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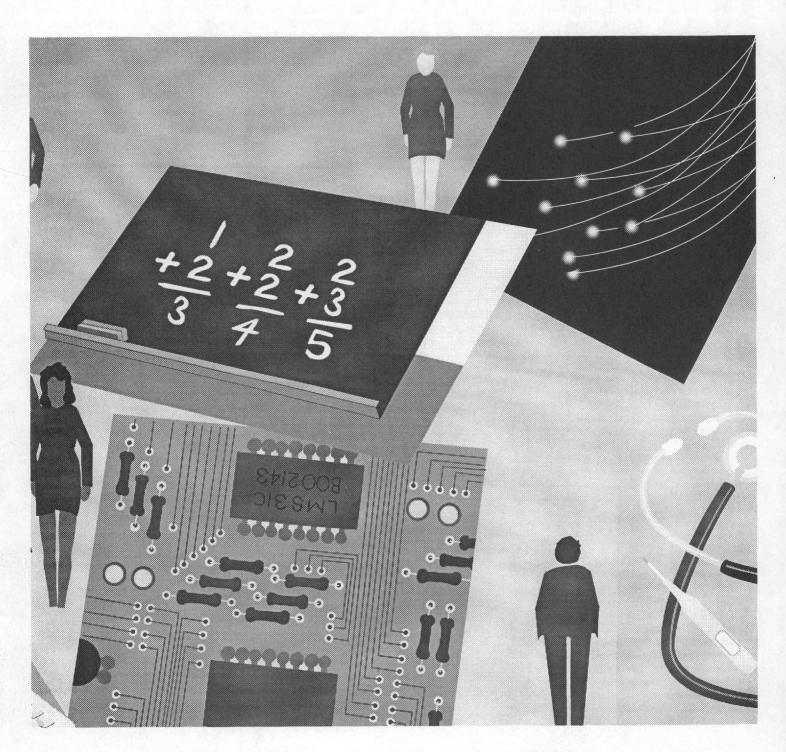


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Accountants and Auditors

(D.O.T. 160 through .167-042, -054, and .267-014)

Nature of the Work

Managers must have up-to-date financial information in order to make important decisions. Accountants and auditors prepare, analyze, and verify financial reports and taxes, and monitor information systems that furnish this information to managers in all business, industrial, and government organizations.

Four major fields of accounting are public, management, and government accounting, and internal auditing. Public accountants have their own businesses or work for public accounting firms. They perform a broad range of accounting, auditing, tax, and consulting activities for their clients, who may be corporations, governments, nonprofit organizations, or individuals. Management accountants, also called industrial, corporate, or private accountants, record and analyze the financial information of the companies for which they work. Internal auditors verify the accuracy of their organization's records and check for mismanagement, waste, or fraud. Government accountants and auditors maintain and examine the records of government agencies and audit private businesses and individuals whose activities are subject to government regulations or taxation.

Within each field, accountants often concentrate on one phase of accounting. For example, many public accountants concentrate on tax matters, such as preparing an individual's income tax returns and advising companies of the tax advantages and disadvantages of certain business decisions. Others concentrate on consulting and offer advice on matters such as employee health care benefits, and compensation; the design of companies' accounting and data processing systems; and controls to safeguard assets. Some specialize in forensic accounting—investigating and interpreting bankruptcies and other complex financial transactions. Still others work primarily in auditing—examining a client's financial statements and reporting to investors and authorities that they have been prepared and reported correctly. However, fewer accounting firms are performing this type of work because of potential liability.

Management accountants analyze and interpret the financial information corporate executives need to make sound business decisions. They also prepare financial reports for nonmanagement groups, including stock holders, creditors, regulatory agencies, and tax authorities. Within accounting departments, they may work in financial analysis, planning and budgeting, cost accounting, and other areas.

Internal auditing is rapidly growing in importance. As computer systems make information more timely and available, top management can base its decisions on actual data rather than personal observation. Internal auditors examine and evaluate their firms' financial and information systems, management procedures, and internal controls to ensure that records are accurate and controls are adequate to protect against fraud and waste. They also review company operations—evaluating their efficiency, effectiveness, and compliance with corporate policies and procedures, laws, and government regulations. There are many types of highly specialized auditors, such as electronic data processing auditors, environmental auditors, engineering auditors, legal auditors, insurance premium auditors, bank auditors, and health care auditors.

Accountants and auditors also work for Federal, State, and local governments. Government accountants see that revenues are received and expenditures are made in accordance with laws and regulations. Many persons with an accounting background work for the Federal Government as Internal Revenue Service agents or in financial management, financial institution examination, and budget analysis and administration.

In addition, a small number of persons trained as accountants teach and conduct research at business and professional schools. Some work part time as accountants or consultants.

Computers are widely used in accounting and auditing. With the aid of special computer software packages, accountants summarize transactions in standard formats for financial records or organize data in special formats for financial analysis. These accounting packages are easily learned and require few specialized computer skills, and greatly reduce the amount of tedious manual work associated with figures and records. Personal and laptop computers enable accountants and auditors in all fields—even those who work independently—to use their clients' computer system and to extract information from large mainframe computers. Internal auditors may recommend controls for their organization's computer system to ensure the reliability of the system and the integrity of the data. A growing number of accountants and auditors have extensive computer skills and specialize in correcting problems with software or developing software to meet unique data needs.

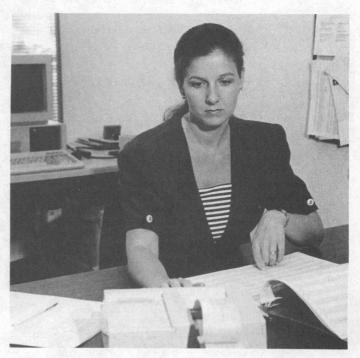
Working Conditions

Accountants and auditors work in offices, but public accountants may frequently visit the offices of clients while conducting audits. Self-employed accountants may be able to do part of their work at home. Accountants and auditors employed by large firms and government agencies may travel frequently to perform audits at clients' places of business, branches of their firm, or government facilities.

The majority of accountants and auditors generally work a standard 40-hour week, but many work longer, particularly if they are self-employed and free to take on the work of as many clients as they choose. For example, about 4 out of 10 self-employed accountants and auditors work more than 50 hours per week, compared to 1 out of 4 wage and salary accountants and auditors. Tax specialists often work long hours during the tax season.

Employment

Accountants and auditors held about 939,000 jobs in 1992. They worked throughout all types of firms and industries, but nearly one-



CPA's have the widest range of job opportunities.

third worked for accounting, auditing, and bookkeeping firms, or were self-employed.

The majority of accountants and auditors were unlicensed management accountants, internal auditors, or government accountants and auditors. However, in 1992 there were on record over 475,000 State-licensed Certified Public Accountants (CPA's), Public Accountants (PA's), Registered Public Accountants (RPA's), and Accounting Practitioners (AP's). The vast majority of these—over 400,000—were CPA's, but there may have been far fewer practicing CPA's in the country; many CPA's hold licenses in several States at once.

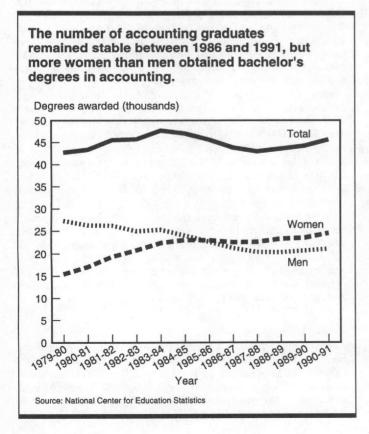
Most accountants and auditors work in urban areas where public accounting firms and central or regional offices of businesses are concentrated. Roughly 10 percent of all accountants were self-employed, and less than 10 percent worked part time.

Some accountants and auditors teach full time in junior colleges and colleges and universities; others teach part time while working for private industry or government or as self-employed accountants.

Training, Other Qualifications, and Advancement

Most public accounting and business firms require applicants for accountant and internal auditor positions to have at least a bachelor's degree in accounting or a related field. Those wishing to pursue a bachelor's degree in accounting should carefully research accounting curricula before enrolling. Many States will soon require CPA candidates to complete 150 semester hours of coursework prior to taking the CPA exam, and many schools have altered their curricula accordingly. Some employers prefer those with a master's degree in accounting or a master's degree in business administration with a concentration in accounting. Most employers also prefer applicants who are familiar with computers and their applications in accounting and internal auditing.

For beginning accounting and auditing positions in the Federal Government, 4 years of college (including 24 semester hours in accounting or auditing) or an equivalent combination of education and experience is required.



Previous experience in accounting or auditing can help an applicant get a job. Many colleges offer students an opportunity to gain experience through summer or part-time internship programs conducted by public accounting or business firms. Such training is invaluable in gaining permanent employment in the field.

Professional recognition through certification or licensure also is helpful. In the majority of States, CPA's are the only accountants who are licensed and regulated. Anyone working as a CPA must have a certificate and a license issued by a State board of accountancy. The vast majority of States require CPA candidates to be college graduates, but a few States substitute a certain number of years of public accounting experience for the educational requirement. Based on recommendations made by the American Institute of Certified Public Accountants and the National Association of State Boards of Accountancy, some States currently require that CPA candidates complete 150 semester hours of college coursework, and many other States are working toward adopting this law. This 150-hour rule requires an additional 30 hours of coursework beyond the usual 4-year bachelor's degree in accounting.

All States use the four-part Uniform CPA Examination prepared by the American Institute of Certified Public Accountants. The 2-day CPA examination is rigorous, and only about one-quarter of those who take it each year pass each part they attempt. Candidates are not required to pass all four parts at once, although most States require candidates to pass at least two parts for partial credit. Many States require all sections of the test to be passed within a certain period of time. Most States also require applicants for a CPA certificate to have some accounting experience.

The designations PA or RPA are also recognized by most States, and several States continue to issue these licenses. With the growth in the number of CPA's, however, the majority of States are phasing out the PA, RPA, and other non-CPA designations by not issuing any more new licenses. Accountants who hold PA or RPA designations have similar legal rights, duties, and obligations as CPA's, but their qualifications for licensure are less stringent. The designation Accounting Practitioner is also awarded by several States. It requires less formal training than a CPA license and covers a more limited scope of practice.

Nearly all States require both CPA's and PA's to complete a certain number of hours of continuing professional education before their licenses can be renewed. The professional associations representing accountants sponsor numerous courses, seminars, group study programs, and other forms of continuing education.

Professional societies bestow other forms of credentials on a voluntary basis. Voluntary certification can attest to professional competence in a specialized field of accounting and auditing. It also can certify that a recognized level of professional competence has been achieved by accountants and auditors who acquired some skills on the job, without the amount of formal education or public accounting work experience needed to meet the rigorous standards required to take the CPA examination. Increasingly, employers seek applicants with these credentials.

The Institute of Internal Auditors confers the designation Certified Internal Auditor (CIA) upon graduates from accredited colleges and universities who have completed 2 years' work in internal auditing and who have passed a four-part examination. The EDP Auditors Association confers the designation Certified Information Systems Auditor (CISA) upon candidates who pass an examination and who have 5 years of experience in auditing electronic data processing systems. However, auditing or data processing experience and college education may be substituted for up to 3 years. Other organizations, such as the National Association of Certified Fraud Examiners and the Bank Administration Institute, confer other specialized auditing designations.

The Institute of Management Accountants (IMA), formerly the National Association of Accountants, confers the Certified Management Accountant (CMA) designation upon college graduates who pass a four-part examination, agree to meet continuing education requirements, comply with standards of professional conduct, and have at least 2 years' work in management accounting. The

CMA program is administered through an affiliate of the IMA, the Institute of Certified Management Accountants. The Accreditation Council for Accountancy and Taxation, a satellite organization of the National Society of Public Accountants, awards a Certificate of Accreditation in Accountancy to those who pass a comprehensive examination, and a Certificate of Accreditation in Taxation to those with appropriate experience and education. It is not uncommon for a practitioner to hold multiple licenses and designations. For instance, one internal auditor might be a CPA, CIA, and CISA.

Persons planning a career in accounting should have an aptitude for mathematics, be able to analyze, compare, and interpret facts and figures quickly, and make sound judgments based on this knowledge. They must be able to clearly communicate the results of their work, orally and in writing, to clients and management.

Accountants and auditors must be good at working with people as well as with business systems and computers. Accuracy and the ability to handle responsibility with limited supervision are important. Perhaps most important, because millions of financial statement users rely on their services, accountants and auditors should have high standards of integrity.

Capable accountants and auditors should advance rapidly; those having inadequate academic preparation may be assigned routine jobs and find promotion difficult. Many graduates of junior colleges and business and correspondence schools, as well as bookkeepers and accounting clerks who meet the education and experience requirements set by their employers, can obtain junior accounting positions and advance to more responsible positions by demonstrating their accounting skills on the job.

Beginning public accountants usually start by assisting with work for several clients. They may advance to positions with more responsibility in 1 or 2 years and to senior positions within another few years. Those who excel may become supervisors, managers, or partners, open their own public accounting firms, or transfer to executive positions in management accounting or internal auditing in private firms.

Beginning management accountants often start as cost accountants, junior internal auditors, or as trainees for other accounting positions. As they rise through the organization, they may advance to accounting manager, chief cost accountant, budget director, or manager of internal auditing. Some become controllers, treasurers, financial vice presidents, chief financial officers, or corporation presidents. Many senior corporation executives have a background in accounting, internal auditing, or finance.

There is a large degree of mobility among public accountants, management accountants, and internal auditors. Practitioners often shift into management accounting or internal auditing from public accounting, or between internal auditing and management accounting. However, it is less common for accountants and auditors to move from either management accounting or internal auditing into public accounting.

Job Outlook

Employment of accountants and auditors is expected to grow faster than the average for all occupations through the year 2005. Qualified accountants and auditors should have good job opportunities. Although the profession is characterized by a relatively low rate of turnover, because the occupation is so large many openings also will arise as accountants and auditors retire, die, or move into other occupations. CPA's should have the widest range of opportunities, especially as more States enact the 150-hour rule and it becomes more difficult to become a CPA.

As the economy grows, the number of business establishments increases, requiring more accountants and auditors to set up their books, prepare their taxes, and provide management advice. As these businesses grow, the volume and complexity of information developed by accountants and auditors on costs, expenditures, and taxes will increase as well. More complex requirements for accountants and auditors also arise from changes in legislation related to taxes, financial reporting standards, business investments, mergers,

and other financial matters. In addition, businesses will increasingly need quick, accurate, and individually tailored financial information due to the demands of growing international competition.

The changing role of public accountants, management accountants, and internal auditors also will spur job growth. Public accountants will perform less auditing work due to potential liability, and less tax work due to growing competition from tax preparation firms, but they will assume an even greater management advisory role and expand their consulting services. These rapidly growing services will lead to increased demand for public accountants in the coming years. Management accountants also will take on a greater advisory role as they develop more sophisticated and flexible accounting systems, and focus more on analyzing operations rather than just providing financial data. Similarly, management will increasingly need internal auditors to develop new ways to discover and eliminate waste and fraud.

Despite growing opportunities for qualified accountants and auditors, competition for the most prestigious jobs—such as those with major accounting and business firms—will remain keen. Applicants with a master's degree in accounting, a master's degree in business administration with a concentration in accounting, or a broad base of computer experience will have an advantage. Moreover, computers now perform many simple accounting functions, allowing accountants and auditors to incorporate and analyze more information. This increasingly complex work requires greater knowledge of more specialized areas such as international business and current legislation, and expertise in specific industries.

Earnings

According to a College Placement Council Salary Survey in 1993, bachelor's degree candidates in accounting received starting salary offers averaging nearly \$28,000 a year; master's degree candidates in accounting, over \$30,000.

According to a survey of workplaces in 160 metropolitan areas, accountants with limited experience had median earnings of \$24,700 in 1992, with the middle half earning between \$22,200 and \$27,500. The most experienced accountants had median earnings of \$76,000, with the middle half earning between \$68,500 and \$84,600. Public accountants—employed by public accounting firms—with limited experience had median earnings of \$28,000 in 1992, with the middle half earning between \$26,500 and \$29,400. The most experienced public accountants had median earnings of \$42,400, with the middle half earning between \$36,900 and \$50,400. Many owners and partners of firms earned considerably more.

Based on a survey by the Institute of Management Accountants, the average salary of IMA members was about \$55,100 a year in 1992. IMA members who were certified public accountants averaged \$61,900, while members who were certified management accountants averaged \$58,700.

According to a survey by the Institute of Internal Auditors, salaries of internal auditors in 1992 ranged from \$26,500 for those with less than 2 years of experience to \$60,700 for those with over 10 years of experience.

In the Federal Government, the starting annual salary for junior accountants and auditors was about \$18,300 in 1993. Candidates who had a superior academic record could begin at about \$22,700. Applicants with a master's degree or 2 years' professional experience began at \$27,800. Accountants employed by the Federal Government in nonsupervisory, supervisory, and managerial positions averaged \$46,300 a year in 1993; auditors, \$48,200.

Related Occupations

Accountants and auditors design internal control systems and analyze financial data. Others for whom training in accounting is invaluable include appraisers, budget officers, loan officers, financial analysts and managers, bank officers, actuaries, underwriters, tax collectors and revenue agents, FBI special agents, securities sales workers, and purchasing agents.

Sources of Additional Information

Information about different accounting licenses and the standards for licensure in your State may be obtained from your State board of accountancy. A list of the addresses and chief executives of all State boards of accountancy is available from:

Repropriet Partial Association of State Boards of Accountancy, 380 Lexington Ave., Suite 200, New York, NY 10168-0002.

Information about careers in certified public accounting and about CPA standards and examinations may be obtained from:

**Example Comparison of Certified Public Accountants, 1211 Avenue of the Certified Public Accountants, 1211 Aven

Americas, New York, NY 10036-8775, or call 1-800-862-4272.

Information on management and other specialized fields of accounting and auditing and on the Certified Management Accountant program is available from:

Institute of Management Accountants, 10 Paragon Dr., Montvale, NJ 07645-1760.

Mational Society of Public Accountants and the Accreditation Council for Accountancy and Taxation, 1010 North Fairfax St., Alexandria, VA

127 The Institute of Internal Auditors, 249 Maitland Ave., Altamonte Springs, FL 32701-4201.

The EDP Auditors Association, 455 Kehoe Blvd., Suite 106, Carol Stream, IL 60188-0180.

For information on accredited accounting programs and educational institutions offering a specialization in accounting or business management, contact:

American Assembly of Collegiate Schools of Business, 605 Old Ballas Rd., Suite 220, St. Louis, MO 63141.

Administrative Services Managers

(D.O.T. 162.117-014; 163.167-026; 169.167-034; 188.117-122, .167-106)

Nature of the Work

Administrative services managers work throughout private industry and government, and their range of duties is broad. They coordinate and direct supportive services, which may include secretarial and correspondence; administration; preparation of payrolls; conference planning and travel; information processing; mail; facilities management; materials scheduling and distribution; printing and reproduction; records management; telecommunications management; personal property procurement, supply, and disposal; data processing; library; food; security; and parking.

In small firms, one administrative services manager may oversee all supportive services. In larger firms, however, administrative services managers work within the same managerial hierarchy as other managers. Supervisory-level, or "first-line," managers report to their mid-level counterparts who, in turn, report to proprietors or top-level managers. These managers—such as the vice president or director of administration—are included in the *Handbook* statement on general managers and top executives.

Supervisory-level administrative services managers directly oversee supervisors or staffs involved in supportive services. Mid-level managers develop overall plans, set goals and deadlines, develop procedures to direct and improve supportive services, define the responsibilities of supervisory-level managers, and delegate authority. They often are involved in the hiring and dismissal of employees but generally have no role in the formulation of personnel policy.

As the size of the firm increases, administrative services managers increasingly specialize in one or more supportive services activities. For example, administrative services managers may work primarily as facilities managers, office managers, contract administrators, property managers, or unclaimed property officers. In some cases, the duties of these administrative services managers are quite similar to those of other managers and supervisors, some of whom are discussed in other *Handbook* statements.

Administrative services managers who specialize in facilities management engage in facilities planning, including buying, selling, or leasing facilities; redesign work areas to be more efficient and "ergonomic" (user-friendly); ensure that facilities comply with government regulations; and supervise maintenance, grounds, and custodial staffs. In some firms, these workers are called facilities managers, and may work in facilities management departments.

Administrative services managers who work as office managers oversee supervisors of large clerical staffs. In small firms, however, clerical supervisors—who are discussed in the *Handbook* statement on clerical supervisors and managers—perform this function. Administrative services managers who work as contract administrators direct the preparation, analysis, negotiation, and review of contracts related to the purchase or sale of equipment, materials, supplies, products, or services. However, procurement functions are generally directed by purchasing agents and managers, also discussed in a separate *Handbook* statement.

Property management is divided into the management and use of personal property such as office supplies, an administrative services management function, and real property management, a function of property and real estate managers—who are discussed elsewhere in the *Handbook*. Personal property managers acquire, distribute, and store supplies, and sometimes sell or dispose of surplus property. Some property managers are engaged solely in surplus property disposal, the resale of scraps, rejects, and other unneeded supplies and machinery, which is an increasingly important source of revenue for many organizations. In government, surplus property officers may acquire and then sell or dispose of government property.

Other administrative services managers oversee unclaimed property disposal. In government, this activity includes locating owners of unclaimed liquid assets—such as stocks, bonds, savings accounts, and the contents of safe deposit boxes—and locating owners of, or auctioning off, unclaimed personal property—such as motor vehicles

Working Conditions

Administrative services managers generally work in comfortable offices. However, since their duties involve a wide range of activities, they must maintain regular contact with personnel in other departments, and working conditions may vary. In small firms, for instance, they may work alongside the supervisors and staffs they oversee, and the office area may be crowded and noisy.



Some administrative services managers run their own management consulting firms.

Their work can be stressful, as they attempt to schedule work to meet deadlines. Although the 40-hour week is standard, uncompensated overtime is often required to resolve problems. Managers involved in contract administration and personal property procurement, use, and disposal may travel extensively between home offices, branch offices, vendors' offices, and property sales sites. Facilities managers who are responsible for the design of work spaces may spend time at construction sites. Facilities managers also may monitor the work of maintenance, grounds, or custodial staffs, and often travel between different facilities.

Employment

Administrative services managers held about 226,000 jobs in 1992. Over two-fifths worked in services industries, including management, business, social, and health services organizations. Others were found in virtually every other industry. A few run their own management services, management consulting, or facilities support services firms.

Training, Other Qualifications, and Advancement

Many administrative services managers advance through the ranks in an organization, acquiring several years' work experience in various administrative services before assuming supervisory duties. For example, managers who oversee clerical supervisors should be familiar with office procedures and equipment and have a working knowledge of word processing, communications, data processing, and recordkeeping. Facilities managers often have a background in architecture, engineering, construction, interior design, or real estate, in addition to managerial or other administrative experience. Managers of personal property acquisition and disposal need experience in purchasing and sales and knowledge of a wide variety of supplies, machinery, and equipment. Managers concerned with supply, inventory, and distribution must be experienced in receiving, warehousing, packaging, shipping, transportation, and related operations. Contract administrators may have worked as contract specialists, cost analysts, or procurement specialists. Managers of unclaimed property often have experience in claims analysis and records management.

Educational requirements vary widely. For supervisory-level administrative services managers of secretarial, mail room, and related administrative support activities, many employers prefer an associate of arts degree in business or management, although a high school diploma may suffice. For managers of audiovisual, graphics, and other more technical activities, postsecondary technical school training is preferred. For managers of highly complex services such as contract administration, a bachelor's degree, preferably in business administration or finance, is usually required. The curriculum should include courses in office technology, accounting, business mathematics, computer applications, and business law. Similarly, facilities managers often need a bachelor's degree in engineering, interior design, or business administration. Some administrative services managers have advanced degrees. Whatever the manager's duties, his or her educational background must be accompanied by work experience reflecting demonstrated ability.

Persons interested in becoming administrative services managers should be able to communicate and establish effective working relationships with many different people—managers, supervisors, professionals, clerks, and blue-collar workers. They should be analytical, detail-oriented, flexible, and decisive. The ability to coordinate several activities and to quickly analyze and resolve specific problems is important. Ability to work under stress and cope with deadlines is also important.

Advancement is easier in large firms that employ several levels of administrative services managers. Attainment of the "Certified Administrative Manager" (CAM) designation, through work experience and successful completion of examinations offered by the Academy of Administrative Management, can increase one's advancement opportunities. A bachelor's degree enhances a supervisory-level manager's opportunities to advance to a mid-level management position, such as director of administrative services, and eventually to a top-level management position, such as executive vice president for administrative services, in one's own or a larger

firm. Those with the required capital and experience can establish their own management consulting, management services, or facilities support services firm.

Job Outlook

Employment of administrative services managers is expected to grow more slowly than the average for all occupations through the year 2005. Moreover, the occupation is characterized by relatively low turnover—similar to other managerial occupations—and relatively few of the administrative services managers who leave their jobs leave the profession permanently. These factors, coupled with the ample supply of competent, experienced workers seeking managerial jobs, should result in keen competition for administrative services management positions in the coming years.

Although administrative services are becoming more complex, many firms are increasingly contracting out administrative services and otherwise streamlining these functions in an effort to cut costs. Corporate restructuring has tempered growth of administrative services managers in recent years, and this trend is expected to continue

As it becomes more common for firms to contract out administrative services, however, demand for administrative services managers will increase in management services, management consulting, and facilities support services firms to which these services are contracted out. In addition, some types of administrative services managers may grow more quickly than others. Facilities managers, a relatively young and quickly growing occupation, may not be subject to the same cost-cutting pressures as other administrative services managers. Also, the extent to which governments at all levels, particularly Federal, contract out for goods and services could affect demand for contract administrators and personal property managers.

Earnings

According to a salary survey by the A.M.S. Foundation (Administrative Management Society), building services/facilities managers averaged about \$48,000 a year in 1993; office/administrative services managers, over \$40,000; and records managers, about \$35,000. Average salaries ranged from \$28,000 for the lowest paid records managers to \$58,000 for the highest paid building services/facilities managers.

In the Federal Government, contract specialists in nonsupervisory, supervisory, and managerial positions averaged \$43,800 a year in 1993; facilities managers, \$42,600; administrative officers, \$42,100; industrial property managers, \$41,300; property disposal specialists, \$38,300; and support services administrators, \$32,900.

Related Occupations

Administrative services managers direct and coordinate supportive services and oversee the purchase, use, and disposal of personal property. Occupations with similar functions include administrative assistants, appraisers, buyers, clerical supervisors, contract specialists, cost estimators, procurement services managers, property and real estate managers, purchasing managers, marketing and sales managers, and personnel managers.

Sources of Additional Information

Information about careers and certification in administrative services management is available from:

137 Academy of Administrative Management, 550 W. Jackson Blvd., Suite 360, Chicago IL 60661.

Detailed data on salaries of administrative services managers is available from:

FA.M.S. Foundation, 550 W. Jackson Blvd., Suite 360, Chicago, IL 60661.

For information about careers in the management of personal property, contact:

Mational Property Management Association, 380 Main St., Suite 290, Dunedin, FL 34698.

For information about careers in facilities management, contact: International Facility Management Association, 1 East Greenway Plaza, 11th Floor, Houston, TX 77046-0194.

For information on careers in records and information management, contact:

P Association of Records Managers and Administrators, 4200 Somerset Dr., Suite 215, Prairie Village, KS 66208.

Budget Analysts

(D.O.T. 161.117-010 and 161.267-030)

Nature of the Work

Budget analysts play a primary role in the development, analysis, and execution of budgets. Budgets are financial plans used to estimate future requirements and organize and allocate expenditures and capital resources effectively. The analysis of spending behavior and the planning of future operations are an integral part of the decision-making process in most corporations and government agencies.

Budget analysts work in both private industry and the public sector. In private industry, a budget analyst examines, analyzes, and seeks new ways to improve efficiency and increase profits. Although analysts working in government generally are not concerned with profits, they too are interested in finding the most efficient distribution of funds and resources among various departments and programs.

A major responsibility of budget analysts is to provide advice and technical assistance in the preparation of annual budgets. At the beginning of the budget cycle, managers and department heads submit proposed operating and financial plans to budget analysts for review. These plans outline expected programs—including proposed program increases or new initiatives, estimated costs and expenses, and capital expenditures needed to finance these programs.

Analysts begin by examining the budget estimates or proposals for completeness, accuracy, and conformance with established procedures, regulations, and organizational objectives. They review financial requests by employing cost-benefit analysis, assessing program trade-offs, and exploring alternative funding methods. They also examine past and current budgets, and research economic and financial developments that affect the organization's spending. This process allows analysts to evaluate program proposals in terms of the organization's priorities and financial resources.

After this review process, budget analysts consolidate the individual department budgets into operating and financial budget summaries. The analyst submits preliminary budgets to senior management, or sometimes, as is often the case in local and State governments, to appointed or elected officials, with comments and supporting statements to justify or deny funding requests. By reviewing different departments' operating plans, analysts gain insight into an organization's overall operations. This generally proves very useful when they interpret and offer technical assistance to officials approving the budget. At this point in the budget process, budget analysts help the chief operating officer, agency head, or other top managers analyze the proposed plan and devise possible alternatives if the projected results are unsatisfactory. The final decision to approve the budget, however, is usually made by the organization head or elected officials.

Throughout the rest of the year, analysts periodically monitor the operating budget by reviewing reports and accounting records to determine if allocated funds have been spent as specified. If deviations appear between the approved budget and actual performance, budget analysts may write a report explaining the causes of the variations along with recommendations for new or revised budget procedures. They suggest reallocation of excess funds or recommend program cuts to avoid or alleviate deficits. They also inform program managers and others within their organization of the status and availability of funds in different budget accounts. Before any changes are made to an existing program or a new one is started, a budget analyst assesses its efficiency and effectiveness. Analysts also may project budget needs for long-range planning.

Analysts also assist in developing procedural guidelines and policies governing the development, formulation, and maintenance of the budget. If necessary, they conduct training sessions for agency or company personnel on new budget procedures.

Budget analysts who work for local or State governments may also spend time answering inquiries from constituents.

Working Conditions

Budget analysts work in a normal office setting and generally work 40 hours per week. However, during the initial development and mid-year and final reviews of budgets, they often experience the pressure of deadlines and tight work schedules. The work during these periods can be extremely stressful, and analysts are usually required to work more than the routine 40 hours a week.

Budget analysts spend the majority of their time working independently, compiling and analyzing data and preparing budget proposals. Nevertheless, their routine schedule can be interrupted by special budget requests, meetings, and training sessions. Others may travel to obtain budget details and explanations of variances from coworkers, and to personally observe what funding is being used for in the field.

Employment

Budget analysts held about 67,000 jobs throughout private industry and government in 1992. Federal, State, and local governments are major employers, accounting for 1 of every 3 budget analyst jobs. The Department of Defense employed 7 of every 10 budget analysts working for the Federal Government. Schools, hospitals, banks, and manufacturers of transportation equipment, chemicals and allied products, electrical and electronic machinery, and industrial machines are other major employers of budget analysts.

Training, Other Qualifications, and Advancement

Most private firms and government agencies require candidates for budget analyst positions to have at least a bachelor's degree. Within the Federal Government, a bachelor's degree in any field is sufficient background for an entry-level budget analyst trainee position. State and local governments have varying requirements, but a bachelor's degree in one of the following areas usually qualifies one for entry into the occupation: Accounting, finance, business or public administration, economics, political science, planning, statistics, or a social science such as sociology. Sometimes, a field closely related to the employing industry or organization within an industry, such as engineering, may be preferred. Some employers prefer that candidates possess a master's degree to ensure adequate analytical and



Budget analysts assure that actual expenditures comply with the approved budget plan.

communication skills. Financial experience can occasionally be substituted for an advanced degree when applying for a budget analyst position. Some companies prefer to promote from within; therefore, competent accounting or payroll clerks and other clerical staff who have worked closely with the budget process are sometimes given the opportunity to advance to entry level budget analyst positions even if they do not meet the educational requirements.

Because developing a budget involves manipulating numbers and requires strong analytical skills, courses in mathematics, statistics, or accounting are helpful, regardless of the prospective budget analyst's major field of study. Because most financial analysis performed by organizations is automated, a familiarity with the financial software packages used by most organizations in budget analysis, as well as word processing, is generally required by employers. Software packages commonly used by budget analysts include electronic spreadsheets and database and graphics software. Job candidates who already possess these computer skills may be preferred over those who need to be trained.

In addition to analytical and computer skills, those seeking a career as a budget analyst must also be able to work under strict time constraints. Strong oral and written communication skills are essential for analysts to prepare, present and defend budget proposals to decision makers.

Entry level budget analysts may receive some formal training when they begin their jobs. However, most employers feel that the best training is obtained by working through one complete budget cycle. During the cycle, analysts become familiar with all the steps involved in the budgeting process.

The Federal Government, on the other hand, offers extensive onthe-job and classroom training for entry level analysts, who are initially called trainees. Analysts are encouraged to participate in the various classes offered throughout their careers.

Beginning analysts usually work under close supervision. Capable entry level analysts can be promoted into intermediate level positions within 1 to 2 years, and then into senior positions within a few more years. Progressing to a higher level means added budgetary responsibility and can lead to a supervisory role.

In the Federal Government, for example, beginning budget analysts compare projected costs with prior expenditures; consolidate and enter data prepared by others; and assist higher grade analysts by doing research. As analysts progress, they begin to develop and formulate budget estimates and justification statements; perform indepth analyses of budget requests; write statements supporting funding requests; advise program managers and others on the status and availability of funds in different budget activities; and present and defend budget proposals to senior managers.

Because financial and analytical skills are vital in any organization, budget analysts often are able to transfer to a related field in other organizations.

Job Outlook

Employment of budget analysts is expected to grow about as fast as the average for all occupations through the year 2005. In addition to employment growth, many job openings will result from the need to replace experienced budget analysts who transfer to other occupations or leave the labor force.

Expanding use of automation may make analysts more productive, allowing them to process more data in less time. Also, computers are increasingly used to organize, summarize, and disseminate automated data to the top levels in organizations, thereby centralizing decision-making and reducing the need for middle managers. Any computer-induced effects on employment may be offset, however, by a greater demand for information and analysis. Easier manipulation of and accessibility to data provide management more considerations on which to base decisions. Also, because of the growing complexity of business and the increasing specialization of functions within organizations, more attention is being given to planning and financial control. Many companies will continue to rely heavily on budget analysts to examine, analyze, and develop budgets to determine capital requirements and to allocate labor and other resources efficiently among all parts of the organization. Managers will continue to use budgets as a vehicle to plan, coordinate,

control, and evaluate activities within their organizations more effectively.

Despite the increase in demand for budget analysts, competition for jobs should remain keen because of the substantial number of qualified applicants. Job opportunities are usually best for candidates with a college degree, particularly a master's. In some cases, experience is more beneficial than a degree and can be used to offset a lack of education. A working knowledge of computer financial software packages can also enhance one's employment prospects in this field.

The financial work performed by budget analysts is an important function in every organization. Financial and budget reports must be completed even during periods of economic slowdowns. Therefore, employment of budget analysts generally is not as adversely affected as other workers during economic slumps.

Earnings

Salaries of budget analysts vary widely by experience, education, and employer. According to a 1993 survey of financial, accounting, banking, and information systems professions conducted by Robert Half International Incorporated, average annual starting salaries of budget and other financial analysts ranged from \$23,500 to \$28,000 for those working in medium-size firms, and from \$24,000 to \$29,000 for those employed by larger organizations. Analysts with 1 to 3 years of experience earned from \$27,000 to \$35,000 a year in medium-size firms and from \$28,500 to \$37,500 in larger companies. Senior analysts earned from \$34,500 to \$41,200 in medium-size firms and from \$36,000 to \$44,000 in larger firms. Earnings of managers in this field ranged from \$41,000 to \$51,000 in medium-size firms to \$45,000 to \$62,000 in large organizations.

A survey of workplaces in 160 metropolitan areas reported that experienced budget analysts had median annual earnings of about \$39,700 in 1992, with the middle half earning between about \$35,700 and \$44,300 a year.

In the Federal Government, budget analysts generally started as trainees earning about \$18,300 a year in 1993. Candidates with a master's degree began at \$27,800. The average annual salary for budget analysts employed by the Federal Government in nonsupervisory, supervisory, and managerial positions was \$42,033 in 1993.

Related Occupations

Budget analysts review, analyze, and interpret financial data; make recommendations for the future; and assist in the implementation of new ideas. Workers who use these skills in other occupations include accountants and auditors, economists, financial analysts, financial managers, and loan officers.

Sources of Additional Information

Information about career opportunities as a budget analyst may be available from your State or local employment service.

Persons interested in working as a budget analyst in the Federal Government can obtain information from:

PU.S. Office of Personnel Management, 1900 E St. NW., Washington, DC 20415.

Construction Contractors and Managers

(D.O.T. 182.167 except -022)

Nature of the Work

Construction contractors and managers assume various levels of responsibility and are known by a wide range of job titles that are often used interchangeably—for example, constructor, construction superintendent, general superintendent, production manager, project manager, general construction manager, executive construction

manager, general contractor, contractor, and subcontractor. Construction contractors and managers may be owners or salaried employees of a construction contracting firm or individuals under contract with the owner, developer, contractor, or management firm overseeing the construction project.

This Handbook statement uses the term "construction manager" broadly to encompass all supervisory-level salaried and self-employed construction managers who oversee construction supervisors and workers. Supervisory level managers report to mid-level and top-level construction managers, who are included in the Handbook

statement on general managers and top executives.

Within the construction industry, the term "construction manager" is used more narrowly to denote the firm or individual involved in a special form of control to perform a construction management function. A construction manager frequently acts as the owner's or developer's consultant regarding the scheduling and coordination of all design and construction processes over the life of

the project.

On small construction projects such as remodeling a home, construction managers are usually self-employed construction contractors who directly oversee their employees. However, large construction projects like an industrial complex are too complicated for one person to supervise. These projects are divided into many segments: Site preparation, including land clearing and earth moving; sewage systems; landscaping and road construction; building construction, including excavation and laying foundations, erection of framework, floors, walls, and roofs; or building services, including carpentry, electrical, plumbing, air-conditioning, and heating. Construction managers may be in charge of one or more of these activities, and may have several subordinates, such as crew supervisors, reporting to them.

Construction contractors and managers plan, budget, and direct the construction project. The planning, often in collaboration with design professionals, requires sophisticated scheduling techniques with flow charts, bar charts, and other graphic presentations. They often use computers to evaluate various construction methods and to determine the most cost-effective plan. They determine the appropriate construction methods and schedule all required construction site activities into logical, specific steps, leading to an intermediate or final objective. They budget the time required to complete each step in an effort to meet established deadlines for a particular task. Construction managers determine the labor requirements and supervise or monitor the hiring and dismissal of workers.

On the job, construction contractors and managers direct construction supervisors and monitor the progress of construction activities including the delivery and use of materials, supplies, tools, machinery, equipment, and vehicles. They are responsible for all necessary permits and licenses and, depending upon the contractual arrangements, direct or monitor compliance with building and

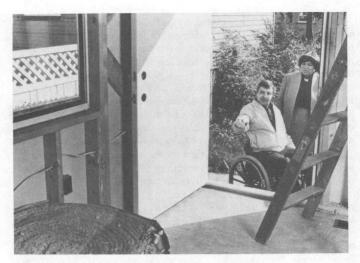
safety codes and other regulations.

They regularly review engineering and architectural drawings and specifications and confer with design professionals to monitor progress and ensure compliance with plans and specifications. They meet with cost estimators in order to keep track of construction costs and to avoid cost overruns. Based upon direct observation and reports by subordinate supervisors, these managers may prepare daily reports of progress and requirements for labor, material, and machinery and equipment at the construction site. Construction managers meet regularly with owners, other contractors and managers, and design professionals to monitor and coordinate all phases of the construction project.

Working Conditions

Construction contractors and managers work out of a main office from which the overall construction project is monitored or out of a field office at the construction site. Management decisions regarding daily construction activities are usually made at the job site. Managers may have to travel when the construction site is in another State or when the manager is responsible for activities at two or more sites. Overseas projects usually entail temporary residence in another country.

Construction contractors and managers are "on call" to deal with accidents, delays, or bad weather at the site. The standard 40-hour



Construction contractors review engineering and architectural drawings and specifications with clients.

week is rare. Indeed, construction may proceed round-the-clock for days, even weeks to meet special project deadlines.

Although the work generally is not considered dangerous, construction contractors and managers must be careful while touring construction sites, especially when machinery, equipment, and vehicles are being operated. Because of the rapid pace of construction activities, they must always be prepared to quickly answer questions, establish priorities, and assign duties. This requires the contractor and or manager to observe job conditions and to be alert to potential problems and to ways to make the work go faster, easier, and safer. Due to the inherent dangers involved in construction, the manager in the field must be alert to and actively manage the safety aspects of jobsite operations.

Employment

Construction contractors and managers held about 180,000 jobs in 1992. About 85 percent were employed in the construction industry, primarily by special trade contractors—for example, plumbing, heating and air-conditioning, and electrical—and general building contractors. Many worked as self-employed independent contractors in the specialty trades. Others were employed by local governments, educational institutions, real estate developers, and engineering, architectural, surveying, and construction management services firms.

Training, Other Qualifications, and Advancement

A growing number of entrants into this occupation have a strong academic background. Completion of a bachelor's degree program in construction science with emphasis on construction management can greatly enhance one's opportunities. In 1992, about 130 colleges and universities offered 4-year degree programs in construction science. These programs include courses in project control and development, site planning, building design, construction methods, construction materials, value analysis, cost estimating, scheduling, contract administration, building codes and standards, inspection procedures, and electives in engineering and architectural sciences, mathematics, statistics, and computer science. Recent graduates from these 4-year degree programs usually are hired as assistants to project managers, field engineers, schedulers, or cost estimators. A growing number of graduates in related fields-engineering, architecture, and cost estimating-also enter construction management, often after having had substantial experience on construction

About 30 colleges and universities also offer a master's degree program in construction science, and one, the University of Florida, offers a doctoral degree program in this field. Master's degree recipients, especially those with experience, typically become construction managers in very large construction companies. Doctoral degree recipients generally become college teachers.

Many contractors and managers have substantial experience as construction craft workers—for example, carpenters, masons, plumbers, or electricians—and proven supervisory ability. Many managers have worked as construction supervisors or as independent contractors overseeing workers in one or more construction trades—for example, structural steel, roofing, or excavation. Many have also attended training and educational programs sponsored by industry associations, usually in collaboration with postsecondary institutions. In 1992, over 200 2-year colleges offered construction management or construction technology programs.

Persons interested in becoming a construction contractor or manager should be adaptable and be able to work effectively in a fast-paced environment. They should be decisive and able to quickly select among alternative courses of action. The ability to coordinate several major activities at once, while being able to analyze and resolve specific problems is imperative, as is the ability to understand engineering, architectural, and other construction drawings. They must be able to establish a good working relationship with many different people—entrepreneurs, other managers, construction professionals, supervisors, and craft workers.

Advancement depends upon the size of the construction company. In large companies, they may become mid-level and eventually top-level managers. Highly experienced individuals may become consultants; some serve as expert witnesses in court or as arbitrators in disputes. Those with the required capital may establish their own firms and offer construction management services. Others may establish their own general contract construction firms that oversee construction projects from start to finish—including project planning, design, and construction.

Job Outlook

Employment of construction contractors and managers is expected to increase much faster than the average for all occupations through the year 2005 as the number and complexity of construction projects continues to grow. In addition to this rising demand, many openings should result from the need to replace workers who transfer to other occupations or leave the labor force. Prospects are expected to be particularly favorable—especially in rapidly growing construction management services firms—for experienced construction managers with a bachelor's (or higher) degree in construction science with emphasis on construction management.

Increased spending on the Nation's infrastructure—highways, bridges, dams, schools, subways, airports, water and sewage systems, and electric power generation and transmission facilities—will be the primary stimulus to the demand for construction contractors and managers. Additional jobs will be created by growth in less rapidly expanding construction activities as well. The need to build more residential housing, commercial and office buildings, and factories, as well as maintenance and repair of all kinds of existing structures will stimulate further demand for these workers.

In addition to growth in the level of construction activity, the increasing complexity of construction projects will lead to more jobs being created. Advances in building materials and construction methods and the growing number of multipurpose buildings, electronically operated "smart"buildings, and energy-efficient structures will require the expertise of more construction managers. In addition, the proliferation of laws setting standards for buildings and construction materials, worker safety, energy efficiency, and environmental pollution has further complicated the manager's job and should increase demand for these workers.

Employment of construction contractors and managers is sensitive to the short-term nature of many construction projects and cyclical fluctuations in construction activity. During periods of diminished construction activity—when many construction workers are laid off—many construction contractors and managers remain employed in their own or other firms planning, scheduling, or estimating costs of future construction projects. When these downturns occur, some self-employed contractors may merge operations or dissolve their business and seek salaried employment with other contractors.

Earnings

Earnings of salaried construction managers and incomes of self-employed contractors vary depending upon the size and nature of the construction project, its geographic location, and economic conditions. Based on limited information, average starting salaries of construction managers in 1992 were about \$32,000; annual earnings of most experienced managers ranged from \$35,000 to \$110,000. Many salaried construction managers receive fringe such as bonuses, liberal motor vehicle and per diem allowances, paid vacations, and life and health insurance. The income of self-employed contractors varies even more widely than that of salaried managers. The failure rate of small, newly formed construction firms is higher than that of other newly established small businesses.

Related Occupations

Construction contractors and managers participate in the conceptual development of a construction project and organize, schedule, and oversee its implementation. Occupations with similar functions include architects, civil engineers, construction supervisors, cost engineers, cost estimators, developers, electrical engineers, industrial engineers, landscape architects, and mechanical engineers.

Sources of Information

For information about careers for construction managers contact: ** American Institute of Constructors, 9887 North Gandy Blvd., Suite 104, St. Petersburg, FL 33702.

P Associated Builders and Contractors, 729 15th St. NW., Washington, DC 20005.

t≅ Associated General Contractors of America, 1300 North 17th St. Rossyln, VA 22209-3883.

P Construction Management Association of America, 1893 Preston White Dr., Suite 130, Reston, VA 22091.

Information on construction science and management program accreditation requirements is available from:

American Council for Construction Education, 901 Hudson Lane, Monroe, LA 71201.

Cost Estimators

(D.O.T. 169.267-038; 221.362-018, and .367-014)

Nature of the Work

Being able to accurately predict the cost of future projects is vital to the economic survival of any business. Cost estimators develop this information for owners or managers to use in making bids for contracts or in determining if a new product will be profitable, or in determining which of a firms' products are making a profit.

Regardless of industry, estimators compile and analyze data on all the factors that can influence costs—materials, labor, location, and special machinery requirements, including computer hardware and software. Job duties vary widely depending upon the type and size of the project. Estimators working in the construction industry and manufacturing businesses have different methods of, and reasons for, estimating costs.

On a large construction project, for example, the estimating process begins with the decision to submit a bid. After reviewing the architect's drawings, specifications, and other bidding documents, the estimator visits the site of the proposed construction project to gather information on access to the site and availability of electricity, water, and other services, as well as surface topography and drainage. If the project is a remodeling or renovation job, the estimator might consider the need to control noise and dust and to perform work in such a way that occupants can continue to carry out their activities as normally as possible. The information developed during the site visit generally is recorded in a signed report that is made part of the project estimate.

After the site visit is completed, the estimator must determine the quantity of materials and labor that the firm will have to furnish. This process, called the quantity survey or "takeoff," is completed by filling out standard estimating forms that provide spaces for the

entry of dimensions, number of units, and other information. A cost estimator working for a general contractor, for example, will estimate the costs of the items the contractor must provide. Although subcontractors will estimate their costs as part of their own bidding process, the general contractor's cost estimator often analyzes bids made by subcontractors as well. Allowances for the waste of materials, inclement weather, shipping delays, and other factors that may increase costs are made as the takeoff proceeds. In large construction companies with several estimators, it is common practice for them to specialize. For instance, one person may estimate only electrical work, whereas another may concentrate on excavation, concrete, and forms. Also during the takeoff process, the estimator must make decisions concerning equipment needs, sequence of operations, and crew size.

On completion of the quantity surveys, a total project cost summary is prepared by the chief estimator that includes the cost of labor, equipment, materials, subcontracts, overhead, taxes, insurance, markup, and any other costs that may affect the project. The chief estimator then prepares the bid proposal for submission to the developer.

In manufacturing and other firms, cost estimators generally are assigned to the engineering or cost department. The estimators' goal in manufacturing is to accurately allocate costs of making products to the people and machines they are produced by. Their job may begin with a request by managers to estimate the costs associated with a major redesign of an existing product or the development of a new product or production process. For example, to develop a new product, the estimator, working with engineers, first reviews blueprints or conceptual drawings to determine the machining operations, tools and gauges, and materials that would be required for the job. The estimator then must prepare a parts list and determine whether it is more efficient to produce or to purchase the parts. To do this, the estimator must initiate inquiries for price information from potential suppliers. The next step is to determine the cost of manufacturing each component of the product. Some high technology products require massive amounts of computer programming during the design phase. The cost of software is one of the fastest growing and most difficult activities to estimate. Some cost estimators now specialize in estimating computer software development and related

The cost estimator then prepares time-phase charts and learning curves. The former indicate the time required for tool design and fabrication, tool "debugging" (finding and correcting all problems), manufacturing of parts, assembly, and testing. Learning curves represent graphically the rate at which performance improves with practice. These curves are commonly called "problem-elimination" curves because many problems, such as engineering changes, rework, parts shortages, and lack of operator skills, diminish as the number of parts produced increases, resulting in lower unit costs.

Using all this information, the estimator then calculates the standard labor hours necessary to produce a predetermined number of units. Standard labor hours are then converted to dollar values, to which are added factors for waste, overhead, and profit to yield the unit cost in dollars. Then the estimator compares the cost of purchasing parts with the firm's cost of manufacturing them to determine which is cheaper.

Computers are widely used because cost estimating may involve complex mathematical techniques. For example, to undertake a parametric analysis, a process used to estimate project costs on a per unit basis subject to the specific requirements of a project, cost estimators use a computer database containing information on costs and conditions of many other similar projects. Although computers cannot be used for the entire estimating process, they can relieve estimators of much of the drudgery associated with routine, repetitive, and time-consuming calculations. This leaves estimators with more time to study and analyze projects and can lead to more accurate estimates. (Details on various cost estimating techniques are available from the organizations listed under Sources of Additional Information below.)

Working Conditions

Estimators spend most of their time in an office. Nevertheless, construction estimators must make frequent visits to work sites that are



Cost estimators use quantitative techniques to analyze factors that influence cost.

dirty and cluttered with debris. Likewise, estimators in manufacturing must spend time on the factory floor where it can be hot, noisy, and dirty. Cost estimators usually operate under pressure, especially when facing deadlines, because inaccurate estimating can cause a firm to lose out on a bid that would have been profitable or to take on a job that proves to be unprofitable. Although estimators usually work a 40-hour week, much overtime is often required. In some industries, frequent travel between the parent firm and its subsidiaries or subcontractors is required. Government and other estimators often visit firms to substantiate bids or prices.

Employment

Cost estimators held about 163,000 jobs in 1992, primarily in construction industries. Others worked for manufacturing industries. Some worked for engineering and architectural services firms, business services firms, and a wide range of other industries. Construction analysts in the Department of Housing and Urban Development and operations research, production control, cost, and price analysts in the Departments of Defense and Energy may do significant amounts of cost estimating in the course of their regular duties. (For more information, see the statement on operations research analysts elsewhere in the *Handbook*.)

Cost estimators work in all parts of the country, usually in or near major industrial, commercial, and government centers and in cities and suburban areas undergoing rapid change or development where large amounts of construction are taking place.

Training, Other Qualifications, and Advancement

Entry requirements vary by industry. In construction, employers prefer applicants with a thorough knowledge of construction materials, costs, and procedures in areas ranging from heavy construction to electrical work, plumbing systems, or masonry work. In fact, most construction estimators have experience as a construction craft worker or as a contractor. Persons who combine this experience with some postsecondary training in construction estimating or a bachelor's or associate degree in civil engineering, architectural drafting, or building construction have the edge in landing jobs. Those with an academic background who lack work experience

qualify for some jobs, but are at a distinct disadvantage when competing for jobs with experienced applicants. In manufacturing, employers prefer persons with a degree in engineering, science, operations research, mathematics, or statistics, or in accounting, finance, business, or a related subject. In high-technology industries, great emphasis is placed on experience involving quantitative techniques. Computer literacy and, in some cases, programming capability are required.

Regardless of background, estimators receive much training on the job. Working with an experienced estimator, they become familiar with each step in the process. Those with no experience reading construction specifications or blueprints first learn that aspect of the work. Then they may accompany an experienced estimator to the construction site or the shop floor where they observe the work being done, take measurements, or perform other routine tasks. As they become more knowledgeable, they learn how to tabulate quantities and dimensions from drawings and how to select which material prices are to be used.

Cost estimating is included as part of the civil engineering, industrial engineering, and construction management or construction engineering technology curriculums in many colleges and universities. Many technical schools, junior colleges, and universities offer courses and programs in cost estimating techniques and procedures. In addition, cost estimating is a significant part of the master's degree program in construction management offered by many colleges and universities. Organizations that represent cost estimators, such as AACE International and the Society of Cost Estimating and Analysis, also sponsor educational programs. These programs help students, estimators-in-training, and experienced estimators stay abreast of changes affecting the profession.

Professional recognition through certification is valuable, because it is a mark of the estimator's competence and experience. To become certified, estimators generally must have between 3 and 7 years of estimating experience and must pass both a written and an oral examination. In addition, certification requirements may include publication of at least one article or paper in the field.

Cost estimators should have an aptitude for mathematics, be able to quickly analyze, compare, and interpret detailed and sometimes poorly defined information, and be able to make sound and accurate judgments based on this knowledge. Assertiveness and self-confidence in presenting and supporting their conclusions are important.

For most estimators, advancement takes the form of higher pay and prestige. Some move into a management position, such as project manager for a construction firm or manager of the industrial engineering department for a manufacturer. Others may go into business for themselves as consultants, providing estimating services for a fee to government or construction and manufacturing firms.

Job Outlook

Employment of cost estimators is dependent primarily upon the level of construction and manufacturing activity. Growth of the construction industry, where about 58 percent of all cost estimators are employed, will be the driving force behind the rising demand for these workers, whose employment is expected to increase faster than the average for all occupations through the year 2005. The fastest growing sectors of the construction industry will be those associated with spending on the Nation's infrastructure. Construction and repair of highways and streets, bridges, and construction of more subway systems, airports, water and sewage systems, and electric powerplants and transmission lines will stimulate demand for many more cost estimators. In addition, spending on hotels, office and other commercial buildings, and construction of residential units, will add to the demand for cost estimators to predict the costs of these projects. Job prospects should be best for those workers who have substantial experience in various phases of construction or a specialty craft or those with a degree in construction management, engineering, or architectural drafting.

Employment of cost estimators in manufacturing should expand as output increases and as more firms use the services of cost estimators to identify and control their operating costs. In manufacturing, experienced persons with degrees in engineering, science, mathematics, business administration, or economics and who have computer expertise should have the best job prospects. Certification is an asset in all instances.

Earnings

Salaries for cost estimators vary widely by experience, education, size of firm, and industry. According to limited data available, most starting salaries in the construction industry for those with limited training ranged from \$17,000 to \$21,000 in 1992. College graduates in fields such as engineering or construction management that provide a strong background in cost estimating can start at \$30,000 or more. Highly experienced individuals earned \$75,000 or more. Starting salaries and annual earnings in the manufacturing sector were usually somewhat higher.

Related Occupations

Other workers who quantitatively analyze information based upon relatively imprecise data include appraisers, cost accountants, cost engineers, economists, evaluators, financial analysts, loan officers, operations research analysts, underwriters, and value engineers.

Sources of Additional Information

Information about career opportunities, certification, schools, and continuing education programs in cost estimating in the construction industry may be obtained from:

AACE International, P.O. Box 1557, Morgantown, WV 26507-1557. Professional Construction Estimators Association of America, P.O. Box 11626, Charlotte, NC 28220-1626.

Similar information about cost estimating in government and manufacturing and other industries is available from:

Society of Cost Estimating and Analysis, 101 S. Whiting St., Suite 313, Alexandria, VA 22304.

Employment Interviewers

(D.O.T. 166.267-010)

Nature of the Work

Whether you are looking for a job or trying to fill one, you could find yourself turning to an employment interviewer for help. Sometimes called personnel consultants, human resources coordinators, manpower development specialists, or employment brokers, employment interviewers help jobseekers find employment and help employers find qualified staff.

Working largely in private personnel supply firms or State employment security offices (also known as job or employment service centers), employment interviewers act as brokers, putting together the best combination of applicant and job. To accomplish this, they obtain information from employers as well as jobseekers.

Being a private industry employment interviewer is a sales job. Counselors pool together a group of qualified applicants and try to sell them to many different companies. Often a consultant will call a company that has never been a client (cold-calling) with the aim of filling their employment needs.

Employers generally pay private (but not public) agencies to recruit workers. The employer places a "job order" with the agency describing the opening and listing requirements such as education, licenses or credentials, and experience. Employment interviewers often contact the employer to determine their exact personnel needs. Jobseekers are asked to fill out forms or present resumes that detail their education, experience, and other qualifications. They may be interviewed or tested and have their background, references, and credentials checked. The employment interviewer then reviews the job requirements and the jobseeker qualifications to determine the best possible match of position and employee. Although computers are increasingly used to keep records and match employers with jobseekers, personal contact with an employment interviewer remains an essential part of an applicant's job search.

Maintaining good relations with employers is an important part of the employment interviewer's job because this helps assure a steady flow of job orders. Being prepared to fill an opening quickly with a qualified applicant impresses employers most and keeps them as clients.

Besides helping firms fill job openings, employment interviewers help individuals find jobs. The services they provide depend upon the company or type of agency they work for and the clientele it

Employment interviewers in personnel supply firms who place permanent employees are generally called counselors. They usually place job applicants who have the right qualifications but lack knowledge of the job market for their desired position. Counselors in these firms offer tips on personal appearance, suggestions on presenting a positive image of oneself, background on the company with which an interview is scheduled, and recommendations about interviewing techniques. Many firms specialize in placing applicants in particular kinds of jobs, for example secretarial, word processing, computer programming and computer systems analysis, engineering, accounting, law, or health. Counselors in such firms usually have 3 to 5 years of experience in the field into which they are placing applicants.

Some employment interviewers work in temporary help services companies. These companies send out their own employees to firms that need temporary help. Employment interviewers take job orders from client firms and match their requests against a list of available workers. The employment interviewer selects the best qualified worker available and assigns him or her to the firm requiring assistance. Sometimes these employees are placed with a company as a temporary and later become a permanent employee.

Traditionally, firms that placed permanent employees usually dealt with highly skilled applicants, such as lawyers or accountants, and those placing temporary employees dealt with less skilled workers, such as secretaries or data entry operators. However, temporary help services increasingly place workers with a wide range of educational backgrounds and work experience; businesses are turning to temporary employees to fill all types of positions to reduce costs of pay and benefits associated with hiring permanent employees.

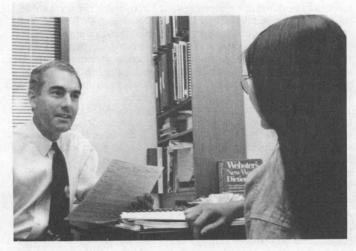
Regular evaluation of employee job skills is an important part of the job for those interviewers working in temporary help services companies. Initially, interviewers evaluate or test new employees' skills to determine their abilities and weaknesses. The results, which are kept on file, are referred to when filling job orders. In some cases, the temporary help company will train employees to improve their skills. Periodically, the interviewer may reevaluate or retest employees to identify any new skills they may have developed.

The duties of employment interviewers in job service centers differ somewhat because applicants may lack marketable skills. In these centers, jobseekers present resumes and fill out forms that ask about educational attainment, job history, skills, awards, certificates, and licenses. An employment interviewer reviews these forms and asks the applicant about the type of job sought and salary range desired. Applicants sometimes have exaggerated expectations. Employment interviewers must be tactful, but persuasive, if an applicant's job or salary requests are unreasonable.

Applicants may need help identifying the kind of work for which they are best suited. The employment interviewer evaluates the applicant's qualifications and either chooses an appropriate occupation or class of occupations, or refers the applicant for vocational testing.

After identifying an appropriate job type, the employment interviewer searches the file of job orders seeking a possible job match, and refers the applicant to the employer if a match is found. If no match is found, the interviewer shows the applicant how to use listings of available jobs.

Some applicants are hindered by problems such as poor English language skills, no high school diploma, a history of drug or alcohol dependency, or a prison record. The amount and nature of special help for such applicants vary from State to State. In some States, it is the employment interviewer's responsibility to counsel hard-to-place applicants and refer them elsewhere for literacy or language instruction, vocational training, transportation assistance, child care, and other services. In other States, specially trained counselors perform this task.



Employment interviewers help bring jobseekers and employers together.

Working Conditions

Employment interviewers usually work in comfortable, well-lighted offices. Some interviewers may spend much of their time out of the office interviewing clients or at a computer terminal. The work can prove hectic, especially in temporary help service companies which supply clients with immediate help for short periods of time, or longer spells, depending on the client's needs. Some overtime may be required, and temporary workers may need their own transportation to make employer visits. The private placement industry is competitive, so counselors feel pressed to give their client companies the best service.

Employment

Employment interviewers held about 79,000 jobs in 1992. Three out of 5 worked for personnel supply services, generally of employment firms or temporary help services companies, in the private sector. One out of 5 worked for State or local government.

Employees of career consulting or outplacement firms are not included in these estimates. Workers in these firms help clients market themselves; they do not act as job brokers, nor do they match individuals with particular vacancies.

Training, Other Qualifications, and Advancement

Although most public and private agencies prefer to hire college graduates for interviewer jobs, a degree is not always necessary. Hiring requirements in the private sector reflect a firm's management approach as well as the placements in which its interviewers specialize. Those that place highly trained individuals such as accountants, lawyers, engineers, physicians, or managers generally have some training or experience in the field in which they are placing workers. Thus, a bachelor's, master's, or even a doctoral degree may be a prerequisite for some interviewers. Even with the right education, however, sales ability is still required to succeed in the private sector.

Educational requirements play a lesser role for interviewers placing secretaries, word processing operators, and other clerical personnel. In these positions, qualities such as energy level, telephone voice, and sales ability take precedence over educational attainment.

Entry level employment interviewer positions in the public sector are generally filled by college graduates, even though the positions do not always require a bachelor's degree. Some States allow substitution of suitable work experience for college education. Suitable work experience is generally defined as public contact work or time spent at other jobs (including clerical jobs) in a job service office. In States that permit employment interviewers to engage in counseling, course work in counseling may be required.

Most States and many large city and county governments use some form of merit system for hiring interviewers. Applicants may take a written exam, undergo a preliminary interview, or submit records of their education and experience for evaluation. Those who meet the standards are placed on a list from which the top-ranked candidates are selected for later interviews and possible hiring.

Other desirable qualifications for employment interviewers include good communications skills, a desire to help people, office skills, and adaptability. A friendly, confidence-winning manner is an asset because personal interaction plays a large role in this occupation. Increasingly, employment interviewers use computers as a tool; thus, knowledge of computers is helpful.

Advancement as an employment interviewer in the public sector is often based on a system providing regular promotions and salary increases for those meeting established standards. Advancement to supervisory positions is highly competitive. In personnel supply firms, advancement often depends on one's success in placing workers and generally takes the form of greater responsibility and higher income. Successful individuals may form their own businesses.

Job Outlook

Employment in this occupation is expected to grow as fast as the average for all occupations through the year 2005. Most new jobs will be with temporary help or personnel supply firms. Relatively little growth is anticipated in State job service offices because of budgetary problems and the increasing use of computerized job matching and information systems. Some additional job openings will result from the need to replace interviewers who do not meet their employer's requirements for placing job applicants, and to replace experienced interviewers who transfer to other occupations, retire, or leave the labor force for other reasons.

Expansion of firms supplying temporary help will be responsible for much of the growth in this occupation. Businesses of all types are turning to temporary help services companies for additional workers during busy periods, for handling short-term assignments or one-time projects, for launching new programs, and to reduce costs of pay and benefits associated with hiring permanent employees.

Expansion of the personnel supply industry in general will also spur job growth. Job orders will increase as the economy expands and new businesses are formed; this is expected to heighten demand for employment interviewers. Firms that lack the time or resources to develop their own screening procedures will likely turn to personnel firms.

Employment opportunities should be better in private placement firms than in State job service centers. Entry to this occupation is relatively easy for college graduates, or people who have had some college courses, except in those positions specializing in placement of workers with highly specialized training, such as lawyers, doctors, and engineers.

Employment interviewers who place permanent workers may lose their jobs during recessions because employers reduce or eliminate hiring for permanent positions during downturns in the economy. Also, during periods of high unemployment, employers have fewer problems finding the workers they need, so they turn less often to employment agencies for help. However, during these times the need for the services of employment interviewers who place temporary employees may increase. Employers are increasingly turning to temporary services because temporary employees cost less to hire than permanent employees and are more flexible in terms of hours and working conditions. Those who place permanent or temporary personnel are more susceptible to layoffs than State job service employment interviewers.

Earnings

Earnings in private firms vary, in part because the basis for compensation varies. Workers in personnel supply firms tend to be paid on a commission basis; those in temporary help service companies receive a salary.

When workers are paid on a commission basis (or salary plus commission), total earnings depend on how much business they bring in. This is usually based on the type as well as the number of placements. Those who place more highly skilled or hard-to-find employees earn more. An interviewer or counselor working strictly on a commission basis often makes around 30 percent of what he or she bills the client, although this varies widely from firm to firm. Some work on a salary-plus-commission basis because they fill difficult or highly specialized positions requiring long periods of search.

The salary, usually small by normal standards, guarantees these individuals security through slow times. The commission provides the incentive and opportunity for higher earnings.

Some personnel supply firms employ new workers for a 2-to 3-month probationary period during which they draw a regular salary. This gives new workers time to develop their skills and acquire some clients. At the end of the probationary period, the new employees are evaluated, and they are either let go or switched to a commission basis.

According to the limited data available, average earnings of interviewers or counselors in personnel supply and temporary help services firms ranged from about \$17,000 to \$25,000 in 1991; some earned considerably more. Salaries for those placing professional workers are usually higher than those placing clerical workers.

Starting salaries for employment interviewers in State job service centers vary from State to State and ranged from about \$13,000 to \$20,000 a year in 1992.

Related Occupations

Employment interviewers serve as intermediaries for jobseekers and employers. Workers in several other occupations do similar jobs.

Personnel officers screen and help hire new employees, but they concern themselves mainly with the hiring needs of the firm; they never represent individual jobseekers. Personnel officers may also have additional duties in areas such as payroll or benefits management.

Career counselors help students and alumni find jobs, but they primarily emphasize career counseling and decision making, not placement.

Counselors in community organizations and vocational rehabilitation facilities help clients find jobs, but they also assist with drug or alcohol dependencies, housing, transportation, child care, and other problems that stand in the way of finding and keeping a job.

Sources of Additional Information

For information on a career as an employment interviewer/counselor, contact:

Pational Association of Personnel Consultants, 3133 Mt. Vernon Ave., Alexandria, VA 22305.

Mational Association of Temporary Services, 119 S. Saint Asaph St., Alexandria, VA 22314.

For information on a career as an employment interviewer in State employment security offices, contact:

P Interstate Conference of Employment Security Agencies, 444 North Capitol St. NW., Suite 142, Washington, DC 20001.

Engineering, Science, and Data Processing Managers

(D.O.T. 002.167-018; 003.167-034 and -070; 005.167-010 and -022; 007.167-014; 008.167-010; 010.161-010, -014, and .167-018; 011.161-010; 012.167-058 and -062; 018.167-022; 019.167-014; 022.161-010; 024.167-010; 029.167-014; 162.117-030; 169.167-030 and -082; and 189.117-014)

Nature of the Work

Engineering, science, and data processing managers plan, coordinate, and direct research, development, design, production, and computer related activities. They supervise a staff which may include engineers, scientists, technicians, computer specialists, data processing workers, along with support personnel.

Engineering, science, and data processing managers determine scientific and technical goals within broad outlines provided by top management. These goals may include the redesign of an industrial machine, improvements in manufacturing processes, the development of a large computer program, or advances in basic scientific research. Managers make detailed plans for the accomplishment of these goals—for example, they may develop the overall concepts of new products or identify problems standing in the way of project completion. They forecast costs and equipment and personnel needs

for projects and programs. They hire and assign scientists, engineers, technicians, computer specialists, data processing workers, and support personnel to carry out specific parts of the projects, supervise their work, and review their designs, programs, and reports.

Managers coordinate the activities of their unit with other units or organizations. They confer with higher levels of management; with financial, industrial production, marketing, and other managers; and with contractors and equipment suppliers. They also establish working and administrative procedures and policies.

Engineering managers direct and coordinate production, operations, quality assurance, testing, or maintenance in industrial plants; or plan and coordinate the design and development of machinery, products, systems, and processes. Many are plant engineers, who direct and coordinate the maintenance, operation, design, and installation of equipment and machinery in industrial plants. Others manage research and development activities that produce new products and processes or improve existing ones.

Natural science managers oversee activities in agricultural science, chemistry, biology, geology, meteorology, or physics. They manage research and development projects and direct and coordinate testing, quality control, and production activities in industrial plants.

Electronic data processing managers direct, plan, and coordinate data processing activities. Top level managers direct all computer-related activities in an organization. Others manage computer operations, software development, or data bases. They analyze the data processing requirements of their organization and assign, schedule, and review the work of systems analysts, computer programmers, and computer operators. They determine computer hardware requirements, evaluate equipment options, and make purchasing decisions.

Some engineering, science, and data processing managers head a section of perhaps 3 to 10 or more scientists, engineers, or computer professionals. Above them are heads of divisions composed of a number of sections, with as many as 15 to 50 scientists or engineers. A few are directors of large laboratories or directors of research.

Working Conditions

Engineering, science, and data processing managers spend most of their time in an office. Some managers, however, may also work in laboratories or industrial plants, where they normally are exposed to the same conditions as research scientists and may occasionally be exposed to the same conditions as production workers. Most work at least 40 hours a week and may work much longer on occasion to meet project deadlines. Some may experience considerable pressure to meet technical or scientific goals within a short time or within a tight budget.



Engineering managers direct the research, development, and manufacture of a product.

Employment

Engineering, science, and data processing managers held about 337,000 jobs in 1992. Although these managers are found in almost all industries, nearly two-fifths are employed in manufacturing, especially in the industrial machinery and equipment, electrical and electronic equipment, transportation equipment, instruments, and chemicals industries. They also work for engineering, management, and computer and data processing services companies. Others work for government, colleges and universities, and nonprofit research organizations. The majority are most likely engineering managers, often managing industrial research, development, and design projects.

Training, Other Qualifications, and Advancement

Experience as an engineer, mathematician, natural scientist, or computer professional is the usual requirement for becoming an engineering, science, or data processing manager. Consequently, educational requirements are similar to those for scientists, engineers, and data processing professionals.

Engineering managers start as engineers. A bachelor's degree in engineering from an accredited engineering program is acceptable for beginning engineering jobs, but many engineers increase their chances for promotion to manager by obtaining a master's degree in engineering or business administration. A degree in business administration or engineering management is especially useful for becoming a general manager.

Natural science managers usually start as a chemist, physicist, biologist, or other natural scientist. Most natural scientists engaged in basic research have a Ph.D. degree. Some in applied research and other activities may have lesser degrees. First-level science managers are usually specialists in the work they supervise. For example, the manager of a group of physicists doing optical research is almost always a physicist who is an expert in optics.

Most data processing managers have been systems analysts, although some may have experience as programmers, operators, or in other computer specialties. There is no universally accepted way of preparing for a job as a systems analyst. Many have degrees in computer or information science, computer information systems, or data processing and have experience as computer programmers. A bachelor's degree is usually required and a graduate degree often is preferred. A typical career advancement progression in a large organization would be from programmer to programmer/analyst, to systems analyst, and then to project leader or senior analyst. The first real managerial position might be as project manager, programming supervisor, systems supervisor, or software manager.

In addition to educational requirements, scientists, engineers, or computer specialists generally must have demonstrated above-average technical skills to be considered for promotion to manager. Superiors also look for leadership and communication skills, as well as managerial attributes such as the ability to make rational decisions, to manage time well, to organize and coordinate work effectively, to establish good working and personal relationships, and to motivate others. Also, a successful manager must have the desire to manage. Many scientists, engineers, and computer specialists want to be promoted but actually prefer doing technical work.

Some scientists and engineers become managers in marketing, personnel, purchasing, or other areas or become general managers.

Job Outlook

Employment of engineering and science managers is expected to increase faster than the average for all occupations through the year 2005. Opportunities for those who wish to become engineering, science, and data processing managers should be closely related to the growth of the occupations they supervise and the industries in which they are found. (See the statements on natural scientists, engineers, computer programmers, and computer scientists and systems analysts elsewhere in the *Handbook*.)

Underlying much of the growth of managers in science and engineering are competitive pressures and advancing technologies which force companies to update and improve products more frequently. Research and investment in plants and equipment to expand output of goods and services and to raise productivity also will

add to employment requirements for science and engineering managers involved in research and development, design, and the opera-

tion and maintenance of production facilities.

Many of the industries which employ engineers and scientists derive a large portion of their business from defense contracts. Because defense expenditures are being reduced, employment growth and job outlook for managers in these industries may not be as strong in the future as in the 1980's, when defense expenditures were increas-

Employment of data processing managers will increase rapidly due to the fast paced expansion of the computer and data processing services industry and the increased employment of computer systems analysts. Large computer centers are consolidating or closing as small computers become more powerful, and more automated systems are resulting in fewer opportunities for data processing managers at computing centers. However, as the economy expands and as advances in technology lead to broader applications for computers, opportunities should increase and employment growth should be brisk.

Despite growth in employment, most job openings will result from the need to replace workers who leave the occupation. Because many engineers, natural scientists, and computer specialists are eligible for management and seek promotion, there can be substantial competition for these openings.

Earnings

Earnings for engineering, science, and data processing managers vary by specialty and level of management. Science and engineering managers had average salaries that ranged from \$50,000 to well over \$100,000 for the most senior managers in large organizations, according to the limited data available. Data processing managers had salaries that ranged from \$35,000 to \$80,000. Managers often earn about 15 to 25 percent more than those they directly supervise, although there are cases where some employees are paid more than the manager who supervises them, especially in research.

In addition, engineering, science, and data processing managers, especially those at higher levels, often are provided more benefits than non-managerial workers in their organizations. Higher level managers often are provided with expense accounts, stock option

plans, and bonuses.

Related Occupations

The work of engineering, science, and data processing managers is closely related to that of engineers, natural scientists, computer personnel, and mathematicians. It is also related to the work of other managers, especially general managers and top executives.

Sources of Additional Information

Contact the sources of additional information on engineers, natural scientists, and systems analysts that are listed in statements on these occupations elsewhere in the Handbook.

Farm Operators and Managers

(D.O.T. 180.117, .161, .167-018, -026 through -046, -058, and -066; 401.161; 402.161; 403.161; 404.161; 405.161; 407.161; 410.161; 411.161; 412.161; 413.161; and 421.161)

Nature of the Work

American farm operators and managers direct the activities of one of the world's largest and most productive agricultural sectors. They produce enough food and fiber to meet the needs of our Nation and to export huge quantities to countries around the world.

Farm operators may be farmer-owners or tenant farmers who rent the use of land. Their specific tasks are determined by the type of farm they operate. On crop farms--farms growing grain, cotton and other fibers, fruit, and vegetables-farm operators are responsible for planning, tilling, planting, fertilizing, cultivating, spraying, and harvesting. After the harvest, they make sure that the crops are

properly stored or packaged, loaded, and promptly marketed. On livestock, dairy, and poultry farms, farm operators must plan, feed, and care for the animals and keep barns, pens, coops, and other farm buildings clean and in repair. They also oversee breeding, some slaughtering, and marketing activities. On horticultural specialty farms, farm operators oversee the production of ornamental plants, nursery products-such as flowers, bulbs, shrubbery, and sod-and fruits and vegetables grown in greenhouses.

Farm operators must make many managerial decisions. Their farm output is strongly influenced by the weather, disease, fluctuations in prices of domestic and foreign farm products, and, in many cases, Federal farm programs. Farm operators must determine the best time to seed, fertilize, cultivate, harvest, and market. They must carefully plan the combination of crops they grow so that, if the price of one crop drops, they will have sufficient income from another to make up for it. Also, prices of crops and livestock change from one month to another, and farm operators who plan ahead may be able to store their crops or keep their livestock to take advantage of better prices later in the year. Farm operators may have to secure loans from credit agencies to finance the purchase of machinery, fertilizer, livestock, and feed. They also keep extensive financial and inventory records of the farm operation; increasingly, farm operators are turning to computers to assist in these tasks.

Farm operators perform tasks ranging from caring for livestock, to operating machinery, to erecting fences and sheds. The size of the farm often determines which of these tasks operators will handle themselves. Operators of large farms have employees who do much of the physical work that small-farm operators do themselves. Operators are responsible for training workers in the use of equipment and supervising them in the performance of their work. Although employment on most farms is limited to the farm operator and one or two family workers or hired employees, some large farms have 100 or more full-time and seasonal workers. Some of these workers are in nonfarm occupations, such as truckdriver, sales representa-

tive, bookkeeper, and computer specialist.

Farm managers have duties and responsibilities that vary widely. For example, the owner of a very large livestock farm may employ a farm manager to oversee a single activity such as feeding livestock. When managing a small crop farm for an absentee owner, on the other hand, the farm manager may assume responsibility for all functions, from planning the crop to participating in planting and harvesting activities. Farm management firms and corporations involved in agriculture employ highly trained professional farm managers who may manage some or all farm operations or oversee tenant operators of several farms. In these cases, farm managers may establish output goals, determine financial constraints, and monitor production and marketing.

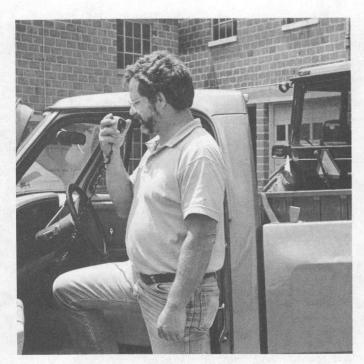
Working Conditions

The soil, topography of the land, and the climate of an area generally determine the type of farming that is done. For example, wheat, corn, and other grains are most efficiently grown on large farms on level land where large, complex machinery can best be used. Thus, these crops are prevalent on the prairies of Iowa and Illinois or the plains of Nebraska and Kansas. Crops that require longer growing seasons, such as cotton, tobacco, and peanuts, are grown chiefly in the South. Most of the country's fruits and vegetables come from California, Texas, and Florida. Many dairy herds are found in the areas of good pastureland, such as Wisconsin, New York, and Minnesota. Livestock production requires large tracts of land for grazing and feed grain production and thus is concentrated in Texas, Nebraska, Iowa, and some Western States.

Many types of farming are seasonal. Although many farm operators and managers on crop farms work from sunup to sundown during the planting and harvesting seasons, they often work on the farm only 6 to 7 months a year, and many have second jobs off the farm.

On farms that raise animals for meat or dairy products, work goes on constantly throughout the year. Because animals must be fed and watered every day and cows must be milked twice daily, operators of these farms must share work with others or they will rarely get the chance to be away.

Farm work can be hazardous. Farmers may be injured by planting and harvesting machinery or large livestock. In addition, they



On some large farms, farm operators and managers direct 100 or more full-time and seasonal workers.

are subject to illnesses and diseases from improper handling and breathing of dangerous pesticides and chemicals.

On very large farms, farm operators spend substantial time meeting with farm managers or farm supervisors in charge of various activities. Professional farm managers overseeing several farms may divide their time between traveling to meet with farm operators and planning and scheduling farm operations while in their offices.

Employment

Farm operators and managers held about 1,218,000 jobs in 1992. Most managed crop production activities while others managed livestock production. A relatively small number were involved in agricultural services such as contract harvesting and farm labor contracting.

Training, Other Qualifications, and Advancement

Growing up on a family farm and participating in agricultural programs for young people sponsored by the National FFA Organization or the 4-H youth educational programs are important sources of training for those interested in pursuing agriculture as a career. However, modern farming requires increasingly complex scientific, business, and financial decisions. Thus, even young people who have lived on farms must acquire a strong educational background. High school training should include courses in mathematics and the sciences. Completion of a 2-year and preferably a 4-year program in a college of agriculture is becoming increasingly important.

Not all people who want to become a farm manager grew up on a farm. For these people, a bachelor's degree in agriculture is essential. In order to qualify for a farm manager position, they will need several years' work experience in many different phases of farm operation.

Students should select the college most appropriate to their specific interests and location. All States have land-grant universities that include a college of agriculture; their major programs of study include areas such as dairy science, agricultural economics and business, horticulture, crop and fruit science, soil science, and animal science. Also, colleges usually offer special programs of study covering products important to the area in which they are located, such as animal science programs at colleges in the Western and Plains States. Whatever one's interest, the college curriculum should include courses in farm production and in business, finance, and economics.

Professional status can be enhanced through voluntary certification as an accredited farm manager (AFM) by the American Society of Farm Managers and Rural Appraisers. Certification requires several years' farm experience and the appropriate academic background—a bachelor's degree or preferably a master's degree in a field of agricultural science—and passing courses and examinations relating to business, financial, and legal aspects of farm management.

Farm operators and managers need to keep abreast of continuing advances in farming methods both in the United States and abroad. They should be willing to try new processes and adapt to constantly changing technologies to produce their crops or raise their livestock more efficiently. Keeping abreast of changing foreign agricultural policies and international exchange rates is important to operators of farms producing internationally traded crops and livestock. Operators also must have enough technical knowledge of crops and growing conditions and plant and animal diseases to be able to make decisions that ensure the successful operation of their farms. Knowledge of the relationship between farm operations—for example, the use of pesticides—and environmental conditions is essential. Mechanical aptitude and the ability to work with tools of all kinds also are valuable skills for the operator of a small farm, who often must maintain and repair machinery or farm structures.

Farm operators and managers must have the managerial skills necessary to organize and operate a business. A basic knowledge of accounting and bookkeeping can be helpful in keeping financial records, and a knowledge of credit sources is essential. They also must keep abreast of complex safety regulations, requirements of government agricultural support programs, and paperwork faced by other small businesses. Familiarity with computers is important, especially on large farms, where computers are often used for record-keeping and business analysis. For example, some farmers use personal computers connected to telephones to get the latest information on prices of farm products and other agricultural news.

Job Outlook

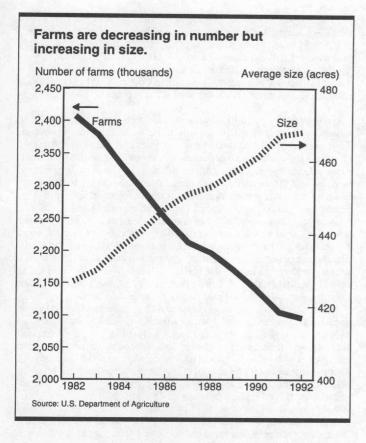
Employment of farm operators and managers is expected to continue to decline through the year 2005. The expanding world population is increasing the demand for food and fiber. However, increasing productivity in the highly efficient U.S. agricultural sector is expected to easily meet domestic and export requirements with fewer but larger farms. Although requirements for machinery and equipment will remain stable or increase slightly, land and labor requirements in the agricultural sector will decrease, but at a slower rate than in the past. The overwhelming majority of job openings will result from the need to replace farmers who retire or leave the occupation for economic or other reasons.

The trend toward fewer and larger farms, primarily through mergers, is expected to continue to reduce the number of jobs for farm operators. A farm can be acquired by inheritance; however, purchasing a farm is expensive and requires substantial capital. In addition, sufficient funds are required to withstand the adverse effects of climate and price fluctuations upon farm output and income and to cover operating costs—livestock, feed, seed, and fuel. Also, the complexity of modern farming and keen competition among farmers leave little room for the marginally successful farmer or the "gentleman" farmer who considers farming a hobby rather than a necessity. Small and medium-size farms, many of which do not generate sufficient income to support the desired standard of living, are expected to decrease in number. However, the small but increasing number of horticultural farms may provide some employment opportunities.

The increase in the average size of farms and in the complexity of farming are expected to spur demand for highly trained and experienced farm managers. Additional demand will come from the increasing number of absentee owners who, rather than work their farms, often hire farm managers to run the farm or oversee tenant farmers.

Earnings

Farmers' incomes vary greatly from year to year, since prices of farm products fluctuate depending upon weather conditions and other factors that influence the amount and quality of farm output



and the demand for those products. A farm that shows a large profit in one year may show a loss in the following year. Many farmers—primarily operators of small farms—have income from off-farm business activities often several times larger than their farm income.

Farm income also varies greatly depending upon the type and size of farm. According to the U.S. Department of Agriculture, average cash income net of expenses in 1993 was over \$100,000 for operators of vegetable and fruit, cotton, and poultry and egg farms. On the other hand, cattle and tobacco farms generated less than \$15,000 in cash income, on the average. Generally, large farms generate more income than small farms. Exceptions include some specialty farms producing low-volume but high-value horticultural and fruit products.

Farm managers who were paid a wage or salary and who worked full time had median earnings of \$382 a week in 1992. The middle half earned between \$382 and \$545 a week. The highest paid managers earned over \$696 a week in 1992, while the lowest paid made less than \$185 a week.

Farmers and self-employed farm managers make their own provisions for benefits. As members of farm organizations, they may derive benefits such as group discounts on health and life insurance premiums. Salaried farm managers may receive housing and the usual benefits such as paid vacations and health insurance.

Related Occupations

Farmers and farm managers strive to improve the quality of agricultural products and the efficiency of farms. Workers with similar functions include agricultural engineers, animal breeders, animal scientists, county agricultural agents, dairy scientists, extension service specialists, feed and farm management advisors, horticulturalists, plant breeders, and poultry scientists.

Sources of Additional Information

For general information about farming and agricultural occupations, contact:

P American Farm Bureau Federation, 225 Touhy Ave., Park Ridge, IL 60068.

For information about certification as an accredited farm manager, contact:

American Society of Farm Managers and Rural Appraisers, 950 South Cherry St., Suite 106, Denver, CO 80222.

For general information about farm occupations, opportunities, and 4-H activities, contact your local county extension service office.

Financial Managers

(D.O.T. 160.167-058; 161.117-018; 169.167-086; 186.117-066, -070, -078, -086; .167-054, -086; and 189.117-038)

Nature of the Work

Practically every firm—whether in manufacturing, communications, finance, education, or health care—has one or more financial managers. Some of them are treasurers, controllers, credit managers, cash managers; they prepare the financial reports required by the firm to conduct its operations and to ensure that the firm satisfies tax and regulatory requirements. Financial managers also oversee the flow of cash and financial instruments, monitor the extension of credit, assess the risk of transactions, raise capital, analyze investments, develop information to assess the present and future financial status of the firm, and communicate with stock holders and other investors.

In small firms, chief financial officers usually handle all financial management functions. However, in large firms, these officers oversee all financial management departments and help top managers develop financial and economic policy and establish procedures, delegate authority, and oversee the implementation of these policies.

Highly trained and experienced financial managers head each financial department. Controllers direct the preparation of all financial reports-for example, income statements, balance sheets, and special reports such as depreciation schedules. They oversee the accounting, audit, or budget departments. Cash and credit managers monitor and control the flow of cash receipts and disbursements to meet the business and investment needs of the firm. For example, cash flow projections are needed to determine whether loans must be obtained to meet cash requirements, or whether surplus cash may be invested in interest-bearing instruments. Risk and insurance managers oversee programs to minimize risks and losses that may arise from financial transactions and business operations undertaken by the institution. Credit operations managers establish credit rating criteria, determine credit ceilings, and monitor their institution's extension of credit. Reserve officers review their institution's financial statements and direct the purchase and sale of bonds and other securities to maintain the asset-liability ratio required by law. User representatives in international accounting develop integrated international financial and accounting systems for the banking transactions of multinational organizations. A working knowledge of the financial systems of foreign countries is essential.

Financial institutions—such as banks, savings and loan associations, credit unions, personal credit institutions, and finance companies—may serve as depositories for cash and financial instruments and offer loans, investment counseling, consumer credit, trust management, and other financial services. Some specialize in specific financial services. Financial managers in financial institutions include vice presidents—who may head one or more financial departments—bank branch managers, savings and loan association managers, consumer credit managers, and credit union managers, for example. These managers make decisions in accordance with policy set by the institution's board of directors and Federal and State laws and regulations.

Due to changing regulations and increased government scrutiny, financial managers in financial institutions must place greater emphasis on accurate reporting of financial data. They must have detailed knowledge of industries allied to banking—such as insurance, real estate, and securities—and broad knowledge of business and industrial activities. With growing domestic and foreign competition,

knowledge of an expanding and increasingly complex variety of financial services is becoming a necessity for financial managers in financial institutions and other corporations. Besides supervising financial services, financial managers in financial institutions may advise individuals and businesses on financial planning.

Working Conditions

Financial managers are provided with comfortable offices, often close to top managers and to departments which develop the financial data these managers need. Although overtime may sometimes be required, financial managers typically work a 40-hour week. Attendance at meetings of financial and economic associations and similar activities is often required. In very large corporations, some traveling to subsidiary firms and to customer accounts may be necessary.

Employment

Financial managers held about 701,000 jobs in 1992. Although these managers are found in virtually every industry, one-third were employed by financial institutions—banks, savings institutions, finance companies, credit unions, insurance companies, securities dealers, and real estate firms, for example. Nearly another third were employed by services industries, including business, health, social, and management services.

Training, Other Qualifications, and Advancement

A bachelor's degree in accounting or finance, or in business administration with an emphasis on accounting or finance, is suitable academic preparation for financial managers. A Master of Business Administration (MBA) degree is increasingly valued by employers. Many financial management positions are filled by promoting experienced, technically skilled professional personnel—for example, accountants, budget analysts, credit analysts, insurance analysts, loan officers, and securities analysts—or accounting or related department supervisors in large institutions.

Due to the growing complexity of global trade, shifting Federal and State laws and regulations, and a proliferation of new, complex financial instruments, continuing education is becoming vital for financial mangers. Firms often provide opportunities for workers to broaden their knowledge and skills and encourage employees to



Outstanding financial managers are prime candidates for promotion to top management jobs.

take graduate courses at colleges and universities or attend conferences sponsored by the company. In addition, financial management, banking, and credit union associations, often in cooperation with colleges and universities, sponsor numerous national or local training programs. Persons enrolled prepare extensively at home, then attend sessions on subjects such as accounting management, budget management, corporate cash management, financial analysis, international banking, and data processing and management information systems. Many firms pay all or part of the costs for those who successfully complete courses. Although experience, ability, and leadership are emphasized for promotion, advancement may be accelerated by this type of special study.

In some cases, financial managers may also broaden their skills and exhibit their competency in specialized fields by attaining professional certification. For example, the Association for Investment Management and Research confers the Chartered Financial Analyst designation to investment professionals who have a bachelor's degree, pass three test levels, and have 3 or more years of experience in the field. The National Association of Credit Management administers a three-part certification program for business credit professionals. Through a combination of experience and examinations, these financial managers pass through the level of Credit Business Associate, to Credit Business Fellow, to Certified Credit Executive. The Treasury Management Association confers the Certified Cash Manager designation to those who pass an examination and have 2 years of relevant experience.

Persons interested in becoming financial managers should like to work independently, deal with people, and analyze detailed account information. The ability to communicate, both orally and in writing, is increasingly important. They also need tact, good judgment, and the ability to establish effective personal relationships to oversee supervisory and professional staff members.

Financial analysis and management have been revolutionized by technological improvements in personal computers and data processing equipment. Knowledge of their applications is vital to upgrade managerial skills and to enhance advancement opportunities

Because financial management is critical for efficient business operations, well-trained, experienced financial managers who display a strong grasp of the operations of various departments within their organization are prime candidates for promotion to top management positions. Some financial managers transfer to closely related positions in other industries. Those with extensive experience and access to sufficient capital may head their own consulting firms.

Job Outlook

Like other managerial occupations, the number of applicants for financial management positions is expected to exceed the number of job openings, resulting in competition for jobs. Employment of financial managers is expected to increase about as fast as the average for all occupations through the year 2005. In addition, job openings will arise each year as financial managers transfer to other occupations, start their own businesses, or retire. Similar to other managers, most financial managers who leave their jobs seek other positions in their field; relatively few experienced workers leave the occupation permanently each year.

Although the need for skilled financial management will increase due to the demands of global trade, the proliferation of complex financial instruments, and continually changing Federal and State laws and regulations, employment growth among financial managers will be tempered by corporate restructuring and downsizing in many industries. Many firms are reducing their ranks of middle managers in an effort to be more efficient and competitive. Similarly, as the banking industry consolidates and banks merge their operations, some financial management positions may be eliminated. These forces will prevent the growing need for skilled financial managers from resulting in dramatic employment growth.

Many opportunities will still exist for the most skilled, adaptable, and knowledgeable financial managers. Those who keep abreast of the latest financial instruments and changing regulations, and those familiar with a range of financial services—for example, banking, business credit, credit unions, insurance, real estate, and securities—and with data processing and management information

systems will enjoy the best employment opportunities. Developing expertise in a rapidly growing industry, such as health care, also may prove helpful.

Earnings

The median annual salary of financial managers was \$39,700 in 1992. The lowest 10 percent earned \$20,200 or less, while the top 10 percent earned over \$77,800.

According to a survey by Robert Half International, a staffing services firm specializing in accounting and finance, salaries of chief financial officers/treasurers ranged from \$56,000 in the smallest firms to \$290,000 in the largest firms in 1993; controllers, \$44,000 to \$129,000; and assistant controllers, \$38,000 to \$75,000.

The salary level depends upon the manager's experience and the size and location of the organization, and is likely to be higher in large organizations and cities. Many financial managers in private industry receive additional compensation in the form of bonuses, which also vary substantially by size of firm.

Related Occupations

Financial managers combine formal education with experience in one or more areas of finance—such as asset management, lending, credit operations, securities investment, or insurance risk and loss control. Workers in other occupations which require similar training and ability include accountants and auditors, budget officers, credit analysts, loan officers, insurance consultants, portfolio managers, pension consultants, real estate advisors, securities analysts, and underwriters.

Sources of Additional Information

For general information about financial management careers, contact:

Financial Management Association, Intl., College of Business Administration, University of South Florida, Tampa, FL 33620-5500.

Financial Managers Society, 8 S. Michigan Ave., Suite 500, Chicago, IL 60603.

For information about financial management careers in banking and related financial institutions, contact:

**Endown Association, Center for Banking Information, 1120 Connecticut Ave. NW., Washington, DC 20036.

For information about financial management careers in credit unions, contact:

Credit Union Executives Society, P.O. Box 14167, Madison, WI 53714.

For information about financial careers in business credit management, the Certified Credit Executive program, and institutions offering graduate courses in credit and financial management, contact.

P National Association of Credit Management (NACM), and Credit Research Foundation, the education and research affiliate of NACM, 8815 Centre Park Dr., Columbia, MD 21045-2117.

For information about careers in corporate cash management and

the Certified Cash Manager program, contact:

Treasury Management Association, 7315 Wisconsin Ave., Bethesda, MD 20814.

For information about the Chartered Financial Analyst program,

IF Association for Investment Management and Research, 5 Boar's Head Lane, P.O. Box 3668, Charlottesville, VA 22903.

For information about financial management careers in the health care industry, contact:

F Healthcare Financial Management Association, 2 Westbrook Corporate

Center, Suite 700, Westchester, IL 60154.

For information on careers and courses for financial managers in

the banking industry, contact:

Savings and Community Bankers of America, Education Services, Center For Financial Studies, 200 Barlow Rd., Fairfield, CT 06430.

Information about careers with the Federal Reserve System is

available from:

By Board of Governors, The Federal Reserve System, Division of Human

Resources Management, Washington, DC 20551, or from the human resources department of the Federal Reserve bank serving each geographic area.

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

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

The U.S. Savings and Loan Directory (Chicago, Rand McNally & Co.).
Representation Representation of the Repres

Funeral Directors

(D.O.T. 187.167-030)

Nature of the Work

Since the earliest of times, most peoples have held funeral ceremonies. The dead have ritually been interred in pyramids, cremated on burning pyres, and sunk beneath the oceans' waves. Even today, funeral practices and rites vary greatly among various cultures and religions. Among the many diverse groups in the United States, funeral practices generally share some common elements: Removal of the remains of the deceased to a mortuary, preparation of the remains, performance of a ceremony that honors the deceased and addresses the spiritual needs of the living as well as the dead, and the burial or destruction of the remains. To unburden themselves of arranging and directing these tasks, grieving families turn to funeral directors.

Funeral directors are also called morticians or undertakers. Although this career does not appeal to everyone, the men and women who work as funeral directors take great pride in the fact that they provide efficient and appropriate services that give comfort to their customers.

Funeral directors interview the family to learn what they desire with regard to the nature of the funeral the clergy members or other persons who will officiate, and the final disposition of the remains; sometimes the deceased leave detailed instructions for their own funerals. Directors establish with the family the location, dates, and times of wakes, memorial services, and burials. They also send a hearse to carry the body to the funeral home or mortuary.

Burial in a casket is the most common method of disposing of remains in this country, although entombments also occur. Cremation, which is the burning of a body in a special furnace, is increasingly selected. Even when remains are cremated, the ashes are often placed in an urn and buried. Funeral directors usually stock a selection of caskets and urns for families to purchase.

Directors arrange the details and handle the logistics of funerals. They prepare obituary notices and have them placed in newspapers, arrange for pallbearers and clergy, schedule with the cemetery the opening and closing of a grave, decorate and prepare the sites of all services, and provide for the transportation of the remains, mourners, and flowers between sites. They also direct preparation and shipment of remains for out-of-State burial.

Funeral services may take place in the home, a house of worship, or the funeral home and at the grave site or crematory. Services may be nonreligious, but often they reflect the religion of the family, so funeral directors must be familiar with the funeral and burial customs of many faiths, ethnic groups, and fraternal organizations. For example, members of some religions seldom have the bodies of the deceased embalmed or cremated.

Most funeral directors are also trained, licensed, and practicing embalmers. In large funeral homes, an embalming staff of one or more embalmers, plus several apprentices, may be employed. Embalming is a sanitary, cosmetic, and preservative process through which the body is prepared for interment. If more than 24 hours or so elapses between death and interment, State laws usually require that remains be embalmed. The embalmer washes the body with germicidal soap and replaces the blood with embalming fluid to preserve the body. Embalmers may reshape and reconstruct disfigured or maimed bodies using materials, such as clay, cotton, plaster of Paris, and wax. They also may apply cosmetics to provide a natural appearance, and then dress the body and place it in a casket. Embalmers may maintain records, such as itemized lists of clothing or

valuables delivered with the body and the name of person em-

Funeral directors also handle the paper work involved with the person's death. They may help family members apply for veterans' burial benefits, notify the Social Security Administration of the death, apply on behalf of survivors for the transfer of any pensions or annuities, and submit papers to State authorities so that a formal certificate of death may be issued and copies distributed to heirs.

Funeral directors are also responsible for the success and the profitability of their businesses. Directors keep records on expenses, purchases, and services rendered; prepare and send invoices for services; prepare and submit reports for unemployment insurance; prepare Federal, State, and local tax forms; and prepare itemized bills for customers. Directors also strive to foster a cooperative spirit and friendly attitude among employees and a compassionate demeanor toward the families.

Most funeral homes have a chapel, one or more viewing rooms, a casket-selection room, and a preparation room. Equipment may include a hearse, a flower car, limousines, and sometimes an ambulance

Working Conditions

Funeral directors often work long, irregular hours. Shift work is sometimes necessary because funeral home hours include evenings and weekends. In smaller funeral homes, working hours vary, but in larger homes employees generally work 8 hours a day, 5 or 6 days a week.

Funeral directors occasionally come into contact with the remains of persons who had contagious diseases, but the possibility of infection is remote if strict health regulations are followed.

To show proper respect and consideration for the families and the dead, funeral directors must dress appropriately. The profession usually requires short, neat hair cuts and trim beards if any, for men. Suits, ties, and dresses are customary for a conservative look.

Employment

Funeral directors held about 27,000 jobs in 1992. About one-third were self-employed. Nearly all worked in the funeral service and crematory industry, but a few worked for the Federal Government.

Training, Other Qualifications, and Advancement

Funeral directors must be licensed in all but one State, Colorado. Licensing laws vary from State to State, but most require applicants to be 21 years old, have a high school diploma, complete some college training in mortuary science, and serve an apprenticeship. After passing a State board licensing examination, new funeral directors may join the staff of a funeral home. Embalmers are required to be licensed in all States, and some States issue a single license for both



Most funeral directors are also trained, licensed, and practicing embalmers.

funeral directors and embalmers. In States that have separate licensing and apprenticeship requirements for the two positions, most people in the field obtain both licenses. Persons interested in a career as a funeral director should contact their state board for specific state requirements.

College programs in mortuary science usually last from 1 to 4 years, depending on the school. There were 40 mortuary science programs accredited by the American Board of Funeral Service Education in 1992. One-year mortuary science programs offered by some vocational schools emphasized basic subjects such as anatomy, physiology, embalming techniques, and restorative art. Two-year programs were offered by a small number of community and junior colleges, and a few colleges and universities offered both 2-and 4-year programs. Longer mortuary science programs include courses in business management, accounting, and use of computers in funeral home management and client services. They also included courses in the social sciences and legal, ethical, and regulatory subjects, such as psychology, grief counseling, oral and written communication, funeral service law, business law, and ethics.

The National Foundation of Funeral Service offers a continuing education program designed for active practitioners in the field. It is a 3-week program in communications, counseling, and management. Some States have continuing education requirements that funeral directors must meet before a license can be renewed.

Apprenticeships must be completed under an experienced and licensed funeral director or embalmer. Depending on State regulations, apprenticeships last from 1 to 2 years and may be served before, during, or after mortuary school. They provide practical experience in all facets of the funeral service from embalming to transporting remains.

State board licensing examinations vary, but they usually consist of written and oral parts and include a demonstration of practical skills. Persons who want to work in another State may have to pass the examination for that State, although many States will grant licenses to funeral directors from another State without further examination.

High school students can start preparing for a career as a funeral director by taking courses in biology and chemistry and participating public speaking or debating clubs. Part-time or summer jobs in funeral homes consist mostly of maintenance and clean-up tasks, such as washing and polishing limousines and hearses, but these tasks can help students become familiar with the operation of funeral homes.

Important personal traits for funeral directors are composure, tact, and the ability to communicate easily with the public. They also should have the desire and ability to comfort people in their time of sorrow.

Advancement opportunities are best in large funeral homes at which directors and embalmers may earn promotions to higher paying positions such as branch manager or general manager. Some directors eventually acquire enough money and experience to establish their own funeral businesses.

Job Outlook

Employment of funeral directors and embalmers is expected to increase about as fast as the average for all occupations through the year 2005. Employment opportunities are expected to be excellent, because the number of graduates in mortuary science is likely to continue to be less than the number of job openings in the field.

Demand for funeral services will rise as the population grows, and with it the number of deaths. The population is projected to become older because the number of persons age 55 and over is expected to increase significantly faster than the population as a whole. Deaths will also increase among members of the younger population due to AIDS.

Cremations have been increasing over the years. This trend may lessen the demand for embalming somewhat, because in some States, embalming is not required before cremation. As a consequence, fewer services would be needed from funeral directors.

Earnings

Salaries of funeral directors depend on the size of the establishment and the number of services performed. A survey conducted by the National Funeral Directors Association found that the average salary, including bonus, for funeral directors who were owner/managers was \$59,574 in 1991; mid-level managers averaged \$41,393. Embalmers had average salaries of \$27,421, and apprentices averaged \$17,489.

Related Occupations

The job of a funeral director requires tact, discretion, and compassion when dealing with grieving people. Others who need these qualities include members of the clergy, social workers, psychologists, psychiatrists, and other health care professionals.

Sources of Additional Information

Information on a career as a funeral director is available from:

The National Funeral Directors Association, 11121 West Oklahoma
Ave., Milwaukee, WI 53227.

P National Selected Morticians, 1616 Central St., Evanston, IL 60201.

For a list of accredited programs in mortuary science and scholarship information contact:

The American Board of Funeral Service Education, 14 Crestwood Rd., Cumberland, ME 04021.

For information on continuing funeral service education contact: The National Foundation of Funeral Service, 2250 East Devon Ave., Suite 250, Des Plaines, IL 60018.

General Managers and Top Executives

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

Nature of the Work

Chief executive officer, executive vice president for marketing, department store manager, financial institution president, brokerage office manager, college president, school superintendent, and police chief—these are examples of general managers and top executives who, at the upper end of the management hierarchy, formulate the policies and direct the operations of the Nation's private firms and government agencies. (Top executives who formulate policy in public administration are discussed in detail in the *Handbook* statement on government chief executives and legislators.)

The fundamental objectives of private organizations are to maintain efficiency and profitability in the face of shifting consumer tastes and needs, accelerating technological complexity, economic interdependence, and domestic and foreign competition. Similarly, nonprofit organizations and government agencies must effectively implement programs subject to budgetary constraints and shifting public preferences. General managers and top executives try to en-

sure that their organizations meet these objectives.

An organization's general goals and policies are established by the chief executive officer in collaboration with other top executives, usually executive vice presidents, and often with a board of directors. In a large corporation, a chief executive officer may frequently meet with top executives of other corporations, domestic or foreign governments, or outside consultants to discuss matters affecting the organization's policies. Although the chief executive officer retains ultimate authority and responsibility, the chief operating officer may be delegated the authority to oversee executive vice presidents who direct the activities of various departments and are responsible for implementing the organization's policies in these departments.

The scope of executive vice presidents' responsibility depends greatly upon the size of the organization. In large corporations, their duties may be highly specialized. For example, they may oversee general managers of marketing, sales promotion, purchasing, finance, personnel, training, industrial relations, administrative services, electronic data processing, property management, transportation, or legal services departments. (Some of these and other managerial occupations are discussed elsewhere in this section of the *Handbook*.) In smaller firms, an executive vice president might be responsible for a number of these departments.

General managers, in turn, direct their individual department's activities within the framework of the organization's overall plan. With the help of supervisory managers and their staffs, general managers oversee and strive to motivate workers to achieve their department's goals as rapidly and economically as possible. In smaller organizations, such as independent retail stores or small manufacturers, a general manager may be responsible for purchasing, hiring, training, quality control, and all other day-to-day supervisory duties. (See the *Handbook* statement on retail managers.)

Working Conditions

General managers in large firms or government agencies are provided with offices close to the departments they direct and to the top executives to whom they report. Top executives may be provided with spacious offices and often meet and negotiate with top executives from other corporations, government, or other countries. Long hours, including evenings and weekends, are the rule for most top executives and general managers, though their schedules may be flexible. Though still uncommon, more executives are accepting temporary positions, sometimes only working for the duration of one project or several months.

one project or several months.

Substantial travel is often required. General managers may travel between national, regional, and local offices to monitor operations and meet with other executives. Top executives may travel to meet with their counterparts in other corporations in the country or overseas. Many attend meetings and conferences that are sponsored by industries and associations and provide invaluable opportunities to meet with peers and keep abreast of technological and other developments. Perquisites such as reimbursement of an accompanying spouse's travel expenses may help executives cope with frequent or extended periods away from home.

In large corporations, job transfers between the parent company and its local offices or subsidiaries, here or abroad, are common.

With increasing domestic and international competition, general managers and top executives are under intense pressure to attain, for example, ever higher production and marketing goals. Executives in charge of poorly performing companies or departments often find that their jobs are in jeopardy.

Employment

General managers and top executives held nearly 2.9 million jobs in 1992. They are found in every industry—wholesale and retail trade



Corporate restructuring and downsizing will limit employment growth among general managers and top executives.

and services industries employ over 6 out of 10 general managers and top executives.

Training, Other Qualifications, and Advancement

The educational background of managers and top executives varies as widely as the nature of their diverse responsibilities. Many general managers and top executives have a bachelor's degree in liberal arts or business administration. Their major often is related to the departments they direct—for example, accounting for a general manager of finance or computer science for a general manager of information systems. Graduate and professional degrees are common. Many managers in administrative, marketing, financial, and manufacturing activities have a master's degree in business administration. Managers in highly technical manufacturing and research activities often have a master's or doctoral degree in an engineering or scientific discipline. A law degree is mandatory for general managers of corporate legal departments, and hospital administrators generally have a master's degree in health services administration or business administration. (For additional information, see the Handbook statement on health services managers.) College presidents and school superintendents generally have a doctorate, often in education administration; some have a law degree. (See the Handbook statement on education administrators.) On the other hand, in some industries, such as retail trade, competent individuals without a college degree may become general managers.

Many general managers in the public sector have a liberal arts degree in public administration or in one of the social sciences such as economics, psychology, sociology, or urban studies. For others, experience is still the primary qualification. For park superintendents, a liberal arts degree also provides a suitable background. Police chiefs are graduates of police academies, and a degree in police science or a related field is increasingly important. Similarly, fire chiefs are graduates of fire academies, and a degree in fire science is gaining in importance as well. For harbormasters, a high school educa-

tion and experience as a harbor pilot are sufficient.

Most general manager and top executive positions are filled by promoting experienced, lower level managers. Some companies prefer that their top execuitves have specialized backgrounds—in finance or marketing, for example. However, certain qualities, including leadership, self-confidence, motivation, decisiveness, flexibility, the ability to communicate effectively, and sound business judgment are far more important. In small firms, where the number of positions is limited, advancement to a higher management position may come slowly. In large firms, promotions may occur more quickly.

Advancement may be accelerated by participation in company training programs to broaden knowledge of company policy and operations. Attendance at national or local training programs sponsored by numerous industry and trade associations and continuing education, normally at company expense, in colleges and universities can familiarize managers with the latest developments in management techniques. Every year, thousands of senior managers, who often have some experience in a particular field such as accounting, engineering, or science, attend executive development programs to facilitate their promotion from functional specialists to general managers. In addition, participation in interdisciplinary conferences and seminars can expand knowledge of national and international issues influencing the manager's firm.

Persons interested in becoming general managers and top executives must have highly developed personal skills. A highly analytical mind able to quickly assess large amounts of information and data is very important. The ability to consider and evaluate the interrelationships of numerous factors and to select the best course of action is imperative. In the absence of sufficient information, sound intuitive judgment is crucial to reaching favorable decisions. General managers and top executives also must be able to communicate clearly and persuasively with customers, subordinates, and other

managers in their firm.

General managers may advance to top executive positions, such as executive or administrative vice president, in their own firm or to a corresponding general manager position in a larger firm. Similarly, top-level managers may advance to peak corporate positions—chief operating officer and, finally, chief executive officer. Chief executive officers and other top executives may also become

members of the board of directors of one or more firms. Some general managers and top executives with sufficient capital and experience establish their own firms or become independent consultants.

Job Outlook

Employment of general managers and top executives is expected to grow more slowly than the average for all occupations through the year 2005 as companies restructure managerial hierarchies in an effort to cut costs. General managers and top executives may be more affected by these cost-cutting strategies than in the past, thus moderating employment growth.

Although this is a large occupation, and many openings will occur each year as executives transfer to other positions, start their own businesses, or retire, competition for top managerial jobs will be keen. Many executives who leave their jobs transfer to other executive or managerial positions, limiting openings for new entrants, and large numbers of layoffs resulting from downsizing and restructuring will lead to an ample supply of competent managers. Moreover, the aging of the workforce will result in more senior middle managers vying for a limited number of top executive positions.

Projected employment growth of general managers and top executives varies widely among industries. For example, employment growth is expected to be faster than average in all services industries combined, but slower than average in all finance, insurance, and real estate industries combined. Employment of general managers and top executives is projected to decline in manufacturing industries overall.

Managers whose accomplishments reflect strong leadership qualities and the ability to improve the efficiency or competitive position of their organizations will have the best opportunities in all industries. In an increasingly global economy, certain types of experience, such as international economics, marketing, or information systems, or knowledge of several disciplines, will also be advantageous.

Earnings

General managers and top executives are among the highest paid workers in the Nation. However, salary levels vary substantially depending upon the level of managerial responsibility, length of service, and type, size, and location of the firm.

At the highest level, chief executive officers (CEO) are extremely well paid. According to a survey by Fortune magazine, CEO's at 200 major companies averaged \$3.2 million in 1993, including bonuses and stock awards, which are often tied to performance. According to a similar survey of 365 companies by Business Week magazine, CEO salaries and bonuses averaged \$1.1 million in 1992; total compensation, including stock options and dividends, averaged \$3.8 million. Salaries are related to the size of the corporation—a top manager in a very large corporation can earn significantly more

than a counterpart in a small firm.

Salaries also vary substantially by type and level of responsibilities and by industry. According to a salary survey by Robert Half International, a staffing services firm specializing in accounting and finance, senior vice presidents/heads of lending in banks with \$1 billion and higher in assets earned about \$200,000 in 1993. Based on a survey sponsored by the Society for Human Resource Management, the average base salary for top human resources managers was about \$136,000 in 1993. A survey by Network World newsweekly found that upper level computer network managers—including chief information officers, vice presidents, and directors-averaged \$83,900 in 1993; mid-level managers—including network, data communications, telecommunications, and technical support managers—averaged \$59,400 in that year. Among top network managers, those in the health care industry were the highest paid, averaging \$142,500 in 1993, while those in wholesale/retail trade were the lowest paid, averaging \$56,000. Among other industries, top network managers in manufacturing/finance and utilities were among the highest paid, while those in education and government were among the lowest paid.

Company-paid insurance premiums, physical examinations, executive dining rooms, use of company cars, paid country club memberships, and expense allowances are among the benefits enjoyed by some general managers and top executives in private industry.

Related Occupations

General managers and top executives plan, organize, direct, control, and coordinate the operations of an organization and its major departments or programs. The members of the board of directors and supervisory managers are also involved in these activities. Occupations in government with similar functions are governor, mayor, postmaster, commissioner, director, and office chief.

Sources of Additional Information

For a wide variety of information on general managers and top executives, including educational programs and job listings, contact:

American Management Association, Management Information Service, 135 West 50th St., New York, NY 10020.

Partial Management Association, 2210 Arbor Blvd., Dayton, OH 45439.

Information about general managers and top executives in specific industries may be obtained from organizations listed under a number of headings—for example, administration, administrators, directors, executives, management, managers, and superintendents—in various encyclopedias or directories of associations in public libraries.

Government Chief Executives and Legislators

Nature of the Work

Go to school. Pay your taxes. Register for the draft. Stop at the stop sign. It seems as though the Government is always telling us what to do. Who, then, tells the Government what to do? Chief executives and legislators at the Federal, State, and local level do the telling. They are elected or appointed officials who strive to meet the needs of their constituents with an effective and efficient government.

Chief executives are officials who run governmental units that help formulate, carry out, and enforce laws. These officials include the President and Vice President of the United States, State governors and lieutenant governors, county executives, town and township officials, mayors, and city, county, town, and township managers. All except local government managers are elected; managers are appointed by the local government council or commission.

Government chief executives, like corporation presidents and other chief executives, have overall responsibility for how their organizations perform. In coordination with legislators, they establish goals and objectives and then organize programs and form policies to attain these goals. They appoint people to head departments, such as highway, health, police, park and recreation, economic development, and finance. Through these departmental heads, chief executives oversee the work of civil servants, who carry out programs and enforce laws enacted by the legislative bodies. They prepare budgets, specifying how government resources will be used. They insure that their government uses resources properly and carries out programs as planned by holding staff conferences, requiring work schedules and periodic performance reports, and conducting personal inspections.

Chief executives meet with legislators and constituents to solicit their ideas, discuss programs, and encourage their support. They also may confer with leaders of other governments to solve mutual problems. Chief executives nominate citizens for government boards and commissions to oversee government activities or examine and help the government solve problems such as drug abuse, crime, deteriorating roads, and inadequate public education.

They also solicit bids from and select contractors to do work for the government, encourage business investment and economic development in their jurisdictions, and seek Federal or State funds. Chief executives of large jurisdictions rely on a staff of aides and assistants, but those in small ones often do much of the work themselves. City, county, town, and other managers, although appointed officials, may act as, and refer to themselves as, chief executives. Legislators are the elected officials who make laws or amend existing ones in order to remedy problems or to promote certain activities. They include U.S. Senators and Representatives, State senators and representatives (called assemblymen and assemblywomen, or delegates in some States), county legislators (called supervisors, commissioners, councilmembers, or freeholders in some States), and city and town council members (called aldermen and alderwomen, trustees, clerks, supervisors, magistrates, and commissioners, among other titles).

Legislators introduce bills in the legislative body and examine and vote on bills introduced by other legislators. In preparing legislation, they read reports and work with constituents, representatives of interest groups, members of boards and commissions, the chief executive and department heads, consultants, and legislators in other units of government. They also approve budgets and the appointments of department heads and commission members submitted by the chief executive. In some jurisdictions, the legislative body appoints a city, town, or county manager. Many legislators, especially at the State and Federal levels, have a staff to help do research, prepare legislation, and resolve constituents' problems.

In some units of government, the line between legislative and executive functions blurs. For example, mayors and city managers may draft legislation and conduct council meetings, and council members may oversee the operation of departments.

Both chief executives and legislators perform ceremonial duties they open new structures and businesses, make proclamations, welcome visitors, and lead celebrations.

Working Conditions

Working conditions of chief executives and legislators vary depending on the size of the governmental unit. Time spent at work ranges from meeting once a month for a local council member to 60 or more hours per week for a legislator. U.S. Senators and Representatives, governors and lieutenant governors, and chief executives and legislators in some large local jurisdictions work full time year round, as do almost all county and city managers. Some city and town managers work for several small jurisdictions. Most State legislators work full time while legislatures are in session (usually for a few months a year) and part time the rest of the year. Local elected officials in most jurisdictions work part time; however, even though the job is officially designated part time, some incumbents actually work a full-time schedule.

In addition to their regular schedules, chief executives are on call at all hours to handle emergencies.

Some jobs require only occasional out-of-town travel, but others involve more frequent travel—often to attend sessions of the legislature or to meet with officials of other units of government. Officials in districts covering a large area may drive long distances to perform their regular duties.



Government chief executives exercise authority over local, State, and National political institutions.

Employment

Chief executives and legislators held about 73,000 jobs in 1992. About 5 of 6 worked in local government; the rest worked primarily in State governments. The Federal Government had 535 Senators and Representatives and 2 chief exexutives. There were about 7,500 State legislators and, according to the International City/County Management Association (ICMA), about 11,000 city managers. Executives and council members for local governments made up the remainder.

Chief executives and legislators who do not hold full-time, yearround positions normally work in a second occupation as well (commonly the one they held before being elected), are retired from another occupation, or attend to household responsibilities. Business owner or manager, teacher, and lawyer are common second occupations, and there are many others as well.

Training, Other Qualifications, and Advancement

Choosing from among candidates who meet the minimum age, residency, and citizenship requirements, the voters try to elect the individual who they decide is most fit to hold the position at stake. The question is thus not "How does one become qualified?" but "How does one get elected?"

Successful candidates usually have a strong record of accomplishment in paid and unpaid work. Many have business, teaching, or legal experience, but others come from a wide variety of occupations. In addition, many have served as volunteers on school boards or zoning commissions; with charities, political action groups, and political campaigns; or with religious, fraternal, and similar organizations

Work experience and public service help develop the planning, organizing, negotiating, motivating, fundraising, budgeting, public speaking, and problem solving skills needed to run a political campaign. Candidates must make decisions quickly and fairly with little or contradictory information. They must have confidence in themselves and their employees to inspire and motivate their constituents and their staff. They should also be sincere and candid, presenting their views thoughtfully and convincingly. Additionally, they must know how to hammer out compromises with colleagues and constituents. National and Statewide campaigns also require a good deal of energy, stamina, and fund raising skills.

Town, city, and county managers are appointed by a council or commission. Managers come from a variety of educational backgrounds. A master's degree in public administration—including courses such as public financial management and legal issues in public administration—is widely recommended but not required. Virtually all town, city, and county managers have at least a bachelor's degree and many hold a master's degree. In addition, working as a student intern in government is recommended—the experience and personal contacts acquired can prove invaluable in eventually securing a position as a town, city, or county manager.

Generally, a town, city, or county manager in a smaller jurisdiction is required to have some expertise in a wide variety of areas; those who work for larger jurisdictions specialize in financial, administrative, or personnel matters. For all managers, communication skills and the ability to get along with others are essential.

Advancement opportunities for most elected public officials are not clearly defined. Because elected positions normally require a period of residency and because local public support is critical, officials can usually advance to other offices only in the jurisdictions where they live. For example, council members may run for mayor or for a position in the State government, and State legislators may run for governor or for Congress. Many officials are not politically ambitious, however, and do not seek advancement. Others lose their bids for reelection or voluntarily leave the occupation. A lifetime career as a government chief executive or legislator is rare.

Town, city, and county managers have a clearer career path. They generally obtain a master's degree in public administration, then gain experience as management analysts or assistants in government departments working with councils and chief executives and learning about planning, budgeting, civil engineering, and other aspects of running a city. After several years, they may be hired to manage a town or a small city and may eventually become manager of progressively larger cities.

Job Outlook

Little, if any, growth is expected in the number of government chief executives and legislators through the year 2005. Few, if any, new governments are likely to form, and the number of chief executives and legislators in existing governments rarely changes. The addition of one or two States to the union would lead to several additional U.S. Senators and Representatives. Some small increase may occur as growing communities—in the rapidly growing South and West, for example—become independent cities and towns and elect a chief executive and legislators and, perhaps, appoint a town manager. A few new positions may also develop as cities and counties without managers hire them and as unpaid offices—which are not counted as employment—are converted to paid positions. On the other hand, attempts by governments to cut costs and streamline operations, in response to tight budgets, could reduce the number of paid positions, particularly at the local level.

The number of State legislators recently declined slightly when States, as required by law, completed their decennial redistricting.

Elections give newcomers the chance to unseat incumbents or to fill vacated positions. In many elections, there is substantial competition, although the level of competition varies from jurisdiction to jurisdiction and from year to year. Generally, there is less competition in small jurisdictions, which have part-time positions offering relatively low salaries and little or no staff to help with tedious work, than in large jurisdictions, which have full-time positions offering higher salaries, more staff, and greater status. In some cases, usually in small jurisdictions, an incumbent runs unopposed, or an incumbent resigns, leaving only one candidate for a job. The high cost of running for such positions in large jurisdictions may serve as a deterrent to running, or may leave the challenger dependent on contributions from special interest groups.

Earnings

Earnings of public administrators vary widely, depending on the size of the government unit and on whether the job is part time, full time and year round, or full time for only a few months a year. Salaries range from little or nothing for a small town council member to \$200,000 a year for the President of the United States.

According to the International City/County Management Association, the average annual salary of mayors was about \$9,900 in 1991. In cities with a population under 2,500, they averaged about \$1,800; in cities with a population over 1 million, around \$78,000.

ICMA data indicate that the average salary for the chair of the county legislative body in 1991 was about \$19,700. Those in counties with populations over 1 million earned an average of \$76,900. County managers earned \$68,100 on average in 1991. In counties with a population over 1 million, they earned an average of \$120,000. The average annual salary of city managers was about \$60,000 in 1991. Salaries ranged from \$35,000 in towns with fewer than 2,500 residents to \$127,000 in cities with a population over 1 million.

According to Book of The States, 1992-93, published by the Council of State Governments, the average salary for legislators in the 40 States that paid an annual salary was about \$23,000 in 1992. In 10 States, legislators just received a per diem while legislatures were in session. Salaries and per diem were generally higher in the larger States.

Data from Book of the States, 1992-93 also indicate that gubernatorial annual salaries ranged from \$35,000 in Arkansas to \$130,000 in New York. In addition to a salary, most governors received perquisites such as transportation and an offical residence. Lieutenant governors averaged over \$57,000 annually.

Related Occupations

Related occupations include managerial positions that require a broad range of skills in addition to administrative expertise, such as corporate chief executives and board members, and generals in the military.

Sources of Additional Information

For more information on careers in public administration, consult your elected representatives and local library. Information on State governments can be obtained from: Council of State Governments, P.O. Box 11910, Iron Works Pike, Lexington, KY 40578.

Information on appointed officials in local government can be obtained from:

F International City/County Management Association, 777 North Capitol St. NE., Suite 500, Washington, DC 20002.

Health Services Managers

(D.O.T. 072.117; 074.167; 075.117-014, -022, -026, and -030; 076.117; 077.117; 078.131, .161-010, -014, and .162; 079.117-010, .131, .151, .167-014 and .267; 187.117-010, -058, -062, and .167-090; 188.117-082

Nature of the Work

Health care is a business, albeit a special one. Like every other business, it needs good management to keep it running smoothly. The term "health services manager" encompasses individuals in many different positions who plan, organize, coordinate, and supervise the delivery of health care. Health services managers include both generalists—the administrators managing or helping to manage an entire facility—and health specialists—the managers in charge of specific clinical departments or services that are found only in the health industry.

The top administrator or chief executive officer (CEO) and the assistant administrators without specific titles are health care generalists. They set the overall direction of the facility. They also are concerned with community outreach, planning, policymaking, and complying with government agencies and regulations. Their range of knowledge is necessarily broad, including developments in the clinical departments as well as in the business arena. They often speak before civic groups, promote public participation in health programs, and coordinate the activities of the organization with those of government or community agencies. CEO's make long term institutional plans by assessing the need for services, personnel, facilities, and equipment and recommending changes such as opening a home health service. CEO's need leadership ability as well as technical skills to provide quality health care while, at the same time, satisfying demand for financial viability, cost containment, and public and professional accountability.

CEO's prepare for oversight and scrutiny of their facility's past performance and plans by consumer groups, government agencies, professional oversight bodies, and insurance companies and other third-party payers.

Larger facilities typically have several assistant administrators to aid the top administrator and to handle day-to-day decisions. They may direct actitivies in clinical areas such as nursing, surgery, therapy, food service, and medical records; or the activities in nonhealth areas such as finance, housekeeping, human resources, and information management. (Because the nonhealth departments are not directly related to health care, these managers are not included in this statement. For information about them, see the statements on managerial occupations elsewhere in the *Handbook*). In smaller facilities, top administrators may handle more of the details of day-to-day operations. For example, many nursing home administrators directly manage personnel, finance, operations, and admissions.

Clinical managers have more narrowly defined responsibilities than the generalists to whom they report and have training and/or experience in the field. For example, directors of physical therapy are experienced physical therapists, and most medical records administrators have a bachelor's degree in medical records administration. These managers establish and implement policies, objectives, and procedures for their departments; evaluate personnel and work; develop reports and budgets; and coordinate activities with other managers.

In group practices, managers work closely with the physician owners. While an office manager may handle business affairs in small medical groups, leaving policy decisions to the physicians themselves, larger groups generally employ a full-time administrator to advise on business strategies and coordinate day-to-day business.

A small group of 10 or 15 physicians might employ a single administrator to oversee personnel matters, billing and collection, budgeting, planning, equipment outlays, and patient flow. A large practice of 40 or 50 physicians may have a chief administrator and several assistants, each responsible for different areas.

Health services managers in health maintenance organizations (HMO's) perform functions similar to those in large group practices, except their staffs may be larger. The size of the administrative staff in HMO's may vary according to the type of HMO and the size of the enrolled population.

Some health services managers oversee the activities of a number of facilities in multifacility health organizations.

Working Conditions

Many health services managers work long hours. Facilities such as nursing homes and hospitals operate around the clock, and administrators and managers may be called at all hours to deal with problems. The job also may include travel to attend meetings or to inspect satellite facilities.

Employment

Health services managers held about 302,000 jobs in 1992. Over one-half of all jobs were in hospitals. About 1 in 7 were in nursing and personal care facilities, and 1 in 8 were in offices and clinics of physicians. The remainder worked in home health agencies, medical and dental laboratories, offices of dentists and other practitioners, and other health and allied services.

Training, Other Qualifications, and Advancement

Health services managers must be familiar with management principles and practices. Some learn from work experience. However, formal education is usually necessary for advancement. For most CEO positions, a graduate degree in health services administration, nursing administration, or business administration is required. For some generalist positions, employers seek applicants with clinical experience (as nurses or therapists, for example) as well as academic preparation in business or health services administration.



Health services managers plan, organize, coordinate, and supervise the delivery of health care.

Bachelor's, master's, and doctoral degree programs in health administration are offered by colleges, universities, and schools of public health, medicine, allied health, public administration, and business administration. There are also some certificate or diploma programs, generally lasting less than 1 year, in health services administration and in medical office management. A master's degree—in hospital administration, health services administration, long term care administration, health sciences, public health, public administration, or business administration—is regarded as the standard credential for most generalist positions in this field. However, a bachelor's degree is adequate for some entry-level positions and a few top positions in smaller operations, and for some middle management jobs in larger ones. Bachelor's degrees may not be needed in smaller nursing homes, physicians' offices, and other facilities. Appropriate experience or certificates and diplomas are sometimes acceptable. For clinical department heads, a degree in the appropriate field and work experience are usually sufficient, but courses in health services administration are helpful.

In 1993, 29 colleges and universities offered bachelor's degree programs in health services administration. Sixty-four schools had accredited programs leading to the master's degree in health services administration, according to the Accrediting Commission on Education for Health Services Administration.

Some graduate programs seek students with undergraduate degrees in business or health administration; however, many programs prefer students with a liberal arts or health professions background. Competition for entry to these programs is keen, and applicants need above-average grades to gain admission. The programs generally last between 2 and 3 years. They include up to 1 year of supervised administrative experience, and course work in areas such as hospital organization and management, accounting and budgeting, human resources administration, strategic planning, health economics, and health information systems. Students generally specialize in one type of facility—hospitals; nursing homes; mental health facilities; HMO's; or outpatient care facilities, including medical groups.

New graduates with master's degrees in health services or hospital administration may start as assistant hospital administrators, or as managers of nonhealth departments, like finance. Postgraduate residencies and fellowships are offered by hospitals and other health facilities; these are normally staff jobs. Graduates from master's degree programs also take jobs in HMO's, large group medical practices, clinics, mental health facilities, and multifacility nursing home corporations.

New recipients of bachelor's degrees in health administration usually begin as administrative assistants or assistant department heads in larger hospitals, or as department heads or assistant administrators in small hospitals or in nursing homes.

A Ph.D. degree may be required to teach, consult, or do research. Nursing service administrators are usually chosen from among supervisory registered nurses with administrative abilities and advanced education.

All States and the District of Columbia require nursing home administrators to pass a licensing examination, complete a State-approved training program, and pursue continuing education. Most States also have additional requirements. A license is not required in other areas of health services management.

Health services managers are often responsible for millions of dollars of facilities and equipment and hundreds of employees. To make effective decisions, they need to be open to different opinions and good at analyzing contradictory information. To motivate others to implement their decisions, they need strong leadership qualities. Tact, diplomacy, and communication skills are essential.

Health services managers advance by moving into more responsible and higher paying positions such as assistant or associate administrator and, finally, CEO, or by moving to larger facilities.

Job Outlook

Employment of health services managers is expected to grow much faster than the average for all occupations through the year 2005 as

health services continue to expand and diversify. Hospitals will continue to employ the most managers, although the number of jobs will not be growing as fast as in other areas.

Employment in home health agencies and nursing and long term care facilities will grow the fastest, due to an increased number of elderly who will need care. Demand in medical group practices will grow, too. As medical group practices and HMO's become larger and more complex, more job opportunities for department heads should emerge.

Health services managers in hospitals will face very keen competition for upper level management jobs, a reflection of the pyramidal management structure characteristic of most large organizations. In nursing homes and other long term care facilities, job opportunities for individuals with strong business and management skills will continue to be good.

Earnings

Earnings vary by type and size of the facility, as well as by level of responsibility. For example, the Medical Group Management Association reported that the median salary for administrators in small group practices—with net revenues of \$2 million or less—was \$46,600; for those in very large group practices—with net revenues over \$50 million—\$166,700.

According to a survey sponsored by the Hay Group and the American Society of Healthcare Human Resources Administration, half of all hospital CEO's earned \$140,900 or more in 1993. The lowest 10 percent earned less than \$77,000; the top 10 percent earned \$223,600 or more.

Clinical department heads' salaries varied too. According to a survey by *Modern Healthcare* magazine, average salaries in 1993 for heads of the following clinical departments were: Medical records, \$47,600; home health, \$52,500; imaging/radiology, \$53,300; physical therapy, \$54,700; rehabilitation services, \$58,800; and nursing services, \$65,700.

According to the American College of Health Care Administrators, nursing home administrators had median annual total compensation of \$44,100 in 1992. The middle 50 percent earned between \$36,000 and \$54,000. Those in facilities with less than 50 licensed beds earned \$36,500; those in facilities with 400 or more beds, \$68,200. Licensed assistant administrators earned median total compensation of \$35,000.

Related Occupations

Health services managers have training or experience in both health and management. Other occupations that require knowledge of both fields are public health directors, social welfare administrators, directors of voluntary health agencies and health professional associations, and underwriters in health insurance companies and HMO's.

Sources of Additional Information

General information about health administration is available from: American College of Healthcare Executives, 840 North Lake Shore Dr., Chicago, IL 60611.

Information about undergraduate and graduate academic programs in this field is available from:

Association of University Programs in Health Administration, 1911 North Fort Myer Dr., Suite 503, Arlington, VA 22209.

For a list of accredited graduate programs in health services administration, contact:

Accrediting Commission on Education for Health Services Administration, 1911 North Fort Myer Dr., Suite 503, Arlington, VA 22209.

For information about career opportunities in long term care administration, contact:

Ramerican College of Health Care Administrators, 325 S. Patrick St., Alexandria, VA 22314.

For information about career opportunities in medical group practices and ambulatory care management, contact:

Medical Group Management Association, 104 Inverness Terrace East, Englewood, CO 80112-5306.

Hotel Managers and Assistants

(D.O.T. 187.117-038, .137-018; .167-046, -078, -106, -122; and 320)

Nature of the Work

For vacationing families and persons whose jobs take them out of town, a comfortable room, good food, and a helpful hotel staff can make being away from home an enjoyable experience. Hotel managers and assistant managers work to insure that guests' visits are pleasant.

Hotel managers are responsible for the efficient and profitable operation of their establishments. In a small hotel, motel, or inn with a limited staff, a single manager may direct all aspects of operations. However, large hotels may employ hundreds of workers, and the manager may be aided by a number of assistant managers assigned among departments responsible for various aspects of operations. The general manager has overall responsibility for the operation of the hotel. Within guidelines established by the owners of the hotel or executives of the hotel chain, the general manager sets room rates, allocates funds to departments, approves expenditures, and establishes standards for service to guests, decor, housekeeping, food quality, and banquet operations. (For more information, see the statement on general managers and top executives elsewhere in the Handbook.) Assistant managers must insure that the day-to-day operations of their departments meet the general manager's standards.

Resident managers live in hotels and are on call 24 hours a day to resolve any problems or emergencies, although they normally work an 8-hour day. As the most senior assistant manager, a resident manager oversees the day-to-day operations of the hotel. In many hotels, the general manager also serves as the resident manager.

Executive housekeepers are responsible for insuring that guest rooms, meeting and banquet rooms, and public areas are clean, orderly, and well maintained. They train, schedule, and supervise the work of housekeepers, inspect rooms, and order cleaning supplies.

Front office managers coordinate reservations and room assignments and train and direct the hotel's front desk staff that deals with the public. They insure that guests are handled courteously and efficiently, complaints and problems are resolved, and requests for special services are carried out.

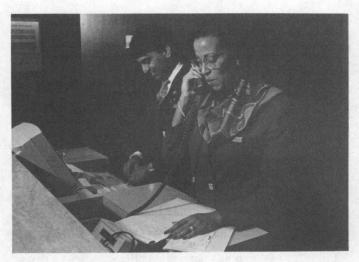
Food and beverage managers direct the food services of hotels. They oversee the operation of hotels' restaurants, cocktail lounges, and banquet facilities. They supervise and schedule food and beverage preparation and service workers, plan menus, estimate costs, and deal with food suppliers. (For more information, see the statement on restaurant and food service managers elsewhere in the Handbook.)

Convention services managers coordinate the activities of large hotels' various departments for meetings, conventions, and other special events. They meet with representatives of groups or organizations to plan the number of rooms to reserve, the desired configuration of hotel meeting space, and any banquet services needed. During the meeting or event, they resolve unexpected problems and monitor activities to check that hotel operations conform to the expectations of the group.

Other assistant managers may be specialists responsible for activities such as personnel, accounting and office administration, marketing and sales, purchasing, security, maintenance, and recreational facilities. (For more information, see the related statements on personnel, training, and labor relations specialists and managers; financial managers; and marketing, advertising, and public relations managers elsewhere in the *Handbook*.) Managers who work for chains may be assigned to organize and staff a newly built hotel, refurbish an older hotel, or reorganize a hotel or motel that is not operating successfully.

Working Conditions

Since hotels are open around the clock, night and weekend work is common. Many hotel managers work considerably more than 40 hours per week. Managers who live in the hotel usually have regular work schedules, but they may be called for work at any time. Some



Front office managers coordinate reservations and room assignments.

employees of resort hotels are managers during the busy season and have other duties the rest of the year.

Hotel managers sometimes experience the pressures of coordinating a wide range of functions. Conventions and large groups of tourists may present unusual problems. Dealing with irate patrons can also be stressful. The job can be particularly hectic for front office managers around checkin and checkout time.

Employment

Hotel managers and assistant managers held about 99,000 wage and salary jobs in 1992. An additional number—primarily owners of small hotels and motels—were self-employed. Others were employed by companies that manage hotels and motels under contract.

Training, Other Qualifications, and Advancement

Postsecondary training in hotel or restaurant management is preferred for most hotel management positions, although a college liberal arts degree may be sufficient when coupled with related hotel experience. In the past, most managers were promoted from the ranks of front desk clerks, housekeepers, waiters and chefs, and hotel sales workers. Although some persons still advance to hotel management positions without the benefit of education or training beyond high school, postsecondary education is increasingly preferred. Nevertheless, experience working in a hotel—even part time while in school—is an asset to all persons seeking to enter hotel management careers. Restaurant management training or experience is also a good background for entering hotel management because the success of a hotel's food service and beverage operations is often of great importance to the profitability of the entire establishment.

A bachelor's degree in hotel and restaurant administration provides particularly strong preparation for a career in hotel management. In 1993, over 160 colleges and universities offered bachelor's and graduate programs in this field. Over 800 community and junior colleges, technical institutes, vocational and trade schools, and other academic institutions also have programs leading to an associate degree or other formal recognition in hotel or restaurant management. Graduates of hotel or restaurant management programs usually start as trainee assistant managers, or at least advance to such positions more quickly.

Hotel management programs usually include instruction in hotel administration, accounting, economics, marketing, housekeeping, food service management and catering, hotel maintenance engineering, and data processing—reflecting the widespread use of computers in hotel operations such as reservations, accounting, and housekeeping management. Programs encourage part-time or summer work in hotels and restaurants because the experience gained and the contacts made with employers may benefit students when they seek full-time employment after graduation.

Hotel managers must be able to get along with all kinds of people, even in stressful situations. They need initiative, self-discipline, and the ability to organize and direct the work of others. They must be able to solve problems and concentrate on details.

Sometimes large hotels sponsor specialized on-the-job management training programs which enable trainees to rotate among various departments and gain a thorough knowledge of the hotel's operation. Other hotels may help finance the necessary training in hotel management for outstanding employees.

Most hotels promote employees who have proven their ability. Newly built hotels, particularly those without well-established onthe-job training programs, often prefer experienced personnel for managerial positions. Large hotel and motel chains may offer better opportunities for advancement than small, independently owned establishments, but relocation every several years often is necessary for advancement. The large chains have more extensive career ladder programs and offer managers the opportunity to transfer to another hotel or motel in the chain or to the central office if an opening occurs. Career advancement can be accelerated by completion of certification programs offered by the associations listed below. These programs generally require a combination of course work, examinations, and experience.

Job Outlook

Employment of salaried hotel managers is expected to grow about as fast as the average for all occupations through the year 2005 as more hotels and motels are built. Business travel will continue to grow, and increased domestic and foreign tourism will also create demand for additional hotels and motels. However, manager jobs are expected to grow more slowly than the hotel industry because a growing share of the industry will be comprised of economy properties, which generally have fewer managers than full-service hotels. In the face of financial constraints, guests are becoming more bargain-conscious, and hotel chains are increasing the number of rooms in economy class hotels. Economy hotels offer clean, comfortable rooms and front desk services without costly extras like restaurants and room service. Because there are not as many departments in each hotel, fewer managers are needed on the hotel premises. Economy hotels have a general manager, and regional offices of the hotel management company employ department managers, such as executive housekeepers, to oversee several hotels.

Although new employment growth is expected to be concentrated in economy hotels, large full-service hotels will continue to offer many trainee and managerial opportunities. Most openings are expected to occur as experienced managers transfer to other occupations, retire, or stop working for other reasons.

Opportunities to enter hotel management are expected to be good for persons who have college degrees in hotel or restaurant management.

Earnings

Salaries of hotel managers varied greatly according to their responsibilities and the size of the hotel in which they worked. In 1993, annual salaries of assistant hotel managers averaged an estimated \$32,500, based on a survey conducted for the American Hotel and Motel Association. Assistants employed in large hotels with over 350 rooms averaged nearly \$38,400 in 1993, while those in small hotels with no more than 150 rooms averaged more than \$26,000. Salaries of assistant managers also varied because of differences in duties and responsibilities. For example, food and beverage managers averaged an estimated more than \$41,200, according to the same survey, whereas front office managers averaged nearly \$26,500. The manager's level of experience is also an important factor.

In 1993, salaries of general managers averaged more than \$59,100, ranging from an average of about \$44,900 in hotels and motels with no more than 150 rooms to an average of about \$86,700 in large hotels with over 350 rooms. Managers may earn bonuses ranging up to 15 percent of their basic salary in some hotels. In addition, they and their families may be furnished with lodging, meals, parking, laundry, and other services.

Most managers and assistants receive 3 to 11 paid holidays a year, paid vacation, sick leave, life insurance, medical benefits, and pension plans. Some hotels offer profit-sharing plans, educational assistance, and other benefits to their employees.

Related Occupations

Hotel managers and assistants are not the only workers concerned with organizing and directing a business in which pleasing people is very important. Others with similar responsibilities include restaurant managers, apartment building managers, retail store managers, and office managers.

Sources of Additional Information

For information on careers and scholarships in hotel management, contact:

The American Hotel and Motel Association (AH&MA), Information Center, 1201 New York Ave. NW., Washington, DC 20005-3931.

For information on educational programs, including correspondence courses, in hotel and restaurant management, write to:

The Educational Institute of AH&MA, P.O. Box 1240, East Lansing, MI 48826

Information on careers in housekeeping management may be obtained from:

Pational Executive Housekeepers Association, Inc., 1001 Eastwind Dr., Suite 301, Westerville, OH 43081.

For information on hospitality careers, as well as how to purchase a directory of colleges and other schools offering programs and courses in hotel and restaurant administration, write to:

— Council on Hotel, Restaurant, and Institutional Education, 1200 17th St. NW., Washington, DC 20036-3097.

Industrial Production Managers

(D.O.T. 180.167-054; 181.117-010; 182.167-022; 183.117-010, -014, .161-014, .167-010, -014, -018, -022, -026, -034, and -038; and 189.117-042, .167-042, and -046)

Nature of the Work

Industrial production managers coordinate activities related to production of goods and direct the work of first-line supervisors. Due to the variety of goods produced, few factories are exactly alike, so managers' duties may vary from plant to plant. However, industrial production managers generally have the same major functions regardless of industry. These include responsibility for production scheduling, staffing, equipment, quality control, inventory control, and the coordination of activities with other departments.

Based on current and projected customer demand, management determines what and how much will be produced. Working within budgetary limitations and time constraints, industrial production managers plan the production schedule. This entails analyzing the plant's personnel and capital resources and selecting the best way to meet the production quota. They determine which machines will be used, whether overtime or extra shifts are necessary, the sequence of production, and related matters. They also monitor the production run to make sure that it stays on schedule, and, if problems arise, take action to solve them.

Industrial production managers also monitor product standards. When quality drops below the established standard, product managers must determine why standards aren't being maintained and how to improve the product. If the problem is poor work, the manager may implement better training programs, reorganize the manufacturing process, or institute employee suggestion or involvement programs. If the cause is substandard materials, the manager works with the purchasing department to improve the quality of the product's components.

Maintaining the inventory of materials necessary for production ties up the firm's financial resources. Yet, insufficient quantities of materials cause delays in production. Working with the purchasing department, the production manager ensures that plant inventories

are maintained at their optimal level. A breakdown in communications between departments can cause slowdowns and a failure to meet production schedules.

Production managers usually report to the plant manager or the vice president for manufacturing. (Information about these workers can be found in the statement on general managers and top executives elsewhere in the *Handbook*). In many plants, one production manager is responsible for all production. In large plants with several operations—aircraft assembly, for example—there are managers in charge of each operation, such as machining, assembly, or finishing.

Because the work of many departments is dependent upon others, managers work closely with heads of other departments such as sales, purchasing, and traffic to plan and implement companies' goals, policies, and procedures. Production managers also work closely with, and act as a liaison between, executives and first-line supervisors.

Computers play an integral role in the coordination of the production process by providing up-to-date data on such things as inventory, work-in-progress, and product standards. Industrial production managers then analyze these data and, working with those from upper management and other departments, determine if adjustments need to be made.

As the trend toward flatter management structure and worker empowerment continues, production managers will increasingly take on the role of a facilitator. Instead of singly making decisions and giving and taking orders, production managers will review and discuss recommendations with subordinates and superiors in the hopes of improving productivity. Because of the additional duties resulting from corporate downsizing, production managers are delegating more authority and responsibility to first-line supervisors.

Working Conditions

Most industrial production managers divide their time between the shop floor and their office. While on the floor, they must follow established health and safety practices and wear the required protective clothing and equipment. The time in the office—often located on or near the production floor—is usually spent meeting with subordinates or other department managers, analyzing production data, and writing and reviewing reports.



Industrial production managers ensure that quality standards are maintained.

Most industrial production managers work more than 40 hours a week, especially when production deadlines must be met. In facilities that operate around the clock, managers may have to work shifts or may be called at any hour to deal with emergencies that could result in production line downtime. Occasionally, this may mean going to the plant to resolve the problem, regardless of the hour, and staying until the situation is under control. Dealing with production workers as well as superiors when working under the pressure of production deadlines or emergency situations can be stressful. In addition, restructuring has eliminated levels of management and support staff. As a result, production managers now have to accomplish more with less and this has greatly increased job-related stress.

Employment

Industrial production managers held about 203,000 jobs in 1992. Although employed throughout manufacturing, about one-half are employed in five industries: Industrial machinery and equipment, transportation equipment, electronic and electrical equipment, fabricated metal products, and food products.

Although production managers work in all parts of the country, jobs are most plentiful in areas where manufacturing is concentrated.

Training, Other Qualifications, and Advancement

Because of the diversity of manufacturing operations and job requirements, there is no standard preparation for this occupation. Many industrial production managers have a college degree in business administration or industrial engineering. Some have a master's degree in business administration (MBA). Others are former production line supervisors who have been promoted. Although many employers prefer candidates to have a degree in business or engineering, some companies hire liberal arts graduates.

As production operations become more sophisticated, an increasing number of employers are looking for candidates with MBA's. This, combined with an undergraduate degree in engineering, is considered particularly good preparation. Companies also are placing greater importance on a candidate's personality. Because the job demands technical knowledge and the ability to compromise, persuade, and negotiate, successful production managers must be well rounded and have excellent communication skills.

Those who enter the field directly from college or graduate school often are unfamiliar with the firm's production process. As a result, they may spend their first few months on the job in the company's training program. These programs familiarize trainees with the production line, company policies and procedures, and the requirements of the job. In larger companies, they may also include assignments to other departments, such as purchasing and accounting.

Blue-collar worker supervisors who advance to production manager positions already have an intimate knowledge of the production process and the firm's organization. To be selected for promotion, these workers must have demonstrated leadership qualities, and often take company-sponsored courses in management skills and communications techniques. Some companies hire college graduates as blue-collar worker supervisors and then promote them.

Once in their job, industrial production managers must stay abreast of new production technologies and management practices. To do this, they belong to professional organizations and attend trade shows where new equipment is displayed; they also attend industry conferences and conventions where changes in production methods and technological advances are discussed.

Although certification in production management and inventory control is not required for most positions, it demonstrates an individual's knowledge of the production process and related areas. Various certifications are available through the American Production and Inventory Control Society. To be certified in production and inventory management, candidates must pass a series of examinations that test their knowledge of inventory management, just-in-time systems, production control, capacity management, and materials planning.

Industrial production managers must be able to speak and write effectively and deal tactfully with both subordinates and superiors in pressure situations. Industrial production managers with a proven record of superior performance may advance to plant manager or vice president for manufacturing. Others transfer to jobs at larger firms with more responsibilities. Opportunities also exist as consultants. (For more information, see the statement on management analysts and consultants elsewhere in the *Handbook*.)

Job Outlook

Little change in employment of industrial production managers is expected through the year 2005. Although manufacturing output is expected to rise significantly, the trend towards smaller management staffs and the lack of growth in production worker employment will limit demand for production managers. Nevertheless, many additional openings will result from the need to replace workers who transfer to other occupations or leave the labor force. However, many of these openings may be filled through internal promotions.

Opportunities should be best for those with college degrees in industrial engineering or business administration and MBA's with undergraduate engineering degrees. Employers also are likely to seek candidates who have excellent communication skills, and who are personable, flexible, and eager to participate in ongoing training.

Earnings

Salaries of industrial production managers vary significantly by industry and plant size. According to the limited data available, the average salary for all production managers was about \$60,000 in 1992. In addition to salary, industrial production managers usually receive bonuses based on job performance.

Benefits for industrial production managers tend to be similar to those offered many workers: Vacation and sick leave, health and life insurance, and retirement plans.

Related Occupations

Industrial production managers oversee production staff and equipment, insure that production goals and quality standards are being met, and implement company policies. Individuals with similar functions include materials, operations, purchasing, and traffic managers

Other occupations requiring similar training and skills are sales engineer, manufacturers' sales representative, and industrial engineer.

Sources of Additional Information

Information on industrial production management can be obtained from:

P National Management Association, 2210 Arbor Blvd., Dayton, OH 45439.

American Manufacturing Association, 135 W 50th St., New York, NY 10020.

Loan Officers and Counselors

(D.O.T. 186.167-078, .267-018, -022, -026)

Nature of work

Banks and other financial institutions need up-to-date information on companies and individuals applying for loans and credit. Customers and clients provide this information to the financial institution's loan officers and counselors, generally the first employees to be seen by them. Loan officers prepare, analyze, and verify loan applications, make decisions regarding the extension of credit, and help borrowers fill out loan applications. Loan counselors help consumers with low income or a poor credit history qualify for credit, usually a home mortgage.

Loan officers usually specialize in commercial, consumer, or mortgage loans. Commercial or business loans help companies pay for new equipment or to expand operations. Consumer loans include home equity, automobile, and personal loans. Mortgage loans are made to purchase real estate or to refinance an existing mort-

Loan officers represent lending institutions that provide funds for a variety of purposes. Personal loans can be made to consolidate bills, purchase expensive items such as an automobile or furniture, or finance a college education. Loan officers attempt to lower their firm's risk by receiving collateral—security pledged for the payment of a loan. For example, when lending money for a college education, the bank may insist that the borrower offer his or her home as collateral. If the borrower were ever unable to repay the loan, the borrower would have to sell the home to raise the necessary money. Loans backed by collateral also are beneficial to the customer because they generally carry a lower interest rate.

Loan officers and counselors must keep abreast of new financial products and services. To meet their customers' needs, for example, banks and other lenders now offer a variety of mortgage products, including reverse equity mortgages, shared equity mortgages, and adjustable rate mortgages. A reverse equity mortgage provides income to the owner of the property, and is paid back either through a conventional mortgage or in a lump sum. A shared equity mortgage allows a group of people to jointly own and be responsible for payment of the mortgage. Adjustable rate mortgages have a fluctuating interest rate, commonly based on the interest rate paid on government bonds—a change in interest rates affects the borrower's monthly payment.

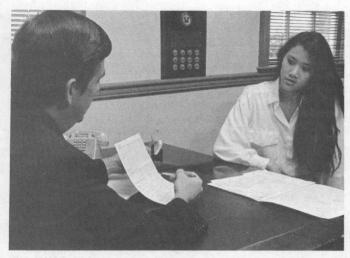
Loan officers meet with customers and gather basic information about the loan request. Often customers will not fully understand the information requested, and will call the loan officer for assistance. Once the customer completes the financial forms, the loan officer begins to process them. The loan officer reviews the completed financial forms for accuracy and thoroughness, and requests additional information if necessary. For example, the loan officer verifies that the customer has correctly identified the type and purpose of the loan. The loan officer then requests a credit report from one or more of the major credit reporting agencies. This information, along with comments from the loan officer, is included in a loan file, and is compared to the lending institution's requirements. Banks and other lenders have established requirements for the maximum percentage of income that can safely go to repay loans. At this point, the loan officer, in consultation with company managers, decides whether or not to grant the loan. A loan that would otherwise be denied may be approved if the customer can provide the lender appropriate collateral. Whether or not the loan request is approved, the loan officer informs the borrower of the lender's decision.

Loan counselors meet with consumers who are attempting to purchase a home or refinance debt, but who do not qualify for loans with banks. Often clients rely on income from self-employment or government assistance to prove that they can repay the loan. Counselors also help to psychologically prepare consumers to be homeowners and to pay their debts. Counselors frequently work with clients who have no experience with financial matters.

Loan counselors provide positive reinforcement along with the financial tools needed to qualify for a loan. This assistance may take several forms. Some clients simply need help in understanding what information loan officers need to complete a loan transaction. Most clients, however, need loans and grants for a down payment sufficient to qualify them for a bank-financed mortgage loan. Many clients have been renting for years and want to buy their properties. While they have the desire to improve their lives through home ownership, they frequently have little or no resources for a down payment. Other clients want to move to a safer and more secure environment where, as owners, they can make decisions regarding the property. The loan counselor helps the client complete an application, and researches Federal, State, and local government programs that could provide the additional money needed for the client to purchase the home. Often several government programs are combined to provide the necessary money.

Working Conditions

Loan officers and counselors work in offices, but mortgage loan officers frequently move from office to office and often visit homes of clients while completing a loan request. Commercial loan officers



Loan officers and counselors are particularly busy when interest rates are low, resulting in a surge in loan applications.

employed by large firms may travel frequently to prepare complex loan agreements.

Most loan officers and counselors work a standard 40-hour week, but may work longer, particularly mortgage loan officers who are free to take on as many customers as they choose. Loan officers and counselors usually carry a heavy caseload and sometimes cannot accept new clients until they complete current cases. They are especially busy when interest rates are low, resulting in a surge in loan applications.

Employment

Loan officers and counselors held about 172,000 jobs in 1992. About 7 out of 10 are employed by commercial banks, savings institutions, and credit unions. Others are employed by nonbank financial institutions, such as mortgage brokerage firms and personal credit firms. Most loan counselors work for State and local governments, or for nonprofit organizations. Loan officers and counselors generally work in urban areas where large banks are concentrated.

Training, Other Qualifications, and Advancement

Most loan officer positions require a bachelor's degree in finance, economics, or a related field. Most employers also prefer applicants who are familiar with computers and their applications in banking. A mortgage loan officer is the exception, with training or experience in sales more crucial to potential employers. Many loan officers advance through the ranks in an organization, acquiring several years of work experience in various other occupations, such as teller or customer service representative.

Capable loan officers may advance to larger branches of the firm or to a managerial position, while less capable loan officers and those having inadequate academic preparation may be assigned to smaller branches and find promotion difficult. Advancement from a loan officer position usually includes becoming a supervisor over other loan officers and clerical staff.

Most loan counselors receive substantial on-the-job training, gaining a thorough understanding of the requirements and procedures for approval of loans. Some acquire this knowledge through work experience in a related field. In addition, accounting skills can be very helpful. Educational requirements vary—some counselors are high school graduates while others have a college degree in economics, finance, or a related field.

Like other workers, outstanding loan counselors can advance to supervisory positions. However, promotion potential is limited, and many loan counselors leave for better paying positions elsewhere.

Persons planning a career as a loan officer or counselor should have good mathematical and communications skills. Developing effective working relationships with different people—managers, clients, and the public—is essential to success as a loan officer or counselor. They also must be able to clearly communicate the results of

their work, orally and in writing, to customers and management. Loan officers must enjoy public contact and be willing to attend community events as a representative of their employer.

Persons interested in counseling should have a strong interest in helping others and the ability to inspire trust, respect, and confidence. Because loan counselors frequently explain the complicated world of banking to clients who have never been exposed to it, patience and an understanding of mortgage banking is necessary to be an effective loan counselor. Counselors should be sensitive to their clients' needs and feelings. Clients want to improve their lives, and counselors must consider the importance and pride they attach to home ownership. Counselors should be able to work independently or as part of a team.

Job Outlook

Employment of loan officers and counselors is expected to grow faster than the average for all occupations through the year 2005. As the population and economy grow, applications for commercial, consumer, and mortgage loans will increase, spurring demand for loan officers and counselors. Growth in the variety and complexity of loans, and the importance of loan officers to the success of banks and other lending institutions, also should assure rapid employment growth. Although increased demand will generate many new jobs, most openings will result from the need to replace workers who leave the occupation or retire. College graduates and those with banking or lending experience should have the best job prospects.

Loan officers are less likely to lose their jobs than other workers in banks and other lending institutions during difficult economic times. Since loans are the major source of income for banks, loan officers are central to the success of their organizations. Loan counselors typically have so many clients that a reduction in their numbers would lead to a decline in the services provided to the community. However, job security is influenced by the spending patterns of local governments. Budget reductions could result in less hiring or even layoffs of loan counselors.

Earnings

According to a salary survey conducted by Robert Half International, a staffing services firm specializing in accounting and finance, real estate mortgage loan officers earned between \$25,000 and \$45,000 in 1993; consumer loan officers, between \$27,000 and \$44,000. Larger banks generally paid higher salaries than smaller banks. Some mortgage loan officers, who typically are paid on a commission basis, earn considerably more.

Based on limited information, most loan counselors earned between \$15,000 and \$35,000 in 1993. Local government employees in large cities earned the highest salaries.

Banks and other lenders sometimes offer their loan officers free checking privileges and somewhat lower interest rates on personal loans. Loan counselors sometimes get awards for their service to the community.

Related Occupations

Loan officers and counselors help the public manage financial assets and secure loans. Occupations that involve similar functions include securities and financial services sales representatives, financial aid officers, real estate agents and brokers, and insurance agents and brokers.

Sources of Additional Information

For information on job opportunities as a loan officer or counselor, contact local employers—banks, savings institutions, mortgage brokers, personal credit firms, or your municipal government—or the local State employment service office.

Information about a career as a loan officer may be obtained from:

P American Bankers Association, 1120 Connecticut Ave. NW., Washington, DC 20036.

Management Analysts and Consultants

(D.O.T. 100.117-014; 161.117-014, .167-010, -014, -018, and -022, .267 except -014 and -030; 169.167-074; and 310.267-010)

Nature of the Work

A rapidly growing small company needs a better system of control over inventories and expenses. An established manufacturing company decides to relocate to another State and needs assistance planning the move. After acquiring a new division, a large company realizes that its corporate structure must be reorganized. A division chief of a government agency wants to know why the division's contracts are always going over budget. These are just a few of the many organizational problems that management analysts, as they are called in government agencies, and management consultants, as business firms refer to them, help solve. Although their job titles may differ, their job duties are essentially the same.

The work of management analysts and consultants varies from employer to employer and from project to project. For example, some projects require several consultants to work together, each specializing in one area; at other times, they will work independently. In general, analysts and consultants collect, review, and analyze information; make recommendations; and often assist in the

implementation of their proposal.

Both public and private organizations use consultants for a variety of reasons. Some don't have the internal resources needed to handle a project; others need a consultant's expertise to determine what resources will be required—or problems encountered—if they pursue a particular course of action; while others want to get outside advice on how to resolve organizational problems that have already been identified or to avoid troublesome problems that could arise.

Firms providing consulting services range in size from solo practitioners to large international organizations employing thousands of consultants. Some firms specialize by industry; others by type of business function, such as human resources or information systems. Consulting services usually are provided on a contract basis—a company solicits proposals from consulting firms specializing in the area in which it needs assistance. These proposals include the estimated cost and scope of the project, staffing requirements, and the deadline. The company then selects the proposal which best meets its needs.

Upon getting an assignment or contract, consultants define the nature and extent of the problem. During this phase of the job, they may analyze data such as annual revenues, employment, or expenditures; interview employees; or observe the operations of the organizational unit.

Next, they use their knowledge of management systems and their expertise in a particular area to develop solutions. In the course of preparing their recommendations, they must take into account the general nature of the business, the relationship the firm has with others in that industry, and the firm's internal organization, as well as information gained through data collection and analysis.

Once they have decided on a course of action, consultants usually report their findings and recommendations to the client, often in writing. In addition, they often make oral presentations regarding their findings. For some projects, this is all that is required; for others, consultants may assist in the implementation of their suggestions.

Management analysts in government agencies use the same skills as their private-sector colleagues to advise managers in government on many types of issues—most of which are similar to the problems faced by private firms. For example, if an agency is planning to purchase several personal computers, it first must determine which type to buy, given its budget and data processing needs. Management analysts would assess the various types of machines available and determine which best meets their department's needs.

Working Conditions

Management analysts and consultants usually divide their time between their offices and their client's operation. Although much of



Management consultants may spend a significant portion of their time with clients.

their time is spent indoors in clean, well-lighted offices, they may have to visit a client's production facility where conditions may not be so favorable. They must follow established safety procedures when making field visits to sites where they may encounter potentially hazardous conditions.

Typically, analysts and consultants work at least 40 hours a week. Overtime is common, especially when deadlines must be met. In addition, because they must spend a significant portion of their time

with clients, they may travel frequently.

Self-employed consultants can set their workload and hours and work at home. On the other hand, their livelihood depends on their ability to maintain and expand their client base, which can be difficult at times.

Employment

Management analysts and consultants held about 208,000 jobs in 1992. Four out of 10 of these workers were self-employed. Most of the rest worked in management consulting firms and for Federal, State, and local governments. The majority of those working for the Federal Government were found in the Department of Defense.

Management analysts and consultants are found throughout the country, but employment is concentrated in metropolitan areas.

Training, Other Qualifications, and Advancement

There are no universal educational requirements for entry level jobs in this field. However, employers in private industry prefer to hire those with a master's degree in business administration or a discipline related to the firms' area of specialization. Those individuals hired straight out of school with only a bachelor's degree are likely to work as research associates or junior consultants, rather than full-fledged management consultants. It is possible for research associates to advance up the career ladder if they demonstrate a strong aptitude for consulting, but, more often, they need to get an advanced degree to do so.

Many entrants to this occupation have, in addition to the appropriate formal education, several years of experience in management

or in another occupation.

Most government agencies hire those with a bachelor's degree and no work experience as entry level management analysts, and often provide formal classroom training in management analysis.

Many fields of study provide a suitable formal educational background for this occupation because of the diversity of problem areas addressed by management analysts and consultants. These include most areas of business and management, as well as computer and information sciences and engineering.

Management analysts and consultants who are hired directly from school sometimes participate in formal company training programs. These programs may include instruction on policies and procedures, computer systems and software, research processes, and

management practices and principles. Because of their previous industry experience, most who enter at middle levels do not participate in formal company training programs. However, regardless of background, analysts and consultants routinely attend conferences to keep abreast of current developments in their field. Additionally, some large firms offer in-house formal training programs for all

Management analysts and consultants often work under little or no supervision, so they should be independent and self-motivated. Analytical skills, strong oral communication and written skills, good judgment, the ability to manage time well, and creativity in developing solutions to problems are other desirable qualities for prospective management analysts and consultants.

In large consulting firms, beginners usually start as a member of a consulting team. The team is responsible for the entire project and each consultant is assigned to a particular area. As consultants gain experience, they may be assigned to work on one specific project full-time, taking on more responsibility and managing their own hours. At the senior level, consultants may supervise entry level workers and become increasingly involved in seeking out new business. Those with exceptional skills may eventually become a partner or principal in the firm. Others with entrepreneurial ambition may open their own firm.

A high percentage of management consultants are self-employed, partly because start-up costs are low. Little capital is required initially, and it is possible for self-employed consultants to share office space, administrative help, and other resources with other self-employed consultants or small consulting firms, thus reducing over-

The Institute of Management Consultants (a division of the Council of Consulting Organizations) offers the Certified Management Consultant (CMC) designation to those who pass an examination and meet minimum levels of education and experience. Certification is not mandatory for management consultants to practice, but it may give a jobseeker a competitive advantage.

Job Outlook

Employment of management analysts and consultants is expected to grow much faster than the average for all occupations through the year 2005 as industry and government increasingly rely on outside expertise to improve the performance of their organizations. Growth is expected in large consulting firms, but also in small consulting firms whose consultants will specialize in highly specific areas of expertise. Although most job openings will result from employment growth of the occupation, additional opportunities will arise from the need to replace personnel who transfer to other fields or leave the labor force.

Increased competition has caused American industry to take a closer look at its operations. In more competitive international and domestic markets, firms cannot afford inefficiency and wasted resources or else they risk losing their share of the market. Management consultants are being increasingly relied upon to help reduce costs, streamline operations, and develop marketing strategies. As businesses downsize and eliminate needed functions as well as permanent staff, consultants will be used to perform those functions on a contractual basis. On the other hand, businesses undergoing expansion, particularly into world markets, will also need the skills of management consultants to help with organizational, administrative, and other issues. Continuing changes in the business environment also are expected to lead to demand for management consultants: Firms will use consultants' expertise to incorporate new technologies, to cope with more numerous and complex government regulations, and to adapt to a changing labor force. As businesses rely more on technology, there are increasing roles for consultants with a technical background, such as engineering or biotechnology, particularly when combined with an MBA.

Federal, State, and local agencies also are expected to expand their use of management analysts. In the era of budget deficits, analysts' skills at identifying problems and implementing cost reduction measures are expected to become increasingly important. However, because one-half of the management analysts employed by the Federal government work for the Department of Defense, the pace of Federal employment growth will vary with the defense budget.

In the private sector, job opportunities are expected to be best for those with a graduate degree and some industry expertise, while opportunities for those with only a bachelor's degree will be best in the Federal Government.

Because many small consulting firms fail each year for lack of managerial expertise and clients, those interested in opening their own firm should have good organizational and marketing skills,

plus several years of consulting experience.

Despite projected rapid employment growth, competition for jobs as management consultants is expected to be keen in the private sector. Because management consultants can come from such diverse educational backgrounds, the pool of applicants from which employers hire is quite large. Additionally, the independent and challenging nature of the work combined with high earnings potential make this occupation attractive to many.

Earnings

Salaries for management analysts and consultants vary widely by experience, education, and employer. In 1992, those who were wage and salary workers had median annual earnings of about \$40,300. The middle 50 percent earned between \$26,500 and \$60,100.

In 1991, according to the Association of Management Consulting Firms (ACME), earnings-including bonuses and/or profit sharing-for research associates in ACME member firms averaged \$31,300; for entry level consultants, \$39,100; for management consultants, \$56,300; for senior consultants, \$76,700; for junior partners, \$105,600; and for senior partners, \$166,100.

Typical benefits for salaried analysts and consultants include health and life insurance, a retirement plan, vacation and sick leave, profit sharing, and bonuses for outstanding work. In addition, all travel expenses usually are reimbursed by their employer. Self-employed consultants usually have to maintain an office and do not re-

ceive employer-provided benefits.

Related Occupations

Management analysts and consultants collect, review, and analyze data; make recommendations; and assist in the implementation of their ideas. Others who use similar skills are managers, computer systems analysts, operations research analysts, economists, and financial analysts.

Sources of Additional Information

Information about career opportunities in management consulting is available from:

PACME, The Association of Management Consulting Firms, 521 Fifth Ave., 35th Floor, New York, NY 10175-3598.

For information about a career as a State or local government management analyst, contact your State or local employment ser-

Persons interested in a management analyst position in the Federal Government can obtain information from: IF U.S. Office of Personnel Management, 1900 E St. NW., Washington, DC 20415.

Marketing, Advertising, and Public **Relations Managers**

(D.O.T. 141.137-010; 159.167-022; 163.117-014, -018, -022, -026, .167-010, -018, -022, .267-010; 164.117-010, -014, -018, .167-010; 185.117-014, .157-010, -014; 187.167-162; 189.117-018)

Nature of the Work

The fundamental objective of any firm is to market its products or services profitably. In small firms, all marketing responsibilities may be assumed by the owner or chief executive officer. In large firms, which may offer numerous products and services nationally or even worldwide, experienced marketing, advertising, and public relations managers coordinate these and related activities.

The executive vice president for marketing in large firms directs the overall marketing policy—including market research, marketing strategy, sales, advertising, promotion, pricing, product development, and public relations activities. (This occupation is included in the Handbook statement on general managers and top executives.) These activities are supervised by middle and supervisory managers who oversee staffs of professionals and technicians.

Marketing managers develop the firm's detailed marketing strategy. With the help of subordinates, including product development managers and market research managers, they determine the demand for products and services offered by the firm and its competitors and identify potential consumers-for example, business firms, wholesalers, retailers, government, or the general public. Mass markets are further categorized according to various factors such as region, age, income, and lifestyle. Marketing managers develop pricing strategy with an eye towards maximizing the firm's share of the market and its profits while ensuring that the firm's customers are satisfied. In collaboration with sales, product development, and other managers, they monitor trends that indicate the need for new products and services and oversee product development. Marketing managers work with advertising and promotion managers to best promote the firm's products and services and to attract potential users.

Sales managers direct the firm's sales program. They assign sales territories and goals and establish training programs for their sales representatives. Managers advise their sales representatives on ways to improve their sales performance. In large, multiproduct firms, they oversee regional and local sales managers and their staffs. Sales managers maintain contact with dealers and distributors. They analyze sales statistics gathered by their staffs to determine sales potential and inventory requirements and monitor the preferences of customers. Such information is vital to develop products and maximize profits.

Except in the largest firms, advertising and promotion staffs are generally small and serve as a liaison between the firm and the advertising or promotional functions are contracted out. Advertising managers oversee the account services, creative services, and media services departments. The account services department is managed by account executives, who assess the need for advertising and, in advertising agencies, maintain the accounts of clients. The creative services department develops the subject matter and presentation of advertising. This department is supervised by a creative director, who oversees the copy chief and art director and their staffs. The media services department is supervised by the media director, who oversees planning groups that select the communication media—for example, radio, television, newspapers, magazines, or outdoor signs—to disseminate the advertising.

Promotion managers supervise staffs of promotion specialists. They direct promotion programs combining advertising with purchase incentives to increase sales of products or services. In an effort to establish closer contact with purchasers—dealers, distributors, or consumers—promotion programs may involve direct mail, telemarketing, television or radio advertising, catalogs, exhibits, inserts in newspapers, in-store displays and product endorsements, and special events. Purchase incentives may include discounts, samples, gifts, rebates, coupons, sweepstakes, and contests.

Public relations managers supervise public relations specialists (see the Handbook statement on public relations specialists). These managers direct publicity programs to a targeted public. They use any necessary communication media in their effort to maintain the support of the specific group upon whom their organization's success depends, such as consumers, stockholders, or the general public. For example, public relations managers may clarify or justify the firm's point of view on health or environmental issues to community or special interest groups. They may evaluate advertising and promotion programs for compatibility with public relations efforts. Public relations managers, in effect, serve as the eyes and ears of top management. They observe social, economic, and political trends that might ultimately have an effect upon the firm, and make recommendations to enhance the firm's public image in view of those trends. Public relations managers may confer with labor relations managers to produce internal company communications—such as news about employee-management relations—and with financial managers to produce company reports. They may assist company executives in drafting speeches, arranging interviews, and other forms of public contact; oversee company archives; and respond to information requests. In addition, public relations managers may handle special events such as sponsorship of races, parties introducing new products, or other activities the firm supports in order to gain public attention through the press without advertising directly.

Working Conditions

Marketing, advertising, and public relations managers are provided with offices close to top managers. Long hours, including evenings and weekends, are common. Working under pressure is unavoidable as schedules change, problems arise, and deadlines and goals must be met. Marketing, advertising, and public relations managers meet frequently with other managers; some meet with the public and government officials.

Substantial travel may be involved. For example, attendance at meetings sponsored by associations or industries is often mandatory. Sales managers travel to national, regional, and local offices and to various dealers and distributors. Advertising and promotion managers may travel to meet with clients or representatives of communications media. Public relations managers may travel to meet with special interest groups or government officials. Job transfers between headquarters and regional offices are common—particularly among sales managers—and may disrupt family life.

Employment

Marketing, advertising, and public relations managers held about 432,000 jobs in 1992. These managers are found in virtually every industry. Industries employing them in significant numbers include motor vehicle dealers; printing and publishing firms; advertising agencies; department stores; computer and data processing services firms; and management and public relations firms.

Training, Advancement, and Other Qualifications

A wide range of educational backgrounds are suitable for entry into marketing, advertising, and public relations managerial jobs, but many employers prefer a broad liberal arts background. A bachelor's degree in sociology, psychology, literature, or philosophy, among other subjects, is acceptable. However, requirements vary depending upon the particular job.

For marketing, sales, and promotion management positions, some employers prefer a bachelor's or master's degree in business administration with an emphasis on marketing. Courses in business law, economics, accounting, finance, mathematics, and statistics are also highly recommended. In highly technical industries, such as



Increasing competition in products and services will spur rapid employment growth among marketing, advertising, and public relations managers.

computer and electronics manufacturing, a bachelor's degree in engineering or science combined with a master's degree in business administration may be preferred. For advertising management positions, some employers prefer a bachelor's degree in advertising or journalism. A course of study should include courses in marketing, consumer behavior, market research, sales, communications methods and technology, and visual arts-for example, art history and photography. For public relations management positions, some employers prefer a bachelor's or master's degree in public relations or journalism. The individual's curriculum should include courses in advertising, business administration, public affairs, political science, and creative and technical writing. For all these specialties, courses in management and completion of an internship while in school are highly recommended. Familiarity with computerized word processing and data base applications also are important for many marketing, advertising, and public relations management positions.

Most marketing, advertising, and public relations management positions are filled by promoting experienced staff or related professional or technical personnel—for example, sales representatives, purchasing agents, buyers, product or brand specialists, advertising specialists, promotion specialists, and public relations specialists. In small firms, where the number of positions is limited, advancement to a management position may come slowly. In large firms, promo-

tion may occur more quickly.

Although experience, ability, and leadership are emphasized for promotion, advancement may be accelerated by participation in management training programs conducted by many large firms. Many firms also provide their employees with continuing education opportunities, either in-house or at local colleges and universities, and encourage employee participation in seminars and conferences, often provided by professional societies. Often in collaboration with colleges and universities, numerous marketing and related associations sponsor national or local management training programs. Courses include brand and product management, international marketing, sales management evaluation, telemarketing and direct sales, promotion, marketing communication, market research, organizational communication, and data processing systems procedures and management. Many firms pay all or part of the cost for those who successfully complete courses.

Some associations (listed under sources of additional information) offer certification programs for marketing, advertising, and public relations managers. Certification is a sign of competence and achievement in this field that is particularly important in a competitive job market. While relatively few marketing, advertising, and public relations managers currently are certified, the number of managers who seek certification is expected to grow. For example, Sales and Marketing Executives International offers a management certification program based on education and job performance. The Public Relations Society of America offers an accreditation program for public relations practitioners based on years of experience and an examination. The American Marketing Association is developing a certification program for marketing managers.

Persons interested in becoming marketing, advertising, and public relations managers should be mature, creative, highly motivated, resistant to stress, and flexible, yet decisive. The ability to communicate persuasively, both orally and in writing, with other managers, staff, and the public is vital. Marketing, advertising, and public relations managers also need tact, good judgment, and exceptional ability to establish and maintain effective personal relationships with supervisory and professional staff members and client firms.

Because of the importance and high visibility of their jobs, marketing, advertising, and public relations managers often are prime candidates for advancement. Well-trained, experienced, successful managers may be promoted to higher positions in their own or other firms. Some become top executives. Managers with extensive experience and sufficient capital may open their own businesses.

Job Outlook

Employment of marketing, advertising, and public relations managers is expected to increase faster than the average for all occupations through the year 2005. Increasingly intense domestic and global competition in products and services offered to consumers should require greater marketing, promotional, and public relations efforts.

Management and public relations firms may experience particularly rapid growth as businesses increasingly hire contractors for these services rather than support additional full-time staff.

In addition to faster than average growth, many job openings will occur each year as a result of managers moving into top management positions, transferring to other jobs, or leaving the labor force. However, many of these highly coveted jobs will be sought by other managers or highly experienced professional and technical personnel, resulting in substantial job competition. College graduates with extensive experience, a high level of creativity, and strong communication skills should have the best job opportunities.

Projected employment growth varies by industry. For example, employment of marketing, advertising, and public relations managers is expected to grow much faster than average in most business services industries, such as computer and data processing, and management and public relations firms, while average growth is pro-

jected in manufacturing industries overall.

Earnings

According to a College Placement Council survey, starting salary offers to marketing majors graduating in 1993 averaged about

\$24,000; advertising majors, about \$21,000.

The median annual salary of marketing, advertising, and public relations managers was \$41,000 in 1992. The lowest 10 percent earned \$22,000 or less, while the top 10 percent earned \$79,000 or more. Many earn bonuses equal to 10 percent or more of their salaries. Surveys show that salary levels vary substantially depending upon the level of managerial responsibility, length of service, education, and the employer's size, location, and industry. For example, manufacturing firms generally pay marketing, advertising, and public relations managers higher salaries than nonmanufacturing firms. For sales managers, the size of their sales territory is another important factor.

According to a 1992 survey by Abbot, Langer and Associates, of Crete, Illinois, annual incomes for sales/marketing managers varied greatly-from under \$25,000 to over \$250,000-depending on the manager's level of education, experience, industry, and the number of employees he or she supervises. The median annual income for top advertising managers was \$45,000; product/brand managers, \$54,000; top market research managers, \$55,000; regional sales managers, \$64,000; and chief marketing executives, \$67,000.

Related Occupations

Marketing, advertising, and public relations managers direct the sale of products and services offered by their firms and the communication of information about their firms' activities. Other personnel involved with marketing, advertising, and public relations include art directors, commercial and graphic artists, copy chiefs, copywriters, editors, lobbyists, marketing research analysts, public relations specialists, promotion specialists, sales representatives, and technical writers. (Some of these occupations are discussed elsewhere in the Handbook.)

Sources of Additional Information

For information about careers in sales and marketing management,

American Marketing Association, 250 S. Wacker Dr., Chicago, IL 60606.

Sales and Marketing Executives International, 458 Statler Office Tower, Cleveland, OH 44115.

For information about careers in advertising management, contact:

American Advertising Federation, Education Services Department, 1101 Vermont Ave. NW., Suite 500, Washington, DC 20005.

Information about careers in promotion management is available

Council of Sales Promotion Agencies, 750 Summer St., Stamford, CT 06901.

Promotion Marketing Association of America, Inc., 322 Eighth Ave., Suite 1201, New York, NY 10001.

Information about careers in public relations management is

Public Relations Society of America, 33 Irving Place, New York, NY

Personnel, Training, and Labor Relations Specialists and Managers

(D.O.T. 079.127; 099.167-010; 166.067, .117, .167 except -046, .257, .267-014 through -046; 169.107, .167-062, .207; 188.117-010, -086, .217)

Nature of the Work

Attracting the most qualified employees available and matching them to the jobs they are best suited for is important for the success of any organization. However, many enterprises are too large to permit close contact between top management and employees. Instead, personnel, training, and labor relations specialists and managers, commonly known as human resource specialists and managers, provide this link. These individuals recruit and interview employees and advise on hiring decisions in accordance with policies and requirements that have been established in conjunction with top management. In an effort to improve morale and productivity and limit job turnover, they also help their firms effectively use employees' skills, provide training opportunities to enhance those skills, and boost employees' satisfaction with their jobs and working conditions. Although some jobs in the human resources field require only limited contact with people outside the office, most involve frequent contact. Dealing with people is an essential part of the job.

In a small organization, one person may handle all aspects of personnel, training, and labor relations work. In contrast, in a large corporation, the top human resources executive usually develops and coordinates personnel programs and policies. (Executives are included in the *Handbook* statement on general managers and top executives.) These policies usually are implemented by a director or manager of human resources and, in some cases, a director of indus-

trial relations.

The director of human resources may oversee several departments, each headed by an experienced manager, who most likely specializes in one personnel activity such as employment, compensation, benefits, training and development, or employee relations.

Employment and placement managers oversee the hiring and separation of employees and supervise various workers, including equal employment opportunity specialists and recruitment specialists.

Recruiters maintain contacts within the community and may travel extensively—often to college campuses—to search for promising job applicants. Recruiters screen, interview, and, in some cases, test applicants, and recommend those who are qualified to fill vacancies. They may also check references before an offer is made. These workers need to be thoroughly familiar with the organization and its personnel policies to discuss wages, working conditions, and promotional opportunities with prospective employees. They also need to keep informed about equal employment opportunity (EEO) and affirmative action guidelines and laws, such as the Americans With Disabilities Act.

EEO representatives or affirmative action coordinators handle this area in large organizations. They investigate and resolve EEO grievances, examine corporate practices for possible violations, and

compile and submit EEO statistical reports.

Employer relations representatives—who usually work in government agencies—maintain working relationships with local employers and promote the use of public employment programs and services. Similarly, employment interviewers—sometimes called personnel consultants—help match jobseekers with employers. (For more information, see the statement on employment interviewers elsewhere in the *Handbook*.)

Job analysts, sometimes called position classifiers, perform very exacting work. They collect and examine detailed information about job duties to prepare job descriptions. These descriptions explain the duties, training, and skills each job requires. Whenever a large organization introduces a new job or reviews existing jobs, it calls upon the expert knowledge of the job analyst.

Occupational analysts conduct research, generally in large firms. They are concerned with occupational classification systems and study the effects of industry and occupational trends upon worker

relationships. They may serve as technical liaison between the firm and industry, government, and labor unions.

Establishing and maintaining a firm's pay system is the principal job of the compensation manager. Assisted by staff specialists, compensation managers devise ways to ensure fair and equitable pay rates. They may conduct surveys to see how their rates compare with others and to see that the firm's pay scale complies with changing laws and regulations. In addition, compensation managers often oversee their firm's performance evaluation system, and they may design reward systems such as pay-for-performance plans.

Employee benefits managers handle the company's employee benefits program, notably its health insurance and pension plans. Expertise in designing and administering benefits programs continues to gain importance as employer-provided benefits account for a growing proportion of overall compensation costs, and as benefit plans increase in number and complexity. For example, pension benefits might include savings and thrift, profit sharing, and stock ownership plans, and health benefits may include long-term catastrophic illness insurance and dental insurance. Familiarity with health benefits is a top priority at present, as more firms struggle to cope with the rising cost of health care for employees and retirees. In addition to health insurance and pension coverage, some firms offer their employees life and accidental death and dismemberment insurance, disability insurance, and relatively new benefits designed to meet the needs of a changing work force, such as parental leave, child care and elder care, long-term nursing home care insurance, employee assistance and wellness programs, and flexible benefits plans, in which employees have the option of receiving cash instead of benefits. Benefits managers must keep abreast of changing Federal and State regulations and legislation that may affect employee

Employee assistance plan managers—also called employee welfare managers—are responsible for a wide array of programs covering occupational safety and health standards and practices; health promotion and physical fitness, medical examinations, and minor health treatment, such as first aid; plant security; publications; food service and recreation activities; car pooling; employee suggestion systems; child care and elder care; and counseling services. Child care and elder care are increasingly important due to growth in the number of dual-income households and the elderly population. Counseling may help employees deal with emotional disorders, alcoholism, or marital, family, consumer, legal, and financial problems. Career counseling and second career counseling for employees approaching retirement age also may be provided. In large firms, some of these programs—such as security and safety—are in separate departments headed by other managers.

Training is supervised by training and development managers. Increasingly, management recognizes that training offers a way of developing skills, enhancing productivity and quality of work, and building loyalty to the firm. Training is widely accepted as a method of improving employee morale, but this is only one of the reasons for its growing importance. Other factors include the complexity of the work environment, the rapid pace of organizational and technological change, and the growing number of jobs in fields that constantly generate new knowledge. In addition, advances in learning theory have provided insights into how adults learn, and how training can

be organized most effectively for adults.

Training specialists plan, organize, and direct a wide range of training activities. Trainers conduct orientation sessions and arrange on-the-job training for new employees. They help rank-and-file workers maintain and improve their job skills and possibly prepare for jobs requiring greater skill. They help supervisors improve their interpersonal skills in order to deal effectively with employees. To help employees prepare for future responsibilities, they may set up individualized training plans to strengthen existing skills or to teach new skills. Training specialists in some companies set up programs to develop executive potential among employees in lower level positions. In government-supported training programs, training specialists function as case managers. They first assess the training needs of the client, then help guide the client through the appropriate training method. After training, they either refer the client to employer relations representatives or help them get a job.

Planning and program development is an important part of the training specialist's job. In order to identify and assess training

needs within the firm, trainers may confer with managers and supervisors or conduct surveys. They also periodically evaluate training effectiveness.

Depending on the size, goals, and nature of the organization, trainers may differ considerably in their responsibilities and in the methods they use. Training methods include on-the-job training; schools in which shop conditions are duplicated for trainees prior to putting them on the shop floor; apprenticeship training; classroom training; programmed instruction, which may involve interactive videos, videodiscs, and other computer-aided instructional technologies; simulators; conferences; and workshops.

The director of industrial relations forms labor policy, oversees industrial labor relations, negotiates collective bargaining agreements, and coordinates grievance procedures to handle complaints resulting from disputes under the contract for firms with unionized employees. The director of industrial relations also advises and collaborates with the director of human resources and other managers and members of their staff, because all aspects of personnel policy—such as wages, benefits, pensions, and work practices—may be in-

volved in drawing up a new or revised contract.

Industrial labor relations programs are implemented by labor relations managers and their staff. When a collective bargaining agreement is up for negotiation, labor relations specialists prepare information for management to use during negotiation, which requires familiarity with economic and wage data as well as extensive knowledge of labor law and collective bargaining trends. The labor relations staff interprets and administers the contract with respect to grievances, wages and salaries, employee welfare, health care, pensions, union and management practices, and other contractual stipulations. As union membership is continuing to decline in most industries, industrial relations personnel are working more with employees who are not members of a labor union.

Dispute resolution—that is, attaining tacit or contractual agreements—has become increasingly important as disputants attempt to avoid costly litigation, strikes, or other disruptions. Dispute resolution also has become more complex, involving employees, management, unions, other firms, and government agencies. Specialists involved in dispute resolution must be highly knowledgeable and experienced, and often report to the director of industrial relations. Conciliators, or mediators, advise and counsel labor and management to prevent and, when necessary, resolve disputes over labor agreements or other labor relations issues. Arbitrators, sometimes called umpires or referees, decide disputes and bind both labor and management to specific terms and conditions of labor contracts. Labor relations specialists who work for unions perform many of the same functions on behalf of the union and its members.

Other emerging specialists include international human resources managers, who handle human resources issues related to a company's foreign operations, and human resources information system specialists, who develop and apply computer programs to process personnel information, match jobseekers with job openings, and handle other personnel matters.

Working Conditions

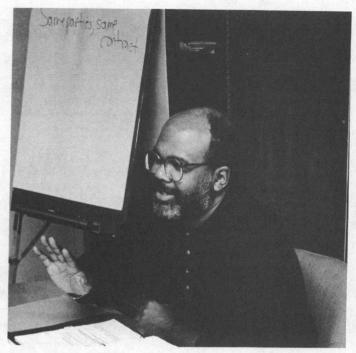
Personnel work is office work. Generally, the work setting is clean, pleasant, and comfortable. Many personnel, training, and labor relations specialists and managers work a standard 35- to 40-hour week. However, many work longer hours—for example, labor relations specialists and managers—when contract agreements are being prepared and negotiated.

Although most personnel, training, and labor relations specialists and managers work in the office, some travel extensively. For example, recruiters regularly attend professional meetings and visit college campuses to interview prospective employees.

Employment

Personnel, training, and labor relations specialists and managers held about 474,000 jobs in 1992. They were employed in virtually every industry. Specialists accounted for 281,000 positions; managers, 193,000. About 10,000—mostly specialists—were self-employed, working as consultants to public and private employers.

The private sector accounted for about 85 percent of salaried jobs. Among these salaried jobs, services industries—including business,



More personnel, training, and labor relations specialists and managers will be needed as employers devote greater resources to job-specific training programs.

health, social, management, and educational services—accounted for nearly 4 out of 10 jobs; labor organizations—the largest employer among specific industries—accounted for 1 out of 10. Manufacturing industries accounted for over 2 out of 10 jobs, while finance, insurance, and real estate firms accounted for about 1 out of 10.

Federal, State, and local governments employed about 15 percent of salaried personnel, training, and labor relations specialists and managers. They handled the recruitment, interviewing, job classification, training, salary administration, benefits, employee relations, and related matters of the Nation's public employees.

Training, Other Qualifications, and Advancement

Because of the diversity of duties and level of responsibility, the educational backgrounds of personnel, training, and labor relations specialists and managers vary considerably. In filling entry level jobs, firms generally seek college graduates. Some employers prefer applicants who have majored in human resources, personnel administration, or industrial and labor relations, while others look for college graduates with a technical or business background. Still others feel that a well-rounded liberal arts education is best.

Many colleges and universities have programs leading to a degree in personnel, human resources, or labor relations. Some offer degree programs in personnel administration or human resources management, training and development, or compensation and benefits. Depending on the school, courses leading to a career in human resources management may be found in departments of business administration, education, instructional technology, organizational development, human services, communication, or public administration, or within a separate human resources institution or department.

Because an interdisciplinary background is appropriate for work in this area, a combination of courses in the social sciences, business, and behavioral sciences is useful. Some jobs may require a background in engineering, science, finance, or law. Most prospective personnel specialists should take courses in compensation, recruitment, training and development, and performance appraisal, as well as courses in principles of management, organizational structure, and industrial psychology. Other relevant courses include business

administration, public administration, psychology, sociology, political science, economics, and statistics. Courses in labor law, collective bargaining, labor economics, labor history, and industrial psychology also provide a valuable background for the prospective labor relations specialist. Knowledge of computers and information

systems is important for some jobs.

Graduate study in industrial or labor relations is increasingly important for those seeking work in labor relations. A law degree seldom is required for entry level jobs, but many people responsible for contract negotiations are lawyers, and a combination of industrial relations courses and law is highly desirable. A background in law is also desirable for employee benefits managers and others who must interpret the growing number of laws and regulations. A degree in dispute resolution provides an excellent background for mediators, arbitrators, and related personnel. A master's degree in personnel, training, or labor relations, or in business administration with a concentration in human resources management, is desirable for those seeking general and top management positions.

For many specialized jobs in this field, previous experience is an asset; for managerial positions, it is essential. Many employers prefer entry level workers who have gained some experience through an internship or work-study program while in school. Personnel administration and human resources development require the ability to work with individuals as well as a commitment to organizational goals. This field also demands other skills that people may develop elsewhere—computer usage, selling, teaching, supervising, and volunteering, among others. This field offers clerical workers opportunities for advancement to professional positions. Responsible positions sometimes are filled by experienced individuals from other fields, including business, government, education, social services ad-

ministration, and the military.

Personnel, training, and labor relations specialists and managers should speak and write effectively and be able to work with or supervise people of all levels of education and experience as part of a team. They must be patient to cope with conflicting points of view and emotionally stable to deal with the unexpected and the unusual. The ability to function under pressure is essential. Integrity, fairmindedness, and a persuasive, congenial personality are important qualities.

Entry level workers often enter formal or on-the-job training programs, in which they learn how to classify jobs, interview applicants, or administer employee benefits. Next, they are assigned to specific areas in the personnel department to gain experience. Later, they may advance to a managerial position, overseeing a major element of the personnel program—compensation or training, for expense

Exceptional personnel, training, and labor relations workers may be promoted to director of personnel or industrial relations, which can eventually lead to a top managerial or executive position. Others may join a consulting firm or open their own business. A Ph.D. is an

asset for teaching, writing, or consulting work.

Though not widespread, some organizations offer certification examinations to members who meet certain education and experience requirements. Certification is a sign of competence and can enhance one's advancement opportunities. (Several of these organizations are listed under sources of additional information.)

Job Outlook

The number of personnel, training, and labor relations specialists and managers is expected to grow faster than the average for all occupations through the year 2005. As in other occupations, job growth among specialists is projected to outpace job growth among managers. In addition, many job openings will result from the need to replace workers who leave this occupation to transfer to other jobs, retire, or for other reasons. However, the job market is likely to remain competitive in view of the abundant supply of qualified college graduates and experienced workers.

Most new jobs for personnel, training, and labor relations specialists and managers will be in the private sector as employers, increasingly concerned about productivity and quality of work, devote greater resources to job-specific training programs in response to the growing complexity of many jobs, the aging of the work force, and technological advances that can leave employees with obsolete

skills. In addition, legislation and court rulings setting standards in occupational safety and health, equal employment opportunity, wages, and health, pension, family leave, and other benefits will increase demand for experts in these areas. The increasing cost of litigation related to labor-management disputes may spur demand for labor relations workers to help resolve these disputes out of court. Increasing demand for international human resources managers and human resources information systems specialists may spur additional job growth. On the other hand, widespread use of computerized human resources information systems could make workers more productive, thus limiting job growth.

Employment demand will be particularly strong in management and consulting firms as well as personnel supply firms as businesses increasingly contract out personnel functions or hire personnel specialists on a contractual basis to meet the increasing cost and complexity of training and development programs. Demand should also increase in firms that develop and administer the increasingly complex employee benefits and compensation packages for other organi-

zations

Demand for personnel, training, and labor relations specialists and managers also is governed by the staffing needs of the firms where they work. A rapidly expanding business is likely to hire additional personnel workers-either as permanent employees or consultants-while a business that has experienced a merger or a reduction in its work force will require fewer personnel workers. Similar to other workers, employment of personnel, training, and labor relations specialists and managers, particularly in larger firms, may be adversely affected by corporate downsizing and restructuring. On the other hand, as human resource management becomes increasingly important to the success of an organization, some small and medium-size businesses that do not have a human resources department may employ workers to perform human resources duties on a part-time basis while maintaining other unrelated responsibilities within the company. In any particular firm, the size and the job duties of the human resources staff are determined by a variety of factors, including the firm's organizational philosophy and goals, the labor intensity and skill profile of the industry, the pace of technological change, government regulations, collective bargaining agreements, standards of professional practice, and labor market conditions.

Earnings

According to a 1993 College Placement Council salary survey, bachelor's degree graduates who majored in human resources, including labor relations, received starting offers averaging \$22,900 a year; master's degree recepients, \$30,500.

The median annual salary of personnel, training, and labor relations specialists was about \$32,000 in 1992. For managers, the median annual salary was over \$37,000. However, salaries varied widely. The lowest 10 percent of specialists earned around \$17,000, while the highest 10 percent of managers earned nearly \$64,000.

According to a 1992 survey of compensation in the human resources field, conducted by Abbott, Langer, and Associates of Crete, Illinois, the median annual salaries for selected personnel and labor relations occupations were: Industrial/labor relations managers, \$70,000; corporate training directors, \$63,900; compensation specialists (executive, managerial, and professional jobs), \$40,200; EEO/affirmative action specialists, \$33,800; personnel research specialists, \$29,400; and benefits specialists (clerical jobs), \$24,200.

According to a survey of workplaces in 160 metropolitan areas, personnel specialists with limited experience had median earnings of \$25,100 a year in 1992, with the middle half earning between \$22,500 and \$28,000 a year. The most experienced personnel specialists had median earnings of \$76,900, with the middle half earning between \$67,200 and \$84,300. Personnel supervisors/managers with limited experience had median earnings of \$51,100 a year in 1992, with the middle half earning between \$47,200 and \$56,400 a year. The most experienced personnel supervisors/managers had median earnings of \$105,000, with the middle half earning between \$94,800 and \$123,900.

In the Federal Government in 1993, persons with a bachelor's degree or 3 years' general experience in the personnel field generally started at \$18,300 a year. Those with a superior academic record or an additional year of specialized experience started at \$22,700 a

year. Holders of a master's degree started at \$27,800, and those with a doctorate in a personnel field started at \$33,600. There are no formal entry level requirements for managerial positions. Applicants must possess a suitable combination of educational attainment, experience, and record of accomplishment.

Labor relations specialists in the Federal Government averaged \$50,400 a year in 1993; personnel managers, \$48,200; equal employment opportunity specialists, \$47,200; position classification specialists, \$45,000; and personnel staffing specialists, \$42,600.

Related Occupations

All personnel, training, and labor relations occupations are closely related. Other workers with skills and expertise in interpersonal relations include employment, rehabilitation, and college career planning and placement counselors; lawyers; psychologists; sociologists; social workers; public relations specialists; and teachers. These occupations are described elsewhere in the *Handbook*.

Sources of Additional Information

For general information on careers and certification in the human resources field, send a self-addressed, stamped, legal-sized envelope to:

Society for Human Resource Management, 606 N. Washington St., Alexandria, VA 22314.

For information about careers in employee training and development, contact:

American Society for Training and Development, 1640 King St., Box 1443, Alexandria, VA 22313.

For information about careers and certification in employee compensation and benefits, contact:

American Compensation Association, 14040 Northsight Blvd., Scottsdale, AZ 85260.

Information about careers and certification in employee benefits is available from:

Finternational Foundation of Employee Benefit Plans, 18700 W. Bluemound Rd., Brookfield, WI 53008.

For information about careers in arbitration and other aspects of dispute resolution, contact:

ar American Arbitration Association, 140 West 51st St., New York, NY 10020.

For information about academic programs in industrial relations, write to:

137 Industrial Relations Research Association, University of Wisconsin, 7226 Social Science Bldg., 1180 Observatory Dr., Madison, WI 53706.

Information about personnel careers in the health care industry is available from:

American Hospital Association, American Society for Healthcare Human Resources, 840 North Lake Shore Dr., Chicago, IL 60611.

American Society for Healthcare Education and Training, 840 North Lake Shore Dr., Chicago, IL 60611.

For information about personnel and labor relations careers in government, contact:

Tar International Association of Personnel in Employment Security, 1801 Louisville Rd., Frankfort, KY 40601.

For additional information on government careers in personnel, send a self-addressed, stamped envelope to:

Finternational Personnel Management Association, IPMA Center for Personnel Research, 1617 Duke St., Alexandria, VA 22314.

Property and Real Estate Managers

(D.O.T. 186.117-042, -046, -058, and -062, .167-018, -030, -038, -042, -046, -062, -066, and -090; 187.167-190; 189.157; 191.117-030 and -042 through -050)

Nature of the Work

Many people own real estate in the form of a home, but, to businesses and investors, commercial real estate is a source of income and profit rather than simply a place for shelter. For them, real estate—including land and structures such as office buildings, shopping centers, and apartment complexes—is a valuable asset that can

produce income and appreciate in value over time if well managed. Real estate can be a source of income when it is leased to others, and a substantial business expense when it is leased from others. For this reason, property managers perform an important function in increasing and maintaining the value of real estate investments for investors. Property managers administer income-producing commercial and residential properties and manage the communal property and services of condominium and community associations. Real estate managers plan and direct the purchase, development, and disposal of real estate for businesses.

Most property and real estate managers work in the field of property management. When owners of apartments, office buildings, retail and industrial properties, or condominiums lack the time or expertise to assume the day-to-day management of their real estate investments, they often hire a property manager, or contract for one's services with a real estate management company. Most property managers handle several properties simultaneously. Property managers act as the owners' agent and adviser for the property. They market vacant space to prospective tenants, through the use of a leasing agent, advertising, or by other means, and establish rental rates in accordance with prevailing local conditions. They negotiate and prepare lease or rental agreements with tenants and collect their rent payments and other fees. Property managers also handle the bookkeeping for the property. They see to it that rents are received and make sure that mortgages, taxes, insurance premiums, payroll, and maintenance bills are paid on time. They also supervise the preparation of financial statements and periodically report to the owners on the status of the property, occupancy rates, dates of lease expirations, and other matters.

Property managers negotiate contracts for janitorial, security, groundskeeping, trash removal, and other services. When contracts are awarded competitively, managers must solicit bids from several contractors and recommend to the owners which bid to accept. They monitor the performance of the contractors, and investigate and resolve complaints from tenants. Managers also purchase all supplies and equipment needed for the property, and make arrangements with specialists for any repairs that cannot be handled by the regular property maintenance staff.

Property managers hire the maintenance and on-site management personnel. At smaller properties, the property manager might employ only a building engineer who maintains the building's heating, ventilation, and air-conditioning systems and performs other routine maintenance and repair. Larger properties require a sizable maintenance staff supervised by a full-time on-site manager, who works under the direction of the property manager.

Although some on-site managers oversee large office buildings or shopping centers, most manage apartments. They train, supervise, and assign duties to the maintenance staff and routinely inspect the grounds, facilities, and equipment, determine what repairs and maintenance are needed, and assign workers to do them. Occasionally, outside contractors are required, and the on-site manager may obtain bids for the work and submit them to the property manager. On-site managers schedule routine servicing of the heating, ventilation, and air-conditioning systems and ensure that the work of the maintenance staff and contract workers is up to standards or contract specifications. They keep records of expenditures incurred for operating the property and submit regular expense reports to the property manager or owners. They may recruit maintenance staff, interview job applicants, and make hiring recommendations to the property manager.

Tenant relations is an important part of the work of on-site managers, particularly apartment and condominium managers. They are responsible for enforcing rules and lease restrictions, such as pet restrictions or use of parking areas. Apartment managers handle tenants' requests for service or repairs and try to resolve complaints. They show vacant apartments to prospective tenants and explain the occupancy terms. Property managers must understand the provisions of legislation such as the Americans With Disabilities Act and local fair housing laws to be sure they are not being discriminatory in the renting or advertising of apartments.

Property and on-site managers employed by condominium and homeowner associations must be particularly adept at dealing with people. Instead of tenants, they must deal on a daily basis with homeowners—members of the community association that employs the manager. Hired by the volunteer board of directors of the association, the community association manager administers its daily affairs and oversees the maintenance of property and facilities that the homeowners own and use jointly through the association. Many community associations are small and cannot afford professional management, but managers of larger condominiums have many of the same responsibilities as the managers of large apartment complexes. Some homeowner associations encompass thousands of homes, and, in addition to administering the associations' financial records, their managers may be responsible for the operation of community pools, golf courses, community centers, and the maintenance of landscaping, parking areas, and streets.

Some real estate managers are employed by businesses to locate, acquire, and develop real estate needed for their operations and to dispose of property no longer suited to their uses. These managers locate desirable sites for factories, retail stores, hotels and motels, and other business ventures and arrange to purchase or lease the property. They select a site based on their assessment of considerations such as property values, zoning, population growth, and traffic volume and patterns. They negotiate contracts for the purchase or lease of the property, securing the most beneficial terms for their company. Real estate managers periodically review their company's real estate holdings, identifying properties that are no longer commercially attractive. They negotiate the sale or termination of the lease of properties selected for disposal.

Real estate managers who work for land development companies acquire land and plan the construction of shopping centers, houses and apartments, office buildings, or industrial parks. They negotiate with representatives of local government, other businesses, community and public interest groups, and public utilities to eliminate obstacles to the development of the land and to gain support for the planned project. It sometimes takes years to win approval for a project, and in the process managers may have to modify the plans for the project many times. Once they are free to proceed with a project, managers negotiate short-term loans to finance the construction of the project, and later negotiate long-term permanent mortgage loans. They then contract with architectural firms to draw up detailed plans, and with construction companies to build the project.

Working Conditions

Most property and real estate managers work in clean, well-lighted offices, but many spend a major portion of their time away from their desks. Property managers frequently visit the properties they oversee, sometimes on a daily basis when contractors are doing major repair or renovation work. On-site apartment managers may spend a large portion of their workday away from their office visiting the building engineer in the boiler room, checking up on the janitorial and maintenance staff, or investigating a problem reported by a tenant. Many real estate managers spend the majority of their



Property managers must quickly resolve tenants' complaints.

time away from home, traveling to company real estate holdings or searching for properties that might be acquired.

Property and real estate managers often must attend meetings in the evening with property owners, community association boards of directors, or civic groups. Not surprisingly, many property and real estate managers put in long work weeks. Many apartment managers are required to live in the apartments where they work so that they are available to handle any emergency that occurs while they are off duty. They usually receive compensatory time off, however, for working at night or on weekends. Many apartment managers receive time off during the week so that they are available on weekends to show apartments to prospective tenants.

Employment

Property and real estate managers held about 243,000 jobs in 1992. Most worked for real estate operators and lessors or for property management firms. Others worked for real estate development companies, banks, government agencies that manage public buildings, and corporations with extensive holdings of commercial properties. Many were self-employed developers, apartment owner-managers, or owners of property management or full-service real estate brokerage firms that manage as well as sell real estate for clients.

Training, Other Qualifications, and Advancement

Most employers prefer to hire college graduates for property and real estate management positions. Degrees in business administration, finance, real estate, public administration, or related fields are preferred, but persons with degrees in the liberal arts are often accepted. Good speaking and writing skills and an ability to deal tactfully with people are essential. Most persons enter property and real estate management as on-site apartment or community association managers, or as assistants to property managers. Previous employment as a real estate agent may be an asset to apartment managers because it provides experience useful in showing apartments and dealing with people, as well as an understanding that an attractive, well-maintained property can command higher rental rates and result in lower turnover among tenants. In the past, many persons with backgrounds in building maintenance have advanced to apartment manager positions on the strength of their knowledge of building mechanical systems, but this is becoming uncommon as employers are placing greater emphasis on administrative and communication abilities for managerial jobs.

On-site managers usually begin at a smaller apartment complex, condominium, or community association, or as an assistant manager at a large property, association, or management company. As they acquire experience working under the direction of a property manager, they may advance to positions with greater responsibility at larger properties. Persons who excel as on-site managers often transfer to assistant property manager positions where they can acquire experience handling a broader range of property management responsibilities.

Although most persons who enter jobs as assistant property managers do so on the strength of on-site management experience, employers are increasingly hiring inexperienced college graduates with bachelor's or master's degrees in business administration, finance, or real estate for these jobs. Assistants work closely with a property manager and acquire experience performing a variety of management tasks, such as preparing the budget, analyzing insurance coverage and risk options, marketing the property to prospective tenants, and collecting overdue rent payments. In time, many assistants advance to property manager positions.

The responsibilities and compensation of property managers increase as they manage larger properties. Most property managers are responsible for several properties at a time, and as their careers advance they are gradually entrusted with properties that are larger or whose management is more complex. Many specialize in the management of one type of property, such as apartments, office buildings, condominiums and homeowner associations, or retail properties. Managers who excel at marketing properties to tenants may specialize in managing new properties, while those who are particularly knowledgeable about buildings and their mechanical systems might specialize in the management of older properties that

require renovation or more frequent repairs. Some experienced property and real estate managers open their own property management or real estate firms.

Persons most commonly enter real estate manager jobs by transferring from positions as property managers or real estate brokers. Real estate managers must be good negotiators, adept at persuading and handling people, and good at analyzing data to assess the fair market value of property or its development potential. Resourcefulness and creativity in arranging financing are essential for managers who specialize in land development. Real estate managers may be required to hold a real estate broker's license.

Many property and real estate managers attend short-term formal training programs conducted by various professional and trade associations active in the real estate field. Employers send managers to these programs to improve their management skills and expand their knowledge of specialized subjects, such as the operation and maintenance of building mechanical systems, insurance and risk management, personnel management, business and real estate law, communications, and accounting and financial concepts. Managers also participate in these programs to prepare themselves for positions of greater responsibility in property and real estate management. Completion of these programs, together with meeting job experience standards and achieving a satisfactory score on a written examination, leads to certification, or the formal award of a professional designation, by the sponsoring association. In addition to these qualifications, some associations require their members to adhere to a specific code of ethics.

Managers of public housing subsidized by the Federal Government are required to be certified, but many property and real estate managers who work with all kinds of property choose to earn a professional designation voluntarily because it represents formal recognition of their achievements and status in the occupation. A number of organizations offer such programs. The Institute of Real Estate Management awards the designations Accredited Residential Manager and Certified Property Manager, while the National Association of Home Builders awards the designation Registered Apartment Manager. The National Apartment Association confers the designations Certified Apartment Manager and Certified Apartment Property Supervisor. The Community Associations Institute bestows the designation Professional Community Association Manager and Association Management Specialist, while the Building Owners and Managers Institute International awards the designations Real Property Administrator and Facilities Management Administrator. The International Association of Corporate Real Estate Executives confers the designations Associate of Corporate Real Estate and Master of Corporate Real Estate.

Job Outlook

Employment of property and real estate managers is projected to increase faster than the average for all occupations through the year 2005. Despite the rapid growth in demand for these workers, the vast majority of job openings are expected to occur as property managers transfer to other occupations or leave the labor force. Opportunities should be best for persons with college degrees in business administration and related fields.

Growth in the demand for office buildings and retail establishments will spur employment of property and real estate managers. Nearly 9 of every 10 new jobs that will be created over the 1992-2005 period are expected to be in wholesale and retail trade; finance, insurance, and real estate; and service industries. Because establishments in these industries are the primary tenants of commercial properties, expansion of these industries is expected to require growth in the Nation's supply of office and retail space. Although development in this area is slow now, it is expected to pick up within several years. Some growth will come from adding on to existing buildings. Although some of these additions will be handled by the property manager already on the site, other additions will require the hiring of additional property managers. More complex responsibilities combined with larger facilities may lead to the hiring of more property managers per building.

In addition, the expected faster than average employment growth in some retail trade industries should require greater numbers of real estate managers to acquire and develop properties for expanding restaurant, food, apparel, and specialized merchandise chains.

Growth in the Nation's stock of apartments and houses also should require more property and real estate managers. Although the rate of new household formation is expected to slow somewhat over the 1992-2005 period, the high cost of purchasing a home is expected to force an increasing proportion of individuals to delay leaving rental housing. In addition, developments of new homes are increasingly being organized with community or homeowner associations that provide community services and oversee jointly owned common areas, requiring professional management.

A growing proportion of commercial and multiunit residential property owners are expected to entrust the management of their properties to a professional manager. Recent changes to income tax laws have greatly limited the tax benefits that property owners and investors can derive from unprofitable apartments and commercial properties. To help properties become more profitable, more owners are expected to place their investments in the hands of property and real estate managers.

Earnings

Median earnings of all property and real estate managers were \$21,800 a year in 1992. The middle 50 percent earned between \$14,600 and \$33,600. Ten percent earned less than \$10,300 and 10 percent earned more than \$47,300 annually.

Earnings of property and real estate managers vary widely by level of responsibility. Those who are certified in their field tend to earn a higher salary than those who are not. A survey conducted by Huntress Real Estate Executive Search Inc. found that the middle third of the on-site apartment managers surveyed had annual salaries averaging \$33,000 in 1992. Property managers had considerably higher earnings, with the middle third of property managers responsible for multiple apartment properties averaging \$67,200. Of property managers responsible for regional shopping malls, the middle third earned \$72,700; of those who managed office buildings, the middle third earned \$75,200.

Earnings of corporate real estate managers were generally comparable to those of property managers, according to the same survey. Among those employed by fast-food and restaurant chains, the middle third of the lease negotiators and site selection representatives averaged \$62,300 annually, while the middle third of real estate directors earned \$68,900. Among real estate managers employed by retail apparel chains, the middle third of the lease negotiators and site selection representatives averaged \$64,700 and the middle third of real estate directors had an average annual salary of \$64,500,

Community association managers received compensation comparable to on-site and property managers employed by other types of properties. Many resident apartment managers receive the use of an apartment as part of their compensation package. Property and real estate managers often are given the use of a company automobile, and managers employed in land development often receive a small percentage of ownership in projects that they develop.

Related Occupations

Property and real estate managers plan, organize, staff, and manage the real estate operations of businesses. Workers who perform similar functions in other fields include restaurant and food service managers, hotel and resort managers and assistants, health services managers, education administrators, and city managers.

Sources of Additional Information

General information about careers in property and real estate management and programs leading to the award of a professional designation in the field is available from:

t∌ Apartment Owners and Managers Association of America, 65 Cherry Plaza, Watertown, CT 06795-0238.

B Building Owners and Managers Institute International, 1521 Ritchie Hwy., Arnold, MD 21012.

P Community Associations Institute, 1630 Duke St., Alexandria, VA 22314.

Institute of Real Estate Management, 430 N. Michigan Ave., Chicago IL 60611.

ta International Association of Corporate Real Estate Executives, 440 Columbia Dr., Suite 100, West Palm Beach, FL 33409.

Tational Apartment Association, 1111 14th St. NW., Suite 900, Washington, DC 20005.

Pational Association of Home Builders, 15th & M Sts. NW., Washington, DC 20005.

Public Relations Specialists

(D.O.T. 165.017, .167)

Nature of the Work

An organization's reputation, profitability, and even its continued existence can depend on the degree to which its goals and policies are supported by its targeted "publics." Public relations specialists serve as advocates for businesses, governments, universities, hospitals, schools, and other organizations, and strive to build and maintain positive relationships with the public. As managers recognize the growing importance of good public relations to the success of their organizations, they increasingly rely on public relations specialists for advice on strategy and policy.

Public relations specialists handle such functions as media, community, consumer, and governmental relations; political campaigns; interest-group representation; conflict mediation; or employee and investor relations. Public relations is not only "telling the organization's story," however. Understanding the attitudes and concerns of consumers, employees, and various other groups also is a vital part of the job. To improve communications, public relations specialists establish and maintain cooperative relationships with representives of community, consumer, employee, and public interest groups and those in print and broadcast journalism.

Public relations specialists put together information that keeps the general public, interest groups, and stockholders aware of an organization's policies, activities, and accomplishments. Their work keeps management aware of public attitudes and concerns of the many groups and organizations with which it must deal.

Public relations specialists prepare press releases and contact people in the media who might print or broadcast their material. Many radio or television special reports, newspaper stories, and magazine articles start at the desks of public relations specialists. Sometimes the subject is an organization and its policies towards its employees or its role in the community. Often the subject is a public issue, such as health, nutrition, energy, or the environment.

Public relations specialists also arrange and conduct programs for contact between organization representatives and the public. For example, they set up speaking engagements and often prepare the speeches for company officials. These specialists represent employers at community projects; make film, slide, or other visual presentations at meetings and school assemblies; and plan conventions. In addition, they are responsible for preparing annual reports and writing proposals for various projects.

In government, public relations specialists—who may be called press secretaries, information officers, public affairs specialists, or communications specialists—keep the public informed about the activities of government agencies and officials. For example, public affairs specialists in the Department of Energy keep the public informed about the proposed lease of offshore land for oil exploration. A press secretary for a member of Congress keeps constituents aware of their elected representative's accomplishments.

In large organizations, the director of public relations, who is often a vice president, may develop overall plans and policies with other executives. In addition, public relations departments employ public relations specialists to write, do research, prepare materials, maintain contacts, and respond to inquiries.

People who handle publicity for an individual or who direct public relations for a small organization may deal with all aspects of the job. They contact people, plan and do research, and prepare material for distribution. They may also handle advertising or sales promotion work to support marketing.



Public relations specialists maintain positive relationships between their organizations and the public.

Working Conditions

Some public relations specialists work a standard 35- to 40-hour week, but unpaid overtime is common. In addition, schedules often have to be rearranged to meet deadlines, deliver speeches, attend meetings and community activities, and travel out of town. Occasionally they may have to be at the job or on call around the clock, especially if there is an emergency or crisis.

Employment

Public relations specialists held about 98,000 jobs in 1992. About two-thirds worked in services industries—management and public relations firms, educational institutions, membership organizations, hospitals, social service agencies, and advertising agencies, for example. Others worked for a wide range of employers, including manufacturing firms, financial institutions, and government agencies. Some were self-employed.

Public relations specialists are concentrated in large cities where press services and other communications facilities are readily available, and where many businesses and trade associations have their headquarters. Many public relations consulting firms, for example, are in New York, Los Angeles, Chicago, and Washington, DC. There is a trend, however, for public relations jobs to be dispersed throughout the Nation.

Training, Other Qualifications, and Advancement

Although there are no defined standards for entry into a public relations career, a college education combined with public relations experience, usually gained through an internship, is considered excellent preparation for public relations work. The ability to write and speak well is essential. Many beginners have a college major in public relations, journalism, advertising, or communications. Some firms seek college graduates who have worked in electronic or print journalism. Other employers seek applicants with demonstrated communications skills and training or experience in a field related to the firm's business—science, engineering, sales, or finance, for example.

In 1992, well over 200 colleges and about 100 graduate schools offered degree programs or special curricula in public relations, usually in a journalism or communications department. In addition, many other colleges offered at least one course in this field. A commonly used public relations sequence includes the following courses: Public relations principles and techniques; public relations management and administration, including organizational development; writing, emphasizing news releases, proposals, annual reports, scripts, speeches, and related items; visual communications, including desktop publishing and computer graphics; and research, emphasizing social science research and survey design and implementation. Courses in advertising, journalism, business administration, political science, psychology, sociology, and creative writing

also are helpful, as is familiarity with word processing and other computer applications. Specialties are offered in public relations for

business, government, or nonprofit organizations.

Many colleges help students gain part-time internships in public relations that provide valuable experience and training. The Armed Forces also can be an excellent place to gain training and experience. Membership in local chapters of the Public Relations Student Society of America or the International Association of Business Communicators provides an opportunity for students to exchange views with public relations specialists and to make professional contacts that may help them find a full-time job in the field. A portfolio of published articles, television or radio programs, slide presentations, and other work is an asset in finding a job. Writing for a school publication or television or radio station provides valuable experience and material for one's portfolio.

Creativity, initiative, good judgment, and the ability to express thoughts clearly and simply are essential. Decision making, problem

solving, and research skills are also important.

People who choose public relations as a career need an outgoing personality, self-confidence, an understanding of human psychology, and an enthusiasm for motivating people. They should be competitive, yet flexible and able to function as part of a team.

Some organizations—particularly those with large public relations staffs—have formal training programs for new employees. In smaller organizations, new employees work under the guidance of experienced staff members. Beginners often maintain files of material about company activities, scan newspapers and magazines for appropriate articles to clip, and assemble information for speeches and pamphlets. After gaining experience, they may write news releases, speeches, and articles for publication, or design and carry out public relations programs. Similar to other occupations, public relations specialists in smaller firms generally get all-around experience, whereas those in larger firms tend to be more specialized.

The Public Relations Society of America accredits public relations specialists who have at least 5 years of experience in the field and have passed a comprehensive 6- hour examination (5 hours written, 1 hour oral). The International Association of Business Communicators also has an accreditation program for professionals in the communications field, including public relations specialists. Those who meet all the requirements of the program earn the designation, Accredited Business Communicator. Candidates must have at least 5 years of experience in a communication field and pass a written and oral examination. They also must submit a portfolio of work samples demonstrating involvement in a range of communication projects and a thorough understanding of communication planning. Employers consider professional recognition through accreditation a sign of competence in this field, and it may be especially helpful in a competitive job market.

Promotion to supervisory jobs may come as public relations specialists show they can handle more demanding managerial assignments. In public relations firms, a beginner may be hired as a research assistant or account assistant and be promoted to account executive, account supervisor, vice president, and eventually senior vice president. A similar career path is followed in corporate public relations, although the titles may differ. Some experienced public relations specialists start their own consulting firms. (For more information on public relations managers, see the *Handbook* statement on marketing, advertising, and public relations managers.)

Job Outlook

Keen competition for public relations jobs will likely continue among recent college graduates with a degree in communications—journalism, public relations, advertising, or a related field—as the number of applicants is expected to exceed the number of job openings. People without the appropriate educational background or work experience will face the toughest obstacles in finding a public relations job.

Employment of public relations specialists is expected to increase about as fast as the average for all occupations through the year 2005. Recognition of the need for good public relations in an increasingly competitive business environment should spur demand for public relations specialists in organizations of all sizes. However, corporate restructuring and downsizing, in an effort to cut costs,

could limit employment growth. Employment in public relations firms should grow as firms hire contractors to provide public relations services rather than support full-time staff. The vast majority of job opportunities should result from the need to replace public relations specialists who leave the occupation to take another job, retire, or for other reasons.

Earnings

Median annual earnings for salaried public relations specialists who usually worked full time were about \$32,000 in 1992. The middle 50 percent earned between \$24,000 and \$51,000 annually; the lowest 10 percent earned less than \$17,000; and the top 10 percent earned more than \$62,000.

A College Placement Council salary survey indicated new college graduates entering the public relations field were offered average

starting salaries of about \$21,000 in 1993.

According to a 1992 salary survey by the *Public Relations Journal*, the median entry level salary of public relations account executives was almost \$21,000 a year. Median annual salaries of all public relations account executives ranged from \$28,000 in public relations firms to about \$36,000 in corporations. Manufacturers, utilities, and scientific and technical firms were among the highest paying employers; museums and miscellaneous nonprofit organizations, religious and charitable organizations, and advertising agencies were among the lowest paying employers. The survey indicated an annual median salary for all respondents, including managers, of about \$44,000. Some highly successful public relations workers earn considerably more.

In the Federal Government, persons with a bachelor's degree generally started at \$22,700 a year in 1993; those with a master's degree generally started at \$27,800 a year. Public affairs specialists in the Federal Government in nonsupervisory, supervisory, and managerial positions averaged about \$45,400 a year in 1993.

Related Occupations

Public relations specialists create favorable attitudes among various organizations, special interest groups, and the public through effective communication. Other workers with similar jobs include fundraisers, lobbyists, promotion managers, advertising managers, and police officers involved in community relations.

Sources of Additional Information

A comprehensive directory of schools offering degree programs or a sequence of study in public relations, and a brochure on careers in public relations, are available for \$10 and \$2, respectively, from: Public Relations Society of America, Inc., 33 Irving Place, New York, NY 10003-2376.

Current information on the public relations field, salaries, and other items is available from:

PR Reporter, P.O. Box 600, Exeter, NH 03833.

Career information on public relations in hospitals/health care is available from:

The American Society for Health Care Marketing and Public Relations, American Hospital Association, 840 North Lake Shore Dr., Chicago, IL 60611

Purchasers and Buyers

(D.O.T. 162.117-010, and -018, .157-010, -018, -022, -030, -034, and -038, .167-010, -014, -018, -022, and -030; 163.117-010; 169.167-054; 184.117-078; and 185.167-034)

Nature of the Work

Purchasers and buyers seek to obtain the highest quality merchandise at the lowest possible price for their employers. The work generally involves determining which commodities or services are best, determining the suppliers of the product or service, negotiating the lowest price, and awarding contracts that ensure that the correct amount of the product or service is received at the appropriate time.

In order to accomplish these tasks successfully, purchasers and buyers study sales records and inventory levels of current stock, identify foreign and domestic suppliers, and keep abreast of changes affecting both the supply of and demand for products and materials for which they are responsible. Purchasers and buyers evaluate and select suppliers based upon price, quality, availability, reliability, and selection. They review listings in catalogs, industry periodicals, directories, and trade journals, research the reputation and history of the suppliers, and advertise anticipated purchase actions in order to solicit bids from suppliers. Meetings, trade shows, conferences, and visits to suppliers' plants and distribution centers also provide opportunities for purchasers and buyers to examine products, assess a supplier's production and distribution capabilities, and discuss other technical and business considerations that bear on the purchase. Although this describes the general activities of purchasers and buyers, specific job duties and responsibilities depend upon the type of commodities or services to be purchased and on the employer.

Purchasing professionals who are most often employed by government agencies or manufacturing firms are usually called purchasing directors, managers, agents, industrial buyers, or contract specialists. These workers acquire product materials, intermediate goods, machines, supplies, and other materials used in the production of a final product. Purchasing agents and managers obtain items ranging from raw materials, fabricated parts, machinery, and office supplies to construction services and airline tickets. The flow of work—or even the entire production process—can be slowed or halted if the right materials, supplies, or equipment are not on hand when needed. In order to be effective, purchasers and buyers must have a working technical knowledge of the goods or services to be

purchased.

In large industrial organizations, a distinction is often drawn between the work of a buyer or purchasing agent and that of a purchasing manager. Purchasing agents and buyers typically focus on routine purchasing tasks, often specializing in a commodity or group of related commodities—for example, steel, lumber, cotton, fabricated metal products, or petroleum products. This usually requires the purchaser to track such things as market conditions, price trends, or futures markets. Purchasing managers usually handle the more complex or critical purchases and may supervise a group of purchasing agents handling other goods and services. Whether a person is titled purchasing agent, buyer, or manager depends more on specific industry and employer practices than on specific job duties.

Changing business practices have altered the traditional roles of purchasing professionals. Manufacturing companies have begun to recognize the importance of purchasing professionals and increasingly involve them at most stages of product development. Their ability to forecast which materials will be most available, inexpensive, and acceptable for production standards can affect the entire product design. For example, potential problems with the supply of materials may be avoided by consulting the purchasing department

in the early stages of product design.

In addition, there is a trend toward limited-source, long-term contracting. These contracts increase the importance of supplier selection because agreements are larger in scope and longer in duration. A major responsibility of most purchasers is to work out problems that may occur with a supplier because the success of the relationship directly affects the buying firm's performance. Increasingly, purchasing professionals work closely with other employees in their own organization. For example, they may discuss the design of custom-made products with company design engineers, quality problems in purchased goods with quality assurance engineers and production supervisors, or shipment problems with managers in the receiving department.

Some purchasing managers who work in the industrial sector and specialize in negotiating and supervising supply contracts are called

contract specialists or supply managers.

Contract specialists in the Federal Government typically use sealed bidding, but sometimes use negotiated agreements for complex items. Government purchasing agents and managers must follow strict laws, statutes, and regulations in their work. These legal requirements are occasionally changed, so agents and contract specialists must stay informed about the latest regulations and their ap-

plications

Other professionals, who buy finished goods for resale, are employed by wholesale and retail establishments where they are commonly referred to as "buyers" or "merchandise managers." Wholesale and retail buyers are an integral part of a complex system of production, distribution, and merchandising that caters to the vast array of consumer needs and desires. Wholesale buyers purchase goods directly from manufacturers or from other wholesale firms for resale to retail firms or to commercial establishments and other organizations. Buyers in retail firms purchase goods from wholesale firms or directly from manufacturers for resale to the public. Buyers largely determine which products their establishment will sell. Therefore, it is essential they have the ability to accurately predict what will appeal to consumers. Buyers must constantly stay informed of the latest fashions and trends. Failure to do so could jeopardize profits and the reputation of their company. Buyers also follow ads in newspapers and other media to check competitors' sales activities and watch general economic conditions to anticipate consumer buying patterns. Buyers working for large and medium sized firms usually specialize in acquiring one or two lines of merchandise. However, buyers working for small stores may purchase their complete inventory.

The use of private-label merchandise and the consolidation of buying departments have increased the responsibilities of retai buyers. Private-label merchandise, produced for a particular retailer, requires buyers to work closely with vendors to develop and obtain the desired product. The downsizing and consolidation of buying departments is also increasing the demands placed on buyers because, although the amount of work remains unchanged, there are fewer people to accomplish it. The result is an increase in the workloads

and levels of responsibility.

Many merchandise managers assist in the planning and implementation of sales promotion programs. Working with merchandising executives, they determine the nature of the sale and purchase accordingly. They also work with advertising personnel to create the ad campaign. For example, they may determine the media in which the advertisement will be placed—newspapers, direct mail, television, or some combination of these. In addition, merchandising managers often visit the selling floor to ensure that the goods are properly displayed. Often, assistant buyers are responsible for placing orders and checking shipments.

Although purchasers and buyers of farm products may work in manufacturing or wholesale or retail trade, many are self-employed brokers who store grain and sell it for a commission. These individu-

als may also speculate on grain prices.

Computers are having a major impact on the jobs of purchasers and buyers. In manufacturing and service industries, computers handle most of the more routine tasks—enabling purchasing professionals to concentrate mainly on the analytical aspects of the job. Computers are used to obtain up-to-date product and price listings, to track inventory levels, process routine orders, and help determine when to make purchases. Computers also maintain bidders' lists, record the history of supplier performance, and issue purchase orders.

Computerized systems have dramatically simplified many of the routine buying functions and improved efficiency in determining which products are selling. For example, cash registers connected to computers, known as point-of-sale terminals, allow organizations to maintain centralized, up-to-date sales and inventory records. This information can then be used to produce weekly sales reports that reflect the types of products in demand. As well as monitoring their company's sales, buyers use computers to gain instant access to the specifications for thousands of commodities, inventory records, and their customers' purchase records. Some firms are linked with manufacturers or wholesalers by electronic purchasing systems. These systems speed selection and ordering and provide information on availability and shipment. All this allows buyers to better concentrate on the selection of goods and suppliers.

Working Conditions

Most purchasers and buyers work in comfortable, well-lighted offices at stores, corporate headquarters, or production facilities. They frequently work more than a 40-hour week because of special sales,



Purchasers and buyers must stay informed about new products and services.

conferences, or production deadlines. Evening and weekend work is common. For those working in retail trade, this is especially true prior to holiday seasons. Consequently, many retail firms discourage the use of vacation time from Thanksgiving until early January.

Buyers and merchandise managers often work under great pressure since wholesale and retail stores are so competitive; buyers need physical stamina to keep up with the fast-paced nature of their work.

Traveling is usually required and most purchasers and buyers spend at least several days a month on the road. High fashion buyers and purchasers for worldwide manufacturing companies often travel outside the United States.

Employment

Purchasers and buyers held about 624,000 jobs in 1992. Purchasing agents and purchasing managers each accounted for slightly more than one-third of the total while buyers accounted for the remainder. Almost all worked full time.

About one-half of all buyers and purchasers worked in wholesale and retail trade establishments such as grocery or department stores. One-fourth worked in manufacturing.

Training, Other Qualifications, and Advancement.

Qualified persons usually begin as trainees, purchasing clerks, expediters, junior buyers, or assistant buyers. Retail and wholesale firms prefer to hire applicants who are familiar with the merchandise they sell as well as with wholesaling and retailing practices. Some retail firms promote qualified employees to assistant buyer positions; others recruit and train college graduates as assistant buyers. Most employers use a combination of methods.

Éducational requirements tend to vary with the size of the organization. Large stores and distributors accept applicants who have completed associate or bachelor's degree programs from any field of study, but prefer individuals with a business background. Manufacturing firms tend to put a greater emphasis on formal training and many desire applicants with a bachelor's or master's degree in business, economics, or technical training such as engineering or one of the applied sciences. Regardless of academic preparation, new employees must learn the specifics of the employers' business.

Although training periods vary in length, most last several years. In wholesale and retail establishments, most trainees begin by selling merchandise, supervising sales workers, checking invoices on material received, and keeping track of stock on hand, although widespread use of computers has simplified some of these tasks. As they progress, retail trainees are given more buying-related responsibilities. In manufacturing, new purchasing employees are often enrolled in company training programs and spend a considerable amount of time learning about company operations and purchasing practices. They work with experienced purchasers to learn about

commodities, prices, suppliers, and markets. In addition, they may be assigned to production planning to learn about the material requirements system and the inventory system.

Persons who wish to become wholesale or retail buyers should be good at planning and decision making and have an interest in merchandising. Anticipating consumer preferences and ensuring that goods are in stock when they are needed require resourcefulness, good judgment, and self-confidence. Buyers must be able to make decisions quickly and take risks. Marketing skills and the ability to identify products that will sell are also very important. Employers often look for leadership ability and communication skills because buyers spend a large portion of their time supervising assistant buyers and dealing with manufacturers' representatives and store executives.

Purchasing professionals must be able to analyze the technical data in suppliers' proposals, make buying decisions, and spend large amounts of money responsibly. The job requires the ability to work independently as well as a part of a team. In addition, these workers must be able to get along well with people to balance the needs of departments within the organization with budgetary constraints. They may consult with lawyers, engineers, and scientists when involved in complex procurements.

Experienced buyers may advance by moving to a department that manages a larger volume or by becoming a merchandise manager. Others go to work in sales for a manufacturer.

An experienced purchasing agent or buyer may become an assistant purchasing manager in charge of a group of purchasing professionals before advancing to purchasing manager, supply manager, or director of materials management. At the top levels, duties may overlap into other management functions such as production, planning, and marketing.

In high technology manufacturing firms, continuing education is essential for advancement. Many purchasers participate in seminars offered by professional societies and take college courses in purchasing. Although no national standard exists, professional certification is becoming increasingly important.

In private industry, the recognized marks of experience and professional competence are the designations Certified Purchasing Manager (CPM), conferred by the National Association of Purchasing Management, Inc. and Certified Purchasing Professional (CPP) and Certified Purchasing Executive (CPE), conferred by the American Purchasing Society, Inc. upon candidates who pass examinations and meet specified educational, experience, and related requirements. In Federal, State, and local government, the indications of professional competence are the designations Certified Professional Public Buyer (CPPB) and Certified Public Purchasing Officer (CPPO), conferred by the National Institute of Governmental Purchasing, Inc. The CPPB is earned by passing a two-part written examination and meeting certain experience requirements. To earn the CPPO, a candidate must have additional purchasing and supervisory or management experience, pass a three-part written exam, and undergo an oral interview assessment.

As more materials purchasing is conducted on a long-term basis, both private and public purchasing professionals are specializing in the contractual aspects of purchasing. The National Contract Management Association confers the designations Certified Associate Contract Manager (CACM) or Certified Professional Contract Manager (CPCM). Candidates for these certifications must have related work experience, complete academic course-work, and pass written exams. These designations primarily apply to contract managers in the Federal Government and its suppliers.

Job Outlook

Employment of purchasers and buyers is expected to increase more slowly than the average for all occupations through the year 2005. Demand for these workers will not keep pace with the rising level of economic activity; mergers and the resulting consolidations of buying departments along with other changes such as limited source, long-term contracting will reduce the need for purchasers and buyers. The increased use of point-of-sale inventory control, artificial intelligence systems, electronic data interchange, and other automated systems will restrict demand further. Consequently, most job

openings will result from the need to replace workers who transfer

to other occupations or leave the labor force.

Persons who have a bachelor's degree in business should have the best chance of landing a buyer job. A master's degree or bachelor's degree in a technical field will be an advantage for those interested in working for a manufacturing or industrial company. However, graduates of 2-year programs in purchasing/buying should continue to find good opportunities, especially in small firms.

Earnings

Median annual earnings of purchasers and buyers were \$33,067 in 1992. The middle 50 percent earned between \$23,092 and \$44,684. The lowest 10 percent averaged less than \$13,959 while the top 10 percent earned more than \$56,581. Merchandise managers and purchasing managers generally earned higher salaries than buyers or agents. As a general rule, those with the most education in their field have the highest incomes.

Purchasing agents in the Federal Government averaged \$24,400

in 1993 and contract specialists averaged \$43,800.

Purchasers and buyers receive the same benefits package as their coworkers, frequently including vacations, sick leave, life and health insurance, and pension plans. In addition to standard benefits, retail buyers often earn cash bonuses based on their performance and may receive discounts on merchandise bought from the employer.

Related Occupations

Workers in other occupations who need a knowledge of marketing and the ability to assess demand are retail sales workers, sales managers, comparison shoppers, manufacturers' and wholesale sales representatives, insurance sales agents, services sales representatives, procurement services managers, and traffic managers.

Sources of Additional Information

General information about a career in retailing is available from: National Retail Federation, 100 West 31st St., New York, NY 10001.

Further information about careers in purchasing and certification

is available from:

American Purchasing Society, Inc., 11910 Oak Trail Way, Port Richey, FL 34668.

Tempe, AZ 85285.

Tational Institute of Governmental Purchasing, Inc., 11800 Sunrise Valley Dr., Suite 1050, Reston, VA 22091.

Pational Contract Management Association, 1912 Woodford Rd., Vienna, VA 22182.

B Federal Acquisition Institute (VF), General Services Administration, 18th and F Sts. NW., Washington, DC 20405.

Restaurant and Food Service Managers

(D.O.T. 185.137; 187.161-010 and .167-026, -106, -126, -206, and -210; 319.137-014 and -018)

Nature of the Work

Food is consumed outside the home in a variety of settings. Eating places range from restaurants that serve fast food or that emphasize elegant dining, to institutional dining in school and employee cafeterias, hospitals, and nursing facilities. The cuisine offered, its price, and the setting in which it is consumed vary greatly, but the managers of these diverse dining facilities have many responsibilities in common. Efficient and profitable operation of restaurants and institutional food service facilities requires that managers and assistant managers select and appropriately price interesting menu items, efficiently use food and other supplies, achieve consistent quality in food preparation and service, recruit and train adequate numbers of workers and supervise their work, and attend to the various administrative aspects of the business.

In most restaurants and institutional food service facilities, the manager is assisted by one or more assistant managers, depending on the size and business hours of the establishment. In large establishments, as well as in many others that offer fine dining, the management team consists of a general manager, one or more assistant managers, and an executive chef. The executive chef is responsible for the operation of the kitchen, while the assistant managers oversee service in the dining room and other areas of the operation. In some smaller restaurants, the executive chef may also be the general manager, and sometimes an owner. In fast-food restaurants and other food service facilities that operate long hours, 7 days a week, the manager is aided by several assistant managers, each of whom supervises a shift of workers. (For additional information, see the *Handbook* statements on general managers and top executives and chefs, cooks, and other kitchen workers.)

Many restaurants rarely change their menu, but other eating establishments change it frequently. Institutional food service facilities and some restaurants offer a new menu every day. Managers or executive chefs select menu items, taking into account the likely number of customers, the past popularity of various dishes, and considerations such as food left over from prior meals that should not be wasted, the need for variety on the menu, and the availability of foods due to seasonal and other factors. They analyze the recipes of the dishes to determine food, labor, and overhead costs and assign prices to the menu items. Menus must be developed far enough in advance that needed supplies may be received in time.

Ordering supplies and dealing with suppliers are important aspects of the work of restaurant and food service managers. On a daily basis, managers estimate food consumption, place orders with suppliers, and schedule the delivery of fresh food and beverages. They receive and check the content of deliveries, evaluating the quality of meats, poultry, fish, fruits, vegetables, and baked goods. Managers meet or talk with sales representatives of restaurant suppliers to place orders to replenish stocks of tableware, linens, paper, cleaning supplies, cooking utensils, and furniture and fixtures. They also arrange for equipment maintenance and repairs, and for a variety of services such as waste removal and pest control.

Managers interview, hire, and, when necessary, discharge workers. They familiarize newly hired workers with the establishment's policies and practices and oversee their training. Managers schedule the work hours of employees, insuring that there are enough workers present during busy periods, but not too many during slow periods.

Restaurant and food service managers supervise the kitchen and the dining room. They oversee food preparation and cooking, checking the quality of the food and the sizes of portions to insure that dishes are prepared and garnished correctly and in a timely manner. They also investigate and resolve customers' complaints about food quality or service. During busy periods, managers may roll up their sleeves and help with the cooking, clearing of tables, or other tasks. They direct the cleaning of the kitchen and dining areas and the washing of tableware, kitchen utensils, and equipment to maintain company and government sanitation standards. They monitor workers and observe patrons on a continual basis to insure compliance with health and safety standards and local liquor regulations

Managers have a variety of administrative responsibilities. In larger establishments, much of this work is delegated to a book-keeper, but in others, managers must keep accurate records of the hours and wages of employees, prepare the payroll, and do paperwork to comply with licensing laws and reporting requirements of tax, wage and hour, unemployment compensation, and Social Security laws. They also must maintain records of the costs of supplies and equipment purchased and insure that accounts with suppliers are paid on a regular basis. In addition, managers record the number, type, and cost of items sold to weed out dishes that are unpopular or less profitable. Many managers are able to ease the burden of recordkeeping and paperwork through the use of computers.

Managers are among the first to arrive and the last to leave at night. At the conclusion of each day, or sometimes each shift, managers must tally the cash received and charge receipts and balance them against the record of sales. They are responsible for depositing the day's income at the bank, or securing it in a safe place. Managers

are also responsible for locking up, checking that ovens, grills, and lights are off, and switching on alarm systems.

Working Conditions

Since evenings and weekends are popular dining periods, night and weekend work is common. However, many managers of institutional food service facilities work more conventional hours because factory and office cafeterias are often open only on weekdays for breakfast and lunch. Many restaurant and food service managers work 50 hours or more per week.

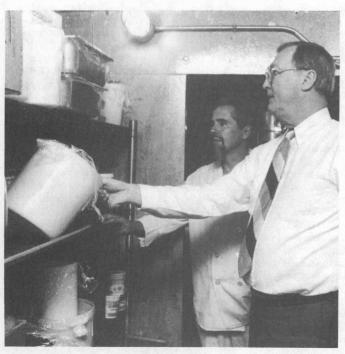
Managers often experience the pressure of simultaneously coordinating a wide range of activities. When problems occur, it is the responsibility of the manager to resolve them with minimal disruption to customers. The job can be hectic during peak dining hours, and dealing with irate customers or uncooperative employees can be particularly stressful.

Employment

Restaurant and food service managers held about 496,000 jobs in 1992. Most worked in restaurants or for contract institutional food service companies, but small numbers also were employed by educational institutions, hospitals, nursing and personal care facilities, and civic, social, and fraternal organizations. About two-fifths were self-employed. Jobs are located throughout the country, but are most plentiful in large cities and tourist areas.

Training, Other Qualifications, and Advancement

Many restaurant and food service manager positions are filled by promoting experienced food and beverage preparation and service workers. Waiters, waitresses, chefs, and fast-food workers who have demonstrated their potential for handling increased responsibility sometimes advance to assistant manager or management trainee jobs when openings occur. Executive chefs need extensive experience working as a chef, and general managers need experience working as assistant manager. However, most food service management companies and national or regional restaurant chains also recruit management trainees from among the graduates of 2-year and 4-year college programs. Food service and restaurant chains prefer to hire persons with degrees in restaurant and institutional food service management, but they often hire graduates with degrees in other fields who have demonstrated interest and aptitude.



Ordering supplies and dealing with suppliers are important aspects of restaurant and food service managers.

A bachelor's degree in restaurant and food service management provides a particularly strong preparation for a career in this occupation. In 1992, more than 160 colleges and universities offered 4year programs in restaurant and hotel management or institutional food service management. For persons who do not want to pursue a 4-year degree, a good alternative is provided by the more than 800 community and junior colleges, technical institutes, and other institutions that offer programs in these fields leading to an associate degree or other formal award below the bachelor's degree. Both 2-year and 4-year programs provide instruction in subjects such as accounting, business law and management, food planning and preparation, and nutrition. Some programs combine classroom and laboratory study with internships that provide on-the-job experience. In addition, many educational institutions offer culinary programs that provide food preparation training which can lead to a career as a cook or chef and provide a foundation for advancement to an executive chef position.

Most employers emphasize personal qualities. Restaurant and food service management can be demanding, so good health and stamina are important. Self-discipline, initiative, and leadership ability are essential. Managers must be able to solve problems and concentrate on details. They need good communication skills to deal with customers and suppliers, as well as to motivate and direct their subordinates. A neat and clean appearance is also required since managers are often in close personal contact with the public.

Most restaurant chains and food service management companies have rigorous training programs for persons hired for management jobs. Through a combination of classroom and on-the-job training, trainees receive instruction and gain work experience in all aspects of the operations of a restaurant or institutional food service facility—food preparation, nutrition, sanitation, security, company policies and procedures, personnel management, recordkeeping, and preparation of reports. Usually after 6 months or a year, trainees receive their first permanent assignment as an assistant manager.

A measure of professional achievement for restaurant and food service managers is to earn the designation of certified Foodservice Management Professional (FMP). Although not a requirement for employment or advancement in the occupation, voluntary certification provides recognition of professional competence, particularly for managers who acquired their skills largely on the job. The Educational Foundation of the National Restaurant Association awards the FMP designation to managers who achieve a qualifying score on a written examination, complete a series of courses that cover a range of food service management topics, and who meet standards of work experience in the field.

Willingness to relocate often is essential for advancement to positions with greater responsibility. Managers advance to larger establishments, or regional management positions with restaurant chains. Some managers eventually open their own eating and drinking establishments. Others transfer to hotel management positions, since management experience in their restaurant or institutional food service is a good background for food and beverage manager jobs at hotels and resorts.

Job Outlook

Employment of restaurant and food service managers is expected to increase much faster than the average for all occupations through the year 2005. In addition to growth in demand for these managers, the need to replace managers who transfer to other occupations or stop working will create many job openings. Job opportunities are expected to be best for persons with bachelor's or associate degrees in restaurant and institutional food service management.

Employment growth is expected to vary by industry. Eating and drinking places will provide the most new jobs as the number of eating and drinking establishments increases and other industries continue to contract out their food services. Population growth, rising personal incomes, and increased leisure time will continue to produce growth in the number of meals consumed outside the home. To meet the demand for prepared food, more restaurants will be built, and more managers will be employed to supervise them. In addition, the number of manager jobs will increase in eating and drinking places as schools, hospitals, and other businesses contract out more

of their food services to institutional food service companies located

in the eating and drinking industry.

Employment of wage and salary managers in eating and drinking places is expected to increase more rapidly than self-employed managers. New restaurants are increasingly affiliated with national chains rather than being independently owned and operated. As this trend continues, fewer owners will manage restaurants themselves, and more restaurant managers will be employed to run the estab-

Employment in eating and drinking establishments is not very sensitive to changes in economic conditions, so restaurant and food service managers are rarely laid off during hard times. However, competition among restaurants is always intense, and many restaurants do not survive.

Food service manager jobs are expected to increase in other industries, but growth will be slowed as contracting out becomes more common. Growth in the population of elderly people is expected to result in growth of food service manager jobs in nursing homes, residential care facilities, and other health care institutions. Likewise, growth in the population of young people enrolled in educational institutions should result in growth of food service manager jobs in school and college cafeterias.

Earnings

Median earnings for restaurant and food service managers were \$418 a week in 1992. The middle 50 percent earned between about \$300 and \$600 a week. The lowest paid 10 percent earned \$225 a week or less, while the highest paid 10 percent earned over \$815 a

Earnings of restaurant and food service managers vary greatly according to their responsibilities and the type and size of establishment. Based on a survey conducted for the National Restaurant Association, the median base salary of managers in restaurants was estimated to be about \$27,900 a year in early 1993, but managers of the largest restaurants and institutional food service facilities often had annual salaries in excess of \$45,000. Managers of fast-food restaurants had an estimated median base salary of \$24,900 a year; managers of full-menu restaurants with table service, almost \$30,400; and managers of commercial and institutional cafeterias, nearly \$29,300 a year in early 1993. Besides a salary, most managers received an annual bonus or incentive payment based on their performance. In 1993, most of these payments ranged between \$2,000 and \$8,000 a year.

Executive chefs had an estimated median base salary of about \$33,600 a year in early 1993, but those employed in the largest restaurants and institutional food service facilities often had base salaries over \$49,000. Annual bonus or incentive payments of most ex-

ecutive chefs ranged between \$2,000 and \$4,000 a year.

The estimated median base salary of assistant managers was over \$23,400 a year in early 1993, but ranged from less than \$19,800 in fast-food restaurants to over \$31,700 in some of the largest restaurants and food service facilities. Annual bonus or incentive payments of most assistant managers ranged between \$1,000 and \$4,000 a year.

Manager trainees had an estimated median base salary of about \$20,200 a year in early 1993, but had salaries of nearly \$27,900 in some of the largest restaurants and food service facilities. Annual bonus or incentive payments of most trainees ranged between \$1,000 and \$3,000 a year.

Most salaried restaurant and food service managers received free meals, sick leave, health and life insurance, and 1 to 3 weeks of paid vacation a year, depending on length of service.

Related Occupations

Restaurant and food service managers direct the activities of business establishments that provide a service to customers. Other managers in service-oriented businesses include hotel managers and assistants, health services administrators, retail store managers, and bank managers.

Sources of Additional Information

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

Career information about restaurant and food service managers, directories of 2- and 4-year college programs in restaurant and food service management, and certification as a Foodservice Management Professional are available from:

The Educational Foundation of the National Restaurant Association, Suite 1400, 250 South Wacker Dr., Chicago, IL 60606.

General information on hospitality careers may be obtained from: Page Council on Hotel, Restaurant, and Institutional Education, 1200 17th St. NW., Washington, DC 20036-3097.

Retail Managers

(D.O.T. 163.167-018; 184.167-114; 185.117, .137, .157-010, .167-014, -030, -034, -038, -046, -082, and -158; 189.117-022, and -046, .167-014 and -018; 299.137-010 and -026)

Nature of the Work

Retail stores sell a wide range of merchandise and provide services directly to the customer. Retail establishments are found everywhere and include shops that sell a wide variety of goods, such as large supermarkets and department and general merchandise stores. Also included are stores that sell specific lines of merchandise, including meat and fish markets, bakeries, and clothing, shoe, hardware, electronic, furniture and homefurnishings, and drug and liquor stores. Retail stores also provide services directly to the customer, and include restaurants and bars, automotive and boat dealers, and vehicle service stations. Managers who work in these establishments, generally called retail managers, are responsible for the success of retail stores. They insure that retail businesses function smoothly and efficiently, and provide quality goods and services to the customer. (Managers in eating and drinking places, the largest retail trade industry, are discussed in the Handbook statement on restaurant and food service managers.)

Retail managers have many responsibilities, depending on the size and type of establishment. Managers coordinate and direct all aspects of retail trade, including ordering, inspection, pricing, and inventorying of goods; monitoring sales activity; developing merchandising plans; maintaining good customer relations; monitoring profits and losses; and coordinating displays, advertisements, and

Retail managers supervise, among others, chefs, cooks, and other kitchen workers, food and beverage service workers, retail sales workers, cashiers, customer service workers, stock and inventory clerks, and grocery clerks. (Some of these occupations are discussed elsewhere in the Handbook.) Retail managers also are responsible for interviewing, hiring, and training employees, as well as preparing work schedules and assigning workers to their specific duties.

Because the retail trade industry provides goods and services directly to customers, the retail manager is ultimately responsible for complete customer satisfaction. Answering customers' complaints and inquiries, and ensuring that customers receive prompt service and quality goods, is the primary duty of retail managers.

As the size of the retail store and the types of goods and services increase, retail managers increasingly specialize in one department or one aspect of merchandising. Larger organizations tend to have many layers of management. Similar to other industries, supervisory level retail managers usually report to their mid-level counterparts who, in turn, report to top-level managers. Small stores and stores that carry specialized merchandise typically have fewer levels

of management.

Supervisory level retail managers, often known as department managers, provide the day-to-day management of individual departments such as shoe, cosmetic, or housewares in large department stores, produce and meat in grocery stores, and service and sales in automotive dealerships. Department managers commonly are found in large retail stores. These managers establish and implement policies, goals, objectives, and procedures for their specific department; coordinate activites with other department heads; and strive for a smooth operation within their specific department. They supervise employees who price and ticket goods and place them on display, clean and organize shelves, displays, and inventory in stockrooms, and inspect merchandise to ensure that none is outdated. Department managers also may greet and assist customers to improve customer services and promote sales and good public relations. Department managers also review inventory and sales records, develop merchandising techniques, and coordinate sales promotions.

Mid-level retail managers, often called store managers, have broader responsibilities than supervisory level managers. Mid-level managers set sales goals, create budgets, develop procedures to direct and improve customer services, define department managers' responsibilities, and delegate authority within their store. Store managers coordinate different departments so that sales promotions and procedures are consistent throughout the store. They also may open and close the store, and may even make bank deposits. Some coordinate other activities within the store, such as safety and security, maintenance and cleaning, and meetings, seminars, and programs for employees. Store managers usually are responsible for implementation and compliance with corporate programs and rules within the store. They plan merchandise demonstrations and coordinate marketing events to promote products. They may implement employee incentive programs, including bonuses and awards, that increase motivation and morale and inspire good customer service. Store managers may review purchasing and sales records and meet with department heads to determine when to restock inventory or announce price-slashing sales. Store managers meet frequently with top management and other store employees to keep the lines of communication open.

Senior level retail managers, commonly known as district, area, or regional managers in large chains and franchises, are covered in the *Handbook* statement on general managers and top executives. District managers coordinate sales and distribution operations for a number of stores and franchises in a specific area or district of the country, and choose the wholesalers that can supply the highest quality goods to the stores. They define store managers' responsibilities and regularly meet with them to make sure that stores attain sales and profit goals, that merchandising and pricing techniques are up to date and comply with company procedures, and that the store and specific departments are clean and follow company guidelines. In order to evaluate the productivity of each individual store, district managers make on-site visits, and often report back to the top executive of the company.

Working Conditions

Most retail managers have offices within the store itself, while senior level managers may have offices at corporate headquarters. Though much of their time is spent in the office completing merchandise orders or arranging work schedules, for example, a large portion of a retail manager's time is spent on the sales floor of the store.

Work hours vary greatly among retail establishments. The work schedule of retail managers usually depends on consumers' needs. Most retail managers work around 40 hours a week, but longer hours are common, especially during holidays, busy shopping hours and seasons, sales, and store inventory. Retail managers are expected to work evenings and weekends, but usually are compensated by getting a weekday off. Hours can change weekly, and managers sometimes may have to report to work on short notice, especially when many employees are absent. Independent owners can set their own schedules, but hours must be convenient to their customers.

Mid- and senior level managers' jobs often require substantial travel. District managers travel frequently between national head-quarters and regional and local store branches. Store managers travel to vendors' offices and trade shows to order goods. Meetings and conferences sponsored by industries, vendors, and associations occur regularly, and provide opportunities to meet with peers and keep abreast of trends in consumer preferences.

Employment

Managers who work in retail trade held about 1,070,000 wage and salary jobs in 1992. About 175,000—primarily owners of small retail establishments—were self-employed. Managers are found in



Customer service and satisfaction are important duties of retail managers.

every retail trade industry—eating and drinking places, grocery stores, department stores, clothing and shoe stores, automotive dealers, and furniture stores are among the largest industries. The accompanying table shows the distribution of wage and salary employment by industry.

Table 1. Distribution of managers, selected retail establishments, 1992

Total (percent)	100.0
Eating and drinking places	34.7
General merchandise stores	9.3
Grocery stores	9.0
Department stores	7.6
Miscellaneous shopping goods stores	6.0
Motor vehicle dealers	5.9
Building material and garden supplies	5.7
Clothing and accessories	4.3
Furniture and home furnishings stores	3.8
Appliance, radio, TV, and music stores	3.1
Auto and home supply stores	2.3
Gasoline service stations	2.2
Food stores, other than grocery stores	1.6
Shoe stores	1.2
Other	3.3
SOURCE: Bureau of Labor Statistics	

Training, Other Qualifications, and Advancement

Knowledge of management principles and practices is the essential requirement for a management position in retail trade, and such knowledge usually is acquired through work experience. Most managers begin their careers on the sales floor as a sales clerk, cashier, customer service worker, or a food and beverage service worker, for example. In these positions they learn merchandising, customer service, and the basic policies and procedures of the store.

Those individuals who display leadership skills, self-confidence, motivation, and decisiveness become candidates for promotion to assistant manager or department manager, depending on the size and structure of the store. In many retail establishments, managers are promoted from within the company. In small retail establishments, where the number of positions is limited, advancement to a

higher management position may come slowly. Larger establishments have more extensive career ladder programs and offer managers the opportunity to transfer to another store in the chain or to the central office if an opening occurs. Promotion may occur more quickly in larger establishments, but relocation every several years may be necessary for advancement. Purchasers and buyers (discussed elsewhere in the Handbook), who purchase merchandise directly from distributors for resale, is one career step within the central office. Other positions within the central office include marketing, advertising, and public relations managers, who coordinate marketing plans, monitor sales, and propose advertisments and promotions, and purchasing agents and managers, who purchase goods and supplies for their organization. (Both occupations are covered in other Handbook statements.)

Training varies from store to store. Many national chains have formal training programs for management trainees, which include both classroom and in-store training. Training may last from 1 week to 1 year or more, as many retail organizations require their trainees to gain experience during all shopping seasons. Other retail organizations may not have any formal training program at all.

Classroom training may include such topics as interviewing and customer service skills, and employee and inventory management and scheduling. Management trainees may be placed in one specific department while training on the job, or they may be rotated among several departments to gather a well-rounded knowledge of the store's operation. Training programs in franchises generally are extensive, covering all functions of the operation, including promotion, marketing, management, finance, purchasing, product preparation, human resource management, and compensation. College graduates usually directly enter management training programs.

The educational background of managers in retail trade varies widely. A high school diploma often is required, and a postsecondary degree is preferred for individuals who wish to advance in the profession. Though generally not required, postsecondary education is a sign of motivation and maturity, increasingly important qualities as the individual is promoted to more responsible positions. Regardless of the education received, business courses including accounting, administration, marketing, management, and sales, as well as courses in psychology, sociology, and communication, are helpful. Managers also must be computer literate as cash registers and inventory control systems become more computerized.

Most managers who have postsecondary education hold an associate or a bachelor's degree in liberal arts, social science, business, or management. Many postsecondary students participate in internship programs to gain retail experience. Such programs usually are planned between individual schools and retail firms.

Many managers who have worked in the retail industry for a long time open their own store. However, retail trade is highly competitive, and although many independent retail owners succeed, some fail to cover expenses and eventually go out of business. Retail owners need good business sense and strong customer service and public relations skills.

Retail managers must get along with all kinds of people. They need initiative, self-discipline, and the ability to organize and direct the work of others. Patience and a mild temperament are necessary when dealing with rude, angry, or demanding customers. Good judgment and decisiveness are necessary when reacting to competition from other stores. Retail managers also must be able to motivate subordinates and communicate clearly and persuasively with customers and other managers.

Job Outlook

Employment of salaried retail managers is expected to grow about as fast as the average for all occupations through the year 2005. Retail establishments are growing in number and size. However, similar to other industries, corporate downsizing and restructuring may temper demand for retail managers. In the face of intense competition, many firms are improving operating efficiency by using computerized registers and inventory control systems, also slowing growth of new retail management jobs.

Because retail managers comprise a large occupation, most job openings are expected to occur as experienced managers retire or stop working for other reasons. Many retail managers transfer to other occupations because of high pressure, long hours, and inability to meet sales quotas. Jobs in retail management vary greatly in earnings, weekly hours, number of employees supervised, and type of goods and services. Since most jobs in retail management do not require education beyond high school, competition is expected for jobs with the most attractive earnings and working conditions. Candidates who have retail experience will have the best opportunities.

Projected employment growth of retail managers reflects projected industry growth. For example, faster than average growth is expected in appliance, radio, television, and music stores, while average growth is expected in miscellaneous shopping goods stores. On the other hand, slower than average growth is expected in department stores, while employment of managers is expected to decline in gasoline service stations.

Earnings

Salaries of retail managers vary substantially, depending upon the level of responsibility, length of service, and type, size, and location of the firm.

According to a survey sponsored by the Association of Convenience Stores, the median salary for assistant store managers ranged between \$13,100 and \$14,300 a year in 1992, depending on the size of the organization. Store managers earned between \$18,400 and \$23,700; district managers, \$29,800 and \$62,700; and regional managers, \$47,000 and \$128,500.

Compensation systems vary by type of establishment and merchandise sold. Most managers receive a commission or a combination of salary and commission. Under a commission system, retail managers receive a percentage of department or store sales. These systems offer managers the opportunity to significantly increase their earnings, but they may find that their earnings depend on their ability to sell their product and the condition of the economy. Those managers who sell large amounts of merchandise often are rewarded with bonuses and awards, and receive recognition throughout the store or chain.

Retail managers receive typical benefits and, in some cases, stock options. In addition, retail managers generally are able to buy their store's merchandise at a discount, often from 10 to 40 percent below regular prices. In some cases, this privilege is extended to the employee's family as well.

Related Occupations

Retail managers serve customers, supervise workers, and direct and coordinate the operations of an establishment whose aim is to maximize profits and satisfy the customer. Others with similar responsibilities include managers in wholesale trade, hotels, banks, hospitals, law firms, and a wide range of other industries.

Sources of Additional Information

Information on employment opportunities for retail managers may be obtained from the employment offices of various retail establishments, or State employment service offices.

Information on educational programs for retail managers is available from:

REP American Management Association, 135 W. 50th St., New York, NY 10020.

General information on management careers in retail establishments is available from:

Provided in Proceedings of the Process of the Proce

Information on management careers in grocery stores, and schools offering related programs, is available from:

12 Food Marketing Institute, 800 Connecticut Ave. NW., Washington, DC 20006-2701

Information about management careers and training programs in the motor vehicle dealers industry is available from:

137 National Automotive Dealers Association, 8400 Westpark Dr., McLean, VA 22102.

Information about management careers in convenience stores is available from:

P National Association of Convenience Stores, 1605 King St., Alexandria, VA 22314.

Underwriters

(D.O.T. 169.267-046)

Nature of the Work

Insurance companies assume billions of dollars in risks each year by writing policies that transfer the risk of loss from their policyholders to themselves. Underwriters appraise and select the risks their company will insure. An insurance company may lose business to competitors if the underwriter appraises risks too conservatively, or it may have to pay more claims if the underwriting actions are too liberal.

Underwriters decide whether an applicant for insurance is an acceptable risk. They analyze information in insurance applications, reports from loss control consultants, medical reports, and actuarial studies—reports that describe the probability of insured loss. They then decide whether to issue a policy and may outline the terms of the contract, including the amount of the premium. Underwriters frequently correspond with policyholders, agents, and managers about policy cancellations or other matters. On rare occasions, they accompany sales workers on appointments with prospective customers. (Life insurance agents and brokers are increasingly called "life underwriters;" they are included in the statement on insurance agents and brokers elsewhere in the *Handbook*.)

Most underwriters specialize in one of three major categories of insurance: Life, property and casualty, or health. They further specialize in group or individual policies. Property and casualty underwriters specialize by type of risk insured, such as fire, homeowner, automobile, marine, property, or workers' compensation. In cases where casualty companies insure in a single "package" policy, covering various types of risks, the underwriter must be familiar with different lines of insurance. Some underwriters, called commercial account underwriters, handle business insurance exclusively. They often evaluate a firm's entire operation in appraising its insurance application.

An increasing proportion of insurance sales are being made through group contracts. A standard group policy insures all persons in a specified group through a single contract at uniform premium rates, generally for life or health insurance protection. The group underwriter analyzes the overall composition of the group to be sure that the total risk is not excessive. Another type of group policy provides members of a group—a labor union, for example—with individual policies reflecting their needs. These generally are casualty policies, such as those covering automobiles. The casualty underwriter analyzes the application of each group member and makes individual appraisals. Some group underwriters meet with



Underwriters frequently correspond with policyholders, agents, and managers about policy cancellations or other matters.

union or employer representatives to discuss the types of policies available to their group.

Working Conditions

Underwriters have desk jobs that require no unusual physical activity. Their offices generally are comfortable and pleasant. Although some overtime may be required, the normal workweek is 35-40 hours. Underwriters occasionally may attend meetings away from home for several days. Construction and marine underwriters often travel to inspect work sites and assess risks.

Employment

Insurance underwriters held about 100,000 jobs in 1992. The following tabulation shows the percent distribution of wage and salary jobs by industry.

Total	100
Insurance carriers	61
Fire, marine, and casualty insurance	40
Life insurance	14
Medical service plans and health insurance	4
Pension funds and miscellaneous insurance	3
Insurance agents, brokers, and service	32
Banks and credit agencies	5
Other industries	2

The majority of underwriters worked for insurance companies (or carriers). Most of the remaining underwriters worked throughout the country in independent agencies—firms which represent one or more insurance companies—and brokers—firms which may deal with any insurance company but represent none. Small numbers of underwriters worked for banks, mortgage companies, and real estate firms.

Underwriters in the life insurance industry are most likely to work in an insurance company's home office. In some large agencies, underwriters help life insurance agents determine if the risk will be accepted or rejected by the home office. However, most regional life insurance offices deal predominantly with sales, not underwriting. Property and casualty underwriters also work in home offices, but more work for agencies or regional branch offices, where they have the authority to underwrite risks and determine an appropriate rating without consulting the home office.

Training, Other Qualifications, and Advancement

For beginning underwriting jobs, many large insurance companies prefer college graduates who have a degree in business administration or finance, with courses or experience in accounting. However, a degree in almost any field plus courses in business law and accounting provide a good general background. Basic familiarity with computers is also needed.

Some companies also hire persons without a college degree for underwriter trainee positions. In addition, some high school graduates who begin as underwriting clerks may be trained as underwriters after they demonstrate an aptitude for the work. In the property and casualty industry, ratings clerks sometimes advance to underwriter jobs through their skill and experience in researching risk and setting rates.

Underwriter trainee or assistant underwriter is the typical entry-level position for this occupation. Beginners may help collect information on applicants and evaluate routine applications under the close supervision of an experienced risk appraiser. Property and casualty trainees study claim files to become familiar with factors associated with certain types of losses. Many larger insurers offer a training program, lasting from a few months to a year, that combines study with work. As trainees develop the necessary judgment, they are assigned policy applications that are more complex and have a greater face value. These often require the use of computers for more efficient processing.

Continuing education is necessary for advancement. Insurance companies generally pay tuition for underwriting courses that their trainees successfully complete; some also offer salary incentives. Independent study programs for experienced property and casualty underwriters are also available. The American Institute for

Chartered Property Casualty Underwriters offers the designations "Associate in Underwriting (AU)," and "Chartered Property Casualty Underwriter (CPCU)." Earning the AU designation usually requires a year and a half and the completion of an examination covering course material. Earning the more advanced CPCU designation generally takes about 5 years, and requires passing 10 examinations covering such subjects as personal and commercial risk management, business law, accounting, finance, economics, and ethics. Although CPCU's may be underwriters, the CPCU is intended for prospective managers. An AU designation is sufficient for a career in underwriting.

Underwriting can be a satisfying career for persons who like working with detail and enjoy analyzing information. In addition, underwriters must possess good judgment in order to make sound decisions. They must also be imaginative and aggressive, especially when they have to obtain information from outside sources.

Experienced underwriters who complete courses of study may advance to chief underwriter or underwriting manager. Some underwriting managers are promoted to senior managerial jobs.

Job Outlook

Employment of underwriters is expected to increase about as fast as the average for all occupations through the year 2005. Most job openings, however, are expected to result from the need to replace underwriters who transfer to other occupations or stop working altogether.

A number of factors underlie the continuing need for underwriters. Shifts in the age distribution of the population will result in an increase in the number of people who assume career and family responsibilities. People in this group have the greatest need for life and property and casualty insurance. A growing demand for insurance coverage for working women also is expected. In addition, expanding long-term healthcare and pension benefits for retirees—an increasing proportion of the population—will increase underwriting requirements. Growing concerns for financial security and liability should also contribute to demand for more insurance protection for homes, automobiles, pleasure craft, and other valuables. New or expanding businesses will need protection for new plants and equipment, product liability, and insurance for workers' compensation and employee benefits.

On the other hand, the trend toward self-insurance is expected to lower the demand for some property and casualty underwriters. Businesses who self-insure set a rate for their own company and pay premiums into a reserve fund. Additionally, many property and casualty companies are foregoing personal lines of insurance—especially automobile—and concentrating on commercial lines of business. Demand for health insurance underwriters should be lower if

national health insurance legislation reduces insurers' freedom to refuse coverage to high-risk individuals. Underwriters specializing in one particular area of insurance may find it difficult to transfer to another type of insurance if their jobs are threatened.

Since insurance is usually regarded as a necessity, regardless of economic conditions, underwriters are unlikely to be laid off because of a recession.

Earnings

The following tabulation shows the median salaries of casualty and property underwriters in 1991, according to a survey by the Alliance of American Insurers in collaboration with the American Insurance Association and the National Association of Independent Insurers.

Underwriters of personal lines	
Entry level	\$25,000
Intermediate level	32,200
Senior level	40,400
Supervisor	45,300
Manager	61,000
Underwriters of commercial lines	
Entry level	\$28,000
Intermediate level	32,800
Senior level	40,600
Supervisor	45,500
Manager	61,000

Most insurance companies have liberal vacation policies and other employee benefits. Almost all insurance companies provide employer-financed group life and retirement plans.

Related Occupations

Underwriters make decisions on the basis of financial data. Other workers with the same type of responsibility include auditors, budget analysts, financial advisors, loan officers, credit managers, real estate appraisers, and risk managers.

Sources of Additional Information

General information about a career as an insurance underwriter is available from the home offices of many life insurance and property and liability insurance companies. Information about the insurance business in general and the underwriting function in particular also may be obtained from:

Society of Chartered Property and Casualty Underwriters, Kahler Hall, P.O. Box 3009, 720 Providence Rd., Malvern, PA 19355-0709.

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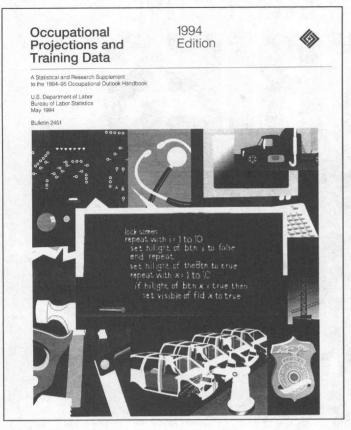
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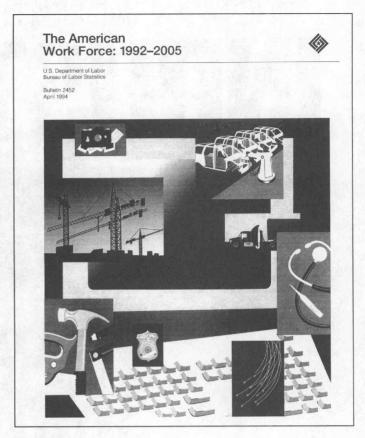
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BLS Bulletin 2452

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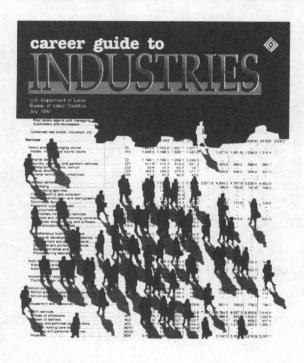
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