
Communications Equipment Operators

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Significant Points

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

Nature of the Work

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

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

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

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

When callers dial information, they usually reach a *directory assistance operator* who provides callers with information such as telephone numbers, addresses, and business listings. Most directory assistance operators work for telephone companies; increasingly, they also work for companies that provide business services. Automated systems now handle many of the functions once performed by directory assistance operators.

The systems prompt callers for a listing and may even connect the call after providing the telephone number. Directory assistance operators, however, are still needed to monitor many of the calls received by automated systems. The operators listen to recordings of the customer’s request and then key information into electronic directories to access the correct telephone numbers. Directory assistance operators also provide personal assistance to customers having difficulty using the automated system.

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

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

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

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

Telephone operators must be accessible to customers 24 hours a day; therefore, they work a variety of shifts. Some operators work split shifts, coming on duty during peak calling periods in the late morning and early evening and going off duty during the intervening hours. Telephone companies normally assign shifts by seniority, allowing the most experienced operators the first choice of schedules. As a result, entry-level operators may have less desirable schedules, including late evening, split-shift, and weekend work. However, companies may allow operators the flexibility to swap shifts with other operators. Telephone company operators may work overtime.



Switchboard operators direct calls within a business.

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

Training, Other Qualifications, and Advancement

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

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

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

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

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

Advancement. After 1 or 2 years on the job, communications equipment operators may advance to other positions within a company. Many switchboard and telephone operators enter clerical occupations, such as customer service representative, dispatcher, and receptionist, in which their operator experience is valuable. (See the *Handbook* sections on these occupations.) Telephone operators interested in more technical work may

train for positions in installing and repairing equipment. (See the sections of the *Handbook* on radio and telecommunications equipment installers and repairers, and line installers and repairers.) Promotion to supervisory positions is also possible.

Employment

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

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

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

Job Outlook

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

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

Developments in communications technologies—in particular, voice recognition systems—will continue to significantly reduce demand for communications equipment operators. Voice recognition technology allows automated telephone systems to recognize human speech. Callers speak directly to the system, which interprets the speech and then connects the call. Voice recognition systems do not require callers to input data through a telephone keypad so they are easier to use than touch-tone systems. Voice recognition systems are increasingly able to understand sophisticated vocabulary and grammatical structures; however, many companies will continue to employ operators so that those callers who do have problems can access a live employee if they desire.

Projections data from the National Employment Matrix

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

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

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

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

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

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

Earnings

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

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

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

Some telephone operators working at telephone companies are members of the Communications Workers of America or the International Brotherhood of Electrical Workers. For these operators, union contracts govern wage rates, wage increases, and the time required to advance from one pay step to the next.

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

Related Occupations

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

Sources of Additional Information

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