

Data Entry and Information Processing Workers

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Significant Points

- Workers can acquire their skills through high schools, community colleges, business schools, or self-teaching aids such as books, tapes, or Internet tutorial applications.
- Overall employment is projected to decline due to the proliferation of personal computers and other technologies; however, the need to replace workers who leave this large occupation each year should produce many job openings.
- Those with expertise in appropriate computer software applications should have the best job prospects.

Nature of the Work

Organizations need to process a rapidly growing amount of information. Data entry and information processing workers help ensure this work is handled smoothly and efficiently. By typing texts, entering data into a computer, operating a variety of office machines, and performing other clerical duties, these workers help organizations keep up with the rapid changes of the “Information Age.”

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

Most keyboarding is now done on word processing equipment—usually a personal computer or part of a larger computer system—which normally includes a keyboard, video display terminal, and printer, and may have “add-on” capabilities such as optical character recognition readers. *Word processors* use this equipment to record, edit, store, and revise letters, memos, reports, statistical tables, forms, and other printed materials. Although it is becoming less common, some word processing workers are employed in centralized word processing teams that handle the transcription and typing for several departments.

In addition to the duties mentioned above, word processors and typists often perform other office tasks, such as answering telephones, filing, and operating copiers or other office machines. Job titles of these workers often vary to reflect these duties. Clerk typists, for example, combine typing with filing, sorting mail, answering telephones, and other general office work. Notereaders transcribe stenotyped notes of court proceedings into standard formats.

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



Data entry and information processing workers may transcribe Braille for the visually impaired.

Keyers use various types of equipment to enter data. Many keyers use a machine that converts the information they type to magnetic impulses on tapes or disks for entry into a computer system. Others prepare materials for printing or publication by using data entry composing machines. Some keyers operate online terminals or personal computers. Data entry keyers increasingly also work with nonkeyboard forms of data entry such as scanners and electronically transmitted files. When using these new character recognition systems, data entry keyers often enter only those data which cannot be recognized by machines. In some offices, keyers also operate computer peripheral equipment such as printers and tape readers, act as tape librarians, and perform other clerical duties.

Working Conditions

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

Employment

Data entry and information processing workers held about 806,000 jobs in 2000 and were employed in every sector of the economy; 509,000 were data entry keyers and 297,000 were word processors and typists. Some workers telecommute by working from their homes on personal computers linked by telephone lines to those in the main office. This enables them to type material at home while still being able to produce printed copy in their offices.

About 1 out of 3 data entry and information processing workers held jobs in firms providing business services, including temporary help, word processing, and computer and data processing. Nearly 1 out of 5 worked in Federal, State, and local government agencies.

Training, Other Qualifications, and Advancement

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

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

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

Job Outlook

Overall employment of data entry and information processing workers is projected to decline through 2010. Nevertheless, the need to replace those who transfer to other occupations or leave this large occupation for other reasons will produce numerous job openings each year. Job prospects will be most favorable for those with the best technical skills—in particular, expertise in appropriate computer software applications. Data entry and information processing workers must be willing to continuously upgrade their skills to remain marketable.

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

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

In addition to technology, employment of data entry and information processing workers will be adversely affected as businesses increasingly contract out their work. Many organizations have reduced or even eliminated permanent in-house staff, for example, in favor of temporary-help and staffing services firms. Some large data entry and information processing firms increasingly employ workers in nations with low wages to enter data. As international trade barriers continue to fall and telecommunications technology

improves, this transfer will mean reduced demand for data entry keyers in the United States.

Earnings

Median annual earnings of word processors and typists in 2000 were \$24,710. The middle 50 percent earned between \$20,070 and \$29,500. The lowest 10 percent earned less than \$16,410, while the highest 10 percent earned more than \$35,410. The salaries of these workers vary by industry and by region. In 2000, median annual earnings in the industries employing the largest numbers of word processors and typists were:

Local government	\$25,710
State government	24,850
Federal Government	23,890
Elementary and secondary schools	23,300
Personnel supply services	22,720

Median annual earnings of data entry keyers in 2000 were \$21,300. The middle 50 percent earned between \$17,850 and \$25,820. The lowest 10 percent earned less than \$15,140, and the highest 10 percent earned more than \$30,910. In 2000, median annual earnings in the industries employing the largest numbers of data entry keyers were:

Federal Government	\$27,260
Accounting, auditing, and bookkeeping	22,310
Computer and data processing services	20,480
Commercial banks	20,410
Personnel supply services	20,070

In the Federal Government, clerk-typists and data entry keyers without work experience started at \$16,015 a year in 2001. Beginning salaries were slightly higher in selected areas where the prevailing local pay level was higher. The average annual salary for all clerk-typists in the Federal Government was 24,934 in 2001.

Related Occupations

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

Sources of Additional Information

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

Desktop Publishers

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Significant Points

- Desktop publishers rank among the 10 fastest growing occupations.
- Most jobs are in firms that handle commercial or business printing, and in newspaper plants.
- Although formal training is not always required, those with certification or degrees will have the best job opportunities.