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Clerical and Other Administrative Support Occupations



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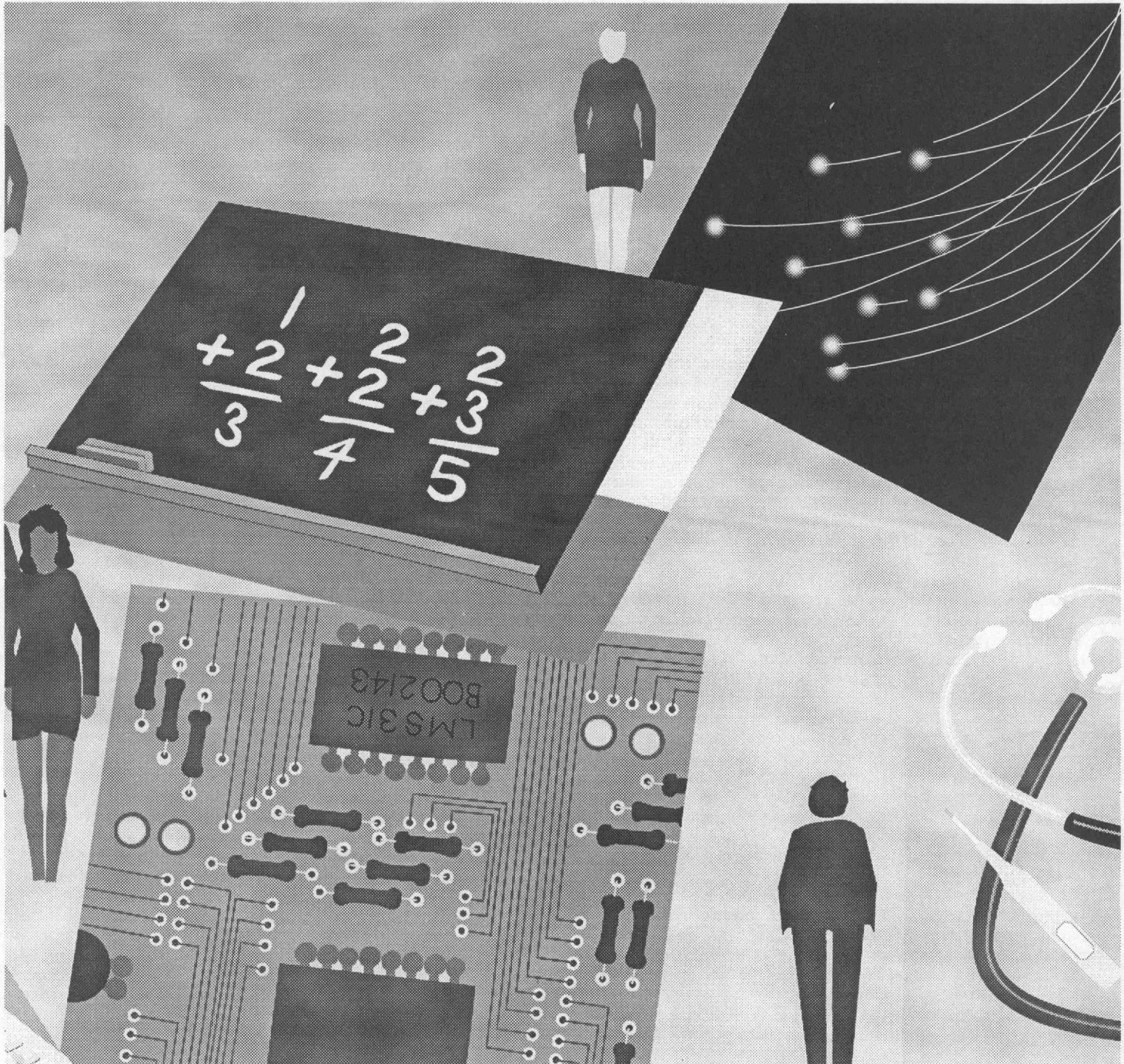
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Adjusters, Investigators, and Collectors

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Nature of the Work

Handling complaints, interpreting and explaining policies or regulations, resolving billing disputes, collecting delinquent accounts, and determining eligibility for governmental assistance are examples of everyday situations that organizations must deal with smoothly and efficiently in order to maintain good relations with customers and clients. Organizations like insurance companies, department stores, banks, and government social services agencies employ adjusters, investigators, and collectors to act as intermediaries with the public in these kinds of situations. Following is a discussion of occupations that make up this group of workers.

Claim Representatives. Claim representatives at insurance companies investigate claims, negotiate settlements, and authorize payments to claimants. When a policyholder files a claim for damage or a loss, the *claim adjuster*, *claim examiner*, or *claim investigator* must initially determine whether the customer's insurance policy covers it and the amount of the loss.

Minor claims filed by automobile or homeowner policyholders are usually handled by "inside adjusters" or "telephone adjusters." These workers contact claimants by telephone or by mail to get information on repair costs, medical expenses, or other details the company needs. Many companies centralize this operation in a drive-in claims center, where the cost of repair is determined and a check is issued immediately.

More complex cases are referred to an "independent adjuster" or "outside adjuster." Claim adjusters plan and schedule the work required to process a claim. They investigate claims by interviewing the claimant and witnesses, consulting police and hospital records, and inspecting property damage to determine the extent of the company's liability. They keep photographs, written or taped statements, or computer files of information obtained from witnesses and prepare reports of their findings. When the policy holder's claim is legitimate, the claim adjuster negotiates with the claimant and settles the claim. When claims are contested, adjusters may testify in court.

Some adjusters work with all lines of insurance. Others specialize in claims associated with fire damage, marine loss, automotive damage, product liability, or workers' compensation. Material damage adjusters inspect automobile damage and use the latest computerized estimating equipment to prepare estimates of the damage.

In life and health insurance companies, the counterpart of the claim adjuster is the claim examiner. In property and casualty insurance companies, the claim examiner may supervise claim adjusters. In both cases, they investigate questionable claims or authorize payment for those exceeding a designated amount. Larger claims are referred to senior examiners. Examiners may check claim applications for completeness and accuracy, interview medical specialists, consult policy files to verify information on a claim, or calculate benefit payments. They also maintain records of settled claims and prepare reports to be submitted to their company's data processing department.

Claim representatives are making greater use of computers to keep records of clients and actions taken in various claims. Many have computer terminals on their desks, and a growing number use portable lap-top computers to enter or access information when they are on assignment outside the office.

Insurance Processing Clerks. *Policy processing clerks* process new insurance policies, modifications to existing policies, and claims.

They begin the new policy process by reviewing the insurance application to ensure that all the questions have been answered. After an application has been reviewed by underwriters and the company determines that it will issue a policy, a policy processing clerk prepares the necessary forms and informs the insurance sales agent of an application's processing status. Policy processing clerks also update existing policies—such as a change in beneficiary, amount of coverage, or type of insurance—and recalculate premiums. They mail correspondence notices regarding changes to the sales agent and to the policyholder. Policy processing clerks maintain files for each policyholder including policies that are to be reinstated or cancelled.

Claim clerks, also called *claim interviewers*, obtain information from policyholders regarding claims like automobile accidents. They prepare reports and review insurance claim forms and related documents for completeness. They call or write insured or other involved persons for missing information and update claim files. They may transmit routine claims for payment or advise the claim supervisor if further investigation is needed.

Like claim representatives, insurance processing clerks use computers extensively in their work. Most spend a large part of their time creating and updating records at a personal computer or terminal.

Adjustment Clerks. Adjustment clerks investigate and resolve customers' complaints about merchandise, service, billing, or credit rating. They may work for banks, department stores, utility companies, and other large organizations selling products and services to the public. Sometimes they are called customer service representatives, customer complaint clerks, or adjustment correspondents.

Adjustment clerks examine all pertinent information to determine the validity of a customer's complaint. In a department store, this may mean checking sales slips or warranties, as well as the merchandise in question. In a bank, it could mean reviewing records and videotapes of automated teller machine transactions. In a utility company, they review meter books, microfilm, computer printouts, and machine accounting records. Regardless of the setting, these clerks also get information—in person, by telephone, or through written correspondence—from the various parties involved, such as the customer and company personnel.

After an investigation and evaluation of the facts, adjustment clerks report their findings, adjustments, and recommendations. These may include exchanging merchandise, refunding money, crediting customers' accounts, or adjusting customers' bills. Adjustment clerks also ensure that the appropriate changes are set in motion and follow up on the recommendations to ensure customer satisfaction. To prevent similar complaints in the future, they may recommend to management improvements in product, packaging, shipping methods, service, or billing methods and procedures. Adjustment clerks keep records of all relevant matters, using them to prepare reports for their supervisors.

Adjustment clerks also respond to inquiries from customers. Clerks frequently can answer these inquiries with a form letter, but other times they must compose a letter themselves. Upon request, adjustment clerks also issue duplicate or additional credit cards for banks and department stores.

Bill and Account Collectors. Bill and account collectors, sometimes called collection correspondents, are responsible for ensuring that customers pay their overdue accounts. Some collectors are employed by collection agencies; others, known as "inside collectors," work directly for the original creditors, like department stores, hospitals, or banks.

Many companies automatically notify customers by mail if their account is overdue. When customers do not respond, collectors are called on to locate and notify them of the delinquent account, usually over the telephone, sometimes by letter. When customers move without leaving a forwarding address, collectors may check with the post office, telephone companies, credit bureaus, or former neighbors to obtain their new address. This is called "skip-tracing."

Once collectors find the debtor, they inform them of the overdue account and solicit payment. If necessary, they review the terms of the sale, service, or credit contract with the customer. Collectors also may attempt to learn the cause of the delay in payment. Where feasible, they offer the customer advice and counsel on how to pay off the debts, such as by taking out a bill consolidation loan. However, the collector's objective is always to ensure that the customer first pays the debt in question.

If customers agree to pay, collectors note that for the record and check later to verify that the payment was indeed made. Collectors may have authority to grant an extension of time if customers ask for one. If customers fail to respond at all, collectors prepare a statement to that effect for the credit department of the establishment. In more extreme cases, collectors may initiate repossession proceedings or service disconnections, or hand the account over to an attorney for legal action.

Most collectors handle other administrative functions for the accounts assigned to them, such as recording changes of address. Bill and account collectors keep records of the amounts collected and the status of the accounts. Some fill out daily reports to keep their supervisors apprised of their progress. In some organizations, inside collectors receive payments and post the amounts to the customers' account. In most operations, however, the posting and receiving are done by other clerical workers. Collectors employed by collection agencies do not receive payments; rather, their primary responsibility is to get customers to pay their obligation.

Increasingly, collectors use computers and a variety of automated systems to keep track of overdue accounts. Typically, collectors work at video display terminals that are linked to computers. In the most sophisticated systems, the computer dials the phone automatically and the collector begins to speak only when a connection has been made. Such systems eliminate time spent calling busy or nonanswering numbers. Many collectors use regular telephones; some wear headsets like those used by telephone operators. From time to time, supervisors may listen in on collectors' conversations with customers to evaluate their job performance.

Welfare Eligibility Workers and Interviewers. Welfare eligibility workers and interviewers—sometimes referred to as *intake workers*, *eligibility determination workers*, *eligibility specialists*, or *income maintenance specialists*—determine who can receive welfare and other types of social assistance. They do so by interviewing and investigating applicants and recipients to see who is eligible. Based on the personal and financial information they obtain and the rules and regulations of each program, they initiate procedures to grant, modify, deny, or terminate individuals' eligibility for various aid programs. This information is recorded and evaluated to determine the amounts of the grants.

Welfare eligibility workers and interviewers work with various kinds of public assistance programs. The best-known are Aid to Families with Dependent Children, Medicaid, Food Stamps, and the Work Incentive Program. Depending on local circumstances, there may be other programs, such as those for public housing, refugee assistance, and fuel assistance.

Most welfare eligibility workers and interviewers specialize in a specific area, such as housing, but some are responsible for several areas. They may assist social workers by informing them of pertinent information they have gathered during their interviews with applicants. In some areas, particularly rural ones, eligibility workers may also perform other kinds of welfare duties.

These workers also provide information to applicants and current recipients. For example, they may explain and interpret eligibility rules and regulations or identify other resources available in the community for financial or social welfare assistance. More experienced workers may help train new workers. In addition, they may be assigned to special units whose responsibility is to detect fraud.

An increasing number of jurisdictions are using computers to increase worker productivity and to reduce the incidence of welfare fraud. In these settings, welfare eligibility workers and interviewers sit in front of computer terminals when they interview applicants

and recipients. Welfare eligibility workers then enter the information provided. In the most advanced systems, the computer terminal prompts them with questions.

Although these workers usually interview applicants and recipients who visit their offices, they may make occasional home visits, especially if the applicant or recipient is elderly or disabled. They may also check with employers or other references to verify answers and get further information.

The authority of welfare eligibility workers and interviewers varies from one jurisdiction to another. In some places, these workers are authorized to decide on an applicant's eligibility, subject to review by their supervisor. In other places, however, they can only make recommendations to their supervisors, who in turn make the ultimate decision.

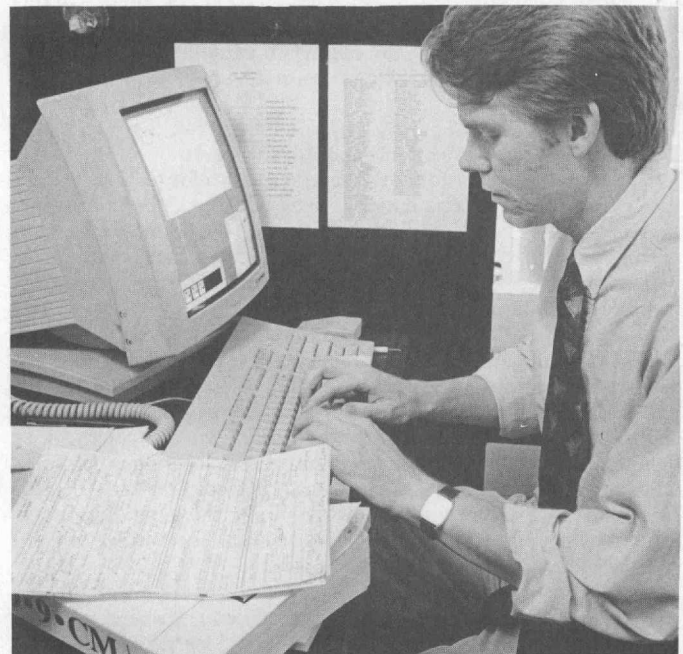
Working Conditions

Most claim examiners have desk jobs that require no unusual physical activity. They typically work a standard 5-day, 40-hour week. Claim examiners may work longer hours during peak periods or when quarterly and annual statements are prepared. They also may travel from time to time to obtain information by personal interview.

Many claim adjusters work outside the office, visiting and inspecting damaged buildings, for example. Occasionally, experienced adjusters may be away from home for days when they travel to the scene of a disaster such as a tornado, hurricane, or flood to work with local adjusters and government officials. Some adjusters may be on "emergency call" in case of such incidents. Material damage adjusters work at local claim centers where policy holders may take their cars for estimates of damage.

Adjusters generally have the flexibility to arrange their work schedule to accommodate evening and weekend appointments with clients. Some report to the office every morning to get their assignments while others simply call from home and spend their days traveling to claim sites. This enables some adjusters to work independently.

Most insurance processing clerks work 40 hours per week in offices. Much of the work is routine and requires remaining at work stations for extended periods of time. Because most insurance information is stored on computers, many of these workers sit at video display terminals and enter or access information while the customer is on the phone. Because most companies provide 24-hour



Most claim examiners have desk jobs that require no unusual physical activity.

claim service to their policyholders, some claim clerks work evenings and weekends. Many claim clerks work part time.

Adjustment clerks, bill and account collectors, and welfare eligibility workers and interviewers work in offices, usually during regular business hours. Some work part time. A few bill and account collectors work as temporaries. From their offices, they deal with customers, clients, or applicants, either by telephone or in person. Dealing with upset or angry clients can be part of the daily routine in these jobs, so the work can be stressful.

Some welfare eligibility workers and interviewers may be hired on a seasonal basis to help administer a specific program. For example, some states hire these workers for the winter to help run emergency fuel assistance programs.

Adjusters, investigators, and collectors who spend a lot of time working at video display terminals may experience musculoskeletal strain and eyestrain.

Employment

Adjusters, investigators, and collectors held about 1,185,000 jobs in 1992. The following tabulation presents their employment distribution by detailed occupation:

Total (percent).....	100
Adjustment clerks.....	30
Bill and account collectors.....	20
Insurance policy processing clerks.....	14
Insurance adjusters, examiners, and investigators.....	12
Insurance claims clerks.....	10
Welfare eligibility workers and interviewers.....	8
Claims examiners, property and casualty insurance.....	3
All other adjusters and investigators.....	3

Insurance companies employ the vast majority of claim adjusters, examiners, and investigators, property and casualty insurance claim examiners, policy processing clerks, and claim clerks. Real estate firms and government agencies employ most of the rest.

About one-fifth of all adjustment clerks are employed by department stores, grocery stores, or catalog and mail order houses. Manufacturing firms, banks and other financial institutions, and telephone companies are other major employers of these workers.

One in 6 bill and account collectors works for a credit reporting and collection agency. Many others work in banks, department stores, and other institutions that extend credit.

Nine of every 10 welfare eligibility workers and interviewers work for state or local government agencies. In 37 states, these workers are employed exclusively by the State government. In the remainder, they are employed by the county or municipal government. Most of those not employed by government work for private social service agencies.

Training, Other Qualifications, and Advancement

Most companies prefer to hire college graduates for claim representative positions. Persons may be hired without college training, however, if they have specialized experience. For example, persons with knowledge of automobile mechanics may qualify as material damage adjusters and those with extensive clerical experience might be hired as inside adjusters.

No specific college major is recommended as the best preparation. Although courses in insurance, economics, or other business subjects are helpful, a degree in almost any field is adequate. An adjuster who has a business or an accounting background might specialize in financial loss due to strikes, breakdowns in equipment, or damage to merchandise. College training in engineering is helpful in adjusting industrial claims, such as damage from fires and other accidents. A legal background is most helpful to those handling workers' compensation and product liability cases. Knowledge of computer applications is increasingly important.

Most large insurance companies provide on-the-job training and home-study courses to beginning claim adjusters and examiners. For example, material damage adjusters would learn about automobile body construction, analysis of collision data, and repair cost estimation, including computerized estimating equipment. They also learn how to deal with customers.

In smaller firms, workers may receive their training through courses offered by the Insurance Institute of America (IIA), a non-profit organization offering educational programs and professional certification to persons in the property-liability insurance industry. The Insurance Institute of America offers an Associate in Claims (AIC) designation upon successful completion of an essay examination. Adjusters can prepare for the examination by independent home study or through company or public classes.

The International Claim Association (ICA) offers a program on life and health insurance claim administration. Completion of the six-examination program leads to the professional designation, Associate, Life and Health Claims (ALHC).

The Life Office Management Association (LOMA) offers a comprehensive 10-course life and health insurance educational program that leads to the professional designation, Fellow, Life Management Institute (FLMI). LOMA also offers the Master Fellow Program (FLMI/M) that is designed specifically to meet the continuing education needs of life and health insurance professionals. Students can prepare for FLMI exams through independent home study or through insurance company or FLMI Society classes.

Most states require adjusters to be licensed. Applicants usually must comply with one or more of the following: Pass a written examination covering the fundamentals of adjusting; complete an approved course in insurance or loss adjusting; furnish character references; be at least 20 or 21 years of age and a resident of the State; and file a surety bond.

Because they often work closely with claimants, witnesses, and other insurance professionals, claim representatives must be able to communicate effectively and gain the respect and cooperation of others. Some companies require applicants to pass a battery of written aptitude tests designed to measure communication, analytical, and general mathematical skills. Examiners must understand federal and state insurance laws and regulations. Both adjusters and examiners should be observant and enjoy working with details.

Beginning adjusters and examiners work on small claims under the supervision of an experienced worker. As they learn more about claim investigation and settlement, they are assigned larger, more complex claims. Trainees are promoted as they demonstrate competence in handling assignments and as they progress in their course work. Because of the complexity of insurance regulations and claim procedures, workers who lack formal academic training may advance more slowly than those with more education. Employees who demonstrate competence in claim work or administrative skills may be promoted to department supervisor in a field office or to a managerial position in the home office.

High school graduation is considered adequate preparation for most insurance processing clerk positions. Courses in typing and word processing, and business arithmetic are desirable. Employers view favorably previous office experience and familiarity with computers. Most new workers begin as file clerks and move into insurance processing positions as they demonstrate their ability. However, persons with considerable clerical experience may begin processing insurance policies immediately.

Some experienced insurance processing clerks may be promoted to a clerical supervisor position. Advancement to a claim representative or an underwriting technician position is possible for clerks who demonstrate potential, have had college training, or have taken specialized courses in insurance. Many companies offer home-study courses that allow their employees to gain the necessary knowledge to advance.

Many employers do not require any formal education for adjustment clerk positions. Instead, they look for people who can read and write and who possess good communications and interpersonal skills. Typing ability is also viewed favorably.

Adjustment clerk is an entry level position in some, but not all, organizations. Depending on their assignment, new adjustment clerks may receive training on the job from a supervisor or an experienced co-worker, or they may enter a formal training course offered by the organization. Training covers such topics as how to use computers, what standard forms to use, whom to contact in other departments of the organization, and how to deal with customers. Some employers provide more advanced training for experienced

adjustment clerks. This training may be offered in-house or from trade associations or local colleges.

While high school graduation sometimes is required by employers when they hire bill and account collectors, formal education beyond high school is not stressed. Previous work experience as a collector is particularly valuable, however. Experience in the field of telemarketing or as a telephone operator also is helpful, as is knowledge of the billing process. Employers seek individuals who speak well and who are persistent and detail-oriented.

Employers normally provide training to new bill and account collectors. This training, which may last up to a couple of months, is usually conducted in a classroom or on the job. It may use lectures, videotapes, computer programs, role-playing, and hands-on experience. In addition to learning about skip-tracing and the firm's billing procedure, new collectors learn communications and negotiating skills. Learning to use the firm's computer and telephone systems is an integral part of such training.

Successful bill and account collectors may become supervisors. Some even start their own collection agencies.

Hiring requirements for welfare eligibility workers and interviewers vary widely. Depending on the jurisdiction, applicants may need a high school diploma, some post-secondary training, or a bachelor's degree. In some jurisdictions, especially rural ones, graduation from high school is not required. Previous work experience may be substituted for education in some places, particularly if it is in a closely related field like employment interviewing, social work, or insurance claims. Fluency in a foreign language may be an advantage in parts of the country with a high concentration of non-English speaking people.

After they are hired, eligibility workers are given training, sometimes in a formal classroom setting, other times in a more informal manner. They are taught the policies, procedures, and program regulations that they are expected to use to determine eligibility. If a formal training program is selected, it generally is followed by on-the-job training provided by the supervisor.

Because they deal with people who are in difficult economic circumstances, welfare eligibility workers and interviewers should be compassionate and empathetic. Attention to detail is important because there are many policies, procedures, and regulations that must be observed.

Advancement to the job of social worker is possible, although additional formal education—such as a bachelor's or master's degree—usually is needed.

Because a significant and growing proportion of adjusters, investigators, and collectors use computers, courses in typing or word processing are recommended. Employers increasingly view experience with computers as an asset.

Job Outlook

Overall employment of adjusters, investigators, and collectors is expected to grow about as fast as the average for all occupations through the year 2005. Most job openings will result from the need to replace workers who transfer to other occupations or leave the labor force.

Growth rates will vary considerably by occupation. Employment of insurance claim examiners is expected to grow about as fast as the average as the increasing volume of insurance results in more insurance claims. Shifts in the age distribution of the population will result in a large increase in the number of people who assume career and family responsibilities. People in this group have the greatest need for life and health insurance, as well as protection for homes, automobiles, and other possessions. A growing demand for insurance coverage for working women is also expected. New or expanding businesses will need protection for new plants and equipment and for insurance covering their employees' health and safety. Opportunities should be particularly good for claim representatives who specialize in complex business insurance such as marine cargo, workers' compensation, and product and pollution liability.

Employment of insurance processing clerks is expected to grow faster than the average as computerization increases their importance in providing customer service to the increasing number of policyholders. Within this group, employment of adjusters and claim

clerks will increase more rapidly than employment of policy processing clerks because they have much more interpersonal contact, which cannot be automated.

The number of job openings for workers in the insurance industry should not fluctuate greatly from year to year. This industry, particularly the health insurance component, is less sensitive to cyclical swings in the economy than most industries.

Employment of adjustment clerks is expected to grow about as fast as average as business establishments seek to maintain good customer relations. An important aspect of good customer service is resolving customers' complaints in a friendly and timely fashion. Because much of their work involves direct communication with customers, demand for adjustment clerks is expected to keep pace with the growth in the number of customers.

Bill and account collector jobs are expected to grow much faster than average as the level of consumer debt rises. As the economy expands, firms will strive to increase the efficiency of their debt collection to keep losses at a minimum.

Contrary to the pattern in most occupations, employment of bill and account collectors tends to rise during recessions. This is due primarily to the difficulty that many individuals have in meeting their financial obligations.

Employment of welfare eligibility workers and interviewers is expected to grow about as fast as average as state and local governments respond to the growing need for public assistance among their constituents. The Family Support Act of 1988, a reform of the welfare system, aims to get people off the welfare rolls by helping them get back to work. At the same time, it increasingly involves welfare departments in such areas as job training, child care, and medical assistance. Over the long run, this legislation probably will increase the demand for counseling and other services provided by welfare eligibility workers and interviewers.

Earnings

Earnings of adjusters, investigators, and collectors vary significantly. For adjusters and investigators, the median weekly earnings in 1992 were about \$400. The middle 50 percent earned between about \$310 and \$510 a week. Adjusters are also furnished a company car or are reimbursed for use of their own vehicle for business purposes. Insurance claim representatives had median weekly earnings of \$430 in 1992. The middle 50 percent earned between \$340 and \$580 a week.

Specific information on earnings of insurance processing clerks and is not available. However, median weekly earnings for records clerks, a category that includes policy processing clerks, were \$350 in 1992. Interviewers, whose work is similar to that of claim clerks, also had median weekly earnings of \$350.

Adjustment clerks had median weekly earnings of about \$390 in 1992; the middle 50 percent earned between about \$300 and \$510 a week. The lowest paid 10 percent earned less than \$250 a week, and the highest paid 10 percent earned over \$690 a week.

Median weekly earnings of full-time bill and account collectors were about \$370 in 1992; the middle 50 percent earned between \$290 and \$450 a week. Ten percent earned less than \$230 and 10 percent, more than \$570. Some bill and account collectors receive a base salary and work on commission beyond that.

Median weekly earnings of full-time welfare eligibility workers and interviewers were about \$390 in 1992; the middle 50 percent earned between \$300 and \$500 a week. The lowest 10 percent earned less than \$270 and the top 10 percent earned more than \$640.

Many welfare eligibility workers and interviewers belong to unions. The two principal unions representing these workers are the American Federation of State, County, and Municipal Employees and the Service Employees International Union.

Related Occupations

Insurance adjusters and examiners investigate, analyze, and determine the validity of their firm's liability concerning personal, casualty, or property loss or damages and effect settlement with claimants. Workers in other occupations that require similar skills include cost estimators, budget analysts, and private investigators.

The work of insurance processing clerks and adjustment clerks is similar to that of other workers who compile, review, or maintain records, including coding, contract, auditing, and reservation clerks and title searchers.

The work of bill and account collectors is related to that of customer service representatives, telemarketers, telephone interviewers, and other workers who deal with the public over the telephone.

The work of welfare eligibility workers is similar to that of human services workers, financial aid counselors, loan counselors, credit counselors, probation officers, and other workers who interview customers or clients.

Sources of Additional Information

General information about careers as a claim representative or an insurance processing clerk is available from the home offices of many life and property and liability insurance companies.

Information about career opportunities in these occupations may be obtained from:

☞ Insurance Information Institute, 110 William St., New York, NY 10038.

Information about licensing requirements for claim adjusters may be obtained from the department of insurance in each State.

For more information on claim representatives, contact:

☞ Alliance of American Insurers, 1501 Woodfield Rd., Suite 400 West, Schaumburg, IL 60173-4980.

For information about public insurance adjusting and independent insurance adjusting, contact respectively:

☞ Insurance Institute of America, 720 Providence Rd., P.O. Box 3016, Malvern, PA 19355-0716.

☞ National Association of Independent Insurance Adjusters, 300 West Washington St., Room 845, Chicago, IL 60606.

Information on the Associate, Life and Health Claims (ALHC) and the Fellow, Life Management Institute (FLMI) designations can be obtained from:

☞ Life Office Management Association, 5770 Powers Ferry Rd., Atlanta, GA 30327-4308.

Career information on bill and account collectors is available from:

☞ American Collectors Association, Inc., P.O. Box 39106, Minneapolis, MN 55439-0106.

Employment information on welfare eligibility workers and interviewers is available at social service offices of municipal, county, and state governments.

Bank Tellers

(D.O.T. 211.362, except -010; 211.382-010; and 219.462-010)

Nature of the Work

Most bank customers have contact with tellers. Tellers generally handle a wide range of banking transactions, such as cashing checks, accepting deposits and loan payments, and processing withdrawals. They sell savings bonds; accept payment for customers' utility bills; receive deposits for special accounts; keep records and perform the necessary paperwork for customer loans; process the proliferating variety of certificates of deposit and money market accounts; and sell travelers' checks. Some tellers specialize in handling foreign currencies or commercial or business accounts.

Before cashing a check, the teller must verify the date, bank name, and identity of the person to receive payment, and see that the document is legal tender, that written and numerical amounts agree, and that the account has sufficient funds to cover the check. The teller must carefully count out the cash to avoid errors. Sometimes a customer withdraws money in the form of a cashier's check, which the teller prepares and verifies. When accepting a deposit, the teller checks the accuracy of the deposit slip and processes the transaction. Tellers may use machines to calculate and record transactions and to prepare documents, such as receipts and drafts. In some banks, they type or write deposit receipts and passbook entries by hand, but this is uncommon. In most banks, tellers use computer terminals to record deposits and withdrawals. Some banks use very

sophisticated computer systems that give tellers quick access to detailed information on customer accounts. Tellers may use this information to tailor their services to fit the customer's needs, or recommend an appropriate bank product or service.

Tellers' duties begin before and continue after banking hours. They begin the day by receiving and counting an amount of working cash for their drawer; this amount is verified by a supervisor, usually the head teller. Tellers use this cash for payments during the day and are responsible for its safe and accurate handling. After banking hours, tellers count cash on hand, list the currency-received tickets on a balance sheet, and balance the day's accounts. They sort checks and deposit slips. Tellers also spend time learning about the bank's products and services and changes in the bank's procedures. They also spend time training to refresh and upgrade their skills.

Tellers process numerous mail transactions. Some tellers replenish cash drawers and corroborate deposits and payments to automatic teller machines (ATM's). Head tellers supervise the work of other tellers and ensure that ATM's function properly.

Because banks offer more and increasingly complex financial services, most bank tellers are now being trained to act as customer service representatives in addition to their other duties. These tellers can briefly explain to customers the various types of accounts and financial services offered by their bank, and refer customers to more experienced customer service representatives or bank managers. (New accounts clerks, who also may act as customer service representatives, are discussed in the *Handbook* statement on interviewing and new accounts clerks. Bank managers are covered in the *Handbook* statement on financial managers.)

Working Conditions

Tellers generally work during the day, Monday through Friday; some evening and weekend work is required. The job offers ample opportunity to work part time with flexible hours; in some banks, 90 percent of tellers work part time. Banks often hire part-time, or "peak-time," tellers for busy banking periods such as lunch hours and weekend mornings. Some tellers work outside the traditional bank setting—in shopping malls, supermarkets, or other large retail establishments. Continual communication with customers, repetitive tasks, prolonged standing within a fairly small area, and a high level of attention to security also characterize the job.

Employment

Bank tellers held about 525,000 jobs in 1992; over one-fourth worked part time. The overwhelming majority, about 96 percent, worked in commercial banks, savings institutions, or credit unions. The rest worked in personal, business, or Federal credit institutions; mortgage banks; security and commodity brokerages; and holding and other investment offices.



Tellers explain banking products and services to customers.

Training, Other Qualifications, and Advancement

In hiring tellers, banks seek people who have good numerical, clerical, and communication skills, and enjoy public contact. Tellers must feel comfortable handling large amounts of cash and, since their work is highly automated, working with computers and video terminals. In some metropolitan areas, banks seek bilingual tellers or those with a working knowledge of several languages.

Although tellers work independently, their recordkeeping is closely supervised. Accuracy and attention to detail are vital. Tellers should be courteous, attentive, and patient in dealing with the public, because customers often judge a bank by the way they are treated at the teller window. Maturity, tact, and the ability to quickly explain bank procedures and services are important in helping customers complete transactions or make financial decisions.

Most entrants transfer from other occupations; virtually all have at least a high school education. In general, banks prefer applicants who have had high school courses in mathematics, accounting, bookkeeping, economics, and public speaking. New tellers, especially at larger banks, receive at least 1 week of formal classroom training. Formal training is followed by several weeks of on-the-job training where tellers observe experienced workers before doing the work themselves. Smaller banks rely primarily upon on-the-job training. In addition to instruction in basic duties, many banks now include extensive training in the bank's products and services—so that tellers are able to make appropriate product referrals to customers—communication and sales skills, and instruction on equipment such as ATM's and on-line video terminals.

In large banks, beginners usually start as limited-transaction tellers, cashing checks and processing simple transactions for a few days, before becoming full-service tellers. Often banks simultaneously train tellers for other clerical duties.

Advancement opportunities are good for well-trained, motivated employees. Experienced tellers may advance to head teller, customer service representative, or new accounts clerk. Outstanding tellers who have had some college or specialized training offered by the banking industry may be promoted to a managerial position. Banks encourage this upward mobility by providing access to education and other sources of additional training.

Tellers can prepare for better jobs by taking courses offered or accredited by the American Institute of Banking, an educational affiliate of the American Bankers Association, or the Institute of Financial Education. These organizations have several hundred chapters in cities across the country and numerous study groups in small communities, and they offer correspondence courses. They also work closely with local colleges and universities in preparing courses of study. Most banks use the facilities of these organizations, which assist local banks in conducting cooperative training programs or developing independent training programs. In addition, many banks refund college tuition fees to their employees upon successful completion of their courses. Although most courses are meant for employed tellers, some community colleges offer preemployment training programs. These programs can help prepare applicants for a job in banking, and can give them an advantage over other jobseekers.

Job Outlook

Employment of bank tellers is expected to decline through the year 2005. However, job prospects still should be good. Because the occupation is large and the turnover rate is high—characteristic of occupations that generally require little formal education and offer relatively low pay—job opportunities, arising from the need to replace tellers who transfer to other occupations or stop working, should be plentiful for qualified applicants.

The projected decline in employment of bank tellers stems from overexpansion and competition from large nonbank corporations that offer bank-like services, including investments and lending, that have resulted in closings, mergers, and consolidations in the banking industry in recent years. This trend is expected to continue, resulting in slow employment growth in commercial banks and savings and loan associations, where employment of tellers is highly concentrated. Further, teller employment will be adversely affected by various technologies, if they are widely adopted by banks in the future. For example, the use of video tellers, which allow customers

at several locations to conduct transactions with tellers at a central location, and interactive telephone systems, which allow customers to bank by telephone, could adversely affect employment of tellers by the year 2005. The use of debit cards instead of cash or checks, scanning devices that verify signatures, and automated currency verification systems also could contribute to the decline in teller employment.

Earnings

In 1992, median annual earnings of full-time tellers were \$14,800. The lowest 10 percent earned about \$10,500 while the top 10 percent earned around \$24,300. Some banks offer incentives whereby tellers earn supplemental rewards for inducing customers to use other financial products and services offered by the bank. In general, a greater range of responsibilities results in a higher salary. Experience, length of service, and, especially, the location and size of the bank also are important.

Some part-time tellers may not be eligible for certain benefits such as life and health insurance, although they may have higher hourly earnings in lieu of benefits.

Related Occupations

Tellers combine a knowledge of bank procedures with quickness and accuracy to process money, checks, and other financial items for customers. Other workers with similar duties include new accounts clerks, cashiers, toll collectors, post office clerks, auction clerks, and ticket sellers.

Sources of Additional Information

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

☞ American Bankers Association, Center for Banking Information, 1120 Connecticut Ave. NW., Washington, DC 20036.

For information on continuing education, preemployment training, and banking jobs, contact:

☞ Institute of Financial Education, 111 E. Wacker Dr., Suite 900, Chicago, IL 60601-4389.

☞ American Institute of Banking, 1120 Connecticut Ave. NW., Washington, DC 20036.

State bankers' associations can furnish specific information about job opportunities in their State. Or write directly to a particular bank to inquire about job openings. For the names and addresses of banks and savings and related institutions, as well as the names of their principal officers, consult one of the following directories.

☞ *The American Financial Directory* (Norcross, Ga., McFadden Business Publications).

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

☞ *Rand McNally Bankers Directory* (Chicago, Rand McNally & Co.).

☞ *The U.S. Savings and Loan Directory* (Chicago, Rand McNally & Co.).

☞ *Rand McNally Credit Union Directory* (Chicago, Rand McNally & Co.).

Clerical Supervisors and Managers

(List of D.O.T. codes available on request from the Chief, Division of Occupational Outlook, Bureau of Labor Statistics, Washington, DC 20212.)

Nature of the Work

All organizations need timely and effective clerical and administrative support to operate efficiently. Coordinating this support is the responsibility of clerical supervisors and managers. They can be found in nearly every sector of the economy, working in positions as varied as office manager, customer services supervisor, or chief telephone operator. Although some functions may vary considerably, many duties are common to all.

Supervisors perform administrative tasks to ensure that their staffs can work efficiently. For example, equipment and machinery used in their departments must be in good working order. If the computer system goes down or a photocopier malfunctions, they must try to correct the problem or alert repair personnel. They also

request new equipment or supplies for their department when necessary.

Planning and supervising the work of their staff is another key function of this job. To do this effectively, the supervisor must know the strengths and weaknesses of each member of the staff as well as the required level of quality and time allotted to each job. They must make allowances for unexpected absences and other disruptions and adjust assignments or perform the work themselves if the situation requires it.

After allocating work assignments and issuing deadlines, clerical supervisors oversee the work to ensure that it is proceeding on schedule and meets established quality standards. This may involve reviewing each person's work on a computer, as in the case of accounting clerks, or, in the case of cashiers, listening to how they deal with customers. When supervising long-term projects, the supervisor may establish regular meetings with staff members to discuss their progress.

Another part of a clerical supervisor's job is to conduct performance evaluations. If a worker has done a good job, the supervisor records it in the employee's personnel file and may recommend a promotion or other award. Alternatively, if a worker is performing poorly, the supervisor discusses the problem with the employee to determine the cause and help the worker improve his or her performance. This might entail sending the employee to a training course or arranging personal counseling. If the situation does not improve, the supervisor may recommend a transfer, demotion, or dismissal.

Clerical supervisors and managers generally interview and evaluate prospective clerical employees. Some may be actively involved in recruiting new workers by performing functions like making presentations at high schools and business colleges. When new workers arrive on the job, supervisors greet them and provide orientation to acquaint them with the organization and its operating routines.

Supervisors also help train new employees in organization and office procedures. They may teach them to use the telephone system and to operate office equipment. Because much clerical work is computerized, they must also teach new employees to use the organization's computer system. When new office equipment or updated computer software is introduced, supervisors retrain experienced employees to use it efficiently. They may also arrange for special outside training for their employees if necessary.

Clerical supervisors often act as liaisons between the clerical staff and the professional, technical, and managerial staff. This may involve implementing new company policies or restructuring the workflow in their departments. They must also keep their superiors informed of their progress and abreast of any potential problems. Oftentimes this communication takes the form of research projects and progress reports. Because they have access to information like their department's performance records, they may compile and present this data for use in planning or designing new policies.

Clerical supervisors may be called upon to resolve interpersonal conflicts among the staff. In organizations covered by union contracts, supervisors must know the provisions of labor-management agreements and run their departments accordingly. They may meet with union representatives to discuss work problems or grievances.

Working Conditions

Clerical supervisors and managers are employed in a wide variety of work settings, but most work in offices that are clean, well-lit, and generally comfortable.

Most work a standard 40-hour week. Because some organizations operate around the clock, however, clerical supervisors may have to work nights, weekends, and holidays. In some cases, supervisors rotate among the three shifts. In others, shifts are assigned on the basis of seniority.

Employment

Clerical supervisors and managers held about 1,267,000 jobs in 1992. Although jobs for clerical supervisors are found in practically every industry, the largest number are found in organizations with a large clerical work force such as government agencies, retail establishments, wholesalers, business service firms, banks, and insurance



Clerical supervisors are found in nearly every sector of the economy.

companies. Due to the need in most organizations for continuity of supervision, few clerical supervisors and managers work on a temporary or part-time basis.

Training, Other Qualifications, and Advancement

Most people entering this occupation transfer from other occupations within the organization, very often from the ranks of those they subsequently supervise. To be promoted to a supervisory position, clerical or administrative support workers must prove that they are capable of handling additional responsibilities. When evaluating candidates, superiors look for strong teamwork skills, determination, loyalty, poise, and confidence. They also look for more specific supervisory attributes, such as the ability to organize and coordinate work efficiently, set priorities, and motivate others. Increasingly, supervisors need a broad base of office skills coupled with personal flexibility to adapt to changes in organizational structure and move among departments when necessary.

In addition, supervisors must pay close attention to detail in order to identify and correct errors made by subordinates. Good working knowledge of the organization's computer system is also an advantage. Many employers require some postsecondary training. An associate degree is sufficient in many cases, but some organizations prefer candidates to hold bachelor's degrees.

A clerk with potential supervisory abilities may be given occasional supervisory assignments. To prepare for full-time supervisory duties, he or she may attend in-house training or take courses in time management, personal relations, or other management skills at a local community college or vocational school.

Some clerical supervisors are hired from outside the organization for positions with more managerial duties. These positions may serve as entry-level training for potential higher level managers. New college graduates may rotate through departments of an organization at this level to learn the work of the entire organization.

Job Outlook

Employment of clerical supervisors and managers is expected to grow about as fast as the average for all occupations through the year 2005. Although growth in the demand for clerical supervisors will generate many job openings, most openings will result from the need to replace experienced supervisors who transfer to other occupations or leave the labor force. Because the occupation is so large, replacement needs will create a large number of job openings.

Employment of clerical supervisors is tied somewhat to the demand for clerical workers. More clerical work will be generated as organizations and the economy grow, especially the business and service sectors. As the amount of clerical work to be done continues to increase, more managers will be needed to coordinate this rising volume of work. As office automation causes employment in some clerical occupations to slow or even decline, supervisors may have

smaller staffs and perform more professional tasks. In other areas, fewer supervisors may be needed.

Earnings

Median annual earnings of full-time clerical supervisors were about \$28,000 in 1992; the middle 50 percent earned between \$21,100 and \$39,400 a year. Ten percent earned less than \$16,200, and 10 percent more than \$51,300. As is the case in most fields, large employers tend to pay higher salaries than small ones. In addition, employers in major metropolitan areas tend to pay higher salaries than those in rural areas.

Depending on their employer, clerical supervisors may receive a variety of benefits. These may include health and life insurance, paid vacations, tuition assistance, and a pension plan. Some clerical supervisors in the private sector may receive additional compensation in the form of bonuses and stock options.

Related Occupations

Clerical supervisors and managers must understand and sometimes perform the work of people whom they oversee, including accounting clerks, cashiers, bank tellers, and telephone operators. Their supervisory and administrative duties are similar to those of other managers.

Sources of Additional Information

State employment service offices can provide information about earnings, hours, and employment opportunities in this and other clerical jobs.

Computer and Peripheral Equipment Operators

(D.O.T. 208.685-030; 213.362, .382, .582, .682, and .685)

Nature of the Work

Computer and peripheral equipment operators oversee the operation of computer hardware systems, ensuring that these expensive machines are used as efficiently as possible. This means that operators must anticipate problems before they occur and take preventive action as well as solve problems that do occur.

The duties of computer and peripheral equipment operators vary with the size of the installation, the type of equipment used, and the policies of the employer. Working from operating instructions prepared by programmers or operations managers, computer operators set controls on the computer and on peripheral devices required to run a particular job. Computer operators or, in large installations, peripheral equipment operators load the equipment with tapes, disks, and paper as needed. While the computer is running—which may be 24 hours a day for large computers—computer operators monitor the computer console and respond to operating and computer messages. If an error message occurs, operators must locate and solve the problem or terminate the program.

Peripheral equipment operators may have to prepare printouts and other output for distribution to computer users. Operators also maintain log books listing events such as machine malfunctions that occurred during their shift. In addition, computer operators may supervise and train peripheral equipment operators and computer operator trainees. They also may help programmers and systems analysts test and debug new programs. (Detailed descriptions of these occupations are presented elsewhere in the *Handbook*.)

As the trend toward networking—making connections between computers—accelerates, a growing number of these workers are operating personal computers (PC's) and minicomputers. More and more establishments are realizing the need to connect all their computers in order to enhance productivity. In many offices, factories, and other work settings, PC's and minicomputers serve as the center of such networks, often referred to as local area networks or multi-user systems. While some of these computers are operated by users

in the area, many require the services of full-time operators. The tasks performed are very similar to those performed on the larger computers.

As organizations continue to use computers in more areas of operation, they are also realizing opportunities to increase the productivity of computer operations. Automation, which traditionally has been the application of computer technology to other functional areas of an organization, is now reaching the computer room. Sophisticated software coupled with robotics now exist that enable the computer to perform many routine tasks formerly done by computer and peripheral equipment operators. For example, scheduling, loading and downloading programs, mounting tapes, rerouting messages and running periodic reports can be done without the intervention of an operator. These improvements will change what computer operators do in the future. As technology advances, more computer operators will monitor an automated system. In addition, they may be in charge of system security, troubleshooting, desk help, network problems, and maintaining large databases. In the computer centers that lack this level of automation, some computer operators may be responsible for tasks traditionally done by peripheral equipment operators.

Working Conditions

Computer operating personnel work in well-lighted, well-ventilated, and generally comfortable rooms. Because many organizations use their computers 24 hours a day, 7 days a week, computer and peripheral equipment operators may be required to work evening or night shifts and weekends. Shift assignments generally are made on the basis of seniority. Automated operations will lessen the need for shift work because many companies let the computer take over all operations during less desirable working hours.

Employment

In 1992, computer operators and peripheral equipment operators held about 266,000 and 30,000 jobs, respectively. Although jobs for computer and peripheral equipment operators are found in almost every industry, most are in wholesale trade establishments; manufacturing companies; data processing service firms; banks; government agencies; and accounting, auditing, and bookkeeping service firms. These organizations have data processing needs that require large computer installations.



Peripheral equipment operators prepare printouts for distribution to computer users.

More than 1 out of 10 computer and peripheral equipment operators works part time.

Training, Other Qualifications, and Advancement

Previous work experience is the key to landing an operator job in many large establishments. These employers look for specific, hands-on experience in the type of equipment and related operating systems that they use. Additionally, a bachelor's degree in a computer-related field or other formal training is recommended. As technology expands, operator jobs will become more competitive and demanding, giving an advantage to those applicants with formal training. Increasing numbers of operators recently hired possess such training and many employers require it.

Smaller organizations may be more willing to provide informal training because their computer systems are not as expensive nor downtime as costly as in larger installations. In these establishments, education may be substituted for experience to some extent. Training is also offered by the Armed Forces and by some computer manufacturers.

Workers usually receive some on-the-job training to become acquainted with their employer's equipment and routines. The length of training varies with the job and the experience of the worker. New peripheral equipment operators are expected to learn their jobs in a few weeks.

Because computer technology changes so rapidly, operators must be adaptable and willing to learn. For example, more formal education or training is now required for operators who work in automated data centers. Greater analytical and technical expertise are also needed to deal with the unique or higher level problems that the computer is not programmed to handle.

Computer and peripheral equipment operators must be able to communicate well in order to work effectively with programmers and each other. Computer operators also must be able to work independently because they may have little or no supervision.

Peripheral equipment operators may become computer operators. A few computer operators may advance to supervisory jobs. Through on-the-job experience and additional formal education, some computer and peripheral equipment operators advance to jobs as programmers or operations analysts, although the move into a programmer job may become more difficult in the years ahead as the skill requirements for programming continue to rise.

Job Outlook

Employment of computer and peripheral equipment operators is expected to decline sharply through the year 2005. A small number of openings will arise each year to replace workers who transfer to other occupations or leave the labor force.

Advances in technology have reduced both the size and the cost of computer equipment while at the same time increasing its capacity for data storage and processing. These improvements in technology have fueled an expansion in the use of computers in such areas as factory and office automation, telecommunications, medicine, and education. Computer and peripheral equipment operators, however, will not benefit because they work mainly with large computer systems—the part of the overall computer market that has slowed down.

Furthermore, the expanding use of software that automates computer operations gives companies the option of making systems user-friendly, which greatly reduces the need for operators. Even if firms continue to use operators, which for many is extremely likely in the near future, these new technologies free the operator to concentrate on unique problems and monitor a greater number of operations at the same time. The result is that as few as 3 operators can accomplish the work previously done by 10.

As automated equipment is developed further, smaller versions and lower prices will induce smaller organizations to invest in these technologies as well, further dampening demand for peripheral equipment operators.

Computer operators or peripheral equipment operators who are displaced by automation may be reassigned to support staffs assisting other members of the organization. Others may be retrained to perform different job duties such as supervising an entire operations

center, maintaining automation packages, and analyzing computer operations to recommend ways to increase productivity.

Earnings

In 1992, full-time computer operators had median earnings of \$21,100 a year. The middle 50 percent earned between \$16,000 and \$28,700. The lowest 10 percent earned less than \$13,400 and the top 10 percent earned more than \$38,700. Salaries generally are higher in large organizations than in small ones.

In the Federal Government, computer operators with a high school diploma started at about \$14,600 a year in 1993. Those with 1 year of college started at \$16,400. Applicants with operations experience started at higher salaries. All computer operators employed by the Federal Government in 1993 averaged about \$27,400.

Related Occupations

Other occupations involving work with computers include computer scientists and systems analysts, programmers, and computer service technicians. Other occupations in which workers operate electronic office equipment include data entry keyers, secretaries, typists and word processors, and typesetters and compositors.

Sources of Additional Information

For information about work opportunities in computer operations, contact firms that use computers such as banks, manufacturing and insurance firms, colleges and universities, and data processing service organizations. The local office of the State employment service can supply information about employment and training opportunities.

Credit Clerks and Authorizers

(D.O.T. 205.367-022; 209.362-018; 219.362-038 and 367-046; 237.367-014; 241.267-030 and 367-018; and 249.362-014, -018, -022, and .367-022)

Nature of the Work

At some point in your life, you will probably apply for credit—to buy a home, furniture or appliances, an automobile, or to get a credit card. A credit clerk or authorizer will review your credit history and obtain the information needed to determine your creditworthiness. Credit clerks contact applicants, credit bureaus, and other sources for information, and verify loan documents to ensure completeness. Credit authorizers refer to credit records and reports to decide whether to approve a customer's credit card purchase.

Clerks in credit bureaus secure, update, and verify information for credit reports. These workers are often called credit investigators or reporters. Clerks in banks and other financial institutions process loan and credit applications. Some clerks verify employment and financial information of credit card applicants. Loan processing clerks prepare loan applications for underwriters. They review loan applications, write credit bureaus and reporting agencies for applicant records, and contact employers, banks, and references to verify personal and financial information. Clerks order appraisals from appraisal companies and secure tax forms, bank statements, and any required government forms from applicants. They calculate debt-to-income ratios to see that applicants meet the minimum guidelines for a loan. If any information in the loan package is inaccurate or incomplete, clerks contact the proper source for further information. Closing clerks obtain and prepare documents needed for real estate settlements. The closing clerks check to see that documents are complete, that all legal documents, such as deeds of trust, hazard insurance papers, and title commitments, are accurate and correctly signed, and that all loan conditions required for settlement have been met.

Credit authorizers approve charges against customers' existing accounts. Most charges are approved automatically by computer. However, when accounts are past due, overextended, invalid, or show a change of address, sales persons refer transactions to credit

authorizers located in a central office. Authorizers evaluate the customers' computerized credit records and payment histories and quickly decide whether or not to approve new charges. Authorizers may enter address changes and credit extensions into computer credit files.

Working Conditions

Credit clerks and authorizers usually work a 35- to 40- hour week. However, during particularly busy periods, they may work overtime. For credit clerks handling residential real estate, the busy periods are spring and summer and at the end of the month. For credit authorizers, busy periods are during the Christmas shopping season and on store sale days. In fact, temporary workers are often hired as credit authorizers during peak workloads. In retail establishments, authorizers may work nights and weekends during store hours.

Credit authorizers and some credit clerks sit for long periods in front of video display terminals, which may cause eyestrain and headaches.

Employment

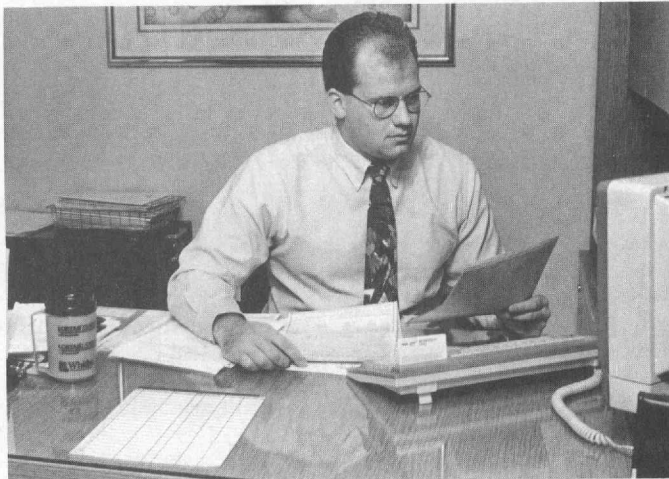
Credit clerks and authorizers held about 218,000 jobs in 1992. About 8 in 10 were in banks and other financial institutions, and about 1 in 10 was in wholesale and retail trade. The rest were distributed among business services, such as credit reporting and collection agencies and computer and data processing services.

Training, Other Qualifications, and Advancement

No specific training is needed for entry level positions in credit clerking and authorizing, with the exception of loan closing and loan interviewing. Closers and interviewers are often required to have previous work experience, preferably in financial institutions, and some knowledge of underwriting.

New employees are generally trained on the job—working under the close supervision of more experienced workers—although some firms offer formal training. Some credit workers also take courses in credit offered by banking and credit associations, public and private vocational schools, and colleges and universities. As workers demonstrate competence, they can advance to team leader of a small group of clerks, loan or credit department supervisor, underwriter, loan officer, or management. For management positions, employers prefer applicants with a bachelor's degree in business or a related field, or at least some college-level business or management courses.

Because positions in these fields involve much telephone contact, good communication skills are a necessity. Good organizational skills and the ability to pay attention to detail are also important. Many credit checkers use computers to enter and retrieve data, so some computer skills and good typing speed are required.



A credit authorizer reviews a customer's credit records before approving a new car loan.

Job Outlook

Employment of credit clerks and authorizers is expected to increase as fast as the average for all occupations through the year 2005 as the volume of credit in the economy continues to grow. Growth will occur as the number of real estate, retail sales, and other transactions requiring credit increases. The interpersonal nature of loan clerking and the judgment required of authorizers ensure that computers will not significantly affect employment. In addition to jobs created by growth, many jobs will become available as workers retire or leave the labor force for other reasons.

Earnings

According to a survey of mortgage banking companies conducted by Carl D. Jacobs & Associates, the average entry level salary for loan processors was about \$18,000 in branch offices and \$19,000 in central offices in 1992.

According to a 1993 salary survey by the A.M.S. Foundation (Administrative Management Society), the average salary for credit and collection clerks was about \$20,800.

Full-time workers generally receive health insurance, vacation and sick leave, and other standard benefits; part-timers may not. In addition, workers in retail establishments usually receive a discount on store purchases.

Related Occupations

Occupations with duties similar to those of credit clerks and authorizers include claim examiners and adjusters, customer-complaint clerks, procurement clerks, probate clerks, and collection clerks.

Sources of Additional Information

Information about local job opportunities in credit clerking and authorizing may be obtained from retail stores, banking institutions, and credit reporting agencies.

General Office Clerks

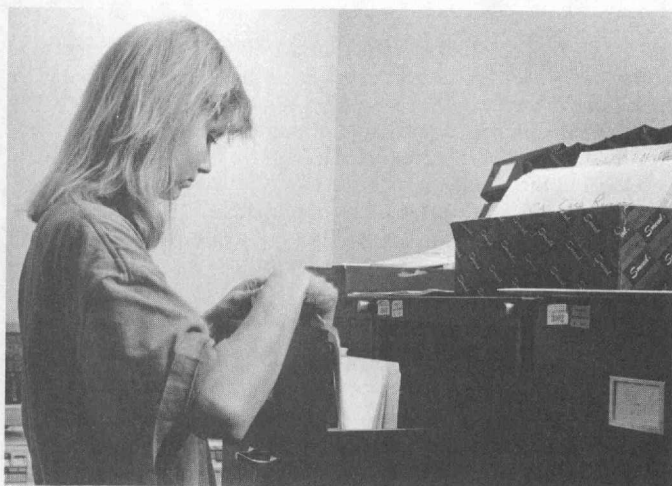
(D.O.T. 209.362-030, .562-010; 219.362-010, -022, -026; 243.362-014; 245.362-014, .367-010, -014, -018; 249.367-010, -014; 375.362-010)

Nature of the Work

The duties of general office clerks are too varied and diverse for them to be classified in any specific administrative support occupation. Rather than specialize in a single primary task, general office clerks have duties that are as diverse as the needs of the employer. Some days may be spent filing or typing; others may be spent entering data at a computer terminal. They also may operate photocopiers, fax machines, or other office equipment; prepare mailings; proofread copy; and answer telephones and deliver messages.

A general office clerk in a doctor's office may not perform the same tasks as a clerk in a large financial institution or in the office of an auto parts wholesaler. Although they all may sort checks, keep payroll records, take inventory, or access information, they also may perform duties specific to their employer like organizing medications, making transparencies for a presentation, or filling orders received by fax machine.

Duties also vary by level of experience. Inexperienced employees may transcribe data, operate calculators, or record inquiries while more experienced workers may handle greater responsibilities. They might maintain financial or other records, verify statistical reports for accuracy and completeness, handle and adjust customer complaints, take inventory of equipment and supplies, answer questions on departmental services and functions, and help prepare budgetary requests. Senior general office clerks may be expected to oversee and direct the work of lower level clerks.



General office clerks have a variety of skills, enabling them to work in almost any office setting.

Working Conditions

For the most part, working conditions for general office clerks are the same as those for other office employees in the same company. Those on a full-time schedule usually work a standard 40-hour week. Some may work shifts or overtime during busy periods and 1 in 4 works part time. In addition, many general office clerks work as temporaries.

Employment

General office clerks held about 2,688,000 jobs in 1992. They work in every sector of the economy. Most general office clerks are employed in relatively small businesses, with over 50 percent working in the services or wholesale and retail trade industries.

Training, Other Qualifications, and Advancement

Many general office clerk jobs are entry level and do not require office or business experience. Employers usually require a high school diploma, and some require typing, word processing, and other general office skills. In addition, basic computer skills are becoming increasingly important.

Training for this occupation is available in business education programs offered in high schools, community and junior colleges, and postsecondary vocational schools. Courses in keyboarding, microcomputer applications, and office practices are particularly helpful.

General office clerks usually work with others. Therefore, they should be cooperative and able to work as part of a team. They must also be willing to change to meet the unexpected requirements of the job.

General office clerks who exhibit strong communication, interpersonal, and analytical skills may be promoted to supervisory positions. Others move into different clerical jobs, such as receptionist, typist, or secretary. Advancement to professional occupations in the establishment usually requires more formal education like a college degree.

Job Outlook

Opportunities for persons interested in becoming general office clerks should be quite favorable. The large size and high turnover of this occupation should produce a significant number of job openings. Jobseekers who have typing and other secretarial skills, basic computer skills, and knowledge of office machine operation such as fax machines and copiers should have the best opportunities. General office clerks should find many opportunities for part-time or temporary work, especially during peak business periods.

Because they are so versatile, general office clerks find work in virtually every kind of industry. Therefore, employment is not dependent on the fortunes of any single sector of the economy. Similarly, because they perform a wide variety of office duties using

many types of equipment, their employment is not necessarily dependent on any particular technological development.

Employment of general office clerks is expected to grow about as fast as the average for all occupations through the year 2005 as more small businesses place a single office worker—frequently a general office clerk—in charge of all clerical work.

Earnings

Median annual earnings of full-time general office clerks were about \$18,500 in 1992; the middle 50 percent earned between \$14,300 and \$24,100 annually. Ten percent earned less than \$11,400, and 10 percent more than \$29,500.

According to a survey of workplaces in 160 metropolitan areas, beginning general office clerks had median annual earnings of \$12,700 in 1992, with the middle half earning about \$11,400 to \$14,600 a year. The most experienced general office clerks had median annual earnings of about \$23,800, with the middle half earning between about \$20,800 and \$26,900 a year.

General office clerks' salaries vary by industry. They tend to be highest in public utilities and mining and lowest in construction and finance, insurance, and real estate.

In 1993, the Federal Government paid general office clerks a starting salary of between \$13,382 and \$16,393 a year, depending on education and experience. In 1993, general office clerks in the Federal Government earned an average annual salary of \$22,791.

Related Occupations

General office clerk is usually an entry-level office job. Entry-level jobs in other settings include cashier, medical assistant, teacher aide, and food and beverage service worker.

Sources of Additional Information

State employment service offices and agencies that specialize in placing administrative support personnel can provide information about job openings for general office clerks.

Information Clerks

Nature of the Work

Information clerks gather information from and provide information to the public. Depending on the organization, they may be known as hotel and motel desk clerks, interviewing clerks, new accounts clerks, receptionists, reservation agents, transportation ticket agents, or travel clerks.

Although their day-to-day duties vary widely, many information clerks greet customers, guests, or other visitors, determine their needs, and either assist them or refer them to someone who can help. Other clerks answer telephones or elicit information from the public. Most information clerks use automated office equipment, such as multiline telephones, fax machines, and personal computers, in the course of their work. While this equipment allows them to process more information, it does not alter the basic requirement of their job—communication and human interaction. More detail on these occupations is available in the statements that appear later in this section.

Working Conditions

Those information clerks who greet customers and visitors usually work in areas that are highly visible and carefully designed and furnished to make a good impression. Working conditions usually are pleasant; work stations are clean, well lighted, and relatively quiet. Reservation agents generally work away from the public, in a space that a number of agents share, and as a result may be crowded and noisy.

Although most information clerks work a standard 40-hour week, some work irregular schedules. Some jobs—those in the transportation industry, hospitals, and hotels, in particular—may require working evenings, late night shifts, weekends, and holidays.

Employees with the least seniority may be assigned the least desirable shifts.

The work of information clerks may be tiring, repetitious, and stressful. For example, receptionists may spend all day answering a continuously ringing telephone. Reservation agents and travel clerks use computer systems which may be electronically monitored by management. These workers also may have their telephone calls monitored or tape recorded by management, and may be subject to limitations on the time that they can spend on each call and quotas on the number of reservations which are made. Such practices can make stress-related complaints more common. Prolonged exposure to a video display terminal may lead to eye and musculoskeletal strain as well as complications to pregnancy.

Both hotel and motel desk clerks and ticket agents may be on their feet most of the time, and ticket agents may have to lift heavy baggage. During holidays and other busy periods, these clerks may find the work hectic due to the large number of people to be served. When service does not flow smoothly—because of cancelled flights or mishandled reservations, for example—these clerks act as a buffer between the establishment and its customers. Trying to serve the needs of difficult or angry customers can be emotionally draining.

Employment

Information clerks held over 1.3 million jobs in 1992. The following tabulation shows 1992 employment for the individual occupations.

Receptionists and information clerks	904,000
Interviewing and new accounts clerks	175,000
Reservation and transportation ticket agents and travel clerks ...	131,000
Hotel desk clerks	122,000

These workers are employed throughout the economy, but are concentrated in hotels and motels, the health services industry, banks and savings institutions, firms providing business or real estate services, and the transportation industry. This type of work lends itself to part-time schedules—more so for receptionists, interviewing and new accounts clerks, and hotel and motel desk clerks than for reservation and transportation ticket agents. About 3 out of every 10 information clerks work part time.

Training, Other Qualifications, and Advancement

Although hiring requirements vary from industry to industry, a high school diploma or its equivalent often is required. However, not all jobs require a high school diploma. Some high school and college students work part time as information clerks outside of school hours. For some jobs, such as airline reservation and ticket agents, some college education is preferred.

With the exception of airline reservation and transportation ticket agents, orientation and training for information clerks generally are given on the job. Hotel and motel desk clerk job orientation usually is brief, and includes an explanation of the job duties and information about the establishment, such as room location and available services. They learn job tasks through on-the-job training under the guidance of a supervisor or an experienced clerk. They often need additional training to use computerized reservation, room assignment, and billing equipment and systems.

Receptionists generally receive on-the-job training. They learn how to operate the telephone system, personal computers, and the proper procedures for greeting visitors, and distributing mail, fax, and parcel deliveries.

Most airline reservation agents learn their skills through formal company training programs. They spend some time in a classroom setting, learning company and industry policies, computer systems, and ticketing procedures. They learn to use a computer to obtain information on schedules, seat availability, and fares; to reserve space for passengers; and to plan passenger itineraries. They must learn airport and airline code designations, and are tested on this knowledge. Since reservation agents are expected to limit the time spent on each call without alienating customers, learning how to carry on a conversation in an organized, yet pleasant manner is an important

part of their training. After completing classroom instruction, new agents work with supervisors or experienced agents for a period of time. During this period, monitoring of telephone conversations may serve as a training device to improve the quality of customer service. In contrast, automobile clubs, bus lines, and railroads either train their travel clerks on the job, without formal classes, or conduct short in-house classes that can last several days. Most information clerks continue to receive instruction on new procedures and company policies after their initial training ends.

Because many information clerks deal directly with the public, a good appearance and a pleasant personality are imperative, as are problem solving ability and good interpersonal skills. A clear speaking voice and fluency in the English language are essential because these employees frequently use the telephone or public address system. Courses useful to persons wanting to enter these occupations include basic math, English, geography, U.S. history, psychology, communications, and public speaking. Good spelling, typing ability, and computer literacy often are needed. Some employers may require applicants to take a typing and spelling test to gauge their skills, with a minimum typing speed of 35 to 50 words per minute often required for employment. It is increasingly helpful for those wishing to enter the hotel and motel industry to learn a foreign language.

Advancement for information clerks generally comes about either by transfer to a more responsible occupation or by promotion to a supervisory position. For example, receptionists, interviewers, and new accounts clerks with typing or other clerical skills may advance to a better paying job as a secretary or administrative assistant. In the airline industry, a ticket agent may advance to lead worker on the shift. Additional training frequently is helpful in preparing information clerks for promotion. In the lodging industry, for example, clerks can improve their chances for advancement by taking home or group study courses in lodging management, such as those sponsored by the Educational Institute of the American Hotel and Motel Association. In some industries, such as lodging, workers commonly are promoted through the ranks. In many industries, a college degree may be required for advancement to management ranks.

Job Outlook

Overall employment of information clerks is expected to increase faster than the average for all occupations through the year 2005. In addition to the many openings that will occur as businesses and organizations expand, numerous jobs for information clerks will result from the need to replace experienced workers who transfer to other occupations or leave the labor force. Replacement needs will create large numbers of job openings, reflecting relatively high turnover. Many young people work as information clerks for a few years before switching to other, better paying jobs. This work is well suited to flexible work schedules, and many opportunities for part-time work will continue to be available.

Economic growth and general business expansion are expected to stimulate demand for these workers. Employment of receptionists, hotel and motel desk clerks, hospital admitting clerks, and reservation and transportation ticket agents and travel clerks should grow more rapidly than that of new accounts clerks. The slower growth projected for new accounts clerks reflects slow growth among commercial banks and savings institutions, where employment is heavily concentrated.

Earnings

In 1992, median weekly earnings of full-time information clerks were about \$320. The middle 50 percent earned between \$260 and \$420. The bottom 10 percent earned less than \$210, while the top 10 percent earned more than \$580. Earnings vary widely by occupation and experience. For example, weekly earnings ranged from less than \$180 for the lowest paid hotel clerks to over \$775 for the highest paid reservation agents. Salaries of reservation and ticket agents tend to be significantly higher than for other information clerks,

while hotel and motel desk clerks tend to earn quite a bit less, as the following tabulation of median weekly earnings shows.

Reservation and transportation ticket agents and travel clerks	\$400
Interviewing and new accounts clerks	350
Receptionists	310
Hotel and motel clerks	250

In 1993, the Federal Government commonly paid beginning receptionists with a high school diploma or 6 months' experience salaries ranging from \$11,900 to \$14,600 a year. The average salary for all receptionists employed by the Federal Government was \$18,600 a year in 1993.

Earnings of hotel and motel desk clerks depend on the location, size, and type of establishment in which they work. Large luxury hotels and those located in metropolitan and resort areas generally pay clerks more than less expensive properties and those located in less populated areas. In general, hotels pay higher salaries than motels or other types of lodging establishments.

In addition to their hourly wage, full-time information clerks who work evenings, nights, weekends, or holidays may receive shift differential pay. Some employers offer educational assistance to their employees. Reservation and transportation ticket agents and travel clerks receive free or very low cost travel on their company's carriers for themselves and their immediate family and, in some companies, free uniforms. Relatively few information clerks belong to unions.

Related Occupations

A number of other workers deal with the public, receive and provide information, or direct people to others who can assist them. Among these are dispatchers, security guards, bank tellers, guides, and telephone operators.

Hotel and Motel Desk Clerks

(D.O.T. 238.367-038)

Nature of the Work

Hotel and motel desk clerks perform a variety of services for guests of hotels, motels, and other lodging establishments. They may register guests and assign rooms, using personal computers. They answer questions about services, checkout times, the local community, and other matters in their public relations capacity. In assigning rooms, they consider their guests' preferences while trying to maximize the establishment's revenues. They keep records of room assignments so they can advise housekeepers, telephone operators, and maintenance workers that rooms are occupied, and they collect payment. Desk clerks are always in the public eye and, through their attitude and behavior, greatly influence the public's impressions and the establishment's reputation.

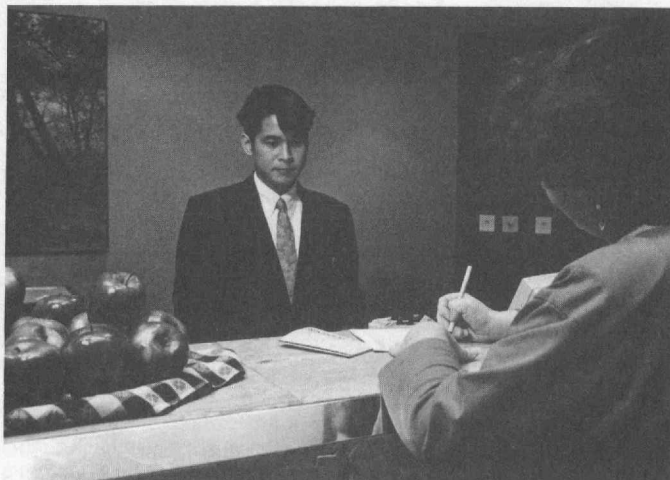
Because most smaller hotels and motels have minimal staffs, the clerk also may function as a bookkeeper, advance reservation agent, cashier, and/or telephone switchboard operator. Large establishments usually have specialized employees to perform these various services.

Employment

Hotel and motel desk clerks held about 122,000 jobs in 1992. This occupation is well suited to flexible work schedules, with over 1 in 5 clerks working part time. Hotels and motels are found in all parts of the country, and so are these jobs.

Job Outlook

Job opportunities for hotel and motel desk clerks should be relatively good because turnover is very high. Each year thousands of workers transfer to other occupations that offer better pay and advancement opportunities, and many more leave work altogether to assume family responsibilities, return to school, or for other reasons.



Hotel and motel desk clerks often are the first employees that guests encounter.

Opportunities for part-time work should continue to be plentiful since the front desk must be staffed 24 hours a day.

Employment of hotel and motel desk clerks is expected to grow faster than the average for all occupations through the year 2005 as more hotels, motels, and other lodging establishments are built and as occupancy rates rise.

Several factors should favorably affect employment of hotel and motel desk clerks. Business travel will likely remain strong. Pleasure travel also is expected to increase in the coming years. The number of international travelers to the United States should continue to grow steadily because of increased promotion abroad of the domestic tourist industry. Increases in the number of two-income families, as well as smaller families and delayed childbearing, should raise discretionary income. This will, in turn, increase the demand for vacation accommodations. Shifts in travel preference away from long vacations and toward long weekends and other, more frequent, short trips also should increase demand.

Employment of hotel and motel desk clerks is sensitive to cyclical swings in the economy. During recessions, vacation and business travel declines, so persons seeking these positions have a harder time finding jobs.

Sources of Additional Information

Information on careers in the lodging industry, as well as information about professional development and training programs, may be obtained from:

☞ The Educational Institute of the American Hotel and Motel Association, P.O. Box 1240, East Lansing, MI 48826.

(See introductory part of this section for information on working conditions, training requirements, and earnings.)

Interviewing and New Accounts Clerks

(D.O.T. 205.362-018, -026, -030, .367-014, -026, -042, -054, and -058)

Nature of the Work

Interviewing and new accounts clerks communicate with individuals in person or by telephone or mail, to assist them in opening bank accounts, gaining admission to medical facilities, or completing charge account applications, consumer surveys, and other forms. They may verify information, create files, and perform various processing tasks. The specific duties and job titles of these workers depend upon the type of employer.

New accounts clerks, who comprise over 6 out of 10 of this occupational group, also are known as customer service representatives. They work for financial institutions such as commercial banks, credit unions, and savings and loan associations. They interview



Interviewing and new accounts clerks compile information through interpersonal communication.

people who want to open a checking or savings account and record the data on an application form. They describe the increasing array of financial services that are available and help people fill out forms for special services, such as overdraft protection or automatic teller machine cards. They may answer telephone inquiries about procedures for opening or closing accounts. (Bank tellers, who also may perform customer service representative duties, are discussed elsewhere in the *Handbook*.)

Many clerks work in hospitals, doctors' offices, and other health-care facilities, where they commonly are known as admitting interviewers. They gather all the preliminary information required for admission, generally including the patient's name, address, age, health history, present medications, previous hospitalizations, religion, persons to notify in case of emergency, attending physician, and individual or insurance company responsible for payment of the bill. They may assign a patient to a room and escort the patient or arrange for an escort to the assigned room. They type admitting and discharge records and route them to designated departments. They receive payments and answer the telephone. In an outpatient setting, they also schedule appointments, note cancellations, and provide general information about care.

Charge-account clerks and survey workers interview individuals to complete credit applications or to conduct market research surveys on such topics as occupation and earnings, political preferences, and buying habits. In either case, they ask a carefully worded series of questions, enter the responses, and forward the results to management. (For more information about the issuance of credit, see the statement on credit clerks and authorizers elsewhere in the *Handbook*.)

Employment

Interviewing and new accounts clerks held about 175,000 jobs in 1992. Over 6 out of 10 were employed by commercial banks and other depository institutions. Over 3 out of 10 worked in hospitals and other health-care facilities, while other clerks worked for firms providing business services. About 1 of every 4 interviewing clerks works part time.

Job Outlook

Overall employment of interviewing and new accounts clerks is expected to increase about as fast as the average for all occupations through the year 2005. Employment growth of interviewing clerks in the health services industry is expected to be faster than average. Additionally, much faster than average employment growth of interviewing clerks will occur in personnel supply services, as more organizations contract out for the services of these clerks rather than support a staff of full-time clerks. On the other hand, slower than average employment growth is expected for new accounts

clerks, reflecting slow growth among commercial banks and savings and loan institutions.

Sources of Additional Information

State employment service offices can provide information about employment opportunities.

A brochure on careers in banking, including information on new accounts clerks (referred to as customer service representatives in the brochure), is available from:

☞ American Bankers Association Education Foundation, 1120 Connecticut Ave. NW., Washington, DC 20036.

(See introductory part of this section for information on working conditions, training requirements, and earnings.)

Receptionists

(D.O.T. 203.362-014; 205.367-038; 237.267, .367-010, -018, -022, -026, -038, -042, -046, and -050; 238.367-022 and -034; 249.262 and .367-082)

Nature of the Work

All organizations want to make a good first impression, and this is the job of the receptionist, who often is the first representative of the organization that a caller encounters. One primary duty of receptionists, particularly those in large cities, is a security function—seeing who belongs in a given place and who does not. They also may be expected to monitor the attendance of employees and report this to management. Another major responsibility of the receptionist is to answer the telephone and route the calls to the proper individual or department.

Receptionists greet customers and other visitors, determine their needs, and refer callers to the person who can help them. They also answer questions from the public. Their day-to-day duties can vary, depending on where they work. Those in hospitals and doctors' offices, for example, may obtain personal and financial information and then direct patients to the proper waiting rooms. At beauty or hair salons, they arrange appointments and may direct customers to the hairstylist. In factories or large business firms and government offices, they provide identification cards and arrange for escorts to take callers to the proper office. Those working for bus and train companies respond to inquiries about departures, arrivals, stops, and related matters.

Many receptionists keep records of callers, the times at which they called, and the persons to whom they were referred. They may inform employees of their visitors' arrivals or an expected visitor's cancellation. When they are not busy with callers, they may perform



Receptionists receive visitors and answer telephone calls.

secretarial duties—opening and sorting mail, collecting and distributing parcels, making fax transmittals and deliveries, updating appointment calendars, preparing travel vouchers, and doing simple bookkeeping, typing, and filing.

Increasingly, receptionists use automated office equipment, such as personal computers, fax machines, and multiline telephone systems. While this equipment increases their productivity, it does not alter the basic content of their job—person to person contact and interaction.

Employment

Receptionists held about 904,000 jobs in 1992, accounting for over two-thirds of all information clerk jobs. Over two-thirds of receptionists worked in services industries, and about half of these were located in the health services industry—doctors' and dentists' offices, hospitals, nursing homes, urgent care centers, surgicenters, and clinics. Manufacturing, wholesale and retail trade, government, and real estate industries also employed large numbers of receptionists. About 3 of every 10 receptionists work part time.

Job Outlook

Job opportunities for receptionists should be plentiful. In addition to faster than average employment growth, turnover is high. Each year, several hundred thousand receptionists transfer to other occupations, seeking better pay or career advancement, or leave the labor force to tend to household responsibilities, return to school, or retire. In addition, because establishments need receptionists' services even during economic downturns, they usually are not subject to layoffs during recessions.

Many receptionists also perform secretarial duties. Good typing and computer skills, coupled with strong interpersonal and communications skills, enhance one's job prospects.

Employment of receptionists is expected to grow faster than the average for all occupations through the year 2005. This is largely because so many receptionists work for firms in the services industry—including physician's offices, law firms, temporary help agencies, and consulting firms—a sector of the economy that is expected to continue to show strong growth. On the other hand, the increasing use of voice mail may temper, somewhat, the demand for receptionists. Where several receptionists may have been required to answer the company's telephones in the past, voice mail may now make it possible for one person to do the job.

Sources of Additional Information

State employment offices can provide information on job openings for receptionists.

(See the introductory part of this section for information on working conditions, training requirements, and earnings.)

Reservation and Transportation Ticket Agents and Travel Clerks

(D.O.T. 214.362-030; 238.167, .362, .367-010, -014, -018, -026, -030; and 248.382)

Nature of the Work

Each year, millions of Americans travel by plane, train, ship, bus, and automobile. Because so many people travel, it often is helpful, even necessary, to plan trips and make reservations well in advance. Reservation and transportation ticket agents and travel clerks help accomplish this. These workers facilitate travel in a variety of ways. They may help individuals plan trips by answering questions and offering suggestions on travel arrangements such as routes, time schedules, rates, and types of accommodation. They make and confirm transportation and hotel reservations, calculate expenses, and write and sell tickets. When passengers are about to embark on their trip, these clerks may check their baggage, direct them to the point of departure, or help them to board.

Reservation agents usually work in large central offices answering customer telephone inquiries and booking reservations. Agents generally have computer terminals and can quickly obtain information needed to make, change, or cancel reservations at the customer's request. After a reservation has been made and the ticket purchased, ticketing clerks compile and record information, such as dates of travel and method of payment. The tickets then are sent to or are picked up by the traveler.

Ticket agents sometimes are known as passenger agents, passenger-booking clerks, reservation clerks, ticket clerks, or ticket sellers. In addition to selling tickets, they may answer inquiries, check baggage, examine passports and visas, ensure passenger seating, or check in animals. Other ticket agents, more commonly known as gate agents, work in airports and terminals assisting passengers when boarding. Their duties include directing passengers to the correct boarding area, checking tickets, making boarding announcements, and assisting young, elderly, or disabled passengers when they board or depart.

Passenger rate clerks work for bus companies. They sell tickets for regular bus routes and arrange nonscheduled or chartered trips by planning travel routes, computing rates, and keeping customers informed of appropriate details. They also may arrange travel accommodations.

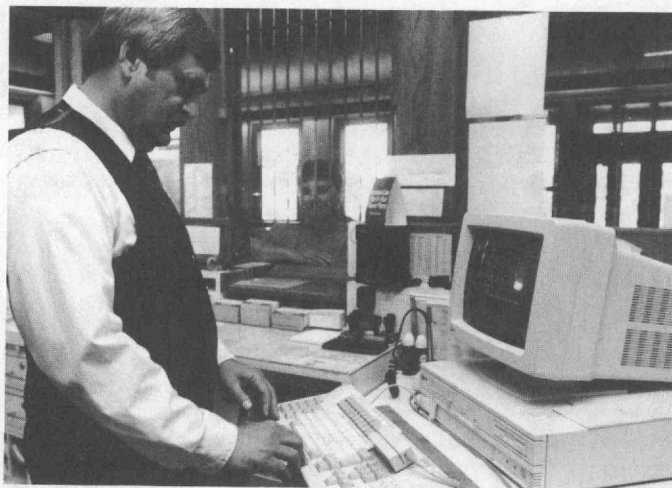
Most travel clerks are employed by automobile clubs. These workers, known as member services counselors or travel counselors, plan trips, calculate mileage, and offer travel suggestions for club members. They highlight the best route from the point of origin to the destination, as well as the return, using a road map. They also prepare an itinerary which indicates points of interest, restaurants, overnight accommodations, and availability of emergency services during the trip. They may make rental car, hotel, or restaurant reservations for club members.

Travel clerks also work in other settings, such as hotels and motels, business firms, and government agencies. When individuals are planning trips, travel clerks assist them by providing the appropriate literature and information, answering questions, and offering suggestions. They make reservations, pick up and deliver tickets, arrange for visas, and make any other arrangements necessary to make the trip more enjoyable.

Reservation and transportation ticket agents and travel clerks must be knowledgeable about their companies' policies and industry procedures. They must be able to use computers to ascertain the availability of special promotions and services, and be able to answer any questions their customers may have.

Employment

Reservation and transportation ticket agents and travel clerks held about 131,000 jobs in 1992. Nearly 2 of every 3 workers are employed by the airlines. Others work for membership organizations



Increased travel will spur demand for more ticket agents.

like automobile clubs, hotels and other lodging places, railroad companies, bus lines, and other companies that provide transportation services.

Although agents and clerks are found throughout the country, most work in downtown ticket and reservation offices and at large metropolitan transportation terminals, where most passenger business originates. The remainder often work in smaller communities served only by intercity bus or railroad lines.

Job Outlook

Most applicants for reservation and transportation ticket agent jobs are likely to encounter considerable competition because the supply of qualified applicants far outstrips demand. Many people satisfy the entry requirements, and airline jobs, in particular, attract many applicants because of the travel benefits and glamour associated with the industry.

Employment of reservation and transportation ticket agents and travel clerks is expected to increase faster than the average for all occupations through the year 2005. Both business and pleasure travel, by airline, bus, rail, and automobile, will likely remain strong and spur employment growth. Increases in the number of two-income families, as well as smaller families and delayed childbearing, should raise discretionary income and allow for more recreational travel.

Job openings also will become available as workers transfer to other occupations, retire, or leave the labor force for other reasons. However, the number of openings will be smaller than that of other information clerks because turnover among reservation and transportation ticket agents and travel clerks is the lowest of all information clerks.

Employment of reservation and transportation ticket agents and travel clerks is sensitive to cyclical swings in the economy. During recessions, discretionary passenger travel declines, and transportation service companies are less likely to hire and may even lay off or demote agents and clerks.

Sources of Additional Information

For information about job opportunities as reservation and transportation ticket agents and travel clerks, write the personnel manager of individual transportation companies. Addresses of airlines are available from:

✉ Air Transport Association of America, Suite 1100, 1301 Pennsylvania Ave. NW., Washington, DC 20004-1707.

A brochure describing airline jobs is available from:

✉ Air Line Employees Association, Job Opportunity Program, 5600 South Central Ave., Chicago, IL, 60638-3797.

(See the introductory part of this section for information on working conditions, training requirements, and earnings.)

Mail Clerks and Messengers

(D.O.T. 209.587-018 and .687-026; 215.563; 222.367-022, .387-038, .567-018, and .587-030 and -032; 230.647-010 and .663-010; 239.567, .677, and .687; 243.367-010; 248.367-030; and 249.687-010)

Nature of the Work

Mail clerks and messengers help businesses and governments run efficiently by moving and distributing information, documents, and small packages.

Most large organizations employ *mail clerks* to handle their internal mail. Internal mail goes back and forth among people, offices, or departments within a firm or institution. It ranges from memos to key personnel to bulletins on job issues to all employees. Mail clerks sort internal mail and deliver it to their fellow employees, often using carts to carry the mail between offices.

Mail clerks also handle external mail, serving as the link between the U.S. Postal Service and individual offices and workers. They sort incoming mail and deliver mail within large office buildings. They also prepare outgoing mail—which may range from advertising flyers, to customers' orders, to legal documents—for delivery to the post office. Many organizations mail numbers of identical items;

mail clerks may prepare materials for mailing by folding and inserting them into envelopes, and affixing the proper postage. Mail may be sent registered, certified, special delivery or first, second, third, or fourth class. When necessary, they contact delivery services to send important letters or parcels. Mail clerks also may sort large mailings by zip code before delivery to the post office. In larger organizations, or organizations with a large volume of outgoing mail, mail clerks often operate machines which collate, fold, and insert material to be mailed into envelopes. They also operate machines which affix postage. In addition, mail clerks increasingly use computers to keep their records of incoming and outgoing items.

Messengers pick up and deliver letters, important business documents, or small packages which need to be sent or received in a hurry from one side of town to another. By sending an item by messenger, the sender ensures that it reaches its destination the same day or even within the hour. Messengers also deliver items which the sender is unwilling to entrust to other means of delivery, such as important legal or financial documents. Some messengers pick up and deliver important small packages such as medical samples to be tested.

Messengers receive their instructions either by reporting to their office in person or by telephone or two-way radio. They then pick up the item and carry it to its destination. After a delivery, they check with their office and receive instructions about the next delivery. Consequently, most messengers spend most of their time outdoors or in their vehicle. Messengers usually maintain records of deliveries and often obtain signatures from the persons receiving the items.

Most messengers deliver items within a limited geographic area, such as a city or metropolitan area. Items which need to go longer distances usually are sent by mail or by an overnight delivery service. Some messengers carry items only for their employer, which typically might be a law firm, bank, or financial institution. Other messengers may act as part of an organization's internal mail system and mainly carry items between an organization's buildings or entirely within one building. Many messengers work for messenger or courier services; for a fee they pick up items from anyone and deliver them to specified destinations within a local area.

Messengers reach their destination by several methods. Many drive vans or cars or ride motorcycles. A few travel by foot, especially in urban areas or when making deliveries nearby. In congested urban areas, messengers often use bicycles, since this is the fastest way to travel in heavy traffic. Bicycle messengers usually are employed by messenger or courier services. Only electronic facsimile (FAX) machines that send copies of documents over telephone lines can deliver information faster in a city than bicycle messengers, but for many types of business transactions a FAX copy cannot substitute for the original document.

Some messengers, especially those who work for courier services, provide and maintain their own transportation. They receive a fee for each delivery, from which they must deduct any expenses associated with the operation of their vehicle. Unlike other messengers, they seldom receive paid vacations, sick leave, health insurance, or other benefits.

Working Conditions

Working conditions for mail clerks are much different from the working conditions for most messengers. Most mail clerks work regular hours, spending much of their time in mailrooms, which are usually located in office buildings. Although mailrooms are usually clean and well lighted, there may be noise from mail-handling machines. Most of the rest of their time is spent making mail deliveries throughout an office building. Mail clerks spend most of their time on their feet while sorting and delivering mail and operating machinery, which can be tiring and physically demanding. They are sometimes required to lift heavy objects but usually the work is not strenuous.

Messengers work in a less structured environment than mail clerks because they spend most of their time alone making deliveries and usually are not closely supervised. Although many messengers work full time during regular business hours, some messengers work nights and weekends.



Mail clerks sort internal mail and deliver it to their fellow employees.

Messengers who deliver by bicycle must be physically fit and are exposed to all weather conditions as well as the many hazards connected with heavy traffic. Some messengers, especially those who work for courier services, are paid according to the number of deliveries made and distance traveled. The pressure to make as many deliveries as possible to increase earnings can be stressful and may lead to unsafe driving or bicycling practices.

Employment

Messengers and mail clerks together held about 271,000 jobs in 1992; about 131,000 were mail clerks and 140,000 were messengers. Only about 12 percent of the messengers were employed by courier and messenger services. About 12 percent worked for law firms, and 12 percent worked for hospitals and medical and dental laboratories. Financial institutions, such as commercial banks, saving institutions, and credit unions, employed 10 percent. The rest were employed in a wide variety of other industries.

In 1992, about one-fifth of all mail clerks worked in Federal, State, and local governments. Others were employed in a wide range of industries. Very few messengers or mail clerks were self-employed.

Training, Other Qualifications, and Advancement

There are no formal qualifications or training required to be a mail clerk or messenger, although some employers prefer high school graduates. This is a first job for many.

Mail clerks must be careful and dependable workers. They must be able to do routine work and work well with their hands. They are usually trained on the job. If they operate computers and mail-handling machinery to help prepare mailings, training may be provided by another employee or by a representative of the machinery manufacturer. Mail clerks are sometimes required to have a driver's license if they make deliveries to other buildings.

Messengers are required to have a driver's license if they operate a motor vehicle; many messengers are required to provide and maintain their own vehicle. They need a good knowledge of the geographic area in which they travel as well as a good sense of direction.

Some mail clerks, depending on the size of the operation, advance to positions as clerical staff supervisors or office managers. Other mail clerks transfer to related jobs with the U.S. Postal Service, if they pass the competitive entrance examination. (Information on postal clerk and mail carrier careers appears elsewhere in the *Handbook*.) Messengers, especially those who work for messenger or courier services, have limited advancement opportunities.

Job Outlook

Employment of mail clerks and messengers is expected to grow more slowly than the average for all occupations through the year

2005 despite an increasing volume of internal mail, parcels, business documents, promotional materials, and other written information that must be handled and delivered as the economy expands. Nevertheless, job opportunities are expected to be plentiful for mail clerks and messengers through the year 2005. Most job openings will stem from the need to replace workers who leave the occupation. Mail clerk and messenger jobs are attractive to many because the limited formal education and training requirements allow easy entry, making them attractive to persons seeking their first job or a short-term source of income. This is especially true for messengers, many of whom work in this occupation a relatively short time.

Businesses' growing reliance on directly mailing advertising and promotional materials to prospective customers will result in increasing amounts of mail to be handled. However, increasing automation of mail-handling will enable mail clerks to handle a growing volume of mail. In addition, employment of mail clerks will be limited by more widespread use of robot mail carts to distribute mail in large office buildings.

Employment of messengers will grow more slowly as new electronic information-handling technology comes into more widespread use. Electronic facsimile, or FAX machines, for example, allow copies of documents to be immediately sent across town or across the country and are rapidly becoming standard office equipment. The transmission of information through telephone lines between computers will also reduce the demand for messengers as more computers are connected to networks. However, messengers will still be needed to transport materials which cannot be sent electronically, such as legal documents, blueprints and other over-sized materials, large multipage documents, and securities. Also, messengers will still be required by medical and dental laboratories to pick up and deliver medical samples, specimens, and other materials.

Earnings

Median weekly earnings of full-time mail clerks were about \$300 in 1992; the middle 50 percent earned between \$240 and \$390 a week. Median weekly earnings of full-time messengers were about \$350. The middle 50 percent of messengers earned between \$250 and \$560 a week. Messengers occasionally receive tips from clients, but this is not a significant part of their earnings.

Some messengers are paid by commission rather than earning a regular wage. The commission usually is based on the number of deliveries made, the distance traveled, and the fee charged to the customer. They must provide their own transportation and must pay fuel and maintenance costs. The more deliveries they make and the faster they travel, the more they earn. They seldom receive paid vacation or sick leave, health insurance, or other benefits. Messengers working for employers other than messenger and courier services usually are paid by the hour and receive the benefits offered to all employees.

Mail clerks are usually paid by the hour and benefits often include health and life insurance, sick leave, vacation pay, and pension plan.

Related Occupations

Messengers and mail clerks sort and deliver letters, parcels, and other items. They also keep accurate records of their work. Others who do similar work are postal clerks and mail carriers, route drivers, traffic, shipping, and receiving clerks, correspondence review clerks, vault workers, parcel post clerks, and reconsignment clerks.

Sources of Additional Information

Information about job opportunities may be obtained from local employers and local offices of the State employment service. Persons interested in mail clerk and messenger jobs may also contact messenger and courier services, mail order firms, banks, printing and publishing firms, utility companies, retail stores, or other large firms.

Material Recording, Scheduling, Dispatching, and Distributing Occupations

(List of D.O.T. codes available on request from the Chief, Division of Occupational Outlook, Bureau of Labor Statistics, Washington, DC 20212.)

Nature of the Work

Workers in this group are responsible for a variety of communications and recordkeeping operations in business and government. In general, they coordinate, expedite, and keep track of orders for personnel, equipment, and materials.

Dispatchers receive requests for service and initiate action to provide that service. Duties vary, depending on the needs of the employer. Police, fire, and ambulance dispatchers, also called public safety dispatchers, handle calls from people reporting crimes, fires, and medical emergencies; truck, bus, and train dispatchers schedule and coordinate the movement of these vehicles; taxicab dispatchers relay requests for cabs to individual drivers; tow truck dispatchers take calls for emergency road service; and gas, electric, and telephone company dispatchers handle calls related to utility and telephone service.

Traffic, shipping, and receiving clerks keep track of all incoming and outgoing shipments of goods transferred between businesses, suppliers, and customers. Traffic clerks keep a record of destination, weight, and charges of all incoming and outgoing shipments. Shipping clerks assemble, address, stamp, and ship merchandise or materials. Receiving clerks unpack, verify, and record incoming merchandise. In a small company, one clerk may perform all of these tasks.

Stock clerks receive, unpack, store, issue, and maintain an inventory. The inventory may be merchandise in wholesale and retail establishments, and equipment, supplies, or materials in other kinds of organizations. In small firms, they may perform all of the above tasks, as well as those usually handled by shipping and receiving clerks. In large establishments, they may be responsible for only one task. More detail on these occupations is available in the statements that follow.

Other administrative support occupations in this group include *production, planning, and expediting clerks*—who coordinate and expedite the flow of work and material according to production schedules; *procurement clerks*—who draw up purchase orders to obtain merchandise or material; *weighers, measurers, checkers, and samplers*—who weigh, measure, and check materials; and *utilities meter readers*—who read electric, gas, water, or steam meters and record the volume used by their customers.

Working Conditions

Working conditions vary considerably by occupation and employment setting. The work of dispatchers can be very hectic when a large number of calls come in at the same time. The job of public safety dispatcher is particularly stressful because slow or improper response to a call can result in further destruction of property, serious injury, or death. Also, callers who are anxious or afraid may become hysterical and be unable to provide the needed information; some even become abusive. Despite provocations, the dispatcher must remain calm, objective, and in control of the situation.

Dispatchers work inside in surroundings that are typical of office jobs. They sit for long periods, often using telephones, computers, and two-way radios. If a lot of time is spent at a video display terminal, as is increasingly commonplace, they may experience eyestrain and back discomfort. Dispatchers generally work a standard 40-hour week. However, evening, weekend, and holiday work is common for those service providers who operate around the clock. Some employers rotate dispatchers among three shifts to divide daytime, weekend, and holiday work equally.

Traffic, shipping, receiving, and stock clerks work in a wide variety of businesses, institutions, and industries. They work in warehouses, stock rooms, or in shipping and receiving rooms that may not be temperature controlled. They also may spend time in cold storage rooms or outside on loading platforms, where they are exposed to the weather. Most jobs

involve frequent standing, bending, walking, stretching, lifting, and carrying. Although many use mechanical material-handling equipment to move heavy items, the work can be strenuous. The typical workweek is 8 hours a day, Monday through Friday, although evening and weekend hours are standard for some jobs and may be required in others when large shipments are involved or when inventory is taken.

Employment

In 1992, material recording, scheduling, dispatching, and distributing workers held nearly 3.6 million jobs. Employment was distributed among the occupations in this group as follows:

Total	3,588,000
Stock clerks	1,782,000
Traffic, shipping, and receiving clerks	824,000
Production, planning, and expediting clerks	239,000
Dispatchers	222,000
Order fillers, wholesale and retail sales	187,000
Procurement clerks	61,000
Meter readers, utilities	49,000
Weighers, measurers, checkers, and samplers	46,000
All other	178,000

Nearly 3 out of 4 material recording, scheduling, dispatching, and distributing jobs were in manufacturing and wholesale and retail trade. Although these workers are found throughout the country, most work near population centers where stores, warehouses, factories, and large communications centers are concentrated.

Training, Other Qualifications, and Advancement

Employers prefer to hire high school graduates, especially those who have taken business courses. Preference also may be given to candidates who have previous business, dispatching, or specific job-related experience. Good reading and writing skills, as well as a basic knowledge of business arithmetic are necessary. Typing, filing, recordkeeping, and other clerical skills are also important. Some employers give applicants typing tests.

Traffic, shipping, and receiving clerks and stock clerks who handle jewelry, liquor, or drugs may have to be bonded. Police, fire, and ambulance dispatching jobs generally are governed by State or local government civil service regulations. Candidates for these jobs may have to pass written, oral, and performance tests. A familiarity with personal computers or computer systems is an asset, because computers are increasingly used for inventory control and for dispatching.

Trainees usually develop the necessary skills on the job. This informal training may last from several days to a few months, depending on the complexity of the job. Dispatchers usually require the most extensive training. Working under an experienced dispatcher, they monitor calls and learn how to operate telephones, radio transmitters and receivers, radio consoles, teletypewriters, and data communications terminals. As trainees gain confidence, they begin to handle calls themselves. Many public safety dispatchers also participate in structured training programs provided by their employer. Some employers offer a course designed by the Associated Public Safety Communications Officers (APCO). This course includes such units as interpersonal communications; overview of the police, fire, and rescue functions; modern public safety telecommunications systems; basic radio broadcasting; local, State, and national crime information computer systems; and telephone complaint/report processing procedures. Other employers develop in-house programs based on their own needs. Emergency medical dispatchers often get special training or have special skills. Some agencies bring in trained paramedics or nurses to work as dispatchers, but because this is so costly, many agencies expand the training of their dispatchers to include instruction on how to help callers begin appropriate lifesaving procedures while trained professionals are on their way.

Although there are no mandatory licensing or certification requirements, some States require that public safety dispatchers possess a certificate to work on a State network such as the Police Information Network. Voluntary certification programs are offered by both APCO and the International Municipal Signal Association.

Many dispatchers participate in these programs in order to improve their prospects for career advancement.

Stock clerks and traffic, shipping, and receiving clerks usually learn the job by doing simple tasks under close supervision. They learn how to count and mark stock and then start keeping records and taking inventory. Stock clerks whose sole responsibility is to bring merchandise to the sales floor and stock shelves and racks need little or no training. Traffic, shipping, and receiving clerks start out by checking items to be shipped and then attaching labels and making sure the addresses are correct. Training in the use of automated equipment is usually done informally on the job.

Communications skills, physical fitness, and the ability to work under pressure are important personal qualities for dispatchers. Residency in the city or county of employment is frequently required for public safety dispatchers. Dispatchers in transportation industries must be able to deal with sudden influxes of shipments and disruptions of shipping schedules caused by bad weather. Strength, stamina, good eyesight, and an ability to work at repetitive tasks and sometimes under pressure are important characteristics for stock clerks and traffic, shipping, and receiving clerks.

Advancement opportunities vary with the place of employment. Dispatchers who work for private firms, which are usually small, will find few opportunities for advancement. Public safety dispatchers, on the other hand, may become a shift or divisional supervisor or chief of communications, or move to higher paying administrative jobs. Some may go on to become police officers or firefighters. In large firms, stock clerks may advance to invoice clerk, stock control clerk, or procurement clerk. Traffic, shipping, and receiving clerks may be promoted to head clerk, and those with a broad understanding of shipping and receiving may enter a related field such as industrial traffic management. With additional training, some stock clerks and traffic, shipping, and receiving clerks advance to jobs as warehouse manager or purchasing agent.

Job Outlook

Overall employment of material recording, scheduling, dispatching, and distributing workers is expected to grow more slowly than the average for all occupations through the year 2005. Employment growth among the occupations in this group is expected to vary, however. Employment of stock clerks is expected to grow more slowly than the average. The volume of business transactions will increase as the economy grows, but automation will enable clerks to handle more stock, holding down employment growth somewhat. The impact of automation will be greatest in warehouses and stockrooms. Employment of traffic, shipping, and receiving clerks is expected to grow about as fast as the average, although automation and other productivity improvements may enable these clerks to handle materials more efficiently, reducing potential employment opportunities. Employment of dispatchers is also expected to grow as fast as the average as the population increases and with it the need to protect property and to coordinate the transportation and shipment of a larger amount of goods.

Because employment in material recording, scheduling, dispatching, and distributing occupations is substantial, workers who leave the labor force or transfer to other occupations are expected to create many thousands of job openings each year.

Earnings

Median weekly earnings of workers in all material recording, scheduling, dispatching, and distributing occupations were about \$384 in 1992. The middle 50 percent earned between \$291 and \$514. The lowest 10 percent earned \$226 or less; the top 10 percent earned over \$688.

Earnings vary somewhat by occupation and industry. Dispatchers earn slightly more than the average for all occupations, and stock clerks and traffic, shipping, and receiving clerks generally earn less. Median weekly earnings of dispatchers were \$420 in 1992.

The median weekly earnings of traffic, shipping, receiving, and stock clerks were between \$350 and \$370 in 1992, with stock clerks generally receiving the higher pay.

Workers in material recording, scheduling, dispatching, and distributing occupations usually receive the same benefits as most other workers. See the introductory section, Keys To Understanding What's in the *Handbook*, for more information on benefits. If

uniforms are required, employers usually either provide the uniforms or an allowance to purchase them.

Dispatchers

(D.O.T. 215.167-010, .367-018; 221.362-014, .367-070, -082; 239.167-014; 367-014, -022, -030; 248.367-026; 249.167-014, .367-070; 372.167-010; 379.162-010; .362-010, and -018; 910.167-014, .367-018; 911.167-010; 913.167-010; .367-010; 914.167-014; 919.162-010; 932.167-010; 939.362-010; 952.167-010; 953.167-010; 954.367-010; 955.167-010; and 959.167-010)

Nature of the Work

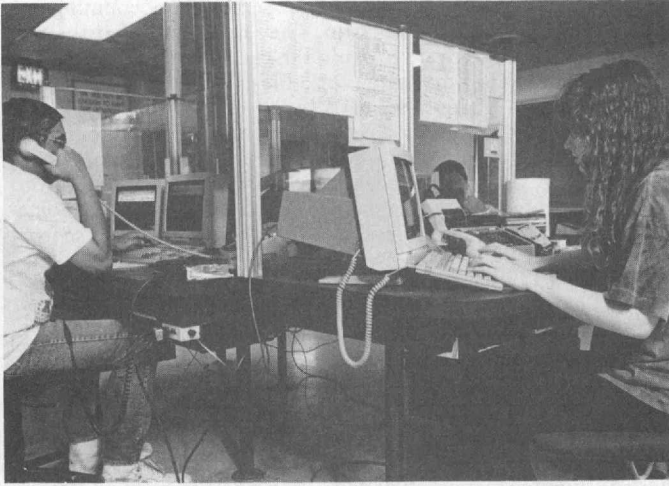
Dispatchers work in a wide array of situations. Some receive and transmit emergency calls from the public requesting assistance and coordinate the dispatching of the appropriate service provider. Others, like those in transportation, coordinate arrivals and departures of shipments so that specific time schedules are kept.

Police, fire, and ambulance dispatchers, also called public safety dispatchers, are usually the first people the public talks to when they call for emergency assistance. Dispatchers receive these calls in a variety of settings; they may work in a police station, a fire station, a hospital, or a centralized city communications center. In many cities, the police department serves as the communications center. In these situations, all 911 emergency calls go to the police department where a dispatcher handles the police calls and screens the others before transferring them to the appropriate service.

When handling a call, dispatchers carefully question the caller to determine the type, seriousness, and location of the emergency. They then quickly decide on the kind and number of units needed, locate the closest and most suitable ones available, and send them to the scene of the emergency. They keep in touch with the units until the emergency has been handled, in case further instructions are needed. When appropriate, they stay in close contact with other service providers—for example, a police dispatcher would monitor the response of the fire department when there is a major fire. In a medical emergency, dispatchers not only keep in close touch with the dispatched units but also with the caller. They often give extensive pre-arrival first aid instructions while the caller is waiting for the ambulance. They continuously give updates on the patient's condition to the ambulance personnel and often serve as a link between the medical staff in a hospital and the emergency medical technicians in the ambulance. (The work of emergency medical technicians is described elsewhere in the *Handbook*.)

Truck dispatchers who work for local and long distance trucking companies coordinate the movement of trucks and freight between cities. They direct the pickup and delivery activities of drivers. They receive customers' requests for pickup and delivery of freight, consolidate freight into truckloads for specific destinations, assign drivers and trucks, make up routes and pickup and delivery schedules, and provide other information. *Bus dispatchers* make sure that local and long distance buses stay on schedule. They handle all problems that may disrupt service and dispatch orders to restore service and schedules. *Train dispatchers* are responsible for the timely movement of trains according to train orders and schedules. *Taxicab dispatchers*, or starters, dispatch taxis in response to requests for service and keep logs on all road service calls. *Tow truck dispatchers* take calls for emergency road service. They relay the problem to a nearby gas station or a tow truck service and see to it that the emergency road service is completed. *Gas and water service dispatchers* monitor gas lines and water mains and send out service trucks and crews to take care of emergencies. Other dispatchers coordinate deliveries, service calls, and related activities for a variety of firms.

Regardless of where they work, all dispatchers keep records, logs, and schedules of the calls they receive and the action they take. They may type and file cards on each call and then prepare detailed reports on all activities occurring during their shift. Those who work with a computer-aided dispatch system make the appropriate entries and corrections into the computer as they occur, and then print a log or report at the end of their shift.



The computerization of the workplace has aided dispatchers.

Many police, ambulance, taxicab, and tow truck dispatchers work as part of a two-person team. One person usually receives incoming calls while the other dispatches and follows up on them. This is commonplace in large communications centers or companies.

Employment

Dispatchers held about 222,000 jobs in 1992. About one-third were police, fire, and ambulance dispatchers, almost all of whom worked for State and local governments—primarily for local police and fire departments. Most of the remaining dispatchers worked for local and long distance trucking companies and bus lines; telephone, electric, and gas utility companies; wholesale and retail establishments; and companies providing business services.

Although dispatching jobs are found throughout the country, most dispatchers work in urban areas where large communications centers and businesses are located.

Job Outlook

Overall employment of dispatchers is expected to grow about as fast as the average for all occupations through the year 2005 due to the growing need for the various services that dispatchers provide. Most job openings will result from the need to replace those who transfer to other occupations or leave the labor force.

Employment of police, fire, and ambulance dispatchers is expected to grow about as fast as the average for all occupations. Their employment is concentrated in State and local government, an industry sector which is expected to experience average growth. Increasingly intense competition among government functions for available resources should limit the ability of many growing communities to keep pace with rapidly growing emergency services needs.

Although population growth and economic expansion are expected to increase overall employment of other dispatchers not involved in public safety, not all specialties will be affected in the same way. Employment of taxicab, train, and truck dispatchers is sensitive to economic conditions. When economic activity falls, demand for transportation services declines. They may experience layoffs or a shortened workweek, and jobseekers may have some difficulty finding entry level jobs. Employment of tow truck dispatchers, on the other hand, is seldom affected by general economic conditions because of the emergency nature of their business.

Computerization is making inroads into all areas of dispatching, increasing productivity and dampening employment growth somewhat. However, computer-aided dispatch systems are very expensive, making them affordable only to relatively large establishments, and slowing growth of dispatchers using computers.

Related Occupations

Other occupations that involve directing and controlling the movement of vehicles, freight, and personnel, as well as information and message distribution, are airline-radio operators, airline dispatchers, air traffic controllers, radio and television transmitter operators, telephone operators, customer service representatives, and transportation agents.

Sources of Additional Information

For further information on training for police, fire, and emergency dispatchers contact:

☞ Associated Public Safety Communications Officers, 2040 S. Ridgewood, South Daytona, FL 32119-8437.

☞ International Municipal Signal Association, P.O. Box 539, 165 East Union St., Newark, NY 14513-1526.

For general information and earnings on dispatchers contact:

☞ American Trucking Associations, Inc., 2200 Mill Rd., Alexandria, VA 22314-4677.

☞ Service Employees International Union, AFL-CIO, 1313 L St. NW., Washington, DC 20005-4100.

☞ Communications Workers of America, 501 Third St. NW., Washington, DC 20001-2797.

☞ American Train Dispatchers Association, 1401 South Harlem Ave., Berwyn, IL 60402-1295.

Information on job opportunities for police, fire, and emergency dispatchers is available from the personnel offices of State and local governments or police departments. Information about work opportunities for other types of dispatchers is available from local employers and State employment service offices. (Information on training and earnings is in the introduction to material recording, scheduling, dispatching, and distributing occupations.)

Stock Clerks

(D.O.T. 219.367-018, .387-026 and -030; 221.587-018 and -022; 222.167-010, .367-014, -026, -038, -042, -050, and -062, .387-018, -026, -030, -034, -042, -058, and -062, .487-010 and -014, .587-022 and -054, .684-010, .687-038 and -046; 229.367-010 and -014, .587-014; 249.367-058; 299.367-014, .677-014; 339.687-010; 381.687-010; and 969.367-010)

Nature of the Work

Stock clerks receive, unpack, check, store, and keep track of merchandise or materials. They keep records of items entering or leaving the stock room and report damaged or spoiled goods. They organize and, when necessary, mark items with identifying codes or prices so that inventories can be located quickly and easily. In many firms, stock clerks use hand-held scanners connected to computers to keep inventories up to date. In stores, stock clerks may bring merchandise to the sales floor and stock shelves and racks. In stockrooms and warehouses, they store materials in bins, on the floor, or on shelves. In large establishments where they may be responsible for only one specific task, they may be known as inventory clerk, stock control clerk, merchandise distributor, order filler, property custodian, or storekeeper. In small firms they may also be responsible for tasks usually handled by shipping and receiving clerks.

Employment

Stock clerks held almost 2 million jobs in 1992 with almost 80 percent working in wholesale or retail trade. The greatest numbers were employed by department and grocery stores. Jobs for stock clerks are found in all parts of the country, but most work in urban areas where stores, warehouses, and factories are concentrated.

Job Outlook

Job prospects for stock clerks should be favorable even though employment is expected to grow more slowly than the average for all occupations through the year 2005. This occupation is very large, and many job openings will occur each year to replace stock clerks who transfer to other jobs or leave the labor force. Many jobs are entry level, and therefore many vacancies are created by normal career progression.



Stock clerks count all goods entering and leaving the warehouse to keep inventory records current.

Growing use of computers for inventory control and new automated equipment are expected to slow growth in demand for stock clerks. This is especially true in manufacturing and in wholesale trade, the industries whose operations are most easily automated. In addition to computerized inventory control systems, firms in these industries are expected to rely more and more on sophisticated conveyor belts, automatic high stackers to store and retrieve goods, and automatic guided vehicles, which are battery powered and driverless.

Employment of stock clerks who work in grocery, general merchandise, department, apparel, and accessories stores is expected to be somewhat less affected by automation since much of their work is done manually on the sales floor and is difficult to automate.

Related Occupations

Other workers who also handle, move, organize, and store materials include shipping and receiving clerks, distributing clerks, routing clerks, stock supervisors, and cargo checkers.

Sources of Additional Information

State employment service offices can provide information about job openings for stock clerks. Also, see clerical and sales occupations elsewhere in the *Handbook* for sources of additional information.

General information about stock clerks can be obtained by contacting:

National Retail Federation, 701 Pennsylvania Ave. NW., Washington, DC 20004-2608.

(Information on training and earnings is in the introduction to material recording, scheduling, dispatching, and distributing occupations.)

Traffic, Shipping, and Receiving Clerks

(D.O.T. 209.367-042; 214.587-014; 219.367-022 and -030; 221.367-022; 222.367-066, .387-014, -022, -050, and -054, .485-010, .567-010 and -014, .587-018, -034, and -058, .687- 022 and -030; 248.362-010, .367-014 and -022; 919.687-010; and 976.687-018)

Nature of the Work

Traffic, shipping, and receiving clerks keep records of all goods shipped and received. Their duties depend on the size of the establishment. In a small company, one clerk may be responsible for accepting deliveries, preparing shipments, and maintaining records. In a large company, the responsibilities are usually divided among several clerks who specialize.

Traffic clerks maintain records on the destination, weight, and charges on all incoming and outgoing freight. They sometimes enter

this information into a computer to be used by the accounting and other departments within the firm. They make sure that the rate charges are accurate by comparing the classification of materials with rate charts. They may also keep a file of claims for overcharges and for damage to goods in transit.

Shipping clerks are record keepers responsible for all outgoing shipments. They prepare shipping documents and mailing labels, and make sure orders have been filled correctly. They also record items taken from inventory and note when orders were filled. Sometimes they fill the order themselves; they obtain merchandise from the stockroom and wrap it or pack it in shipping containers. They also address and label packages, look up and compute freight or postal rates, and record the weight and cost of each shipment. They also may prepare invoices and furnish information about shipments to another part of the company, such as the accounting department. Once a shipment is checked and ready to go, shipping clerks may move the goods from the plant—sometimes by forklift truck—to the shipping dock and direct its loading.

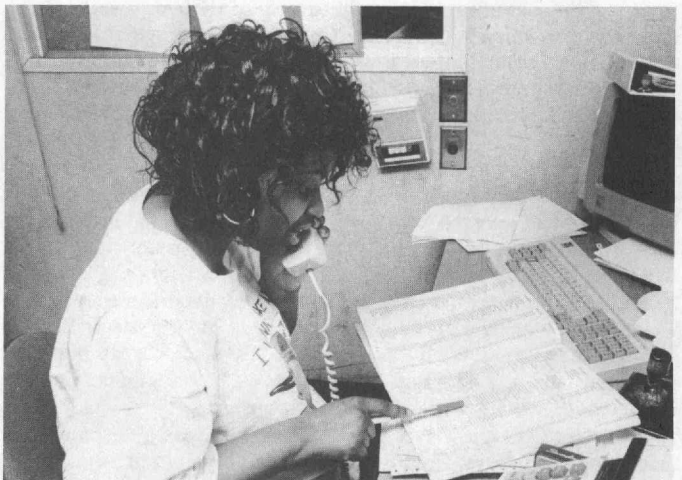
When shipments arrive, *receiving clerks* perform tasks similar to those of shipping clerks. They determine whether their employer's orders have been correctly filled by verifying incoming shipments against the original order and the accompanying bill of lading or invoice. They record the shipment and the condition of its contents. In many firms, receiving clerks record the information by using handheld scanners to read the bar codes on incoming products. After recording this information, they connect the scanner or reader to a personal computer and transfer the data to the appropriate department. They may route or move shipments to the proper department, warehouse section, or stockroom. They also arrange for adjustments with shippers whenever merchandise is lost or damaged. Shipping and receiving clerks in small businesses may also perform some stock clerk duties.

Employment

Traffic, shipping, and receiving clerks held about 824,000 jobs in 1992. Nearly two-thirds were employed by wholesale retail establishments or manufacturing firms. Although jobs for traffic, shipping, and receiving clerks are found throughout the country, most clerks work in urban areas, where factories and wholesale establishments generally are located. Many traffic, shipping, and receiving clerks work for the U.S. Postal Service. For information on these workers, see the statement on postal clerks and mail carriers, elsewhere in the *Handbook*.

Job Outlook

Employment of traffic, shipping, and receiving clerks is expected to increase about as fast as the average for all occupations through the year 2005. Employment growth will continue to be affected by automation, as all but the smallest firms move to hold down labor costs



Receiving clerks monitor the quantity and condition of incoming goods.

by using computers to store and retrieve shipping and receiving records.

Methods of materials handling have changed significantly in recent years. Large warehouses are increasingly automated, using equipment such as computerized conveyor systems, robots, computer-directed trucks, and automatic storage and retrieval systems. Automation, coupled with the growing use of hand-held scanners and personal computers in receiving departments has increased the productivity of these workers.

Despite automation, job openings will arise due to increasing economic activity and because certain functions cannot be automated. For example, someone needs to check shipments before they go out and when they arrive to ensure that everything is in order. However, most job openings will occur because of the need to replace traffic, shipping, and receiving clerks who leave the occupation. Because this is an entry level occupation, many vacancies are created by normal career progression.

Related Occupations

Traffic, shipping, and receiving clerks record, check, and often store the materials that a company receives. They also process and pack goods for shipment. Other workers who perform similar duties are stock clerks, material clerks, distributing clerks, routing clerks, express clerks, expeditors, and order fillers.

Sources of Additional Information

General information about traffic, shipping, and receiving clerks can be obtained by contacting:
National Retail Federation, 701 Pennsylvania Ave. NW., Washington, DC 20004-2608.

(Information on training and earnings is in the introduction to material recording, scheduling, dispatching, and distributing occupations.)

Postal Clerks and Mail Carriers

(D.O.T. 209.687-014; 230.363-010, .367-010; 239.367-018; and 243.367-014)

Nature of the Work

Each day, the U.S. Postal Service receives, sorts, and delivers millions of letters, bills, advertisements, and packages. To do this, it employs about 792,000 workers. Almost 5 out of 10 of these workers are postal clerks, who sort mail and serve customers in post offices, or mail carriers, who deliver the mail.

Clerks and carriers are distinguished by the type of work they do. Clerks are usually classified by the mail processing function they perform, whereas carriers are classified by their type of route—city or rural.

About 350 mail processing centers throughout the country service post offices in surrounding areas and are staffed primarily by postal clerks. Some clerks, more commonly referred to as mail handlers, unload the sacks of incoming mail; separate letters, parcel post, magazines, and newspapers; and transport these to the proper sorting and processing area. In addition, they may load mail into automated letter sorting machines, perform simple canceling operations, and rewrap packages damaged in processing.

After letters have been put through stamp-canceling machines, they are taken to other workrooms to be sorted according to destination. Clerks operating older electronic letter-sorting machines push keys corresponding to the ZIP code of the local post office to which each letter will be delivered; the machine then drops the letters into the proper slots. This older, less automated method of letter sorting is being slowly phased out. Other clerks sort odd-sized letters, magazines, and newspapers by hand. Finally, the mail is sent to local post offices for sorting according to delivery route and delivered.

A growing proportion of clerks operate optical character readers (OCR's) and bar code sorters. Optical character readers "read" the zip code and spray a bar code onto the mail. Bar code sorters then scan the code and sort the mail. Because this is significantly faster

than older sorting methods, it is becoming the standard sorting technology in mail processing centers.

Postal clerks at local post offices sort local mail for delivery to individual customers, sell stamps, money orders, postal stationary, and mailing envelopes and boxes, weigh packages to determine postage, and check that packages are in satisfactory condition for mailing. Clerks also register, certify, and insure mail and answer questions about postage rates, post office boxes, mailing restrictions, and other postal matters. Occasionally, they may help a customer file a claim for a damaged package.

Once the mail has been processed and sorted, it is ready to be delivered by mail carriers. Duties of city and rural carriers are very similar. Most travel established routes delivering and collecting mail. Mail carriers start work at the post office early in the morning, where they spend a few hours arranging their mail for delivery and taking care of other details. Recently, automated equipment has been able to sort most of the mail for city carriers, allowing them to spend less time sorting and more time delivering mail.

Carriers may cover the route on foot, by vehicle, or a combination of both. On foot, they carry a heavy load of mail in a satchel or push it in a cart. In some urban and most rural areas, they use a car or small truck. Although the Postal Service provides vehicles to city carriers, most rural carriers use their own automobiles. Deliveries are made house-to-house, to roadside mailboxes, and to large buildings, such as offices or apartments, which generally have all the mailboxes on the first floor.

Besides delivering and collecting mail, carriers collect money for postage-due and c.o.d. (cash on delivery) fees and obtain signed receipts for registered, certified, and insured mail. If a customer is not home, the carrier leaves a notice that tells where special mail is being held.

After completing their routes, carriers return to the post office with mail gathered from street collection boxes, homes, and businesses. They turn in the mail receipts and money collected during the day and may separate letters and parcels for further processing by clerks.

The duties of some city carriers may be very specialized; some deliver only parcel post while others collect mail from street boxes and receiving boxes in office buildings. In contrast, rural carriers provide a wide range of postal services. In addition to delivering and picking up mail, they sell stamps and money orders and accept parcels, letters, and items to be registered, certified, or insured.

All carriers answer customers' questions about postal regulations and services and provide change-of-address cards and other postal forms when requested. In addition to their regularly scheduled duties, carriers often participate in neighborhood service programs in which they check on elderly or shut-in patrons or notify the police of any suspicious activities along their route.

Postal clerks and mail carriers are classified as casual, part-time flexible, part-time regular, or full time. Casual workers, hired for 90 days at a time, help process and deliver mail during peak mailing or vacation periods. Part-time flexible workers do not have a regular work schedule or weekly guarantee of hours; they replace absent workers and help with extra work as the need arises. Part-time regulars have a set work schedule of fewer than 40 hours per week. Full-time postal employees work a 40-hour week over a 5-day period.

Working Conditions

Postal clerks usually work in clean, well-ventilated, and well-lit buildings. However, other conditions vary according to work assignments and the type of labor-saving machinery available. In small post offices, mail handlers use handtrucks to move heavy mail sacks from one part of the building to another and clerks may sort mail by hand. In large post offices and mail processing centers, chutes and conveyors move the mail, and much of the sorting is done by machines. Despite the use of automated equipment, the work of mail handlers and postal clerks can be physically demanding. These workers are usually on their feet, reaching for sacks and trays of mail or placing packages and bundles into sacks and trays.

Mail handlers and distribution clerks may become bored with the routine of moving and sorting mail. Many work at night or on weekends because most large post offices process mail around the clock, and the largest volume of mail is sorted during the evening and night shifts.



Automation of mail sorting has reduced hand sorting significantly.

Window clerks, on the other hand, have a greater variety of duties, frequent contact with the public, and rarely have to work at night. However, they may have to deal with upset customers, and they are held accountable for the assigned stock of stamps and for postal funds.

Most carriers begin work early in the morning, in some cases as early as 4 a.m. if they have routes in the business district. A carrier's schedule has its advantages, however. Carriers who begin work early in the morning are through by early afternoon, and they spend most of the day on their own, relatively free from direct supervision. Overtime hours may be required during peak delivery times, such as the holidays.

Carriers spend most of their time outdoors, and deliver mail in all kinds of weather. Even those who drive often must walk when making deliveries and must lift heavy sacks of parcel post items when loading their vehicles. In addition, carriers always must be cautious of potential hazards on their routes. Wet roads and sidewalks can be treacherous, and each year numerous carriers are bitten by dogs.

Employment

The U.S. Postal Service employed 64,000 postal clerks and 297,000 mail carriers in 1992. About 85 percent of them worked full time. Most postal clerks provided window service and sorted mail at local post offices, although some worked at mail processing centers. Although most mail carriers worked in cities and suburban communities, 43,000 were rural carriers.

In addition to the postal clerks mentioned above, there were about 217,000 traffic, shipping, and receiving clerks employed in the U.S. Postal Service in 1992. Many of the duties of these clerks are described in the Nature of the Work section of this statement. For more information about these workers, see the statement on traffic, shipping, and receiving clerks elsewhere in the *Handbook*.

Training, Other Qualifications, and Advancement

Postal clerks and mail carriers must be U.S. citizens or have been granted permanent resident-alien status in the United States. They must be at least 18 years old (or 16, if they have a high school diploma). Qualification is based on a written examination that measures speed and accuracy at checking names and numbers and ability to memorize mail distribution procedures. Applicants must pass a physical examination as well, and may be asked to show that they can lift and handle mail sacks weighing up to 70 pounds. Applicants for jobs as postal clerks operating electronic sorting machines must pass a special examination that includes a machine aptitude test.

Applicants for mail carrier positions must have a driver's license, a good driving record, and a passing grade on a road test.

Applicants should apply at the post office or mail processing center where they wish to work in order to determine when an exam will be given. Applicants' names are listed in order of their examination scores. Five points are added to the score of an honorably discharged veteran, and 10 points to the score of a veteran wounded in combat or disabled. When a vacancy occurs, the appointing officer chooses one of the top three applicants; the rest of the names remain on the list to be considered for future openings until their eligibility expires, usually 2 years from the examination date.

Relatively few people under the age of 25 are hired as career postal clerks or mail carriers, a result of keen competition for these jobs and the customary waiting period of 1-2 years or more after passing the examination. It is not surprising, therefore, that most entrants transfer from other occupations.

New postal clerks and mail carriers are trained on the job by experienced workers. Many post offices offer classroom instruction. Workers receive additional instruction when new equipment or procedures are introduced. They usually are trained by another postal employee or, sometimes, a training specialist hired under contract by the Postal Service.

A good memory, good coordination, and the ability to read rapidly and accurately are important. In addition, mail handlers should be in good physical condition. Mail handlers and distribution clerks work closely with other clerks, frequently under the tension and strain of meeting dispatch transportation deadlines. Window clerks and mail carriers must be courteous and tactful when dealing with the public, especially when answering questions or receiving complaints.

Postal clerks and mail carriers often begin on a part-time flexible basis and become regular or full time in order of seniority as vacancies occur. Full-time clerks may bid for preferred assignments such as the day shift, a window job, or a higher level nonsupervisory position as expeditor or window service technician. Carriers can look forward to obtaining preferred routes as their seniority increases, or to higher level jobs such as carrier technician. Both clerks and carriers can advance to supervisory positions.

Job Outlook

Those seeking a job in the Postal Service can expect to encounter keen competition—the number of applicants for postal clerk and mail carrier positions is expected to continue to far exceed the number of openings. Job opportunities will vary by occupation and duties performed.

Overall employment of postal clerks is expected to decline through the year 2005. In spite of anticipated increases in the total volume of mail, automation will continue to increase the productivity of postal clerks, slowing employment growth. Increasingly, mail will be moved using automated materials-handling equipment and sorted using optical character readers, bar code sorters, and other automated sorting equipment. In addition, demand for window clerks will be moderated by the increased sales of stamps and other postal products by grocery and department stores and other retail outlets.

Conflicting factors also are expected to influence demand for mail carriers. Despite competition from alternative delivery systems and new forms of electronic communication, the volume of mail handled by the Postal Service is expected to continue to grow. Population growth and the formation of new households will stimulate demand for mail delivery. However, increased use of the "ZIP + 4" system, which is used to sort mail to the carrier route, and other automated sorting equipment should decrease the amount of time carriers spend sorting their mail, allowing them more time to handle longer routes. In addition, the Postal Service is moving toward more centralized mail delivery, such as the use of more cluster boxes, to cut down on the number of door-to-door deliveries. Although these trends are expected to increase carrier productivity, they should balance with the growth in mail volume, and employment of mail carriers is expected to change little through the year 2005.

Jobs will become available because of the need to replace postal clerks and mail carriers who retire or stop working for other reasons. However, the factors that make entry to these occupations highly competitive—attractive salaries, a good pension plan, job security, and modest educational requirements—contribute to a high

degree of job attachment. Accordingly, replacement needs produce relatively fewer job openings than in other occupations of this size. In contrast to the typical pattern, postal workers generally remain in their jobs until they retire; relatively few transfer to other occupations.

Although the volume of mail to be processed and delivered rises and falls with the level of business activity, as well as with the season of the year, full-time postal clerks and mail carriers have never been laid off. When mail volume is high, full-time clerks and carriers work overtime, part-time clerks and carriers work additional hours, and casual clerks and carriers may be hired. When mail volume is low, overtime is curtailed, part-timers work fewer hours, and casual workers are discharged.

Earnings

In 1992, base pay for beginning full-time carriers and postal clerks was \$23,737 a year, rising to a maximum of \$33,952 after 12 1/2 years of service. For those working between 6 p.m. and 6 a.m., a supplement is paid. Experienced, full-time, city delivery mail carriers earn an average salary of \$32,832 a year. Postal clerks and carriers working part-time flexible schedules begin at \$11.81 an hour and, based on the number of years of service, increase to a maximum of \$16.91 an hour.

Rural delivery carriers had average base salaries of \$34,951 in 1992. Their earnings are determined through an evaluation of the amount of work required to service their routes. Carriers with heavier workloads generally earn more than those with lighter workloads. Rural carriers also receive an equipment maintenance allowance when required to use their own vehicles. In 1992, this was approximately 34 cents per mile.

Postal workers enjoy a variety of employer-provided benefits. These include health and life insurance, vacation and sick leave, and a pension plan.

In addition to their hourly wage and benefits package, some postal workers receive a uniform allowance. This group includes those workers who are in the public view for 4 or more hours each day and various maintenance workers. The amount of the allowance depends on the job performed—some workers are only required to wear a partial uniform, and their allowance is lower. In 1992, for example, the allowance for a letter carrier was \$252 per year, compared to \$108 for a window clerk.

Most of these workers belong to one of four unions: American Postal Workers Union, National Association of Letter Carriers, National Postal Mail Handlers Union, and National Rural Letter Carriers Association.

Related Occupations

Other workers whose duties are related to those of postal clerks include mail clerks, file clerks, routing clerks, sorters, material moving equipment operators, clerk typists, cashiers, data entry operators, and ticket sellers. Others with duties related to those of mail carriers include messengers, merchandise deliverers, and delivery-route truckdrivers.

Sources of Additional Information

Local post offices and State employment service offices can supply details about entrance examinations and specific employment opportunities for postal clerks and mail carriers.

Record Clerks

Nature of the Work

Organizations of all kinds—businesses, government agencies, unions, health care facilities, and colleges and universities—need to keep accurate records. Maintaining and updating financial as well as nonfinancial records, ranging from payroll records to information on the shipment of goods to bank statements, is the job of record clerks. (Additional information about specific record clerk occupations is provided in the separate statements in this section.)

Record clerks perform a wide variety of recordkeeping duties. Billing clerks prepare bills and invoices. Bookkeeping, accounting, and auditing clerks maintain financial data in computer and paper files. Brokerage clerks prepare and maintain the records generated when stocks, bonds, and other types of investments are traded. Statement clerks prepare monthly statements for bank customers. File clerks store and retrieve various kinds of office information for use by members of the staff. Library assistants check books in and out. Order clerks process incoming orders for goods and services. Payroll and timekeeping clerks compute wages for payroll records. Personnel clerks keep employee records current.

Record clerks' duties may vary with the size of the firm. In a small business, for example, one bookkeeping clerk may handle all financial records and transactions as well as payroll and personnel duties while a large firm may employ specialized accounting clerks to work on each aspect of the balance sheet, as well as specialized payroll and personnel clerks.

Increased computerization has changed the duties of most record clerks. In the past, for example, clerks made calculations with adding machines and entered figures into ledgers and paper files. Now, many workers use financial software to enter and manipulate data. In many cases, these computer programs can automatically perform calculations on data that previously had to be calculated manually. Computers enable clerks to access data within files more quickly than by leafing through stacks of paper. Despite increased automation, however, workers still keep backup paper records for research, auditing, and reference purposes.

Interaction with the public and with coworkers is a basic part of the job of many record clerks. Payroll clerks, for example, may answer employees' questions concerning benefits; bookmobile drivers help patients in nursing homes and hospitals select books; and order clerks may call customers to verify special mailing instructions.

Working Conditions

With the exception of library clerks and bookmobile drivers, record clerks work in a typical office environment. Most work alongside the organization's other clerical workers, but some work in centralized units away from the organization's front office. Clerks who review detailed data may have to sit for extended periods. Although they do not do heavy lifting, file clerks and library assistants must frequently stoop, bend, reach, and spend a lot of time on their feet. Bookmobile drivers must maneuver their large vehicles in all kinds of traffic and weather conditions. In addition, some are responsible for the maintenance of the bookmobile.

An increasing number of record clerks use video display terminals (VDT's) as part of their daily routine. Workers who spend a lot of time at VDT's may experience eyestrain and muscle strain, backaches, headaches, and repetitive motion injuries.

Most of these workers work regular business hours. Some, such as library assistants, may work evenings and weekends. Library assistants employed in school libraries generally work only during the school year. Accounting clerks may work longer hours to meet deadlines at the end of the fiscal year, during tax time, or when monthly and yearly accounting audits are performed. Billing, bookkeeping, and accounting clerks in hotels, restaurants, and stores may work overtime during peak holiday and vacation seasons. Brokerage clerks may have to work overtime if there is a high volume of activity in the stock or bond markets. Order clerks in retail establishments may work overtime when sales volume is high, especially around Christmas.

Employment

Record clerks held about 3,573,000 jobs in 1992. The following tabulation indicates the employment in each occupation.

Total	100
Bookkeeping, accounting, and auditing clerks	59
Billing clerks and related workers	11
Order clerks, material, merchandise, and service	8
File clerks	7
Payroll and timekeeping clerks	5
Personnel clerks, except payroll and timekeeping	4
Library assistants and bookmobile drivers	3
Brokerage and statement clerks	3

These workers are employed in virtually every industry. The largest number work for firms providing health, business, and other types of services. Large numbers also work in trade; finance, insurance, and real estate; manufacturing; and government.

Training, Other Qualifications, and Advancement

Most record clerk jobs are entry level positions. Most employers require applicants to have at least a high school diploma or its equivalent. A higher level of education will usually be favored over a high school diploma, but it is not generally required. However, in some cases, more extensive education is mandatory. For example, order clerks in high-technology firms often need to understand scientific and mechanical processes, which may require some college education. Regardless of the type of work being done, most employers prefer those who are computer literate. Knowledge of word processing and spreadsheet programs is especially valuable, as is experience working in an office and good interpersonal skills.

High schools, business schools, and community colleges teach office skills. Business education programs typically include courses in typing (keyboarding), word processing, shorthand, business communications, records management, and office systems and procedures. Technical training needed for some specialized order clerk positions can be obtained in technical institutes and in 2- and 4-year colleges.

Some entrants are college graduates with degrees in business, finance, or the liberal arts. Although a degree is rarely required, many graduates take entry level clerical positions to get into a company or into the finance and accounting field, with the hope of being promoted to professional or managerial jobs. Some companies, such as brokerage and accounting firms, have a set plan of advancement that tracks college graduates from entry level clerk jobs into management positions. These workers may start at higher salaries and advance more rapidly than those without a degree.

Once hired, record clerks generally receive on-the-job training. Under the guidance of a supervisor or senior worker, new employees learn procedures to follow. Some formal classroom training may be necessary, such as training in operating specific computer software.

Record clerks must be careful, orderly, and detail oriented in order to avoid making errors and to be able to recognize errors made by others. These workers must also be honest, discreet, and trustworthy because they frequently come in contact with confidential material. Payroll clerks, billing clerks, and bookkeeping, accounting, and auditing clerks should have a strong aptitude for numbers. Because statement clerks have access to individuals' financial information, they must be bonded. Many bookmobile drivers are now required to have a commercial driver's license.

Workers usually advance by taking on more duties in the same occupation with higher pay. Others advance to closely related occupations. For example, some order clerks use their experience to move into a sales position. Others move into another clerical job, such as secretary, or advance to a supervisory position. With appropriate experience and education, some clerks may become accountants, personnel specialists, brokers, or librarians.

Job Outlook

Higher than average turnover in this large occupation places it among those occupations providing the most job openings. Opportunities will be very plentiful for full-time, part-time, and seasonal employment as record clerks transfer to other occupations or leave the labor force. These are entry level jobs that require little formal preparation and are characterized by a lot of movement into and out of them.

Employment of record clerks is expected to grow more slowly than the average for all occupations through the year 2005. Despite continued growth in the volume of business transactions, rising productivity will result in slow employment growth.

The main factor affecting productivity in these occupations is the spread of office automation. Many of these jobs are "back office" clerical positions, which have already been heavily automated in many organizations. Productivity has increased significantly as workers use word processors and personal computers instead of more time-consuming equipment such as typewriters, adding machines, and calculators. The growing use of equipment such as bar code readers, point-of-sale terminals, and optical scanners by other

employees also reduces much of the data entry handled by record clerks. Managers and professionals now do much of their own clerical work, using computers to access, create, and store data directly in the computer system. The growing use of local area networks is also facilitating electronic data interchange (EDI). EDI refers to the sending of data from computer to computer, without the need for clerks to reenter the data. To further eliminate duplicate functions, more large companies may consolidate all their clerical operations in a central office where accounting, billing, personnel, and payroll functions are performed for all satellite offices in the organization.

Earnings

Salaries of record clerks vary considerably. Region of the country, size of city, and type and size of establishment all influence salary levels. The level of industry or technical expertise required and the complexity and uniqueness of a clerk's responsibilities may also affect earnings. Average salaries vary by detailed occupation, as shown in the following tabulation.

Order clerks	\$22,200
Payroll and timekeeping clerks	21,000
Personnel clerks	20,300
Bookkeeping, accounting, and auditing clerks	19,100
Billing clerks	18,400
Library assistants and bookmobile drivers	16,400
File clerks	15,700

In the Federal Government in 1993, payroll and timekeeping clerks and personnel clerks with a high school diploma or 6 months of clerical experience started at \$14,600. In 1993, the average salary for all payroll and timekeeping clerks was \$20,300, and for personnel clerks, \$23,700.

In addition to salary, record clerks receive the same package of benefits as other employees in the organization. In large and medium-size establishments, sick and annual leave, life and health insurance, and retirement plans are common.

Related Occupations

Most record clerks today enter data into a computer system and perform basic analysis of the data. Other clerical workers who enter and manipulate data are bank tellers, statistical clerks, receiving clerks, medical record clerks, hotel and motel clerks, credit clerks, and reservation and transportation ticket agents.

Sources of Additional Information

State employment service offices can provide information about job openings for record clerks.

Public libraries and libraries in academic institutions can provide information about job openings for library assistants and bookmobile drivers.

The State Library of Ohio, Field Operations Department, can provide specific information on bookmobile drivers. The address is: 65 South Front St., Columbus, OH 43215.

Information on careers in records and information management can be obtained from:

Association of Record Managers and Administrators (ARMA), 4200 Somerset Dr., Suite 215, Prairie Village, KS 66208. (Phone: 1-800-422-2762.)

Billing Clerks

(D.O.T. 184.387-010; 210.382-022, -026, -066; 211.482-014, -018; 214.267-010, .362-010, -014, -022, -026, -038, -042, .382-014, -018, -030, .387-010, -014, -018, .462-010, .467-010, -014; 214.482-010, -014, -018, -022, .587-010; 216.382-034, -050, -054, -018, -022; 217.382-010; 241.267-026; and 249.367-034)

Nature of the Work

Billing clerks produce the bills and related documents that are used to settle customers' accounts. Billing, cost, and rate clerks keep the records, calculate the charges, and maintain the files of payments

made for goods or services. Billing machine operators operate the machines that generate the bills, statements, and invoices.

Billing clerks review purchase orders, bills of lading, sales tickets, hospital records, or charge slips to calculate the total amount due from a customer. In accounting, law, consulting, and similar firms, billing clerks calculate client fees based on the actual time required to perform the task. They keep track of the accumulated hours and dollar amounts to charge to each job, the type of job performed for a customer, and the percentage of work completed. In hospitals, calculating the charges for an individual's hospital stay may require a letter to an insurance company, whereas a clerk computing trucking rates for machine parts may consult a rate book. After billing clerks review all necessary information, they compute the charges using calculators, adding machines, or computers. They then prepare the itemized statements, bills, or invoices—depending on the organization's needs—used for billing and recordkeeping purposes. For example, the clerk might prepare a simple bill that only contains the amount due and the date and type of service. In another organization, the clerk would produce a detailed invoice that includes the codes for all goods and services provided. This latter form might list the items sold, credit terms, date of shipment or dates services were provided, a salesperson's or doctor's identification if necessary, and the sales total.

Once all the information has been entered, billing machine operators then run off the bill that will be sent to the customer. In a growing number of firms, billing machines are being replaced by computers and specialized billing software that allow clerks to calculate charges and prepare bills in one step. Computer packages prompt clerks to enter data from hand-written forms and manipulate the necessary entries of quantities, labor, and rates to be charged. Billing clerks verify the entry of information and check for computer errors before the bill is printed by the computer. After the bills are printed, billing clerks check them again for accuracy.

Employment

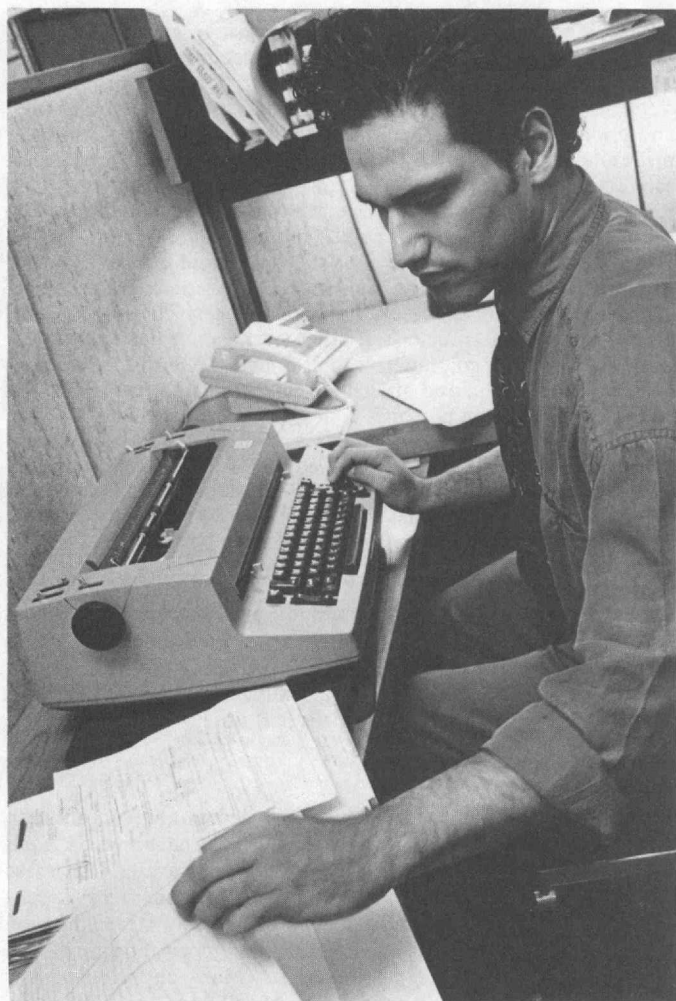
Billing clerks held about 409,000 jobs in 1992. About 4 of every 10 workers were employed by banks and other financial institutions, insurance companies, and other organizations providing business and health services. About 1 of every 4 employees was found in wholesale and retail establishments, and a significant number worked in manufacturing, transportation, communications, and utilities. Approximately 1 in 6 billing clerks works part time.

Job Outlook

Job openings for persons seeking work as billing clerks are expected to be numerous through the year 2005. Despite the lack of employment growth, many job openings will occur as billing clerks transfer to other occupations or leave the labor force. Turnover in this occupation is relatively high, reflecting the fact that it is an entry level occupation requiring only a high school diploma. Each year, tens of thousands of jobs will become available as billing clerks transfer to another occupation or leave the labor force.

Overall employment of billing clerks is expected to change little through the year 2005. A growing economy and a greater demand for billing services will result in more business transactions, but productivity increases will keep employment from rising. Employment of billing, cost, and rate clerks will rise, but not as fast as the increase in business transactions, as computers are increasingly used to manage account information. Less routine, more complex billing applications will increasingly require workers with greater technical expertise. Employment of machine operators will decline as billing machines are replaced by more advanced machines and computers which enable billing, cost, and rate clerks to perform the jobs formerly done by billing machine operators. In smaller firms, accounting clerks are taking over the responsibilities of billing clerks due to productivity gains from billing software.

(See introductory part of this section for information on training requirements and earnings.)



Billing clerks maintain the files of payments made for goods and services.

Bookkeeping, Accounting, and Auditing Clerks

(D.O.T. 209.687-010; 210.362-010, .367-010, -014, .382-010, -014, -030, -038, -042, -046, -050, -054, -062; 216.362-014, -022, -026, -034, -038, -042, .382-022, -026, -058, .482-010, -026, .587-010; 219.362-066, .367-042, .387-018, .487-010, and .587-010)

Nature of the Work

All money spent or received by an organization must be accurately recorded. Bookkeeping, accounting, and auditing clerks are an organization's financial recordkeepers. They compute, classify, record, and verify numerical data in order to develop and maintain financial records.

In smaller establishments, bookkeeping clerks handle all aspects of financial transactions. They record debits and credits, compare current and past balance sheets, summarize details of separate ledgers, and prepare reports for supervisors and managers. They may also prepare bank deposits by compiling data from cashiers, verifying and balancing receipts, and sending the cash, checks, or other forms of payment to the bank.

In larger offices and accounting departments, accounting clerks are more specialized. Their title may reflect the type of accounting they do, such as accounts payable clerk or accounts receivable clerk. Entry level accounting clerks post details of transactions, total accounts, and compute interest charges. They may also monitor loans and accounts payable and receivable to ensure that payments are up

to date. More advanced clerks may total, balance, and reconcile billing vouchers; ensure completeness and accuracy of data on accounts; and code documents according to company procedures. They may also post transactions in journals and on computer files, and update these files when needed. They also review computer printouts against manually maintained journals, and make necessary corrections. Senior workers review invoices and statements to make sure all information is accurate and complete, and may reconcile computer reports with operating reports.

Auditing clerks verify records of transactions posted by other workers. They check figures, postings, and documents for correct entry, mathematical accuracy, and proper codes. They also correct or note errors for accountants or other workers to adjust.

As organizations computerize their financial records, more bookkeeping, accounting, and auditing clerks are using specialized accounting software on personal computers. They increasingly post charges to accounts on computer spreadsheets and data bases and do less manual posting to general ledgers. Information is entered into the computer from paper receipts or bills and then is stored on paper as computer printouts.

Employment

Bookkeeping, accounting, and auditing clerks held about 2,112,000 jobs in 1992. About 1 of every 4 was in wholesale and retail trade. About one-third were in organizations providing business, health, educational, and social services. Approximately 1 in 4 bookkeeping, accounting, and auditing clerks works part time.

Job Outlook

Virtually all job openings for bookkeeping, accounting, and auditing clerks through the year 2005 will be due to replacement needs. Each year, several hundred thousand jobs will become available as these clerks transfer to other occupations or leave the labor force. Turnover is lower than among other record clerk occupations, but the large size of the occupation ensures a large number of openings and plentiful job opportunities for jobseekers. Many opportunities for temporary and part-time work should be available.

Little change is expected in the employment of bookkeeping, accounting, and auditing clerks through 2005. A growing economy will result in more financial transactions and other activities and, therefore, more demand for accounting services. However, automation of office functions is expected to continue, with resulting productivity increases. Virtually all new jobs will be created in small, rapidly growing organizations. Large organizations are likely to continue the consolidation of departments to eliminate duplicate functions and reduce the demand for these clerks.

(See introductory part of this section for information on training requirements and earnings.)



Bookkeeping clerks post changes to accounts using computer spreadsheets.

Brokerage Clerks and Statement Clerks

(D.O.T. 214.362-046; 216.362-046, .382-046, .482-034; 219.362-018, -054, and .482-010)

Nature of the Work

Brokerage clerks and statement clerks work behind the scenes to produce records associated with financial transactions.

Brokerage clerks, who work in the operations area of securities firms, perform many duties to facilitate the sale and purchase of stocks, bonds, commodities, and other kinds of investments. These clerks produce the necessary records of all transactions that occur in their area of the business.

Their specific job titles depend upon the type of work they do. Purchase-and-sale clerks match orders to buy with orders to sell. They balance and verify stock trades by comparing the records of the selling firm to those of the buying firm. Dividend clerks ensure timely payments of stock or cash dividends to clients of a particular brokerage firm. Transfer clerks execute customer requests for changes to security registration and examine stock certificates for adherence to banking regulations. Receive-and-deliver clerks facilitate the receipt and delivery of securities among firms and institutions. Margin clerks post accounts and monitor activity in customers' accounts. Their job is to ensure that customers make their payments and stay within legal boundaries concerning stock purchases.

A significant and growing number of brokerage clerks use custom designed software programs to process transactions, allowing transactions to be processed more quickly than if they were done manually. At this time, only a few customized accounts are handled manually.

Statement clerks assemble, verify, and send individual and commercial bank statements every month. How this is done depends on the particular bank.

In most modern banks, statement clerks, sometimes called statement operators, run sophisticated, high-speed machines. These machines fold the computer-printed statement, collate it if it is more than one page, insert the statement and cancelled checks into an envelope, seal it, and weigh it for postage. Statement clerks load the machine with the statements, cancelled checks, and envelopes. They then monitor the equipment, correct jams, or call the repair personnel for more serious problems.

In banks that do not have such machines, statement clerks manually place the statements and cancelled checks in envelopes, seal them, and weigh them for postage. They may also be responsible for verifying signatures and checking for missing information on checks, placing cancelled checks into trays, and retrieving them to send with the statements.

In a small but growing number of banks, only the statement is printed and sent to the account holder. The cancelled checks are not returned; this is known as check truncation.

Statement clerks are employed primarily by large banks. In smaller banks, their function is usually handled by a teller or a bookkeeping clerk who performs other duties during the rest of the month. Other small banks send their statement information to larger banks for processing, printing, and mailing.

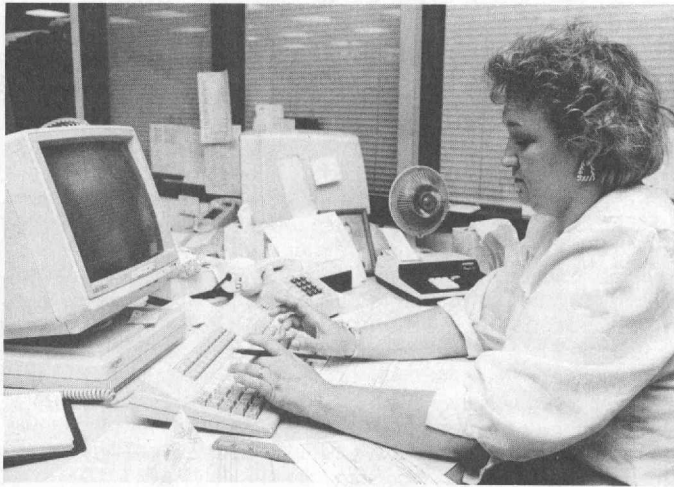
Employment

Brokerage clerks held about 57,000 jobs in 1992, and statement clerks held about 31,000. Brokerage clerks worked in firms involved in the sales of securities and commodities. Almost all statement clerks were employed by banking institutions of some kind.

Job Outlook

Jobs for brokerage clerks and statement clerks will not be nearly as plentiful through the year 2005 as for other record clerk occupations, due to the relatively small size of the occupation. Nevertheless, several thousand jobs will become available each year to replace clerks who transfer to other occupations or leave the labor force.

Employment of brokerage clerks and statement clerks is expected to grow more slowly than the average for all occupations through



Automation will limit growth of brokerage clerks and statement clerks.

the year 2005 due to automation and changes in business practices. For example, computers now calculate the dividends due on stocks, something done for decades by brokerage clerks with adding machines and calculators. However, brokerage clerks are still needed to enter data into the computer and to process information. In the past, the record of security ownership was a piece of paper—a stock certificate. Today, most securities are stored in computer form and traded using electronic data interchange (EDI). Although less paper changes hands, clerks continue to enter and verify all transactions. Automated statement processing will grow as the increased volume of transactions justifies the cost of the necessary equipment, and this will dampen demand for statement clerks. In addition, the further spread of check truncation is expected to hold down employment of statement clerks. The use of ATM card systems and other electronic money transfers should increase, resulting in significantly fewer checks being written and processed.

(See introductory part of this section for information on training requirements and earnings.)

File Clerks

(D.O.T. 206.362-010, .367-014, -018; and .387-010, -014, -022, -034)

Nature of the Work

All kinds of organizations—businesses, government agencies, and non profit institutions—generate records that must be arranged so that information can be located quickly. This creates many job opportunities for file clerks, who classify, store, retrieve, and update office information.

File clerks, also called records and information clerks or record center clerks, examine incoming material and code it numerically, alphabetically, or by subject matter. They then store forms, letters, receipts, or reports in paper form or enter necessary information into other storage devices. Many file clerks still place paper files in file cabinets. Some clerks operate mechanized files that rotate to bring the needed records to them. Others film documents that are then stored on microforms (microfilm or microfiche). A small but growing number of file clerks use imaging systems that scan paper files or film and store the material on optical disks.

Records must be current to be useful. File clerks ensure that new information is added to the files in a timely manner and may destroy outdated file materials or transfer them to inactive storage. They also check files at regular intervals to make sure that all items are correctly sequenced and placed. Whenever records cannot be located, the file clerk searches for the missing material. As an organization's needs for information change, file clerks implement changes to the filing system established by supervisory personnel.

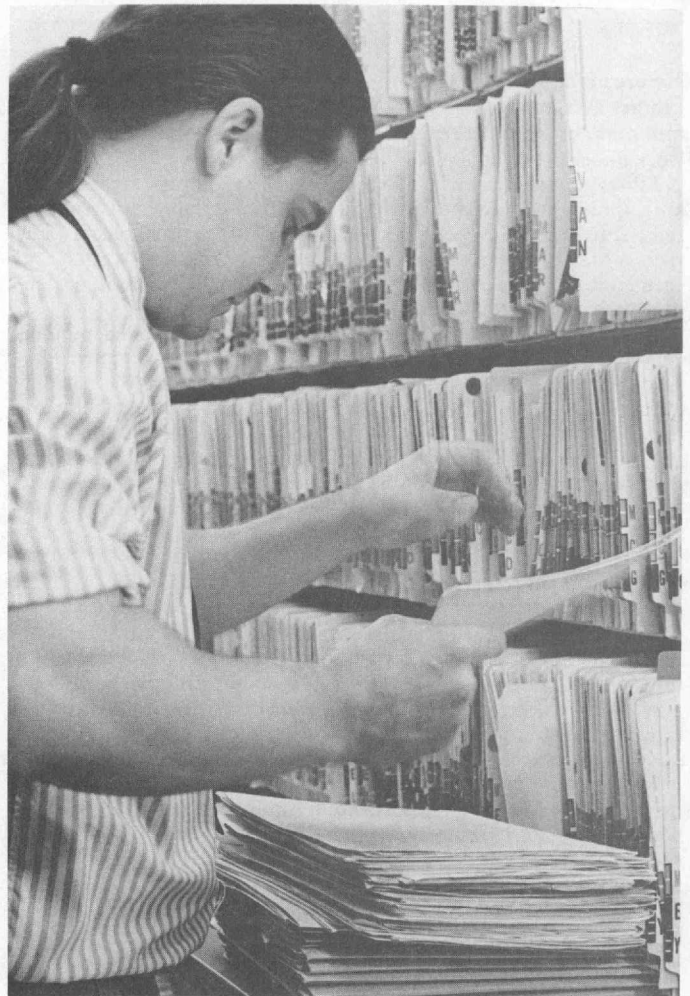
When records are requested, file clerks locate them and give them to the borrower. The document may be a sheet of paper stored in a drawer in a file cabinet or an image on microform. In the first example, the clerk manually retrieves the document and hands or forwards it to the borrower. In the latter example, the clerk retrieves the microform and displays it on a microform reader. If necessary, file clerks make copies of records and distribute them. They keep track of materials removed from the files and make sure that those given out are returned.

A growing number of file clerks are using computerized filing and retrieval systems. When the amount of information in files is too large to be stored on a computer, information on the physical location of documents can be stored in a data base. To retrieve a document, the clerk enters the document's identification code, obtains the location, and pulls the document. A smaller number of files can be stored directly on the computer. Even when files are stored on the computer, backup paper copies generally are also kept. However, accessing files in a computer data base is much quicker than locating and physically retrieving paper files.

In small offices, file clerks often have expanded responsibilities. These include typing (keyboarding), word processing, sorting mail, or operating copying machines.

Employment

File clerks held about 257,000 jobs in 1992. Many other clerical workers also perform filing in connection with their work. While file clerk jobs are found in nearly every sector of the economy, about 4 out of 5 file clerks are employed in services; finance, insurance, and real estate; and government. More than 1 out of every 10 is employed in temporary services, and about 1 out of 3 works part time.



File clerks return files to storage after they are returned by borrower.

Job Outlook

Job opportunities for file clerks should be plentiful through the year 2005 because a large number of workers will be needed to replace workers who leave the occupation each year. Turnover is very high, highest among all record clerk occupations. This reflects the lack of formal training requirements, limited advancement potential, and relatively low pay.

Jobseekers who have typing (keyboarding) and other secretarial skills and are familiar with a wide range of office machines, personal computers in particular, should have better opportunities than less experienced applicants. File clerks should find many opportunities for temporary or part-time work, especially during peak business periods.

Employment of file clerks is expected to grow about as fast as the average for all occupations through the year 2005 as recordkeeping requirements continue to rise in conjunction with rising economic activity. Demand for file clerk services will be strongest in the rapidly growing health sector. However, the expected growth in the volume of paper records should be partially offset by the greater use of automated and computerized systems that increase file clerks' productivity. In addition, use of personal computers by professionals and managers will relieve file clerks of accessing the growing number of documents stored on computers.

(See introductory part of this section for information on training requirements and earnings.)

Library Assistants and Bookmobile Drivers

(D.O.T. 209.387-026; 222.587-014; 249.363-010, .365-010, .367-046, and .687-014)

Nature of the Work

Library assistants and bookmobile drivers keep library resources in order and make them readily available to a variety of users. They work under the direction of librarians.

Library assistants—sometimes referred to as library media assistants, library technicians, library aides, or circulation assistants—register patrons so they can borrow materials from the library. They record the borrower's name and address from an application and then issue a library card. Many library assistants now enter and update patron's records using computers.

At the circulation desk, assistants lend and collect books, periodicals, video tapes, and other materials. When an item is borrowed, assistants stamp the due date on the material and record the patron's identification from his or her library card. They inspect returned materials for damage, check the due dates, and compute any fines that may be owed. They review records to compile a list of overdue materials and send out overdue notices. They also answer patrons' questions in person and on the telephone and refer those they cannot answer to a librarian.

Throughout the library, assistants sort returned books, publications, and other items and return them to their designated shelves, files, or storage areas. They locate materials to be loaned, either to a patron or to another library. Many card catalogues are computerized, so library assistants must be familiar with the computer system for their particular library. If any of the materials have been damaged, these workers repair them, if possible. For example, they use tape or paste to repair torn pages or book covers and other specialized processes to repair more valuable materials.

Some library assistants specialize in helping patrons with vision problems, including blindness. Sometimes referred to as talking-books library clerks or braille-and-talking-books clerks, they review the borrower's list of desired reading material. They select those materials or closely related substitutes from the library collection of large type or braille volumes, tape cassettes, and open-reel talking books. They do the necessary paperwork and give or mail them to the borrower.

To extend library services to as wide an audience as possible, many libraries operate bookmobiles. Bookmobile drivers drive vans stocked with books or drive light trucks that pull a book trailer to

designated sites on a regular schedule. Bookmobiles serve community organizations such as shopping centers, apartment complexes, schools, and nursing homes. Depending on local conditions, they may drive alone or may be accompanied by a library technician.

When working alone, the drivers perform many of the same functions as a library assistant in a main or branch library. They answer patrons' questions, receive and check out books, collect fines, maintain the book collection, and shelve materials. Bookmobile drivers participate and may assist in planning programs sponsored by the library such as reader advisory programs, used book sales, or outreach programs. They must keep track of their mileage, the materials lent out, and the amount of fines collected. In some areas they are responsible for the maintenance of the vehicle and any photocopiers or other equipment in it. They may be required to record statistics on circulation and the number of people visiting the bookmobile. Drivers may also record requests for special items from the main library and arrange for the materials to be mailed or delivered to a patron during the next scheduled visit. Increasingly, bookmobiles are equipped with personal computers and CD-ROM systems linked to the main library system; this allows bookmobile drivers to reserve or locate books immediately.

Because bookmobile drivers may be the only link some people have to the library, much of their work is helping the public. They may assist handicapped or elderly patrons to the bookmobile or shovel snow to assure their safety. They may enter hospitals or nursing homes to deliver books directly to patrons who are bedridden. Bookmobile drivers should be familiar with audiovisual equipment for showing slides or films.

The schedules of bookmobile drivers depend on the size of the area being served. Some of these workers go out on their routes every working day, while others do so only certain days of the week. On the other days, they perform library assistant duties at the library. Some now work evenings and weekends to give patrons as much access to the library as possible.

Employment

Library assistants and bookmobile drivers held about 114,000 jobs in 1992. Almost one-half of these workers were employed by public libraries; most of the remainder worked in school libraries. Opportunities for flexible schedules are abundant; over one-half of these workers were on part-time schedules.

Job Outlook

Opportunities should be good for persons interested in jobs as library assistants or bookmobile drivers through the year 2005. Turnover of these workers is quite high, reflecting the relatively weak attachment to the occupation. This work is attractive to retirees and others who want a part-time schedule, and there is a lot of movement into and out of the occupation. Tens of thousands of openings



Bar code readers enable library assistants to log in returned books more efficiently.

will become available each year to replace workers who transfer to another occupation or leave the labor force. Some positions become available as library assistants move within the organization. Library assistants can be promoted to supervisory positions in public service or technical service areas. Advancement opportunities are greater in larger libraries and may be more limited in smaller libraries.

Employment is expected to grow about as fast as the average for all occupations through the year 2005. The vast majority of library assistants and bookmobile drivers work in public or school libraries of some kind. Moderate employment growth is expected due to the expected growth in funding for local governments and academic institutions of all types. Because so many are employed by public institutions, library assistants and bookmobile drivers are not directly affected by the ups and downs of the business cycle. Some of these workers may lose their jobs, however, if there are cuts in government budgets.

(See introductory part of this section for information on training requirements and earnings.)

Order Clerks

(D.O.T. 209.387-018; 245.367-026; 249.367-042, -054; 295.367-018; and 659.462-010)

Nature of the Work

Order clerks receive and process incoming orders for such items as spare parts for machines, consumer appliances, gas and electric power connections, film rentals, and articles of clothing. They are sometimes called order-entry clerks, customer service representatives, order processors, or order takers.

Orders for materials, merchandise, or services can come from within an organization or from outside it. In large companies with many work sites, such as automobile manufacturers, parts and equipment need to be ordered from the company's warehouses. "Inside order clerks" receive orders from other workers employed by the same company or from salespersons in the field. Many other order clerks, however, receive orders from other companies or from individuals. Order clerks in wholesale businesses, for instance, receive orders for merchandise from retail establishments that the retailer in turn sells to the public. A growing number of order clerks work in catalog sales, receiving orders from individual customers either by phone or by mail. Order clerks dealing primarily with the public sometimes are referred to as "outside order clerks."

Today, most order clerks record orders on video display terminals (VDT's) that are part of a larger computer system. Many clerks sit at these terminals and receive orders directly by telephone, entering the required information as the customer places the order. Depending on the size of the purchase, the order clerk may be required to get approval for the credit card purchase. Some orders are received through the computer system; they are sent directly from the customer's terminal to the order clerk's terminal.

The computer provides the order clerk with ready access to information such as order stock numbers, prices and inventory. Orders frequently depend on which products are in stock and which products are most appropriate for the customer's needs. Some order clerks, especially those in industrial settings, must be able to give price estimates for entire jobs, not just single parts. Others must be able to take special orders or give expected arrival dates.

Although the large majority of orders are now placed by phone, some order clerks also receive orders by mail and by fax machine. These clerks review the hand-written or typed orders for completeness and clarity. They extract the checks or money orders, sort them, and send them on for processing. The clerk may complete missing information or contact the customer for the information. Similarly, if customers need additional information, such as prices, shipping dates, or anticipated delays, the order clerk contacts them. These orders may be processed by order clerks in small establishments or, in large organizations, entered into the computer system by data-entry clerks.



One-half of all order clerks work in wholesale or retail establishments.

After an order has been verified and entered, the customer's final cost is calculated. The clerk then routes the order to the proper department—such as the warehouse—that actually sends out or delivers the item in question.

In organizations with sophisticated computer systems, inventory records are adjusted automatically as sales are made. In less automated organizations, order clerks adjust inventory records. For example, after processing an order for bolts, the clerk verifies that the bolts were sent and subtracts the order from the inventory control form. Clerks also notify other departments when inventories are low or when orders would deplete supplies. They also compile data from completed orders to produce reports that managers use to assess the organization's sales and plan its future activities.

Some order clerks need to establish priorities in filling orders. For example, an order clerk in a blood bank may receive a request from a hospital for a certain type of blood. The clerk must first find out if the request is routine or an emergency, and then take appropriate action.

Employment

Order clerks held about 300,000 jobs in 1992. Most worked for wholesale and retail establishments and manufacturing firms.

Job Outlook

Job openings for order clerks should be plentiful through the year 2005 due to sizeable replacement needs. Tens of thousands of jobs will become available each year to replace order clerks who transfer to other occupations or who leave the labor force. Many of these openings will be for seasonal work, especially in catalogue companies that cater to holiday gift buyers.

Little change in the employment of order clerks is expected through the year 2005 as office automation continues to increase the productivity of these workers. As the economy grows, more orders for goods and services will be placed. How this growing business activity relates to employment of order clerks depends in large measure on the setting. Demand for outside order clerks who deal mainly with the public should remain fairly strong. The greater use of toll-free numbers that makes "home shopping" easier and more convenient will stimulate demand for these workers. However, productivity gains from the increasing use of automation will absorb some of the growth in the volume of orders.

Demand for inside order clerks will be much weaker, however. The spread of electronic data interchange (EDI), a system that enables computers to communicate directly with each other, allows orders between establishments to be placed with little human intervention. Although currently limited to large organizations, it is expected that orders between computers of different companies and from home computers will increase.

Other automation should also depress the demand for order clerks. Sophisticated inventory control and automatic billing systems allow companies to track their inventory and accounts with much less help from order clerks. A growing number of companies are using facsimile machines (faxes) to receive orders. Increasingly, data entry keyers enter the information from faxed or mailed orders. Some companies, especially retail businesses, use voice recognition equipment to receive orders. Currently, this technology consists of an answering machine. However, experts believe that by the year 2005, "interactive" voice recognition equipment will carry on a conversation with the customer and take the order. To the extent that such equipment is perfected and marketed widely, it is expected to further reduce the demand for order clerks.

(See introductory part of this section for information on training requirements and earnings.)

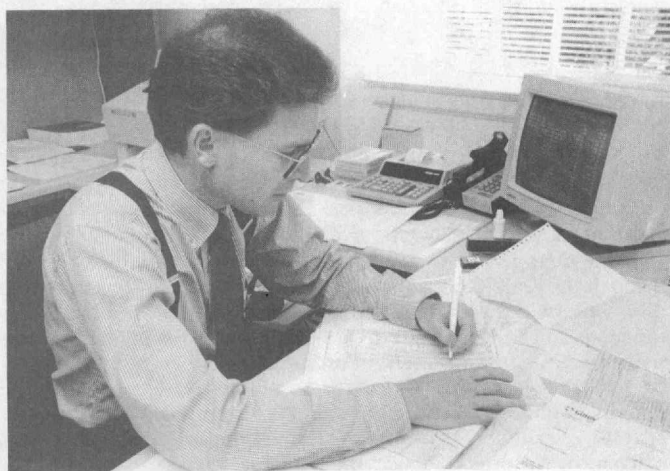
Payroll and Timekeeping Clerks

(D.O.T. 215.362-018, .367-022, .382-014, and .482-010)

Nature of the Work

Payroll and timekeeping clerks perform a vital function—ensuring that employees' paychecks are correct and paid on time. Employees frequently call on them to adjust monetary errors or incorrect amounts of vacation time. Their daily duties include researching these records as well as performing other clerical tasks.

Timekeeping clerks distribute and collect timecards each pay period. These workers review employee workcharts, timesheets, and timecards to ensure that information, such as the number of hours worked and sick and vacation days, is properly recorded, and that the records have the signatures of authorizing officials. For example, they may recalculate total hours on a timesheet that has many complex entries. In companies that bill for the time spent by staff, such as law or accounting firms, timekeeping clerks make sure the hours recorded are charged to the correct job so the client can be properly billed. They review computer reports listing timecards that cannot be processed because of errors and contact the employee or the employee's supervisor to resolve the problem. Timekeeping clerks also keep informed of new payroll policies and inform managers and other employees of procedural changes.



Payroll clerks resolve problems with employees' pay.

In the payroll department, payroll clerks, also called payroll technicians, screen the timecards for calculating, coding, or other errors. Then they compute pay by subtracting allotments like retirement, Federal and State taxes, insurance, or savings from gross earnings. Increasingly, computers perform these calculations and alert payroll clerks to problems or errors in the data. For small organizations or for new employees whose records are not yet entered into a computer system, clerks may perform all the necessary calculations. In some small offices, payroll is processed by clerks or other employees in the accounting department.

Payroll clerks also maintain paper backup files for research and reference. They record changes in employee addresses; close out files when workers retire, resign, or transfer; and advise employees on income tax withholding and other mandatory deductions. They also issue and record adjustments to pay because of previous errors or retroactive increases. Payroll clerks must follow changes in tax and deduction laws, so they have to be aware of the most current revisions. They prepare and mail earnings and tax withholding statements in early January for employees' use in preparing their income tax returns.

In small offices, payroll and timekeeping duties are more likely to be included in the duties of a general office clerk or secretary. Larger organizations employ specialized payroll and timekeeping clerks to perform these functions.

Employment

Payroll and timekeeping clerks held about 165,000 jobs in 1992. About 1 of every 3 worked in business, health, education, and social services. One in 4 worked in manufacturing, and approximately 2 of every 10 were in wholesale and retail trade or in government. Approximately 1 in 8 payroll and timekeeping clerks works part time.

Job Outlook

Numerous job openings for persons seeking work as payroll and timekeeping clerks should be available through the year 2005. Many thousands of jobs will open up each year as these workers transfer to other occupations—many payroll clerks use this position as a steppingstone to higher level accounting jobs—or leave the labor force.

Employment of payroll and timekeeping clerks is expected to decline through the year 2005 as continuing automation of the payroll and timekeeping function makes these workers more productive. The technology having the greatest effect on employment is the expanding use of automated timeclocks to calculate employees' hours and balances. These automated timeclocks allow large organizations to centralize their timekeeping duties in one location. At individual sites, employee hours are increasingly tracked by computer and verified by managers. Then, this information is compiled and sent to a central office to be processed by payroll clerks. This eliminates the need to have payroll clerks at every site. Also, timekeeping duties are more commonly being distributed to secretaries and general office clerks or being contracted out to organizations that specialize in these services.

(See introductory part of this section for information on training requirements and earnings.)

Personnel Clerks

(D.O.T. 205.362-010, -014, -022, .367-062, .567-010; 209.362-026; 241.267-010; and 249.367-090)

Nature of the Work

When new employees begin work at most large organizations, they are greeted and briefed by personnel clerks. These clerks may explain the company's various employee benefits and pay rates, review rules and regulations, administer an oath of office, and see that the new employees report to their duty station.

Personnel clerks maintain the personnel records of the organization's employees. These records include information such as name, address, job title, earnings, benefits such as health and life insurance, and tax withholding. On a daily basis, they record and answer

questions about employees' absences and supervisory reports on job performance. When an employee receives a promotion or switches health insurance plans, the personnel clerk updates the appropriate form. A personnel clerk may also prepare a report for a manager elsewhere in the organization. Compiling a list of employees eligible for an award is one example.

Some personnel clerks in smaller organizations perform reception as well as other clerical duties. They answer telephone or letter inquiries from the public, send out announcements of job openings or job examinations, and issue application forms. When credit bureaus and finance companies request confirmation of a person's employment, the personnel clerk provides authorized information from the employee's personnel records. Payroll departments and insurance companies may also be contacted to verify changes to records.

Some personnel clerks are also involved in hiring. As part of their job, they may screen job applicants to obtain information such as education and work experience; administer aptitude, personality, and interest tests; explain the organization's employment policies and refer qualified applicants to the employing official; and request references from present or past employers. Personnel clerks inform job applicants, by telephone or letter, of their acceptance or rejection for employment.

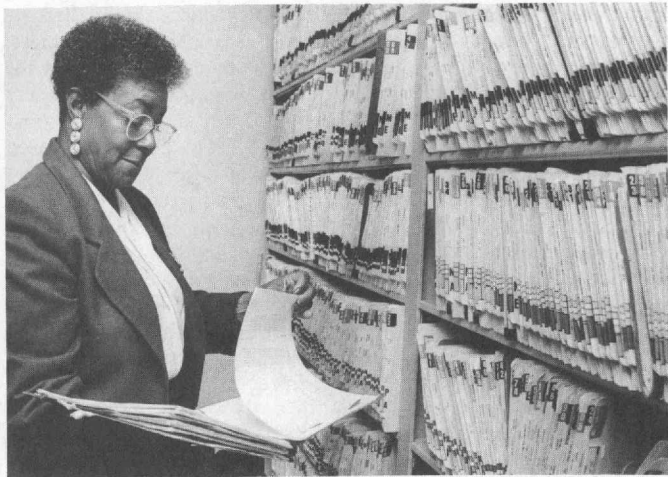
Other personnel clerks are known as assignment clerks. Their role is to notify a firm's existing employees of position vacancies and to identify and assign qualified applicants. They keep track of vacancies throughout the organization and complete and distribute vacancy advertisement forms. The clerks review applications in response to the advertisement and verify the information using personnel records. After the selection is made, they notify all the applicants of their acceptance or rejection.

In some job settings, personnel clerks have more specific job titles. In temporary help agencies, for example, referral clerks handle calls from businesses or other organizations requesting temporary workers. After recording information regarding the job requirements, they locate registered workers who meet the requirements and are available for the scheduled work shift. The clerks then inform the selected workers of the available job. Some referral clerks specialize in referring specific types of workers, such as nurses.

Identification clerks are responsible for security matters at defense installations. They compile and record personal data about vendors, contractors, and civilian and military personnel and their dependents. Their job duties include interviewing applicants, corresponding with law enforcement authorities, and preparing badges, passes, and identification cards.

Employment

Personnel clerks held about 128,000 jobs in 1992. Although these workers are found in most industries, 1 of every 4 works for a government agency. Colleges and universities, hospitals, department stores, and banks also employ large numbers of personnel clerks.



Personnel clerks ensure that employees' records are complete and current.

Job Outlook

Replacement needs will account for most job openings for personnel clerks through the year 2005. Jobs will open up as clerks advance within the personnel department, take a job unrelated to personnel administration, or leave the labor force.

Employment of personnel clerks is expected to grow about as fast as the average for all occupations through the year 2005. Contributing to the demand for personnel clerks is the increased workload associated with a growing work force and changing personnel practices brought about by changes in tax and immigration laws, the growing popularity of flexible benefit plans, and the growth of legislatively mandated benefits.

Despite increased workloads, automation of personnel departments will increase the productivity of personnel clerks and moderate their employment growth. The growing use of computers and electronic data interchange (EDI) in personnel or human resource departments means that a lot of data entry work done by personnel clerks can be eliminated as employees themselves enter the data and send it to the personnel office. This is most feasible in large organizations with multiple personnel offices. In addition, as professionals in personnel offices increasingly use computers and other automated office equipment, there could be less work for personnel clerks.

(See introductory part of this section for information on training requirements and earnings.)

Secretaries

(D.O.T. 201 and 219.362-074)

Nature of the Work

Most organizations employ secretaries to perform and coordinate office activities and to ensure that information gets disseminated in a timely fashion to staff and clients. Managers, professionals, and other support staff rely on them to keep administrative operations under control. Their specific duties depend upon their level of responsibility and the type of firm in which they are employed.

Secretaries are responsible for a variety of administrative and clerical duties that are necessary to run and maintain organizations efficiently. They schedule appointments, give information to callers, organize and maintain files, fill out forms, and take dictation. They may also type letters, make travel arrangements, or contact clients. In addition, secretaries operate office equipment like facsimile machines, photocopiers, and telephones with voice mail capabilities.

In today's automated offices, secretaries increasingly use personal computers to run spreadsheet, word processing, data base management, desktop publishing, and graphics programs—tasks previously handled by managers and professionals. Because they are often relieved from dictation and typing, they can support several members of the professional staff. Secretaries sometimes work in clusters of three or four so that they can work more flexibly and share their expertise.

Executive secretaries or administrative assistants perform fewer clerical tasks than lower level secretaries. As well as receiving visitors, arranging conference calls, and answering letters, they may handle more complex responsibilities like conducting research, preparing statistical reports, training employees, and supervising other clerical staff.

In addition to general administrative duties, some secretaries do highly specialized work that requires a knowledge of technical terminology and procedures. Further specialization in various types of law is common among legal secretaries. They prepare correspondence and legal papers such as summonses, complaints, motions, and subpoenas under the supervision of an attorney. They also may review legal journals and assist in other ways with legal research. Medical secretaries transcribe dictation, prepare correspondence, and assist physicians or medical scientists with reports, speeches, articles, and conference proceedings. They record simple medical histories, arrange for patients to be hospitalized, or order supplies. They may also need to know insurance rules, billing practices, and

be familiar with hospital or laboratory procedures. Other technical secretaries assist engineers or scientists. They may prepare correspondence, maintain the technical library, and gather and edit materials for scientific papers.

Working Conditions

Secretaries usually work in offices with other professionals or in schools, hospitals, or doctors' offices. Their jobs often involve sitting for long periods. If they spend a lot of time typing, particularly at a video display terminal, they may encounter problems of eyestrain, stress and repetitive motion problems such as carpal tunnel syndrome.

Secretaries generally work a standard 40-hour week. In some cities, especially in the Northeast, the scheduled workweek is 37 hours or less.

Office work lends itself to alternative or flexible working arrangements, like telecommuting, and 1 secretary in 6 works part time. In addition, a significant number of secretaries work as temporaries. A few participate in job-sharing arrangements in which two people divide responsibility for a single job.

Employment

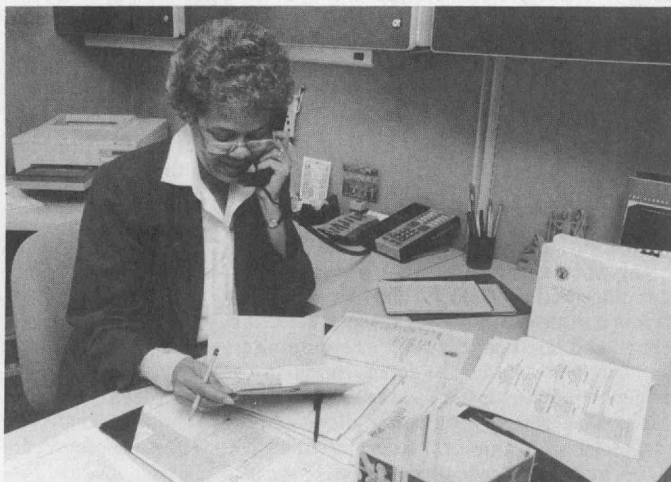
Secretaries held 3,324,000 jobs in 1992, making this one of the largest occupations in the U.S. economy. The following tabulation shows the distribution of employment by secretarial specialty.

Legal secretaries	280,000
Medical secretaries	234,000
All other secretaries	2,810,000

Secretaries are employed in organizations of every description. About one-half of all secretaries are employed in firms providing services, ranging from education and health to legal and business services. Others work for firms that engage in manufacturing, construction, wholesale and retail trade, transportation, and communications. Banks, insurance companies, investment firms, and real estate firms are important employers, as are Federal, State, and local government agencies.

Training, Other Qualifications, and Advancement

High school graduates may qualify for secretarial positions provided they have basic office skills. Today, however, knowledge of word processing, spreadsheet, and database management programs is increasingly important, and most employers require it. Secretaries must be proficient in keyboarding and good at spelling, punctuation, grammar, and oral communication. Shorthand is necessary for some positions.



Secretaries are increasingly taking on new responsibilities.

Employers also look for communication and interpersonal skills, since secretaries must be tactful in their dealings with many different people. Discretion, judgment, organizational ability, and initiative are important for higher level secretarial positions.

As office automation continues to evolve, retraining and continuing education will remain an integral part of many jobs. Continuing changes in the office environment, for instance, have increased the demand for secretaries who are adaptable and versatile. Secretaries may have to attend classes to learn to operate new office equipment such as word processing equipment, information storage systems, personal computers, or new updated software packages.

The skills needed for a secretarial job can be acquired in various ways. Formal training, especially for computer skills, may lead to higher paying jobs. Secretarial training ranges from high school vocational education programs that teach office practices, shorthand, and keyboarding skills to 1- to 2-year programs in secretarial science offered by business schools, vocational-technical institutes, and community colleges. Many temporary service agencies provide training in computer and keyboarding skills. These skills are most often acquired, however, through instruction offered at the workplace by other employees or by equipment and software vendors. In addition, specialized training programs are available for students planning to become medical or legal secretaries or office automation specialists.

Testing and certification for entry-level office skills is available through the Office Proficiency Assessment and Certification (OPAC) program offered by Professional Secretaries International (PSI). As secretaries gain experience, they can earn the designation Certified Professional Secretary (CPS) by passing a series of examinations given by the Institute for Certifying Secretaries, a department of PSI. This designation is recognized by a growing number of employers as the mark of excellence for senior-level office professionals. Similarly, those without experience who want to be certified as a legal support professional may be certified as an Accredited Legal Secretary (ALS) by the Certifying Board of the National Association of Legal Secretaries. They also administer an examination to certify a legal secretary with 3 years' experience as a Professional Legal Secretary (PLS).

Advancement for secretaries generally comes about by promotion to a secretarial position with more responsibilities. Qualified secretaries who broaden their knowledge of the company's operations may be promoted to other positions such as senior or executive secretary, clerical supervisor, or office manager.

Secretaries with word processing experience can advance to jobs as word processing trainers, supervisors, or managers within their own firms or in a secretarial or word processing service bureau. They also can get jobs with manufacturers of word processing or computer equipment in positions such as instructor or sales representative.

Job Outlook

Employment of secretaries is expected to grow more slowly than the average for all occupations through the year 2005. Nevertheless, employment opportunities should be quite plentiful, especially for well-qualified and experienced secretaries, who, according to many employers, are in short supply. The very large size of the occupation, coupled with moderate turnover, generates several hundred thousand secretarial positions each year as experienced workers transfer to other occupations or leave the labor force.

Demand for secretaries will rise as the economy grows and as more workers are employed in offices. The trend toward secretaries assuming more responsibilities traditionally reserved for managers and professionals should also stimulate demand.

Increased productivity resulting from new office technologies, however, will offset this demand somewhat. In firms that have invested in electronic typewriters, word processors, or personal computers, secretaries can turn out significantly more work than when they used electric or manual typewriters. New office technologies such as electronic mail, facsimile machines, and voice message systems are used in a growing number of organizations. These and other sophisticated computer software capabilities are expected to be used more widely in the years ahead.

Widespread use of automated equipment is already changing the workflow in many offices. Administrative duties are being reassigned and the functions of entire departments are being restructured. Large firms are experimenting with different methods of staffing their administrative support operations. In some cases, such traditional secretarial duties as typing or keyboarding, filing, copying, and accounting are being assigned to workers in other units or departments. In some law offices and physicians' offices, for example, paralegals and medical assistants are taking over some tasks formerly done by secretaries. Professionals and managers increasingly do their own word processing rather than submit the work to secretaries and other support staff. In addition, there is a trend in many offices for groups of professionals and managers to "share" secretaries, allowing secretaries to assume new responsibilities. The traditional arrangement of one secretary per manager is becoming less prevalent; instead, secretaries increasingly support systems or units.

Developments in office technology are certain to continue, and they will bring about further changes in the secretary's work environment. However, many secretarial job duties are of a personal, interactive nature and hence, not easily automated. Duties such as planning conferences, receiving clients, and transmitting staff instructions require tact and communication skills. Because automated equipment cannot substitute for these personal skills, secretaries will continue to play a key role in the office activities of most organizations.

Earnings

The average annual for all secretaries was \$26,700 in 1992. Salaries vary a great deal, however, reflecting differences in skill, experience, and level of responsibility, ranging from \$20,000 to \$36,000.

The starting salary for inexperienced secretaries in the Federal Government was \$16,400 a year in 1993. All secretaries employed by the Federal Government in 1993 averaged about \$24,000.

Related Occupations

A number of other workers type, record information, and process paperwork. Among these are bookkeepers, receptionists, stenographers, personnel clerks, typists and word processors, legal assistants, medical assistants, and medical record technicians. A growing number of secretaries share in managerial and human resource responsibilities. Occupations using these skills include clerical supervisor, systems manager, office manager, and human resource officer.

Sources of Additional Information

For career information, contact:

Professional Secretaries International, 10502 NW Ambassador Dr., Kansas City, MO 64195-0404. (Phone: 1-816-891-6600.)

Persons interested in careers as legal secretaries can request information from:

National Association of Legal Secretaries (International), 2250 East 73rd St., Suite 550, Tulsa, OK 74136.

State employment offices can provide information about job openings for secretaries.

Stenographers and Court Reporters

(D.O.T. 202.362, .382-010, and 203.582-058)

Nature of the Work

Written accounts of spoken words are necessary for correspondence, records, or legal proof. These verbatim reports of speeches, conversations, legal proceedings, meetings, or other events are taken by stenographers and court reporters.

Stenographers and *stenotype operators* take dictation and then transcribe their notes on a typewriter or word processor. They may take dictation using either shorthand or a stenotype machine, which prints shorthand symbols. General stenographers, including most beginners, take routine dictation and do other office tasks such as

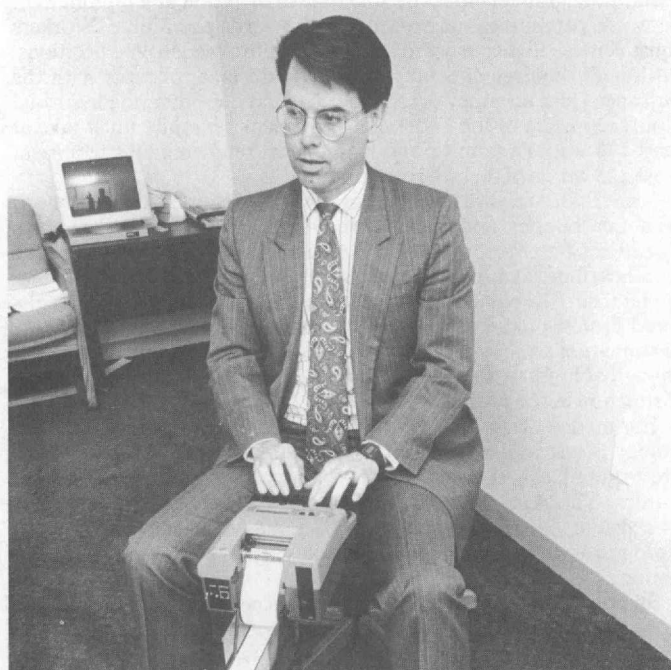
typing, filing, answering telephones, and operating office machines. Experienced and highly skilled stenographers take more difficult dictation. For example, they may sit in on staff meetings and provide word-for-word records or summary reports of the proceedings to the participants. They may also supervise other stenographers, typists, and clerical workers. Some experienced stenographers take dictation in foreign languages; others work as public stenographers serving traveling business people and others.

Technical stenographers must know the medical, legal, and engineering or scientific terminology used in a particular profession. For example, *medical transcriptionists* listen to doctors' audio recordings and use typewriters or word processors to transcribe what they hear into the proper printed format. These reports are not always word-for-word; they may be edited for grammar or abbreviated words may be expanded. Transcriptionists must be medical language specialists and familiar with patient assessment, therapeutic procedures, diagnoses, and prognoses. In addition to transcribing letters, reports, and the like, they may have other clerical duties. (Medical secretaries and assistants may transcribe as part of their jobs. These occupations are covered elsewhere in the *Handbook*.)

Court reporters record all statements made in an official proceeding. They take down all statements at speeds of approximately 200 words per minute and present their record as the official transcript. Because there is only one person creating an official transcript, accuracy is vitally important.

Many reporters do freelance work recording out-of-court depositions for attorneys, proceedings of meetings and conventions, and other private activities. Still others record the proceedings in the U.S. Congress, in State and local governing bodies, and in government agencies at all levels.

Some reporters still dictate notes on magnetic tapes that a typist can transcribe later. Others transcribe their own notes, or give them to note readers, persons skilled in reading back shorthand notes. Most commonly, reporters use stenotype machines that print shorthand symbols on paper and record them on computer disks. The disks are then loaded into a computer that translates and displays the symbols in English. This is called "Computer-Aided Transcription." Stenotype machines that link directly to the computer are used for real-time captioning. That is, as the reporter types the symbols, they are instantly transcribed by the computer. This is used for closed captioning for the deaf or hearing-impaired on television, in



Court reporters often use stenotype machines to record statements made in official proceedings.

courts, or in meetings. Court reporters who specialize in captioning television news stories may be called *stenocaptioners*.

Working Conditions

Stenographers usually work in clean, well-lighted offices. Court reporters sometimes record depositions in the offices of attorneys, but they more often work in nonoffice settings, such as courts, legislatures, and conventions. Medical transcriptionists may also work in hospitals, doctors' offices, or outpatient service facilities. Although the work is not physically demanding, sitting in the same position for long periods can be tiring. In addition, pressure to be accurate and fast can be stressful.

Stenographers and court reporters can work a standard 40-hour week. Many court reporters, however, are self-employed and freelance their services, which may result in irregular hours. Others work part time or as temporaries.

Employment

Stenographers and court reporters held 115,000 jobs in 1992. Nearly 15 percent were self-employed freelance court reporters. Of those who worked for a wage or salary, about one-third worked for State and local governments, a reflection of the large number of court reporters working in courts, legislatures, and various agencies. An additional one-fourth worked for hospitals as medical transcriptionists. Other stenographers and court reporters worked for colleges and universities, secretarial and court reporting services, temporary help supply services, and law firms.

Training, Other Qualifications, and Advancement

Stenographic skills are taught in high schools, vocational schools, and proprietary business schools. There are 350 postsecondary schools and colleges that offer 2- or 4-year training programs in court reporting. About 100 programs have been approved by the National Court Reporters Association, and all of them teach computer-aided transcription.

For stenographer jobs, employers prefer to hire high school graduates and seldom have a preference among the many different shorthand methods. For court reporter jobs, however, employers prefer stenotype, not only because reporters can write faster using stenotype, but also because they can feed stenotype notes to a computer for high-speed transcription. Speed and accuracy are the most important factors in hiring. To qualify for jobs in the Federal Government, stenographers must be able to take dictation at a minimum of 80 words per minute and type at least 40 words per minute. Workers must achieve higher rates to advance to more responsible positions. Although requirements vary in private firms, applicants with the best speed and accuracy usually receive first consideration in hiring. Court reporters in the Federal Government generally must take at least 175 words a minute, and many court reporting jobs require at least 225 words of dictation per minute.

Some States require Court reporters who stenotype depositions to be notary publics, and 18 States require each court reporter to be a Certified Court Reporter (CCR). A certification test is administered by a board of examiners in each State that has CCR laws. The National Court Reporters Association confers the designation Registered Professional Reporter (RPR) upon those who pass a two-part examination and participate in continuing education programs. Although voluntary, the RPR designation is recognized as a mark of distinction in the profession.

For medical transcriptionist jobs, understanding medical terminology is essential. Good English grammar and punctuation skills are required, as well as familiarity with word processing using computers. The American Association for Medical Transcription awards the voluntary designation Certified Medical Transcriptionist to those who earn passing scores on written and practical examinations.

Stenographers can advance to more responsible secretarial positions, especially if they develop their interpersonal skills such as the ability to communicate well. Stenographers who get the necessary education can become court reporters. Court reporters, on the other hand, have little advancement opportunities, although some reporters choose to specialize in captioning television programs.

Job Outlook

Employment of stenographers and court reporters is expected to decline. Decreases in stenographer jobs should more than offset growth in transcriptionist and court reporters jobs. Despite the decline, job openings will arise each year due to the need to replace workers who leave the occupation.

The widespread use of dictation machines has greatly reduced the need for office stenographers. The traditional "steno pool" is practically a thing of the past. Audio recording equipment and the use of personal computers by managers and other professionals should continue to greatly decrease the demand for these workers.

Although the need for health care documentation is expected to increase as health services continue to grow, growth of medical transcriptionist jobs should be slowed as more doctors and nurses directly enter their notes into computers. Meanwhile, skilled court reporters jobs should remain nearly unchanged as video recordings are increasingly recognized as legal records of proceedings. Also, budget constraints should limit the ability of Federal, State, and local courts to expand, even in the face of rising numbers of criminal court cases and civil lawsuits. Demand should grow, however, for court reporters willing to take depositions for court reporting service bureaus or as independent freelancers.

Another factor stimulating demand is the growing number of conventions, conferences, seminars, and similar meetings whose proceedings are recorded. Although many of these events are being videotaped, a written transcript must still be created for legal purposes or if the proceedings are to be published. The trend to provide instantaneous written captions for the deaf and hearing impaired also should strengthen demand for stenocaptioners.

Competition for entry level jobs as a court reporter is increasing as more workers are attracted to the occupation. Opportunities should be best for those who earn certification by the National Court Reporters Association.

Earnings

Stenographers and court reporters had median earnings of \$410 a week in 1992. The middle 50 percent earned between \$370 and \$540 a week. The lowest paid 10 percent earned less than \$310, while the highest paid 10 percent earned over \$960 a week. Court reporters generally earn higher salaries than stenographic office workers. Regardless of specialty, earnings depend on speed, education, experience, and geographic location (earnings are generally higher in large cities than in rural areas).

Related Occupations

A number of other workers type, record information, and process paperwork. Among these are bookkeepers, receptionists, secretaries, personnel clerks, administrative assistants, and medical assistants.

Sources of Additional Information

For information about shorthand reporting, contact:

☞ National Court Reporters Association, 8224 Old Courthouse Rd., Vienna, VA 22182.

Information on medical transcription is available from:

☞ American Association for Medical Transcription, P.O. Box 576187, Modesto, CA 95357. Phone: toll free, 1-800-982-2182.

State employment offices can provide information about job openings for stenographers.

Telephone Operators

(D.O.T. 235.222-010, .462-010, .562-014, .662-014, -018, -022, and -026; and 239.367-026)

Nature of the Work

Although most telephone numbers are dialed directly, some still require the assistance of a telephone operator. Telephone company central office operators help customers with person-to-person or

collect calls or with special billing requests, such as charging a call to a third number or giving customers credit or a refund for a wrong number or a bad connection. Operators also are called upon to handle emergency calls and assist children or people with physical limitations.

Technological innovations have also changed the responsibilities of central office operators. Electronic switching systems have eliminated the need for manual switching, and new systems automatically record information about the length and cost of calls into a computer that processes the billing statements. It is also now possible in most places to call other countries, person-to-person, or collect without the help of an operator. The task of responding to "intercept" calls (vacant, changed, or disconnected numbers) also is automated, and a computerized recording explains the reason for the interception and gives the new number. The monitoring and computing of charges on calls from pay telephones also have an automated function formerly performed by operators.

Directory assistance operators answer inquiries by accessing computerized alphabetical and geographical directories. They generally no longer read numbers; this is done by a computerized recording.

Many organizations like hotels and medical centers employ operators to run private branch exchange (PBX) switchboards. These switchboard, or PBX operators, connect interoffice or house calls, answer and relay outside calls, connect outgoing calls, supply information to callers, and record charges. Many also act as receptionists or information clerks, relaying messages or announcing visitors. (Receptionists are described elsewhere in this section of the *Handbook*.)

Operators also work in other settings. Telephone-answering-service operators manage switchboards to provide answering service for clients. Communication-center operators handle airport authority communication systems. For example, they use the public address system to page passengers or visitors. They also monitor electronic equipment alarms.

Private-branch-exchange service advisors, sometimes called customer instructors or telephone usage counselors, train switchboard operators. Service advisors monitor conversations between operators and customers to observe the operator's behavior, technical accuracy, and adherence to company policies.

Working Conditions

The hours of PBX or switchboard operators generally are the same as those of other clerical workers in the firm. In some organizations, they work 40 hours a week during regular business hours. Operators in hotels, hospitals, and other places where telephone service is needed on a 24-hour basis, work shifts, even on holidays and weekends. Telephone company operators generally work 32 1/2 to 37 1/2 hours a week. They also may work day, evening, or night shifts, which include weekends and holidays.

Some operators work split shifts—that is, they are on duty during the peak calling periods in the late morning and early evening and have time off in between. Telephone companies normally assign shifts by seniority, allowing the most experienced workers to choose when they will work. These operators, like all telephone company employees, may be subject to 24-hour call. In general, though, they work overtime only during emergencies.

Many telephone company operators work at video display terminals in pleasant, well-lighted, air-conditioned surroundings. But if the work site is not well designed, these operators may experience eyestrain and back discomfort.

The job of a telephone operator requires little physical exertion; during peak calling periods, however, the pace at the switchboard may be hectic. Telephone companies continually strive to increase operator efficiency, and this can create a tense work environment. An operator's work generally is quite repetitive and, in telephone companies, is closely supervised. Computerized pacing and monitoring by supervisors, combined with the rapid pace, may cause stress. Operators must sit for long periods and usually need supervisory approval to leave their work stations.

Employment

Telephone operators held about 314,000 jobs in 1992. About 3 out of 4 worked as PBX operators in hotels, hospitals, department stores, or other organizations. The remainder worked in telephone companies. Roughly one-fifth of all operators worked part time, although relatively few of those employed by telephone companies were part-timers.

Training, Other Qualifications, and Advancement

Telephone operators should be pleasant, courteous, and patient. A clear, pleasing voice and good hearing are important. In addition to being a good listener, prospective operators should have good reading, spelling, and arithmetic skills. Good eye-hand coordination and manual dexterity are useful, as is an ability to work well under pressure. Many employers require operators to pass a physical examination. Some employers require a high school diploma. High school courses in speech, office practices, and business math provide a helpful background. Fluency in a foreign language is also looked upon favorably.

New operators are taught how to use the equipment and keep records of calls. In larger companies, this may include familiarization with computer terminals and recordkeeping programs. In telephone companies, classroom instruction lasts up to 3 weeks and is followed by on-the-job training. Classroom instruction covers time zones and geography so that central office operators understand rates and know where major cities are located. Tapes are used to familiarize trainees with the dial tone, busy signal, and other telephone sounds and to improve diction and courtesy by giving them an opportunity to hear their own voices. Close supervision continues after training is completed.

PBX operators who handle routine calls usually have a somewhat shorter training period than telephone company operators. These workers usually are trained informally by experienced personnel, although, in some organizations, it may be done by a telephone company instructor.

After 1 or 2 years of experience, telephone company operators may be promoted to service assistant, aiding the supervisor by monitoring telephone conversations. Direct promotion to supervisor may also be possible in some companies. Some operators advance to



Many telephone operators are also receptionists.

other clerical jobs or to telephone craft jobs such as installer or repairer. Large firms may promote PBX operators to more responsible clerical positions; however, many small businesses have limited advancement opportunities.

Job Outlook

Employment of operators in telephone companies is expected to decline sharply through the year 2005 as automation continues to increase these workers' productivity. Many telephone companies do not plan to replace operators who leave and many are laying off operators. The number of switchboard or PBX operators will also decline, but not as fast. As older switchboards that require operators to make connections are replaced by ones that route calls automatically, fewer operators will be needed. In addition, voice message systems are expected to proliferate as computers become smaller, cheaper, and more powerful. These systems record, store, play, and forward telephone messages—work currently performed by PBX operators. In those cases when callers need to speak to an operator, they may be helped by receptionists who have been trained to make telephone connections. However many firms may still keep switchboard operators for the "personal touch," which would somewhat limit the effects of new technology.

Voice recognition technology, which gives computers the capacity to understand speech and to talk back, is now being introduced. This equipment will replace some directory assistance operators and central office operators.

Earnings

Telephone operators who worked year round full time earned a median weekly salary of \$385 in 1992. The middle 50 percent earned between \$284 and \$490. The bottom 10 percent earned less than \$232; the top 10 percent earned more than \$561 a week.

According to a survey of workplaces in 160 metropolitan areas, switchboard operators had median weekly earnings of \$353 in 1992. The middle half earned between \$300 and \$400 a week.

Telephone company operators generally earn more than switchboard operators. Operators employed by AT&T and the Bell Operating Companies and represented by the Communications Workers of America earned between \$550 and \$567 a week in 1992.

Most telephone company operators are members of the Communications Workers of America or the International Brotherhood of Electrical Workers. For these operators, union contracts govern wage rates, wage increases, and the time required to advance from one step to the next (it normally takes 4 years to rise from the lowest paying, nonsupervisory operator position to the highest). Contracts also call for extra pay for work beyond the normal 6 1/2 to 7 1/2 hours a day or 5 days a week, for Sunday and holiday work, and for a pay differential for nightwork and split shifts. Many contracts provide for a 1-week vacation with 6 months of service; 2 weeks for 1 to 6 years; 3 weeks for 7 to 14 years; 4 weeks for 15 to 24 years; and 5 weeks for 25 years and over. Holidays range from 9 to 11 days a year.

Related Occupations

Other workers who provide information to the general public include customer service representatives, dispatchers, hotel clerks, information clerks, police aides, receptionists, reservation agents, and travel clerks.

Sources of Additional Information

For more details about employment opportunities, contact a telephone company. For general information on the telephone industry and career opportunities in it, request copies of *Phonefacts* from:

☞ United States Telephone Association, Small Companies Division, 900 19th St. NW., Suite 800, Washington, DC 20006.

For general information on the telephone industry contact:

☞ Communications Workers of America, Research Department, 501 3rd St. NW., Washington, DC 20001.

Typists, Word Processors, and Data Entry Keyers

(D.O.T. 203.362-010 and -022, .382-018 and -026, .582-014, -038, -042, -046, -054, -062, -066, and -078; 208.382-010; and 209.382-010)

Nature of the Work

Many organizations process large amounts of information and data in the course of their daily operations. Typists, word processors, and data entry keyers often are responsible for ensuring that this work is handled smoothly and efficiently.

Typists and word processors usually set up and enter reports, letters, mailing labels, and other text material. Typists make neat, typed copies of materials written by other clerical, professional, or managerial workers. They may begin as entry level workers by typing headings on form letters, addressing envelopes, or preparing standard forms on electric or electronic typewriters. As they gain experience, they may begin to do routine typing, such as insurance policies, or to type from handwritten drafts. Often, they perform other office tasks as well: answering telephones, filing, and operating copiers, calculators, and other office machines.

More experienced typists do work that requires a higher degree of accuracy and independent judgment. Senior typists work from rough drafts that are difficult to read or that contain technical material. They may plan and type complicated statistical tables, combine and rearrange materials from different sources, or prepare master copies to be reproduced on photocopiers.

Job titles of typists vary by duties performed and by work setting. For example, clerk typists combine typing with filing, sorting mail, answering telephones, and other general office work. Note-readers transcribe stenotyped notes of court proceedings into standard formats.

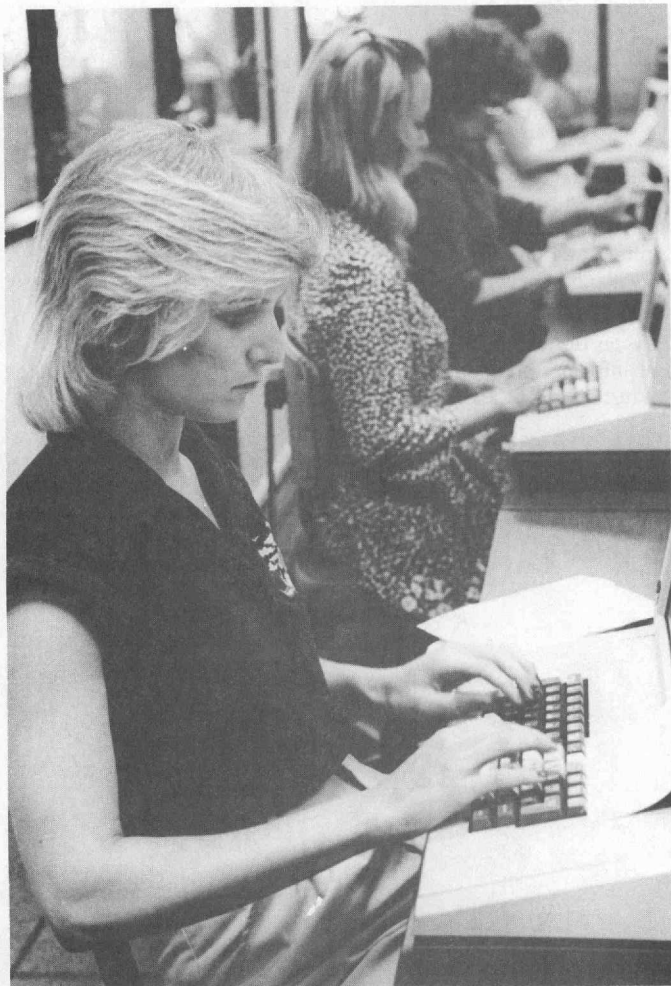
In many organizations, word processing centers handle the transcription and typing for several departments. Regardless of how work is organized, most typing is now done more quickly on automated word processing equipment. Word processors use this equipment to record, edit, store, and revise letters, memos, reports, statistical tables, forms, and other printed materials. Word processing or automated equipment—usually a personal computer or part of a larger computer system—normally includes a keyboard, a video display terminal, and a printer, and may have "add-on" capabilities such as optical character recognition readers. This way, information and instructions can be received through the machine.

Data entry keyers usually fill forms that appear on a computer screen or enter lists of items or numbers. They also may manipulate existing data, edit current information, or proofread new entries to a database. They may enter customers' personal information, orders for supplies, or update membership lists. Usually this information is used internally by the company and may be reformatted before, say, use by a professional for an accounting report or by the billing department to send to a customer.

Keyers can enter data on a variety of typewriter-like equipment. Many keyers use a machine that converts the information they type to magnetic impulses on tapes or disks for entry into a computer system. Others prepare materials for printing or publication by using data entry composing machines. Some keyers operate on-line terminals or personal computers. Data entry keyers are increasingly exposed to non-keyboard forms of data entry and are working more with scanners and electronically transmitted files. In some offices, keyers also operate computer peripheral equipment such as printers and tape readers, act as tape librarians, and perform other clerical duties.

Working Conditions

Typists, word processors, and data entry keyers usually work in clean offices. They sit for long periods and sometimes must contend with high noise levels caused by various office machines such as printers. These workers generally work a standard 40-hour week. In some cities, especially in the Northeast, the scheduled workweek is 37 hours or less.



Job prospects will be best for workers who are familiar with a variety of software packages.

Some word processors and data entry keyers work in large, centralized word processing centers that are relatively isolated from other operational areas. Others, however, are located in departments that are physically dispersed throughout the organization, so they often work more closely with other employees.

Recent research on occupational health and safety has been concerned with the hazards to physical and mental health posed by new types of office equipment. Studies have found that word processors and data entry keyers who work full time on video terminals experience musculoskeletal strain, eye problems, and stress. Repetitive strain injuries, such as carpal tunnel syndrome, may also affect typists, word processors, and data entry keyers.

Employment

Typists, word processors, and data entry keyers held about 1,238,000 jobs in 1992 and were employed in every sector of the economy. Office work lends itself to alternative or flexible working arrangements; many of these workers hold temporary jobs and 1 in 5 works part time. Some of these part-time workers are self-employed freelancers; others take short-term jobs through temporary help agencies. Some workers "telecommute." That is, they work from their homes via personal computers linked by telephone lines to those in the main office. This enables them to type material at home and almost instantly produce printed copy in an office miles away. These home-based jobs often do not include the full range of benefits that full-time office workers enjoy, and they lack the advantages of social interaction on the job.

Four of every 10 typists, word processors, and data entry keyers held jobs in educational institutions, health care facilities, law offices, and firms that provide business services. Among the latter are temporary help agencies and word processing service bureaus. One in four worked in government agencies at various levels.

Training, Other Qualifications, and Advancement

Employers generally hire high school graduates who can meet their requirements for keyboarding speed. Keyboarding skills can be learned in different ways—in high schools, community colleges, business schools, home study schools, or on one's own, using self-teaching aids such as books, records, and personal computers. Spelling, punctuation, and grammar skills are also important, as is familiarity with standard office equipment and procedures.

Increasingly, employers also expect applicants to have word processing or data entry training or experience. Many community colleges, business schools, and temporary help agencies teach students to use word processing, spreadsheet, and database management computer software packages.

For many people, a job as a typist, word processor, or data entry keyer is their first job after graduating from high school or after a period of full-time family responsibilities. This work frequently serves as a steppingstone to higher paying, more responsible jobs. Large companies and government agencies generally have training programs to help clerical employees upgrade their skills and advance to positions with more responsibilities. It is common for typists, word processors, and data entry keyers to transfer to other clerical jobs, such as secretary, statistical clerk, or court reporter, or to be promoted to a supervisory job in a word processing or data entry center.

Job Outlook

Employment of typists, word processors, and data entry keyers is expected to decline through the year 2005 despite rapid growth in the production of information and volume of business transactions. This is an indication of the significant productivity gains expected to continue among office workers due to increasing office automation. Technological advances and restructuring of work processes should enable fewer typists, word processors, and data entry keyers to handle a bigger workload. A couple of hundred thousand openings will still occur each year, however, as workers transfer to other occupations or leave the labor force.

Technological advances are driving these productivity gains. Most important among these is the proliferation of personal computers, which has enabled other workers to perform work formerly done by typists, word processors, and data entry keyers. Most professionals and managers now use desktop personal computers or work stations to enter data and do their own word processing.

Many data entry and word processing departments have decentralized in much the same way that technology has in today's offices. Some larger organizations still have central word processing and data entry departments, but most have moved to a more dispersed, leaner staff which is more flexible. Another indication of this trend is the recent increase in part-time work and the growth of the temporary services industry, which accounts for a significant portion of the growth in these occupations.

Further automation of tasks is expected and should continue to reduce the demand for typists, word processors, and data entry keyers. For example, bar code scanners are now used in many retail establishments and their use should continue to spread to smaller establishments as prices fall. More sophisticated optical character recognition readers, which scan documents and enter their text and data into a computer, are being used in more and more workplaces. This technology is being improved and should be widely used in the 1990's. Researchers are also developing voice recognition technologies that enable people to enter text and data by simply speaking to a computer. It is not clear when this technology is likely to affect employment patterns, but its effects could be significant.

In addition to these technologies designed to make traditional data entry more productive, others are being implemented which aim to make it unnecessary. Data is being captured at the point of origin and entered into the system without human intervention. An example of this in the banking industry is automatic teller machines.

As telecommunications technology improves, many organizations will network computers allowing more data to be electronically transmitted, thus avoiding the reentry of data.

Job prospects will be brightest for those typists, word processors, and data entry keyers with the best technical skills. Applicants for such positions, however, will increasingly need to be flexible and willing to continuously develop their skills. In particular, the more computer software packages these workers know or expertise they have in combining word processing with graphics or spreadsheets, the better their job opportunities will be.

Earnings

Typists and data entry keyers in metropolitan areas earned average salaries of \$20,000 in 1992, while word processors averaged \$23,000. Typists generally receive higher salaries if they have word processing experience.

In the Federal Government in 1993, clerk-typists and data entry keyers without work experience each started at about \$13,400 a year. In some metropolitan areas, higher salaries are paid because of shortages of qualified personnel. The average annual salary for all clerk-typists in the Federal Government in 1993 was about \$18,800.

Related Occupations

Typists, word processors, and data entry keyers must transcribe information quickly. Other workers who must deliver information in a timely manner are stenographers, court reporters, dispatchers, and telephone operators.

Sources of Additional Information

For information about job opportunities in data entry, contact the nearest office of the State employment service.