Office and Administrative Support Occupations

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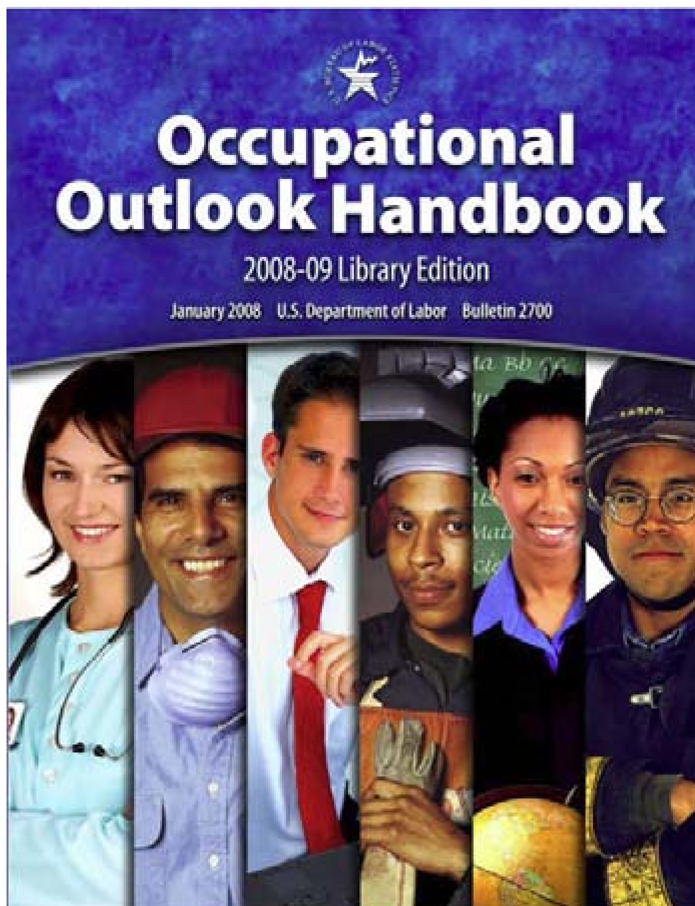
U.S. Department of Labor
Bureau of Labor Statistics



Occupations Included in this Reprint

Bill and account collectors
Billing and posting clerks and machine operators
Bookkeeping, accounting, and auditing clerks
Brokerage clerks
Cargo and freight agents
Communications equipment operators
Computer operators
Couriers and messengers
Credit authorizers, checkers, and clerks
Customer service representatives
Data entry and information processing workers
Desktop publishers
Dispatchers
File clerks
Gaming cage workers
Hotel, motel, and resort desk clerks
Human resources assistants, except payroll and timekeeping
Interviewers
Library assistants, clerical
Meter readers, utilities
Office and administrative support worker supervisors and managers
Office clerks, general
Order clerks
Payroll and timekeeping clerks
Postal Service workers
Procurement clerks
Production, planning, and expediting clerks
Receptionists and information clerks
Reservation and transportation ticket agents and travel clerks
Secretaries and administrative assistants
Shipping, receiving, and traffic clerks
Stock clerks and order fillers
Tellers
Weighers, measurers, checkers, and samplers, recordkeeping

Bill and Account Collectors

(O*NET 43-3011.00)

Significant Points

- Almost 1 in 4 collectors works for a collection agency; others work in banks, retail stores, government, physicians' offices, hospitals, and other institutions that lend money and extend credit.
- Most jobs in this occupation require only a high school diploma, though many employers prefer workers with some postsecondary training.
- Much faster than average employment growth is expected as companies focus more efforts on collecting unpaid debts.

Nature of the Work

Bill and account collectors, often called simply *collectors,* keep track of accounts that are overdue and attempt to collect payment on them. Some are employed by third-party collection agencies, while others—known as "in-house collectors"—work directly for the original creditors, such as department stores, hospitals, or banks.

The duties of bill and account collectors are similar across the many different organizations in which they work. First, collectors are called upon to locate and notify customers of delinquent accounts, usually over the telephone, but 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 the new address. The attempt to find the new address is called "skip tracing." New computer systems assist in tracing by automatically tracking when customers change their address or contact information on any of their open accounts.

Once collectors find the debtor, they inform him or her 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 on how to pay off the debts, such as taking out a bill consolidation loan. However, the collector's prime objective is always to ensure that the customer pays the debt in question.

If a customer agrees to pay, collectors record this commitment and check later to verify that the payment was made. Collectors may have authority to grant an extension of time if customers ask for one. If a customer fails to pay, collectors prepare a statement indicating the customer's action for the credit department of the establishment. In more extreme cases, collectors may initiate repossession proceedings, disconnect the customer's service, or hand the account over to an attorney for legal action. Most collectors handle other administrative functions for the accounts assigned to them, including recording changes of address and purging the records of the deceased.

Collectors use computers and a variety of automated systems to keep track of overdue accounts. In sophisticated predictive

Bill and account collectors call customers to ask for payment on late or delinquent bills.

dialer systems, a computer dials the telephone automatically, and the collector speaks only when a connection has been made. Such systems eliminate time spent calling busy or nonanswering numbers. Many collectors use regular telephones, but others wear headsets like those used by telephone operators.

Work environment. In-house bill and account collectors typically are employed in an office environment, and those who work for third-party collection agencies may work in a call-center environment. Workers spend most of their time on the phone tracking down and contacting people with debts. The work can be stressful as some customers are confrontational when pressed about their debts. Still, some appreciate assistance in resolving their outstanding debt. Collectors may also feel pressured to meet targets for debt recovered in a certain period.

Bill and account collectors often have to work evenings and weekends, when it is easier to reach people. Many collectors work part time or on flexible work schedules, though the majority work 40 hours per week.

Training, Other Qualifications, and Advancement

Most employers require collectors to have at a least a high school diploma and prefer some customer service experience. Employers usually provide on-the-job training to new employees.

Education and training. Most bill and account collectors are required to have at least a high school diploma. However, employers prefer workers who have completed some college or who have experience in other occupations that involve contact with the public.

Once hired, workers usually receive on-the-job training. Under the guidance of a supervisor or some other senior worker, new employees learn company procedures. Some formal classroom training also may be necessary, such as training in specific computer software. Additional training topics usually include telephone techniques and negotiation skills. Workers are also instructed in the laws governing the collection of debt as mandated by the Fair Debt Collection Practices Act, which applies to all third party and some in-house collectors.

Other qualifications. Workers should have good communication and people skills because they need to speak to customers daily, some of whom may be in stressful financial situations. In

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16 Number	Change, 2006-16 Percent
Bill and account collectors	43-3011	434,000	534,000	99,000	23

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

addition, collectors should be computer literate, and experience with advanced telecommunications equipment is also useful.

Advancement. Collectors most often advance by taking on more complex cases. Some might become team leaders or supervisors. Workers who acquire additional skills, experience, and training improve their advancement opportunities.

Employment

Bill and account collectors held about 434,000 jobs in 2006. About 24 percent of collectors work in the business support services industries, which includes collection agencies. Many others work in banks, retail stores, government, physician's offices, hospitals, and other institutions that lend money and extend credit.

Job Outlook

Employment of bill and account collectors is expected to grow much faster than the average for all occupations through 2016. Job prospects are expected to be favorable because growth in the occupation and the many people who leave the occupation are expected to create plentiful openings.

Employment change. Over the 2006-16 decade, employment of bill and account collectors is expected to grow by 23 percent, which is much faster than the average for all occupations. Cash flow is becoming increasingly important to companies, which are now placing greater emphasis on collecting unpaid debts sooner. Thus, the workload for collectors is expected to continue to increase as they seek to collect not only debts that are relatively old, but also ones that are more recent. In addition, as more companies in a wide range of industries get involved in lending money and issuing credit cards, they will need to hire collectors because debt levels will likely continue to rise.

Hospitals and physicians' offices are two of the fastest growing industries requiring collectors. With insurance reimbursements not keeping up with cost increases, the health care industry is seeking to recover more money from patients. Government agencies also are making more use of collectors to collect on everything from parking tickets to child-support payments and past-due taxes. In addition, the Internal Revenue Service (IRS) has begun outsourcing the collection of overdue Federal taxes to third-party collection agencies, adding to the need for workers in this occupation.

Despite the increasing demand for bill collectors, employment growth may be somewhat constrained by the increased use of third-party debt collectors, who are generally more efficient than in-house collectors. Also, some firms are beginning to use offshore collection agencies, whose lower cost structures allow them to collect debts that are too small for domestic collection agencies.

Job prospects. Job openings will not be created from employment growth alone. A significant number of openings will result from the many people who leave the occupation and must be replaced. As a result, job opportunities should be favorable.

Contrary to the pattern in most occupations, employment of bill and account collectors tends to rise during recessions, reflecting the difficulty that many people have in meeting their financial obligations. However, collectors usually have more success at getting people to repay their debts when the economy is good.

Earnings

Median hourly earnings of bill and account collectors were $13.97 in May 2006. The middle 50 percent earned between $11.49 and $17.14. The lowest 10 percent earned less than $9.61, and the highest 10 percent earned more than $21.12. Many bill and account collectors earn commissions based on the amount of debt they recover.

Related Occupations

Bill and account collectors review and collect information on accounts. Other occupations with similar responsibilities include credit authorizers, checkers, and clerks; loan officers; and interviewers.

Sources of Additional Information

Career information on bill and account collectors is available from:

➤ ACA International, The Association of Credit and Collection Professionals, P.O. Box 390106, Minneapolis, MN 55439. Internet: **http://www.acainternational.org**

Billing and Posting Clerks and Machine Operators

(O*NET 43-3021.00, 43-3021.01, 43-3021.02, 43-3021.03)

Significant Points

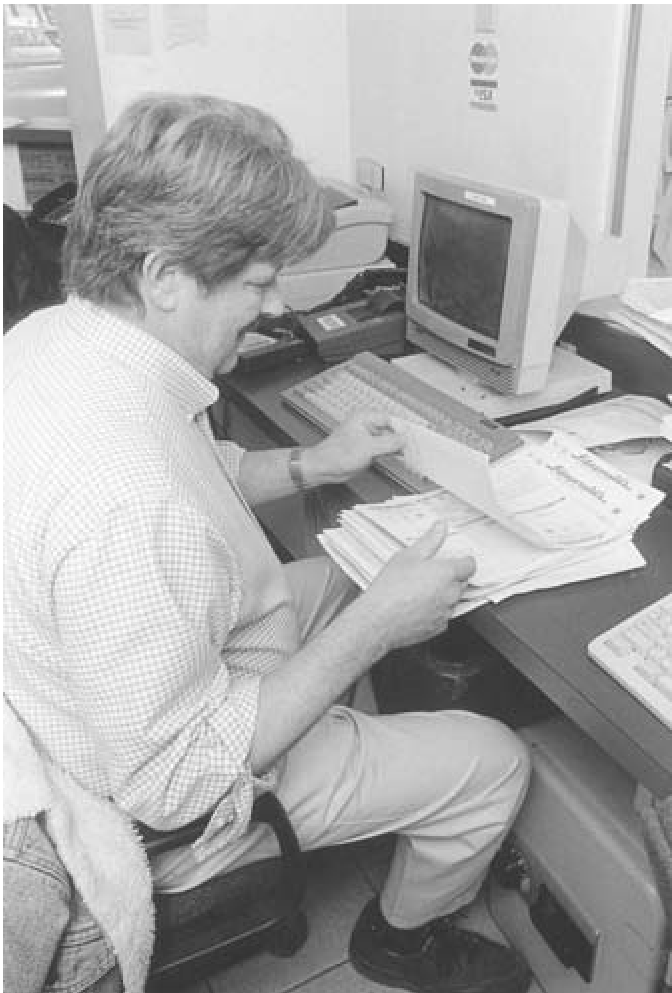
- About 35 percent of these workers are employed in the health care industry.
- Most jobs in this occupation require only a high school diploma; however, many employers prefer to hire workers who have completed some college courses or a degree.
- Slower than average employment growth is expected as increased automation of billing services reduces the need for billing clerks.

Nature of the Work

Billing and posting clerks and machine operators, commonly called billing clerks, calculate charges, develop bills, and prepare them to be mailed to customers. By reviewing purchasing records and making or verifying calculations, they ensure that even the most complicated bills are accurate.

Billing clerks review hospital records, purchase orders, sales tickets, or charge slips to calculate the total amount due from a customer. They must take into account any discounts, special rates, or credit terms. A billing clerk for a trucking company, for example, often needs to consult a rate book to determine shipping costs. A hospital's billing clerk may need to contact an insurance company to determine what items will be reimbursed. In accounting, law, consulting, and similar firms, billing clerks calculate client fees based on the time required to perform the service being purchased. They keep track of the accumulated hours spent on a job, the fees to charge, the type of job performed for a customer, and the percentage of work completed.

After billing clerks review all necessary information, they compute the charges, using calculators or computers. They then prepare itemized statements, bills, or invoices used for billing and recordkeeping purposes. In some organizations, the clerk might prepare a bill containing the amount due and the date and type of service; in others, the clerk might produce a more detailed invoice with codes for all goods and services provided. They might also list the items sold, the terms of credit, the date of shipment or of service, and a salesperson's or doctor's identification.



Billing and posting clerks prepare statements to be sent to customers.

Computers and specialized billing software allow many clerks to calculate charges and prepare bills in one step. Computer packages prompt clerks to enter data from handwritten forms and to manipulate the necessary information on quantities, labor, and rates to be charged. Billing clerks verify the entry of information and check for errors before the computer prints the bill. After the bills are printed, billing clerks review them again for accuracy. Computer software also allows bills to be sent electronically if both the biller and the customer prefer not to use paper copies; this, coupled with the prevalence of electronic payment options, allows a completely paperless billing process. In offices that are not automated, *billing machine operators* produce the bill on a billing machine to send to the customer.

In addition to producing invoices, billing clerks may be asked to handle follow-up questions from customers and resolve any discrepancies or errors. Finally, all changes must be entered in the accounting records.

Work environment. Billing clerks typically are employed in an office environment, although a growing number—particularly medical billers—work at home. Most billing clerks work 40 hours per week during regular business hours, though about 16 percent work part time. Billing clerks use computers on a daily basis, so workers may have to sit for extended periods and also may experience eye and muscle strain, backaches, headaches, and repetitive motion injuries.

Training, Other Qualifications, and Advancement

Billing clerks generally need at least a high school diploma, but many employers prefer workers who have completed some college courses.

Education and training. Most billing clerks need at least a high school diploma. However, many employers prefer to hire workers who have completed some college courses or a degree. Workers with an associate or bachelor's degree are likely to start at higher salaries and advance more easily than those without degrees. Employers also seek workers who are comfortable using computers, especially billing software programs.

Billing clerks usually receive on-the-job training from their supervisor or some other senior worker. Some formal classroom training also may be necessary, such as training in the specific computer software used by the company. A number of community and career colleges offer certificate programs in medical billing. Courses typically cover basic biology, anatomy, and physiology in addition to training on coding and computer billing software.

Other qualifications. Workers must be careful, orderly, and detail oriented. They must be good at working with numbers to avoid making errors and to recognize errors made by others. Workers also should be discreet and trustworthy because they frequently come in contact with confidential material. Medical billers in particular need to understand and follow the regulations of the Health Insurance Portability and Accountability Act

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Billing and posting clerks and machine operators	43-3021	542,000	566,000	24,000	4

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook.*

(HIPAA), which were enacted to maintain the confidentiality of patient medical records.

Advancement. Billing clerks usually advance by taking on more duties for higher pay or by transferring to a closely related occupation. Some become supervisors because most companies fill supervisory and managerial positions by promoting individuals from within the organization. Workers who acquire additional skills, experience, and training improve their advancement opportunities. With appropriate experience and education, some billing clerks may become accountants, human resource specialists, or buyers.

Employment

In 2006, billing and posting clerks and machine operators held about 542,000 jobs. Although all industries employ billing clerks, the health care industry employs the most, with over a third of all billing clerks. The wholesale and retail trade industries also employ a large number. Third-party billing companies—companies that provide billing services for other companies—are employing a growing number. Industries that provide this service are the accounting, tax preparation, bookkeeping, and payroll services industry and administrative and support services industry. These industries currently employ around 11 percent of this occupation, although a portion of these clerks do billing for their employers rather than for an outside client. Another 2 percent—mostly medical billers—were self-employed.

Job Outlook

Employment of billing and posting clerks and machine operators is expected to grow more slowly than the average for all occupations through 2016. Despite slow growth, job prospects should be good as workers leave the occupation creating many job openings.

Employment change. Employment of billing and posting clerks and machine operators is expected to grow by about 4 percent from 2006 to 2016, which is slower than the average for all occupations. Automated and electronic billing processes have greatly simplified billing and allow companies to send bills out faster without hiring additional workers. In addition, as the billing process becomes simplified, other workers, particularly accounting and bookkeeping clerks, are taking on the billing function. More billing clerks will be needed in medical billing, however, because medical bills are complicated and health care services are growing.

Employment growth for billing clerks will occur in most health care related industries, but growth will be limited as more hospitals and physicians' offices use contract billing companies. Contract billing companies generally have much more sophisticated technology and software, enabling each clerk to produce more bills, limiting the need for more clerks. In all industries, including health care, the billing function is becoming increasingly automated and invoices and statements are automatically generated upon delivery of the service or shipment of goods. Bills also are increasingly delivered electronically over the Internet, eliminating the production and mailing of paper bills.

Job prospects. Although growth will be limited, many job openings will occur as workers transfer to other occupations or leave the labor force. A relatively large number of workers leave jobs in this occupation and must be replaced, as is common among entry-level occupations that usually require only a high school diploma.

Earnings

Median hourly earnings of billing and posting clerks and machine operators were $28,850 in May 2006. The middle 50 percent earned between $24,080 and $34,970. The lowest 10 percent earned less than $20,140, and the highest 10 percent earned more than $41,750.

Related Occupations

Billing clerks create and process financial records; other occupations with similar responsibilities include payroll and timekeeping clerks; bookkeeping, auditing, and accounting clerks; tellers; and order clerks.

Sources of Additional Information

Information on employment opportunities for billing clerks is available from local offices of the State employment service.

Bookkeeping, Accounting, and Auditing Clerks

(O*NET 43-3031.00)

Significant Points

- Bookkeeping, accounting, and auditing clerks held more than 2.1 million jobs in 2006 and are employed in every industry.
- Employment is projected to grow as fast as the average due to a growing economy.
- The large size of this occupation ensures plentiful job openings, including many opportunities for temporary and part-time work.

Nature of the Work

Bookkeeping, accounting, and auditing clerks are financial recordkeepers. They update and maintain accounting records, including those which calculate expenditures, receipts, accounts

payable and receivable, and profit and loss. These workers have a wide range of skills from full-charge bookkeepers who can maintain an entire company's books to accounting clerks who handle specific tasks. All of these clerks make numerous computations each day and increasingly must be comfortable using computers to calculate and record data.

In small businesses, *bookkeepers* and *bookkeeping clerks* often have responsibility for some or all of the accounts, known as the general ledger. They record all transactions and post debits (costs) and credits (income). They also produce financial statements and prepare reports and summaries for supervisors and managers. Bookkeepers also prepare bank deposits by compiling data from cashiers, verifying and balancing receipts, and sending cash, checks, or other forms of payment to the bank. They also may handle payroll, make purchases, prepare invoices, and keep track of overdue accounts.

In large-companies' accounting departments, *accounting clerks* have more specialized tasks. Their titles, such as accounts payable clerk or accounts receivable clerk, often reflect the type of accounting they do. In addition, their responsibilities vary by level of experience. Entry-level accounting clerks post details of transactions, total accounts, and compute interest charges. They also may monitor loans and accounts to ensure that payments are up to date. More advanced accounting clerks may total, balance, and reconcile billing vouchers; ensure the completeness and accuracy of data on accounts; and code documents according to company procedures.

Accounting clerks post transactions in journals and on computer files and update the files when needed. Senior clerks also review computer printouts against regularly maintained journals and make necessary corrections. They may review invoices and statements to ensure that all the information appearing on them is accurate and complete, and they may reconcile computer reports with operating reports.

Auditing clerks verify records of transactions posted by other workers. They check figures, postings, and documents to ensure that they are correct, mathematically accurate, and properly coded. They also correct or note errors for accountants or other workers to fix.

As organizations continue to computerize their financial records, many bookkeeping, accounting, and auditing clerks use specialized accounting software, spreadsheets, and databases. Most clerks now enter information from receipts or bills into computers, and the information is then stored either electronically or as computer printouts, or both. The widespread use of computers also has enabled bookkeeping, accounting, and auditing clerks to take on additional responsibilities, such as payroll, procurement, and billing. Many of these functions require these clerks to write letters and make phone calls to customers or clients.

Work environment. Bookkeeping, accounting, and auditing clerks work in an office environment. They may experience eye and muscle strain, backaches, headaches, and repetitive motion injuries from using computers on a daily basis. Clerks may have to sit for extended periods while reviewing detailed data.

Many bookkeeping, accounting, and auditing clerks work regular business hours and a standard 40-hour week, although some may work occasional evenings and weekends. About 24 percent of these clerks worked part time in 2006.

Bookkeeping, accounting, and auditing clerks keep records of business and financial documents.

Bookkeeping, accounting, and auditing clerks may work longer hours to meet deadlines at the end of the fiscal year, during tax time, or when monthly or yearly accounting audits are performed. Additionally, those who work in hotels, restaurants, and stores may put in overtime during peak holiday and vacation seasons.

Training, Other Qualifications, and Advancement

Employers usually prefer bookkeeping, accounting, and auditing clerks to have at least a high school diploma and some accounting coursework or relevant work experience. Clerks should also have good communication skills, be detail-oriented, and trustworthy.

Education and training. Most bookkeeping, accounting, and auditing clerks are required to have a high school degree at a minimum. However, having some college is increasingly important and an associate degree in business or accounting is required for some positions. Although a bachelor's degree is rarely required, graduates may accept bookkeeping, accounting, and auditing clerk positions to get into a particular company or to enter the accounting or finance field with the hope of eventually being promoted.

Once hired, bookkeeping, accounting, and auditing clerks usually receive on-the-job training. Under the guidance of a supervisor or another more experienced employee, new clerks learn company procedures. Some formal classroom training also may be necessary, such as training in specialized computer software.

Other qualifications. Experience in a related job and working in an office environment also is recommended. Employers prefer workers who can use computers; knowledge of word processing and spreadsheet software is especially valuable.

Bookkeeping, accounting, and auditing clerks must be careful, orderly, and detail-oriented in order to avoid making errors and to recognize errors made by others. These workers also should be discreet and trustworthy because they frequently come in contact with confidential material. They should also have good communication skills because they increasingly

work with customers. In addition, all bookkeeping, accounting, and auditing clerks should have a strong aptitude for numbers.

Certification and advancement. Bookkeeping, accounting, and auditing clerks, particularly those who handle all the recordkeeping for a company, may find it beneficial to become certified. The Certified Bookkeeper (CB) designation, awarded by the American Institute of Professional Bookkeepers, demonstrates that individuals have the skills and knowledge needed to carry out all bookkeeping functions, including overseeing payroll and balancing accounts according to accepted accounting procedures. For certification, candidates must have at least 2 years of bookkeeping experience, pass a four-part examination, and adhere to a code of ethics. Several colleges and universities offer a preparatory course for certification; some offer courses online.

Bookkeeping, accounting, and auditing clerks usually advance by taking on more duties for higher pay or by transferring to a closely related occupation. Most companies fill office and administrative support supervisory and managerial positions by promoting individuals from within their organizations, so clerks who acquire additional skills, experience, and training improve their advancement opportunities. With appropriate experience and education, some bookkeeping, accounting, and auditing clerks may become accountants or auditors.

Employment

Bookkeeping, accounting, and auditing clerks held more than 2.1 million jobs in 2006. They work in all industries and at all levels of government. Local government and the accounting, tax preparation, bookkeeping, and payroll services industry are among the individual industries employing the largest numbers of these clerks.

Job Outlook

Job growth is projected to be average through 2016, and job prospects should be good as a large number of bookkeeping, accounting, and auditing clerks are expected to retire or transfer to other occupations.

Employment change. Employment of bookkeeping, accounting, and auditing clerks is projected to grow by 12 percent during the 2006-16 decade, which is as fast as the average for all occupations. Due its size, this occupation will have among the largest numbers of new jobs arise, about 264,000 over the projections decade.

A growing economy will result in more financial transactions and other activities that require recordkeeping by these workers. Additionally, the Sarbanes-Oxley Act of 2002 calls for more accuracy and transparency in the reporting of financial data for public companies, which will increase the demand for these workers. Moreover, companies will continue to outsource their bookkeeping and accounting departments to independent accounting, tax preparation, bookkeeping, and payroll services firms. However, at the same time, the increasing use of tax preparation software in place of the services of tax professionals will hinder growth somewhat.

Clerks who can carry out a wider range of bookkeeping and accounting activities will be in greater demand than specialized clerks. Demand for full-charge bookkeepers is expected to increase, for example, because they do much of the work of accountants and perform a wider variety of financial transactions, from payroll to billing. Technological advances will continue to change the way these workers perform their daily tasks, such as using computer software programs to maintain records, but will not decrease the demand for these workers, especially in smaller establishments.

Job prospects. Some job openings are expected to result from job growth, but even more openings will stem from the need to replace existing workers who leave. Each year, numerous jobs will become available as clerks transfer to other occupations or leave the labor force. The large size of this occupation ensures plentiful job openings, including many opportunities for temporary and part-time work. Certified Bookkeepers (CBs) and those with several years of accounting or bookkeeping experience will have the best job prospects.

Earnings

In May 2006, the median wage and salary earnings of bookkeeping, accounting, and auditing clerks were $30,560. The middle half of the occupation earned between $24,540 and $37,780. The top 10 percent of bookkeeping, accounting, and auditing clerks more than $46,020, and the bottom 10 percent earned less than $19,760.

Benefits offered by employers may vary by the type and size of establishment, but health insurance and paid leave are common.

Related Occupations

Bookkeeping, accounting, and auditing clerks work with financial records. Other workers who perform similar duties include accountants and auditors; bill and account collectors; billing and posting clerks and machine operators; brokerage clerks; credit authorizers, checkers, and clerks; payroll and timekeeping clerks; procurement clerks; and tellers.

Sources of Additional Information

For information on the Certified Bookkeeper designation, contact:

➤ American Institute of Professional Bookkeepers, 6001 Montrose Rd., Suite 500, Rockville, MD 20852. Internet: **http://www.aipb.org**

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Bookkeeping, accounting, and auditing clerks	43-3031	2,114,000	2,377,000	264,000	12

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook.*

Brokerage Clerks

(O*NET 43-4011.00)

Significant Points

- More than 9 out of 10 brokerage clerks worked for securities and commodities firms, banks, and other establishments in the financial services industry.
- High school graduates qualify for many of these positions, but many workers now hold associate or bachelor's degrees.
- Good prospects are expected for qualified jobseekers as employment grows and as existing brokerage clerks advance to other occupations.

Nature of the Work

For a typical investor, buying and selling stock is a simple process. Often, it is as easy as calling a broker on the phone or entering the trade into a computer. Behind the scenes, however, buying and selling stock is more complicated, involving trade execution and a fair amount of paperwork. While brokers do some of this work themselves, much of it is delegated to brokerage clerks.

Brokerage clerks perform a number of different tasks with a wide range of responsibilities. Most involve computing and recording data pertaining to securities transactions. Brokerage clerks may also contact customers, take orders, and inform clients of changes to their accounts. Brokerage clerks work in the operations departments of securities firms, on trading floors, and in branch offices. Technology has had a major impact on these positions over the last several years. A significant and growing number of brokerage clerks use custom-designed software programs to process transactions more quickly. Only a few customized accounts are still handled manually.

A broker's assistant, also called a sales assistant, is the most common type of brokerage clerk. These clerks typically assist a small number of brokers, for whom they take client calls, write up order tickets, process the paperwork for opening and closing accounts, record a client's purchases and sales, and inform clients of changes to their accounts. All broker's assistants must be knowledgeable about investment products so that they can communicate clearly with clients. Those who are licensed by the Financial Industry Regulatory Authority (FINRA) can make recommendations to clients at the instruction of the broker. (Securities, commodities, and financial services sales agents are discussed elsewhere in the *Handbook.*)

Brokerage clerks in the operations areas of securities firms perform many duties to help the sale and purchase of stocks, bonds, commodities, and other kinds of investments. They also produce the necessary records of all transactions that occur in their area of the business. Purchase-and-sale clerks match orders to buy with orders to sell. They balance and verify trades of stock by comparing the records of the selling firm with those of the buying firm. Dividend clerks ensure timely payments of stock or cash dividends to clients of a particular brokerage firm.

Brokerage clerks assist with tasks such as executing trades and filing paperwork.

Transfer clerks execute customer requests for changes to security registration and examine stock certificates to make sure that they adhere to banking regulations. Receive-and-deliver clerks handle the receipt and delivery of securities among firms and institutions. Margin clerks record and monitor activity in customers' accounts to ensure that clients make payments and stay within legal boundaries concerning their purchases of stock.

Work environment. Brokerage clerks work in offices and on trading floors, areas that are clean and well lit but which may be noisy at times. The workload is generally manageable but can become very heavy when the market fluctuates rapidly. Brokerage clerks generally work a standard 40-hour week, but they may work overtime during particularly busy periods.

Training, Other Qualifications, and Advancement

Most brokerage clerks learn their jobs through a few months of on-the-job training and experience. Once they have worked in the firm for a few years, many clerks advance to sales representative or broker positions.

Education and training. Some brokerage clerk positions require only a high school diploma, but graduates from 2- and 4-year college degree programs are increasingly preferred. Positions dealing with the public, such as broker's or sales assistant, and those dealing with more complicated financial records are especially likely to require a college degree.

Most new employees are trained on the job, working under the close supervision of more experienced employees. Some firms offer formal training that may include courses in telephone etiquette, computer use, and customer service skills. They may also offer training programs to help clerks study for the broker licensing exams.

Licensure. Licenses are not strictly required for most brokerage clerk positions, but a Series 7 brokerage license can make a clerk more valuable to the broker. This license gives the holder the ability to act as a registered representative of the firm. A registered representative has the right to answer more of a client's questions and to pass along securities recommendations from the broker. In order to receive this license, a clerk must pass the General Securities Registered Representative Examination (Series 7 exam), administered by FINRA, and be an employee of a registered firm for at least 4 months.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Brokerage clerks	43-4011	73,000	88,000	15,000	20

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

Other qualifications. Brokerage clerk jobs require good organizational and communication skills, as well as attention to detail. Computer skills are extremely important, as most of the work is done by computer. An aptitude for working with numbers is also very helpful, as is a basic knowledge of accounting.

Advancement. Clerks may be promoted to sales representative positions or other professional positions within the securities industry. Employment as a brokerage clerk may also be a stepping-stone into a position as a broker.

Employment

Brokerage clerks held about 73,000 jobs in 2006. More than 9 out of 10 worked for securities and commodities, banking, and other financial industries.

Job Outlook

The job outlook for prospective brokerage clerks is good. As the securities industry grows, the number of clerks will increase. Opportunities will be abundant relative to other securities industry occupations, due to advancement of other clerks and job growth.

Employment change. Employment of brokerage clerks is expected to grow by 20 percent during the 2006-16 decade, which is faster than the average for all occupations. With more people investing in securities, brokerage clerks will be required to process larger volumes of transactions. Moreover, regulatory changes have resulted in more legal documentation and recordkeeping requirements. Demand will be tempered, however, by continually improving technologies that allow increased automation of many tasks. Further, clerks are often seen as reducing profits, since they do not bring in customers, making them particularly prone to layoffs. Because of intense competition, especially among discount brokerages, companies must continually focus on cutting costs, meaning that many responsibilities formerly handled by clerks are now handled by the brokers themselves.

Job prospects. Because brokerage clerks are often entry-level workers, many opportunities will result from the advancement of other clerks. Prospects will be good for qualified workers. New entrants who have strong sales skills and an aptitude for understanding numbers will have the best opportunities. While not required, a 4-year degree can also be very helpful.

Earnings

Median annual earnings of brokerage clerks were $36,390 in May 2006. The middle 50 percent earned between $29,480 and $46,030. The lowest 10 percent earned less than $24,590 and the highest 10 percent earned more than $57,600.

Related Occupations

Brokerage clerks compute and record data. Other workers who perform calculations and record data include bill and account collectors; billing and posting clerks and machine operators; bookkeeping, accounting, and auditing clerks; and tellers.

Sources of Additional Information

For more information on employment in the securities industry, contact:

➤ Securities Industry and Financial Markets Association, 120 Broadway, 35th Floor, New York, NY 10271.
Internet: **http://www.sifma.org**

For information on licensing, contact:

➤ Financial Industry Regulatory Authority (FINRA), 1735 K St.NW. Washington, DC 20006. Internet: **http://www.finra.org**

Cargo and Freight Agents

(O*NET 43-5011.00)

Significant Points

- Cargo and freight agents need no more than a high school diploma and learn their duties informally on the job.
- Faster than average employment growth is expected.

Nature of the Work

Cargo and freight agents arrange for and track incoming and outgoing shipments in airline, train, or trucking terminals or on shipping docks. They expedite shipments by determining the route that shipments will take and by preparing all necessary documents. Agents take orders from customers and arrange for the pickup of freight or cargo and its delivery to loading platforms. Cargo and freight agents may keep records of the cargo, including its amount, type, weight, dimensions, destination, and time of shipment. They keep a tally of missing items and record the condition of damaged items.

Cargo and freight agents arrange cargo according to its destination. They also determine any shipping rates and other charges that usually apply to freight. For imported or exported freight, they verify that the proper customs paperwork is in order. Cargo and freight agents often track shipments electronically, using bar codes, and answer customers' questions about the status of their shipments.

Work environment. Cargo and freight agents work in a wide variety of businesses, institutions, and industries. Some work in warehouses, stockrooms, or shipping and receiving rooms that may not be temperature controlled. Others may spend time

Cargo and freight agents determine the route that shipments will take and prepare all necessary documents.

in cold storage rooms or outside on loading platforms, where they are exposed to the weather.

Most jobs for cargo and freight agents involve frequent standing, bending, walking, and stretching. Some lifting and carrying of small items may be involved. Although automated devices have lessened the physical demands of this occupation, not every employer has these devices. The work still can be strenuous, even though mechanical material-handling equipment is used to move heavy items.

The typical workweek is Monday through Friday. However, evening and weekend hours are common in jobs involving large shipments.

Training, Other Qualifications, and Advancement

Cargo and freight agents need no more than a high school diploma and learn their duties informally on the job.

Education and training. Many jobs are entry level and require only a high school diploma. Cargo and freight agents undergo informal on-the-job training. They start out by checking items to be shipped, attaching labels to them, and making sure that addresses are correct. As this occupation becomes more automated, workers may need longer periods of training to master the use of equipment.

Other qualifications. Employers prefer to hire people who can use computers. Typing, filing, recordkeeping, and other clerical skills also are important.

Advancement. Advancement opportunities for cargo and freight agents are usually limited, but some agents may become team leaders or use their hands-on experience to switch to other clerical occupations in the businesses where they work.

Employment

Cargo and freight agents held about 86,000 jobs in 2006. Most agents were employed in transportation. Approximately 44 percent worked for firms engaged in support activities for the transportation industry, 23 percent were in the air transportation industry, 9 percent worked for courier businesses, and 7 percent were in the truck transportation industry.

Job Outlook

Employment is expected to grow faster than average.

Employment change. Employment of cargo and freight agents is expected to increase by 16 percent during the 2006-16 decade, faster than the average for all occupations. A growing number of agents will be needed to handle the increasing number of shipments resulting from increases in cargo traffic. Additional demand will stem from the growing popularity of online shopping and same-day delivery.

Job prospects. In addition to new job growth, openings will be created by the need to replace cargo and freight agents who leave the occupation.

Earnings

Median annual earnings of cargo and freight agents in May 2006 were $37,110. The middle 50 percent earned between $27,750 and $46,440. The lowest 10 percent earned less than $22,470, and the highest 10 percent earned more than $57,440. Median annual earnings in the industries employing the largest numbers of cargo and freight agents in May 2006 were:

Industry	Earnings
Scheduled air transportation	$38,340
Freight transportation arrangement	37,130
Couriers	36,750
General freight trucking	34,010
Support activities for air transportation	23,770

These workers usually receive the same benefits as most other workers. If uniforms are required, employers generally provide them or offer an allowance to purchase them.

Related Occupations

Cargo and freight agents plan and coordinate shipments of cargo by airlines, trains, and trucks. They also arrange freight pickup with customers. Others who do similar work are couriers and messengers; shipping, receiving, and traffic clerks; weighers, measurers, checkers, and samplers, recordkeeping; truck drivers and driver/sales workers; and Postal Service workers.

Sources of Additional Information

Information about job opportunities may be obtained from local employers and local offices of the State employment service.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Cargo and freight agents	43-5011	86,000	100,000	14,000	16

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook.*

Communications Equipment Operators

(O*NET 43-2011.00, 43-2021.00, 43-2099.99)

Significant Points

- Switchboard operators hold 7 out of 8 jobs.
- Workers train on the job.
- Employment is expected to decline rapidly, but job prospects should be good.

Nature of the Work

Most communications equipment operators work as *switchboard operators* for a wide variety of businesses, such as hospitals, hotels, telephone call centers, and government agencies. Switchboard operators use private branch exchange (PBX) or voice over Internet protocol (VoIP) systems to relay incoming, outgoing, and interoffice calls. They also may frequently handle other clerical duties, such as supplying information, taking messages, and greeting and announcing visitors.

Technological improvements have automated many of the tasks handled by switchboard operators. New systems automatically connect outside calls to the correct destination or to automated directories, and voice-mail systems take messages without the assistance of an operator. Despite the increasing automation of telephone call routing, however, some callers still require the assistance of an operator. Many callers have general requests, but do not know the person or department with whom they wish to speak. Switchboard operators use their knowledge of the duties and responsibilities of different departments to correctly direct calls.

Telephone operators assist customers in making telephone calls. Some telephone operators are central office operators who help customers to complete local and long-distance calls, usually under special circumstances. Other telephone operators are directory assistance operators who provide customers with information such as telephone numbers or area codes.

When callers dial "0," they usually reach a *central office operator*. Most of these operators work for telephone companies, and many of their responsibilities have been automated. For example, callers can make international, collect, and credit card calls without the assistance of a central office operator. Even so, callers still need a central office operator for a limited number of tasks, including placing person-to-person calls or interrupting busy lines if an emergency warrants the disruption. When natural disasters such as storms or earthquakes occur, central office operators provide callers with emergency phone contacts. They also assist callers who are having difficulty with automated phone systems. For example, an operator monitoring an automated system that aids a caller in placing collect calls may intervene if a caller needs assistance with the system.

When callers dial information, they usually reach a *directory assistance operator* who provides callers with information such as telephone numbers, addresses, and business listings. Most directory assistance operators work for telephone companies; increasingly, they also work for companies that provide business services. Automated systems now handle many of the functions once performed by directory assistance operators. The systems prompt callers for a listing and may even connect the call after providing the telephone number. Directory assistance operators, however, are still needed to monitor many of the calls received by automated systems. The operators listen to recordings of the customer's request and then key information into electronic directories to access the correct telephone numbers. Directory assistance operators also provide personal assistance to customers having difficulty using the automated system.

Other communications equipment operators include workers who operate satellite communications equipment, telegraph equipment, and a wide variety of other communications equipment.

Work environment. Most communications equipment operators work in pleasant, well-lighted surroundings. Because communications equipment operators spend much time seated at keyboards and video monitors, employers often provide workstations designed to decrease glare and other physical discomforts. Such improvements reduce the incidence of eyestrain, back discomfort, and injury due to repetitive motion.

An operator's work may be quite repetitive and the pace hectic during peak calling periods. To maintain operators' efficiency, supervisors at telephone companies often monitor their performance, including the amount of time they spend on each call. The rapid pace of the job—handling up to 1000 calls in a day—and frequent monitoring may cause stress.

Switchboard operators generally work the same hours as other clerical employees at their company. In most organizations, full-time operators work regular business hours over a 5-day workweek. Work schedules are more irregular in hotels, hospitals, and other organizations that require round-the-clock operator services. In these companies, switchboard operators may work in the evenings and on holidays and weekends.

Telephone operators must be accessible to customers 24 hours a day; therefore, they work a variety of shifts. Some operators work split shifts, coming on duty during peak calling periods in the late morning and early evening and going off duty during the intervening hours. Telephone companies normally assign shifts by seniority, allowing the most experienced operators the

Switchboard operators direct calls within a business.

first choice of schedules. As a result, entry-level operators may have less desirable schedules, including late evening, split-shift, and weekend work. However, companies may allow operators the flexibility to swap shifts with other operators. Telephone company operators may work overtime.

Approximately 1 in 5 communications equipment operators work part time. Because of the irregular nature of telephone operator schedules, many employers seek part-time workers for those shifts that are difficult to fill.

Training, Other Qualifications, and Advancement

Training for communications equipment operators is normally a mix of on-the-job training and classes lasting a few hours to a few weeks.

Education and training. Communications equipment operators generally receive their training on the job, so a high school diploma is usually sufficient for most operators. Switchboard operators usually receive informal on-the-job training, lasting only a few days or weeks. Because they are often the first contact with the public or client, switchboard operators often receive some training in customer service. Training may vary by place of employment—a switchboard operator in a hospital would learn how to handle different emergencies, for example. Since switchboard operators' duties may include clerical work, training in basic computer and writing skills may also be required.

Entry-level telephone operators at telecommunications companies may receive both classroom and on-the-job instruction that can last a couple of weeks. These operators may be paired with experienced personnel who provide hands-on instruction.

New employees in both specialties are trained in the operation of their equipment and in procedures designed to maximize efficiency. They are familiarized with company policies, and instructors monitor both the time and quality of trainees' responses to customer requests. Supervisors may continue to monitor new employees closely after they complete their initial training session.

Other qualifications. Applicants should have clear speech, good hearing, and strong reading, spelling, and numerical skills. Computer literacy and typing skills also are important, and familiarity with a foreign language is helpful for some positions. Candidates for positions may be required to take an examination covering basic language, computer, data entry, and math skills. Employers emphasize customer service and seek operators who will remain courteous to customers while working quickly and handling difficult customers.

Advancement. After 1 or 2 years on the job, communications equipment operators may advance to other positions within a company. Many switchboard and telephone operators enter clerical occupations, such as customer service representative, dispatcher, and receptionist, in which their operator experience is valuable. (See the *Handbook* sections on these occupations.) Telephone operators interested in more technical work may train for positions in installing and repairing equipment. (See the sections of the *Handbook* on radio and telecommunications equipment installers and repairers, and line installers and repairers.) Promotion to supervisory positions is also possible.

Employment

Communications equipment operators held about 209,000 jobs in 2006. About 7 out of 8 worked as switchboard operators. Employment was distributed as follows:

Switchboard operators, including answering service..........177,000
Telephone operators..........27,000
All other communications equipment operators..........4,300

Switchboard operators work in almost all industries, but they are concentrated in telephone call centers, hospitals, hotels, and the Federal Government. Many work as temporary employees in the employment services industry. Telephone operators are concentrated in the telecommunications industry.

Job Outlook

Employment of communications equipment operators is projected to decline rapidly. Virtually all job openings will result from the need to replace communications equipment operators who transfer to other occupations or leave the labor force, but job prospects are expected to be good.

Employment change. Employment of communications equipment operators is projected to decline rapidly by 12 percent between 2006 and 2016. Switchboard operators are projected to decline moderately by 8 percent. Telephone operators are expected to decline rapidly by 40 percent. Declining employment will be due largely to new labor-saving communications technologies, the movement of jobs to foreign countries, and consolidation of telephone operator jobs into fewer locations.

Developments in communications technologies—in particular, voice recognition systems—will continue to significantly reduce demand for communications equipment operators. Voice recognition technology allows automated telephone systems to recognize human speech. Callers speak directly to the system, which interprets the speech and then connects the call. Voice recognition systems do not require callers to input data through a telephone keypad so they are easier to use than touch-tone

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Communications equipment operators	43-2000	209,000	183,000	-25,000	-12
Switchboard operators, including answering service	43-2011	177,000	163,000	-15,000	-8
Telephone operators	43-2021	27,000	16,000	-11,000	-40
Communications equipment operators, all other	43-2099	4,300	4,700	300	7

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

systems. Voice recognition systems are increasingly able to understand sophisticated vocabulary and grammatical structures; however, many companies will continue to employ operators so that those callers who do have problems can access a live employee if they desire.

The proliferation of cell phones has negatively affected employment of both telephone operators and switchboard operators. Cell phones have reduced the demand for directory assistance and collect calls, and have resulted in decreasing use of pay phones that often required operators to assist with the call. The increasing use of cell phones also have reduced demand for switchboard operators in hotels because hotel guests now use in-room phones less frequently.

Internet directory assistance services are reducing the need for directory assistance operators. With Internet access increasingly available on cell phones, the decline in demand for directory assistance services will continue.

As communications technologies have improved and the price of long-distance service has fallen, companies are finding other ways to reduce costs by consolidating operator jobs in low cost locations. Increasingly this has included the movement of telephone operator jobs to other countries with lower prevailing wage rates.

Job prospects. Despite declining employment, job prospects should be good. There are frequent job openings due to turnover. Many communications equipment operator leave the occupation each year, and some must be replaced.

Earnings

Median hourly earnings of wage-and-salary switchboard operators, including answering service, were $10.88 in May 2006. The middle 50 percent earned between $9.14 and $13.29. The lowest 10 percent earned less than $7.71, and the highest 10 percent earned more than $15.93. Median hourly earnings in the industries employing the largest numbers of switchboard operators are:

Industry	Earnings
Offices of physicians	$11.40
General medical and surgical hospitals	11.07
Automobile dealers	10.04
Business support services	9.60
Telephone call centers	9.55

Median hourly earnings of wage-and-salary telephone operators in May 2006 were $16.41. The middle 50 percent earned between $10.67 and $20.59. The lowest 10 percent earned less than $8.44, and the highest 10 percent earned more than $22.44.

Some telephone operators working at telephone companies 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 pay step to the next.

Median hourly earnings of all other wage-and-salary communications equipment operators in May 2006 were $15.23. The middle 50 percent earned between $10.04 and $19.91. The lowest 10 percent earned less than $7.91, and the highest 10 percent earned more than $24.58.

Related Occupations

Other workers who provide information to the general public include dispatchers; hotel, motel, and resort desk clerks; customer service representatives; and receptionists and information clerks.

Sources of Additional Information

For more details about employment opportunities, contact companies in the industries that employ communications equipment operators.

Computer Operators

(O*NET 43-9011.00)

Significant Points

- Computer operators are projected to be among the most rapidly declining occupations over the 2006-16 decade because advances in technology are making the duties traditionally performed by computer operators obsolete.
- Computer operators usually receive on-the-job training; the length of training varies with the job and the experience of the worker.
- Opportunities will be best for operators who have formal computer education, are familiar with a variety of operating systems, and keep up with the latest technology.

Nature of the Work

Computer operators oversee the operation of computer hardware systems, ensuring that these machines are used as efficiently and securely as possible. They may work with mainframes, minicomputers, or networks of personal computers. Computer operators must anticipate problems and take preventive action, as well as solve problems that occur during operations.

The duties of computer operators vary with the size of the installation, the type of equipment used, and the policies of the employer. Generally, operators control the console of either a mainframe digital computer or a group of minicomputers. Working from operating instructions prepared by programmers, users, or operations managers, computer operators set controls on the computer and on peripheral devices required to run a particular job.

Computer operators load equipment with tapes, disks, and paper, as needed. While the computer is running—which may be 24 hours a day—computer operators monitor the control console and respond to operating and computer messages. Messages indicate the individual specifications of each job being run. If an error message occurs, operators must locate and solve the problem or terminate the program. Operators also maintain logbooks or operating records that list each job run and events that occur during their shift, such as machine malfunctions. Other computer operators perform and monitor routine tasks, such as tape backup, virus checking, software upgrading, and basic maintenance. In addition, computer operators may

help programmers and systems analysts test and debug new programs.

A greater number of computer operators are working on personal computers (PCs) and minicomputers, as the number and complexity of computer networks continues to grow. In many offices, factories, and other work settings, PCs and minicomputers are connected in networks, often referred to as local area networks (LANs) or multi-user systems. While users in the area operate some of these computers, many require the services of full-time operators. The tasks they perform on PCs and minicomputers are very similar to those performed on large computers and include trying to keep the computer networks secure.

As organizations continue to look for opportunities to increase productivity, many tasks formerly performed by computer operators are now being automated. New software enables computers to perform many routine tasks, formerly done by computer operators, without human interaction. Scheduling, loading, and downloading programs, mounting tapes, rerouting messages, and running periodic reports can be done without the intervention of an operator. As technology advances, the responsibilities of many computer operators are shifting to areas such as network operations, user support, and database maintenance.

Work environment. Computer operators generally work in well-lit, ventilated, comfortable rooms. Because many organizations use their computers 24 hours a day, 7 days a week, computer operators may be required to work evening or night shifts and weekends. Shift assignments usually are made based on seniority. However, increasingly automated operations will lessen the need for shift work because many companies can let the computer take over operations during less desirable working hours. In addition, telecommuting technologies, such as faxes, modems, and e-mail, and data center automation, such as automated tape libraries, enable some operators to monitor batch processes, check systems performance, and record problems for the next shift.

Computer operators monitor computer systems and watch for potential problems.

Because computer operators generally spend a lot of time in front of a computer monitor and perform repetitive tasks such as loading and unloading printers, they may be susceptible to eyestrain, back discomfort, and hand and wrist problems.

Training, Other Qualifications, and Advancement

Computer operators generally require a high school degree and are trained by employers on the job. Most computer operators expect to advance to other positions in the information technology field within a few years.

Education and training. Computer operators usually receive 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. However, previous work experience is key to obtaining an operator job in many large establishments. Employers generally look for specific, hands-on experience with the type of equipment and related operating systems they use. Additionally, formal computer training, perhaps through a community college or technical school, can be useful. Related training also can be obtained through the U.S. Armed Forces and from some computer manufacturers. As computer technology changes and data processing centers become more automated, employers will increasingly require candidates for operator jobs to have formal training and related experience.

Other qualifications. Computer technology changes so rapidly that operators must be adaptable and willing to learn. Operators who work in automated data centers also need analytical and technical expertise to deal with unique or high-level problems that a computer is not programmed to handle. Operators must be able to communicate well and to work effectively with programmers, users, and other operators. Computer operators also must be able to work independently because they may have little or no direct supervision.

Advancement. Some computer operators may advance to supervisory jobs, although most management positions within data processing or computer operations centers require advanced formal education, such as a bachelor's or graduate degree. Computer operators may advance to jobs in areas such as network operations or support through on-the-job experience and additional formal education. As they gain experience in programming, some operators may advance to jobs as programmers or analysts, but a move into these types of jobs is becoming much more difficult because employers increasingly require at least a bachelor's degree for more skilled computer jobs.

Employment

Computer operators held about 130,000 jobs in 2006. Jobs are found in various industries such as government, health care, manufacturing, data processing services and other information industries, and finance and insurance. They are also employed by some firms in computer systems design and related services as more companies contract out their data processing operations.

Job Outlook

Computer operators continue to be one of the occupations with the most rapidly declining employment. Although computers

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16 Number	Change, 2006-16 Percent
Computer operators	43-9011	130,000	98,000	-32,000	-25

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook.*

are increasingly prevalent in the workplace, improved software and automation of many systems are quickly reducing the need for this occupation. Some job openings may, nevertheless, be available to replace workers who leave the occupation.

Employment change. Employment of computer operators is projected to decline by 25 percent because advances in technology are making obsolete many of the duties traditionally performed by these workers. Technological advances have reduced both the size and cost of computer equipment while increasing the capacity for data storage and processing automation. Sophisticated computer hardware and software are now used in practically every industry in such areas as factory and office automation, telecommunications, health care, education, and government. The expanding use of software that automates computer operations gives companies the option of making systems more efficient, but greatly reduces the need for operators. Such improvements require operators to monitor a greater number of operations at the same time and solve a broader range of problems that may arise. The result is that fewer operators will be needed to perform more highly skilled work.

Computer operators who are displaced by automation may be reassigned to support staffs that maintain personal computer networks or assist other members of the organization. Operators who keep up with changing technology by updating their skills through additional training should have the best prospects of moving into other areas such as network administration and technical support. Others may be retrained to perform different job duties, such as supervising an operations center, maintaining automation packages, or analyzing computer operations to recommend ways to increase productivity. In the future, operators who wish to take advantage of changing job opportunities in the computer field will need to know more about programming, automation software, graphics interface, client-server environments, and open systems.

Job prospects. Experienced operators are expected to face competition for the few job openings that will arise each year to replace workers who transfer to other occupations or leave the labor force. Opportunities will be best for operators who have formal computer education, familiarity with a variety of operating systems, and knowledge of the latest technology.

Earnings

Median annual earnings of computer operators were $33,560 in May 2006. The middle 50 percent earned between $25,990 and $43,060 per year. The highest 10 percent earned more than $51,970, and the lowest 10 percent earned less than $20,510.

Related Occupations

Other occupations involving work with computers include computer software engineers; computer programmers; computer support specialists and systems administrators; computer systems analysts, and computer scientists and database administrators. Other occupations in which workers operate electronic office equipment include data entry and information processing workers and secretaries and administrative assistants.

Sources of Additional Information

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

Couriers and Messengers

(O*NET 43-5021.00)

Significant Points

- Most jobs do not require more than a high school diploma.
- Employment is expected to have little to no change, reflecting the more widespread use of electronic information-handling technologies such as e-mail and fax.

Nature of the Work

Couriers and messengers move and distribute information, documents, and small packages for businesses, institutions, and government agencies. They pick up and deliver letters, important business documents, or packages that need to be sent or received quickly within a local area. Couriers and messengers use trucks and vans for larger deliveries, such as legal caseloads and conference materials. By sending an item by courier or messenger, the sender ensures that it reaches its destination the same day or even within the hour. Couriers and messengers also deliver items that the sender is unwilling to entrust to other means of delivery, such as important legal or financial documents, passports, airline tickets, or medical samples to be tested.

Couriers and messengers receive their instructions either in person—by reporting to their office—or by telephone, two-way radio, or wireless data service. Then they pick up the item and carry it to its destination. After each pickup or delivery, they check in with their dispatcher to receive instructions. Sometimes the dispatcher will contact them while they are between stops and reroute them to pick up a new delivery. Consequently, most couriers and messengers spend much of their time outdoors or in their vehicle. They usually maintain records of

deliveries and often obtain signatures from the people receiving the items.

Most couriers and messengers deliver items within a limited geographic area, such as a city or metropolitan area. Mail or overnight delivery service is the preferred delivery method for items that need to go longer distances. Some couriers and messengers carry items only for their employer, often a law firm, bank, medical laboratory, or financial institution. Others may act as part of an organization's internal mail system and carry items mainly within the organization's buildings or entirely within one building. Many couriers and 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. Most are paid on a commission basis.

Couriers and 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 to make deliveries. Messenger or courier services usually employ the bicycle messengers.

Work environment. Couriers and messengers spend most of their time alone, making deliveries, and usually are not closely supervised. Those who deliver by bicycle must be physically fit and must cope with all weather conditions and the hazards of heavy traffic. Car, van, and truck couriers must sometimes carry heavy loads, either manually or with the aid of a hand truck. They also have to deal with difficult parking situations, traffic jams, and road construction. The pressure of making as many deliveries as possible to increase one's earnings can be stressful and may lead to unsafe driving or bicycling practices. The typical workweek is Monday through Friday; however, evening and weekend hours are common.

Training, Other Qualifications, and Advancement

Most couriers and messengers train on the job. Communication skills, a good driving record, and good sense of direction are helpful.

Education and training. Most courier and messenger jobs do not require workers to have more than a high school diploma. Couriers and messengers usually learn as they work, training with an experienced worker for a short time.

Other qualifications. Couriers and messengers need a good knowledge of the area in which they travel and a good sense of direction. Employers also prefer to hire people who are familiar with computers and other electronic office and business equipment. In addition, good oral and written communication skills are important because communicating with customers and dispatchers is an integral part of some courier and messenger jobs.

Those who work as independent contractors for a messenger or delivery service may be required to have a valid driver's license, a registered and inspected vehicle, a good driving record, and insurance coverage. Many couriers and messengers, who are employees rather than independent contractors, also are required to provide and maintain their own vehicle. Although some companies have spare bicycles or mopeds that their riders may rent for a short period, almost all two-wheeled couriers own their own bicycle, moped, or motorcycle.

Advancement. Couriers and messengers have limited advancement opportunities. However, one avenue for advancement is to learn dispatching or to take service requests by phone.

Some independent contractors become master contractors. Master contractors organize routes for multiple independent contractors through courier agencies.

Employment

Couriers and messengers together held about 134,000 jobs in 2006. About 25 percent were employed in the couriers and messengers industry; 15 percent worked in health care; and 9 percent worked in legal services. About 19 percent were self-employed independent contractors; they provide their own vehicles and, to a certain extent, set their own schedules. However, they are like employees in some respects, because they often contract with one company.

Job Outlook

Employment of couriers and messengers should have little to no change through 2016, despite an increasing volume of parcels, business documents, and other materials to be delivered. The need to replace workers who leave the occupation will create some job openings.

Employment change. Employment in this occupation is expected to remain unchanged during the 2006-16 decade. Employment will be unchanged because of the more widespread use of electronic information-handling technologies such as e-mail and fax. Electronic transmission of many documents, forms, and other materials is replacing items that had been hand delivered. Many legal and financial documents, which formerly were delivered by hand because they required a handwritten signature, can now be delivered electronically with online signatures. However, for items that are unable to be sent electronically—such as blueprints and other oversized materials, securities, and passports—couriers and messengers will still be needed. They still will also be required by medical and dental laboratories to pick up and deliver medical samples, specimens, and other materials.

Job prospects. Despite the lack of job growth, some job opportunities will arise out of the need to replace couriers and messengers who leave the occupation. Demand for couriers and messengers may be particularly strong in certain activities, like transporting donor organs for hospitals.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Couriers and messengers	43-5021	134,000	134,000	-200	0

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

Earnings

Median annual earnings of couriers and messengers in May 2006 were $21,540. The middle 50 percent earned between $17,430 and $27,080. The lowest 10 percent earned less than $14,870, and the highest 10 percent earned more than $34,510. Median annual earnings in the industries employing the largest numbers of couriers and messengers in May 2006 were:

Medical and diagnostic laboratories	$23,020
Depository credit intermediation	20,680
Couriers	20,650
Legal services	20,610
Local messengers and local delivery	19,560

Couriers employed by a courier service usually receive the same benefits as most other workers. If uniforms are required, employers generally provide them or offer an allowance to purchase them. Most independent contractors do not receive benefits, but usually have higher earnings.

Related Occupations

Messengers and couriers deliver letters, parcels, and other items. They also keep accurate records of their work. Others who do similar work are Postal Service workers; truck drivers and driver/sales workers; shipping, receiving, and traffic clerks; and cargo and freight agents.

Sources of Additional Information

Local employers and local offices of the State employment service can provide additional information about job opportunities. People interested in courier and messenger jobs also may contact messenger and courier services, mail-order firms, banks, printing and publishing firms, utility companies, retail stores, or other large companies.

Information on careers as couriers and messengers is available from:

➤ Messengers and Couriers Association of the Americas, 1156 15th St. NW., Suite 900, Washington, DC 20005.

Credit Authorizers, Checkers, and Clerks

(O*NET 43-4041.00, 43-4041.01, 43-4041.02)

Significant Points

- Most jobs require only a high school diploma.
- Employment is expected to decline.

Nature of the Work

Credit authorizers, checkers, and clerks review credit history and obtain the information needed to determine the creditworthiness of individuals or businesses applying for credit. They spend much of their day on the telephone or on the Internet obtaining information from credit bureaus, employers, banks, credit institutions, and other sources to determine applicants' credit history and ability to repay what they borrow or charge.

Credit authorizers, checkers, and clerks process and authorize applications for credit, including applications for credit cards. Although the distinctions among the three job titles are disappearing, some general differences remain. *Credit clerks* typically handle the processing of credit applications by verifying the information on the application, calling applicants if additional data are needed, contacting credit bureaus for a credit rating, and obtaining any other information necessary to determine applicants' creditworthiness. If clerks work in a department store or other establishment that offers instant credit, they enter the applicant's information into a computer at the point of sale. A credit rating is then transmitted from a central office within seconds to indicate whether the application should be rejected or approved.

Credit checkers investigate the credit history and current credit standing of a person or business prior to the issuance of a loan or line of credit. Credit checkers also may contact credit departments of businesses and service companies to obtain information about an applicant's credit standing. Credit reporting agencies and bureaus hire checkers to secure, update, and verify information for credit reports. These workers often are called credit investigators or credit reporters.

Credit authorizers review a customer's credit history.

Credit authorizers approve charges against customers' existing accounts. Most charges are approved automatically by computer. However, when accounts are past due, overextended, or invalid, or when they show a change of address, salespersons refer the associated transactions to credit authorizers located in a central office. These authorizers evaluate the customers' computerized credit records and payment histories and quickly decide whether to approve new charges.

Work environment. Credit authorizers, checkers, and clerks usually work a standard 40-hour week. However, they may work overtime during particularly busy periods, such as holiday shopping seasons and store sales. Most credit authorizers, checkers, and clerks work in areas that are clean, well lit, and relatively quiet. These workers sit for long periods of time in front of computer screens, which may cause eyestrain and headaches. Part-time work is available, and temporary workers are often hired during peak workloads.

Training, Other Qualifications, and Advancement

Employers generally prefer workers with a least a high school diploma or its equivalent and usually provide on-the-job training.

Education and training. A high school diploma or its equivalent is usually the minimum requirement for these workers. Most new employees are trained on the job, working under close supervision of more experienced employees. Some firms offer formal training that may include courses in telephone etiquette, computer use, and customer service skills. Some credit authorizers, checkers, and clerks also take courses in credit offered by banking and credit associations, public and private vocational schools, and colleges and universities.

Experience and other qualifications. Other requirements of the job include good telephone and organizational skills and the ability to pay close attention to details and meet tight deadlines. Computer skills also are important in order to enter and retrieve data quickly.

Advancement. These workers typically can advance to supervisory positions. They may become loan or credit department supervisor or team leader of a small group of clerks.

Employment

Credit authorizers, checkers, and clerks held about 69,000 jobs in 2006. Nearly half of these workers were employed by finance and insurance industries, mainly firms in credit intermediation and related activities, such as commercial and savings banks; credit unions; and mortgage, finance, and loan companies. Credit bureaus, collection agencies, and wholesale and retail trade establishments also employ these clerks.

Job Outlook

Employment for this occupation is expected to decline moderately through the year 2016. However, job openings will still arise from the need to replace workers leaving the occupation.

Employment change. Employment of credit authorizers, checkers, and clerks is expected to decline moderately by about 8 percent between 2006 and 2016. Despite a projected increase in the number of credit applications, technology will allow these applications to be processed, checked, and authorized by fewer workers than were required in the past.

Credit scoring is a major development that has improved the productivity of credit authorizers, checkers, and clerks, thus limiting employment growth in the occupation. Companies and credit bureaus now can purchase software that quickly analyzes an applicant's creditworthiness and summarizes it with a "score." Credit issuers then can easily decide whether to accept or reject an application on the basis of its score, speeding up the authorization of loans or credit. Obtaining credit ratings also has become much easier for credit checkers and authorizers because businesses now have computer systems directly linked to credit bureaus that provide immediate access to a person's credit history.

Job prospects. Despite an expected decline in employment, job prospects for credit authorizers, checkers, and clerks will remain good. Openings will arise from the need to replace workers who leave the occupation for various reasons. However, the job outlook is sensitive to overall economic activity. A downturn in the economy or a rise in interest rates usually leads to a decline in demand for credit.

Earnings

Median hourly earnings of credit authorizers, checkers, and clerks in May 2006 were $14.41. The middle 50 percent earned between $11.25 and $18.10. The lowest 10 percent earned less than $8.72, and the highest 10 percent earned more than $22.30. Median hourly earnings in nondepository credit intermediation were $15.21 in 2006, while median earnings in depository credit intermediation were $15.01.

Related Occupations

Credit authorizers, checkers, and clerks obtain and analyze credit histories. Other workers who review account information include bill and account collectors, loan officers, and insurance underwriters.

Sources of Additional Information

State employment service offices and agencies can provide information about job openings for credit authorizers, checkers, and clerks.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Credit authorizers, checkers, and clerks	43-4041	69,000	63,000	-5,800	-8

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

Customer Service Representatives

(O*NET 43-4051.00)

Significant Points

- Job prospects are expected to be excellent.
- Most jobs require only a high school diploma but educational requirements are rising.
- Strong verbal communication and listening skills are important.

Nature of the Work

Customer service representatives are employed by many different types of companies to serve as a direct point of contact for customers. They are responsible for ensuring that their company's customers receive an adequate level of service or help with their questions and concerns. These customers may be individual consumers or other companies, and their service needs can vary considerably.

All customer service representatives interact with customers to provide information in response to inquiries about products or services and to handle and resolve complaints. They communicate with customers through a variety of means—by telephone; by e-mail, fax, regular mail; or in person. Some customer service representatives handle general questions and complaints, whereas others specialize in a particular area.

Many customer inquiries involve routine questions and requests. For example, customer service representatives may be asked to provide a customer with their credit card balance, or to check on the status of an order. However, other questions are more involved, and may require additional research or further explanation on the part of the customer service representative. In handling customers' complaints, they must attempt to resolve the problem according to guidelines established by the company. These procedures may involve asking questions to determine the validity of a complaint; offering possible solutions; or providing customers with refunds, exchanges, or other offers, like discounts or coupons. In some cases, customer service representatives are required to follow up with an individual customer until a question is answered or an issue is resolved.

Some customer service representatives help people decide what types of products or services would best suit their needs. They may even aid customers in completing purchases or transactions. Although the primary function of customer service representatives is not sales, some may spend time encouraging customers to purchase additional products or services. (For information on workers whose primary function is sales, see the statements on sales and related occupations elsewhere in the *Handbook*.) Customer service representatives also may make changes or updates to a customer's profile or account information. They may keep records of transactions and update and maintain databases of information.

Most customer service representatives use computers and telephones extensively in their work. Customer service representatives frequently enter information into a computer as they are speaking to customers. Often, companies have large amounts of data, such as account information, that is pulled up on a computer screen while the representative is talking to a customer so he or she can answer specific questions. Customer service representatives also usually have answers to the most common customer questions, or guidelines for dealing with complaints. In the event that they encounter a question or situation to which they do not know how to respond, workers consult with a supervisor to determine the best course of action. They generally use multiline telephone systems, which may route calls directly to the most appropriate representative. However, at times, they must transfer calls to someone who may be better able to respond to the customer's needs.

In some organizations, customer service representatives spend their entire day on the telephone. In others, they may spend part of their day answering e-mails and the remainder of the day taking calls. For some, most of their contact with the customer is face to face. Customer service representatives need to remain aware of the amount of time spent with each customer so that they can fairly distribute their time among the people who require their assistance. This is particularly important for those whose primary activities are answering telephone calls and whose conversations are required to be kept within a set time limit. For those working in call centers, there is usually very little time between telephone calls. When working in call centers, customer service representatives are likely to be under close supervision. Telephone calls may be taped and reviewed by supervisors to ensure that company policies and procedures are being followed.

Job responsibilities also can differ, depending on the industry in which a customer service representative is employed. For example, those working in the branch office of a bank may assume the responsibilities of other workers, such as teller or new account clerk, as needed. In insurance agencies, a customer service representative interacts with agents, insurance companies, and policyholders. These workers handle much of the paperwork related to insurance policies, such as policy applications and changes and renewals to existing policies. They answer questions regarding policy coverage, help with reporting claims, and do anything else that may need to be done. Although they must have similar credentials and knowledge of insurance products as insurance agents, the duties of a customer service representative differ from those of an agent as they are not responsible for seeking potential customers. Customer service representatives employed by utilities and communications companies assist individuals interested in opening accounts for various utilities such as electricity and gas, or for communication services such as cable television and telephone. They explain various options and receive orders for services to be installed, turned on, turned off, or changed. They also may look into and resolve complaints about billing and other service.

Work environment. Although customer service representatives work in a variety of settings, most work in areas that are clean and well lit. Many work in call or customer contact centers where workers generally have their own workstation or cubicle space equipped with a telephone, headset, and computer. Because many call centers are open extended hours, beyond

the traditional work day, or are staffed around the clock, these positions may require workers to take on early morning, evening, or late night shifts. Weekend or holiday work also may be necessary. As a result, the occupation is well suited to flexible work schedules. About 17 percent of customer service representatives work part time. The occupation also offers the opportunity for seasonal work in certain industries, often through temporary help agencies.

Call centers may be crowded and noisy, and work may be repetitious and stressful, with little time between calls. Workers usually must attempt to minimize the length of each call, while still providing excellent service. To ensure that these procedures are followed, conversations may be monitored by supervisors, which be stressful. Also, long periods spent sitting, typing, or looking at a computer screen may cause eye and muscle strain, backaches, headaches, and repetitive motion injuries.

Customer service representatives working outside of a call center environment may interact with customers through several different means. For example, workers employed by an insurance agency or in a grocery store may have customers approach them in person or contact them by telephone, computer, mail, or fax. Many of these customer service representatives work a standard 40-hour week; however, their hours generally

Customer service representatives answer questions and assist customers over the phone.

depend on their employer's hours of operation. Work environments outside of a call center also vary accordingly. Most customer service representatives work either in an office or at a service or help desk.

Customer service representatives may have to deal with difficult or irate customers, which can be challenging. However, the ability to resolve customers' problems has the potential to be very rewarding.

Training, Other Qualifications, and Advancement

Most jobs require at least a high school diploma. However, employers are increasingly seeking candidates with some college education. Most employers provide training to workers before they begin serving customers.

Education and training. Most customer service representative jobs require only a high school diploma. However, because employers are demanding a higher skilled workforce, many customer service jobs now require an associate or bachelor's degree. High school and college level courses in computers, English, or business are helpful in preparing for a job in customer service.

Training requirements vary by industry. Almost all customer service representatives are provided with some training prior to beginning work. This training generally includes customer service and phone skills; information on products and services; information about common customer problems; the use of the telephone and computer systems; and company policies and regulations. Length of training varies, but usually lasts at least several weeks. Because of a constant need to update skills and knowledge, most customer service representatives continue to receive training throughout their career. This is particularly true of workers in industries such as banking, in which regulations and products are continually changing.

Other qualifications. Because customer service representatives constantly interact with the public, good communication and problem-solving skills are a must. Verbal communication and listening skills are especially important. For workers who communicate through e-mail, good typing, spelling, and writing skills are necessary. Basic to intermediate computer knowledge and good interpersonal skills also are important qualities for people who wish to be successful in the field.

Customer service representatives play a critical role in providing an interface between customers and companies. As a result, employers seek out people who are friendly and possess a professional manner. The ability to deal patiently with problems and complaints and to remain courteous when faced with difficult or angry people is very important. Also, a customer service representative needs to be able to work independently within specified time constraints. Workers should have a clear and pleasant speaking voice and be fluent in English. However, the ability to speak a foreign language is becoming increasingly necessary.

Although some positions may require previous industry, office, or customer service experience, many customer service jobs are entry level. However, within insurance agencies and brokerages, these jobs usually are not entry-level positions. Workers must have previous experience in insurance and often are required by State regulations to be licensed like insur-

ance sales agents. A variety of designations are available to demonstrate that a candidate has sufficient knowledge and skill, and continuing education courses and training often are offered through the employer.

Advancement. Customer service jobs are often good introductory positions into a company or an industry. In some cases, experienced workers can move up within the company into supervisory or managerial positions or they may move into areas such as product development, in which they can use their knowledge to improve products and services. As they gain more knowledge of industry products and services, customer service representatives in insurance may advance to other, higher level positions, such as insurance sales agent.

Employment

Customer service representatives held about 2.2 million jobs in 2006. Although they were found in a variety of industries, about 23 percent of customer service representatives worked in finance and insurance. The largest numbers were employed by insurance carriers, insurance agencies and brokerages, and banks and credit unions.

About 14 percent of customer service representatives were employed in administrative and support services. These workers were concentrated in the business support services industry (which includes telephone call centers) and employment services (which includes temporary help services and employment placement agencies). Another 11 percent of customer service representatives were employed in retail trade establishments such as general merchandise stores and food and beverage stores. Other industries that employ significant numbers of customer service representatives include information, particularly the telecommunications industry; manufacturing, such as printing and related support activities; and wholesale trade.

Job Outlook

Customer service representatives are expected to experience growth that is much faster than the average for all occupations through the projection period. Furthermore, job prospects should excellent as workers who leave the occupation will need to be replaced.

Employment change. Employment of customer service representatives is expected to increase 25 percent from 2006 to 2016, which is much faster than the average for all occupations. This occupation will have one of the largest numbers of new jobs arise, about 545,000 over the 2006-16 projection period. Beyond growth stemming from expansion of the industries in which customer service representatives are employed, a need for additional customer service representatives is likely to result from heightened reliance on these workers. Customer service is very important to the success of any organization that deals with customers, and strong customer service can build sales, visibility, and loyalty as companies try to distinguish themselves from competitors. In many industries, gaining a competitive edge and retaining customers will be increasingly important over the next decade. This is particularly true in industries such as financial services, communications, and utilities, which already employ numerous customer service representatives. As the trend towards consolidation in industries continues, centralized call centers will provide an effective method for delivering a high level of customer service. As a result, employment of customer service representatives may grow at a faster rate in call centers than in other areas. However, this growth may be tempered by a variety of factors such as technological improvements that make it increasingly feasible and cost-effective for call centers to be built or relocated outside of the United States.

Technology is affecting the occupation in many ways. The Internet and automated teller machines have provided customers with means of obtaining information and conducting transactions that do not entail interacting with another person. Technology also allows for greater streamlining of processes, while at the same time increasing the productivity of workers. The use of computer software to filter e-mails, generating automatic responses or directing messages to the appropriate representative, and the use of similar systems to answer or route telephone inquiries are likely to become more prevalent in the future. Also, with rapidly improving telecommunications, some organizations have begun to position their call centers overseas.

Despite such developments, the need for customer service representatives is expected to remain strong. In many ways, technology has heightened consumers' expectations for information and services, and the availability of information online seems to have generated more need for customer service representatives, particularly to respond to e-mail. Also, technology cannot replace human skills. As more sophisticated technologies are able to resolve many customers' questions and concerns, the nature of the inquiries handled by customer service representatives is likely to become increasingly complex.

Furthermore, the job responsibilities of customer service representatives are expanding. As companies downsize or take other measures to increase profitability, workers are being trained to perform additional duties such as opening bank accounts or cross-selling products. As a result, employers increasingly may prefer customer service representatives who have education beyond high school, such as some college or even a college degree.

While jobs in some industries—such as retail trade—may be affected by economic downturns, the customer service occupation generally is resistant to major fluctuations in employment.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Customer service representatives	43-4051	2,202,000	2,747,000	545,000	25

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

Job prospects. Prospects for obtaining a job in this field are expected to be excellent, with more job openings than jobseekers. Bilingual jobseekers, in particular, may enjoy favorable job prospects. In addition, numerous job openings will result from the need to replace experienced customer service representatives who transfer to other occupations or leave the labor force. Replacement needs are expected to be significant in this large occupation because many young people work as customer service representatives before switching to other jobs.

This occupation is well suited to flexible work schedules, and many opportunities for part-time work will continue to be available, particularly as organizations attempt to cut labor costs by hiring more temporary workers.

Earnings

In May 2006, median hourly earnings for wage and salary customer service representatives were $13.62. The middle 50 percent earned between $10.73 and $17.40. The lowest 10 percent earned less than $8.71 and the highest 10 percent earned more than $22.11.

Earnings for customer service representatives vary according to level of skill required, experience, training, location, and size of firm. Median hourly earnings in the industries employing the largest numbers of these workers in May 2006 were:

Industry	Earnings
Insurance carriers	$15.00
Agencies, brokerages, and other insurance related activities	14.51
Depository Credit Intermediation	13.68
Employment services	11.74
Telephone call centers	10.29

In addition to receiving an hourly wage, full-time customer service representatives who work evenings, nights, weekends, or holidays may receive shift differential pay. Also, because call centers are often open during extended hours, or even 24 hours a day, some customer service representatives have the benefit of being able to work a schedule that does not conform to the traditional workweek. Other benefits can include life and health insurance, pensions, bonuses, employer-provided training, and discounts on the products and services the company offers.

Related Occupations

Customer service representatives interact with customers to provide information in response to inquiries about products and services and to handle and resolve complaints. Other occupations in which workers have similar dealings with customers and the public are information and record clerks; financial clerks, such as tellers and new account clerks; insurance sales agents; securities, commodities, and financial services sales agents; retail salespersons; computer support specialists; and gaming services workers.

Sources of Additional Information

State employment service offices can provide information about employment opportunities for customer service representatives.

Data Entry and Information Processing Workers

(O*NET 43-9021.00, 43-9022.00)

Significant Points

- For many people, a job as a data entry and information processing worker is their first job after high school.
- Although overall employment is projected to decline, the need to replace workers who leave this large occupation each year should produce job openings.
- Job prospects should be best for those with expertise in appropriate computer software applications and who meet company requirements for keyboarding speed.

Nature of the Work

Organizations need to process a rapidly growing amount of information. Data entry and information processing workers help ensure the smooth and efficient handling of information. By keying in text, entering data into a computer, operating a variety of office machines, and performing other clerical duties, these workers help organizations keep up with the rapid changes that are characteristic of today's "Information Age." Data entry and information processing workers are known by various other titles, including word processors, typists, and data entry keyers, and less commonly, electronic data processors, keypunch technicians, and transcribers.

Word processors and *typists* usually set up and prepare reports, letters, mailing labels, and other text material. As entry-level workers, word processors may begin by keying headings on form letters, addressing envelopes, or preparing standard forms on computers. As they gain experience, they often are assigned tasks requiring a higher degree of accuracy and independent judgment. Senior word processors may work with highly technical material, plan and key complicated statistical tables, combine and rearrange materials from different sources, or prepare master copies.

Most keyboarding is now done on computers that normally are connected to a monitor, keyboard, and printer and may have "add-on" capabilities, such as optical character recognition readers. Word processors use this equipment to record, edit, store, and revise letters, memos, reports, statistical tables, forms, and other printed materials. Although it is becoming less common, some word processing workers are employed on centralized word processing teams that handle transcription and keying for several departments.

In addition to fulfilling the duties mentioned above, word processors often perform other office tasks, such as answering telephones, filing, and operating copiers or other office machines. Job titles of these workers frequently vary to reflect these duties. For example, administrative clerks combine word processing with filing, sorting mail, answering telephones, and other general office work. Note readers transcribe stenotyped notes of court proceedings into standard formats.

Data entry keyers usually input lists of items, numbers, or other data into computers or complete forms that appear on a computer screen. They also may manipulate existing data, edit current information, or proofread new entries into a database for accuracy. Some examples of data sources include customers' personal information, medical records, and membership lists. Usually, this information is used internally by a company and may be reformatted before other departments or customers use it.

Keyers use various types of equipment to enter data. Many 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 software. Some keyers operate online terminals or personal computers. Increasingly, data entry keyers work with nonkeyboard forms of data entry, such as scanners and electronically transmitted files. When using the new character recognition systems, data entry keyers often enter only those data which cannot be recognized by machines. In some offices, keyers also operate computer peripheral equipment such as printers and tape readers, act as tape librarians, and perform other clerical duties.

Work environment. Data entry and information processing workers usually work a standard 40-hour week in clean offices. They sit for long periods and sometimes must contend with high noise levels caused by various office machines. These workers are susceptible to repetitive strain injuries such as carpal tunnel syndrome, neck and back injuries, and eyestrain. To help prevent these conditions, many offices have adopted regularly scheduled breaks, ergonomically designed keyboards, and workstations that allow workers to stand or sit as they wish.

Data entry and information processing workers rely on computers to do their work.

Some workers in this occupation telecommute, working from their homes on personal computers linked by telephone lines to those in the main office. This arrangement enables them to key in material at home while still being able to produce printed copy in their offices.

Training, Other Qualifications, and Advancement

Many data entry and information processing workers are hired right out of high school. Most training occurs on the job, and can be learned in a short period of time.

Education and training. Employers generally hire high school graduates who meet their requirements for accuracy and keyboarding speed. Increasingly, employers also expect applicants to have training or experience in word processing or data entry tasks. Spelling, punctuation, and grammar skills are important, as is familiarity with standard office equipment and procedures.

Students acquire skills in keyboarding and in the use of word processing, spreadsheet, and database management computer software in high schools, community colleges, business schools, temporary help agencies, or self-teaching aids such as books, tapes, and Internet tutorials.

Advancement. For many people, a job as a data entry and information processing worker is their first job after high school or after a period of full-time family responsibilities. This work frequently serves as a steppingstone to higher paying jobs with increased responsibilities. Large companies and government agencies usually have training programs to help administrative employees upgrade their skills and advance to higher level positions. It is common for data entry and information processing workers to transfer to other administrative jobs, such as secretary, administrative assistant, or statistical clerk, or to be promoted to a supervisory job in a word processing or data entry center.

Employment

Data entry and information processing workers held about 492,000 jobs in 2006 and were employed in virtually every sector of the economy. Of the data entry and information processing workers, 313,000 were data entry keyers and 179,000 were word processors and typists.

About 1 out of 5 data entry and information processing workers held jobs in firms providing administrative and support services, including temporary help and word processing agencies, and another 15 percent worked for State or local government.

Job Outlook

Although employment of data entry and information processing workers is expected to decline, job prospects will be favorable for those who have good technical skills, familiarity with office equipment, and keyboarding speed and accuracy.

Employment change. Overall employment of data entry and information processing workers is projected to moderately decline by 7 percent through the year 2016. Although data entry

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Data entry and information processing workers	43-9020	492,000	457,000	-35,000	-7
Data entry keyers	43-9021	313,000	299,000	-15,000	-5
Word processors and typists	43-9022	179,000	158,000	-21,000	-12

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook.*

and information processing workers are affected by productivity gains stemming from organizational restructuring and the implementation of new technologies, projected employment change differs among these workers. Employment of word processors and typists is expected to decline because of the proliferation of personal computers, which allows other workers to perform duties formerly assigned to word processors and typists. Most professionals and managers, for example, now use desktop personal computers to do their own word processing. However, because technologies affecting data entry keyers tend to be costlier to implement, employment of these workers will decline less than word processors and typists.

Employment growth of data entry keyers will be dampened by productivity gains as various data-capturing technologies, such as barcode scanners, voice recognition technologies, and sophisticated character recognition readers, become more prevalent. These technologies can be applied to a variety of business transactions, such as inventory tracking, invoicing, and placing orders. Moreover, as telecommunications technology improves, many organizations will increasingly take advantage of computer networks that allow data to be transmitted electronically. These networks will permit more data to be entered automatically into computers, reducing the demand for data entry keyers.

In addition to being affected by technology, employment of data entry and information processing workers will be adversely affected by businesses that are increasingly contracting out their work. Many organizations have reduced or even eliminated permanent in-house staff—for example, in favor of temporary employment and staffing services firms. Some large data entry and information processing firms increasingly employ workers in nations with relatively lower wages. As international trade barriers continue to fall and telecommunications technology improves, this transfer of jobs will mean reduced demand for data entry keyers in the United States.

Job prospects. The need to replace workers who transfer to other occupations or leave this large occupation for other reasons will produce numerous job openings each year. Job prospects will be most favorable for those with the best technical skills—in particular, expertise in appropriate computer software applications. Data entry and information processing workers must be willing to upgrade their skills continuously in order to remain marketable.

Earnings

Median annual earnings of word processors and typists in May 2006 were $29,430. The middle 50 percent earned between $24,180 and $35,950. The lowest 10 percent earned less than $20,200, while the highest 10 percent earned more than $43,330. The salaries of these workers vary by industry and by region. In May 2006, median annual earnings in the industries employing the largest numbers of word processors and typists were as follows:

Local government	$31,210
Elementary and secondary schools	29,960
Federal government	29,420
State government	28,520
Employment services	25,220

Median annual earnings of data entry keyers in May 2006 were $24,690. The middle 50 percent earned between $20,460 and $29,700. The lowest 10 percent earned less than $17,050, and the highest 10 percent earned more than $35,970. The following are median annual earnings for May 2006 in the industries employing the largest numbers of data entry keyers:

Management, scientific, and technical consulting services	$25,860
Insurance carriers	25,760
Accounting, tax preparation, bookkeeping, and payroll services	23,600
Data processing, hosting, and related services	22,680
Employment services	22,650

Related Occupations

Data entry and information processing workers must transcribe information quickly. Other workers who deliver information in a timely manner are dispatchers, interpreters and translators, and communications equipment operators. Data entry and information processing workers also must be comfortable working with office technology, and in this regard they are similar to court reporters, medical records and health information technicians, secretaries and administrative assistants, and computer operators.

Sources of Additional Information

For information about job opportunities for data entry and information processing workers, contact the nearest office of the State employment service.

For information related to administrative occupations, including educational programs and certified designations, contact:

- International Association of Administrative Professionals, 10502 NW., Ambassador Dr., P.O. Box 20404, Kansas City, MO 64195-0404. Internet: **http://www.iaap-hq.org**
- American Management Association, 1601 Broadway, New York, NY 10019. Internet: **http://www.amanet.org**

Desktop Publishers

(O*NET 43-9031.00)

Significant Points

- About 35 percent work for newspaper, periodical, book, and directory publishers, while almost 25 percent work in the printing industry.
- Overall employment is expected to experience little or no change over the 2006-2016 decade.
- Most employers prefer to hire experienced desktop publishers; among persons without experience, opportunities should be best for those with certificates or degrees in desktop publishing or graphic design.

Nature of the Work

Desktop publishers use computer software to format and combine text, data, photographs, charts, and other graphic art or illustrations into prototypes of pages and other documents that are to be printed. They then may print the document using a high resolution printer or they may send the materials, either in print form or electronically, to a commercial printer. Examples of materials produced by desktop publishers include books, brochures, calendars, magazines, newsletters and newspapers, packaging, and forms.

Desktop publishers typically design and create the graphics that accompany text, convert photographs and illustrations into digital images, and manipulate the text and images to display information in an attractive and readable format. They design page layouts, develop presentations and advertising campaigns, and do color separation of pictures and graphics material. Some desktop publishers may write some of the text or headlines used in newsletters or brochures. They also may translate electronic information onto film or other traditional media if the final product will be sent to an off-set printer. As companies bring the production of marketing, promotional, and other kinds of materials in-house, they increasingly employ desktop publishers to produce such materials in house.

Desktop publishers use a computer and appropriate software to enter and select formatting properties, such as the size and style of type, column width, and spacing. Print formats are stored in the computer and displayed on a computer monitor. Images and text can be rearranged, column widths altered, or material enlarged or reduced. New information, such as charts, pictures, or additional text can be added. Scanners are used to capture photographs, images, or art as digital data that can be either incorporated directly into electronic page layouts or further manipulated with the use of computer software. The desktop publisher can make adjustments or compensate for deficiencies in the original color print or transparency. An entire newspaper, catalog, or book page, complete with artwork and graphics, can be created on the screen exactly as it will appear in print. Digital files are then used to produce printing plates. Like photographers and multimedia artists and animators, desktop publishers also can create special effects or other visual images using film, video, computers, or other electronic media. (Separate statements on photographers and on artists and related workers appear elsewhere in the *Handbook*.)

Desktop publishing encompasses a number of different kinds of jobs. Personal computers enable desktop publishers to more easily perform many of the design and layout tasks that would otherwise require large and complicated equipment and extensive human effort. Advances in computer software and printing technology continue to enhance desktop publishing work, making desktop publishing more economical and efficient than before. For example, desktop publishers get the material as computer files delivered over the Internet or on a portable disk drive instead of receiving simple typed text and instructions from customers. Other innovations in the occupation include digital color page makeup systems, electronic page layout systems, and off-press color proofing systems. In addition, most materials are reproduced on the Internet as well as printed; therefore, desktop publishers may need to know electronic publishing software, such as Hypertext Markup Language (HTML) and may be responsible for converting text and graphics to an Internet-ready format.

Some desktop publishers may write and edit as well as lay out and design pages. For example, in addition to laying out articles for a newsletter, desktop publishers may be responsible for copyediting content or for writing original content themselves. Desktop publisher's writing and editing responsibilities may vary widely from project to project and employer to employer. Smaller firms typically use desktop publishers to perform a wide range of tasks, while desktop publishers at larger firms may specialize in a certain part of the publishing process. (Writers and editors are discussed elsewhere in the *Handbook*.)

Desktop publishers also may be called publications specialists, electronic publishers, DTP operators, desktop publishing editors, electronic prepress technicians, electronic publishing specialists, image designers, typographers, compositors, layout artists, and Web publications designers. The exact name may vary by the specific tasks performed or simply by personal preference.

Work environment. Desktop publishers usually work in clean, air-conditioned office areas with little noise. They generally work a standard workweek; however, some may work night shifts, weekends, or holidays depending upon the production schedule for the project or to meet deadlines.

Desktop publishers format and design photographs, art, and data with text for electronic page layouts.

These workers often are subject to stress and the pressures of short deadlines and tight work schedules. Like other workers who spend long hours working in front of a computer monitor, desktop publishers may be susceptible to eyestrain, back discomfort, and hand and wrist problems.

Training, Other Qualifications, and Advancement

Most desktop publishers learn their skills by taking classes, completing a certificate program offered on line or through an accredited academic program, or through experience on the job. Experience is the best training and many desktop publishers get started just by experimenting with the software and developing a knack for designing and laying out material for publication.

Education and training. There is generally no educational requirement for the job of desktop publisher. Most people learn on the job or by taking classes on line or through local learning centers that teach the latest software. For those who are interested in pursuing a career in desktop publishing, an associate degree or a bachelor's degree in graphic arts, graphic communications, or graphic design is preferred. Graphic arts programs are a good way to learn about the desktop publishing software used to format pages; assign type characteristics; and import text and graphics into electronic page layouts. The programs teach print and graphic design fundamentals and provide an extensive background in imaging, prepress operations, print reproduction, and emerging media. Courses in other aspects of printing also are available at vocational-technical institutes, industry-sponsored update and retraining programs, and private trade and technical schools.

Other qualifications. Although formal training is not always required, those with certificates or degrees will have the best job opportunities. Most employers prefer to hire people who have at least a high school diploma and who possess good communication skills, basic computer skills, and a strong work ethic. Desktop publishers should be able to deal courteously with people, because they have to interact with customers and clients and be able to express design concepts and layout options with them. They also may have to do simple math calculations and compute ratios to scale graphics and artwork and estimate job costs. A basic understanding and facility with computers, printers, scanners, and other office equipment and technologies also is needed to work as a desktop publisher.

Desktop publishers need good manual dexterity, and they must be able to pay attention to detail and work independently. Good eyesight, including visual acuity, depth perception, a wide field of view, color vision, and the ability to focus quickly also are assets. Artistic ability often is a plus. Employers also seek persons who are even tempered and adaptable—important qualities for workers who often must meet deadlines and learn how to operate new equipment.

Advancement. Workers with limited training and experience assist more experienced staff on projects while they learn the software and gain practical experience. They advance on the basis of their demonstrated mastery of skills. Desktop publishing software continues to evolve and gain in technological sophistication. As a result, desktop publishers need to keep abreast of the latest developments and how to use new software and equipment. As they gain experience, they may advance to positions with greater responsibility. Some may move into supervisory or management positions. Other desktop publishers may start their own companies or work as independent consultants, while those with more artistic talent and further education may find job opportunities in graphic design or commercial art positions.

Employment

Desktop publishers held about 32,000 jobs in 2006. About 35 percent worked for newspaper, periodical, book, and directory publishers, while 24 percent worked in the printing and related support activities industry. Other desktop publishers work for professional, scientific, and technical services firms and in many other industries that produce printed or published materials.

The printing and publishing industries are two of the most geographically dispersed industries in the United States, and desktop publishing jobs are found throughout the country. Although most jobs are in large metropolitan cities, electronic communication networks and the Internet allow some desktop publishers to work from other locations.

Job Outlook

Employment of desktop publishers is expected to experience little or no change over the 2006-2016 decade because more people are learning basic desktop publishing skills as a part of their regular job functions in other occupations and because more organizations are formatting materials for display on the web rather than designing pages for print publication.

Employment change. Employment of desktop publishers is expected to grow 1 percent between 2006 and 2016, which is considered little or no change in employment. Desktop publishing has become a frequently used and common tool for designing and laying out printed matter, such as advertisements, brochures, newsletters, and forms. However, increased computer processing capacity and widespread availability of more elaborate desktop publishing software will make it easier and more affordable to use for people who are not printing professionals. As a result, the need for people who specialize in desktop publishing will slow, as more people are able to do this work.

In addition, organizations are increasingly moving their published material to the Internet to save the cost of printing and distributing materials. This change will slow the growth of desktop publishers, especially in smaller membership and trade organizations, which publish newsletters and small reports. Companies that produce large reports and rely on high quality and high resolution color and graphics within their publications, however, will continue to use desktop publishers to lay out publications for offset printing.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Desktop publishers	43-9031	32,000	32,000	300	1

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

Job prospects. Despite the little to no change in projected employment, job opportunities for desktop publishers are expected to be good because of the need to replace workers who move into managerial positions, transfer to other occupations, or leave the labor force. However, job prospects will be better for those with experience as many employers prefer to hire experienced desktop publishers because of the long time it takes to become good at this work. Among individuals with little or no experience, opportunities should be best for those with computer backgrounds, certification in desktop publishing, or who have completed a postsecondary program in desktop publishing, graphic design, or web design.

Earnings

Earnings for desktop publishers vary according to level of experience, training, geographic location, and company size. Median annual earnings of desktop publishers were $34,130 in May 2006. The middle 50 percent earned between $26,270 and $44,360. The lowest 10 percent earned less than $20,550, and the highest 10 percent earned more than $55,040 a year. Median annual earnings of desktop publishers in May 2006 were $36,460 in printing and related support services and $31,450 in newspaper, periodical, book, and directory publishers.

Related Occupations

Desktop publishers use artistic and editorial skills in their work. These skills also are essential for artists and related workers; commercial and industrial designers; prepress technicians and workers; public relations specialists; and writers and editors.

Sources of Additional Information

Details about training programs may be obtained from local employers such as newspapers and printing shops or from local offices of the State employment service.

For information on careers and training in printing, desktop publishing, and graphic arts, write to:

➤ Graphic Arts Education and Research Foundation, 1899 Preston White Dr., Reston, VA 20191-4367.
Internet: **http://www.gaerf.org**

➤ Graphic Arts Information Network, 200 Deer Run Rd., Sewickley, PA 15143. Internet: **http://www.gain.net**

Dispatchers

(O*NET 43-5031.00, 43-5032.00)

Significant Points

- Alternative work schedules are necessary to accommodate evening, weekend, and holiday work and 24-hour-per-day, 7-day-per-week operations.
- Dispatchers generally are entry-level workers who are trained on the job and need no more than a high school diploma.
- Many States require specific types of training or certification.

Nature of the Work

Dispatchers schedule and dispatch workers, equipment, or service vehicles to carry materials or passengers. Some dispatchers take calls for taxi companies, for example, or for police or ambulance assistance. They keep records, logs, and schedules of the calls that they receive and of the transportation vehicles that they monitor and control. In fact, they usually prepare a detailed report on all activities occurring during their shifts. Many dispatchers employ computer-aided dispatch systems to accomplish these tasks.

All dispatchers are assigned a specific territory and have responsibility for all communications within that area. Many work in teams, especially dispatchers in large communications centers or companies. The work of dispatchers varies greatly, depending on the industry in which they work.

Police, fire, and ambulance dispatchers, also called public safety dispatchers or 911 operators, monitor the location of emergency services personnel from one or all of the jurisdiction's emergency services departments. These workers dispatch the appropriate type and number of units in response to calls for assistance. Dispatchers, or call takers, often are the first people the public contacts when emergency assistance is required. If certified for emergency medical services, the dispatcher may provide medical instruction to those on the scene of the emergency until the medical staff arrives.

Police, fire, and ambulance dispatchers work in a variety of settings—a police station, a fire station, a hospital, or, increasingly, a centralized communications center. In some areas, one of the major departments serves as the communications center. In these situations, all emergency calls go to that department, where a dispatcher handles their calls and screens the others before transferring them to the appropriate service.

When handling calls, dispatchers question each caller carefully to determine the type, seriousness, and location of the emergency. The information obtained is posted either electronically by computer or, with decreasing frequency, by hand. The dispatcher then quickly decides the priority of the incident, the kind and number of units needed, and the location of the closest and most suitable units available. When appropriate, dispatchers 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 keep in close touch not only with the dispatched units, but also with the caller. They may give extensive first-aid instructions before the emergency personnel arrive, while the caller is waiting for the ambulance. Dispatchers 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. (A separate statement on emergency medical technicians and paramedics appears elsewhere in the *Handbook*.)

Other dispatchers coordinate deliveries, service calls, and related activities for a variety of firms. *Truck dispatchers,* who work for local and long-distance trucking companies, coordinate the movement of trucks and freight between cities. These dispatchers direct the pickup and delivery activities of drivers, receive customers' requests for the pickup and delivery of freight, consolidate freight orders into truckloads for specific

Many dispatchers use computer-aided systems.

destinations, assign drivers and trucks, and draw up routes and pickup and delivery schedules. *Bus dispatchers* make sure that local and long-distance buses stay on schedule. They handle all problems that may disrupt service, and they dispatch other buses or arrange for repairs in order to restore service and schedules. *Train dispatchers* ensure the timely and efficient movement of trains according to orders and schedules. They must be aware of track switch positions, track maintenance areas, and the location of other trains running on the track. *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 nature of the problem to a nearby service station or a tow-truck service and see to it that the road service is completed. *Gas and water service dispatchers* monitor gaslines and water mains and send out service trucks and crews to take care of emergencies.

Work environment. The work of dispatchers can be very hectic when many calls come in at the same time. The job of public safety dispatchers is particularly stressful because a slow or an improper response to a call can result in serious injury or further harm. Also, callers who are anxious or afraid may become excited and be unable to provide needed information; some may even become abusive. Despite provocations, dispatchers must remain calm, objective, and in control of the situation.

Dispatchers sit for long periods, using telephones, computers, and two-way radios. Much of their time is spent at video display terminals, viewing monitors and observing traffic patterns. As a result of working for long stretches with computers and other electronic equipment, dispatchers can experience significant eyestrain and back discomfort. Generally, dispatchers work a 40-hour week; however, rotating shifts and compressed work schedules are common. Alternative work schedules are necessary to accommodate evening, weekend, and holiday work and 24-hour-per-day, 7-day-per-week operations.

Training, Other Qualifications, and Advancement

Dispatchers generally are entry-level workers who are trained on the job and need no more than a high school diploma. Many States require specific types of training or certification.

Education and training. Workers usually develop the necessary skills on the job. This informal training lasts from several days to a few months, depending on the complexity of the job. While working with an experienced dispatcher, new employees monitor calls and learn how to operate a variety of communications equipment, including telephones, radios, and various wireless devices. As trainees gain confidence, they begin to handle calls themselves. In smaller operations, dispatchers sometimes act as customer service representatives, processing orders. Many public safety dispatchers also participate in structured training programs sponsored by their employer. Increasingly, public safety dispatchers receive training in stress and crisis management as well as in family counseling. This training helps them to provide effective services to others; and, at the same time, it helps them manage the stress involved in their work.

Licensure. Many States require specific types of training or certification from a professional association. Certification often requires several months in a classroom for instruction in computer-assisted dispatching and other emerging technologies as well as radio dispatching and stress management.

Other qualifications. State or local government civil service regulations usually govern police, fire, and emergency medical dispatching jobs. Candidates for these positions may have to pass written, oral, and performance tests. Also, they may be asked to attend training classes in order to qualify for advancement.

Communication skills and the ability to work under pressure are important personal qualities for dispatchers. Residency in the city or county of employment frequently is 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, road construction, or accidents.

Certification and advancement. Although there are no mandatory licensing requirements, some States require that public safety dispatchers possess a certificate to work on a State network, such as the Police Information Network. Many dispatchers participate in these programs in order to improve their prospects for career advancement.

Dispatchers who work for private firms, which usually are small, will find few opportunities for advancement. In contrast, public safety dispatchers may become a shift or divisional supervisor or chief of communications, or they may move to higher paying administrative jobs. Some become police officers or fire fighters.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Dispatchers	43-5030	289,000	306,000	16,000	6
Police, fire, and ambulance dispatchers	43-5031	99,000	113,000	13,000	14
Dispatchers, except police, fire, and ambulance	43-5032	190,000	193,000	2,900	2

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

Employment

Dispatchers held 289,000 jobs in May of 2006. About 34 percent were police, fire, and ambulance dispatchers, almost all of whom worked for State and local governments—primarily local police and fire departments. About 28 percent of all dispatchers worked in the transportation and warehousing industry, and the rest worked in a wide variety of mainly service-providing industries.

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

Job Outlook

Employment of dispatchers is expected to grow more slowly than average. In addition to those positions resulting from job growth, many openings will arise from the need to replace workers who transfer to other occupations or leave the labor force.

Employment change. Employment of dispatchers is expected to increase 6 percent over the 2006-16 decade, more slowly than the average for all occupations. Population growth and economic expansion are expected to spur employment growth for all types of dispatchers. The growing and aging population will increase demand for emergency services and stimulate employment growth of police, fire, and ambulance dispatchers.

Job prospects. In addition to openings due to growth, job openings will result from the need to replace workers who transfer to other occupations or leave the labor force. Many districts are consolidating their communications centers into a shared area-wide facility. As the equipment becomes more complex, individuals with computer skills and experience will have a greater opportunity for employment as public safety dispatchers.

Employment of some dispatchers is more adversely affected by economic downturns than employment of other dispatchers. For example, when economic activity falls, demand for transportation services declines. As a result, taxicab, train, and truck dispatchers may experience layoffs or a shortened workweek, and jobseekers may have some difficulty finding entry-level jobs. Employment of tow-truck dispatchers, by contrast, is seldom affected by general economic conditions, because of the emergency nature of their business. Likewise, public safety dispatchers are unlikely to be affected by economic downturns.

Earnings

Median annual wage-and-salary earnings of dispatchers, except police, fire, and ambulance in May 2006 were $32,190. The middle 50 percent earned between $24,860 and $42,030. The lowest 10 percent earned less than $19,780, and the highest 10 percent earned more than $53,250.

Median annual wage-and-salary earnings of police, fire, and ambulance dispatchers in 2006 were $31,470. The middle 50 percent earned between $25,200 and $39,040. The lowest 10 percent earned less than $20,010, and the highest 10 percent earned more than $47,190.

Related Occupations

Other occupations that involve directing and controlling the movement of vehicles, freight, and personnel, as well as distributing information and messages, include air traffic controllers, communications equipment operators, customer service representatives, and reservation and transportation ticket agents and travel clerks.

Sources of Additional Information

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

➤ Association of Public Safety Communications Officials, International, 351 N. Williamson Blvd., Daytona Beach, FL 32114. Internet: **http://www.apco911.org**

➤ International Municipal Signal Association, P.O. Box 359, 165 E. Union St., Newark, NY 14513.
Internet: **http://www.IMSAsafety.org**

Information on job opportunities for police, fire, and emergency dispatchers is available from 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.

File Clerks

(O*NET 43-4071.00)

Significant Points

- About 1 out of 4 file clerks work part time.
- A high school diploma or its equivalent is the most common educational requirement.
- Employment is expected to decline through the year 2016.

Nature of the Work

The amount of information generated by organizations continues to grow rapidly. File clerks classify, store, retrieve, and

File clerks are responsible for sorting, storing, and retrieving an organization's records.

update this information. In many small offices, they often have additional responsibilities, such as entering data, performing word processing, sorting mail, and operating copying or fax machines.

File clerks, also called record, information, or record center clerks, examine incoming material and code it numerically, alphabetically, or by subject matter. Paper forms, letters, receipts, or reports are stored in files while necessary information may be entered, often electronically, into other storage devices. Some clerks operate mechanized files that rotate to bring the needed records to them; others convert documents to film that is then stored on microfilm or microfiche. A growing number of file clerks use imaging systems that scan paper files or film and store the material on computers.

In order for records to be useful, they must be up to date and accurate and readily available. File clerks ensure that new information is added to files in a timely manner and discard outdated materials or transfer them to inactive storage. Clerks also check files at regular intervals to make sure that all items are correctly sequenced and placed. When records cannot be found, file clerks attempt to locate them. As an organization's needs for information change, file clerks implement changes to the filing system.

When records are requested, file clerks locate them and give them to the person requesting them. A record may be a sheet of paper stored in a file cabinet or an image on microform. In the former case, the clerk retrieves the document manually. In the latter case, the clerk retrieves the microform and displays it on a microform reader. If necessary, file clerks make copies of records and distribute them. In addition, they keep track of materials removed from the files to ensure that borrowed files are returned.

Increasingly, file clerks use computerized filing and retrieval systems that have a variety of storage devices, such as a mainframe computer, CD-ROM, or DVD-ROM. To retrieve a document in these systems, the clerk enters the document's identification code, obtains the location of the document, and gets the document. Accessing files in a computer database is much quicker than locating and physically retrieving paper files. Still, even when files are stored electronically, backup paper or electronic copies usually are also kept.

Work environment. File clerks usually work in areas that are clean, well lit, and relatively quiet. The work is not overly strenuous but may involve a lot of standing, walking, reaching, pulling, and bending, depending on the method used to retrieve files. Prolonged exposure to computer screens may lead to eyestrain for the many file clerks who work with computers.

Training, Other Qualifications, and Advancement

File clerks must be alert, accurate, and able to work with others. Most train on the job.

Education and training. Most employers prefer applicants with a high school diploma or a GED or a mix of education and related experience. Most new employees are trained on the job under close supervision of more experienced employees.

Other qualifications. File clerks must be able to work with others since part of the job is helping fellow workers. Clerks must be alert, accurate, and attentive while performing repetitive tasks. Willingness to do routine and detailed work is also important. Proficiency with desktop computer software is becoming increasingly important as more files are being stored electronically.

Advancement. File clerks can advance to more senior clerical office positions such as receptionist or bookkeeping clerk.

Employment

File clerks held about 234,000 jobs in 2006. Although file clerk jobs are found in nearly every sector of the economy, more than 90 percent of these workers are employed in service-providing industries, including government. Health care establishments employed around 3 out of every 10 file clerks. About 1 out of every 4 file clerks worked part time in 2006.

Job Outlook

Rapid declines in employment are expected through 2016. Job prospects should be best for jobseekers who have general office skills and who are familiar with personal computers and other office machines.

Employment change. Employment of file clerks is expected to decline rapidly by 41 percent between 2006 and 2016, largely due to productivity gains from office automation and the consolidation of clerical jobs. Most files are stored digitally and can be retrieved electronically, reducing the demand for file clerks.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
File clerks	43-4071	234,000	137,000	-97,000	-41

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook.*

Job prospects. There will be job openings for file clerks because a large number of workers will be needed to replace the workers who leave the occupation each year. The high number of separations from file clerk jobs reflects the lack of formal training requirements, limited advancement potential, and relatively low pay. Organizations across the economy will continue to need to hire file clerks to record and retrieve information. File clerks should find opportunities for temporary or part-time work, especially during peak business periods.

Jobseekers who have typing and other secretarial skills and who are familiar with a wide range of office machines, especially personal computers, should have the best job opportunities.

Earnings

Median hourly earnings of file clerks were $10.62 in May 2006. The middle 50 percent earned between $8.64 and $13.31. The lowest 10 percent earned less than $7.27, and the highest 10 percent earned more than $16.71. Median hourly earnings in the industries employing the largest number of file clerks in May 2006 are shown below:

Industry	Earnings
Local government	$12.18
Legal services	11.08
General medical and surgical hospitals	11.02
Employment services	10.19
Offices of physicians	9.50

Related Occupations

File clerks classify and retrieve files. Other workers who perform similar duties include receptionists and information clerks and stock clerks and order fillers.

Sources of Additional Information

State employment service offices and agencies can provide information about job openings for file clerks.

Gaming Cage Workers

(O*NET 43-3041.00)

Significant Points

- Job opportunities are available nationwide and are no longer limited to Nevada and New Jersey.
- Most employers prefer applicants who have at least a high school diploma as well as experience in handling money or previous casino employment.
- Workers need a license issued by a regulatory agency, such as a State casino control board or commission; licensure requires a background investigation.

Nature of the Work

Gaming cage workers, more commonly called *cage cashiers*, work in casinos and other gaming establishments. The "cage" where these workers can be found is the central depository for money, gaming chips, and paperwork necessary to support casino play.

Cage workers carry out a wide range of financial transactions and handle any paperwork that may be required. They perform credit checks and verify credit references for people who want to open a house credit account. They cash checks according to rules established by the casino. Cage workers sell gambling chips, tokens, or tickets to patrons or to other workers for resale to patrons and exchange chips and tokens for cash. They may use cash registers, adding machines, or computers to calculate and record transactions. At the end of their shift, cage cashiers must balance the books.

Because gaming establishments are closely scrutinized, cage workers must follow a number of rules and regulations related to their handling of money. For example, they monitor large cash transactions and report these transactions to the Internal Revenue Service to help enforce tax regulations and prevent money laundering. Also, in determining when to extend credit or cash a check, cage workers must follow detailed procedures.

Work environment. The atmosphere in casinos is often considered glamorous. However, casino work can also be physically demanding. This occupation requires workers to stand for long periods with constant reaching and grabbing. Sometimes cage workers may be expected to lift and carry relatively heavy items. The casino atmosphere exposes workers to certain hazards, such as cigarette, cigar, and pipe smoke. Noise from slot machines, gaming tables, and talking workers and patrons may be distracting to some, although workers wear protective headgear in areas where loud machinery is used to count money.

Most casinos are open 24 hours a day, 7 days a week and offer 3 staggered shifts. Casinos typically require cage workers to work on nights, weekends, and holidays.

Gaming cage workers must be careful, orderly, and detail-oriented to avoid making errors.

Training, Other Qualifications, and Advancement

While there are no mandatory education requirements, gaming cage workers typically receive on-the-job training and are licensed by a regulatory agency, such as a State casino control board or commission.

Education and training. There usually are no minimum educational requirements, although most employers prefer at least a high school diploma or the equivalent.

Once hired, gaming cage workers usually receive on-the-job training. Under the guidance of a supervisor or other senior worker, new employees learn company procedures. Some formal classroom training also may be necessary, such as training in specific gaming regulations and procedures.

Licensure. All gaming workers are required to have a license issued by a regulatory agency, such as a State casino control board or commission. Applicants for a license must provide photo identification and pay a fee. Some States may require gaming cage workers to be residents of that State. Age requirements vary by State. The licensing application process also includes a background investigation and drug test.

Other qualifications. Experience in handling money or previous casino employment is preferred. Prospective gaming cage workers are sometimes required to pass a basic math test, and they must be careful, orderly, and detail-oriented to avoid making errors and to recognize errors made by others. These workers also should be discreet and trustworthy because they frequently come in contact with confidential material. Good customer service skills and computer proficiency are also necessary for this occupation. Each casino establishes its own requirements for education, training, and experience.

Advancement. Advancement opportunities in casino gaming depend less on workers' previous casino duties and titles than on their ability and eagerness to learn new jobs. For example, in addition to advancement opportunities available in the cage, such as head cage cashier or supervisor, cage workers may advance onto the floor and become dealers or supervisors.

Employment

Gaming cage workers held about 18,000 jobs in 2006. All of these individuals work in establishments that offer gaming; employment is concentrated in Nevada, Louisiana, Mississippi, and Atlantic City, New Jersey. However, a growing number of States and Indian reservations have legalized gambling, and gaming establishments can now be found in many parts of the country.

Job Outlook

Employment of gaming cage workers is expected to grow about as fast as the average for all occupations through 2016. Job seekers should have favorable prospects due primarily to the spread of legalized gambling.

Employment change. Employment of gaming cage workers is expected to increase by 11 percent between 2006 and 2016, which is about as fast as the average for all occupations. The outlook for gaming cage workers depends on the demand for gaming, which is expected to remain strong. No longer confined to Nevada and New Jersey, gaming is becoming legalized in more States that consider gaming an effective way to increase revenues. A substantial portion of this growth will come from the construction of new Indian casinos and of "racinos," which are pari-mutuel racetracks that offer casino games.

Gaming cage workers, however, will experience slower growth than others in gaming establishments, as casinos find ways to reduce the amount of cash handled by employees. For example, self-serve cash-out and change machines are common along with automated teller machines. In addition, slot machines are now able to make payouts in tickets, instead of coins. Tickets can be read by other slot machines and the amount on the ticket transferred to the new machine. Known as Ticket-in, Ticket-Out game play, these technologies reduce the number of cash transactions needed to play and speed up the exchange process, which means fewer workers are needed to handle the cage than in the past.

Job prospects. In addition to job openings arising from employment growth, a fair number of openings will result from high turnover in this occupation caused by the high level of scrutiny workers receive and the need to be accurate. People with good mathematics abilities, previous casino experience, some background in accounting or bookkeeping, and good customer service skills should have the best opportunities.

Earnings

Earnings for gaming cage workers vary according to level of experience, training, location, and size of the gaming establishment. Median hourly earnings of gaming cage workers were $11.13 in May 2006. The middle 50 percent earned between $9.49 and $13.52 an hour. The lowest 10 percent earned less than $8.19, and the highest 10 percent earned more than $15.92 an hour.

Related Occupations

Many other occupations provide hospitality and customer service. Some examples of related occupations are credit authorizers, checkers, and clerks; gaming services occupations; sales worker supervisors; cashiers; retail salespersons; and tellers.

Sources of Additional Information

Information on employment opportunities for gaming cage workers is available from local offices of the State employment service.

Information on careers in gaming also is available from:

➤ American Gaming Association, 1299 Pennsylvania Ave. NW., Suite 1010 East, Washington, DC 20004.
Internet: **http://www.americangaming.org**

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Gaming cage workers	43-3041	18,000	20,000	2,000	11

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

Hotel, Motel, and Resort Desk Clerks

(O*NET 43-4081.00)

Significant Points

- Job opportunities should be good, because of industry growth and substantial replacement needs.
- Evening, weekend, and part-time work hours create the potential for flexible schedules.
- Professional appearance and personality are more important than formal academic training in getting a job.

Nature of the Work

Hotel, motel, and resort desk clerks are always in the public eye and are usually the first line of customer service for a lodging property. Their attitude and behavior greatly influence the public's impressions of the establishment.

Front-desk clerks perform a variety of services for guests of hotels, motels, and other lodging establishments. Regardless of the type of accommodation, most desk clerks have similar responsibilities. They register arriving guests, assign rooms, and check out guests at the end of their stay. They also keep records of room assignments and other registration-related information on computers. When guests check out, desk clerks prepare and explain the charges and process payments.

Desk clerks answer questions about services, checkout times, the local community, or other matters of public interest. They report problems with guest rooms or public facilities to members of the housekeeping or maintenance staff. In larger hotels or in larger cities, desk clerks may refer queries about area attractions to a concierge and may direct more complicated questions to the appropriate manager.

Hotel, motel, and resort desk clerks regularly use computers to store and retrieve guest reservation information.

In some smaller hotels and motels where smaller staffs are employed, clerks may take on a variety of additional responsibilities, such as bringing fresh linens to rooms, and they are often responsible for all front-office operations, information, and services. For example, they may perform the work of a bookkeeper, advance reservation agent, cashier, laundry attendant, and telephone switchboard operator.

Work environment. Hotels are open around the clock, creating the need for night and weekend work. About half of all desk clerks work a 40-hour week. Nearly one in five work part-time. Others work full-time, but with varying schedules. Most clerks work in areas that are clean, well lit, and relatively quiet, although lobbies can become crowded and noisy when busy. Many hotels have stringent dress guidelines for desk clerks.

Desk clerks may experience particularly hectic times during check-in and check-out times or when convention guests or large groups arrive at once. Moreover, dealing with irate guests can be stressful. Computer failures can further complicate an already busy time and add to stress levels. Hotel desk clerks may be on their feet most of the time and may occasionally be asked to lift heavy guest luggage.

Training, Other Qualifications, and Advancement

Employers look for clerks who are friendly and customer-service oriented, well groomed, and display maturity, self confidence, and good judgment.

Education and training. Most hotel, motel, and resort desk clerks receive orientation and training on the job. Orientation may include an explanation of the job duties and information about the establishment, such as the arrangement of guest rooms, availability of additional services, such as a business or fitness center, and location of guest services, such as ice and vending machines, restaurants, and nearby retail stores and attractions. New employees learn job tasks under the guidance of a supervisor or an experienced desk clerk. They often receive additional training on interpersonal or customer service skills and on how to use the computerized reservation, room assignment, and billing systems and equipment. Desk clerks often learn new procedures and company policies after their initial training ends. While postsecondary education is not usually required for this job, formal training in a hospitality management degree or certificate program may be an advantage for getting positions in larger or more upscale properties.

Other qualifications. Desk clerks, especially in high-volume and higher-end properties, should be quick-thinking, energetic, and able to work as a member of a team. Hotel managers typically look for these personal characteristics when hiring desk clerks, because personality traits are difficult to teach. A clear speaking voice and fluency in English are essential when talking with guests and using the telephone or public-address systems. Good spelling and computer literacy are also needed because most of the work involves a computer. In addition, speaking a foreign language fluently is increasingly helpful because of the growing international clientele of many properties.

Advancement. Large hotel and motel chains may offer better opportunities for advancement than small, independently owned establishments. Large chains have more extensive career ladder programs and may offer desk clerks an opportunity to participate in management training programs. Also, the Educational Insti-

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Hotel, motel, and resort desk clerks	43-4081	219,000	257,000	38,000	17

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

tute of the American Hotel and Lodging Association offers home-study or group-study courses in lodging management, which may help some desk clerks obtain promotions more rapidly.

Employment

Hotel, motel, and resort desk clerks held about 219,000 jobs in 2006. Almost all were in hotels, motels, and other establishments in the accommodation industry.

Job Outlook

Hotel, motel, and resort desk clerks will experience faster-than-average job growth through the 2006-16 decade because additional hotel properties continue to be built and more people are expected to travel for business and leisure. Good job opportunities are expected.

Employment change. Employment of hotel, motel, and resort desk clerks is expected to grow 17 percent between 2006 and 2016, which is faster than the average for all occupations. As more lodging establishments open and as people and companies have more money and travel more, occupancy rates will increase and create demand for desk clerks.

Employment of hotel and motel desk clerks should benefit from steady or increasing business and leisure travel. Shifts in preferences away from long vacations and toward long weekends and other, more frequent, shorter trips also should boost demand for these workers. While many lower budget and extended-stay establishments are being built to cater to families and the leisure traveler, many new luxury and resort accommodations also are opening to serve the upscale client. With the increased number of units requiring staff, employment opportunities for desk clerks should be good.

Growth of hotel, motel, and resort desk clerk jobs will be moderated somewhat by technology. Automated check-in and check-out procedures and on-line reservations networks free up staff time for other tasks and reduce the amount of time spent with each guest.

Job prospects. In addition to job growth, job opportunities for hotel and motel desk clerks are expected to be good because of the need to replace the many clerks who either transfer to other occupations that offer better pay and advancement opportunities or who leave the workforce altogether. Opportunities for those willing to work a variable schedule should continue to be plentiful.

Employment of desk clerks is sensitive to cyclical swings in the economy. During recessions, vacation and business travel declines, and hotels and motels need fewer desk clerks. Similarly, employment is affected by special events, convention business, and seasonal fluctuations.

Earnings

Median annual earnings of hotel, motel and resort desk clerks were $18,460 in May 2006. The middle 50 percent earned between $15,930 and $22,220. The lowest 10 percent earned less than $13,690, and the highest 10 percent earned more than $27,030.

Earnings of hotel, motel, and resort desk clerks vary by worker characteristics, season, and geographic factors, such as whether the establishment is in a major metropolitan area or a resort community. Earnings also vary according to the size of the hotel and the level of service offered. For example, luxury hotels that offer guests more personal attention and a greater number of services typically have stricter and more demanding requirements for their desk staff and often provide higher earnings.

Related Occupations

Lodging managers, particularly at smaller hotels and lodging establishments, may perform some of the same duties as desk clerks. Other occupations that require workers to assist the public include counter and rental clerks, customer service representatives, receptionists and information clerks, and retail salespersons.

Sources of Additional Information

Information about the hotel and lodging industry and links to State lodging associations may be obtained from:

➤ American Hotel & Lodging Association, 1201 New York Ave., NW., #600 Washington, DC 20005.
Internet: **http://www.ahla.com**

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

➤ Educational Institute of the American Hotel and Lodging Association, 800 N. Magnolia Ave., Suite 1800, Orlando, FL 32803. Internet: **http://www.ei-ahla.org**

Human Resources Assistants, Except Payroll and Timekeeping

(O*NET 43-4161.00)

Significant Points

- About 17 percent work for Federal, State, and local governments.
- Employment will grow as human resources assistants assume more responsibilities.
- Job opportunities should be best for those with excellent communication and computer skills and a broad based knowledge of general office functions, as assistants assume more responsibilities.

Nature of the Work

Human resources assistants maintain the human resource records of an organization's employees. These records include information such as name, address, job title, and earnings; benefits such as health and life insurance; and tax withholding. They also undertake a variety of other personnel and general office related tasks.

On a daily basis, these assistants record information and answer questions about and for employees. They might look up information about absences or job performance, for instance. When an employee receives a promotion or switches health insurance plans, the human resources assistant updates the appropriate form. Human resources assistants also may prepare reports for managers. For example, they might compile a list of employees eligible for an award.

In small organizations, some human resources assistants perform a variety of other clerical duties, including answering telephone calls or letters, sending out announcements of job openings or job examinations, signing for packages, ordering office supplies, and issuing application forms. When credit bureaus and finance companies request confirmation of a person's employment, the human resources assistant provides authorized information from the employee's personnel records. Assistants also may contact payroll departments and insurance companies to verify changes to records.

Some human resources assistants are involved in hiring. They screen job applicants to obtain information such as their 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. Also, human resources assistants inform job applicants, by telephone, letter, or e-mail, of their acceptance for or denial of employment.

In some job settings, human resources assistants have more specific job titles. For example, *assignment clerks* notify a firm's existing employees of upcoming vacancies, identify applicants who qualify for the vacancies, and assign those who are qualified to various positions. They also keep track of vacancies that arise throughout the organization, and they complete and distribute forms advertising vacancies. When completed applications are returned, these clerks review and verify the information in them, using personnel records. After a selection for a position is made, they notify all of the applicants of their acceptance or rejection.

As another example, *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. The identification clerk's job duties include interviewing applicants; corresponding with law enforcement authorities; and preparing badges, passes, and identification cards.

Work environment. Human resources assistants usually work in clean, pleasant, and comfortable office settings, but prolonged exposure to video display terminals may lead to eyestrain for assistants who work with computers. They usually work a standard 35- to 40-hour week.

Human resources assistants explain the organization's employment policies, screen job applicants, and request references.

Training, Other Qualifications, and Advancement

Employers prefer to hire people who have a high school diploma. Computer, communication, and interpersonal skills are important.

Education and training. A high school diploma or GED usually is preferred for these jobs. Generally, training beyond high school is not required. However, training in computers, in filing and maintaining filing systems, in organizing, and in human resources practices is helpful. Proficiency using Microsoft Word, Excel, and other computer applications also is very desirable. Many of these skills can be learned in a vocational high school program aimed at office careers, and the remainder can be learned on the job.

Formal training is also available at a small number of colleges, most of which offer diploma programs in office automation. Many proprietary schools also offer such programs.

Other qualifications. Human resources assistants must be able to interact and communicate with individuals at all levels of the organization. In addition, assistants should demonstrate poise, tactfulness, diplomacy, and good interpersonal skills in order to handle sensitive and confidential situations.

Employment

Human resources assistants held about 168,000 jobs in 2006. About 17 percent work for Federal, State, and local governments. Other jobs for human resources assistants were in various industries such as health care and social assistance; educational services, public and private; management of companies and enterprises; administrative and support services; and finance and insurance.

Job Outlook

Employment of human resources assistants is expected to grow as fast as the average for all occupations. Job opportunities should be best for those with excellent communication and computer skills and a broad based knowledge of general office functions, as assistants assume more responsibilities.

Employment change. The number of jobs for human resources assistants is expected to grow by 11 percent between 2006 and 2016, as fast as the average for all occupations. In a favorable job market, more emphasis is placed on human re-

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Human resources assistants, except payroll and timekeeping	43-4161	168,000	187,000	19,000	11

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

sources departments, thus increasing the demand for assistants. However, even in economic downturns there is demand for assistants, as human resources departments in all industries try to make their organizations more efficient by determining what type of employees to fire or hire, and strategically filling job openings. Human resources assistants may play an instrumental role in their organization's human resources policies. For example, they may talk to staffing firms and consulting firms, conduct other research, and then offer their ideas on issues such as whether to hire temporary contract workers or full-time staff.

As with other office and administrative support occupations, the growing use of computers in human resources departments means that much of the data entry that is done by human resources assistants can be eliminated, as employees themselves enter the data and send the electronic file to the human resources office. Such an arrangement, which is most feasible in large organizations with multiple human resources offices, could limit job growth among human resources assistants.

Job prospects. Job opportunities should be best for those with excellent communication and computer skills and a broad based knowledge of general office functions, as assistants assume more responsibilities. For example, workers conduct Internet research to locate resumes, they must be able to scan resumes of job candidates quickly and efficiently, and they must be increasingly sensitive to confidential information such as salaries and Social Security numbers.

In addition to positions arising from job growth, replacement needs will account for many job openings for human resources assistants as they advance within the human resources department, take jobs unrelated to human resources administration, or leave the labor force.

Earnings

Median annual earnings of human resources assistants in May 2006 were $33,750. The middle 50 percent earned between $27,430 and $41,080. The lowest 10 percent earned less than $22,700 and the highest 10 percent earned more than $48,670. Median annual earnings in the industries employing the largest number of human resources assistants in 2006 were:

Industry	Earnings
Federal executive branch	$37,000
Local government	35,440
Management of companies and enterprises	34,260
Colleges, universities, and professional schools	33,870
Employment services	29,330

In 2007, the Federal Government typically paid salaries ranging from $33,336 to $42,236 a year. Beginning human resources assistants with a high school diploma or 6 months of experience were paid an average annual salary of $26,685. The average salary for all human resources assistants employed by the Federal Government was $37,835 in 2007.

Some employers offer educational assistance to human resources assistants.

Related Occupations

Human resources assistants maintain the personnel records of an organization's employees. On a daily basis, these assistants record information and answer questions about employee absences and supervisory reports on employees' job performance. Other workers with similar skills and expertise in interpersonal relations include bookkeeping, accounting, and auditing clerks; communications equipment operators; customer service representatives; data entry and information processing workers; order clerks; receptionists and information clerks; secretaries and administrative assistants; stock clerks and order fillers; and tellers.

Sources of Additional Information

For information about human resources careers, contact:

➤ Society for Human Resource Management, 1800 Duke St., Alexandria, VA 22314. Internet: **http://www.shrm.org**

Interviewers

(O*NET 43-4061.00, 43-4111.00, 43-4131.00)

Significant Points

- A high school diploma or its equivalent is the most common educational requirement.
- Familiarity with computers and strong interpersonal skills are very important

Nature of the Work

Interviewers obtain information from individuals and business representatives who are opening bank accounts, trying to obtain loans, seeking admission to medical facilities, participating in consumer surveys, applying to receive aid from government programs, or providing data for various other purposes. By mail, by telephone, or in person, these workers solicit and verify information, create files, and perform a number of other related tasks.

The specific duties and job titles of *interviewers* depend upon the type of employer. In doctors' offices and other health care facilities, for example, interviewing clerks also are known as *admitting interviewers* or *patient representatives*. These workers obtain all preliminary information required for a patient's record or for his or her admission to a hospital, such as the patient's name, address, age, medical history, present medications,

previous hospitalizations, religion, people to notify in case of emergency, attending physician, and party responsible for payment. In some cases, interviewing clerks may be required to verify that an individual is eligible for health benefits or to work out financing options for those who might need them.

Other duties of interviewers in health care include assigning patients to rooms and summoning escorts to take patients to their rooms; sometimes, interviewers may escort patients themselves. Using the facility's computer system, interviewers schedule laboratory work, x-rays, and surgeries; prepare admission and discharge records; and route these medical records to appropriate departments. They also may bill patients, receive payments, and answer the telephone. In an outpatient or office setting, interviewers schedule appointments, keep track of cancellations, and provide general information about care. In addition, the role of the admissions staff, particularly in hospitals, is expanding to include a wide range of patient services, from assisting patients with financial and medical questions to helping family members find hotel rooms.

Interviewing clerks who conduct market research surveys and polls for research firms have somewhat different responsibilities. These interviewers ask a series of prepared questions, record the responses, and forward the results to management. They may ask individuals questions about their occupation and earnings, political preferences, buying habits, satisfaction with certain goods or services sold to them, or other aspects of their lives. Although most interviews are conducted over the telephone, some are conducted in focus groups or by randomly polling people in a public place. More recently, the Internet is being used to elicit people's opinions. Almost all interviewers use computers or similar devices to enter the responses to questions.

Eligibility interviewers, government programs, determine the eligibility of individuals applying to receive government assistance, such as welfare, unemployment benefits, Social Security benefits, and public housing. These interviewers gather the relevant personal and financial information about an applicant and, on the basis of the rules and regulations of the particular government program, grant, modify, deny, or terminate an individual's eligibility for the program. They also help to detect fraud committed by people who try to obtain benefits that they are not eligible to receive.

Loan interviewers and clerks review individuals' credit history and obtain the information needed to determine the creditworthiness of applicants for loans and credit cards. These workers spend much of their day on the telephone, obtaining information from credit bureaus, employers, banks, credit institutions, and other sources to determine an applicant's credit history and ability to pay back a loan or charge.

Loan interviewers interview potential borrowers; help them fill out applications for loans; investigate the applicant's background and references; verify the information on the application; and forward any findings, reports, or documents to the company's appraisal department. Finally, interviewers inform the applicant as to whether the loan has been accepted or denied.

Loan clerks, also called *loan processing clerks*, *loan closers, or loan service clerks,* assemble documents pertaining to a loan, process the paperwork associated with the loan, and ensure that all information is complete and verified. Mortgage loans are the primary type of loan handled by loan clerks, who also may have to order appraisals of the property, set up escrow accounts, and secure any additional information required to transfer the property.

Interviewers may ask questions over the phone or face-to-face.

The specific duties of loan clerks vary by specialty. Loan closers, for example, complete the loan process by gathering the proper documents for signature at the closing, including deeds of trust, property insurance papers, and title commitments. They set the time and place for the closing, make sure that all parties are present, and ensure that all conditions for settlement have been met. After the settlement, the loan closer records all of the documents involved and submits the final package to the owner of the loan. Loan service clerks maintain the payment records on a loan once it is issued. These clerical workers process the paperwork for payment of fees to insurance companies and tax authorities, and also may record changes in clients' addresses and ownership of a loan. When necessary, they answer calls from customers with routine inquiries.

Work environment. Working conditions vary for different types of interviewers, but most of these workers work in areas that are clean, well lit, and relatively quiet. Most of these workers work a standard 35 to 40 hour week, but evening and weekend work may be required in some establishments. Some interviewers may conduct surveys on the street or in shopping malls, or they may go door to door.

Training, Other Qualifications, and Advancement

There are minimal formal educational requirements for interviewers, and most new employees receive on-the-job training. Employers seek applicants with strong interpersonal skills, including a pleasant personality, clear voice, and the ability to communicate with others.

Education and training. Most employers prefer applicants with a high school diploma or its equivalent or a mix of education and related experience.

New employees generally train on the job, working under the close supervision of more experienced employees, although some firms offer formal training. Some loan interviewers also take courses about credit that are offered by banking and credit

associations, public and private vocational schools, and colleges and universities.

Other qualifications. Because interviewers deal with the public, they must have a pleasant personality, clear speaking voice, and professional appearance. Familiarity with computers and strong interpersonal skills are very important. Fluency in a foreign language also can be beneficial.

Advancement. Experienced interviewers may advance to positions with added responsibilities or supervisory duties. Many organizations fill open supervisory positions by promoting qualified individuals from within the company. Interviewers who obtain additional skills or training will have the best opportunities. For some managerial positions, a college degree may be required.

Employment

Interviewers held about 589,000 jobs in 2006. Approximately 221,000 were interviewers, except eligibility and loan; 256,000 were loan interviewers and clerks; and 112,000 were eligibility interviewers, government programs. About half of all interviewers, except eligibility and loan, worked in health care and social assistance industries, and about 23 percent of these interviewers worked part time. Most loan interviewers and clerks worked in financial institutions. About 7 out of every 10 eligibility interviewers for government programs, worked in State and local government.

Job Outlook

Slower than average growth is expected for interviewers during the projection period, but levels of employment change vary significantly with occupational specialty. Prospects will be best for applicants with a broad range of job skills, including good customer service, math, and telephone skills.

Employment change. Employment of interviewers is expected to grow by 4 percent from 2006 to 2016, which is slower than the average for all occupations. However, the projected change in employment varies by specialty.

The number of interviewers, except eligibility and loan, is projected to grow about as fast as average, with the most growth in the health care and social assistance sector. This sector will hire more admissions interviewers as health care facilities consolidate staff and expand the role of the admissions staff and as an aging and growing population requires more visits to health care practitioners. However increases in the use of online surveys and questionnaires, which are often cheaper than other data collection methods, should reduce the demand for interviewers who conduct market research interviews over the phone relative to other jobs involved in marketing.

Employment of eligibility interviewers for government programs is projected to grow slower than the average for all occupations. The increase in the number of retiring baby boomers becoming eligible for Social Security and other government entitlement programs will be the main cause of growth in this occupation. Automation should have an effect on some eligibility interviewers because, as with credit and loan ratings, eligibility for government aid programs can be determined instantaneously by entering information into a computer.

Little or no change in employment is projected for loan interviewers and clerks due to advances in technology that are making these workers more productive. Despite a projected increase in the number of applications for loans, automation will increase productivity so that fewer workers will be required to process, check, and authorize applications than in the past. The effects of automation on employment will be moderated, however, by the many interpersonal aspects of the job. Mortgage loans, for example, require loan processors to personally verify financial data on the application, and loan closers are needed to assemble documents and prepare them for settlement.

Moreover, employment will be adversely affected by changes in the financial services industry. For example, significant consolidation has occurred among mortgage loan servicing companies. As a result, fewer mortgage banking companies are involved in servicing loans, making the function more efficient and reducing the need for loan service clerks.

Job prospects. Some job openings will come from employment growth, but most job openings should arise from the need to replace the numerous interviewers who leave the occupation each year. Prospects for filling these openings will be best for applicants with a broad range of job skills, including good customer service, math, and telephone skills. In addition to openings for full-time jobs, opportunities also should be available for part-time and temporary jobs.

The job outlook for loan interviewers and clerks is sensitive to overall economic activity. A downturn in the economy or a rise in interest rates usually leads to a decline in the demand for loans, particularly mortgage loans and can result in layoffs. Even in slow economic times, however, job openings will arise from the need to replace workers who leave the occupation for various reasons.

The job outlook for eligibility interviewers also is sensitive to overall economic activity; a severe slowdown in the economy will cause more people to apply for government aid programs, increasing demand for eligibility interviewers.

Earnings

Median hourly wage and salary earnings of eligibility interviewers, government programs, in May 2006 were $18.05. The

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Interviewers	—	589,000	612,000	22,000	4
Eligibility interviewers, government programs	43-4061	112,000	116,000	3,500	3
Interviewers, except eligibility and loan	43-4111	221,000	242,000	21,000	10
Loan interviewers and clerks	43-4131	256,000	254,000	-2,300	-1

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

middle 50 percent earned between $14.40 and $21.92. The lowest 10 percent earned less than $12.18, and the highest 10 percent earned more than $24.30. Median hourly earnings in the industries employing the largest number eligibility interviewers, government programs were:

Federal Government	$21.20
Local government	17.52
State government	16.35

Median hourly wage and salary earnings of loan interviewers and clerks in May 2006 were $14.89. The middle 50 percent earned between $12.07 and $18.69. The lowest 10 percent earned less than $9.88, and the highest 10 percent earned more than $22.66. Median hourly earnings of loan interviewers and clerks in depository credit intermediation was $15.22, while median hourly earnings in nondepository credit intermediation was $14.35.

Median hourly wage and salary earnings of interviewers, except eligibility and loan, in May 2006 were $12.64. The middle 50 percent earned between $10.12 and $15.31. The lowest 10 percent earned less than $8.35, and the highest 10 percent earned more than $18.57. Median hourly earnings in the industries employing the largest number of interviewers, except eligibility and loan, were:

State government	$15.27
Colleges, universities, and professional schools	15.05
General medical and surgical hospitals	12.69
Offices of physicians	12.55
Other professional, scientific, and technical services	10.10

Related Occupations

Interviewers obtain information from individuals. Other workers who perform similar duties include procurement clerks, customer service representatives, and bill and account collectors.

Sources of Additional Information

State employment service offices can provide information about employment opportunities for interviewers.

For specific information on a career as a loan processor or loan closer, contact:

➤ Mortgage Bankers Association, 1919 Pennsylvania Ave. NW., Washington, DC 20006.
Internet: **http://www.mortgagebankers.org**

Library Assistants, Clerical

(O*NET 43-4121.00)

Significant Points

- Flexible schedules and ample opportunities for part-time work characterize this occupation.
- Library assistants train on the job; most libraries use electronic cataloging systems so computers skills are essential.
- Job prospects should be good.

Nature of the Work

Library assistants, clerical—sometimes referred to as library media assistants, library aides, or circulation assistants—help librarians and library technicians organize library resources and make them available to users. (Librarians and library technicians are discussed elsewhere in the *Handbook.*)

At the circulation desk, library assistants lend and collect books, periodicals, videotapes, and other materials. When an item is borrowed, assistants scan it and the patron's library card to record the transaction in the library database; they then stamp the due date on the item or print a receipt with the due date. When an item is returned, assistants inspect it for damage and scan it to record its return. Electronic circulation systems automatically generate notices reminding patrons that their materials are overdue, but library assistants may review the record for accuracy before sending out the notice. Library assistants also register new patrons and issue them library cards. They answer patrons' questions or refer them to a librarian.

Throughout the library, assistants sort returned books, periodicals, and other items and put them on their designated shelves, in the appropriate files, or in storage areas. Before reshelving returned materials, they look for any damage and try to make repairs. For example, they may use tape or paste to repair torn pages or book covers and use other specialized processes to repair more valuable materials.

Assistants also locate materials being lent to a patron or another library. Because nearly all library catalogs are computerized, library assistants must be familiar with computers. They sometimes help patrons with computer searches.

Some library assistants specialize in helping patrons who have vision problems. Sometimes referred to as *braille-and-talking-books clerks*, these assistants review the borrower's list of desired reading materials, and locate those materials or close substitutes from the library collection of large-type or braille volumes and books on tape. Then, they give or mail the materials to the borrower.

Work environment. Library assistants who prepare library materials may sit at desks or computer terminals for long periods and can develop headaches or eyestrain. Some duties can be repetitive and boring, such as shelving new or returned materials. Others can be rewarding, such as assisting patrons who are performing computer searches with the use of local

Library assistants reshelve books after they are returned.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Library assistants, clerical	43-4121	116,000	125,000	9,100	8

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

and regional library networks. Library assistants may lift and carry books, climb ladders to reach high stacks, and bend low to shelve books on bottom shelves.

Library assistants in school libraries work regular school hours. Those in public libraries and college and university libraries also work weekends, evenings, and some holidays. About 60 percent of library assistants work part time, making the job appealing to retirees, students, and others interested in flexible schedules.

Training, Other Qualifications, and Advancement

Library assistants receive most of their training on the job. No formal education is required, although familiarity with computers is helpful.

Education and training. Training requirements for library assistants are generally minimal; most libraries prefer to hire workers with a high school diploma or GED, although libraries also hire high school students for these positions. No formal postsecondary training is expected. Some employers hire individuals with experience in other clerical jobs; others train inexperienced workers on the job.

Other qualifications. Given the extensive use of electronic resources in libraries, computer skills are needed for most jobs; knowledge of databases and other library automation systems is especially useful. Library assistants should be able to pay close attention to detail, as the proper shelving or storage of materials is essential.

Advancement. Library assistants usually advance by assuming added responsibilities. Many begin by performing simple jobs such as shelving books or adding new books and periodicals to the database when they arrive. After gaining experience, they may move into positions that allow them to interact with patrons, such as staffing the circulation desk. Experienced assistants may be able to advance to library technician positions, which involve more responsibility. Eventually they may advance to supervise a public service or technical service area. Advancement opportunities are greater in large libraries.

Employment

Library assistants held about 116,000 jobs in 2006. More than half of these workers were employed by local governments in public libraries; most of the remaining employees worked in school, college, and university libraries. Many of these jobs are part time.

Job Outlook

Employment of library assistants is expected to grow about as fast as average. Prospects should be good because many workers leave these jobs and need to be replaced.

Employment change. The number of library assistants is expected to increase by 8 percent between 2006 and 2016, about as fast as the average for all occupations. Efforts to contain costs in local governments and academic institutions of all types will slow overall growth in library services, but may result in the hiring of more library support staff, who are paid less than librarians and who take on more responsibility. Because library assistants work for public institutions, they are not directly affected by the ups and downs of the business cycle, but they may be affected by changes in the level of government funding for libraries.

Job prospects. Each year, many people leave this relatively low-paying occupation for other occupations that offer higher pay or full-time work. This creates good job opportunities for those who want to become library assistants.

Earnings

Median hourly earnings of library assistants were $10.40 in May 2006. The middle 50 percent earned between $8.07 and $13.45. The lowest 10 percent earned less than $6.77, and the highest 10 percent earned more than $16.73.

Related Occupations

Library assistants, store materials and help customers retrieve it. File clerks have similar duties. Library assistants also work closely with library technicians in providing library services to patrons.

Sources of Additional Information

Information about a career as a library assistant can be obtained from either of the following organizations:

➤ Council on Library/Media Technology, P.O. Box 42048, Mesa, AZ 85274-2048. Internet: **http://colt.ucr.edu**

➤ American Library Association, 50 East Huron St., Chicago, IL 60611. Internet: **http://www.ala.org/ala/education/educationcareers.htm**

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

Meter Readers, Utilities

(O*NET 43-5041.00)

Significant Points

- Meter reading is one of the fastest-declining occupations, as a result of automated meter reading (AMR) systems that allow meters to be monitored and billed from a central point.
- Most meter readers are employed by electric, gas, or water utilities or by local governments.
- Many workers begin working as meter readers and advance to lineman, power plant operator, or dispatcher jobs.

Nature of the Work

Meter readers read electric, gas, water, or steam consumption meters and record the volume used. They serve both residential and commercial consumers. The basic duty of a meter reader is to walk or drive along a route and read customers' consumption from a tracking device. Accuracy is the most important part of the job, as companies rely on readers to provide the information they need to bill their customers.

Other duties include inspecting the meters and their connections for any defects or damage, supplying repair and maintenance workers with the necessary information to fix damaged meters. They keep track of customers' average usage and record reasons for any extreme fluctuations in volume. Meter readers are constantly aware of any abnormal behavior or consumption that might indicate an unauthorized connection. They may turn on service for new occupants and turn off service for questionable behavior or nonpayment of charges.

Work environment. Meter readers work outdoors in all types of weather as they travel through communities and neighborhoods taking readings. Those traveling on foot may have to walk several miles a day. Dogs can pose a difficulty for meter readers, although they are generally given precautionary devices to help them avoid encounters. Meter readers generally work 40-hour weeks, although part-time positions are available. The typical workweek is Monday through Friday.

Training, Other Qualifications, and Advancement

Meter readers are entry-level utility employees. Many people start utility careers in this occupation with the goal of advancing to more responsible positions.

Education and training. Most employers prefer to hire workers who have a high school diploma. Until they demonstrate an ability to work alone, inexperienced meter readers usually work with more experienced ones. They learn how to read meters and determine consumption rates on the job and they must also learn the route that they need to travel.

Other qualifications. No experience is required for this position, but employers prefer to hire those familiar with computers and other electronic office and business equipment. Because routes may change, it is important for readers to be able to understand maps. Typing, recordkeeping and other clerical skills are also useful.

Advancement. Meter reading is generally considered an entry-level occupation. Many people start working as meter readers and move up to higher positions in the metering department. Others move on to other positions within the utility, such as dispatcher or distributor. They may also become apprentices to more skilled positions, such as lineman or electrician.

Employment

Meter readers held about 47,000 jobs in 2006. About 42 percent were employed by electric, gas, and water utilities. Most of the rest were employed in local government, reading water meters or meters for other government-owned utilities.

Most modern meters are electronic and can be read using a remote device.

Job Outlook

Despite declining employment, some job openings are expected during the 2006-16 decade.

Employment change. Employment of meter readers is expected to decline by 10 percent through 2016. New AMR systems allow meters to be monitored and billed from a central point, reducing the need for meter readers.

Job prospects. It will be many years before AMR systems can be implemented in all locations, so there still will be some openings for meter readers, mainly to replace workers leaving the occupation. The utilities industry is expecting a large number of retirements from its aging workforce, which should create many job opportunities.

Earnings

Median annual earnings of utility meter readers in May 2006 were $30,330. The middle 50 percent earned between $23,580 and $39,320. The lowest 10 percent earned less than $18,970, and the highest 10 percent earned more than $49,150. Employee benefits vary greatly between companies and may not be offered for part-time workers. If uniforms are required, employers generally provide them or offer an allowance to purchase them.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Meter readers, utilities	43-5041	47,000	42,000	-4,800	-10

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook.*

Related Occupations

Other workers responsible for the distribution and control of utilities include line installers and repairers, and power plant operators, distributors, and dispatchers.

Sources of Additional Information

Information about job opportunities may be obtained from local utilities and offices of State employment services, and from:

➤ International Brotherhood of Electrical Workers, 1125 15th St.NW., Washington, DC 20005.
Internet: **http://www.ibew.org**

Office and Administrative Support Worker Supervisors and Managers

(O*NET 43-1011.00)

Significant Points

- Most jobs are filled by promoting office or administrative support workers from within the organization.
- Office automation will cause employment in some office and administrative support occupations to grow slowly or even decline, resulting in slower-than-average growth among supervisors and managers.
- Applicants are likely to encounter keen competition because their numbers should greatly exceed the number of job openings.

Nature of the Work

All organizations need timely and effective office and administrative support to operate efficiently. Office and administrative support supervisors and managers coordinate this support. These workers are employed in virtually every sector of the economy, working in positions as varied as teller supervisor, customer services manager, or shipping and receiving supervisor.

Although specific functions of office and administrative support supervisors and managers vary significantly, they share many common duties. For example, supervisors perform administrative tasks to ensure that their staffs can work efficiently. Equipment and machinery used in their departments must be in good working order. If the computer system goes down or a fax machine malfunctions, the supervisors must try to correct the problem or alert repair personnel. They also request new equipment or supplies for their department when necessary.

Planning work and supervising staff are key functions of this job. To do these effectively, the supervisor must know the strengths and weaknesses of each member of the staff, as well as the results required and time allotted to each job. Supervisors must make allowances for unexpected staff absences and other disruptions by adjusting assignments or performing the work themselves if the situation requires it.

After allocating work assignments and issuing deadlines, office and administrative support supervisors and managers oversee the work to ensure that it is proceeding on schedule and meeting established quality standards. This may involve reviewing each person's work on a computer—as in the case of accounting clerks—or listening to how a worker deals with customers—as in the case of customer services representatives. When supervising long-term projects, the supervisor may meet regularly with staff members to discuss their progress.

Office and administrative support supervisors and managers also evaluate each worker's performance. If a worker has done a good job, the supervisor indicates that in the employee's personnel file and may recommend a promotion or other award. Alternatively, if a worker is performing inadequately, the supervisor discusses the problem with the employee to determine the cause and helps the worker to improve his or her performance. This might require 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.

Office and administrative support supervisors and managers usually interview and evaluate prospective employees. When new workers arrive on the job, supervisors greet them and provide orientation to acquaint them with their organization and its operating routines. Some supervisors may be actively involved in recruiting new workers—for example, by making presentations at high schools and business colleges. They also may serve as the primary liaisons between their offices and the general public through direct contact and by preparing promotional information.

Supervisors help train new employees in organization and office procedures. They may teach new employees how to use the telephone system and operate office equipment. Because most administrative support work is computerized, they also must teach new employees to use the organization's computer system. When new office equipment or updated computer software is introduced, supervisors train experienced employees to use it efficiently or, if this is not possible, arrange for their employees to receive special outside training.

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

Office and administrative support supervisors and managers also may have 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 also may meet with union representatives to discuss work problems or grievances.

Work environment. Office and administrative support supervisors and managers are employed in a wide variety of work settings, but most work in clean and well-lit offices that usually are comfortable.

Most office and administrative support supervisors and managers work a standard 40-hour week. However, some organiza-

Office and administrative support worker supervisors and managers must ensure that offices operate efficiently.

tions operate around the clock, so some supervisors may have to work nights, weekends, and holidays. Sometimes, supervisors rotate among the three 8-hour shifts in a workday; in other cases, shifts are assigned on the basis of seniority.

Training, Other Qualifications, and Advancement

Most firms fill office and administrative support supervisory and managerial positions by promoting office or administrative support workers from within their organizations. To become eligible for promotion to a supervisory position, administrative support workers must prove they are capable of handling additional responsibilities.

Education and training. Many employers require office and administrative support supervisors and managers to have postsecondary training—and in some cases, an associate or even a bachelor's degree. Good working knowledge of the organization's computer system is also an advantage. In addition, supervisors must pay close attention to detail in order to identify and correct errors made by the staff they oversee.

Most office and administrative support worker supervisors and managers are promoted from within the company. Several years of on-the-job experience are usually the best preparation to become a supervisor or manager. After acquiring some experience, the employee should have a thorough knowledge of other personnel and company operations.

Administrative support workers with potential supervisory abilities may be given occasional supervisory assignments. To prepare for full-time supervisory duties, workers may attend in-house training or take courses in time management, project management, or interpersonal relations.

Other qualifications. When evaluating candidates, supervisors look for strong teamwork, problem-solving, leadership, and communication skills, as well as determination, loyalty, poise, and confidence. They also look for more specific supervisory attributes, such as the ability to organize and coordinate work efficiently, to set priorities, and to 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.

Advancement. For office and administrative supervisors and managers promoted from within, advancement opportunities may be limited without a postsecondary degree, depending on the company. The knowledge required to move into more business and financial related occupations may not necessarily be learned through working in an office or administrative occupation.

In some managerial positions, office and administrative support supervisor positions are filled with people from outside the organization. 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 organization before moving on to a higher level position.

Employment

Office and administrative support supervisors and managers held 1.4 million jobs in 2006. Although jobs for office and administrative support supervisors and managers are found in practically every industry, the largest number are found in organizations with a large administrative support workforce, such as banks, wholesalers, government agencies, retail establishments, business service firms, health care facilities, schools, and insurance companies. Because of most organizations' need for continuity of supervision, few office and administrative support supervisors and managers work on a temporary or part-time basis.

Job Outlook

Employment of office and administrative support supervisors and managers is expected to grow more slowly than the average for all occupations through the year 2016. Keen competition is expected for prospective job applicants.

Employment change. Employment is expected to grow by 6 percent during the 2006-16 period, which is more slowly than the average for all occupations. Employment of office and administrative support supervisors and managers is determined largely by the demand for administrative support workers. New technology should increase office and administrative support workers' productivity and allow a wider variety of tasks to be performed by people in professional positions. These trends will cause employment in some administrative support occupations to grow slowly or even decline. As a result, supervisors will direct smaller permanent staffs—supplemented by increased use

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
First-line supervisors/managers of office and administrative support workers	43-1011	1,418,000	1,500,000	82,000	6

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

of temporary administrative support staff—and perform more professional tasks. Office and administrative support managers will coordinate the increasing amount of administrative work and make sure that the technology is applied and running properly. However, organizational restructuring should continue to reduce employment in some managerial positions, distributing more responsibility to office and administrative support supervisors.

Job prospects. Like those seeking other supervisory and managerial occupations, applicants for jobs as office and administrative support worker supervisors and managers are likely to encounter keen competition because the number of applicants should greatly exceed the number of job openings. Besides the job openings arising from growth, a large number of openings will stem from the need to replace workers who transfer to other occupations or leave this large occupation for other reasons.

Earnings

Median annual earnings of office and administrative support supervisors and managers were $43,510 in May 2006; the middle 50 percent earned between $33,730 and $56,130. The lowest paid 10 percent earned less than $26,530, while the highest paid 10 percent earned more than $71,340. In May 2006, median annual earnings in the industries employing the largest numbers of office and administrative support supervisors and managers were:

Industry	Earnings
Management of companies and enterprises	$49,160
Local government	45,520
General medical and surgical hospitals	44,250
Offices of physicians	42,110
Depository credit intermediation	40,900

In addition to typical benefits, some office and administrative support supervisors and managers, particularly in the private sector, may receive additional compensation in the form of bonuses and stock options.

Related Occupations

Office and administrative support supervisors and managers must understand and sometimes perform the work of those whom they oversee, including bookkeeping, accounting, and auditing clerks; secretaries and administrative assistants; communications equipment operators; customer service representatives; data entry and information processing workers; general office clerks; receptionists and information clerks; stock clerks and order fillers; and order clerks. Their supervisory and administrative duties are similar to those of other supervisors and managers, such as education administrators and administrative services managers.

Sources of Additional Information

For information related to a wide variety of management occupations, including educational programs and certified designations, contact:

- International Association of Administrative Professionals, 10502 NW. Ambassador Dr., P.O. Box 20404, Kansas City, MO 64195-0404.
Internet: **http://www.iaap-hq.org**
- American Management Association, 1601 Broadway, New York, NY 10019.
Internet: **http://www.amanet.org**
- Association of Professional Office Managers, 1 Research Court, Suite 450, Rockville, MD 20850.
Internet: **http://www.apomonline.org**

Office Clerks, General

(O*NET 43-9061.00)

Significant Points

- Employment growth and high replacement needs in this large occupation will result in numerous job openings.
- Prospects should be best for those with knowledge of basic computer applications and office machinery as well as good communication skills.
- Part-time and temporary positions are common.

Nature of the Work

Rather than performing a single specialized task, general office clerks have responsibilities that often change daily with the needs of the specific job and the employer. Some clerks spend their days filing or keyboarding. Others enter data at a computer terminal. They also operate photocopiers, fax machines, and other office equipment; prepare mailings; proofread documents; and answer telephones and deliver messages.

The specific duties assigned to a clerk vary significantly, depending on the type of office in which he or she works. An office clerk in a doctor's office, for example, would not perform the same tasks that a clerk in a large financial institution or in the office of an auto parts wholesaler would. Although all clerks may sort checks, keep payroll records, take inventory, and access information, they also perform duties unique to their employer, such as organizing medications in a doctor's office, preparing materials for presentations in a corporate office, or filling orders received by fax machine for a wholesaler.

Clerks' duties also vary by level of experience. Whereas inexperienced employees make photocopies, stuff envelopes, or

General office clerks may send faxes and make photocopies as part of their administrative tasks.

record inquiries, experienced clerks usually are given additional responsibilities. For example, they may maintain financial or other records, set up spreadsheets, verify statistical reports for accuracy and completeness, handle and adjust customer complaints, work with vendors, make travel arrangements, take inventory of equipment and supplies, answer questions on departmental services and functions, or help prepare invoices or budgetary requests. Senior office clerks may be expected to monitor and direct the work of lower level clerks.

Work environment. For the most part, general office clerks work in comfortable office settings. Those on full-time schedules usually work a standard 40-hour week; however, some work shifts or overtime during busy periods. About 26 percent of clerks work part time in 2006. Many clerks also work in temporary positions.

Training, Other Qualifications, and Advancement

Office clerks often need to know how to use word processing and other business software and office equipment. Experience working in an office is helpful, but office clerks also learn skills on the job.

Education and training. Although most office clerk jobs are entry-level positions, employers may prefer or require previous office or business experience. Employers usually require a high school diploma or equivalent, and some require basic computer skills, including familiarity with word processing software, as well as other general office skills.

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

Other qualifications. Because general office clerks usually work with other office staff, they should be cooperative and able to work as part of a team. Employers prefer individuals who can perform a variety of tasks and satisfy the needs of the many departments within a company. In addition, applicants should have good communication skills, be detail oriented, and adaptable.

Advancement. General office clerks who exhibit strong communication, interpersonal, and analytical skills may be promoted to supervisory positions. Others may move into different, more senior administrative jobs, such as receptionist, secretary, or administrative assistant. After gaining some work experience or specialized skills, many workers transfer to jobs with higher pay or greater advancement potential. Advancement to professional occupations within an organization normally requires additional formal education, such as a college degree.

Employment

General office clerks held about 3.2 million jobs in 2006. Most are employed in relatively small businesses. Although they work in every sector of the economy, about 43 percent worked in local government, health care and social assistance, administrative and support services, finance and insurance, or professional, scientific, and technical services industries.

Job Outlook

Employment growth and high replacement needs in this large occupation is expected to result in numerous job openings for general office clerks.

Employment change. Employment of general office clerks is expected to grow 13 percent between 2006 and 2016, which is about as fast as the average for all occupations. The employment outlook for these workers will continue to be affected by the increasing use of technology, expanding office automation, and the consolidation of administrative support tasks. These factors have led to a consolidation of administrative support staffs and a diversification of job responsibilities. However, this consolidation will increase the demand for general office clerks

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Office clerks, general	43-9061	3,200,000	3,604,000	404,000	13

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook.*

because they perform a variety of administrative support tasks, as opposed to clerks with very specific functions. It will become increasingly common within businesses, especially those smaller in size, to find only general office clerks in charge of all administrative support work.

Job prospects. Many job openings for general office clerks are expected to be for full-time jobs; there will also be a demand for part-time and temporary positions. Prospects should be best for those who have good writing and communication skills and knowledge of basic computer applications and office machinery—such as fax machines, telephone systems, and scanners. As general administrative support duties continue to be consolidated, employers will increasingly seek well-rounded individuals with highly developed communication skills and the ability to perform multiple tasks.

Job opportunities may vary from year to year because the strength of the economy affects demand for general office clerks. Companies tend to employ more workers when the economy is strong. Industries least likely to be affected by economic fluctuations tend to be the most stable places for employment.

Earnings

Median annual earnings of general office clerks were $23,710 in May 2006; the middle 50 percent earned between $18,640 and $30,240 annually. The lowest 10 percent earned less than $14,850, and the highest 10 percent earned more than $37,600. Median annual salaries in the industries employing the largest numbers of general office clerks in May 2006 were:

Industry	Earnings
Local government	$26,590
General medical and surgical hospitals	26,050
Elementary and secondary schools	24,230
Colleges, universities, and professional schools	23,980
Employment services	21,890

Related Occupations

The duties of general office clerks can include a combination of bookkeeping, keyboarding, office machine operation, and filing. Other office and administrative support workers who perform similar duties include bookkeeping, accounting, and auditing clerks; communications equipment operators; customer service representatives; data entry and information processing workers; order clerks; receptionists and information clerks; secretaries and administrative assistants; stock clerks and order fillers; and tellers. Nonclerical entry-level workers include cashiers; counter and rental clerks; and food and beverage serving and related workers.

Sources of Additional Information

State employment service offices and agencies can provide information about job openings for general office clerks.

For information related to administrative occupations, including educational programs and certified designations, contact:

➤ International Association of Administrative Professionals, 10502 NW. Ambassador Dr., P.O. Box 20404, Kansas City, MO 64195-0404. Internet: **http://www.iaap-hq.org**

➤ American Management Association, 1601 Broadway, New York, NY 10019. Internet: **http://www.amanet.org**

Order Clerks

(O*NET 43-4151.00)

Significant Points

- Employment is expected to decline through 2016 due to growth in online retailing and in business-to-business electronic commerce, and because of the increasing use of automated systems that make placing orders easy and convenient.
- A high school diploma or GED is the most common educational requirement.

Nature of the Work

Order clerks receive and process orders for a variety of goods or services, such as spare parts, consumer appliances, gas and electric power connections, film rentals, and articles of clothing. They sometimes are called order-entry clerks, order processors, or order takers.

Orders for materials, merchandise, or services can come from inside or from outside of an organization. Inside order clerks receive orders from other workers employed by the same company or from salespersons in the field. In large companies with many worksites, such as automobile manufacturers, clerks order parts and equipment from the company's warehouses.

Many other order clerks, called outside order clerks, receive orders from outside companies or directly from consumers. Order clerks in wholesale businesses, for instance, receive orders from retail establishments for merchandise that the retailer, in turn, sells to the public. An increasing number of order clerks work for catalog companies and online retailers, receiving orders from individual customers by telephone, fax, regular mail, or e-mail.

Computers provide order clerks with ready access to information such as stock numbers, prices, and inventory. The successful filling of an order frequently depends on having the right products in stock and being able to determine which products are most appropriate for the customer's needs. Some order clerks—especially those in industrial settings—must be able to

Order clerks work in areas that are clean, well lit, and relatively quiet.

give price estimates for entire jobs, not just single parts. Others must be able to take special orders, give expected arrival dates, prepare contracts, and handle complaints.

Many order clerks receive orders directly by telephone, recording the required information as the customer places the order. However, a rapidly increasing number of orders now are received through computer systems, the Internet, faxes, and e-mail. In some cases, these orders are sent directly from the customer's terminal to the order clerk's terminal. Orders received by regular mail are sometimes scanned into a database that is instantly accessible to clerks.

Clerks review orders for completeness and clarity. They may fill in missing information or contact the customer for the information. Clerks also contact customers if the customers need additional information, such as prices or shipping dates, or if delays in filling the order are anticipated. For orders received by regular mail, clerks remove checks or money orders, sort them, and send them for processing.

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—which 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 may adjust or verify inventory records. Clerks also may notify other departments when inventories are low or when filling certain orders would deplete supplies.

Some order clerks must 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 whether the request is routine or an emergency and then take appropriate action.

Work environment. Most order clerks work in areas that are clean, well lit, and relatively quiet. These workers sit for long periods of time in front of computer terminals, which may cause eyestrain and headaches.

Order clerks usually work a standard 40-hour workweek. Clerks in retail establishments typically work overtime during peak holiday seasons, when sales volume is high. Some firms may have shifts round-the-clock to accommodate customers' time zones.

Training, Other Qualifications, and Advancement

Most order clerks are trained on the job. Employers prefer workers who are computer literate and proficient in word-processing and spreadsheet software.

Education and training. Employers prefer applicants with a high school diploma or GED or a mix of education and related experience. Most order clerks are trained on the job under the close supervision of more experienced employees.

Other qualifications. It is helpful for clerks to be comfortable using computers and to have a working knowledge of word-processing and spreadsheet software. Proficiency with computer software is increasingly important because most orders are being filled and filed electronically.

Advancement. By taking on more duties, ambitious order clerks can receive higher pay or become eligible for advancement opportunities. Some use their experience as an order clerk to move into sales positions.

Employment

Order clerks held about 271,000 jobs in 2006. Over half of all order clerks were employed in wholesale and retail trade establishments, and another 15 percent were employed in manufacturing firms. Approximately 1 out every 10 order clerks worked in the electronic shopping and mail order houses sector of retail trade. Other order clerk jobs were in industries such as information, warehousing and storage, couriers, and business support services.

Job Outlook

Overall employment of order clerks is expected to decline rapidly through the year 2016 due to improvements in technology and office automation. However, numerous job openings are expected because some of the clerks who leave the occupation will need to be replaced.

Employment change. Employment of order clerks is expected to decline rapidly by 24 percent from 2006 to 2016 as improvements in technology and office automation continue to increase worker productivity.

Growth in electronic commerce, and the use of automated systems that make placing orders easy and convenient, will decrease demand for order clerks. The spread of electronic data interchange, which enables computers to communicate directly with each other, allows orders within establishments to be placed with little human interaction. In addition, internal systems allowing a firm's employees to place orders directly are becoming increasingly common. Outside orders placed over the Internet often are entered directly into the computer by the customer; the order clerk is not involved in placing the order. Some companies also use automated phone menus to receive orders. Others use answering machines. Developments in voice recognition technology may further reduce the demand for order clerks.

Furthermore, increased automation will allow current order clerks to be more productive, with each clerk able to handle an increasingly higher volume of orders. Sophisticated inventory control and automatic billing systems permit companies to track inventory and accounts with much less help from order clerks than in the past.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Order clerks...	43-4151	271,000	205,000	-66,000	-24

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

Job prospects. While overall employment of order clerks is expected to decline through the year 2016, numerous openings will occur each year to replace order clerks who transfer to other occupations or leave the labor force. Many of these openings will be for seasonal work, especially in catalog companies or online retailers catering to holiday gift buyers.

Earnings

Median hourly earnings of order clerks in May 2006 were $12.66. The middle 50 percent earned between $9.91 and $16.22. The lowest 10 percent earned less than $8.18, and the highest 10 percent earned more than $20.69. Median hourly earnings in electronic shopping and mail-order houses were $10.50.

Related Occupations

Order clerks receive and process orders. Other workers who perform similar duties include stock clerks and order fillers and hotel, motel, and resort desk clerks.

Sources of Additional Information

State employment service offices and agencies can provide information about job openings for order clerks.

Payroll and Timekeeping Clerks

(O*NET 43-3051.00)

Significant Points

- Payroll and timekeeping clerks are found in every industry.
- Workers train on the job; employers prefer high school graduates who have computer skills.
- Those who have completed a certification program will have an advantage in the job market.

Nature of the Work

Payroll and timekeeping clerks perform a vital function: ensuring that employees are paid on time and that their paychecks are accurate. If inaccuracies occur, such as monetary errors or incorrect amounts of vacation time, these clerks research and correct the records. In addition, they may perform other clerical tasks. Automated timekeeping systems that allow employees to enter the number of hours they have worked directly into a computer have eliminated much of the data entry and review by timekeepers and have elevated the job of payroll clerks, allowing them to perform more complex tasks. In offices that have not automated this function, however, payroll and timekeeping clerks still perform many of the traditional job functions.

The fundamental task of *timekeeping clerks* is distributing and collecting timecards each pay period. These workers review employee work charts, timesheets, and timecards to ensure that information is properly recorded and that records have the signatures of authorizing officials. In companies that bill clients for the time worked by staff—law or accounting firms, for example—timekeeping clerks make sure that the hours recorded are charged to the correct job so that clients can be properly billed. These clerks also review computer reports listing timecards that cannot be processed because of errors, and they contact the employee or the employee's supervisor to resolve the problem. In addition, timekeeping clerks are responsible for informing managers and other employees about procedural changes in payroll policies.

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

Payroll clerks record changes in employees' addresses; close out files when workers retire, resign, or transfer; and advise employees on income tax withholding and other mandatory deductions. These workers also issue and record adjustments to workers' pay because of previous errors or retroactive increases. Periodically, they prepare and mail earnings and tax-withholding statements for employees' use in preparing income tax returns. Payroll clerks need to be aware of changes in tax and deduction laws, so that they can implement them.

In small offices, payroll and timekeeping duties are likely to be included in the duties of a general office clerk, a secretary, or an accounting clerk. However, large organizations employ specialized payroll and timekeeping clerks to perform these functions. In offices that have automated timekeeping systems, payroll clerks perform more analysis of the data, examining trends and working with computer systems. They also spend more time answering employees' questions and processing unique data.

Work environment. Payroll and timekeeping clerks usually work in clean, pleasant, and comfortable office settings, but they also may face pressure to meet deadlines. Clerks usually work a standard 35- to 40-hour week; however, longer hours might be necessary during busy periods.

Payroll and timekeeping clerks review work charts and timesheets to ensure that employees are paid on time.

Training, Other Qualifications, and Advancement

Payroll and timekeeping clerks train on the job. Employers prefer high school graduates who have computer skills.

Education and training. Most employers prefer applicants with a high school diploma or GED. Payroll and timekeeping clerks train on the job, gaining skills by watching and learning from other workers. New workers receive training in payroll, timekeeping, personnel issues, workplace practices, and company policies. Some also complete training programs in high schools, business schools, or community colleges.

Other qualifications. Computer skills are very desirable. In addition, payroll and timekeeping clerks must be able to interact and communicate with individuals at all levels of the organization. Clerks need poise, tactfulness, and diplomacy, and the interpersonal skills to handle sensitive and confidential situations.

Certification and advancement. Many professional organizations for payroll and timekeeping offer classes to enhance the skills of their members. Some organizations offer certification programs; completion of a certification program can show competence and can enhance advancement opportunities. For example, the American Payroll Association offers two levels of certification, the Fundamental Payroll Certification and the Certified Payroll Professional. The first is open to all individuals who wish to demonstrate basic payroll competency. The second and more advanced credential is available to those who have been employed in the practice of payroll for at least 3 years, among other requirements. Both certifications require experience and a passing score on an exam.

Employment

Payroll and timekeeping clerks held about 214,000 jobs in 2006. They can be found in every industry, but a growing number work for employment services companies as temporary employees. Many also work for accounting, tax preparation, bookkeeping, and payroll services firms, which increasingly perform the payroll function as a service to other companies. Approximately 16 percent of all payroll and timekeeping clerks worked part time in 2006.

Job Outlook

Slower-than-average job growth is expected. Those who have completed a certification program will have an advantage in the job market.

Employment change. Employment of payroll and timekeeping clerks is expected to grow 3 percent during the 2006-16 decade, slower than the average for all occupations. The increasing use of computers will limit employment growth of payroll and timekeeping clerks. For example, automated time clocks, which calculate employee hours, allow large organizations to centralize their timekeeping duties in one location. At individual sites, employee hours increasingly are tracked by computer and verified by managers. This information is compiled and sent to a central office to be processed by payroll clerks. In addition, the growing use of direct deposit will reduce the need to draft paychecks because pay is transferred automatically each pay period. Also, more organizations are allowing employees to update their payroll records electronically. In smaller organizations, payroll and timekeeping duties are being assigned to secretaries, general office clerks, or accounting clerks.

As entering and recording payroll and timekeeping information becomes more simplified, the job itself is becoming more varied and complex. For example, companies now offer a greater variety of pension, 401(k), and other investment plans to their employees. Also, the growing use of wage garnishment for child support is adding to the complexity. These developments will contribute to job growth for payroll and timekeeping clerks, who will be needed to record and monitor such information.

As firms increasingly outsource the payroll function, most job growth is expected to be in companies that specialize in payroll—including companies in the employment services industry and the accounting, tax preparation, bookkeeping, and payroll services industry. Many of these companies are data processing facilities, but accounting firms also are taking on the payroll function to supplement their accounting work.

Job prospects. In addition to job growth, numerous job openings will arise each year as payroll and timekeeping clerks leave the labor force or transfer to other occupations. Those who have completed a certification program, indicating that they can handle more complex payroll issues, will have an advantage in the job market.

Earnings

Salaries of payroll and timekeeping clerks may vary considerably. The region of the country, size of city, and type and size of establishment all influence salary levels. Also, the level of expertise required and the complexity and uniqueness of a clerk's responsibilities may affect earnings.

Median annual earnings of payroll and timekeeping clerks in May 2006 were $32,400. The middle 50 percent earned between $26,190 and $39,420. The lowest 10 percent earned less than $21,150, and the highest 10 percent earned more than $46,500. Median annual earnings in the industries employing the largest numbers of payroll and timekeeping clerks in May 2006 were:

Industry	Earnings
Management of companies and enterprises	$33,880
Accounting, tax preparation, bookkeeping, and payroll services	33,700
Elementary and secondary schools	33,600
Local government	33,490
Employment services	30,290

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Payroll and timekeeping clerks	43-3051	214,000	220,000	6,600	3

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook.*

Some employers offer educational assistance to payroll and timekeeping clerks.

Related Occupations

Payroll and timekeeping clerks perform a vital financial function—ensuring that employees are paid on time and that their paychecks are accurate. In addition, they may perform various other office and administrative support duties. Other financial clerks include bill and account collectors; billing and posting clerks and machine operators; bookkeeping, accounting, and auditing clerks; gaming cage workers; procurement clerks; and tellers.

Sources of Additional Information

For general information about payroll and timekeeping clerks, contact:

➤ American Payroll Association, 660 North Main Ave., Suite 100, Suite 660, San Antonio, TX 78205-1217.
Internet: **http://www.americanpayroll.org**

➤ WorldatWork, 14040 N. Northsight Blvd., Scottsdale, AZ 85260. Internet: **http://www.worldatwork.org**

Information on employment opportunities for payroll and timekeeping clerks is available from local offices of the State employment service.

Postal Service Workers

(O*NET 43-5051.00, 43-5052.00, 43-5053.00)

Significant Points

- Employment of Postal Service workers is expected to experience little or no change overall because of greater efficiencies in the processing and sorting of mail.
- Keen competition is expected as the number of qualified applicants usually exceeds the number of job openings.
- Qualification is based on an examination.
- Applicants customarily wait 1 to 2 years or more after passing the examination before being hired.

Nature of the Work

Each week, the U.S. Postal Service delivers billions of pieces of mail, including letters, bills, advertisements, and packages through heat, snow, or rain. To do this in an efficient and timely manner, the Postal Service employs about 615,000 individuals who process, sort, and deliver mail and packages as well as provide customer services and supplies in post offices. Most Postal Service workers are clerks, mail carriers, or mail sorters, processors, and processing machine operators. Postal clerks wait on customers at post offices, whereas mail sorters, processors, and processing machine operators sort incoming and outgoing mail at post offices and mail processing centers. Mail carriers deliver mail to urban and rural residences and businesses throughout the United States.

Postal Service clerks, also known as window clerks, sell stamps, money orders, postal stationery, and mailing envelopes and boxes in post offices throughout the country. They also weigh packages to determine postage and check that packages are in satisfactory condition for mailing. These clerks register, certify, and insure mail and answer questions about postage rates, post office boxes, mailing restrictions, and other postal matters. Window clerks also help customers file claims for damaged packages.

Postal Service mail sorters, processors, and processing machine operators prepare incoming and outgoing mail for distribution at post offices and at mail processing centers. These workers are commonly referred to as mail handlers, distribution clerks, mail processors, or mail processing clerks. They load and unload postal trucks and move mail around a mail processing center with forklifts, small electric tractors, or hand-pushed carts. They also load and operate mail processing, sorting, and canceling machinery.

Postal Service mail carriers deliver mail, once it has been processed and sorted, to residences and businesses in cities, towns, and rural areas. Although carriers are classified by their type of route—either city or rural—duties of city and rural carriers are similar. Most travel established routes, delivering and collecting mail. Mail carriers start work at the post office early in the morning, when they arrange the mail in delivery sequence. Automated equipment has reduced the time that carriers need to sort the mail, causing them to spend more of their time delivering it.

Mail carriers cover their routes on foot, by vehicle, or a combination of both. On foot, they carry a heavy load of mail in a satchel or push it on a cart. In most urban and rural areas, they use a car or small truck. Although the Postal Service provides vehicles to city carriers, most rural carriers must use their own automobiles for whose use they are reimbursed. Deliveries are made house-to-house, to roadside mailboxes, and to large buildings such as offices or apartments, which generally have all of their tenants' mailboxes in one location.

Besides delivering and collecting mail, carriers collect money for postage-due and COD (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 homes, businesses, and sometimes street collection boxes, and turn in the mail, receipts, and money collected during the day.

Some city carriers may have specialized duties such as delivering only parcels or picking up mail from mail collection boxes. In contrast to city carriers, rural carriers provide a wider range of postal services, in addition to delivering and picking up mail. For example, rural carriers may sell stamps and money orders and register, certify, and insure parcels and letters. All carriers, however, must be able to answer customers' questions about postal regulations and services and provide change-of-address cards and other postal forms when requested.

Work environment. Window clerks usually work in the public portion of post offices. They have a variety of duties and frequent contact with the public, but they rarely work at night. However, they may have to deal with upset customers, stand for

long periods, and be held accountable for an assigned stock of stamps and funds. Depending on the size of the post office in which they work, they also may be required to sort mail.

Despite the use of automated equipment, the work of mail sorters, processors, and processing machine operators can be physically demanding. Workers may have to move heavy sacks of mail around a mail processing center. These workers usually are on their feet, reaching for sacks and trays of mail or placing packages and bundles into sacks and trays. Processing mail can be tiring and tedious. Many sorters, processors, and machine operators 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. Workers can experience stress as they process mail under tight production deadlines and quotas.

Most carriers begin work early in the morning—those with routes in a business district can start as early as 4 a.m. Overtime hours are frequently required for urban carriers. Carriers spend most of their time outdoors, delivering mail in all kinds of weather. Though carriers face many natural hazards, such as extreme temperatures, wet and icy roads and sidewalks, and even dog bites, serious injuries are often due to the nature of the work, which requires repetitive movements, as well as constant lifting and bending. These types of repetitive injuries occur as various kinds of injuries to joints and muscles, as well as carpal tunnel syndrome.

Postal Service workers examine addresses to ensure that mail gets delivered to the correct location.

Training, Other Qualifications, and Advancement

All applicants for Postal Service jobs are required to take a postal service examination. After passing the exam, it may take 1 to 2 years or longer before being hired as the number of applicants is generally much greater than the number of jobs that open up.

Education and training. There are no specific education requirements to become a Postal Service worker; however, all applicants must have a good command of the English language. Upon being hired, new Postal Service workers are trained on the job by experienced workers. Many post offices offer classroom instruction on safety and defensive driving. Workers receive additional instruction when new equipment or procedures are introduced. In these cases, workers usually are trained by another postal employee or a training specialist.

Other qualifications. Postal Service workers must be at least 18 years old. They must be U.S. citizens or have been granted permanent resident-alien status in the United States, and males must have registered with the Selective Service upon reaching age 18.

All applicants must pass a written examination that measures speed and accuracy at checking names and numbers and the ability to memorize mail distribution procedures. Jobseekers should contact the post office or mail processing center where they wish to work 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 are added to the score of a veteran who was wounded in combat or is 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 after the examination date.

When accepted, applicants must pass a physical examination and drug test, and may be asked to show that they can lift and handle mail sacks weighing 70 pounds. Applicants for mail carrier positions must have a driver's license and a good driving record, and must receive a passing grade on a road test.

Postal clerks and mail carriers should be courteous and tactful when dealing with the public, especially when answering questions or receiving complaints. A good memory and the ability to read rapidly and accurately are important. Good interpersonal skills are important, particularly for mail clerks and mail carriers who deal closely with the public.

Advancement. Postal Service workers often begin on a part-time, flexible basis and become regular or full time in order of seniority, as vacancies occur. Full-time workers may bid for preferred assignments, such as the day shift or a high-level nonsupervisory position. Carriers can look forward to obtaining preferred routes as their seniority increases. Postal Service workers can advance to supervisory positions on a competitive basis.

Employment

The U.S. Postal Service employed 80,000 clerks; 338,000 mail carriers; and 198,000 mail sorters, processors, and pro-

cessing machine operators in 2006. Most of them worked full time. Most postal clerks provide window service at post office branches. Many mail sorters, processors, and processing machine operators sort mail at major metropolitan post offices; others work at mail processing centers. The majority of mail carriers work in cities and suburbs, while the rest work in rural areas.

Postal Service workers are classified as casual, part-time flexible, part-time regular, or full time. Casuals are hired for 90 days at a time to 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 but are called as the need arises. Part-time regulars have a set work schedule of fewer than 40 hours per week, often replacing regular full-time workers on their scheduled day off. Full-time postal employees work a 40-hour week over a 5-day period.

Job Outlook

Employment of Postal Service workers is expected to experience little or no change through 2016. Still, many jobs will become available for mail clerks and carriers, which are expected to add workers, and because of the need to replace those who retire or leave the occupation.

Employment change. The stable employment overall of Postal Service mail carriers and Postal Service clerks will be offset by declines in Postal Service mail sorters, processors, and processing machine operators, which will cause overall employment of Postal Service workers to decline 2 percent over the 2006-2016 period. An increasing population, the greater use of third class, or bulk, mail by businesses, and more electronic shopping will generate more business for the Postal Service. However, demand will be moderated by the fact that people are sending out fewer pieces of first class mail because of the growing use of electronic communication.

These changes will affect Postal Service occupations in different ways. Efforts by the Postal Service to provide better service and meet the needs of a growing population will increase the demand for Postal Service clerks. However, the declining use of first class mail as the use of electronic communication grows will hold growth in this occupation to a minimum.

Employment of mail sorters, processors, and processing machine operators is expected to decline moderately because of the increasing use of automated materials handling equipment and optical character readers, barcode sorters, and other automated sorting equipment. In addition, companies that mail in bulk have an economic incentive to presort the mail before it arrives at the Post Office to qualify for a reduction in the price.

Employment of mail carriers is expected to grow, but only about 1 percent through 2016. As the population continues to rise, the need for mail carriers will grow. In addition, businesses are using the mail more to deliver advertising, which is making up for the reduced use of first class mail. Also, the Postal Service is moving toward more centralized mail delivery, such as the use of cluster mailboxes, to cut down on the number of door-to-door deliveries. The best employment opportunities for mail carriers are expected to be in less urbanized areas as the number of addresses to which mail must be delivered continues to grow, especially in fast growing rural areas. However, increased use of the "delivery point sequencing" system, which allows machines to sort mail directly by the order of delivery, should reduce the amount of time that carriers spend sorting their mail, allowing them to spend more time on the streets delivering mail. This will mitigate the demand for more mail carriers.

Job prospects. Those seeking jobs as Postal Service workers can expect to encounter keen competition. The number of applicants usually exceeds the number of job openings because of the occupation's low entry requirements and attractive wages and benefits.

The role of the Postal Service as a government-approved monopoly continues to be a topic of debate. However, in 2003 the Presidential Commission on Postal Services and in 2006 the Congress both rejected the idea of privatizing the United States Postal Service. Employment and schedules in the Postal Service fluctuate with the demand for its services. When mail volume is high, full-time employees work overtime, part-time workers get additional hours, and casual workers may be hired. When mail volume is low, overtime is curtailed, part-timers work fewer hours, and casual workers are discharged.

Earnings

Median annual earnings of Postal Service mail carriers were $44,350 in May 2006. The middle 50 percent earned between $40,290 and $48,400. The lowest 10 percent had earnings of less than $34,810, while the top 10 percent earned more than $50,830. Rural mail carriers are reimbursed for mileage put on their own vehicles while delivering mail.

Median annual earnings of Postal Service clerks were $44,800 in 2006. The middle 50 percent earned between $41,720 and $47,890. The lowest 10 percent had earnings of less than $38,980, while the top 10 percent earned more than $49,750.

Median annual earnings of Postal Service mail sorters, processors, and processing machine operators were $43,900 in 2006. The middle 50 percent earned between $40,350 and $47,440.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Postal service workers	43-5050	615,000	603,000	-12,000	-2
Postal service clerks	43-5051	80,000	80,000	900	1
Postal service mail carriers	43-5052	338,000	341,000	3,500	1
Postal service mail sorters, processors, and processing machine operators	43-5053	198,000	181,000	-17,000	-8

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

The lowest 10 percent had earnings of less than $25,770, while the top 10 percent earned more than $49,570.

Postal Service workers enjoy a variety of employer-provided benefits similar to those enjoyed by Federal Government workers. The American Postal Workers Union, the National Association of Letter Carriers, the National Postal Mail Handlers Union, and the National Rural Letter Carriers Association together represent most of these workers.

Related Occupations

Other occupations with duties similar to those of Postal Service clerks include cashiers; counter and rental clerks; file clerks; and shipping, receiving, and traffic clerks. Others with duties related to those of Postal Service mail carriers include couriers and messengers, and truck drivers and driver/sales workers. Occupations whose duties are related to those of Postal Service mail sorters, processors, and processing machine operators include inspectors, testers, sorters, samplers, and weighers, and material moving occupations.

Sources of Additional Information

Local post offices and State employment service offices can supply details about entrance examinations and specific employment opportunities for Postal Service workers.

Procurement Clerks

(O*NET 43-3061.00)

Significant Points

- About 23 percent of procurement clerks work for Federal, State, and local governments.
- Overall employment is expected to experience little or no change as a result of increasing automation, offshoring, and restructuring of business.
- High school graduates with good communication and computer skills should have the best job opportunities.

Nature of the Work

Procurement clerks compile requests for materials, prepare purchase orders, keep track of purchases and supplies, and handle inquiries about orders. Usually called purchasing clerks or *purchasing technicians*, they perform a variety of tasks related to ordering goods and supplies for an organization. They make sure that what was purchased arrives on schedule and meets the purchaser's specifications.

Automation is having a profound effect on this occupation. Orders for goods now can be placed electronically when supplies are low. However, automation is still years away for many firms, and the role of the procurement clerk is unchanged in many organizations.

Procurement clerks perform a wide range of tasks. Some clerks perform strictly clerical functions, but others, particularly at small or medium-sized companies, do more complex tasks. In general, procurement clerks process requests for purchases. They

Procurement clerks prepare purchase orders and make sure that the shipment and the bills agree with the order.

first determine whether there is any of the requested product left in inventory and may go through catalogs or to the Internet to find suppliers. They may prepare invitation-to-bid forms and mail them to suppliers or distribute them for public posting. Procurement clerks may interview potential suppliers by telephone or face-to-face to check on prices and specifications and then put together spreadsheets with price comparisons and other facts about each supplier. Upon the organization's approval, clerks prepare and mail purchase orders and enter them into computers.

Procurement clerks keep track of orders and determine the causes of any delays. If the supplier has questions, clerks try to answer them and resolve any problems. When the shipment arrives, procurement clerks may reconcile the purchase order with the shipment, making sure that they match; notify the vendors when invoices are not received; and verify that the bills match the purchase orders.

Some purchasing departments, particularly in small companies, are responsible for overseeing the organization's inventory control system. At these organizations, procurement clerks monitor in-house inventory movement and complete inventory transfer forms for bookkeeping purposes. They may keep inventory spreadsheets and place orders when materials on hand are insufficient.

Work environment. Procurement clerks usually work a standard 40-hour week. Most procurement clerks work in areas that are clean, well lit, and relatively quiet. These workers sit for long periods of time in front of computer terminals, which many cause eyestrain and headaches. Workers in this occupation may sometimes work overtime or on varied shifts.

Training, Other Qualifications, and Advancement

Most employers prefer applicants with a high school diploma or its equivalent. To advance to purchasing agent jobs, a bachelor's degree is usually required and certification is helpful.

Education and training. Most employers prefer applicants who have a high school diploma or its equivalent or a mix of education and related experience. Most procurement clerks are trained on the job under close supervision of more experienced employees. Training usually lasts less than a few months.

Other qualifications. Employers prefer workers who are computer-literate and have a working knowledge of word processing and spreadsheet software. Proficiency with computer

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Procurement clerks..	43-3061	78,000	76,000	-1,600	-2

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook.*

software is important because most tasks, such as preparing purchase orders, are performed electronically.

Certification and advancement. Some procurement clerks who obtain a bachelor's degree and show a greater understanding of contracts and purchasing may be promoted to the position of purchasing agent or buyer. Useful fields of study include business, supply management, engineering, and economics.

Getting a certification may help procurement clerks demonstrate that they have the knowledge and skills necessary to take on more advanced purchasing tasks. There are several recognized credentials for purchasing agents and purchasing managers. The Certified Purchasing Manager (CPM) designation is conferred by the Institute for Supply Management. In 2008, this certification will be replaced by the Certified Professional in Supply Management (CPSM) credential, covering the wider scope of duties now performed by purchasing professionals. The Certified Purchasing Professional (CPP) and Certified Professional Purchasing Manager (CPPM) designations are conferred by the American Purchasing Society. The Certified Supply Chain Professional (CSCP) and Certified in Production and Inventory Management (CPIM) credentials are conferred by APICS, also known as the Association for Operations Management. In Federal, State, and local government, the indications of professional competence are Certified Professional Public Buyer (CPPB) and Certified Public Purchasing Officer (CPPO), conferred by the National Institute of Governmental Purchasing. Most of these certifications are awarded only after experience and education requirements are met and written or oral exams are successfully completed.

Employment

In 2006, procurement clerks held about 78,000 jobs in every industry, including manufacturing, retail and wholesale trade, health care, and government. About 23 percent of procurement clerks work for Federal, State, and local governments; most of these work for the Federal Government.

Job Outlook

Employment in the occupation is expected to experience little or no change. High school graduates with good communication and computer skills should have the best job opportunities.

Employment change. Employment of procurement clerks is expected to decline by 2 percent during the 2006-16 decade, which is considered little or no change, as a result of increasing automation, offshoring, and business restructuring. The need for procurement clerks will be reduced as the use of computers to place orders directly with suppliers—called electronic data interchange—and as ordering over the Internet—known as "e-procurement"—become more commonplace. In addition, procurement authority for some purchases is now being given to employees in the departments originating the purchase. These departments may be issued procurement cards, which are similar to credit cards that enable a department to charge purchases up to a specified amount.

Job prospects. Despite the expected little or no change in employment, job openings will arise out of the need to replace workers who transfer to other occupations or leave the labor force. High school graduates with good communication and computer skills should have the best job opportunities.

Earnings

Median hourly earnings of procurement clerks in May 2006 were $15.91. The middle 50 percent earned between $12.65 and $19.41. The lowest 10 percent earned less than $10.16 and the highest 10 percent earned more than $22.68. Procurement clerks working for the Federal Government had an average annual income of $41,716 in 2007.

Related Occupations

Procurement clerks compile information and records to draw up purchase orders for materials and services. Other workers who perform similar duties are purchasing agents and buyers, stock clerks and order fillers, and order clerks. Procurement clerks provide office support services for businesses and other organizations. Other workers who perform similar duties are file clerks; secretaries and administrative assistants; receptionists and information clerks; bookkeeping, accounting, and auditing clerks; and payroll and timekeeping clerks.

Sources of Additional Information

Information on obtaining positions as procurement clerks or procurement technicians with the Federal Government is available from the Office of Personnel Management through USAJOBS, the Federal Government's official employment information system. This resource for locating and applying for job opportunities can be accessed through the Internet at **http://www.usajobs.opm.gov** or through an interactive voice response telephone system at (703) 724-1850 or TDD (978) 461-8404. These numbers are not toll free, and charges may result.

State or local government personnel offices and their Web sites can provide information about procurement clerk jobs at those levels of government.

Information on employment opportunities for procurement clerks in the public or private sector is available from local offices of the State employment service.

Further information about education, training, employment, and certification for purchasing careers is available from:

➤ APICS, The Association for Operations Management, 5301 Shawnee Rd., Alexandria, VA 22312-2317. Internet: **http://www.apics.org**

➤ American Purchasing Society, North Island Center, Suite 203, 8 East Galena Blvd., Aurora, IL 60506.

- Institute for Supply Management, P.O. Box 22160, Tempe, AZ 85285-2160. Internet: **http://www.ism.ws**
- National Institute of Governmental Purchasing, Inc., 151 Spring St., Suite 300, Herndon, VA 20170-5223. Internet: **http://www.nigp.org**

Production, Planning, and Expediting Clerks

(O*NET 43-5061.00)

Significant Points

- Production, planning, and expediting clerks work closely with supervisors who must approve production and work schedules.
- Many production, planning, and expediting jobs are at the entry level and do not require more than a high school diploma.
- Manufacturing firms and wholesale and retail trade establishments are the primary employers.
- Slower-than-average employment growth is projected.

Nature of the Work

Production, planning, and expediting clerks coordinate and facilitate the flow of information, work, and materials within or among offices. Most of their work is done according to production, work, or shipment schedules that are developed by supervisors who determine work progress and completion dates. Clerks compile reports on the progress of work and on production problems, and also may set worker schedules, estimate costs, schedule the shipment of parts, keep an inventory of materials, inspect and assemble materials, and write special orders for services and merchandise. In addition, they may route and deliver parts to ensure that production quotas are met and that merchandise is delivered on the date promised.

Production and planning clerks compile records and reports on various aspects of production, such as materials and parts used, products produced, machine and instrument readings, and frequency of defects. These workers prepare work tickets or other production guides and distribute them to other workers. Production and planning clerks coordinate, schedule, monitor, and chart production and its progress, either manually or electronically. They also gather information from customers' orders or other specifications and use the information to prepare a detailed production sheet that serves as a guide in assembling or manufacturing the product.

Expediting clerks contact vendors and shippers to ensure that merchandise, supplies, and equipment are forwarded on the specified shipping dates. They communicate with transportation companies to prevent delays in transit, and they may arrange for the distribution of materials upon their arrival. They may even visit work areas of vendors and shippers to check the status of orders. Expediting clerks locate materials and distribute them to specified production areas. They may inspect products for quality and quantity to ensure their adherence to specifications. They also keep a chronological list of due dates and may move work that does not meet the production schedule to the top of the list.

Production, planning, and expediting clerks monitor reports to ensure a steady flow of materials.

Work environment. Although their offices or desks may be near a production plant or warehouse, production, planning, and expediting clerks generally work in clean and environmentally-controlled conditions. They spend most of their day either on the phone or on the computer while working closely with supervisors who must approve production and work schedules. The typical workweek is Monday through Friday.

Training, Other Qualifications, and Advancement

Training requirements for production, planning, and expediting clerks are limited. Usually a high school diploma is sufficient, although computer skills also are essential.

Education and training. Many production, planning, and expediting jobs are at the entry level and do not require more than a high school diploma. However, applicants who have taken business courses or have specific job-related experience may be preferred. Production, planning, and expediting clerks usually learn the job by doing routine tasks under close supervision. They learn how to count and mark stock, and then they start keeping records and taking inventory. Production, planning, and expediting clerks must learn both how their company operates and the company's priorities before they can begin to write production and work schedules efficiently.

Other qualifications. Employers prefer to hire those familiar with computers and other electronic office and business equipment. Because communication with other people is an integral part of some jobs in the occupation, good oral and written communication skills are essential. Typing, filing, recordkeeping, and other clerical skills also are important. Strength, stamina, good eyesight, and an ability to work at repetitive tasks, sometimes under pressure, are other important characteristics that employers look for in prospective workers.

Advancement. Advancement opportunities for production, planning, and expediting clerks vary with the place of employment, but often require additional education.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Production, planning, and expediting clerks	43-5061	293,000	305,000	12,000	4

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook.*

Employment

Clerks engaged in production, planning, and expediting activities work in almost every sector of the economy, overseeing inventory control and assuring that schedules and deadlines are met. In 2006, production, planning, and expediting clerks held 293,000 jobs. Jobs in manufacturing made up 41 percent. Another 15 percent were in wholesale and retail trade establishments. Others worked in advertising firms and for telecommunications companies, among other places.

Job Outlook

Employment of production, planning, and expediting clerks is expected to increase more slowly than average.

Employment change. The number of production, planning, and expediting clerks is expected to grow by 4 percent from 2016 to 2016, slower than the average for all occupations. As a greater emphasis is placed on the timely delivery of goods and services throughout the economy, there will be increasing need for production, planning, and expediting clerks at all levels of the supply chain. However, the expected employment decline in manufacturing will limit the overall growth of this occupation. The work of production, planning, and expediting clerks is less likely to be automated than the work of many other administrative support occupations.

Job prospects. In addition to openings due to employment growth, job openings will arise from the need to replace production, planning, and expediting clerks who leave the labor force or transfer to other occupations. Opportunities will be better in fields that are experiencing faster growth, such as wholesale trade and warehousing.

Earnings

Median annual earnings of production, planning, and expediting clerks in May 2006 were $38,620. The middle 50 percent earned between $29,560 and $48,900. The lowest 10 percent earned less than $23,470, and the highest 10 percent earned more than $59,080.

These workers usually receive the same benefits as most other workers.

Related Occupations

Other workers who coordinate the flow of information to assist the production process include cargo and freight agents; shipping, receiving, and traffic clerks; stock clerks and order fillers; and weighers, measurers, checkers, and samplers, recordkeeping.

Sources of Additional Information

Information about job opportunities may be obtained from local employers and from local offices of the State employment service.

Receptionists and Information Clerks

(O*NET 43-4171.00)

Significant Points

- Good interpersonal skills are critical.
- A high school diploma or its equivalent is the most common educational requirement.
- Employment is expected to grow faster than average for all occupations.

Nature of the Work

Receptionists and information clerks are charged with a responsibility that may affect the success of an organization: making a good first impression. Receptionists and information clerks answer telephones, route and screen calls, greet visitors, respond to inquiries from the public, and provide information about the organization. Some are responsible for the coordination of all mail into and out of the office. In addition, they contribute to the security of an organization by helping to monitor the access of visitors—a function that has become increasingly important.

Whereas some tasks are common to most receptionists and information clerks, their specific responsibilities vary with the type of establishment in which they work. For example, receptionists and information clerks in hospitals and in doctors' offices may gather patients' personal and insurance information and direct them to the proper waiting rooms. In corporate headquarters, they may greet visitors and manage the scheduling of the board room or common conference area. In beauty or hair salons, they arrange appointments, direct customers to the hairstylist, and may serve as cashiers. In factories, large corporations, and government offices, receptionists and information clerks may provide identification cards and arrange for escorts to take visitors to the proper office. Those working for bus and train companies respond to inquiries about departures, arrivals, stops, and other related matters.

Increasingly, receptionists and information clerks use multiline telephone systems, personal computers, and fax machines. Despite the widespread use of automated answering systems or voice mail, many receptionists and clerks still take messages and inform other employees of visitors' arrivals or cancellation of an appointment. When they are not busy with callers, most workers are expected to perform a variety of office duties, including opening and sorting mail, collecting and distributing parcels, and transmitting and delivering facsimiles. Other duties include updating appointment calendars, preparing travel vouchers, and performing basic bookkeeping, word processing, and filing.

Receptionists and information clerks must be courteous, professional, and helpful when greeting people.

Work environment. Receptionists and information clerks who greet customers and visitors usually work in areas that are highly visible and designed and furnished to make a good impression. Most work stations are clean, well lighted, and relatively quiet. The work performed by some receptionists and information clerks may be tiring, repetitious, and stressful as they may spend all day answering continuously ringing telephones and sometimes encounter difficult or irate callers. The work environment, however, may be very friendly and motivating for individuals who enjoy greeting customers face to face and making them feel comfortable.

Training, Other Qualifications, and Advancement

A high school diploma or its equivalent is the most common educational requirement, although hiring requirements for receptionists and information clerks vary by industry. Good interpersonal skills and being technologically proficient also are important to employers.

Education and training. Receptionists and information clerks generally need a high school diploma or equivalent as most of their training is received on the job. However, employers often look for applicants who already possess certain skills, such as prior computer experience or answering telephones. Some employers also may prefer some formal office education or training. On the job, they learn how to operate the telephone system and computers. They also learn the proper procedures for greeting visitors and for distributing mail, fax messages, and parcels. While many of these skills can be learned quickly, those who are charged with relaying information to visitors or customers may need several months to learn details about the organization.

Other qualifications. Good interpersonal and customer service skills—being courteous, professional, and helpful—are critical for this job. Being an active listener often is a key quality needed by receptionists and information clerks that requires the ability to listen patiently to the points being made, to wait to speak until others have finished, and to ask appropriate questions when necessary. In addition, the ability to relay information accurately to others is important.

The ability to operate a wide range of office technology also is helpful, as receptionists and information clerks are often asked to work on other assignments during the day.

Advancement. Advancement for receptionists generally comes about either by transferring to an occupation with more responsibility or by being promoted to a supervisory position. Receptionists with especially strong computer skills may advance to a better paying job as a secretary or an administrative assistant.

Employment

Receptionists and information clerks held about 1.2 million jobs in 2006. The health care and social assistance industries—including offices of physicians, hospitals, nursing homes, and outpatient care facilities—employed about 33 percent of all receptionists and information clerks. Manufacturing, wholesale and retail trade, government, and real estate industries also employed large numbers of receptionists and information clerks. More than 3 of every 10 receptionists and information clerks work part time.

Job Outlook

Employment of receptionists and information clerks is expected to grow faster than average for all occupations. Receptionists and information clerks will have a very large number of new jobs arise, more than 200,000 over the 2006-16 period. Additional job opportunities will result from the need to replace workers who transfer to other occupations or leave the labor force.

Employment change. Receptionists and information clerks are expected to increase by 17 percent from 2006 to 2016, which is faster than the average for all occupations. Employment growth will result from rapid growth in the following industries: offices of physicians, legal services, employment services, and management and technical consulting.

Technology will have conflicting effects on employment growth for receptionists and information clerks. The increasing use of voice mail and other telephone automation reduces the need for receptionists by allowing one receptionist to perform work that formerly required several. At the same time, however, the increasing use of other technology has caused a consolidation of clerical responsibilities and growing demand for workers with diverse clerical and technical skills. Because receptionists and information clerks may perform a wide variety of clerical tasks, they should continue to be in demand. Further, they perform many tasks that are interpersonal in nature and

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Receptionists and information clerks	43-4171	1,173,000	1,375,000	202,000	17

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook.*

are not easily automated, ensuring continued demand for their services in a variety of establishments.

Job prospects. In addition to job growth, numerous job opportunities will be created as receptionists and information clerks transfer to other occupations or leave the labor force altogether. Opportunities should be best for persons with a wide range of clerical and technical skills, particularly those with related work experience.

Earnings

Median hourly earnings of receptionists and information clerks in May 2006 were $11.01. The middle 50 percent earned between $9.06 and $13.51. The lowest 10 percent earned less than $7.54, and the highest 10 percent earned more than $16.23. Median hourly earnings in the industries employing the largest number of receptionists and information clerks in May 2006 were:

Offices of dentists	$12.89
General medical and surgical hospitals	11.74
Offices of physicians	11.44
Employment services	10.72
Personal care services	8.57

Related Occupations

Receptionists deal with the public and often direct people to others who can assist them. Other workers who perform similar duties include dispatchers, secretaries and administrative assistants, and customer service representatives.

Sources of Additional Information

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

Reservation and Transportation Ticket Agents and Travel Clerks

(O*NET 43-4181.00)

Significant Points

- Most jobs are found in large metropolitan airports, reservation call centers, and train or bus stations.
- A high school diploma or its equivalent is the most common educational requirement.
- Employment is expected to show little or no growth because of the significant impact of technology on worker productivity.

Nature of the Work

Each year, millions of people travel by plane, train, ship, bus, and automobile. Many of these travelers rely on the services of reservation and transportation ticket agents and travel clerks. Agents and clerks perform functions as varied as selling tickets, confirming reservations, checking baggage, and providing useful travel information.

Most *reservation agents* work for airlines or large hotel chains, helping people plan trips and make reservations. They usually work in reservation call centers, answering telephone or e-mail inquiries and offering travel arrangement suggestions and information such as routes, schedules, fares, and types of accommodations. They also change or confirm transportation and lodging reservations. Most agents use their own company's reservation system to obtain information needed to make, change, or cancel traveler reservations.

Transportation ticket agents are sometimes known as passenger service agents, passenger booking clerks, reservation clerks, airport service agents, ticket clerks, or ticket sellers. They work in airports, train stations, and bus stations, selling tickets, assigning seats to passengers, and checking baggage. In addition, they may answer inquiries and give directions, examine passports and visas, or check in pets. They may be required to assist customers who have trouble operating self-service ticketing machines or kiosks. Other ticket agents, more commonly known as *gate or station agents*, work in airport terminals, assisting passengers boarding airplanes. These workers direct passengers to the correct boarding area, check tickets and seat assignments, make boarding announcements, and provide special assistance to young, elderly, or disabled passengers.

Travel clerks provide travelers information on points of interest, restaurants, overnight accommodations, and availability of emergency services. In some cases, they make rental car, hotel, and restaurant reservations. Clerks also may provide assistance in filling out travel documents and answer other travel-related questions.

Work environment. Most reservation and transportation ticket agents and travel clerks work in airports, call centers, and train and bus terminals that generally are clean and safe. Reservation and ticket agents who work in large, centralized reservation centers spend much of their day talking with customers on the telephone and using a computer to plan itineraries and to make reservations. The call center environment is often hectic and noisy. Ticket agents, who work at transporta-

Reservation and transportation ticket agents and travel clerks verify schedules before printing tickets.

tion sites may stand on their feet for long periods of time, and may have to lift heavy baggage.

Although most reservation and transportation ticket agents and travel clerks work a standard 40-hour week, about 14 percent work part time. Some agents work evenings, late nights, weekends, and holidays. In general, employees with the most seniority tend to be assigned the more desirable shifts.

The work performed by reservation and transportation ticket agents and travel clerks may be repetitive and stressful. They often work under stringent time constraints. Agents and clerks must work quickly and accurately to avoid mistakes and angering customers. Difficult or angry customers also can create stressful situations as agents usually bear the brunt of customers' dissatisfaction. In addition, prolonged computer use, which is common in this occupation, may lead to eyestrain.

Training, Other Qualifications, and Advancement

Most reservation and transportation ticket agents spend several weeks in company-sponsored training programs learning the reservation system and other travel-related information. Good customer service skills and the ability to work quickly are important.

Education and training. A high school diploma or its equivalent is the most common educational requirement for reservation and transportation ticket agents and travel clerks. Most airline reservation and ticket agents learn their skills through formal company training programs that can last several weeks. They learn company and industry policies as well as ticketing procedures. Trainees also learn to use the airline's computer system to obtain information on schedules, fares, and the availability of seats; to make reservations for passengers; and to prepare passenger itineraries. In addition, they must become familiar with train, airport, and airline code designations, security regulations, and safety procedures. After completing classroom instruction, new agents work under the direct guidance of a supervisor or experienced agent. During this time the supervisors may monitor telephone conversations to improve the quality of customer service so that agents learn to provide customer service in a courteous manner, while limiting the time spent on each call.

In contrast to those who work for airlines, reservation and transportation ticket agents and travel clerks who work for bus lines and railroads are trained on the job through short in-house classes that last several days.

Other qualifications. Applicants usually must be 18 years of age and older and a valid driver's license may be required. Also, experience with computers and good typing skills usually are required. Agents who handle passenger luggage must be able to lift heavy objects.

Many reservation and transportation ticket agents and travel clerks deal directly with the public, so a professional appearance and a pleasant personality are important. A clear speaking voice and fluency in English also are essential, because these employees frequently use the telephone or public-address systems. In addition, fluency in a foreign language is becoming increasingly helpful for those who deal with the public, because of the growing number of international and non-English speaking travelers.

Advancement. Reservation and transportation ticket agents and travel clerks may advance by being transferred to a position with more responsibilities or by being promoted to a supervisory position. Many travel companies fill supervisory and managerial positions by promoting individuals within their organization, so those who acquire additional skills, experience, and training improve their opportunities for advancement. Some companies require that candidates for supervisory positions have an associate degree in a business-related field, such as management, business administration, or marketing. Within the airline industry, a ticket agent may advance to lead worker on the shift.

Employment

Reservation and transportation ticket agents and travel clerks held about 165,000 jobs in 2006. About six out of ten agents and clerks are employed by airlines. Others work for tour operators and reservation services, hotels and other lodging places, and other companies that provide transportation services.

Although agents and clerks are found throughout the country, most work in large metropolitan airports, reservation call centers, and train or bus stations. The remainder work in small, regional airports, or in small communities served only by intercity bus or railroad lines.

Job Outlook

Employment of reservation and transportation ticket agents and travel clerks is expected to show little or no growth during the projection period. Additionally, applicants for these jobs are likely to encounter keen competition.

Employment change. Employment of reservation and transportation ticket agents is expected grow only 1 percent from 2006 to 2016, reflecting little or no change to employment. Despite a growing and more mobile population who will likely travel more frequently, newer automated reservations and ticketing operations will speed transaction time and reduce the need for more workers to handle the expected higher volume of business. Most train stations and airports now have self-service ticket printing machines, or kiosks, which enable passengers to make reservations, purchase tickets, and check-in for train rides and flights themselves.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Reservation and transportation ticket agents and travel clerks	43-4181	165,000	167,000	1,800	1

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

Many passengers also are able to check travel times and fares, make reservations, purchase tickets, and check-in for most domestic flights on the Internet. Nevertheless, not all travel-related passenger services can be fully automated, primarily for safety and security reasons, and not all passengers use these automated services. As a result, job openings will continue to become available as increasing numbers of people travel more frequently. Additional growth will result to meet the travel needs of the growing retirement population, particularly in less traditional transportation centers, such as with boat or cruise operators or with companies who rent recreational vehicles.

Job prospects. Job applicants often face competition for these jobs, because entry requirements are relatively low and benefits for those who like to travel, particularly on the airlines, are high. Applicants who have previous experience in the travel industry, in sales, or in customer service should have the best job prospects. Those who possess a pleasant personality and strong customer service skills also should have good job opportunities. Additional job opportunities will result from the need to replace workers who transfer to other occupations, retire, or leave the labor force altogether.

Employment in these occupations may fluctuate with the economy. During recessions, discretionary passenger travel often declines, and transportation service companies are less likely to hire new workers and may institute layoffs.

Earnings

Median annual earnings of reservation and transportation ticket agents and travel clerks in May 2006 were $28,540. The middle 50 percent earned between $21,640 and $38,540. The lowest 10 percent earned less than $17,670, and the highest 10 percent earned more than $45,400. Many employers offer discounts on travel services to their employees. In May 2006, median annual earnings in the industries employing the largest number of agents were:

Industry	Earnings
Scheduled air transportation	$32,850
Traveler accommodation	23,630
Travel arrangement and reservation services	22,630

Related Occupations

Other occupations that provide travel-related services include hotel, motel, and resort desk clerks; travel agents; and flight attendants. Other occupations that make sales and provide information to customers include counter and rental clerks, order clerks, customer service representatives, and receptionists and information clerks.

Sources of Additional Information

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

➤ Air Transport Association of America, 1301 Pennsylvania Ave. NW., Suite 1100, Washington, DC 20004.
Internet: **http://www.airlines.org**

Secretaries and Administrative Assistants

(O*NET 43-6011.00, 43-6012.00, 43-6013.00, 43-6014.00)

Significant Points

- This occupation is expected to be among those with the largest number of new jobs.
- Opportunities should be best for applicants with extensive knowledge of software applications.
- Secretaries and administrative assistants today perform fewer clerical tasks and are increasingly taking on the roles of information and communication managers.

Nature of the Work

As the reliance on technology continues to expand in offices, the role of the office professional has greatly evolved. Office automation and organizational restructuring have led secretaries and administrative assistants to assume responsibilities once reserved for managerial and professional staff. In spite of these changes, however, the core responsibilities for secretaries and administrative assistants have remained much the same: Performing and coordinating an office's administrative activities and storing, retrieving, and integrating information for dissemination to staff and clients.

Secretaries and administrative assistants perform a variety of administrative and clerical duties necessary to run an organization efficiently. They serve as information and communication managers for an office; plan and schedule meetings and appointments; organize and maintain paper and electronic files; manage projects; conduct research; and disseminate information by using the telephone, mail services, Web sites, and e-mail. They also may handle travel and guest arrangements.

Secretaries and administrative assistants use a variety of office equipment, such as fax machines, photocopiers, scanners, and videoconferencing and telephone systems. In addition, secretaries and administrative assistants often use computers to do tasks previously handled by managers and professionals, such as: create spreadsheets; compose correspondence; manage databases; and create presentations, reports, and documents using desktop publishing software and digital graphics. They also may negotiate with vendors, maintain and examine leased equipment, purchase supplies, manage areas such as stockrooms or corporate libraries, and retrieve data from various sources. At the same time, managers and professionals have assumed many tasks traditionally assigned to secretaries and administrative assistants, such as keyboarding and answering the telephone. Because secretaries and administrative assistants do less dictation and word processing, they now have time to support more members of the executive staff. In a number of organizations, secretaries and administrative assistants work in teams to work flexibly and share their expertise.

Many secretaries and administrative assistants now provide training and orientation for new staff, conduct research on the

Internet, and operate and troubleshoot new office technologies.

Specific job duties vary with experience and titles. *Executive secretaries and administrative assistants* provide high-level administrative support for an office and for top executives of an organization. Generally, they perform fewer clerical tasks than do secretaries and more information management. In addition to arranging conference calls and supervising other clerical staff, they may handle more complex responsibilities such as reviewing incoming memos, submissions, and reports in order to determine their significance and to plan for their distribution. They also prepare agendas and make arrangements for meetings of committees and executive boards. They also may conduct research and prepare statistical reports.

Some secretaries and administrative assistants, such as legal and medical secretaries, perform highly specialized work requiring knowledge of technical terminology and procedures. For instance, *legal secretaries* prepare correspondence and legal papers such as summonses, complaints, motions, responses, and subpoenas under the supervision of an attorney or a paralegal. They also may review legal journals and assist with legal research—for example, by verifying quotes and citations in legal briefs. Additionally, legal secretaries often teach newly minted lawyers how to prepare documents for submission to the courts. *Medical secretaries* transcribe dictation, prepare correspondence, and assist physicians or medical scientists with reports, speeches, articles, and conference proceedings. They also record simple medical histories, arrange for patients to be hospitalized, and order supplies. Most medical secretaries need to be familiar with insurance rules, billing practices, and hospital or laboratory procedures. Other technical secretaries who assist engineers or scientists may prepare correspondence, maintain their organization's technical library, and gather and edit materials for scientific papers.

Secretaries employed in elementary schools and high schools perform important administrative functions for the school. They are responsible for handling most of the communications between parents, the community, and teachers and administrators who work at the school. As such, they are required to know details about registering students, immunizations, and bus schedules, for example. They schedule appointments, keep track of students' academic records, and make room assignments for classes. Those who work directly for principals screen inquiries from parents and handle those matters not needing a principal's attention. They also may set a principal's calendar to help set her or his priorities for the day.

Work environment. Secretaries and administrative assistants usually work in schools, hospitals, corporate settings, government agencies, or legal and medical offices. Their jobs often involve sitting for long periods. If they spend a lot of time keyboarding, particularly at a computer monitor, they may encounter problems of eyestrain, stress, and repetitive motion ailments such as carpal tunnel syndrome.

Almost one-fifth of secretaries work part time and many others work in temporary positions. A few participate in job-sharing arrangements, in which two people divide responsibility for a single job. The majority of secretaries and administrative assistants, however, are full-time employees who work a standard 40-hour week.

Secretaries and administrative assistants use computers to perform clerical and administrative tasks.

Training, Other Qualifications, and Advancement

Word processing, writing, and communication skills are essential for all secretaries and administrative assistants. However, employers increasingly require extensive knowledge of software applications, such as desktop publishing, project management, spreadsheets, and database management.

Education and training. High school graduates who have basic office skills may qualify for entry-level secretarial positions. They can acquire these skills in various ways. Training ranges from high school vocational education programs that teach office skills and typing to 1- and 2-year programs in office administration offered by business and vocational-technical schools, and community colleges. Many temporary placement agencies also provide formal training in computer and office skills. Most medical and legal secretaries must go through specialized training programs that teach them the language of the industry.

Employers of executive secretaries increasingly are seeking candidates with a college degree, as these secretaries work closely with top executives. A degree related to the business or industry in which a person is seeking employment may provide the job seeker with an advantage in the application process.

Most secretaries and administrative assistants, once hired, tend to acquire more advanced skills through on-the-job instruction by other employees or by equipment and software vendors. Others may attend classes or participate in online education to learn how to operate new office technologies, such as information storage systems, scanners, or new updated software packages. As office automation continues to evolve, retraining and continuing education will remain integral parts of secretarial jobs.

Other qualifications. Secretaries and administrative assistants should be proficient in typing and good at spelling, punctuation, grammar, and oral communication. Employers also look for good customer service and interpersonal skills because secretaries and administrative assistants must be tactful in their dealings with people. Discretion, good judgment, organizational or management ability, initiative, and the ability to work independently are especially important for higher-lev-

el administrative positions. Changes in the office environment have increased the demand for secretaries and administrative assistants who are adaptable and versatile.

Certification and advancement. Testing and certification for proficiency in office skills is available through organizations such as the International Association of Administrative Professionals; National Association of Legal Secretaries (NALS), Inc.; and Legal Secretaries International, Inc. As secretaries and administrative assistants gain experience, they can earn several different designations. Prominent designations include the Certified Professional Secretary (CPS) and the Certified Administrative Professional (CAP), which can be earned by meeting certain experience or educational requirements and passing an examination. Similarly, those with 1 year of experience in the legal field, or who have concluded an approved training course and who want to be certified as a legal support professional, can acquire the Accredited Legal Secretary (ALS) designation through a testing process administered by NALS.

NALS offers two additional designations: Professional Legal Secretary (PLS), considered an advanced certification for legal support professionals, and a designation for proficiency as a paralegal. Legal Secretaries International confers the Certified Legal Secretary Specialist (CLSS) designation in areas such as intellectual property, criminal law, civil litigation, probate, and business law to those who have 5 years of legal experience and pass an examination. In some instances, certain requirements may be waived.

Secretaries and administrative assistants generally advance by being promoted to other administrative positions with more responsibilities. Qualified administrative assistants who broaden their knowledge of a company's operations and enhance their skills may be promoted to senior or executive secretary or administrative assistant, clerical supervisor, or office manager. Secretaries with word processing or data entry experience can advance to jobs as word processing or data entry trainers, supervisors, or managers within their own firms or in a secretarial, word processing, or data entry service bureau. Secretarial and administrative support experience also can lead to jobs such as instructor or sales representative with manufacturers of software or computer equipment. With additional training, many legal secretaries become paralegals.

Employment

Secretaries and administrative assistants held more than 4.2 million jobs in 2006, ranking it among the largest occupations in the U.S. economy. The following tabulation shows the distribution of employment by secretarial specialty:

Secretaries, except legal, medical, and executive	1,940,000
Executive secretaries and administrative assistants	1,618,000
Medical secretaries	408,000
Legal secretaries	275,000

Secretaries and administrative assistants are employed in organizations of every type. Around 9 out of 10 secretaries and administrative assistants are employed in service providing industries, ranging from education and health care to government and retail trade. Most of the rest work for firms engaged in manufacturing or construction.

Job Outlook

Employment of secretaries and administrative assistants is expected to grow about as fast as average for all occupations. Secretaries and administrative assistants will have among the largest numbers of new jobs arise, about 362,000 over the 2006-16 period. Additional opportunities will result from the need to replace workers who transfer to other occupations or leave this occupation.

Employment change. Employment of secretaries and administrative assistants is expected to increase about 9 percent, which is about as fast as average for all occupations, between 2006 and 2016. Projected employment varies by occupational specialty. Above average employment growth in the health care and social assistance industry should lead to faster than average growth for medical secretaries, while moderate growth in legal services is projected to lead to average growth in employment of legal secretaries. Employment of executive secretaries and administrative assistants is projected to grow faster than average for all occupations. Growing industries—such as administrative and support services; health care and social assistance; and professional, scientific, and technical services—will continue to generate the most new jobs. Little or no change in employment is expected for secretaries, except legal, medical, or executive, who account for about 46 percent of all secretaries and administrative assistants.

Increasing office automation and organizational restructuring will continue to make secretaries and administrative assistants more productive in coming years. Computers, e-mail, scanners, and voice message systems will allow secretaries and administrative assistants to accomplish more in the same amount of time. The use of automated equipment also is changing the distribution of work in many offices. In some

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Secretaries and administrative assistants	43-6000	4,241,000	4,603,000	362,000	9
Executive secretaries and administrative assistants	43-6011	1,618,000	1,857,000	239,000	15
Legal secretaries	43-6012	275,000	308,000	32,000	12
Medical secretaries	43-6013	408,000	477,000	68,000	17
Secretaries, except legal, medical, and executive	43-6014	1,940,000	1,962,000	22,000	1

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

cases, traditional secretarial duties as typing, filing, photocopying, and bookkeeping are being done by clerks in other departments or by the professionals themselves. For example, professionals and managers increasingly do their own word processing and data entry, and handle much of their own correspondence. Also, in some law and medical offices, paralegals and medical assistants are assuming some tasks formerly done by secretaries.

Developments in office technology are certain to continue. However, many secretarial and administrative duties are of a personal, interactive nature and, therefore, are not easily automated. Responsibilities such as planning conferences, working with clients, and instructing staff require tact and communication skills. Because technology cannot substitute for these personal skills, secretaries and administrative assistants will continue to play a key role in most organizations.

As paralegals and medical assistants assume more of the duties traditionally assigned to secretaries, there is a trend in many offices for professionals and managers to replace the traditional arrangement of one secretary per manager with secretaries and administrative assistants who support the work of systems, departments, or units. This approach often means that secretaries and administrative assistants assume added responsibilities and are seen as valuable members of a team.

Job prospects. In addition to jobs created from growth, numerous job opportunities will arise from the need to replace secretaries and administrative assistants who transfer to other occupations, especially exceptionally skilled executive secretaries and administrative assistants who often move into professional occupations. Job opportunities should be best for applicants with extensive knowledge of software applications and for experienced secretaries and administrative assistants. Opportunities also should be very good for those with advanced communication and computer skills. Applicants with a bachelor's degree will be in great demand to act more as managerial assistants and to perform more complex tasks.

Earnings

Median annual earnings of secretaries, except legal, medical, and executive, were $27,450 in May 2006. The middle 50 percent earned between $21,830 and $34,250. The lowest 10 percent earned less than $17,560, and the highest 10 percent earned more than $41,550. Median annual earnings in the industries employing the largest numbers of secretaries, except legal, medical, and executive in May 2006 were:

Industry	Earnings
Local government	$30,350
General medical and surgical hospitals	28,810
Colleges, universities, and professional schools	28,700
Elementary and secondary schools	28,120
Employment services	26,810

Median annual earnings of executive secretaries and administrative assistants were $37,240 in May 2006. The middle 50 percent earned between $30,240 and $46,160. The lowest 10 percent earned less than $25,190, and the highest 10 percent earned more than $56,740. Median annual earnings in the industries employing the largest numbers of executive secretaries and administrative assistants in May 2006 were:

Industry	Earnings
Management of companies and enterprises	$41,570
Local government	38,670
Colleges, universities, and professional schools	36,510
State government	35,830
Employment services	31,600

Median annual earnings of legal secretaries were $38,190 in May 2006. The middle 50 percent earned between $29,650 and $48,520. The lowest 10 percent earned less than $23,870, and the highest 10 percent earned more than $58,770. Medical secretaries earned a median annual salary of $28,090 in May 2006. The middle 50 percent earned between $23,250 and $34,210. The lowest 10 percent earned less than $19,750, and the highest 10 percent earned more than $40,870.

Salaries vary a great deal, however, reflecting differences in skill, experience, and level of responsibility. Certification in this field may be rewarded by a higher salary.

Related Occupations

Workers in a number of other occupations also type, record information, and process paperwork. Among them are bookkeeping, accounting, and auditing clerks; receptionists and information clerks; communications equipment operators; court reporters; human resources assistants, except payroll and timekeeping; computer operators; data entry and information processing workers; paralegals and legal assistants; medical assistants; and medical records and health information technicians. A growing number of secretaries and administrative assistants share in managerial and human resource responsibilities. Occupations requiring these skills include office and administrative support supervisors and managers; computer and information systems managers; administrative services managers; and human resources, training, and labor relations managers and specialists.

Sources of Additional Information

State employment offices provide information about job openings for secretaries and administrative assistants.

For information on the latest trends in the profession, career development advice, and the CPS or CAP designations, contact:

➤ International Association of Administrative Professionals, 10502 NW. Ambassador Dr., P.O. Box 20404, Kansas City, MO 64195-0404. Internet: **http://www.iaap-hq.org**

➤ Association of Executive and Administrative Professionals, Suite G-13, 900 South Washington Street, Falls Church, VA 22406-4009. Internet: **http://www.theaeap.com**

Information on the CLSS designation can be obtained from:

➤ Legal Secretaries International Inc., 2302 Fannin Street, Suite 500, Houston, TX 77002-9136.
Internet: **http://www.legalsecretaries.org**

Information on the ALS, PLS, and paralegal certifications are available from:

➤ National Association of Legal Secretaries, Inc., 314 East Third St., Suite 210, Tulsa, OK 74120.
Internet: **http://www.nals.org**

Shipping, Receiving, and Traffic Clerks

(O*NET 43-5071.00)

Significant Points

- Shipping, receiving, and traffic clerks generally are entry-level workers who need no more than a high school diploma.
- Slower-than-average employment growth is expected as a result of increasing automation; many additional job openings will result from the need to replace workers who leave the occupation.
- Because of increasing automation, employers prefer to hire those familiar with computers and other electronic office and business equipment.

Nature of the Work

Shipping, receiving, and traffic clerks keep records of all goods shipped and received. Their duties depend on the size of the establishment they work for and the level of automation used. Larger companies typically are better able to finance the purchase of computers, scanners, and other equipment to handle some or all of a clerk's responsibilities. In smaller companies, a clerk maintains records, prepares shipments, sorts packages, and accepts deliveries. In both environments, shipping, receiving, and traffic clerks may lift cartons of various sizes.

Shipping clerks keep records of all outgoing shipments. They prepare shipping documents and mailing labels and make sure that orders have been filled correctly. Also, they record items taken from inventory and note when orders were filled. Sometimes they fill the order themselves, taking merchandise from the stockroom, noting when inventories run low, and wrapping or packing the goods 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. In addition, shipping clerks may prepare invoices and furnish information about shipments to other parts of the company, such as the accounting department. Once a shipment is checked and ready to go, shipping clerks may sort and move the goods from the warehouse—sometimes by forklift—to the shipping dock or truck terminal and direct their loading.

Receiving clerks perform tasks similar to those of shipping clerks. They determine whether orders have been filled correctly by verifying incoming shipments against the original order and the accompanying bill of lading or invoice. They make a record of the shipment and the condition of its contents. In many firms, receiving clerks either use hand-held scanners to record barcodes on incoming products or manually enter the information into a computer. These data then can be transferred to the appropriate departments. An increasing number of clerks at larger, more automated companies use radio-frequency identification (RFID) scanners, which store and remotely retrieve data using tags or transponders. Clerks then check the shipment for any discrepancies in quantity, price, and discounts. Receiving clerks may route or move shipments to the proper department, warehouse section, or stockroom. They also may arrange for adjustments with shippers if merchandise is lost or damaged. Receiving clerks in small businesses may perform some duties similar to those of stock clerks. In larger establishments, receiving clerks may control all receiving platform operations, such as scheduling of trucks, recording of shipments, and handling of damaged goods.

Shipping, receiving, and traffic clerks maintain records of all goods shipped and received.

Traffic clerks maintain records on the destination, weight, and charges on all incoming and outgoing freight. They verify rate charges by comparing the classification of materials with rate charts. In many companies, this work may be automated. Information either is scanned or is entered by hand into a computer for use by the accounting department or other departments within the company. Traffic clerks also keep a file of claims for overcharges and for damage to goods in transit.

Work environment. Most jobs for shipping, receiving, and traffic clerks involve frequent standing, bending, walking, and stretching. Lifting and carrying smaller items also may be involved, especially at small companies with less automation. Although automated devices have lessened the physical demands of this occupation, their use remains somewhat limited. The work still can be strenuous, even though mechanical material handling equipment, such as computerized conveyor systems, is used to move heavy items at a rapid pace.

The typical workweek is Monday through Friday; however, evening and weekend hours are common in some jobs and may be required when large shipments are involved or during major holiday periods.

Training, Other Qualifications, and Advancement

Shipping, receiving, and traffic clerks generally are entry-level workers who need no more than a high school diploma. Because of increasing automation, however, employers prefer to hire those familiar with computers and other electronic office and business equipment.

Education and training. Shipping, receiving, and traffic clerks usually learn the job by doing routine tasks under close supervision. They first learn how to count and mark stock, and then they start keeping records and taking inventory.

Training in the use of automated equipment usually is done informally, on the job. As these occupations become more auto-

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Shipping, receiving, and traffic clerks	43-5071	769,000	797,000	28,000	4

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

mated, however, workers may need longer periods of training to master the use of the equipment and technology. Because of increasing automation, employers prefer to hire those familiar with computers and other electronic office and business equipment.

Other qualifications. Strength, stamina, good eyesight, and an ability to work at repetitive tasks, sometimes under pressure, are important characteristics. Shipping, receiving, and traffic clerks who handle jewelry, liquor, or drugs may need to be bonded.

Advancement. Shipping, receiving, and traffic clerks are commonly promoted to head clerk, and those with a broad understanding of shipping and receiving may sometimes become purchasing agents or enter a related field, such as industrial traffic management. The Warehousing Education and Research Council offers online courses in distribution and logistics, which may enhance a clerk's potential for advancement.

Employment

Shipping, receiving, and traffic clerks held about 769,000 jobs in 2006. About 71 percent were employed in manufacturing or by wholesale and retail establishments. Although jobs for shipping, receiving, and traffic clerks are found throughout the country, most clerks work in urban areas, where shipping depots in factories and wholesale establishments usually are located.

Job Outlook

Slower-than-average employment growth is expected as a result of increasing automation. However, many additional job openings will result from the need to replace shipping, receiving, and traffic clerks who leave the occupation.

Employment change. Employment of shipping, receiving, and traffic clerks is expected to grow 4 percent between 2006 and 2016, more slowly than the average for all occupations. Job growth will continue to be limited by automation as all but the smallest firms move to reduce labor costs by using computers and high-technology scanners to store and retrieve shipping and receiving records.

Methods of handling materials have changed significantly in recent years. Large warehouses are increasingly becoming automated, with equipment such as automatic sorting systems, robots, computer-directed trucks, and programmed data storage and retrieval systems. This automation, coupled with the growing use of hand-held barcode and RFID scanners in shipping and receiving departments, has increased the productivity of shipping, receiving, and traffic clerks.

Job prospects. In addition to some openings from employment growth, many job openings will occur because of the need to replace shipping, receiving, and traffic clerks who leave the occupation. This is a large entry-level occupation, and many vacancies are created each year as workers leave as part of their normal career progression. Because smaller warehouses, distribution centers, and trucking terminals will continue to rely on sorting and moving goods by hand, job opportunities at those facilities may be better than at larger, more automated centers.

Earnings

Median annual earnings of wage-and-salary shipping, receiving, and traffic clerks in May 2006 were $26,070. The middle 50 percent earned between $20,670 and $32,840. The lowest 10 percent earned less than $16,970, and the highest 10 percent earned more than $40,590.

These workers usually receive the same benefits as most other workers. If uniforms are required, employers generally provide them or offer an allowance to purchase them.

Related Occupations

Shipping, receiving, and traffic clerks record, check, and often store materials that a company receives. They also process and pack goods for shipment. Other workers who perform similar duties are stock clerks and order fillers; production, planning, and expediting clerks; cargo and freight agents; and Postal Service workers.

Sources of Additional Information

For information about career opportunities and online courses in distribution, warehousing, and storage systems, contact:

➤ Warehousing Education and Research Council, 1100 Jorie Blvd., Suite 170, Oak Brook, IL 60523. Internet: **http://www.werc.org**

Additional information about job opportunities may be obtained from local employers and local offices of the State employment service.

Stock Clerks and Order Fillers

(O*NET 43-5081.00, 43-5081.01, 43-5081.02, 43-5081.03, 43-5081.04)

Significant Points

- Stock clerks and order fillers generally are entry-level workers who learn through short-term on-the-job training.
- Despite the projected decline in employment due to the use of automation in factories, warehouses, and stores, numerous job openings are expected due to replacement needs.
- Because of automation, applicants who are familiar with computers and other electronic office and business equipment will have the best job prospects.

Numerous job openings for stock clerks and order fillers are expected due to replacement needs.

Nature of the Work

Stock clerks and order fillers receive, unpack, check, store, track merchandise or materials, and pick up customer orders. They keep records of items entering or leaving the stockroom and inspect damaged or spoiled goods. Stock clerks and order fillers sort, organize, and mark items with identifying codes, such as price, stock, or inventory control codes, so that inventories can be located quickly and easily. They also may be required to lift cartons of various sizes. In larger establishments, where they may be responsible for only one task, they may be called *stock-control clerks, merchandise distributors, or property custodians*. In smaller firms, they also may perform tasks such as packing and mailing items, usually handled by shipping and receiving clerks. (A separate statement on shipping, receiving, and traffic clerks appears elsewhere in the *Handbook*.)

In many firms, stock clerks and order fillers use hand-held scanners connected to computers to keep inventories up to date. In retail stores, stock clerks bring merchandise to the sales floor and stock shelves and racks. In stockrooms and warehouses, stock clerks store materials in bins, on floors, or on shelves. Instead of putting the merchandise on the sales floor or on shelves, order fillers take customers' orders and either hold the merchandise until the customers can pick it up or send it to them.

Work environment. Working conditions vary considerably by employment setting. Most jobs for stock clerks and order fillers involve frequent standing, bending, walking, and stretching. Some lifting and carrying of smaller items also may be involved. Although automated devices have lessened the physical demands of this occupation, their use remains somewhat limited. Even though mechanical material handling equipment is employed to move heavy items, the work still can be strenuous.

Evening and weekend hours are common and may be required when large shipments are involved or when inventory is taken.

Training, Other Qualifications, and Advancement

Stock clerk and order fillers generally are entry-level workers who do not need more than a high school diploma or GED. Short-term on-the-job training is usually adequate for this occupation.

Education and training. Stock clerks and order fillers usually learn the job by doing routine tasks under close supervision. They learn how to count and mark stock and later to keep records and take inventory. Training in the use of automated equipment usually is done informally, on the job. As this occupation becomes more automated, however, workers may need longer periods of training to master the use of the equipment.

Other qualifications. Strength, stamina, good eyesight, and an ability to work at repetitive tasks, sometimes under pressure, are important characteristics. Stock clerks and order fillers who handle jewelry, liquor, or drugs may be bonded. Employers prefer to hire those familiar with computers and other electronic office and business equipment. Typing, filing, recordkeeping, and other clerical skills also are important in some jobs.

Advancement. Advancement opportunities for stock clerks and order fillers vary with the place of employment. With additional training, some workers advance to jobs as warehouse leads or supervisors, purchasing agents or other jobs within the facility such as inventory control.

Employment

Stock clerks and order fillers held about 1.7 million jobs in 2006. About 78 percent work in wholesale and retail trade. The greatest numbers are found in department stores, followed by grocery stores. Jobs for stock clerks are found in all parts of the country, but most work in large urban areas that have many large suburban shopping centers, warehouses, and factories.

Job Outlook

Employment of stock clerks and order fillers is projected to decline as a result of automation in factories, warehouses, and stores. However, numerous job openings will occur each year due to the need to replace workers who leave the occupation, which is a characteristic of very large occupations with limited training requirements. Because of automation, applicants who are familiar with computers and other electronic office and business equipment will have the best job prospects.

Employment change. Employment of stock clerks and order fillers is expected to decline moderately by 8 percent over the 2006 to 2016 period. The growing use of computers for inventory control and the installation of new, automated equipment

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Stock clerks and order fillers..	43-5081	1,705,000	1,574,000	-131,000	-8

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

are expected to inhibit growth in demand for stock clerks and order fillers, especially in manufacturing and wholesale trade industries, where operations are most easily automated. In addition to using computerized inventory control systems to sort goods more efficiently, firms in these industries are relying more on sophisticated conveyor belts and automatic high stackers to store and retrieve goods. Also, expanded use of battery-powered, driverless, automatically guided vehicles can be expected.

The increasing role of large retail outlets and warehouses, as well as catalog, mail, telephone, and Internet shopping services, however, should bolster employment of stock clerks and order fillers in these sectors of retail trade.

Job prospects. Despite declining employment, numerous job openings will occur each year due to replacement needs. Because of automation, applicants who are familiar with computers and other electronic office and business equipment will have the best job prospects. Since much of the work of stock clerks and order fillers who work in grocery, general merchandise, apparel, accessory, and department stores is done manually and is difficult to automate, workers in these industries should be less affected by automation than workers in manufacturing.

Earnings

In May 2006, median annual wage-and-salary earnings of stock clerks and order fillers in were $20,440. The middle 50 percent earned between $16,670 and $26,440. The lowest 10 percent earned less than $14,490, and the highest 10 percent earned more than $34,200.

These workers usually receive the same benefits as most other workers. If uniforms are required, employers generally provide them or offer an allowance to purchase them.

Related Occupations

Workers who also handle, move, organize, store, and keep records of materials include shipping, receiving, and traffic clerks; production, planning, and expediting clerks; cargo and freight agents; and procurement clerks.

Sources of Additional Information

State employment service offices can provide information about job openings for stock clerks and order fillers.

Tellers

(O*NET 43-3071.00)

Significant Points

- Tellers should enjoy working with the public, feel comfortable handling large amounts of money, and be discreet and trustworthy.
- About 1 out of 4 tellers work part time.
- Many job openings will arise from replacement needs because many tellers eventually leave for jobs in other occupations that offer higher pay or more responsibility.
- Employment of tellers is projected to grow as fast as the average; good job prospects are expected.

Tellers must have good customer service skills.

Nature of the Work

The teller is the worker most people associate with their bank. Among the responsibilities of tellers are cashing checks, accepting deposits and loan payments, and processing withdrawals. Tellers make up approximately one-fourth of bank employees and conduct most of a bank's routine transactions.

Prior to starting their shifts, tellers receive and count an amount of working cash for their drawers. A supervisor—usually the head teller—verifies this amount. Tellers disburse this cash during the day and are responsible for its safe and accurate handling. Before leaving, tellers count their cash on hand, list the currency received on a balance sheet making sure that the accounts balance, and sort checks and deposit slips. Over the course of a workday, tellers also may process numerous mail transactions. They also may sell savings bonds, accept payment for customers' utility bills and charge cards, process necessary paperwork for certificates of deposit, and sell travelers' checks. Some tellers specialize in handling foreign currencies or commercial or business accounts. Other tellers corroborate deposits and payments to automated teller machines (ATMs).

Being a teller requires a great deal of attention to detail. Before cashing a check, a teller must verify the date, the name of the bank, the identity of the person who is to receive payment, and the legality of the document. A teller also must make sure that the written and numerical amounts agree and that the account has sufficient funds to cover the check. The teller then must carefully count cash to avoid errors. Sometimes a custom-

er withdraws money in the form of a cashier's check, which the teller prepares and verifies. When accepting a deposit, tellers must check the accuracy of the deposit slip before processing the transaction.

As banks begin to offer more and increasingly complex financial services, tellers are being trained to identify customers who might want to buy these services. This task requires them to learn about the various financial products and services the bank offers so that they can explain them to customers and refer interested customers to appropriate specialized sales personnel. In addition, tellers in many banks are being cross-trained to perform some of the functions of customer service representatives. (Customer service representatives are discussed separately in the *Handbook*.)

Technology continues to play a large role in the job duties of all tellers. In most banks, for example, tellers use computer terminals to record deposits and withdrawals. These terminals often give them quick access to detailed information on customer accounts. Tellers can use this information to tailor the bank's services to fit a customer's needs or to recommend an appropriate bank product or service.

In most banks, head tellers manage teller operations. They set work schedules, ensure that the proper procedures are adhered to, and act as mentors to less experienced tellers. In addition, head tellers may perform the typical duties of a front-line teller, as needed, and may deal with the more difficult customer problems. They may access the vault, ensure that the correct cash balance is in the vault, and oversee large cash transactions.

Work environment. Tellers work in an office environment. They may experience eye and muscle strain, backaches, headaches, and repetitive motion injuries as a result of using computers every day. Tellers may have to sit for extended periods while reviewing detailed data.

Many tellers work regular business hours and a standard 40-hour week. Sometimes, they work evenings and weekends to accommodate extended bank hours. About 1 in 4 tellers worked part time.

Training, Other Qualifications, and Advancement

Most teller jobs require a high school diploma or higher degree. Tellers are usually trained on the job.

Education and training. Most tellers are required to have at least a high school diploma, but some have completed some college training or even a bachelor's degree in business, accounting, or liberal arts. Although a college degree is rarely required, graduates sometimes accept teller positions to get started in banking or in a particular company with the hope of eventually being promoted to managerial or other positions.

Once hired, tellers usually receive on-the-job training. Under the guidance of a supervisor or other senior worker, new employees learn company procedures. Some formal classroom training also may be necessary, such as training in specific computer software.

Other qualifications. Experience working in an office environment or in customer service, and particularly in cash-handling can be important for tellers. Regardless of experience, employers prefer workers who have good communication and customer service skills. Knowledge of word processing and spreadsheet software is also valuable.

Tellers should enjoy contact with the public. They must have a strong aptitude for numbers and feel comfortable handling large amounts of money. They should be discreet and trustworthy because they frequently come in contact with confidential material. Tellers also must be careful, orderly, and detail-oriented to avoid making errors and to recognize errors made by others.

Advancement. Tellers usually advance by taking on more duties and being promoted to head teller or to another supervisory job. Many banks and other employers fill supervisory and managerial positions by promoting individuals from within their organizations, so outstanding tellers who acquire additional skills, experience, and training improve their advancement opportunities. Tellers can prepare for jobs with better pay or more responsibility by taking courses offered by banking and financial institutes, colleges and universities, and private training institutions.

Employment

Tellers held about 608,000 jobs in 2006. The overwhelming majority of tellers worked in commercial banks, savings institutions, or credit unions. The remainder worked in a variety of other finance and other industries.

Job Outlook

Employment of tellers is expected to grow about as fast as the average for all occupations. Overall job prospects should be favorable due to the need to replace workers who retire or otherwise leave the occupation.

Employment change. Employment is projected to grow by 13 percent between 2006 and 2016, which is about as fast as the average for all occupations. To attract customers, banks are opening new branch offices in a variety of locations, such as grocery stores and shopping malls. Banks are also keeping their branches open longer during the day and on weekends. Both of these trends are expected to increase job opportunities for tellers, particularly those who work part time.

Despite the improved outlook, automation and technology will continue to reduce the need for tellers who perform only routine transactions. For example, increased use of ATMs, debit cards, credit cards, and the direct deposit of pay and benefit checks have reduced the need for bank customers to interact with tellers for routine transactions. Electronic banking—con-

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Tellers	43-3071	608,000	689,000	82,000	13

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

ducted over the telephone or the Internet—also is spreading rapidly throughout the banking industry and will reduce the need for tellers in the long run.

Employment of tellers also is being affected by the increasing use of 24-hour telephone centers by many large banks. These centers allow a customer to interact with a bank representative at a distant location, either by telephone or by video terminal. Such centers usually are staffed by customer service representatives.

Job prospects. Job prospects for tellers are expected to be favorable. In addition to job openings expected from growth, most openings will arise from the need to replace the many tellers who transfer to other occupations—which is common for large occupations that normally require little formal education and offer relatively low pay. Prospects will be best for tellers with excellent customer service skills, knowledge about a variety of financial services, and the ability to sell those services.

Earnings

Salaries of tellers vary with experience, region of the country, size of city, and type and size of establishment. Median annual earnings of tellers were $22,140 in May 2006. The middle 50 percent earned between $19,300 and $25,880 a year. The lowest 10 percent earned less than $16,770, and the highest 10 percent earned more than $30,020 a year in May 2006.

Related Occupations

Tellers enter data into a computer, handle cash, and keep track of financial transactions. Other clerks who perform similar duties include bill and account collectors; billing and posting clerks and machine operators; bookkeeping, accounting, and auditing clerks; gaming cage workers; brokerage clerks; and credit authorizers, checkers, and clerks.

Sources of Additional Information

Information on employment opportunities for tellers is available from banks and other employers, local offices of the State employment service, and from:

➤ Bank Administration Institute, 1 North Franklin St., Suite 1000 Chicago, IL 60606. Internet: **http://www.bai.org**

Weighers, Measurers, Checkers, and Samplers, Recordkeeping

(O*NET 43-5111.00)

Significant Points

- Many jobs are at the entry level and do not require more than a high school diploma.
- Employment of weighers, measurers, checkers, and samplers is expected to decline because of the increased use of automated equipment that performs the function of these workers.

Nature of the Work

Weighers, measurers, checkers, and samplers weigh, measure, and check materials, supplies, and equipment in order to keep accurate records. Most of their duties are clerical. Using either manual or automated data-processing systems, they verify the quantity, quality, and overall value of the items they are responsible for and check the condition of items purchased, sold, or produced against records, bills, invoices, or receipts. They check the items to ensure the accuracy of the recorded data. They prepare reports on warehouse inventory levels and on the use of parts. Weighers, measurers, checkers, and samplers also check for any defects in the items and record the severity of the defects they find.

Information obtained by these workers needs to be accurate.

These workers use weight scales, counting devices, tally sheets, and calculators to get and record information about products. They usually move objects to and from the scales with a handtruck or forklift. They issue receipts for products when needed or requested.

Work environment. Weighers, measurers, checkers, and samplers work in a wide variety of businesses, institutions, and industries. Some work in warehouses, stockrooms, or shipping and receiving rooms that may not be temperature controlled. Others may spend time in cold storage rooms or on loading platforms that are exposed to the weather.

Training, Other Qualifications, and Advancement

Most jobs do not require more than a high school diploma. However preference is given to applicants familiar with computers.

Education and training. Many weigher, measurer, checker, and sampler jobs are entry level and do not require more than a high school diploma or a GED, its equivalent.

Other qualifications. Employers prefer to hire individuals familiar with computers. Applicants who have specific job-related experience may also be preferred. Typing, filing, recordkeeping, and other clerical skills are important.

Advancement. Advancement opportunities vary with the place of employment.

Employment

Weighers, measurers, checkers, and samplers held about 79,000 jobs in 2006. Their employment is spread across many industries. Retail trade accounted for 14 percent of those jobs, manufacturing accounted for about 22 percent, and wholesale trade employed another 18 percent.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Weighers, measurers, checkers, and samplers, recordkeeping..........	43-5111	79,000	70,000	-9,000	-11

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

Job Outlook

Despite rapid declines in overall employment due primarily to automation, job opportunities should arise from the need to replace workers who leave the labor force or transfer to other occupations.

Employment change. Employment of weighers, measurers, checkers, and samplers is expected to decline rapidly by 11 percent from 2006 through 2016 because of the increased use of automated equipment that now performs the function of these workers.

Job prospects. Despite employment declines, job opportunities should arise from the need to replace workers who leave the labor force or transfer to other occupations.

Earnings

Median wage-and-salary earnings of weighers, measurers, checkers, and samplers in May 2006 were $12.20. The middle 50 percent earned between $9.66 and $15.83. The lowest 10 percent earned less than $8.03, and the highest 10 percent earned more than $19.78.

These workers usually receive the same benefits as most other workers. If uniforms are required, employers generally provide them or offer an allowance to purchase them.

Related Occupations

Other workers who determine and document characteristics of materials or equipment include cargo and freight agents; production, planning, and expediting clerks; shipping, receiving, and traffic clerks; stock clerks and order fillers; and procurement clerks.

Sources of Additional Information

Information about job opportunities may be obtained from local employers and local offices of the State employment service.