5.19; head cashiers, \$5.78; other full-time cashiers, \$5.32; part-time cashiers, \$4.31; baggers, \$2.87; head grocery clerks, \$6.13; other full-time grocery clerks, \$5.33; part-time grocery clerks, \$4.40; head meatcutters \$7.11; first meatcutters, \$6.73; journey level meatcutters, \$6.50; meat wrappers, \$5.06; head dairy clerks, \$5.59; head produce clerks, \$6.13; other full-time produce clerks, \$5.21; and mis-

cellaneous full-time day stockers, \$5.09.

Earnings tend to be highest in large stores in metropolitan areas; they are highest in the North Central region and the West and lowest in the South. Employees generally receive health insurance, annual and sick leave, pension benefits, and other benefits usually available to workers in other industries.

Based on limited information, management and sales trainees generally earn starting salaries in excess of \$10,000 a year. Experienced managers may earn considerably more than this. As is the case with other retail foodstore employees, managerial salaries usually are highest in large stores in metropolitan areas. Research and planning positions generally pay considerably more than management or sales trainee jobs.

Almost all foodstore employees must be able to stand for several hours at a time. Stock clerks must be capable of lifting cases of merchandise which weigh up to 50 pounds, and meatcutters must be careful when handling knives and using machinery, such as electric saws. Because they frequently work in refrigerated rooms, meatcutters also must be able to tolerate low temperatures (35 to 50 degrees fahrenheit). The frequency and severity of injuries in retail foodstores have been considerably higher than the average for all wholesale and retail trade.

Managers may work long hours, often staying after regular store

hours to check work schedules, plan merchandising strategy, take inventory, or do paperwork. Successful store operation often depends on the manager's ability to delegate responsibility to assistants who run the store in his or her absence and to be responsive to customers' needs.

Many foodstore employees are union members. Employees in the meat department may be represented by the Amalgamated Meat Cutters and Butcher Workmen of North America. Other employees in the store may belong to the Retail Clerks International Association; some may belong to the International Brotherhood of Teamsters, Chauffeurs, Warehousemen, and Helpers of America (Ind.), or the Retail, Wholesale, and Department Store Union.

Sources of Additional Information

Details about employment opportunities are available from local foodstores and the local office of the State employment service. For additional information on some specific occupations in the industry, see separate statements elsewhere in the *Handbook*.

For additional information on careers in the retail foodstore industry, write to:

National Association of Retail Grocers, P.O.
Box 17412, Washington, D.C. 20041.

FINANCE, INSURANCE, AND REAL ESTATE

Nearly every individual and organization uses services that the finance, insurance, and real estate industry provides. Financial institu-

tions—banks, savings and loan companies, consumer credit organizations, and others—offer services ranging from checking and savings

accounts to the handling of stock and bond transactions. Insurance companies provide protection against losses caused by fire, accident, sickness, and death. Real estate firms serve as agents in the sale or rental of buildings and property, and often manage large offices and apartments.

In 1976, more than 4.3 million persons worked in the field of finance, insurance, and real estate. Finance alone employed close to 2 million persons; another 1.5 million worked in the insurance industry. The remainder, nearly 1 million, held jobs in real estate.

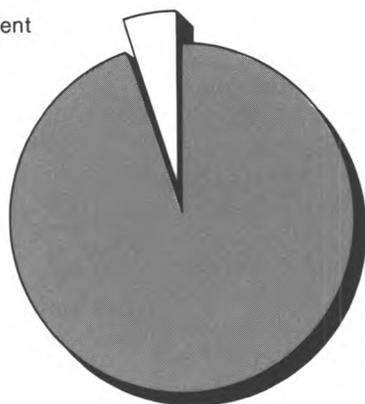
The overwhelming majority of these jobs are white collar. Clerical workers alone make up a large percentage of total employment. Many clerical workers have jobs that are unique to particular industries, such as bank tellers in financial institutions and claim representatives in insurance companies. Other large clerical occupations include secretary, typist, bookkeeper, and office machine operator—jobs found in nearly all industries. Sales workers also constitute a sizable portion of the work force. Most of these are insurance and real estate agents and brokers. A relatively small number of sales workers sell stocks and bonds.

Managers and officials—bank officers, office managers, and others—constitute yet another important component of employment, while professional and technical workers—such as accountants, lawyers, computer specialists, and financial analysts—account for a much smaller share.

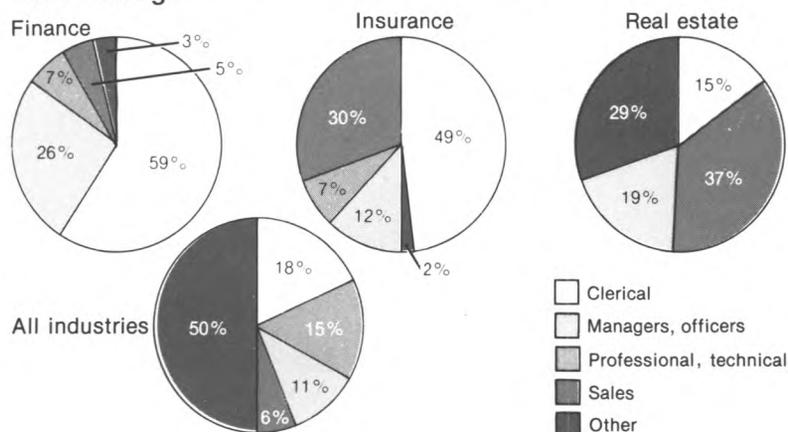
The accompanying chart illustrates the differences in the occupational composition of the finance, insurance, and real estate industries in 1976. In all three, professional and technical employees made up a very small share of the total, while the

Finance, insurance, and real estate, 1976

5% of total employment in all industries



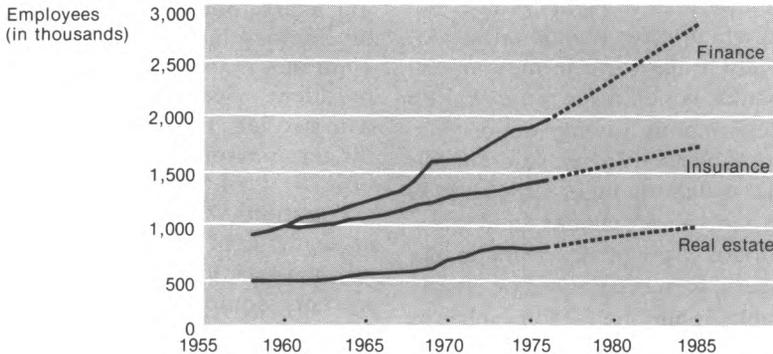
The occupational composition of employment in the finance, insurance and real estate industries differs greatly from each other and from the economy-wide average



Source: Bureau of Labor Statistics

Employment in finance, insurance, and real estate has grown steadily, almost unaffected by economic fluctuations

Wage and salary workers in finance, insurance, and real estate, 1958-76 and projected 1985



Source: Bureau of Labor Statistics

proportion of managers exceeded the average for the entire economy.

Employment of sales workers, however, differed greatly among the three industries. In real estate, for example, they formed the largest single category, accounting for 40 percent of total employment. This proportion was more than 6 times the average for the economy as a whole.

Insurance companies employed a slightly lower, though still very large, share of sales workers. In finance, however, sales workers made up a much smaller part of total employment.

The situation for clerical occupations was the reverse of that for sales personnel. A relatively small proportion of the workforce in real estate

consisted of clerical workers; in finance and insurance, the proportion was much higher—about 50 percent.

In the future, population, business activity, and personal incomes all are expected to rise, creating a need to expand both the types of services offered and the number of establishments engaged in finance, insurance, and real estate. The three industries are expected to grow at different rates, however, as shown in the accompanying chart.

Between 1976 and 1985, employment in both finance and real estate is expected to grow faster than the average for all industries, while employment growth in insurance should be about as fast as the average. As the chart indicates, finance will grow about twice as fast as insurance, with real estate expanding at a more moderate pace.

Occupational growth rates also will vary, principally as a result of changes in technology or ways of doing business. For example, the increasing use of data processing should continue to lessen the demand for workers in routine clerical and recordkeeping functions while spurring demand for workers in computer occupations.

OCCUPATIONS IN THE BANKING INDUSTRY

Banks have been described as “department stores of finance” because they offer a variety of services ranging from individual checking accounts to letters of credit for financing world trade. Banks safeguard money and valuables; administer trusts and personal estates; and lend money to business, educational, religious, and other organizations. They lend money to individuals to purchase homes, automobiles, and household items, and to cover unexpected financial needs. Banks continually adapt their services to meet their customers’ needs. In recent years, for example, they have offered revolving credit plans, charge cards, accounting and billing services, and money management counseling.

Banks and Their Workers

Banks employed approximately 1.2 million workers in 1976. Most

bank employees work in commercial banks, which offer a wide variety of services. Others work in mutual savings banks, which offer more limited services—mainly savings deposit accounts, mortgage loans, safe-deposit rentals, trust management, money orders, travelers’ checks, and pass-book loans. Still others work in the 12 Federal Reserve Banks (or “bankers’ banks”) and their 24 branches as well as in foreign exchange firms, clearing house associations (where banks exchange checks and other paper), check cashing agencies, and other related organizations. In addition, nearly 500,000 people in 1976 performed similar work in savings and loan associations, credit unions, mortgage brokerage firms, and other nonbank credit agencies.

In 1976, commercial banks processed about 25 billion checks and handled an enormous amount of pa-

perwork. Clerical workers accounted for nearly two-thirds of all bank employees. Many tellers or clerks process the thousands of deposit slips, checks, and other documents that banks handle daily. Banks also employ many secretaries, stenographers, typists, telephone operators, and receptionists.

Bank officers and managers constitute a large portion of employment in the banking industry. Approximately 1 out of 4 employees is an officer—a president, vice president, treasurer, comptroller, branch manager, loan officer, personnel officer, or other official. Professional and technical occupations, which make up a smaller segment of employment, include accountants, lawyers, labor relations workers, computer programmers and systems analysts, economists and public relations specialists. Banks, like other institutions, also employ guards, elevator operators, and other service workers.

Three large occupational categories in banking—officers and managers, tellers, and clerks—are described in separate statements elsewhere in the *Handbook*.

Places of Employment

In 1976, there were over 15,000 commercial and mutual savings banks in the United States. (Individual branches numbered approximately 50,000, but hiring usually takes place only at the main offices.) Bank employment is concentrated in a relatively small number of very large banks. In 1976, for example, almost two-thirds of all commercial bank employees worked in the Nation’s 800 largest commercial banks; less than 6 percent were employed by the 6,000 smallest commercial banks.

Most bank employees work in heavily populated States, such as New York, California, Illinois, Pennsylvania, and Texas. New York City, the financial capital of the Nation, has far more bank workers than any other city.

Training and Advancement

Professional and managerial bank workers usually have completed college; most tellers and clerks have fin-



About 25 billion checks are processed yearly.



Bank officers and managers account for about 1 out of 4 bank employees.

ished high school; guards and building service personnel may have less than a high school education.

Most new employees receive some form of in-service bank training. Banks also provide other opportunities for workers to broaden their knowledge and skills. Many banks encourage employees to take courses at local colleges and universities. In addition, banking associations spon-

sor a number of programs, sometimes in cooperation with colleges and universities. The American Bankers Association (ABA) offers the most extensive national program for bank officers. Each of its dozen schools located all over the country deals with a different phase of banking. Officers attend annual sessions of one or two weeks and receive degrees after one to three years in areas

such as commercial lending, installment credit, and international banking. ABA also sponsors annual seminars and conferences and provides textbooks and other educational materials. Many banks pay all or part of the costs for those who successfully complete courses.

Support personnel can prepare for better jobs through courses offered by the American Institute of Banking (AIB), an arm of the ABA. The Institute, which has over 400 chapters in cities across the country and numerous study groups in small communities, also offers correspondence study and assists local banks in conducting cooperative training programs. The great majority of banks use AIB facilities; many banks use other training sources as well.

Salary practices in banks resemble those in many other industries. Most banks review a new employee's salary twice during the first year. Thereafter, employees generally are considered for a salary increase once a year. In addition to salary, many banks provide compensation as an incentive to outstanding performance, such as selling services or increasing deposits. The employee usually receives this compensation as an immediate or yearend bonus.

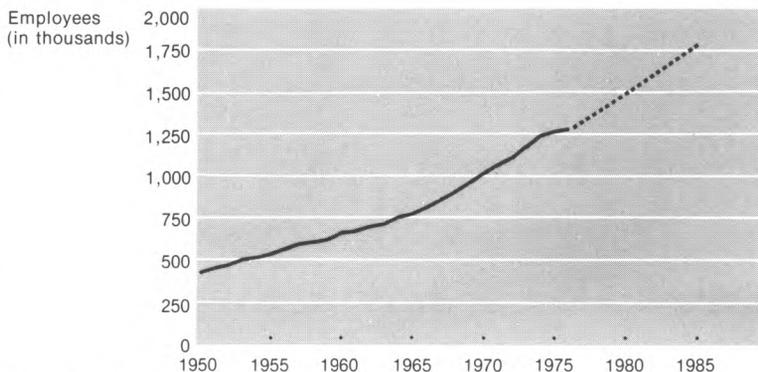
Bank employees should enjoy working with numbers and should be able to handle large amounts of money. They should present a good image to customers. Often bank officials are encouraged to participate in community activities.

Employment Outlook

Banks should continue to be a major source of job opportunities in office occupations. Banking employment is expected to rise faster than the average for all industries through the mid-1980's. New jobs resulting from employment growth, as well as those that arise as employees retire, die, or stop working for other reasons, are expected to account for tens of thousands of openings each year. Moreover, most entry-level openings should be open to all qualified candidates. While a friend's referral may help the applicant get his or her foot in the door, especially in smaller establishments, most banks

Employment in the banking industry will continue to grow very rapidly as banks improve and expand services

Wage and salary workers in the banking industry, 1950-76 and projected 1985



Source: Bureau of Labor Statistics

rely upon walk-in applicants as their single largest source of new personnel.

Most openings occur at the clerical level. High turnover among tellers should result in numerous job openings. Particularly strong demand is expected for office machine and computer operators.

Two kinds of opportunities exist for the college graduate: As trainees for officer or managerial positions, and as professional personnel such as accountants, auditors, statisticians, computer programmers, and systems analysts.

A growth in bank facilities and a rise in population, sales, and incomes will result in more financial transactions. Jobs also will be created as banks continue to improve and expand services such as bank charge cards and the handling of accounts for retail stores. As banks strive to bring these and other services closer to suburban areas, branch banks will grow in number and provide additional employment opportunities.

The continued conversion to electronic data processing may lessen demand for some bank workers, despite the expected increase in bank services. The effect of this development will vary by occupation, as indicated in the statements on specific banking occupations elsewhere in the *Handbook*.

Bank employees are less likely to be laid off during periods of low business activity than workers in many other fields. Even when a bank

is sold or merged, workers seldom lose their jobs. Bank officials usually reduce employment, when necessary, by not replacing employees who leave their jobs.

Earnings and Working Conditions

In addition to salaries, bank workers generally receive liberal fringe benefits. For example, most banks have some type of profit-sharing or bonus plan. Group plans that provide life insurance, hospitalization, surgical benefits, and retirement income are common. Sometimes free checking accounts or safe-deposit boxes also are provided. These fringe benefits, along with job stability, may compensate for the fact that banking salaries tend to be lower than those paid for comparable positions in other industries.

The workweek in banks is generally 40 hours or less; in a few localities, a workweek of 35 hours is common. Tellers and some other employees may work at least one evening a week when banks remain open for business. Certain check processors and operators of computing equipment may work on evening shifts.

Sources of Additional Information

General information about banking occupations, training opportunities, and the banking industry itself is available from:

American Bankers Association, Bank Personnel Division, 1120 Connecticut Ave. NW., Washington, D.C. 20036.

National Association of Bank Women, Inc., National Office, 111 E. Wacker Dr., Chicago, Ill. 60601.

National Bankers Association, 4310 Georgia Ave. NW., Washington, D.C. 20011.

For information about career opportunities as a bank examiner, contact:

Federal Deposit Insurance Corporation, Director of Personnel, 550 17th St. NW., Washington, D.C. 20429.

Information on careers with the Federal Reserve System is available from:

Board of Governors, The Federal Reserve System, Personnel Department, Washington, D.C. 20551 or from the personnel department of the Federal Reserve bank serving each geographic area.

State bankers' associations can furnish specific information about job opportunities. Writing directly to a particular bank to inquire about job openings also can produce favorable results. For the names and addresses of banks in a specific location as well as the names of their principal officers, consult one of the following directories, which are published twice each year:

The American Bank Directory, (Norcross, McFadden Business Publications).

Bankers Directory—The Banker's Blue Book, (Chicago, Rand McNally International).

Polk's World Bank Directory, (Nashville, R.L. Polk & Co.).

OCCUPATIONS IN THE INSURANCE INDUSTRY

The insurance industry offers many employment opportunities both for recent high school and college graduates and for experienced workers.

The 1,800 life and 2,800 property-liability (also called casualty) insurance companies do business in home and regional offices and also in thousands of sales offices throughout the country.

Nature of the Business

There are three major types of insurance: life, property-liability, and health. Some companies specialize in only one type; a growing number of large insurers now offer several lines of insurance. For example, several life insurance carriers can now offer their policyholders protection for their homes and cars; at the same time, major property-liability companies sell life insurance policies. Many insurance companies also offer mutual fund shares and variable annuities as additional investment choices for their customers.

Life insurance companies sell policies that provide benefits to survivors upon the death of the insured. Some life insurance policies also provide policyholders with a steady income when they reach retirement age or if they become disabled; policies may be designed to help provide funds to educate children when they reach college age, or give extra financial protection while the children are young. Life insurance policies also may be used to protect business interests and to guarantee employee benefits. Property-liability insurance provides policyholders with protection against loss or damage to their property, and protects them from financial responsibility for injuries to others or damage to other people's property. It covers hazards such as

fire, theft, and windstorm, as well as workers' compensation and other claims. Most life and property liability companies sell accident and health insurance, which helps policyholders pay medical expenses, and may furnish other benefits for an injury or illness.

An increasing number of insurance policies cover groups ranging from a few individuals to many thousands. These policies usually are issued to employers for the benefit of their employees. Most common are group life and health plans, although the number of group automobile and homeowner policies is growing rapidly. In 1976, group life insurance protected about 75 million persons; the number of policies was about 60 percent higher than the number 10 years earlier.

Insurance Workers

About 1.6 million people worked in the insurance business in 1976.

The majority were in clerical and sales jobs. (See accompanying chart.)

Nearly half of all insurance workers have clerical jobs; only the banking industry has a larger proportion of employees doing clerical work. In insurance, clerical workers keep records of premium payments, services, and benefits paid to policyholders. Most are secretaries, stenographers, typists, statistical clerks, office machine operators, or general office clerks. They do work similar to that of their counterparts in other businesses.

Other clerical workers have positions of greater responsibility that require extensive knowledge of some phase of insurance. They include *claim adjusters* (D.O.T. 241.168) and *claim examiners* (D.O.T. 249.268) who decide whether claims are covered by the policy, see that payment is made, and, when necessary, investigate the circumstances surrounding the claim. (See the statement on Claim Representatives elsewhere in the *Handbook*.)

Nearly one-third of all insurance employees are sales workers—chiefly agents and brokers who sell policies to individuals and business firms. *Agents and brokers* (D.O.T. 250.258) usually find their own customers or “prospects,” and see that each policy they sell meets the individual needs



Nearly half of all insurance workers have clerical jobs.

of the policyholder. (See the statement on insurance agents and brokers elsewhere in the *Handbook*.)

About one out of eight insurance workers has a managerial job. Managers of local sales offices often spend part of their time selling. Others, who work in home offices, are in charge of departments such as actuarial calculations, policy issuance, accounting, and investments.

Professionals, employed mainly at home offices, represent about 1 out of 15 insurance workers. These specialists, who work closely with insurance company managers, study insurance risks and coverage problems, analyze investment possibilities, prepare financial reports, and do other professional work. Among them is the *actuary* (D.O.T. 020.188) whose job is unique to the insurance field. Actuaries make studies of the probability of an insured loss and determine premium rates. (See the statement on actuaries elsewhere in the *Handbook*.) Another specialist is the *underwriter* (D.O.T. 169.188), who evaluates insurance applications to determine the risk involved in issuing a policy. Underwriters decide whether to accept or reject the application; they also determine which premium rate should apply for each policy issued. (See the statement on underwriters elsewhere in the *Handbook*.)

Other professional employees do essentially the same work in insurance companies as in other businesses. Accountants, for example, analyze insurance company records and financial problems relating to premiums, investments, payments to policyholders, and other aspects of the business. Safety engineers, fire protection engineers, and industrial hygienists in casualty companies consult with industrial and commercial policyholders on matters concerning the health and safety of their employees. (See the statement on occupational safety and health workers elsewhere in the *Handbook*.) Lawyers interpret the regulations that apply to insurance company operations and handle the settlement of some insurance claims. Investment analysts evaluate real estate mortgages and new issues of bonds and other securities, analyze investments held by



As more computers are installed to process insurance records, an increasing number of data processing specialists are being employed.

their companies, and recommend when to hold, buy, or sell. As more computers are installed to process insurance records, an increasing number of programmers, systems analysts, and other data processing specialists are being employed. Most companies also employ public relations, sales promotion, and advertising specialists.

Insurance companies require the same kinds of custodial and maintenance work as other large organizations. About 1 out of 45 workers in the insurance business performs these duties.

Places of Employment

Insurance company home and regional offices generally are located near large urban centers. Nearly one-half of all persons employed in these large offices work in seven States: New York, California, Illinois, Texas, Pennsylvania, Ohio, and Massachusetts. Insurance workers who deal directly with the public—sales personnel and claim adjusters—are located throughout the country. Almost all insurance agents and brokers work out of local company offices or independent agencies. Many claim adjusters work in independent firms located in small cities and towns throughout the country. Company operated drive-in claim centers are

located in many medium-sized towns.

About half of all insurance employees work in life companies and agencies. Included in this group are some very large companies with thousands of employees; nearly one-third of life company workers are employed in firms of more than 1,000 people. Property-liability companies, although more numerous than life insurance companies, generally have fewer workers; fewer than one in five of those employed in casualty companies work in establishments of 1,000 or more. Most local agencies and sales offices are relatively small, regardless of the types of insurance handled. About 60 percent of these offices employed fewer than 20 persons.

Training, Other Qualifications, and Advancement

Insurance offers job opportunities for people with different educational backgrounds and talents. Some positions require specific college training; others can be filled by workers with limited academic training and few skills.

Graduation from high school or business school is enough training for most beginning clerical jobs. Courses in typing and business math are assets; the ability to operate office machines also is helpful. These and other special skills help beginners advance to more responsible jobs.

Jobs in engineering, accounting, and other professional fields generally require the same kinds of college training here as in other businesses. College-trained people also are preferred for managerial positions, many of which are filled by promotion from within.

In all work requiring contact with the public, employees should have a pleasant disposition and an outgoing personality. Those in frequent contact with policyholders should be able to inspire confidence in their ability to protect the customer's interests. Because insurance companies often encourage their managers and administrative employees to participate in community organizations, they should be people who enjoy

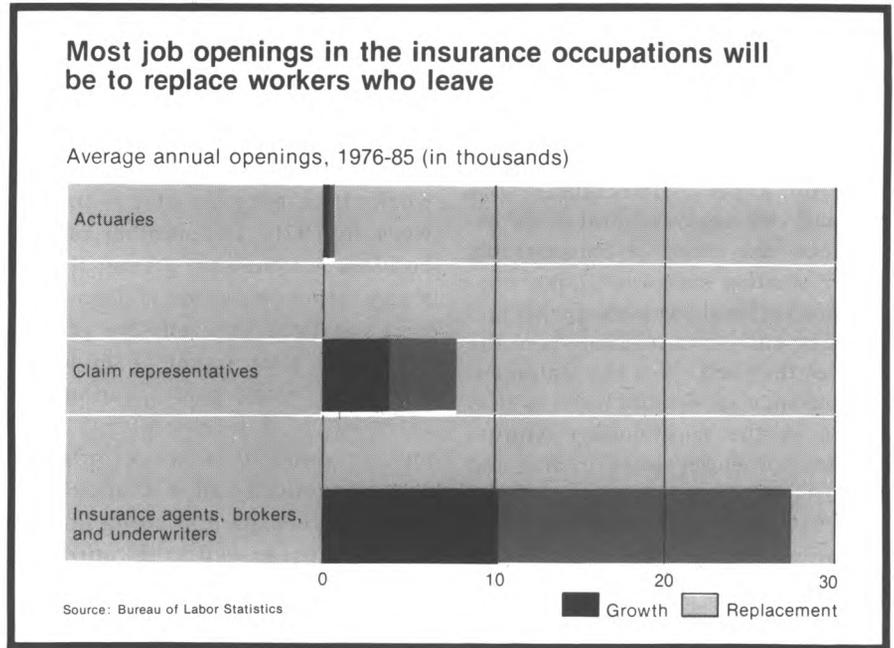
working with others in a social situation.

Insurance workers have ample opportunity to continue their education. The Insurance Institute of America, for example, has home study courses for claim adjusters, claim examiners, underwriters, and sales workers. The American College of Life Underwriters, the National Association of Life Underwriters, and the Life Underwriter Training Council offer courses that stress the services agents provide to policyholders. Other courses, especially designed to help clerical employees better understand life insurance, relate to the organization and operation of both home and field offices. These are given by the Life Office Management Association, which also provides programs for the development of supervisors and managers.

Employment Outlook

Employment of insurance workers is expected to increase about as fast as the average for all occupations through the mid-1980's as the insurance industry continues to expand. In addition to new jobs that will become available, thousands of openings will occur as employees die, retire, or leave their jobs to seek other work.

The expected increase in employment will result mainly from a growing volume of insurance business. As a larger proportion of the population enters the age group normally associated with family formation, higher incomes, and greater consumer spending, insurance sales should expand. Sales of life insurance will rise as the growing number of young adults attempt to provide a secure future for their families. Property-liability insurance sales should expand as they buy homes, cars, and other items that require insurance protection. More business insurance will be needed as new plants are built, new equipment is installed, and more goods are shipped throughout the country and the world. Additional sales will be generated by a rising demand for relatively new services such as dental, prepaid legal, and kidnap insurance. Furthermore, the growing concern over the health and safety of industrial workers and con-



sumers will spur demand for men and women to work in the areas of occupational safety and health, product liability, and workers' compensation.

Growth of insurance employment, however, is not expected to keep pace with the expanding volume of business for several reasons. Sales workers are expected to become more productive as more insurance is sold through group contracts and multiple-line policies (those that cover many different risks formerly covered in separate policies). Although the total number of clerical jobs probably will continue to rise, the increasing use of computers to do routine jobs will lessen the demand for many low-skilled clerical workers. In addition, State "no-fault" insurance plans should reduce the number and complexity of automobile claims to be adjusted, thus lessening the demand for automobile claim adjusters.

The insurance industry has always been a stable employer and most insurance workers have better prospects of regular employment than workers in many other industries. Business people usually regard property-liability insurance as a necessity, both during economic recession and in boom periods. Individuals who buy insurance try to provide as much ba-

sic financial protection as possible, even when their incomes decline.

Earnings and Working Conditions

Earnings of nonsupervisory office workers in insurance companies averaged \$170 a week in 1976, slightly below the average for all industries. There were significant differences in earnings depending upon the type of insurance company. For example, workers in companies specializing in accident and health insurance averaged \$164 a week, while employees in life companies earned \$167 and workers in casualty companies were paid average weekly salaries of \$174. Salary levels in different parts of the country also vary; earnings are generally lowest in southern cities and highest in northeastern and western metropolitan areas. Within a geographic region, salaries usually are higher in the larger companies.

A 1976 survey of life insurance companies revealed a wide range of clerical salaries. File clerks earned about \$117 a week and typists received about \$124. Executive secretaries averaged about \$234 and experienced computer operators were paid average weekly salaries of \$220.

Starting salaries for professional workers are generally comparable to

those for similar positions in other businesses. According to information available from private surveys of life and property-liability insurance companies, 1976 college graduates started at salaries ranging from \$8,500 to \$12,000 a year. Specialists with graduate degrees or several years' experience may receive considerably higher starting salaries. Unlike salaried professional workers, agents and brokers earn commissions on the policies they sell. (See the statement on insurance agents and brokers elsewhere in the *Handbook*.) Annual salaries for supervisors in life and property-liability companies ranged from \$17,000 to \$25,000. Those in executive positions earned between \$35,000 and \$50,000 a year in 1976,

depending upon their area of specialization and level of responsibility.

Except for agents and brokers who sometimes must extend their working hours to meet with prospective clients, insurance company employees worked an average of 37 hours a week in 1976. The number of paid holidays is somewhat greater than in many other industries. Two-week paid vacations generally are granted employees after 1 year of service; in most companies, paid vacations are extended to 3 weeks after 5 years and, in some, to 4 weeks after 10 years. Practically all insurance company workers share in group life and health plans, as well as in retirement pensions.

Sources of Additional Information

General information on employment opportunities in the insurance business may be obtained from the personnel departments of major insurance companies or from insurance agencies in local communities.

Other information on careers in the insurance field is available from:

American Council of Life Insurance, 1850 K St. NW., Washington, D.C. 20006.

Insurance Information Institute, 110 William St., New York, N.Y. 10038.

American Mutual Insurance Alliance, 20 N. Wacker Dr., Chicago, Ill. 60606.

National Association of Independent Insurers, Public Relations Department, 2600 River Rd., Des Plaines, Ill., 60018.

SERVICE AND MISCELLANEOUS INDUSTRIES

An increasing share of our national wealth is being devoted to services as a result of greater emphasis on amenities such as health care, education,

and recreation. In many ways, this trend reflects the country's goals of a better and fuller life for all its citizens.

In today's job market, the service industries are a major source of employment, for new workers as well as experienced ones. They offer job opportunities to people at all levels of skill, training, and education.

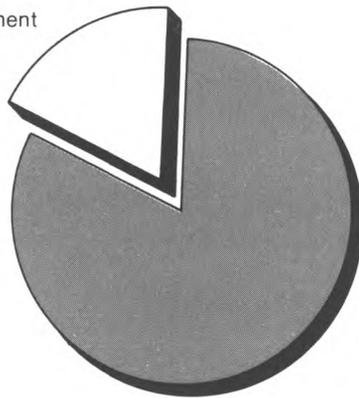
In 1976, nearly 30 million people worked in service industries. Nearly one-half were wage and salary workers in private firms, including over 1 million private household workers; over 13.1 million more were government employees (mainly in education, health, and public administration); and about 2.3 million were self-employed.

Educational services, including elementary and secondary schools and institutions of higher education, make up the largest sector of the service industry, and account for about one-fourth of its work force. Medical services, including hospitals, offices of physicians, and other establishments that provide health services, constitute the next largest sector, and account for about one-fifth of the workers. The Postal Service and Federal, State, and local public administration account for about one-sixth of service workers. Other service industries employing many workers are hotels, laundries, beauty and barber shops, private households, business and repair services, welfare and religious organizations, and entertainment.

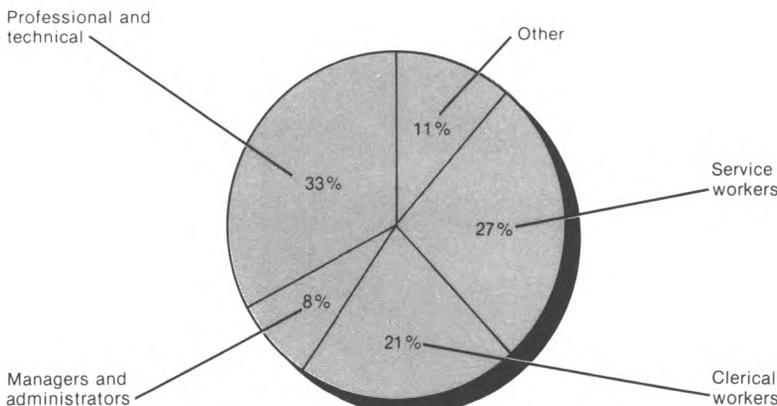
As shown in the accompanying tabulation, white-collar workers (professional, managerial, clerical, and sales workers) account for over three-fifths of the service industry's employment. The industry employs the highest proportion of professional, technical, and kindred workers of any major industry; these workers account for about one-third of the industry's employment. By far the largest concentration of professional personnel is represented by teachers in educational services. Other major

Service industries, 1976

18% of total employment in all industries



Occupational groups in the service industry, 1976



Source: Bureau of Labor Statistics

employers of professional workers are medical and health services—where doctors, dentists, and nurses constitute a large share of the work force. The government employs many professionals in administrative jobs. Many professionals are self-employed. Clerical workers account for about 1 out of 5 service industry employees. Most are stenographers, typists, secretaries, and office machine operators. Managers, officials, and proprietors, including health services administrators, make up less than one-tenth of the industry's employment.

Service workers represent over one-fourth of the industry's employment. Some large service occupations are private household worker, practical nurse, hospital attendant, janitor, waiter and waitress, cook, and protective service worker.

Blue-collar workers, mainly skilled craft workers and semiskilled operatives, constitute only one-tenth of the industry's employment. Many of the craft workers are mechanics in automobile and other repair service industries, or maintenance workers in hotels, schools, and other establishments. Operatives work mainly in laundries, auto repair shops, and other types of repair businesses. Most of the relatively few laborers in this industry work in auto repair shops, on golf courses, and in bowling alleys.

Employment in the service industry is expected to increase faster than the average for all industries through the mid-1980's. The growth in the demand for services is expected to stem from population growth, expanding business activity, and rising personal incomes. Among the fastest

growing segments of the industry will be hospitals, medical services, and computer software firms.

The importance of personal contact in many service activities tends to limit the effect of technological innovations on employment requirements. Although computers may slow the employment growth in some areas—for example, in bookkeeping—technological change is not expected to significantly limit the total demand for workers in the service industry.

The statements that follow discuss job opportunities in the hotel and laundry and drycleaning industries. More detailed information about services related to occupations that cut across many industries appears elsewhere in the *Handbook*.

HOTEL OCCUPATIONS

Hotels, motels, and resorts provide lodgings to suit the needs of every traveler. Some motels offer inexpensive basic services for those who simply want a comfortable place to sleep. Other motels and most hotels cater to persons who desire more luxurious surroundings and offer fine restaurants, personal service, and many recreational facilities that may include swimming pools, golf courses, tennis courts, horseback riding, game rooms, and health spas. About 890,000 people worked in this industry in 1976.

This statement gives an overview of jobs in hotels, motels, and resorts. Separate *Handbook* statements describe the work of hotel housekeepers, managers, front office clerks, and bellhops.

The Hotel Business

Hotels range in size from those with only a few rooms and employees to huge establishments with more than 1,000 rooms and hundreds of workers. Many of the motels built in recent years are fairly large and employ many workers, but the economy motels and most older motels have relatively small staffs. In fact, some motels are run entirely by owners and their families.

Nearly all hotels and many motels offer a variety of conveniences for their guests, including restaurants, banquet rooms, meeting rooms, swimming pools, and gift shops. Motels usually have simple coffee shops, while hotels often have several restaurants and may offer live entertain-

ment at night. Hotels and motels in resort areas often have a wide variety of recreational facilities including golf courses, tennis courts, and swimming pools. Large hotels also may have newsstands, barber and beauty shops, laundry and valet services, and theater and airline ticket counters.

Hotel Workers

As hotel operations become more complex, the emphasis on training is increasing. Demand for persons with special skills and training at colleges, junior colleges, technical institutes, vocational schools, and high schools is increasing. Also, many employees, particularly managers, undergo comprehensive on-the-job training programs.

To provide the many services they offer, hotels and motels employ workers in a wide variety of occupations. These usually are classified as professional, middle management, and service and craft occupations. Professional positions such as general manager, food and beverage manager, personnel director, and administrative chef generally require considerable formal training and job experience. Middle management occupations such as auditor, purchasing agent, executive housekeeper, and chef generally require formal training and extensive on-the-job training. Jobs such as bellhop, cleaner, bartender, and waitress generally require less training.

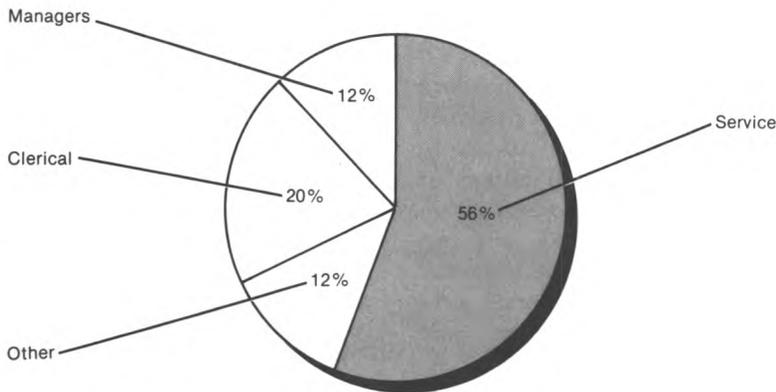
Housekeeping is a very important part of the business and more than a fourth of all workers are concerned with keeping hotels and motels clean and attractive. The housekeeping staff make beds, provide guests with fresh linens and towels, vacuum rooms and halls, and move furniture. Linen room attendants and laundry room workers mark and inspect towels, sheets, and blankets and operate the washing and pressing machines in the hotel laundry. Large hotels and motels usually employ executive housekeepers to supervise these workers and purchase housekeeping supplies. Some hotels also employ managers to supervise laundry operations.

Food service personnel comprise



Some hotel occupations require little or no specialized training.

Three out of every five hotel employees in 1976 were service workers



Source: Bureau of Labor Statistics

the next largest group of hotel workers. These workers include cooks and chefs, waiters and waitresses, meatcutters, dining room attendants and dishwashers, food counter workers, and bartenders who work in the coffee shops and restaurants found in most motels and hotels. Detailed descriptions of their duties are found elsewhere in the *Handbook*.

Hotel managers and assistants are responsible for the profitable operation of their establishments. They determine room rates, oversee restau-

rant operations, and supervise the staff. In smaller hotels and motels a general manager performs all these tasks, but in large hotels a general manager usually has several assistants, each one responsible for a separate department, such as food service, sales, or personnel.

Nearly all hotels and motels employ clerical workers to take room reservations, bill guests, and furnish information. Most of these workers are front office clerks who greet guests, assign rooms, handle mail,

and collect payments. The remainder are cashiers, bookkeepers, telephone operators, secretaries, and other clerical workers, whose jobs in hotels are much like clerical jobs elsewhere.

Most hotels and some motels employ a uniformed staff to perform services for guests. This staff includes bellhops, who carry baggage and escort guests to their rooms; doorkeepers, who help guests out of their cars or taxis and carry baggage into the hotel lobby; and elevator operators.

In addition, hotels employ many other workers who are also found in other industries. Among these are accountants, personnel workers, entertainers, and recreation workers. Maintenance workers, such as carpenters, electricians, stationary engineers, plumbers, and painters, also work for hotels. Still others include detectives, barbers, cosmetologists, valets, gardeners, and parking attendants. Most of these occupations are discussed elsewhere in the *Handbook*.

Employment Outlook

Employment in this industry is expected to expand more slowly than the average for all industries through the mid-1980's. Although new hotels and motels are expected to be built to take advantage of in-town, interstate highway, or resort locations, desirable sites are becoming scarce and very expensive. As a result, many owners are expected to rehabilitate and modernize existing hotel properties rather than construct new properties. In addition to openings resulting from growth, thousands of workers will be needed each year to replace those who retire, die, or leave the industry.

Most of the anticipated employment growth will stem from the need to staff new hotels and motels. Although employment is expected to increase in both luxury and economy motels as Federal expenditures for highways and other transportation systems stimulate travel, both business and pleasure travel are sensitive to economic and business conditions. More hotels are adding facilities and services for recreation in an effort to attract greater numbers of travelers, particularly from nearby areas. Older hotels unable to modernize are likely



Hotel reservation personnel coordinate reservations for all hotels and motels in the company's system.

to experience low occupancy rates that may force them to reduce costs by eliminating some services and workers. Meanwhile, thousands of temporary jobs will continue to be available each year in resort hotels and motels that are open only part of the year.

Most of the job openings in hotels and motels will be for workers who need limited training, such as cleaners, porters, and some dining room employees. Large numbers of jobs will be available for front office staff, but opportunities may be limited by the increasing use of computer reservation systems in hotel and motel chains.

Opportunities may be particularly favorable for persons with training or experience as cooks and chefs or as food managers.

Earnings and Working Conditions

Earnings of hotel workers depend on the location, size, and type of the hotel in which they work. Large luxury hotels and those located in metropolitan and resort areas generally pay their employees more than less expensive hotels and those located in less populated areas. Workers in some occupations receive tips in addition to wages that add substantially to their income. Nonsupervisory workers in the hotel industry averaged \$3.03 an hour in 1976, excluding tips—compared to \$4.87 an hour for all nonsupervisory workers in private industry, except farming. About three-fourths of all hotel workers are covered by Federal and State minimum wage laws; in 1976, workers covered by these laws earned at least \$2.20 an hour.

Salaries of hotel managers and assistants are particularly dependent upon the size and sales volume of the hotel, and vary greatly because of differences in duties and responsibil-

ities. Hotel manager trainees who are graduates of specialized college programs generally start at around \$10,000 a year and usually are given periodic increases for the first year or two. Experienced managers may earn several times as much as beginners. For example, salaries of hotel general managers ranged from about \$16,000 to \$50,000 a year in late 1975, according to a survey conducted by the American Hotel and Motel Association. Hotel food and beverage managers earned from about \$12,000 to \$30,000 and executive housekeepers from about \$7,000 to over \$20,000. Managers may earn bonuses ranging from 10 to 20 percent of basic salary in some hotels. In addition to salary, hotels customarily furnish managers and their families with lodging in the hotel, meals, parking facilities, laundry, and other services.

The American Hotel and Motel Association also publishes wage data taken from union contracts of hotels and motels in major U.S. cities. Hourly rates during 1976 varied widely from city to city. Bellhops earned from \$1.34 to \$2.52 per hour, cleaners from \$2.17 to \$4.22, laundry workers from \$2.25 to \$4.52, bartenders from \$2.48 to \$5.85, waiters and waitresses from \$1.38 to \$3.05, elevator operators from \$2.19 to \$4.65, telephone operators from \$2.40 to \$4.64, and maintenance workers from \$2.36 to \$5.30. Tips, which represent a significant source of income for many employees, are not included in these data.

Since hotels are open continuously, employees must work on shifts. Fewer employees work at night than during the day; those who work on night shifts often receive additional compensation. Managers and housekeepers who live in the hotel usually have regular work schedules, but may be called for work at any time.

Food service personnel may receive extra pay for banquets and other special occasions and commonly receive meals. In some hotels, cleaners, elevator operators, room clerks, and others also receive meals. Most employees receive 5 to 10 paid holidays a year, paid vacations, sick leave, life insurance, medical benefits, and pension plans. Some hotels offer bonuses, profit sharing plans, educational assistance, and other benefits to their employees.

The Hotel and Restaurant Employees and Bartenders International Union is the major union in the hotel business. Some hotel workers, including bellhops, porters, cleaners, cooks, housekeepers, waiters and waitresses, maintenance engineers, elevator operators, guards, door attendants, gardeners, laundry workers, and others are members of the Service Employees' International Union.

Sources of Additional Information

Information on careers and scholarships in the lodging industry may be obtained from:

The Educational Institute of the American Hotel and Motel Association, 1407 S. Harrison Rd., East Lansing, Mich. 48823.

For a directory of colleges and other schools offering programs and courses in hospitality education, write to:

Council on Hotel, Restaurant, and Institutional Education, 11 Koger Executive Center, Suite 219, Norfolk, Va. 23502.

Information on careers in housekeeping and a list of schools offering programs in institutional housekeeping management is available from:

National Executive Housekeepers Association, Inc., Business and Professional Building, 414 Second Ave., Gallipolis, Ohio 45631.

OCCUPATIONS IN LAUNDRY AND DRYCLEANING PLANTS

In 1976, approximately 418,000 persons were employed by establishments that launder and dryclean garments, household furnishings, and institutional linens and uniforms. These workers were employed throughout the country, but were concentrated in metropolitan areas.

Drycleaning firms and laundries accounted for about three-fourths of the industry's workers. Most of the remainder worked for firms that specialized in renting and cleaning uniforms, towels, diapers, and other linens. A small proportion were employed in valet shops.

More than half of the industry's employment is found in firms that have 20 employees or more. Most firms, however, are owner-operated and have fewer than 10 employees. In 1976, about one-seventh of the industry's workers were self-employed.

Nature of the Work

One way to describe the work done in this industry is to follow an imaginary bundle of clothes from the time it leaves the customer until it is cleaned and returned. (See accompanying chart.) The bundle consists of some men's shirts, a business suit, and bed linens. A *route driver* (D.O.T. 292.358) picks up the bundle and, after leaving a receipt, takes the bundle to the plant.

The owner of the bundle may instead leave it at the plant or drive-up store. In this case, a *counter clerk* (D.O.T. 369.887) makes out a receipt. Either the route driver or the counter clerk sorts the items in the bundle into laundry and drycleaning.

The bundle is turned over to a *marker* (D.O.T. 369.887), who puts an identifying symbol on each item so it may be matched with the customer's receipt at some later time.

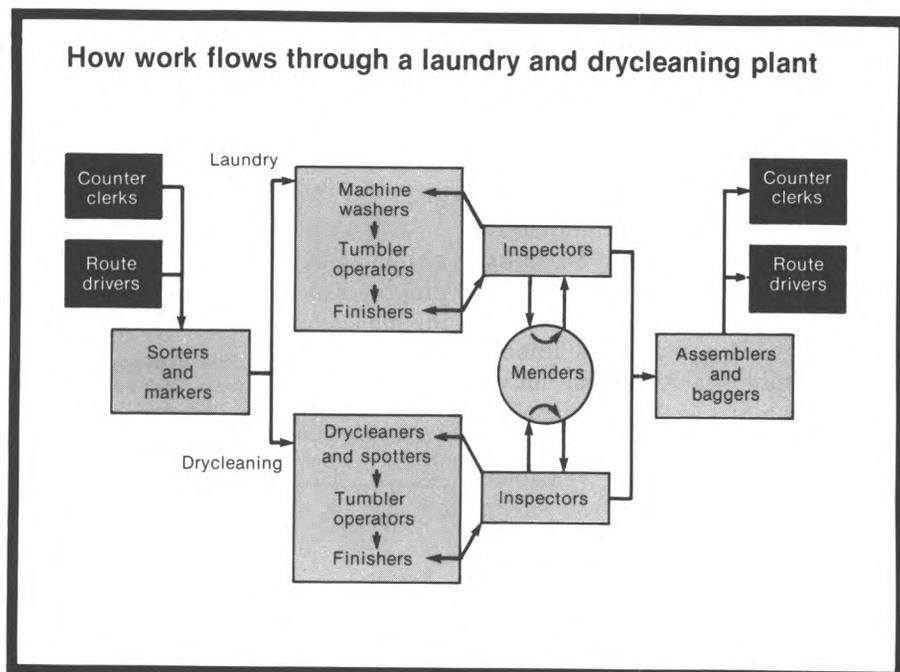
The marker then sends the shirts and sheets to the washroom and the suit to the drycleaning room.

A *machine washer* (D.O.T. 361.885) puts several hundred pounds of sheets into a huge washing machine. Shirts are loaded into another washer. These machines are controlled automatically, but the machine washer must understand how to operate the controls—water temperature, suds level, time cycles, and the amount of agitation for different fabrics. When the washing cycle is completed, the laundry is transferred to an extractor that removes about half of the water. This stage is similar to the "spin" cycle on a home washer. Conveyors move the laundry to conditioners, dryers, or tumblers where dry, heated air removes some of the remaining moisture.

Sheets go from the drying area to *flatwork finishers* (D.O.T. 363.886), who shake out folds and creases, spread the sheets on moving belts, and feed them into large flatwork ironing machines for ironing and partial folding. When the sheets come out of the machine, other finishers complete the folding and stacking.

Shirts go directly from the extractor to *shirt finishers* (D.O.T. 363.782), who usually work in teams of two or three. One finisher puts the sleeves of the shirt on a "sleever," which has two armlike forms. A second finisher then puts the shirt on a "triple-head" press that irons the front and back simultaneously. In some plants, the first finisher either folds the shirt or places it on a hanger, whichever the customer has indicated. A third finisher may do the folding. In some laundries, one shirt finisher performs all these operations.

The jobs of the *drycleaner* (D.O.T. 362.782) and *machine washer* (D.O.T. 361.885) are similar, but the cleaning solution for drycleaning is a chemical solvent instead of water, and drycleaning machines generally are smaller than the laundry washers. The drycleaner sorts clothes according to color, fiber content, and fabric construction and selects the proper time cycle for each load. The drycleaner may apply special prespotting solutions to spots and stains before placing the garments in the





Flatwork finishers shake out folds and creases, spread the sheets on moving belts, and feed them into large flatwork ironing machines.

drycleaning machine. After cleaning, a special machine removes the solvent and then the clothes are dried in a tumbler or hot-air cabinet. The *spotter* (D.O.T. 362.381) will use chemical reagents and steam to remove stubborn stains. In some plants, the same person does drycleaning and spotting.

If the clothes are made of a material that sheds wrinkles readily, the finisher places them on hangers and puts them in a steam tunnel or steam cabinet. The steam will remove the wrinkles and help the garment regain its shape.

Some clothes, such as men's suits, are made out of fabrics that require more attention; they are finished differently. A *men's suit finisher* (D.O.T. 363.782) puts the pants on special "topper" and "legger" presses. The jacket is placed on a body form that may have a second part that comes down to press and shape the shoulders and collar of the jacket while the steam is forced from the inside. Final finishing touches are done on a steam-heated pressing head and "buck," a flat surface covered in fabric.

An *inspector* (D.O.T. 369.687) checks finished items to see that the quality standards of the plant have been maintained. Any item in need of recleaning or refinishing may be returned to the appropriate department; occasionally, the inspector works on them instead. Repair work may be forwarded to a *mender*

(D.O.T. 782.884), who sews on buttons, mends tears, and resews seams. Finally, *assemblers* (D.O.T. 369.687) collect the linens and shirts by matching the sales invoice with the identification marks. Assemblers or *baggers* (D.O.T. 920.887) may remove tags before putting the items in bags or boxes for storage until called for by the customer or delivered by the route driver.

In addition to workers who are unique to laundry and drycleaning plants, many other workers are found in this industry. The manager or proprietor sees that the plant operates efficiently. Office workers keep rec-



Some clothes are made of fabrics that require special attention.

ords, handle correspondence, and prepare bills. Sales personnel search for new customers. Mechanics keep equipment and machinery operating properly. Some service workers clean, guard, and otherwise maintain the plant; others plan and serve food to plantworkers. Laborers lift and carry heavy loads to machines. (Many of these occupations are discussed elsewhere in the *Handbook*.)

Training, Other Qualifications, and Advancement

Many workers in this industry get their first jobs without previous training. Persons who have little formal education can get production line jobs in drycleaning plants. Basic laundry and drycleaning skills may be learned on the job in a short time. Some jobs, such as folding towels and feeding pillowcases and sheets into a flatwork ironer, may require 1 or 2 days to learn. Some finishing jobs—pants presser, or shirt finisher, for example—may require less than a week's training. Other jobs, such as counter clerk, marker, inspector, and assembler, may require several weeks to learn. Several months or more are needed to train a drycleaner or women's apparel finisher. It may take 6 to 12 months to become a spotter because of the variety of fibers and fabrics, spots and stains, and chemicals used in treating the stains.

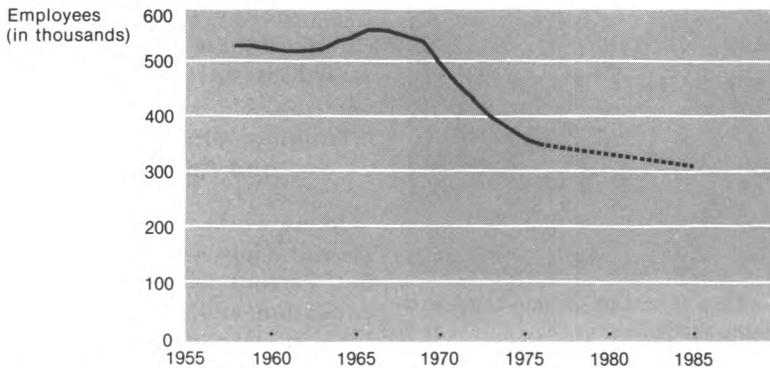
Some preemployment training in finishing, drycleaning, and spotting skills is available in vocational high schools and trade schools. Home study courses in all operations of the industry are available from the International Fabricare Institute.

Employers look for dependable workers who have physical stamina, manual dexterity, and keen eyesight. Workers must be able to adjust to the repetitive nature of many laundry and drycleaning jobs.

Advancement for most workers in this industry is limited. Many remain permanently in the same job. Nevertheless, employers occasionally send promising employees to technical or managerial training programs given by the International Fabricare Institute at its facility in Joliet, Ill. Some men's suit finishers become skilled

Laborsaving machinery and improved methods enable laundries and drycleaning plants to do more work with fewer employees

Wage and salary workers in laundries and drycleaning plants, 1958-76 and projected 1985



Source: Bureau of Labor Statistics

enough to do women's apparel finishing. Markers and assemblers interested in finishing work usually are given an opportunity to move up to this job. Finishers also may become inspectors. Supervisors and managers frequently are chosen from experienced employees already in the industry. Some drycleaners and spotters establish their own drycleaning plants.

Employment Outlook

Employment in this industry is expected to decline through the mid-1980's. Laborsaving machinery and more efficient methods of cleaning and finishing laundry will enable the

industry to do more work with fewer employees. Nevertheless, thousands of workers will be hired to replace those who retire, die, or transfer to other fields.

Although the industry's total employment is expected to decline, employment trends will differ among occupations. Employment of spotters is expected to decline because new fibers and finishes make fabrics less stainable. The number of finishers should decrease as machinery does more of the finishing work. On the other hand, more people will be needed in some maintenance occupations to repair the increasing amount of machinery and equipment used by laundry and drycleaning

firms. More counter clerks will be required due to growth in the number of retail outlets operated by these firms.

Earnings and Working Conditions

Wage levels in the laundry and drycleaning industry are not high. In 1976, the hourly average wage for nonsupervisory workers in this industry was \$3.26 compared to \$4.36 for all nonsupervisory workers in all service industries and \$4.87 for all such workers in private industry, except farming. Earnings are higher for workers in the more highly skilled occupations, such as drycleaner, spotter, and machine washer.

Modern laundry and drycleaning plants are clean and well-lighted. Because of the heat, hot air, and steam of the cleaning processes, the plant may be hot during the summer months. Many new, small drycleaning plants, however, are air-conditioned in the office and customer areas and well-ventilated in the machinery areas. In addition, new machinery operates with a minimum of noise. Work in laundries and drycleaning plants is less hazardous than in most manufacturing plants.

Sources of Additional Information

The local office of the State employment service may have additional information on training and employment opportunities in this field.

GOVERNMENT

Government service, one of the Nation's largest fields of employment, provided jobs for about 15 million civilian workers in 1976—about

1 out of 6 employed persons in the United States. State or local governments (county, city, township, school district, or other special division)

employed 4 out of 5 government workers; the remainder worked for the Federal Government.

Government employees represent a significant portion of each State's work force. They work in large cities, small towns, and even in remote and isolated places such as lighthouses and forest ranger stations. A small number of Federal employees work overseas.

Continuing the trend begun in the late 1940's, employment in State and local government is expected to grow faster than the average for all industries through the mid-1980's. Federal employment, on the other hand, is expected to grow much more slowly than the average for all industries. Many job opportunities also will arise at all levels of government as workers retire, die, or leave government service.

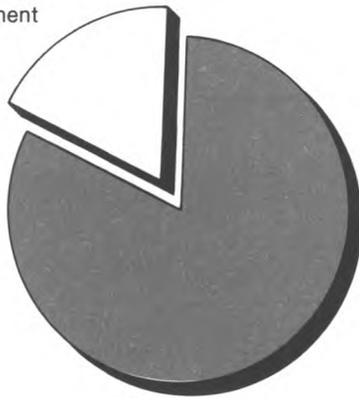
Government Activities and Occupations

Two-fifths of all government workers in 1975, or 6.3 million, provided educational services, mostly at the State and local levels in elementary and secondary schools. Besides teachers, others who worked in educational services included administrative and clerical workers, maintenance workers, librarians, dietitians, nurses, and counselors.

More than 1 million civilian employees in 1975 worked for Federal agencies that are concerned with national defense and international relations. Principal occupations that deal with these functions included administrative and clerical workers, health workers, teachers, engineers, scientists, technicians, and craft and other manual workers. People in these jobs work in offices, research laboratories, navy yards, arsenals, and missile launching sites and in hospitals and schools run by the military services.

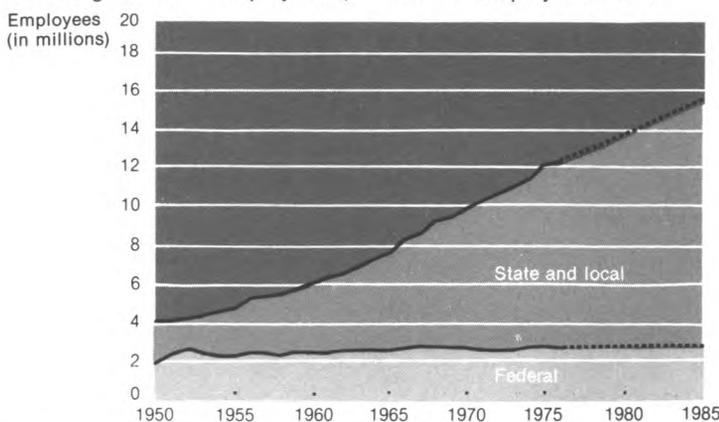
Government (including public education), 1976

18% of total employment in all industries



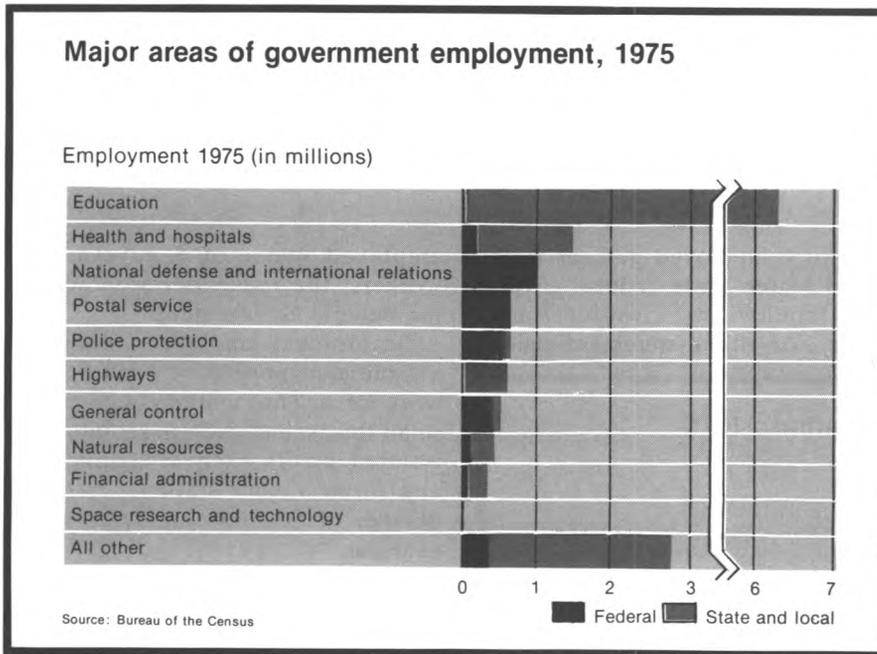
Almost all of the growth in government employment is at the State and local level

Civilian government employment,¹ 1950-76 and projected 1985



Source: Bureau of Labor Statistics

¹Includes public education



Another 1.4 million workers provided health services and staffed hospitals, primarily for State and local governments. Many workers also were employed in housing and community development, police and fire protection, social security and public welfare services, transportation and public utilities, financial administration, general administrative functions, and judicial and legislative activities. The majority of these workers also were State and local government employees. All of the 700,000 government workers in postal services and a majority of the 400,000 workers in natural resources, such as those in National Park and Forest Services, were employed by the Federal Government.

Because of the special character of many government activities, the occupational distribution of employment is very different from that in private industry, as shown in table 1.

Although the many government activities require a diversified work force having various levels of education, training, and skill, 2 out of 3 government employees are white-collar workers. Among the largest white-collar occupational groups are teachers, administrators, postal clerks, and office workers such as stenographers, typists, and clerks.

Some important service, craft, and manual occupations are aircraft and automotive mechanics, repairers, police officers, firefighters, truckdrivers, skilled maintenance workers (for example, carpenters, painters, plumbers, and electricians), custodial workers, and laborers.

The following chapters discuss opportunities for civilian employment in the major divisions of government and in the various branches of the Armed Forces. A separate chapter gives information on post office occupations.

Table 1. Percent distribution of employment in government and private industry by occupation, 1976

Occupation	Government ¹	Private industry
Total	100	100
White-collar workers	68	46
Professional and technical.....	36	11
Managers and administrators.....	8	10
Clerical.....	24	18
Sales.....	(2)	7
Blue-collar workers	14	39
Craft and related workers.....	6	14
Transport equipment operatives.....	3	4
Other equipment operatives.....	1	15
Nonfarm laborers.....	4	6
Service workers	18	13
Farm workers	(2)	2

¹ Excludes Federal employment overseas.

² Less than 0.5 percent

NOTE: Because of rounding, sums of individual items may not equal totals.

SOURCE: Bureau of Labor Statistics

FEDERAL CIVILIAN GOVERNMENT

Nature and Location of Employment

The Federal Government is the Nation's largest employer. It employed about 2,750,000 civilian workers in 1976, including about 50,000 U.S. citizens in U.S. territories and foreign countries. Although the headquarters of most Government departments and agencies are in the Washington, D.C. metropolitan area, only 1 out of 8 (about 350,000) Federal employees worked in that area in 1976. Nearly 300,000 worked in California, and more than 100,000 each in New York, Pennsylvania, Texas, and Illinois.

Federal employees work in occupations that represent nearly every kind of job in private employment, as well as some others unique to the Federal Government, such as postal clerk, regulatory inspector, foreign service officer, and Internal Revenue agent. Most Federal employees work for the departments and agencies that make up the executive branch of the government. About 50,000 are employed in the legislative and judicial branches.

The executive branch includes the Executive Office of the President, the 11 cabinet departments, and nearly 90 independent agencies, commissions, and boards. This branch is responsible for activities such as administering Federal laws, handling international relations, conserving natural resources, treating and rehabilitating disabled veterans, delivering the mail, conducting scientific research, maintaining the flow of supplies to the Armed Forces, and administering other programs to promote the health and welfare of the people of the United States.

The Department of Defense, which includes the Departments of the Army, Navy, and Air Force, is

the largest agency. It employed over 930,000 civilian workers in 1976. The departments of Agriculture; Health, Education, and Welfare; and Treasury each employed more than 100,000 workers. The two largest independent agencies were the U.S. Postal Service, which employed 680,000 workers, and the Veterans Administration, which employed over 200,000.

Nearly 40,000 people worked for the legislative branch of government, which includes the Congress, the Government Printing Office, the General Accounting Office, and the Library of Congress. More than 10,000 people worked for the judicial branch, which includes the Supreme Court and the other U.S. courts.

White-Collar Occupations. Because of its wide range of responsibilities, the Federal Government employs white-collar workers in a great many occupational fields. Nearly 2 million white-collar workers, including postal workers, worked for the Federal Government in 1975. About 1 out of 4 of these were administrative and clerical workers.

More than 470,000 general clerical workers were employed in all departments and agencies of the Federal Government in 1975. Included in this group were office machine operators, secretaries, stenographers, clerk-typists, mail and file clerks, telephone operators, and workers in computer and related occupations. In addition, there were over 500,000 postal clerks and mail carriers employed by the Federal Government.

About 150,000 Federal Government workers were employed in engineering and related fields in 1975. Included in this total were about 80,000 engineers, representing virtually every branch and specialty of the profession. There also were large

numbers of technicians in areas such as engineering, electronics, surveying, and drafting. Nearly two-thirds of all engineers were in the Department of Defense.

Of the 120,000 workers employed in accounting and budgeting work, 35,000 were professional accountants or Internal Revenue agents. Among technician and administrative occupations in this field were accounting technician, tax accounting technician, and budget administrator. There also were large numbers of clerks in specialized accounting work. Accounting workers were employed throughout the Government, particularly in the Department of Defense, the Treasury Department, and the General Accounting Office.

Nearly 120,000 Federal employees worked in hospitals or in medical, dental, and public health activities in 1975. Three out of 5 were either professional nurses or nursing assistants. Professional occupations in this field included physician, dietitian, medical technologist, and physical therapist. Other technician and aide jobs were medical technician, medical laboratory aide, and dental assistant. Employees in this field worked primarily for the Veterans Administration; others worked for the Departments of Defense and Health, Education, and Welfare.

Almost 70,000 workers were engaged in administrative work related to private business and industry. They arranged and monitored contracts with the private sector, and purchased goods and services needed by the Federal Government. Administrative occupations included contract and procurement specialist, production control specialist, and Internal Revenue officer. Two out of three of these workers were employed by the Departments of Defense and Treasury.

Another 60,000 persons worked in jobs concerned with the purchase, cataloging, storage, and distribution of supplies for the Federal Government. This field included many managerial and administrative positions such as supply management officer, purchasing officer, and inventory management specialist, as well as large numbers of specialized clerical

positions. Most of these jobs were in the Department of Defense.

The Federal Government employed almost 60,000 persons in the field of law. There were about 17,000 employees in professional positions, such as attorney or law clerk, and administrative positions such as passport and visa examiner or tax law specialist. There also were many clerical positions that involve claims examining work. Workers in the legal field were employed throughout the Federal Government.

About 50,000 persons were employed in the social science field. Professional economists were employed throughout the Federal Government; psychologists and social workers worked primarily for the Veterans Administration; and foreign affairs and international relations specialists for the Department of State. One third of the workers in this field were social insurance administrators, employed largely in the Department of Health, Education, and Welfare.

About 45,000 biological and agricultural science workers were employed by the Federal Government. Many of these worked in forestry and soil conservation activities. Others administered farm assistance programs. The largest number were employed as biology, forest and range fire control, soil conservation, and forestry technicians. Most of these workers were employed by the Departments of Agriculture and Interior.

The Federal Government employed about 45,000 persons in investigative and inspection work. Large numbers of these workers were engaged in criminal investigation and health and regulatory inspection. Most of these jobs were in the Departments of Treasury, Justice, and Agriculture.

In the physical sciences, the Federal Government employed more than 40,000 persons. Professional workers included chemists, physicists, meteorologists, cartographers, and geologists. Aides and technicians in this field included physical science technicians, meteorological technicians, and cartographer's technicians. Three out of four workers in the physical sciences were employed by

the Departments of Defense, Interior, and Commerce.

Among the 15,000 persons employed in the mathematics field were professional mathematicians and statisticians, and mathematics technicians and statistical clerks. Mathematics workers were employed primarily by the Departments of Defense, Agriculture, Commerce, and Health, Education, and Welfare.

Entrance requirements for white-collar jobs vary widely. Entrants into professional occupations usually must have a college degree in a specified field or equivalent work experience. Occupations typical of this group are attorney, physicist, and engineer.

Entrants into administrative and managerial occupations usually are not required to have knowledge of a specialized field, but rather must indicate that they have potential for future development by having a degree from a 4-year college or responsible job experience. Entrants usually begin at a trainee level and learn the duties of the job after they are hired. Typical jobs in this group are budget analyst, claims examiner, purchasing specialist, administrative assistant, and personnel specialist.

Technician, clerical, and aide-assistant jobs have entry level positions that usually are filled by people who have a high school education or the equivalent. For many of these positions, no previous experience or training is required. The entry level position is usually that of trainee. Persons who have junior college or technical school training, or those who have specialized skills, may enter these occupations at higher levels. Jobs typical of this group are engineering technician, supply clerk, clerk-typist, and nursing assistant.

Blue-Collar Occupations. Blue-collar occupations—service, craft, operative and laborer jobs—provided employment for more than 520,000 workers in 1975. The Department of Defense employed about three-fourths of these workers in establishments such as naval shipyards, arsenals, and air or army depots, as well as on construction, harbor, flood-control, irrigation, or reclamation projects. Others worked for the Vet-

erans Administration, U.S. Postal Service, General Services Administration, Department of the Interior, and Tennessee Valley Authority.

The largest single group of blue-collar workers consisted of mobile equipment operators and mechanics. These jobs included those of forklift operator, chauffeur, truckdriver, and automobile mechanic. The second largest group of workers consisted of general laborers, who performed a wide variety of manual jobs.

The Federal Government employed many workers in machinery operation and repair occupations, such as boiler and steam plant operator, machinist, machinery repairer, maintenance electrician, electronics equipment repairer, and aircraft mechanic.

Skilled construction workers also were utilized widely throughout the Federal Government in such jobs as carpenter, painter, plumber, steamfitter and pipefitter, and sheet-metal worker. Other important blue-collar occupations included warehouse worker, food service worker, and printer.

Entrance requirements. Persons with previous training in a skilled trade may apply for a position with the Federal Government at the journeyman level. Those with no previous training may apply for appointment to one of several apprenticeship programs. Applicants are given a written examination and are rated on their potential for learning a skilled trade. Apprenticeship programs generally last for 4 years; trainees receive both classroom and on-the-job training. After completing this training, a person is eligible for a position at the journey level. There also are a number of positions which require little or no prior training or experience, including custodian, maintenance worker, messenger, and many others. (Detailed descriptions of the work duties, qualifications, and training of most white-collar, service, craft, and laborer jobs mentioned above are provided in other sections of the *Handbook*.)

The Merit System

More than 9 out of 10 jobs in the Federal Government are under a merit system. The Civil Service Act,

administered by the U.S. Civil Service Commission, covers 6 out of 10 Federal jobs. This act was passed by the Congress to insure that Federal employees are hired on the basis of individual merit and fitness. It provides for competitive examinations and the selection of new employees from among those who make the highest scores. The commission, through its network of about 100 Federal Job Information Centers, examines and rates applicants and supplies Federal departments and agencies with names of persons eligible for the jobs to be filled.

Some Federal jobs are exempt from Civil Service requirements, either by law or by action of the Civil Service Commission. However, most of these positions are covered by separate merit systems of other agencies such as the Foreign Service of the Department of State, the Department of Medicine and Surgery of the Veterans Administration, the Federal Bureau of Investigation, the Energy Research and Development Administration, the Nuclear Regulatory Commission, and the Tennessee Valley Authority.

Civil service competitive examinations may be taken by any U.S. citizen. To be eligible for appointment, an applicant must meet minimum age, training, and experience requirements for the particular job. A physical handicap will not in itself bar a person from a position if it does not interfere with his or her performance of the required duties. Examinations vary according to the types of positions for which they are held. Some examinations test the applicant's ability to do the job applied for or his or her ability to learn how to do it. Applicants for jobs that do not require a written test are rated on the basis of the experience and training described in their applications and any supporting evidence required.

Applicants are notified as to whether they have achieved eligible or ineligible ratings, and the names of eligible applicants are entered on a list in the order of their test scores. When a Federal agency requests names of eligible applicants for a job vacancy, the area office sends the agency the names at the top any one of the top three. Names of those not

selected are restored to the list for consideration for other job openings.

Employment Trends and Outlook

Federal employment is expected to grow more slowly than the average for all industries through the mid-1980's, continuing a trend begun in the late 1960's. Although total Federal Government employment is expected to rise somewhat, some Federal agencies will reduce their staffs as some administrative responsibilities will continue to be transferred to State and local governments. In addition, the Postal Service is expected to reduce staff while the Department of Defense is expected to keep the number of its civilian employees relatively constant.

In addition to some new jobs there will be openings due to the need to replace employees who transfer out of the Federal service, retire, or die. Thus, many job opportunities will occur in occupations where total employment is relatively stable, as well as in those in which it is rising.

The proportion of Federal workers employed in professional, technical, and administrative jobs has gradually increased in recent years and the proportion employed in clerical and blue-collar jobs has fallen. This trend is expected to continue, reflecting the increasing demand for existing services by a growing population, as well as demands for new services. Acceptance of new or redefined responsibilities by the Federal Government is expected to result in rising requirements for professional, administrative, and technical workers. Employment in many clerical and blue-collar occupations will be limited by the Federal Government's increasing use of laborsaving electronic data processing and materials handling equipment and the introduction of improved data transmission and communications systems.

Earnings, Advancement, and Working Conditions

Most Federal civilian employees are paid according to one of three major pay systems; the General Pay Schedule, the wage system, and the Postal Service Schedule. (The Postal Service Schedule is discussed in the

statement on the Postal Service elsewhere in the *Handbook*.)

Nearly half of all Federal workers are paid under the General Schedule. The General Schedule is a pay scale for workers in professional, administrative, technical, and clerical jobs, and for workers such as guards and messengers. General Schedule jobs are classified by the U.S. Civil Service Commission in one of 18 grades, according to the difficulty of duties and responsibilities, and the knowledge, experience, and skills required of the worker. General Schedule (GS) pay rates are set by Congress and apply nationwide. They are reviewed annually to insure that they remain comparable with salaries in private industry.

The distribution of Federal white-collar employees by General Schedule grade, the entrance and maximum salaries for each grade, and the amount of each grade's periodic increases are listed in table 1. Appointments usually are made at the minimum rate of the salary range for the appropriate grade. However, appointments in hard-to-fill positions may be at a higher rate.

Employees in all grades except the highest, GS-18, receive within-grade pay increases after they have worked the required time period, if their work is at an acceptable level of competence. Within-grade increases may be given also in recognition of high-quality service.

High school graduates who have no related work experience usually start in GS-2 jobs, but some who have special skills begin at grade GS-3. Graduates of 2-year junior colleges and technical schools often can begin at the GS-4 level. Most people appointed to professional and administrative jobs such as psychologist, statistician, economist, writer and editor, budget analyst, accountant, and physicist, can enter at grades GS-5 or GS-7, depending on their academic record. Those who have a master's degree, or the equivalent education or experience, usually enter at the GS-9 or GS-11 level. Advancement to higher grades generally depends upon ability, work performance, and openings in jobs with higher grades.

Table 1. Distribution of full-time Federal employees under the General Schedule by grade level, March 31, 1976, and salary scale effective February 20, 1977

General Schedule	Employees		Salaries		
	Number	Percent	Entrance	Periodic increase	Maximum
Total all grades	1,358,489	100.0			
1.....	2,256	0.2	\$5,810	\$194	\$7,556
2.....	25,526	1.9	6,572	219	8,543
3.....	99,330	7.3	7,408	247	9,631
4.....	174,146	12.8	8,316	277	10,809
5.....	182,211	13.4	9,303	310	12,093
6.....	85,741	6.3	10,370	346	13,484
7.....	127,553	9.4	11,523	384	14,979
8.....	27,790	2.0	12,763	425	16,588
9.....	139,334	10.3	14,097	470	18,327
10.....	22,090	1.6	15,524	517	20,177
11.....	146,954	10.8	17,056	569	22,177
12.....	139,692	10.3	20,442	681	26,571
13.....	107,310	7.9	24,308	810	31,598
14.....	49,379	3.6	28,725	958	37,347
15.....	24,530	1.8	33,789	1,126	² 43,923
16.....	3,309	0.2	39,629	1,321	² 47,500
17.....	990	0.1	46,423	—	² 47,500
18.....	348	(¹)	² 47,500	—	—

¹ Less than 0.05 percent

² The rate of basic pay for employees at these rates is limited by section 5308 of title 5 of the United States Code to \$47,500 as of the above date.

SOURCE: U.S. Civil Service Commission.

Table 2. Coordinated Federal Wage System average salaries for selected occupational groups, October 31, 1975

Occupational group	Average Salary
Manual labor.....	\$9,895
Mobile industrial equipment operation and maintenance.....	12,942
Fixed industrial equipment operation and maintenance.....	13,607
Warehousing.....	11,558
Metal work and processing.....	13,676
Aircraft repair, propeller work, and engine overhaul.....	13,712
Electrical installation and maintenance.....	14,052
Machine tool work.....	13,660
Electronic equipment installation, maintenance, and operation.....	14,198
Woodworking.....	13,271
Pipefitting.....	13,786
Printing and reproduction.....	14,339
Painting and paperhanging.....	13,006

SOURCE: U.S. Civil Service Commission.

About one-quarter of the Federal civilian workers are paid according to the coordinated Federal Wage System. Under this system, craft, service, and manual workers are paid hourly rates which are established on the basis of "prevailing" rates paid by private employers for similar work in the same locations. As a result, the Federal Government wage rate paid for an occupation varies by locality.

Average salaries paid Federal workers for some of the more common types of blue-collar work appear in table 2.

Federal Government employees work a standard 40-hour week. Employees who are required to work overtime receive premium rates for the additional time or compensatory time off at a later date. Most employees work 8 hours a day and 5 days a

week, Monday through Friday, but in some cases, the nature of the work requires a different workweek. Annual earnings for most full-time Federal workers are not affected by seasonal factors.

Federal employees earn 13 days of annual (vacation) leave each year during their first 3 years of service; 20 days each year until the end of 15 years; after 15 years, 26 days each year. Nine paid holidays are observed annually. Workers who are members of military reserve organizations also are granted up to 15 days of paid military leave a year for training purposes. A Federal worker who is laid off is entitled to unemployment compensation similar to that provided for employees in private industry.

Other benefits available to most Federal employees include: A contributory retirement system, optional participation in low-cost group life and health insurance programs which are partly supported by the Government, and training programs to develop maximum job proficiency and help workers achieve their highest potential. These training programs may be conducted in Government facilities or in private educational facilities at Government expense.

Sources of Additional Information

Information on employment opportunities in the Federal Government is available from a number of sources. High school students are often able to get information from their high school guidance counselors. A college placement office is often a good source of such information for college students. Information also may be available from State employment service offices.

The U.S. Civil Service Commission operates 62 area offices and over 100 Federal Job Information Centers located in various large cities throughout the country. These offices announce and conduct examinations required for various Federal Government jobs. They evaluate qualifications and refer eligible applicants to employing agencies for their geographic areas. They also provide a complete one-stop information ser-

vice on local and nationwide job opportunities in the Federal Government service. The Federal Job Information Centers also operate a toll-free telephone information service in nearly all States for those unable to visit them. Their telephone numbers are listed in most telephone books under "U.S. Government."

For information about jobs in a specific agency, contact the agency directly.

OCCUPATIONS IN THE POSTAL SERVICE

The U.S. Postal Service handled about 90 billion pieces of mail in 1976, including letters, magazines, and parcels. About 680,000 workers were required to process and deliver this mail. The vast majority of Postal Service jobs are open to workers with 4 years of high school or less. The work is steady, and the pay starts at about \$12,000 a year for most workers. Some of the jobs, such as mail

carrier, offer a good deal of personal freedom. Other jobs, however, are more closely supervised and more routine.

Nature and Location of the Industry

Most people are familiar with the duties of the mail carrier, yet few are aware of the many different tasks required in processing mail and of the variety of occupations in the Postal Service.

At all hours of the day and night, a steady stream of letters, packages, magazines, and papers moves through the postal system. Mail carriers collect mail from neighborhood mailboxes and bring it to post offices that truck it to the nearest mail processing center for sorting by postal clerks. There are more than 300 large mail processing centers, each responsible for sorting the outgoing and incoming mail for an area of the United States. Outgoing mail is sorted and sent by truck or airplane to the appropriate mail processing center in another area of the country. Incoming mail is sorted for the var-

ious local post offices in the area, trucked to the post offices, and then sorted again for delivery by mail carriers to homes and business establishments. (Detailed information on mail carriers and postal clerks appears elsewhere in the *Handbook*.)

Mailhandlers load, unload, and move mail sacks and bulk mail, such as parcels and packages. They separate and distribute mail sacks to postal clerks for processing. Some also rewrap parcels and packages or operate canceling machines, fork-lift trucks, or addressograph and mimeograph machines.

Technicians and mechanics maintain, test, repair, and overhaul machinery that processes mail or dispenses stamps. Some technicians specialize in maintenance of electronic equipment.

To keep buildings and equipment clean and in good working order, the Postal Service employs a variety of service and maintenance workers. Included are janitors, laborers, vehicle mechanics, electricians, carpenters, and painters.

Postal inspectors audit post offices' operations to see that they are run efficiently, that funds are spent properly, and that postal laws and regulations are observed. They also investigate crimes such as theft, forgery, and fraud involving use of the mail.

Postmasters and line supervisors are responsible for the day-to-day operation of the post office. They supervise mailhandlers, clerks, carriers, and technicians; hire and train employees; and set up work schedules. Postmasters manage a post office, station, or branch.

More than 9 out of 10 postal workers were employed in 1 of 5 occupations in 1976. The 270,000 postal clerks and 250,000 mail carriers together accounted for 3 out of 4 postal jobs. The 40,000 mailhandlers, 40,000 line supervisors, and 30,000 postmasters were the next largest postal occupations. The postal service also employs many postal inspectors, guards, truckdrivers, administrative workers, and secretaries.

The Postal Service operates more than 40,000 post offices, stations and branches, community post offices,



Many postal service jobs do not require formal education or special training.

and contract postal stations and branches. They range in size from the large metropolitan postal station that employes hundreds of workers, to the small contract station or branch that occupies a corner of a country store. Most are post offices, but some postal facilities serve special purposes, such as handling payroll records or supplying equipment.

Although every community receives mail service, employment is concentrated in large metropolitan areas. Post offices in cities such as New York, Chicago, and Los Angeles employ a great number of workers not only because they process huge amounts of mail for their own populations but also because they serve as mail processing points for the smaller communities that surround them.

The Postal Service also contracts with private businesses to transport mail. In 1976, there were more than 12,000 of these "Star" route contracts. Most "Star" route carriers use trucks to haul mail, but some use airplanes or boats instead.

Training, Other Qualifications, and Advancement

An applicant for a Postal Service job must pass a written examination and meet minimum age requirements. Generally, the minimum age is 18, but a high school graduate may begin work at 16 if the job is not hazardous and does not require use of a motor vehicle. Many Postal Service jobs do not require formal education or special training. Applicants for these jobs are hired on the basis of their examination scores.

Applicants should apply at the post office where they wish to work and take the entrance examination for the job they want. Examinations for most jobs include a written test that checks an applicants vocabulary and reading ability, as well as any special abilities required, such as aptitude for remembering addresses. A physical examination is required, as well. Applicants for jobs that require strength and stamina are sometimes given a special test. For example, mailhandlers must be able to lift and carry mail sacks weighing up to 70 pounds. The names of applicants

who pass the examinations are placed on a list in the order of their scores. Separate eligibility lists are maintained for each post office. Five extra points are added to the score of an honorably discharged veteran, and 10 extra points to the score of a veteran wounded in combat or disabled. When a job opens, the appointing officer chooses one of the top three applicants. Others are left on the list so that they can be considered for future openings.

New employees are trained either on the job by supervisors and other experienced employees or in local training centers. Training ranges from a few days to several months, depending on the job. For example, mailhandlers and custodians can learn their jobs in a relatively short time while postal inspectors need months of training.

Postal workers are classified as casual, part-time flexible, part-time regular, or full-time. Casual workers are hired to help handle the large amounts of mail during the Christmas season and for other short-term assignments. Part-time flexible employees, although they have career status, do not have a regular work schedule but replace absent workers or help with extra work loads as the need arises. Part-time regulars have a set work schedule—for example, 4

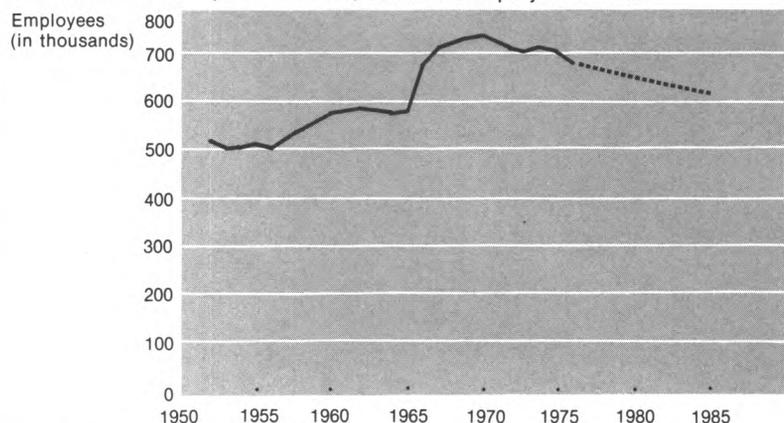
hours a day. Carriers, clerks, and mailhandlers may start as part-time flexible workers and move into full-time jobs according to their seniority as vacancies occur.

Postal workers can advance to better paying positions by learning new skills. Training programs are available for low-skilled workers who wish to become technicians or mechanics. Also, employees can get preferred assignments, such as the day shift or a more desirable delivery route, as their seniority increases. When an opening occurs, eligible employees may submit written requests, called "bids," for assignment to the vacancy. The bidder who meets the qualifications for the assignment and has the most seniority gets the job.

Applicants for supervisory jobs must pass an examination. Additional requirements for promotion may include training or education, a satisfactory work record, and appropriate personal characteristics such as leadership ability. If the leading candidates are equally qualified, length of service also is considered. Although opportunities for promotion to supervisory positions in smaller post offices are limited, workers may apply for vacancies in a larger post office and thus increase their chances.

Employment in the postal service is expected to decrease due to mechanization and falling mail volume

Employment in the postal service, 1952-76 and projected 1985



Source: Bureau of Labor Statistics

Employment Outlook

Employment in the Postal Service is expected to decline through the mid-1980's as mail processing systems become more efficient and as mail volume falls because of rising postal rates and increasing reliance on the telephone for personal communication. Anticipated cutbacks in the frequency of home deliveries will offset any employment growth stemming from increases in the number of homes and business establishments. Consolidation of the postal system is expected to result in the closing of many small post offices reducing requirements for postmasters, guards, and maintenance and support personnel. Nevertheless, thousands of job openings will result annually as workers retire, die, or transfer to other fields.

Earnings and Working Conditions

Postal Service employees are paid under several separate pay schedules depending upon the duties of the job, knowledge, experience, or skills re-

quired. For example, there are separate schedules for production workers, such as clerks, city mail carriers, and mailhandlers; for rural carriers; for supervisors; for nonsuperisory administrative, technical, and clerical workers; and for postal executives. In all pay schedules, except that of executives, employees receive periodic "step" increases up to a specified maximum if their job performance is satisfactory. In addition, salaries of most postal workers are automatically adjusted for changes in the cost of living.

Full-time employees work an 8-hour day 5 days a week. Both full-time and part-time employees who work more than 8 hours a day or 40 hours a week receive overtime pay of one-and-one-half times their hourly rates. They also receive extra pay for night and Sunday work.

In 1976, postal employees earned 13 days of annual leave (vacation) during each of their first 3 years of service, including prior Federal civilian and military service; 20 days each year for 3 to 15 years of service; and 26 days after 15 years. In addition,

they earned 13 days of paid sick leave a year regardless of length of service.

Other benefits include retirement and survivorship annuities, and low-cost life and health insurance programs supported in part by the Postal Service.

Most post office buildings are clean and well lighted, but some of the older ones are not. The Postal Service is in the process of replacing and remodeling its outmoded buildings, and conditions are expected to improve.

Most postal workers are members of unions and are covered by one of several negotiated bargaining agreements between the Postal Service and the unions.

Sources of Additional Information

Local post offices and State employment service offices can supply details about entrance examinations and employment opportunities in the Postal Service.

STATE AND LOCAL GOVERNMENTS

State and local governments provide a very large and expanding source of job opportunities in a wide variety of occupational fields. In 1976, about 12.2 million people worked for State and local government agencies; nearly three-fourths of these worked in units of local government, such as counties, municipalities, towns, and school districts.

Educational services account for about half of all jobs in State and local government. In 1975, about 6.3 million government employees worked in public schools, colleges, or other educational services. In addition to more than 3.5 million instructional personnel, school systems, colleges, and universities also employed 2.7 million administrative personnel, librarians, guidance counselors, nurses, dietitians, clerks, and maintenance workers. Three-fifths of these worked in elementary and secondary schools, which are administered largely by local governments. State employment in education is concentrated chiefly at the college, university, and technical school levels.

The next largest field of State and local government employment was health services. The 1.2 million workers employed in health and hospital work included physicians, nurses, medical laboratory technicians, and hospital attendants.

General governmental control and financial activities accounted for about 750,000 workers. These included chief executives and their staffs, legislative representatives, and persons employed in the administration of justice, tax enforcement and other financial work, and general administration. These functions require the services of individuals such as lawyers, judges and other court officials, city managers, property assess-

sors, budget analysts, stenographers, and clerks.

More than 600,000 people worked in street and highway construction and maintenance. Highway workers include civil engineers, surveyors, operators of construction machinery and equipment, truckdrivers, concrete finishers, carpenters, toll collectors, and construction laborers.

Police and fire protection is another large field of employment. Over 600,000 persons were engaged in police work, including administrative, clerical, and custodial personnel, as well as uniformed and plainclothes police. Local governments employed all of the nearly 300,000 fire protection employees, as well as most of the police. One out of three firefighters was employed part time.

Other State and local government employees work in a wide variety of activities: Local utilities (such as water or electricity), transportation, natural resources, public welfare, parks and recreation, sanitation, correction, local libraries, sewage disposal, and housing and urban renewal. These activities require workers in diverse occupations such as economist, electrical engineer, electrician, pipefitter, clerk, forester, and bus-driver.

Clerical, administrative, maintenance, and custodial work make up a large portion of employment in most government agencies. Among the workers involved in these activities are clerk-typists, stenographers, secretaries, office managers, fiscal and budget administrators, bookkeepers, accountants, carpenters, painters, plumbers, guards, and janitors. (Detailed discussions of most occupations in State and local governments are given elsewhere in the *Handbook*, in the sections covering the individual occupations.)

Employment Trends and Outlook

The long-range trend in State and local government employment has been steadily upward. Much of this growth results from the need to provide additional services as population increases and as people move from rural to urban areas. City development has required additional street and highway facilities; police and fire protection; and public health, sanitation, welfare, and other services. Population growth and increasing personal income have generated demand for additional and improved education, housing, health facilities, and other services. Except for employment in elementary and secondary school systems State and local government employment is expected to grow faster than the average for all industries through the mid-1980's.

A larger State and local work force also will be needed to provide improved public transportation systems, more urban planning and renewal programs, increased police protection, better measures to guard against air and water pollution, and expanded natural resource development programs. In addition, large numbers of workers will be needed to replace employees who transfer to other fields of work, retire, or die.

Federal-State programs in education, vocational training, health, and other fields will increase the needs of local and State governments for professional, administrative, and technical personnel. These will include engineers, scientists, social workers, counselors, teachers, physicians, and librarians.

Most positions in State and local governments are filled by residents of the State or locality. If shortages of particular skills exist however, it is often necessary to recruit from outside the area.

Earnings and Working Conditions

Earnings of State and local government employees vary widely, depending upon occupation and locality. Salary differences from State to State tend to reflect differences in the general wage level in various localities.

The *Handbook* statement for individual occupations often gives salary information for State and local government employment. Salary information also can be obtained from the appropriate State and local government agencies.

A majority of State and local government positions are filled through some type of formal civil service test, that is, personnel are hired and promoted on the basis of merit. In some

areas, groups of employees, such as teachers and police, have separate civil service coverage for their specific groups.

Most State and local government employees are covered by retirement systems or by the Federal Social Security program. They usually work a standard week of 40 hours or less, with overtime pay or compensatory time benefits for additional hours of work.

Sources of Additional Information

Persons interested in working for State or local government agencies should contact the appropriate State, county, or city agencies. Offices of local school boards, city clerks, school and college counselors or placement personnel, and local offices of State employment services have additional information.

THE ARMED FORCES

The Armed Forces offer young people career opportunities in a range of occupations almost as wide as that found in civilian life. Jobs include clerical and administrative work, skilled construction trades, electrical and electronic occupations, auto repair, and hundreds of other specialties requiring varied amounts of education and training. Each year the Armed Forces give

hundreds of thousands of men and women basic and advanced training that can be useful in both military and civilian careers.

Since the draft was ended in 1973, the various branches of the Armed Forces—Army, Air Force, Navy, Marine Corps, and Coast Guard—are being staffed entirely through voluntary enlistments. The military services must compete with civilian

employers, and they must offer occupational benefits and training programs that make military service an attractive career alternative. These benefits are explained in more detail later in this statement.

A young person may enlist in any one of a variety of programs that involve different combinations of active and reserve duty. Active duty ranges from 3 to 6 years, with 3- and 4-year enlistments the most common. In general, enlistments for over 4 years are for job specialties that require a considerable amount of advanced technical training.

Places of Employment

At the end of 1976, over 2.1 million persons were on active duty in the Armed Forces—about 770,000 in the Army; 600,000 in the Air Force; 525,000 in the Navy; 190,000 in the Marine Corps; and 38,000 in the Coast Guard. In addition to those on active duty, over 2.7 million persons were in reserve components.

Military personnel are stationed throughout the United States and in many countries around the world. In the United States, the largest numbers are in California, followed by Texas, North Carolina, Florida, and the Washington, D.C. metropolitan area. About 480,000 are outside the United States. The majority of these—over 300,000—are stationed in Europe (particularly Germany); large numbers also are in the Western Pacific.

Job Training and Education for Enlisted Personnel

The Armed Forces train personnel in hundreds of different types of jobs. Job training available to enlistees depends on the length of their service commitment, their general and technical aptitude, the needs of the service, and personal preferences. Following a basic training period of between 6 and 11 weeks, depending on the service branch, a majority of the recruits go directly to formal classroom training to prepare for a specialized field of work. The remainder receive on-the-job training at their first duty assignment. For those not assigned directly to schools, there is opportunity for for-



The Armed Forces train personnel in hundreds of different types of jobs.

mal classroom training following on-the-job training.

After initial or advanced training, recruits are sent to their service assignment. The type and location of duty depend on the service vacancies, personal qualifications, and personal preferences.

People planning to apply the skills they gain through military training to a civilian career should obtain certain information before choosing a military occupation. First, they should determine how good the prospects are for civilian employment in jobs related to the particular military specialty which interests them. Second, they should know what the prerequisites are for the related civilian job. Many occupations require licensing, certification, or a minimum level of education. Those who are interested should find out whether military training is sufficient to enter the field or, if not, what additional training will be required.

Much information is given in other *Handbook* statements on the employment outlook for civilian jobs for which military training helps prepare an individual. Additional information often can be obtained from schools, unions, trade associations, and other organizations in the field of interest, or from a school counselor. By looking into this kind of information before choosing a specific military occupation, young people entering the Armed Forces will help insure that the type of training they obtain will fit their career plans.

A list of major job categories for enlisted personnel is presented below.

Administrative Specialists and Clerks:

- Personnel.
- Administration.
- Clerical personnel.
- Accounting, finance, and disbursing.
- Supply and logistics.
- Religious, morale, and welfare.
- Information and education.
- Communications center operations.

Electrical and Mechanical Equipment Repairers:

- Aircraft.
- Automotive.

- Wire communications.
- Missiles, mechanical and electrical.
- Armament and munitions.
- Shipboard propulsion.
- Power generating equipment
- Precision equipment.
- Aircraft launch equipment.
- Other mechanical and electrical equipment.

Crafts:

- Metalworking.
- Construction.
- Utilities.
- Construction equipment operation.
- Lithography.
- Industrial gas and fuel production.
- Fabric, leather and rubber.
- Firefighting and damage control.
- Other crafts.

Service and Supply Handlers:

- Food service.
- Motor transport.
- Material receipt, storage, and issue.
- Military police.
- Personal service.
- Auxiliary labor.
- Forward area equipment support.

Infantry, Gun Crews, and Seamanship Specialists:

- Infantry.
- Armor and amphibious.
- Combat engineering.
- Artillery/gunnery, rockets, and missiles.
- Combat air crew.
- Seamanship.

Electronic Equipment Repairers:

- Radio/radar.
- Fire control systems.
- Missile guidance and control.
- Sonar equipment.
- Nuclear weapons equipment.
- ADP computers.
- Teletype and cryptographic equipment.
- Other electronic equipment.

Communications and Intelligence Specialists:

- Radio and radio code.
- Sonar.
- Radar and air traffic control.
- Signal intelligence/electronic warfare.

- Military intelligence.
- Combat operations control.

Medical and Dental Specialists:

- Medical care.
- Technical medical services.
- Related medical services.
- Dental care.

Other Technical and Allied Specialists:

- Photography.
- Drafting, surveying, and mapping.
- Weather.
- Ordnance disposal and diving.
- Scientific and engineering aides.
- Musicians.

A brief description of each category as it relates to civilian jobs follows:

Administrative specialist and clerk jobs are found in most private businesses and government agencies and require the same basic skills as those learned in the military services.

Electrical and mechanical equipment repairers generally are instructed in the basic theories and advanced troubleshooting techniques involved in the operation and repair of equipment. This instruction and training make transfer to a similar civilian job fairly easy in many career fields. In others, some additional civilian training may be needed.

In general, the various *skilled crafts or trades* require some kind of apprenticeship program. In some apprenticeship programs credit may be given for skills acquired through military training and experience.

Many of the *service and supply occupations* are identical to those in civilian life. Such military experience is helpful in obtaining similar civilian employment.

On the other hand, some of the jobs in the *infantry, gun crews and seamanship specialist* group are unique to the Armed Forces—they have few or no parallels in civilian jobs. However, this work experience may be helpful in developing leadership and supervisory skills that provide a good base for future civilian employment.

Those working as *electronic equipment repairers* generally maintain and repair specialized military equip-



Seaman looks through the ship's telescope as he stands lookout watch.

ment. However, most of the training and experience gained can be directly related to civilian occupations such as electronics technician, aircraft instrument mechanic, or radar and radio repairer. The service-trained specialist in electronic equipment repair may need additional training on specialized equipment before gaining journeyman status in civilian employment. Again, credit sometimes is given in an apprenticeship program for skills acquired in the service. For certain occupations, such as electrician, applicants for a license may be required to demonstrate their proficiency by passing an examination.

Some of the *communications and intelligence specialist* occupations have civilian counterparts; for example, sonar, radar, and radio operators may move into civilian jobs and use the same skills. In general, however, these specialists have a limited civilian demand. Other jobs, such as military intelligence or combat operations control have very few or no directly parallel civilian occupations.

In recent years, changes in military training and civilian requirements in the *medical and dental* fields have greatly increased civilian employment opportunities for service-trained personnel. An examination is required in most fields to show proficiency. Some of the civilian occupa-

tions in which service-trained individuals can become certified include: Physician's assistant; laboratory technician; emergency medical technician; medical technologist; dental assistant; nurse (most States allow service-trained personnel to take the Licensed Practical Nurse Examination; a few, the Registered Nurse Examination); and physical therapists.

Other technical and allied specialists include a wide range of jobs, many having direct civilian parallels such as photographer, meteorologist, musician, and others providing skills with limited demand in the civilian sector such as ordnance disposal and diving.

Women are eligible for and encouraged to enter all military occupational fields except those involving actual combat.

Other Educational Programs

In addition to on-duty training, a variety of programs are available to help military personnel continue their education. At most military installations, a Tuition Assistance program is available for active duty personnel who, during off-duty hours, wish to take courses.

Each service branch also offers programs for full-time education, and provides full pay allowances, tu-

ition, and related fees. Other programs enable enlisted personnel to take college courses and additional military training so that they can become commissioned officers. Courses also are available by other institutions to help service personnel earn their high school equivalency diploma. In addition, programs are being instituted to permit the application of credit for military training courses towards associate or baccalaureate college degrees from participating institutions.

Officer Training

Officer candidates in the Armed Forces receive special training through such programs as: The Federal Service Academies (Naval, Air Force, Military, and Coast Guard); Reserve Officer Training Corps (ROTC); Officer Candidate School; National Guard (State Officer Candidate School programs); direct appointment; and several other programs.

The Federal Service Academies, which admit women as well as men, provide a 4-year college program leading to a bachelor of science degree. The midshipman or cadet is provided free room and board, tuition, medical care, and a monthly allowance. Graduates may receive regular commissions in all branches of the service and have a 5-year active duty obligation.

To become a candidate for appointment as a midshipman or cadet in the Naval, Air Force, or Military Academy, most applicants obtain a nomination from an authorized nominating source (usually a member of Congress). It is not necessary to know a member of Congress personally to request a nomination. The nominee must meet certain requirements, which include an academic record of a specified quality, college aptitude test scores above an established minimum, and recommendations from teachers or school officials. Also, the nominee must pass a medical examination. Appointments are made from eligible nominees according to personal preference of the nominating authority and by a competitive system based on the nominees' qualifications. The dependents



The Armed Forces offer a variety of flight training programs, many of which lead to a commission.

Army, Navy, Marine Corps, and Air Force units at participating colleges and universities throughout the United States and Puerto Rico. As a part of the school curriculum, ROTC training includes 2 to 5 hours of military instruction a week in addition to regular college courses.

Students in the last 2 years of an ROTC program and all those on ROTC scholarships are paid a monthly allowance while attending school and receive additional pay for summer training. Following graduation, ROTC students fulfill their military obligations by serving as regular or reserve officers for a stipulated period of time.

A commission in the Armed Forces can be earned without ROTC training by those who enlist from civilian life into one of the several Officer Candidate School Programs. The Army, Navy, Air Force, Marine Corps, and Coast Guard train selected college graduates to become commissioned officers. The National Guard also has several Officer Candidate Programs for qualified high school graduates.

Many persons who are trained in medicine or one of the related health sciences may qualify for direct appointment as officers. Financial assistance is available to students enrolled in training in one of these fields. Direct appointments also are available for those qualified to serve in other special duties, such as the judge advocate general or chaplain corps.

The Armed Forces offer a wide variety of flight training programs, many of which lead to a commission. All services have programs for qualified enlisted personnel to obtain commissions.

Salary, Allowances, Promotion, and Working Conditions

In addition to a regular salary, military personnel receive free room and board, medical and dental care, a military clothing allowance, military supermarket and department store shopping privileges, recreational facilities, 30 days of paid vacation a year, and travel opportunities. When room and board are not provided, a living allowance is given. Table 1

Table 1. Active duty military compensation in 1976 for members of the Armed Forces who are single and have less than 2 years of service

Pay grade	Regular military compensation, total	Basic pay	Quarters allowance	Subsistence allowance
Enlisted members:				
E-1	\$6,346	\$4,493	\$886	\$967
E-2	6,915	5,008	940	967
E-3	7,227	5,198	1,062	967
E-4	7,566	5,407	1,192	967
Commissioned officers:				
O-1	10,553	8,280	1,606	667
O-2	12,263	9,540	2,056	667
O-3	13,973	10,944	2,362	667

SOURCE: Department of Defense.

of certain veterans may automatically gain admission if they apply. Active and reserve service members also may receive such preferences.

Academy are made on a competitive basis. A nomination is not required.

The Reserve Officer Training Corps (ROTC) Program involves the training of students in about 500

gives examples of military pay and allowances. Career officers and enlisted personnel also are eligible for retirement benefits after 20 years of service.

The pay grades for enlisted personnel are E-1 to E-9. The pay grades for commissioned officers are O-1 to O-10.

Enlisted personnel will normally be promoted to pay grade E-3 within their first 12 months of service. Further promotions depend on individual merit, but in-grade pay increases are possible on the basis of length of service.

The normal workweek in the Armed Forces is 8 hours a day, 5 or 5 1/2 days a week. Due to the nature of military work, an individual or group may be called upon to work longer hours without additional compensation. With the wide range of jobs found in the service, working conditions vary substantially. Some jobs that are extraordinarily dangerous, or in an undesirable location, provide additional income in the form of bonuses or special payments.

Athletic and other recreational facilities—such as libraries, gymnasiums, tennis courts, golf courses, and movies—are available on most military installations. Also available are personal affairs officers, legal assistance officers, and chaplains, as well as supporting agencies, which military personnel may go to for help with personal or financial problems.

Veterans' Benefits

The Veterans Administration provides numerous benefits to those who have served in the Armed Forces. The educational assistance program usually is the most important to those considering enlisting.

Each month they are on active duty, Armed Forces personnel may set aside between \$50 and \$75 of their pay into an educational fund. The Veterans Administration puts in two dollars for every dollar contributed by the service member, up to a limit of \$2,700 of the service member's contribution. Upon separation from active duty, the amount in the fund can be used to finance an education at any approved institution. One month of benefits is available for each month the service member contributed; a service member may receive benefits for a maximum of 36 months. Since the service member's contributions are matched 2 for 1, this means that a maximum of \$8,100 may be available over the 36-month period (\$2,700 paid into the fund by the service member, \$5,400 by the Armed Forces). Since most colleges have about a 9 month academic year, a regular 4-year college program can be financed through this contributory arrangement. These benefits may be received for education at any approved institution, including public or private elementary, secondary, vocational, correspondence, business, or flight training schools; com-

munity or junior colleges; normal schools; teacher's colleges; colleges or universities; professional, scientific, or technical institutions; and various other institutions that furnish education at the elementary level or above.

More detailed or current information on educational benefits, as well as other veterans benefits, is available from the Veterans Administration office located in each State, the District of Columbia, Puerto Rico, and the Philippines.

Other Sources of Information

Each of the military services publishes handbooks and pamphlets that describe entrance requirements, training and advancement opportunities, and other aspects of military careers. These publications are available at all recruiting stations, most State employment service offices, high schools, colleges, and public libraries. Individuals may obtain additional information by writing to the addresses below:

U.S. Army Recruiting Command, Fort Sheridan, Ill. 60037.

Navy Recruiting Command, (Code 40), 4015 Wilson Blvd., Arlington, Va. 22203.

USAF Recruiting Service, Directorate of Recruiting Operations, Randolph Air Force Base, Tex. 78148.

Director, Personnel Procurement Division, Headquarters, U.S. Marine Corps, Washington, D.C. 20380.

Commandant, (G-PMR), U.S. Coast Guard, Washington, D.C. 20590.

Dictionary of Occupational Titles (D.O.T.) Index

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