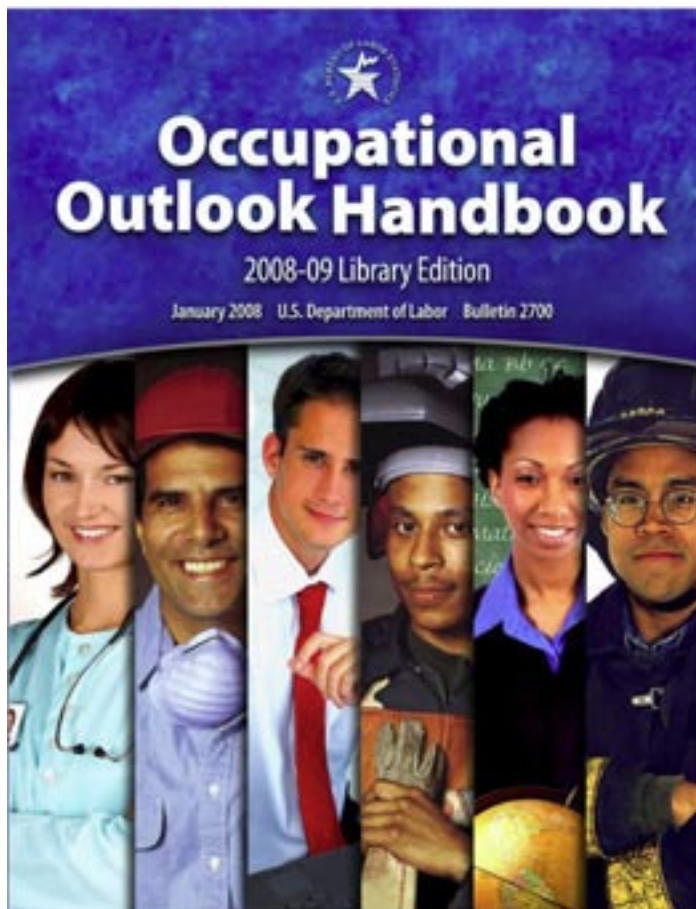


Service Occupations: Cleaning, Food, and Personal



Reprinted from the
Occupational Outlook Handbook, 2008-09 Edition

U.S. Department of Labor
Bureau of Labor Statistics



Occupations Included in this Reprint

- Animal care and service workers
- Barbers, cosmetologists, and other personal appearance workers
- Building cleaning workers
- Chefs, cooks, and food preparation workers
- Childcare workers
- Fitness workers
- Flight attendants
- Food and beverage serving and related workers
- Food service managers
- Gaming services occupations
- Grounds maintenance workers
- Personal and home care aides
- Pest control workers
- Recreation workers

Animal Care and Service Workers

(O*NET 39-2011.00, 39-2021.00)

Significant Points

- Animal lovers get satisfaction in this occupation, but the work can be unpleasant, physically and emotionally demanding, and sometimes dangerous.
- Most workers are trained on the job, but employers generally prefer to hire people who have experience with animals; some jobs require a bachelor's degree in biology, animal science, or a related field.
- Most positions will present good employment opportunities; however, keen competition is expected for jobs as zookeepers and marine mammal trainers.
- Earnings are relatively low.

Nature of the Work

Many people like animals. But, as pet owners can attest, taking care of them is hard work. Animal care and service workers—who include animal caretakers and animal trainers—train, feed, water, groom, bathe, and exercise animals and clean, disinfect, and repair their cages. They also play with the animals, provide companionship, and observe behavioral changes that could indicate illness or injury. Boarding kennels, pet stores, animal shelters, veterinary hospitals and clinics, stables, laboratories, aquariums and natural aquatic habitats, and zoological parks all house animals and employ animal care and service workers. Job titles and duties vary by employment setting.

Kennel attendants care for pets while their owners are working or traveling out of town. Beginning attendants perform basic tasks, such as cleaning cages and dog runs, filling food and water dishes, and exercising animals. Experienced attendants may provide basic animal healthcare, as well as bathe animals, trim nails, and attend to other grooming needs. Attendants who work in kennels also may sell pet food and supplies, assist in obedience training, help with breeding, or prepare animals for shipping.

Groomers are animal caretakers who specialize in grooming or maintaining a pet's appearance. Most groom dogs and a few groom cats. Some groomers work in kennels, veterinary clinics, animal shelters, or pet-supply stores. Others operate their own grooming business, typically at a salon, or increasingly, by making house calls. Such mobile services are growing rapidly as they offer convenience for pet owners, flexibility of schedules for groomers, and minimal trauma for pets resulting from their being in unfamiliar surroundings. Groomers clean and sanitize equipment to prevent the spread of disease, maintain grooming equipment, and maintain a clean and safe environment for the animals. Groomers also schedule appointments, discuss pets' grooming needs with clients, and collect information on the pet's disposition and its veterinarian. Groomers often are the first to notice a medical problem, such as an ear or skin infection that requires veterinary care.

Grooming the pet involves several steps: an initial brush-out is followed by a first clipping of hair or fur using electric clip-

pers, combs, and grooming shears; the groomer then cuts the nails, cleans the ears, bathes, and blow-dries the animal, and ends with a final clipping and styling.

Animal caretakers in animal shelters perform a variety of duties and work with a wide variety of animals. In addition to attending to the basic needs of the animals, caretakers at shelters also must keep records of the animals received and discharged and any tests or treatments done. Some vaccinate newly admitted animals under the direction of a veterinarian or veterinary technician, and euthanize (painlessly put to death) seriously ill, severely injured, or unwanted animals. Animal caretakers in animal shelters also interact with the public, answering telephone inquiries, screening applicants for animal adoption, or educating visitors on neutering and other animal health issues.

Grooms, or caretakers, care for horses in stables. They saddle and unsaddle horses, give them rubdowns, and walk them to cool them off after a ride. They also feed, groom, and exercise the horses; clean out stalls and replenish bedding; polish saddles; clean and organize the tack (harness, saddle, and bridle) room; and store supplies and feed. Experienced grooms may help train horses.

In zoos, animal care and service workers, called *keepers*, prepare the diets and clean the enclosures of animals, and sometimes assist in raising them when they are very young. They watch for any signs of illness or injury, monitor eating patterns or any changes in behavior, and record their observations. Keepers also may answer questions and ensure that the visiting public behaves responsibly toward the exhibited animals. Depending on the zoo, keepers may be assigned to work with a broad group of animals such as mammals, birds, or reptiles, or they may work with a limited collection of animals such as primates, large cats, or small mammals.

Animal trainers train animals for riding, security, performance, obedience, or assisting people with disabilities. Animal trainers do this by accustoming the animal to human voice and contact and conditioning the animal to respond to commands. The three most commonly trained animals are dogs, horses, and marine mammals, including dolphins. Trainers use several techniques to help them train animals. One technique, known as a bridge, is a stimulus that a trainer uses to communicate the precise moment an animal does something correctly. When the animal responds correctly, the trainer gives positive reinforcement in a variety of ways: food, toys, play, rubdowns, or speaking the word "good." Animal training takes place in small steps and often takes months and even years of repetition. During the conditioning process, trainers provide animals with mental stimulation, physical exercise, and husbandry care. A relatively new form of training teaches animals to cooperate with workers giving medical care. Animals learn "veterinary" behaviors, such as allowing and even cooperating with the collection of blood samples; physical, x-ray, ultrasonic, and dental exams; physical therapy; and the administration of medicines and replacement fluids.

Training also can be a good tool for facilitating the relocation of animals from one habitat to another, easing, for example, the process of loading horses on trailers. Trainers often work in competitions or shows, such as circuses or marine

parks, aquariums, animal shelters, dog kennels and salons, or horse farms. Trainers in shows work to display the talent and ability of an animal, such as a dolphin, through interactive programs to educate and entertain the public.

In addition to their hands-on work with the animals, trainers often oversee other aspects of animals' care, such as preparing their diet and providing a safe and clean environment and habitat.

Work environment. People who love animals get satisfaction from working with and helping them. However, some of the work may be unpleasant, physically and emotionally demanding, and sometimes dangerous. Most animal caretakers and service workers have to clean animal cages and lift, hold, or restrain animals, risking exposure to bites or scratches. Their work often involves kneeling, crawling, repeated bending, and lifting heavy supplies like bales of hay or bags of feed. Animal caretakers must take precautions when treating animals with germicides or insecticides. They may work outdoors in all kinds of weather, and the work setting can be noisy. Caretakers of show and sports animals travel to competitions.

Animal caretaker and service workers who witness abused animals or who assist in euthanizing unwanted, aged, or hopelessly injured animals may experience emotional distress. Those working for private humane societies and municipal animal shelters often deal with the public, some of whom might react with hostility to the implication that they are neglecting or abusing their pets. Such workers must maintain a calm and professional demeanor while helping to enforce the laws regarding animal care.

Animal care and service workers often work irregular hours. Most animals are fed every day, so caretakers often work weekend and holiday shifts. Some zoo animals skip one meal a week to mimic their lives in the wild. In some animal hospi-



Most pet groomers work in kennels, veterinary clinics, or pet supply stores, but an increasing number operate their own salon or make house calls.

tals, research facilities, and animal shelters, an attendant is on duty 24 hours a day, which means night shifts.

Training, Other Qualifications, and Advancement

On-the-job training is the most common way animal caretakers and service workers learn their work; however, employers generally prefer to hire people who have experience with animals. Some preparatory programs are available for specific types of caretakers, such as groomers.

Education and training. Animal trainers often need a high school diploma or GED equivalent. Some animal training jobs may require a bachelor's degree and additional skills. For example, marine mammal trainers usually need a bachelor's degree in biology, marine biology, animal science, psychology, or a related field. An animal health technician degree also may qualify trainers for some jobs.

Most equine trainers learn their trade by working as a groom at a stable. Some study at an accredited private training school. Because large animals are involved, most horse-training jobs have minimum weight requirements for candidates.

Many dog trainers attend workshops and courses at community colleges and vocational schools. Topics include basic study of canines, learning theory of animals, teaching obedience cues, problem solving methods, and safety. Many also offer business training.

Many zoos require their caretakers to have a bachelor's degree in biology, animal science, or a related field. Most require experience with animals, preferably as a volunteer or paid keeper in a zoo.

Most pet groomers learn their trade by completing an informal apprenticeship, usually lasting 6 to 10 weeks, under the guidance of an experienced groomer. Prospective groomers also may attend one of the 52 State-licensed grooming schools throughout the country, with programs varying in length from 2 to 18 weeks. Beginning groomers often start by taking on one duty, such as bathing and drying the pet. They eventually assume responsibility for the entire grooming process, from the initial brush-out to the final clipping.

Animal caretakers in animal shelters are not required to have any specialized training, but training programs and workshops are available through the Humane Society of the United States, the American Humane Association, and the National Animal Control Association. Workshop topics include cruelty investigations, appropriate methods of euthanasia for shelter animals, proper guidelines for capturing animals, techniques for preventing problems with wildlife, and dealing with the public.

Beginning animal caretakers in kennels learn on the job and usually start by cleaning cages and feeding and watering animals.

Certification and other qualifications. Certifications are available in many animal service occupations. For dog trainers, certification by a professional association or one of the hundreds of private vocational or State-approved trade schools can be advantageous. The National Dog Groomers Association of America offers certification for master status as a groomer. The American Boarding Kennels Association offers a three-stage, home-study program for individuals interested in pet care.

Those who complete the third stage and pass oral and written examinations become Certified Kennel Operators (CKO).

All animal caretakers and service workers need patience, sensitivity, and problem solving ability. They also need tact and communication skills. This is particularly true for those in shelters, who often deal with individuals who abandon their pets. The ability to handle emotional people is vital for workers at shelters.

Animal trainers especially need problem-solving skills and experience in animal obedience. Successful marine mammal trainers should also have good public speaking skills as seminars and presentations are a large part of the job. Usually 4 to 5 trainers work with a group of animals at one time, therefore, each trainer should be able to work as part of a team. Marine mammal trainers must also be good swimmers; certification in SCUBA is a plus.

Advancement. With experience and additional training, caretakers in animal shelters may become adoption coordinators, animal control officers, emergency rescue drivers, assistant shelter managers, or shelter directors. Pet groomers who work in large retail establishments or kennels may, with experience, move into supervisory or managerial positions. Experienced groomers often choose to open their own salons. Advancement for kennel caretakers takes the form of promotion to kennel supervisor, assistant manager, and manager; those with enough capital and experience may open up their own kennels. Zookeepers may advance to senior keeper, assistant head keeper, head keeper, and assistant curator, but very few openings occur, especially for the higher-level positions.

Employment

Animal caretakers and service workers held 200,000 jobs in 2006. Over 3 out of 4 worked as nonfarm animal caretakers; the remainder worked as animal trainers. Nonfarm animal caretakers often worked in boarding kennels, animal shelters, stables, grooming shops, pet stores, animal hospitals, and veterinary offices. A significant number of caretakers worked for animal humane societies, racing stables, dog and horse race-track operators, zoos, theme parks, circuses, and other amusement and recreations services.

Employment of animal trainers is concentrated in animal services that specialize in training and in commercial sports, where they train racehorses and dogs. About 57 percent of animal trainers were self-employed.

Job Outlook

Because many workers leave this occupation each year, there will be good job opportunities for most positions. Faster-than-

average employment growth also will add to job openings, in addition to replacement needs.

Employment change. Employment of animal care and service workers is expected to grow 19 percent over the 2006-16 decade, faster than the average for all occupations. The companion pet population, which drives employment of animal caretakers in kennels, grooming shops, animal shelters, and veterinary clinics and hospitals, is expected to increase. Pet owners—including a large number of baby boomers, whose disposable income is expected to increase as they age—are expected to increasingly purchase grooming services, daily and overnight boarding services, training services, and veterinary services, resulting in more jobs for animal care and service workers. As more pet owners consider their pets part of the family, demand for luxury animal services and the willingness to spend greater amounts of money on pets should continue to grow. Demand for marine mammal trainers, on the other hand, should grow slowly.

Demand for animal care and service workers in animal shelters is expected to grow as communities increasingly recognize the connection between animal abuse and abuse toward humans, and continue to commit private funds to animal shelters, many of which are working hand-in-hand with social service agencies and law enforcement teams.

Job prospects. Due to employment growth and the need to replace workers who leave the occupation, job opportunities for most positions should be good. The need to replace workers leaving the field will create the overwhelming majority of job openings. Many animal caretaker jobs require little or no training and have flexible work schedules, making them suitable for people seeking a first job or for temporary or part-time work. The outlook for caretakers in zoos and aquariums, however, is not favorable due to slow job growth and keen competition for the few positions.

Prospective mammal trainers will face keen competition as the number of applicants greatly exceeds the number of available positions. Prospective horse trainers should anticipate an equally challenging labor market as the number of entry-level positions is limited. Dog trainers, however, should experience conditions that are more favorable. Opportunities for dog trainers should be best in large metropolitan areas.

Job opportunities for animal care and service workers may vary from year to year because the strength of the economy affects demand for these workers. Pet owners tend to spend more on animal services when the economy is strong.

Earnings

Earnings are relatively low. Median hourly earnings of nonfarm animal caretakers were \$8.72 in May 2006. The middle

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Animal care and service workers	39-2000	200,000	238,000	39,000	19
Animal trainers.....	39-2011	43,000	53,000	9,800	23
Nonfarm animal caretakers.....	39-2021	157,000	185,000	29,000	18

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*.

50 percent earned between \$7.50 and \$10.95. The bottom 10 percent earned less than \$6.56, and the top 10 percent earned more than \$14.64. Median hourly earnings in the industries employing the largest numbers of nonfarm animal caretakers in May 2006 were:

Spectator sports	\$9.38
Other personal services	8.78
Social advocacy organizations	8.31
Other professional, scientific, and technical services	8.23
Veterinary services	8.23
Other miscellaneous store retailers	8.22

Median hourly earnings of animal trainers were \$12.65 in May 2006. The middle 50 percent earned between \$9.11 and \$17.39. The lowest 10 percent earned less than \$7.66, and the top 10 percent earned more than \$22.42.

Related Occupations

Others who work extensively with animals include farmers, ranchers, and agricultural managers; agricultural workers; veterinarians; veterinary technologists and technicians; veterinary assistants; and biological scientists.

Sources of Additional Information

For career information and information on training, certification, and earnings of the related occupation of animal control officers, contact:

► National Animal Control Association, P.O. Box 1480851, Kansas City, MO 64148-0851.

Internet: <http://www.nacanet.org>

For information on becoming an advanced pet care technician at a kennel, contact:

► American Boarding Kennels Association, 1702 East Pikes Peak Ave., Colorado Springs, CO 80909.

Internet: <http://www.abka.com/abka>

For general information on pet grooming careers, including certification information, contact:

► National Dog Groomers Association of America, P.O. Box 101, Clark, PA 16113.

Internet: <http://www.nationaldoggroomers.com>

Barbers, Cosmetologists, and Other Personal Appearance Workers

(O*NET 39-5011.00, 39-5012.00, 39-5091.00, 39-5092.00, 39-5093.00, 39-5094.00)

Significant Points

- A State license is required for barbers, cosmetologists, and most other personal appearance workers, although qualifications vary by State.
- About 46 percent of workers are self employed; many also work flexible schedules.

Nature of the Work

Barbers and cosmetologists focus on providing hair care services to enhance the appearance of consumers. Other personal appearance workers, such as manicurists and pedicurists, shampooers, theatrical and performance makeup artists, and skin care specialists provide specialized beauty services that help clients look and feel their best.

Barbers cut, trim, shampoo, and style hair mostly for male clients. They also may fit hairpieces and offer scalp treatments and facial shaving. In many States, barbers are licensed to color, bleach, or highlight hair and to offer permanent-wave services. Barbers also may provide skin care and nail treatments.

Hairdressers, hairstylists, and cosmetologists offer a wide range of beauty services, such as shampooing, cutting, coloring, and styling of hair. They may advise clients on how to care for their hair at home. In addition, cosmetologists may be trained to give manicures, pedicures, and scalp and facial treatments; provide makeup analysis; and clean and style wigs and hairpieces.

A number of workers offer specialized services. *Manicurists and pedicurists*, called *nail technicians* in some States, work exclusively on nails and provide manicures, pedicures, polishing, and nail extensions to clients. Another group of specialists is *skin care specialists*, or *estheticians*, who cleanse and beautify the skin by giving facials, full-body treatments, and head and neck massages as well as apply makeup. They also may remove hair through waxing or, if properly trained, laser treatments. *Theatrical and performance makeup artists*, apply makeup to enhance performing artists' appearance for movie, television, or stage performances. Finally, in larger salons, *shampooers* specialize in shampooing and conditioning hair.

In addition to working with clients, personal appearance workers may keep records of hair color or skin care regimens used by their regular clients. A growing number actively sell hair, skin, and nail care products. Barbers, cosmetologists, and other personal appearance workers who operate their own salons have managerial duties that may include hiring, supervising, and firing workers, as well as keeping business and inventory records, ordering supplies, and arranging for advertising.

Work environment. Most full-time barbers, cosmetologists, and other personal appearance workers put in a 40-hour week, but longer hours are common, especially among self-employed



Manicurists and pedicurists rank among the fastest growing occupations.

workers. Work schedules may include evenings and weekends, the times when beauty salons and barbershops are busiest. In 2006, about 31 percent of cosmetologists and 19 percent of barbers worked part time, and 16 percent of cosmetologists and 11 percent of barbers had variable schedules.

Barbers, cosmetologists, and other personal appearance workers usually work in clean, pleasant surroundings with good lighting and ventilation. Good health and stamina are important, because these workers are on their feet for most of their shift. Prolonged exposure to some hair and nail chemicals may cause irritation, so protective clothing, such as plastic gloves or aprons, may be worn.

Training, Other Qualifications, and Advancement

All States require barbers, cosmetologists, and other personal appearance workers to be licensed, with the exceptions of shampooers and makeup artists. To qualify for a license, most job seekers are required to graduate from a State-licensed barber or cosmetology school.

Education and training. A high school diploma or GED is required for some personal appearance workers in some States. In addition, most States require that barbers and cosmetologists complete a program in a State-licensed barber or cosmetology school. Programs in hairstyling, skin care, and other personal appearance services can be found in both high schools and in public or private postsecondary vocational schools.

Full-time programs in barbering and cosmetology usually last 9 months and may lead to an associate degree, but training for manicurists and pedicurists and skin care specialists requires significantly less time. Makeup artists can attend schools that specialize in this subject, but it is not required. Shampooers generally do not need formal training. Most professionals take advanced courses in hairstyling or other personal appearance services to keep up with the latest trends. They also may take courses in sales and marketing.

During their first weeks on the job, new workers may be given relatively simple tasks. Once they have demonstrated their skills, they are gradually permitted to perform more complicated procedures, such as coloring hair. As they continue to work in the field, more training usually is required to help workers learn the techniques particular to each salon and to build on the basics learned in cosmetology school. Personal appearance workers attend training at salons, cosmetology schools, or industry trade shows throughout their careers.

Licensure. All States require barbers, cosmetologists, and other personal appearance workers to be licensed, with the exceptions of shampooers and makeup artists. Qualifications for a license vary by State, but generally a person must have a high school diploma or GED, be at least 16 years old, and have graduated from a State-licensed barber or cosmetology school. After graduating from a State approved training program, students take a State licensing examination. The exam consists of a written test and, in some cases, a practical test of styling skills or an oral examination. In many States, cosmetology training may be credited toward a barbering license, and vice versa, and a few States combine the two licenses. Most States require separate licensing examinations for manicurists, pedicurists, and skin care specialists.

Some States have reciprocity agreements that allow licensed barbers and cosmetologists to obtain a license in a different State without additional formal training, but such agreements are uncommon. Consequently, persons who wish to work in a particular State should review the laws of that State before entering a training program.

Other qualifications. Successful personal appearance workers should have an understanding of fashion, art, and technical design. They also must keep a neat personal appearance and a clean work area. Interpersonal skills, image, and attitude play an important role in career success. As client retention and retail sales become an increasingly important part of salons' revenue, the ability to be an effective salesperson becomes ever more vital for salon workers. Some cosmetology schools consider "people skills" to be such an integral part of the job that they require coursework in that area. Business skills are important for those who plan to operate their own salons.

Advancement. Advancement usually takes the form of higher earnings as barbers and cosmetologists gain experience and build a steady clientele. Some barbers and cosmetologists manage salons, lease booth space in salons, or open their own salons after several years of experience. Others teach in barber or cosmetology schools or provide training through vocational schools. Still others advance to become sales representatives, image or fashion consultants, or examiners for State licensing boards.

Employment

Barbers, cosmetologists, and other personal appearance workers held about 825,000 jobs in 2006. Of these, barbers and cosmetologists held 677,000 jobs, manicurists and pedicurists 78,000, skin care specialists 38,000, and shampooers 29,000. Theatrical and performance makeup artists held 2,100 jobs.

Most of these workers are employed in beauty salons or barber shops, but they also are found in nail salons, day and resort spas, and nursing and other residential care homes. Nearly every town has a barbershop or beauty salon, but employment in this occupation is concentrated in the most populous cities and States. Theatrical and performance makeup artists work for movie and television studios, performing arts companies, and event promoters. Some apply makeup in retail stores.

About 46 percent of all barbers, cosmetologists, and other personal appearance workers are self-employed. Many of these workers own their own salon, but a growing number of the self-employed lease booth space or a chair from the salon's owner.

Job Outlook

Overall employment of barbers, cosmetologists, and other personal appearance workers is projected to grow slightly faster than the average for all occupations. Opportunities for entry level workers should be favorable, while job candidates at high-end establishments will face keen competition.

Employment change. Personal appearance workers will grow by 14 percent from 2006 to 2016, which is faster than the average for all occupations. This growth primarily will be a result of an increasing population and from the growing demand for personal appearance services, particularly skin care services.

Employment trends are expected to vary among the different occupational specialties. Employment of hairdressers, hairstyl-

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Personal appearance workers.....	39-5000	825,000	942,000	117,000	14
Barbers and cosmetologists.....	39-5010	677,000	755,000	77,000	11
Barbers.....	39-5011	60,000	61,000	600	1
Hairdressers, hairstylists, and cosmetologists.....	39-5012	617,000	694,000	77,000	12
Miscellaneous personal appearance workers.....	39-5090	148,000	187,000	39,000	27
Makeup artists, theatrical and performance.....	39-5091	2,100	3,000	900	40
Manicurists and pedicurists.....	39-5092	78,000	100,000	22,000	28
Shampooers.....	39-5093	29,000	33,000	3,900	13
Skin care specialists.....	39-5094	38,000	51,000	13,000	34

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*.

ists, and cosmetologists should increase by 12 percent because many now cut and style both men's and women's hair and because the demand for hair treatment by teens and aging baby boomers is expected to remain steady or even grow. As a result, fewer people are expected to go to barber shops and employment of barbers is expected to see relatively little change in employment.

Continued growth in the number of nail salons and full-service day spas will generate numerous job openings for manicurists, pedicurists, and skin care specialists. Employment of manicurists and pedicurists will grow by 28 percent, while employment of shampooers will increase by 13 percent. Estheticians and other skin care specialists will see large gains in employment, and are expected to grow 34 percent as more facial procedures to improve one's complexion become available and become more popular in spas and some medical settings. Makeup artists are expected to grow by 40 percent, but because of its relatively small size, the occupation will only add a few hundred jobs over the decade.

Job prospects. Job opportunities generally should be good. However, competition is expected for jobs and clients at higher paying salons as applicants compete with a large pool of licensed and experienced cosmetologists for these positions. More numerous than those arising from job growth, an abundance of job openings will come about from the need to replace workers who transfer to other occupations, retire, or leave the labor force for other reasons. Opportunities will be best for those with previous experience and for those licensed to provide a broad range of services.

Earnings

Median hourly earnings in May 2006 for salaried hairdressers, hairstylists, and cosmetologists, including tips and commission, were \$10.25. The middle 50 percent earned between \$7.92 and \$13.75. The lowest 10 percent earned less than \$6.68, and the highest 10 percent earned more than \$18.78.

Median hourly earnings in May 2006 for salaried barbers, including tips, were \$11.13. The middle 50 percent earned between \$8.71 and \$14.25. The lowest 10 percent earned less than \$7.12, and the highest 10 percent earned more than \$20.56.

Among skin care specialists, median hourly earnings, including tips, were \$12.58, for manicurists and pedicurists \$9.23, and for shampooers \$7.78.

While earnings for entry-level workers usually are low, earnings can be considerably higher for those with experience. A number of factors, such as the size and location of the salon, determine the total income of personal appearance workers. They may receive commissions based on the price of the service, or a salary based on the number of hours worked, and many receive commissions on the products they sell. In addition, some salons pay bonuses to employees who bring in new business. For many personal appearance workers the ability to attract and hold regular clients are key factors in determining earnings.

Although some salons offer paid vacations and medical benefits, many self-employed and part-time workers in this occupation do not enjoy such benefits. Some personal appearance workers receive free trial products from manufacturers in the hope that they will recommend the products to clients.

Related Occupations

Other workers who provide a personal service to clients and are usually professionally licensed or certified include massage therapists and fitness workers.

Sources of Additional Information

For details on State licensing requirements and approved barber or cosmetology schools, contact your State boards of barber or cosmetology examiners.

State licensing board requirements and a list of licensed training schools for cosmetologists may be obtained from:

► National Accrediting Commission of Cosmetology Arts and Sciences, 4401 Ford Ave., Suite 1300, Alexandria, VA 22302.

Internet: <http://www.naccas.org>

Information about a career in cosmetology is available from:

► National Cosmetology Association, 401 N. Michigan Ave., 22nd floor, Chicago, IL 60611.

Internet: <http://www.ncacares.org>

For information on a career as a barber, contact:

► National Association of Barber Boards of America, 2703 Pine Street, Arkadelphia, AR 71923.

Internet: <http://www.nationalbarberboards.com>

An additional list of private schools for several different types of personal appearance workers is available from:

► Beauty Schools Directory.

Internet: <http://www.beautyschoolsdirectory.com>

Building Cleaning Workers

(O*NET 37-1011.00, 37-2011.00, 37-2012.00, 37-2019.99)

Significant Points

- This very large occupation requires few skills to enter and each year has one of the largest numbers of job openings of any occupation.
- Most job openings result from the need to replace the many workers who leave these jobs because they provide low pay and few benefits, limited opportunities for training or advancement, and often only part-time or temporary work.
- Most new jobs will occur in businesses providing janitorial and cleaning services on a contract basis.

Nature of the Work

Building cleaning workers—including janitors, maids, housekeeping cleaners, window washers, and rug shampooers—keep office buildings, hospitals, stores, apartment houses, hotels, and residences clean, sanitary, and in good condition. Some do only cleaning, while others have a wide range of duties.

Janitors and *cleaners* perform a variety of heavy cleaning duties, such as cleaning floors, shampooing rugs, washing walls and glass, and removing rubbish. They may fix leaky faucets, empty trash cans, do painting and carpentry, replenish bathroom supplies, mow lawns, and see that heating and air-conditioning equipment works properly. On a typical day, janitors may wet- or dry-mop floors, clean bathrooms, vacuum carpets, dust furniture, make minor repairs, and exterminate insects and rodents. They may also clean snow or debris from sidewalks in front of buildings and notify management of the need for major repairs. While janitors typically perform most of the duties mentioned, cleaners tend to work for companies that specialize in one type of cleaning activity, such as washing windows.

Maids and *housekeeping cleaners* perform any combination of light cleaning duties to keep private households or commercial establishments, such as hotels, restaurants, hospitals, and nursing homes, clean and orderly. In hotels, aside from cleaning and maintaining the premises, maids and housekeeping cleaners may deliver ironing boards, cribs, and rollaway beds to guests' rooms. In hospitals, they also may wash bed frames, make beds, and disinfect and sanitize equipment and supplies with germicides. Janitors, maids, and cleaners use many kinds of equipment, tools, and cleaning materials. For one job they may need standard cleaning implements; another may require an electric floor polishing machine and a special cleaning solution. Improved building materials, chemical cleaners, and power equipment have made many tasks easier and less time consuming, but cleaning workers must learn the proper use of equipment and cleaners to avoid harming floors, fixtures, building occupants, and themselves.

Cleaning supervisors coordinate, schedule, and supervise the activities of janitors and cleaners. They assign tasks and inspect building areas to see that work has been done properly; they

also issue supplies and equipment and inventory stocks to ensure that supplies on hand are adequate. They may be expected to screen and hire job applicants; train new and experienced employees; and recommend promotions, transfers, or dismissals. Supervisors may prepare reports concerning the occupancy of rooms, hours worked, and department expenses. Some also perform cleaning duties.

Cleaners and *servants in private households* dust and polish furniture; sweep, mop, and wax floors; vacuum; and clean ovens, refrigerators, and bathrooms. They also may wash dishes, polish silver, and change and make beds. Some wash, fold, and iron clothes; a few wash windows. General houseworkers also may take clothes and laundry to the cleaners, buy groceries, and perform many other errands.

Building cleaning workers in large office and residential buildings, and more recently in large hotels, often work in teams consisting of workers who specialize in vacuuming, picking up trash, and cleaning restrooms, among other things. Supervisors conduct inspections to ensure that the building is cleaned properly and the team is functioning efficiently. In hotels, one member of the team is responsible for reporting electronically to the supervisor when rooms are cleaned.

Work environment. Because most office buildings are cleaned while they are empty, many cleaning workers work evening hours. Some, however, such as school and hospital custodians, work in the daytime. When there is a need for 24-hour maintenance, janitors may be assigned to shifts. Most full-time building cleaners work about 40 hours a week. Part-time cleaners usually work in the evenings and on weekends.

Most building cleaning workers work indoors, but some work outdoors part of the time, sweeping walkways, mowing lawns, or shoveling snow. Working with machines can be noisy, and some tasks, such as cleaning bathrooms and trash rooms, can be dirty and unpleasant. Janitors may suffer cuts, bruises, and burns from machines, handtools, and chemicals. They spend most of their time on their feet, sometimes lifting or pushing heavy furniture or equipment. Many tasks, such as dusting or sweeping, require constant bending, stooping, and stretching. Lifting the increasingly heavier mattresses at nicer hotels in order to change the linens can cause back injuries and sprains.



Building cleaning workers often work indoors and use specialized equipment.

Training, Other Qualifications, and Advancement

Most building cleaning workers, except supervisors, have a high school degree or less and mainly learn their skills on the job or in informal training sessions sponsored by their employers. Supervisors, though, generally have at least a high school diploma and often some college.

Education and training. No special education is required for most entry-level janitorial or cleaning jobs, but workers should be able to perform simple arithmetic and follow instructions. High school shop courses are helpful for jobs involving repair work. Most building cleaners learn their skills on the job. Beginners usually work with an experienced cleaner, doing routine cleaning. As they gain more experience, they are assigned more complicated tasks. In some cities, programs run by unions, government agencies, or employers teach janitorial skills. Students learn how to clean buildings thoroughly and efficiently; how to select and safely use various cleansing agents; and how to operate and maintain machines, such as wet and dry vacuums, buffers, and polishers. Students learn to plan their work, to follow safety and health regulations, to interact positively with people in the buildings they clean, and to work without supervision. Instruction in minor electrical, plumbing, and other repairs also may be given.

Supervisors of building cleaning workers usually need at least a high school diploma, but many have some college or more, especially those who work at places where clean rooms and well-functioning buildings are a necessity, such as in hospitals and hotels.

Other qualifications. Those who come in contact with the public should have good communication skills. Employers usually look for dependable, hard-working individuals who are in good health, follow directions well, and get along with other people.

Certification and advancement. A small number of cleaning supervisors and managers are members of the International Executive Housekeepers Association, which offers two kinds of certification programs for cleaning supervisors and managers: Certified Executive Housekeeper (CEH) and Registered Executive Housekeeper (REH). The CEH designation is offered to those with a high school education, while the REH designation is offered to those who have a 4-year college degree. Both designations are earned by attending courses and passing exams and both must be renewed every 3 years to ensure that workers keep abreast of new cleaning methods. Those with the REH designation usually oversee the cleaning services of hotels, hospitals, casinos, and other large institutions that rely on well-trained experts for their cleaning needs.

Advancement opportunities for workers usually are limited in organizations where they are the only maintenance worker. Where there is a large maintenance staff, however, cleaning workers can be promoted to supervisor or to area supervisor or manager. In many establishments, they are required to take some in-service training to improve their housekeeping techniques and procedures and to enhance their supervisory skills. A high school diploma improves the chances for advancement. Some janitors set up their own maintenance or cleaning businesses.

Employment

Building cleaning workers held about 4.2 million jobs in 2006. More than 7 percent were self-employed.

Janitors and cleaners worked in nearly every type of establishment and held about 2.4 million jobs. They accounted for more than 57 percent of all building cleaning workers. More than 31 percent worked for firms supplying building maintenance services on a contract basis, about 20 percent were employed in public or private educational services, and 2 percent worked in hotels or motels. Other employers included hospitals; restaurants; religious institutions; manufacturing firms; government agencies; and operators of apartment buildings, office buildings, and other types of real estate.

First-line supervisors of housekeeping and janitorial workers held more than 282,000 jobs. Approximately 20 percent worked in firms supplying building maintenance services on a contract basis, while approximately 11 percent were employed in hotels or motels. About 4 percent worked for State and local governments, primarily at schools and colleges. Others worked for hospitals, nursing homes and other residential care facilities.

Maids and housekeepers held about 1.5 million jobs. Private households employed the most maids and housekeepers—almost 29 percent—while hotels, motels, and other traveler accommodations employed about the same percentage, almost 29 percent. Hospitals, nursing homes, and other residential care facilities employed large numbers, also. Although cleaning jobs can be found in all cities and towns, most are located in highly populated areas where there are many office buildings, schools, apartment houses, nursing homes, and hospitals.

Job Outlook

Overall employment of building cleaning workers is expected to grow faster than average for all occupations through 2016, as more office complexes, apartment houses, schools, factories, hospitals, and other buildings requiring cleaning are built to accommodate a growing population and economy.

Employment change. The number of building cleaning workers is expected to grow 14 percent between 2006 and 2016, which is faster than the average for all occupations. This occupation will have, in fact, one of the largest numbers of new jobs arise, about 570,000 over the 2006-16 period.

Much of the growth in these occupations will come from cleaning residential properties. As families become more pressed for time, they increasingly hire cleaning and handyman services to perform a variety of tasks in their homes. Also, as the population ages, older people will need to hire cleaners to help maintain their houses. In addition, housekeeping cleaners will be needed to clean the growing number of residential care facilities for the elderly. These facilities, including assisted-living residences, generally provide housekeeping services as part of the rent. Although there have been some improvements in productivity in the way buildings are cleaned and maintained—using teams of cleaners, for example, and better cleaning supplies—cleaning still is very much a labor-intensive job.

As many firms reduce costs by contracting out the cleaning and maintenance of buildings, businesses providing janitorial and cleaning services on a contract basis are expected to have the greatest number of new jobs in this field.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Building cleaning workers	—	4,154,000	4,723,000	569,000	14
First-line supervisors/managers of housekeeping and janitorial workers.....	37-1011	282,000	318,000	36,000	13
Building cleaning workers	37-2010	3,872,000	4,405,000	533,000	14
Janitors and cleaners, except maids and housekeeping cleaners	37-2011	2,387,000	2,732,000	345,000	14
Maids and housekeeping cleaners.....	37-2012	1,470,000	1,656,000	186,000	13
Building cleaning workers, all other	37-2019	16,000	18,000	2,400	15

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

Job prospects. In addition to job openings arising due to growth, numerous openings should result from the need to replace those who leave this very large occupation each year. Limited promotion potential, low pay, and the fact that many jobs are part-time and temporary, induce many to leave the occupation, thereby contributing to the number of job openings and the need to replace these workers.

Building cleaners usually find work by answering newspaper advertisements, applying directly to organizations where they would like to work, contacting local labor unions, or contacting State employment service offices.

Earnings

Median annual earnings of janitors and cleaners, except maids and housekeeping cleaners, were \$19,930 in May 2006. The middle 50 percent earned between \$16,220 and \$25,640. The lowest 10 percent earned less than \$14,010 and the highest 10 percent earned more than \$33,060. Median annual earnings in 2006 in the industries employing the largest numbers of janitors and cleaners, except maids and housekeeping cleaners, were as follows:

Elementary and secondary schools	\$24,010
Local government	23,930
Colleges, universities, and professional schools	23,170
General medical and surgical hospitals.....	21,670
Services to buildings and dwellings.....	17,870

Median annual earnings of maids and housekeepers were \$17,580 in May 2006. The middle 50 percent earned between \$15,060 and \$21,440. The lowest 10 percent earned less than \$13,140, and the highest 10 percent earned more than \$26,390. Median annual earnings in 2006 in the industries employing the largest numbers of maids and housekeepers were as follows:

General medical and surgical hospitals.....	\$20,080
Community care facilities for the elderly	17,900
Nursing care facilities	17,690
Services to buildings and dwellings.....	17,540
Traveler accommodation.....	16,790

Median annual earnings of first-line supervisors and managers of housekeeping and janitorial workers were \$31,290 in May 2006. The middle 50 percent earned between \$24,230 and

\$40,670. The lowest 10 percent earned less than \$19,620, and the highest 10 percent earned more than \$51,490. Median annual earnings in May 2006 in the industries employing the largest numbers of first-line supervisors and managers of housekeeping and janitorial workers were as follows:

Local government	\$38,170
Elementary and secondary schools	35,660
Nursing care facilities	30,570
Services to buildings and dwellings.....	29,730
Traveler accommodation.....	26,730

Related Occupations

Workers who specialize in one of the many job functions of janitors and cleaners include pest control workers; general maintenance and repair workers; and grounds maintenance workers.

Sources of Additional Information

Information about janitorial jobs may be obtained from State employment service offices.

For information on certification in executive housekeeping, contact:

➤ International Executive Housekeepers Association, Inc., 1001 Eastwind Dr., Suite 301, Westerville, OH 43081-3361. Internet: <http://www.ieha.org>

Chefs, Cooks, and Food Preparation Workers

(O*NET 35-1011.00, 35-2011.00, 35-2012.00, 35-2013.00, 35-2014.00, 35-2015.00, 35-2019.99, 35-2021.00)

Significant Points

- Many cooks and food preparation workers are young—37 percent are below the age of 24.
- One-third of these workers are employed part time.
- Job openings are expected to be plentiful because many of these workers will leave the occupation for full-time employment or better wages.

Nature of the Work

Chefs, cooks, and food preparation workers prepare, season, and cook a wide range of foods—from soups, snacks, and salads to entrees, side dishes, and desserts. They work in a variety of restaurants and other food services establishments. Chefs and cooks create recipes and prepare meals, while food preparation workers peel and cut vegetables, trim meat, prepare poultry, and perform other duties, such as keeping work areas clean and monitoring temperatures of ovens and stovetops.

Specifically, *chefs* and cooks measure, mix, and cook ingredients according to recipes, using a variety of equipment, including pots, pans, cutlery, ovens, broilers, grills, slicers, grinders, and blenders. Chefs and head cooks also are responsible for directing the work of other kitchen workers, estimating food requirements, and ordering food supplies.

Food preparation workers perform routine, repetitive tasks under the direction of chefs and cooks. These workers ready the ingredients for complex dishes by slicing and dicing vegetables, and composing salads and cold items. They weigh and measure ingredients, go after pots and pans, and stir and strain soups and sauces. Food preparation workers may cut and grind meats, poultry, and seafood in preparation for cooking. They also clean work areas, equipment, utensils, dishes, and silverware.

Larger restaurants and food services establishments tend to have varied menus and larger kitchen staffs. Staffs often include several chefs and cooks, sometimes called assistant or line cooks. Each chef or cook works an assigned station that is equipped with the types of stoves, grills, pans, and ingredients needed for the foods prepared at that station. Job titles often reflect the principal ingredient prepared or the type of cooking performed—vegetable cook, fry cook, or grill cook, for example. These cooks also may direct or work with other food preparation workers.

Executive chefs and *head cooks* coordinate the work of the kitchen staff and direct the preparation of meals. They determine serving sizes, plan menus, order food supplies, and oversee kitchen operations to ensure uniform quality and presentation of meals. An executive chef, for example, is in charge of all food service operations and also may supervise the many kitchens of a hotel, restaurant group, or corporate dining operation. A *chef de cuisine* reports to an executive chef and is responsible for the daily operations of a single kitchen. A *sous chef*, or sub chef, is the second-in-command and runs the kitchen in the absence of the chef. Many chefs earn fame both for themselves and for their kitchens because of the quality and distinctive nature of the food they serve.

Responsibilities depend on where cooks work. *Institution* and *cafeteria cooks*, for example, work in the kitchens of schools, cafeterias, businesses, hospitals, and other institutions. For each meal, they prepare a large quantity of a limited number of entrees, vegetables, and desserts according to preset menus. Meals generally are prepared in advance so diners seldom get the opportunity to special order a meal. Restaurant cooks usually prepare a wider selection of dishes, cooking most orders individually. *Short-order cooks* prepare foods in restaurants and coffee shops that emphasize fast service and quick food preparation. They grill and garnish hamburgers, prepare sand-

wiches, fry eggs, and cook French fries, often working on several orders at the same time. *Fast-food cooks* prepare a limited selection of menu items in fast-food restaurants. They cook and package batches of food, such as hamburgers and fried chicken, to be kept warm until served. (*Combined food preparation and service workers*, who both prepare and serve items in fast-food restaurants, are included with the material on food and beverage serving and related workers elsewhere in the *Handbook*.)

The number and types of workers employed in kitchens also depends on the type of establishment. Small, full-service restaurants offering casual dining often feature a limited number of easy-to-prepare items supplemented by short-order specialties and ready-made desserts. Typically, one cook prepares all the food with the help of a short-order cook and one or two other kitchen workers.

Grocery and specialty food stores employ chefs, cooks, and food preparation workers to develop recipes and prepare meals for customers to carry out. Typically, entrees, side dishes, salads, or other items are prepared in large quantities and stored at an appropriate temperature. Counter assistants portion and package items according to customer orders for serving at home.

Some cooks, called *research chefs*, combine culinary skills with knowledge of food science to develop recipes for chain restaurants and food processors and manufacturers. They test new formulas and flavors for prepared foods and determine the most efficient and safest way to prepare new foods.

Some cooks work for individuals rather than for restaurants, cafeterias, or food manufacturers. These *private household cooks* plan and prepare meals in private homes according to the client's tastes or dietary needs. They order groceries and supplies, clean the kitchen, and wash dishes and utensils. They also may serve meals. Private chefs are employed directly by a single individual or family or sometimes by corporations or institutions, such as universities and embassies, to perform cooking and entertaining tasks. These chefs usually live in and may travel with their employer. Because of the sensitive nature of their employment, they are usually required to sign confidentiality agreements. As part of the job, private chefs often perform additional services, such as paying bills, coordinating schedules, and planning events.

Another type of private household cooks, called personal chefs, usually prepare a week's worth of meals in the client's home for the client to heat and serve according to directions throughout the week. Personal chefs are self-employed or employed by a company that provides this service.

Work environment. Many restaurant and institutional kitchens have modern equipment, convenient work areas, and air conditioning, but kitchens in older and smaller eating places are often not as well designed. Kitchen staffs invariably work in small quarters against hot stoves and ovens. They are under constant pressure to prepare meals quickly, while ensuring quality is maintained and safety and sanitation guidelines are observed. Because the pace can be hectic during peak dining times, workers must be able to communicate clearly so that food orders are completed correctly.

Working conditions vary with the type and quantity of food prepared and the local laws governing food service operations.



Chefs, cooks, and food preparation workers often prepare ingredients ahead of time so that they can be cooked quickly when ordered.

Workers usually must stand for hours at a time, lifting heavy pots and kettles, and working near hot ovens and grills. Job hazards include slips and falls, cuts, and burns, but injuries are seldom serious.

Work hours in restaurants may include early mornings, late evenings, holidays, and weekends. Work schedules of chefs, cooks and other kitchen workers in factory and school cafeterias may be more regular. In 2006, about 29 percent of cooks and 44 percent of food preparation workers had part-time schedules, compared to 15 percent of workers throughout the economy. Work schedules in fine-dining restaurants, however, tend to be longer because of the time required to prepare ingredients in advance. Many executive chefs regularly work 12-hour days because they oversee the delivery of foodstuffs early in the day, plan the menu, and prepare those menu items that take the most skill.

The wide range in dining hours and the need for fully-staffed kitchens during all open hours creates work opportunities for students, youth, and other individuals seeking supplemental income, flexible work hours, or variable schedules. Eighteen percent of cooks and food preparation workers were 16 to 19 years old in 2006; nineteen percent were age 20 to 24. Ten percent had variable schedules. Kitchen workers employed by

schools may work during the school year only, usually for 9 or 10 months. Similarly, resort establishments usually only offer seasonal employment.

Training, Other Qualifications, and Advancement

On-the-job training is most common for fast-food cooks, short-order cooks, and food preparation workers. Chefs and others with more advanced cooking duties often attend cooking school. Vocational training programs are available to many high school students, but advanced positions usually require training after high school. Experience, an ability to develop and enhance cooking skills, and a strong desire to cook are the most common requirements for advancement.

Education and training. A high school diploma is not required for beginning jobs, but it is recommended for those planning a career as a cook or chef. Most fast-food or short-order cooks and food preparation workers require little education or training to start because most skills are learned on the job. Training generally starts with basic sanitation and workplace safety and continues with instruction on food handling, preparation, and cooking procedures. Training in food handling, sanitation, and health and safety procedures are mandatory in most jurisdictions for all workers. Those who become proficient and who show an interest in learning complicated cooking techniques may advance to more demanding cooking positions or into supervisory positions.

Some high school or vocational school programs offer courses in basic food safety and handling procedures, cooking, and general business and computer classes that can be helpful for those who might someday want to be a chef or to open their own restaurant. Many school districts, in cooperation with State departments of education, provide on-the-job training and summer workshops for cafeteria kitchen workers who aspire to become cooks. Food service management companies or hotel and restaurant chains, also offer paid internships and summer jobs to those starting out in the field. Internships provide valuable experience and can lead to placement in more formal chef training programs.

When hiring chefs and others in advanced cooking positions, however, employers usually prefer applicants who have training after high school. These training programs range from a few months to 2 years or more. Vocational or trade-school programs typically offer basic training in food handling and sanitation procedures, nutrition, slicing and dicing methods for various kinds of meats and vegetables, and basic cooking methods, such as baking, broiling, and grilling. Longer programs leading to a certificate or a 2- or 4-year degree train chefs for fine-dining or upscale restaurants. They offer a wider array of training specialties, such as advanced cooking techniques; cooking for banquets, buffets, or parties; and cuisines and cooking styles from around the world.

A growing number of chefs participate in these longer training programs through independent cooking schools, professional culinary institutes, 2- or 4-year college degree programs in hospitality or culinary arts, or in the armed forces. Some large hotels and restaurants also operate their own training and job-placement programs for chefs and cooks. Executive chefs and head cooks who work in fine-dining restaurants require

many years of training and experience and an intense desire to cook.

Although curricula may vary, students in culinary training programs spend most of their time in kitchens learning to prepare meals by practicing cooking skills. They learn good knife techniques and proper use and care of kitchen equipment. Training programs also include courses in nutrition, menu planning, portion control, purchasing and inventory methods, proper food storage procedures, and use of leftover food to minimize waste. Students also learn sanitation and public health rules for handling food. Training in food service management, computer accounting and inventory software, and banquet service are featured in some training programs. Most formal training programs also require students to get experience in a commercial kitchen through an internship, apprenticeship, or out-placement program.

Many chefs are trained on the job, receiving real work experience and training from chef-mentors in the restaurants where they work. Professional culinary institutes, industry associations, and trade unions sponsor formal apprenticeship programs in coordination with the U.S. Department of Labor.

The American Culinary Federation accredits more than 200 formal academic training programs and sponsors apprenticeship programs around the country. Typical apprenticeships last 2 years and combine classroom training and work experience. Accreditation is an indication that a culinary program meets recognized standards regarding course content, facilities, and quality of instruction.

Other qualifications. Chefs, cooks, and food preparation workers must be efficient, quick, and work well as part of a team. Manual dexterity is helpful for cutting, chopping, and plating. These workers also need creativity and a keen sense of taste and smell. Personal cleanliness is essential because most States require health certificates indicating that workers are free from communicable diseases. Knowledge of a foreign language can be an asset because it may improve communication with other restaurant staff, vendors, and the restaurant's clientele.

Certification and advancement. The American Culinary Federation certifies pastry professionals, personal chefs, and culinary educators in addition to various levels of chefs. Certification standards are based primarily on experience and formal training. Although certification is not required, it can help to prove accomplishment and lead to advancement and higher-paying positions.

Advancement opportunities for chefs, cooks, and food preparation workers depend on their training, work experience, and ability to perform more responsible and sophisticated tasks. Many food preparation workers, for example, may move into assistant or line cook positions. Chefs and cooks who demonstrate an eagerness to learn new cooking skills and to accept greater responsibility may also move up and be asked to train or supervise lesser skilled kitchen staff. Others may move to larger or more prestigious kitchens and restaurants.

Some chefs and cooks go into business as caterers or personal chefs or open their own restaurant. Others become instructors in culinary training programs. A number of cooks and chefs advance to executive chef positions or food service management

positions, particularly in hotels, clubs, or larger, more elegant restaurants. (See the section on food service managers elsewhere in the *Handbook*.)

Employment

Chefs, cooks, and food preparation workers held 3.1 million jobs in 2006. The distribution of jobs among the various types of chefs, cooks, and food preparation workers was as follows:

Food preparation workers	902,000
Cooks, restaurant	850,000
Cooks, fast food	629,000
Cooks, institution and cafeteria	401,000
Cooks, short order	195,000
Chefs and head cooks	115,000
Cooks, private household	4,900
Cooks, all other	16,000

Two-thirds of all chefs, cooks, and food preparation workers were employed in restaurants and other food services and drinking places. About 15 percent worked in institutions such as schools, universities, hospitals, and nursing care facilities. Grocery stores, hotels, and gasoline stations with convenience stores employed most of the remainder.

Job Outlook

Job opportunities for chefs, cooks, and food preparation workers are expected to be plentiful because of the continued growth and expansion of food services outlets, resulting in average employment growth, and because of the large numbers of workers who leave these occupations and need to be replaced. However, those seeking the highest-paying positions will face keen competition.

Employment change. Employment of chefs, cooks, and food preparation workers is expected to increase by 11 percent over the 2006-16 decade, which is about as fast as the average for all occupations. This occupation will have among the largest numbers of new jobs arise, about 351,000 over the period. Growth will be spurred by increases in population, household income, and demand for convenience that will lead to more people dining out and taking vacations that include hotel stays and restaurant visits. In addition, employment of chefs, cooks, and food preparation workers who prepare meals-to-go, such as those who work in the prepared foods sections of grocery or specialty food stores, should grow faster than average as these stores compete with restaurants for people's food dollars. Also, there is a growing consumer desire for convenient, healthier, made-from-scratch meals.

Projected employment growth varies by detailed occupation. The number of higher-skilled chefs and cooks working in full-service restaurants—those that offer table service and more varied menus—is expected to increase about as fast as the average for all occupations. Much of this increase will come from job growth in more casual dining settings, rather than in up-scale full-service restaurants. Dining trends suggest that an increasing number of meals are eaten away from home, which creates growth in family dining restaurants, but greater limits on expense-account meals is expected to generate slower growth for up-scale restaurants.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Chefs, cooks, and food preparation workers.....	—	3,113,000	3,464,000	351,000	11
Chefs and head cooks.....	35-1011	115,000	124,000	8,700	8
Cooks and food preparation workers	35-2000	2,998,000	3,340,000	342,000	11
Cooks	35-2010	2,097,000	2,301,000	204,000	10
Cooks, fast food	35-2011	629,000	681,000	52,000	8
Cooks, institution and cafeteria.....	35-2012	401,000	445,000	43,000	11
Cooks, private household.....	35-2013	4,900	5,400	400	9
Cooks, restaurant.....	35-2014	850,000	948,000	98,000	12
Cooks, short order.....	35-2015	195,000	205,000	9,500	5
Cooks, all other	35-2019	16,000	16,000	500	3
Food preparation workers	35-2021	902,000	1,040,000	138,000	15

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

Employment of food preparation workers is expected to grow faster than the average for all occupations, reflecting diners’ desires for convenience as they shop for carryout meals in a greater variety of places, including full-service restaurants, limited-service eating places, and grocery stores.

Employment of fast-food cooks is expected to grow about as fast as the average for all occupations. Duties of cooks in fast-food restaurants are limited; most workers are likely to be combined food preparation and serving workers, rather than fast-food cooks. Employment of short-order cooks is expected to increase more slowly than average.

Employment of institution and cafeteria chefs and cooks will show growth about as fast as the average. Their employment will not keep pace with the rapid growth in the educational and health services industries—where their employment is concentrated. Offices, schools, and hospitals increasingly contract out their food services in an effort to make “institutional food” more attractive to office workers, students, staff, visitors, and patients. Much of the growth of these workers will be in contract food service establishments that provide catering services or food management and staff for employee dining rooms, sports complexes, convention centers, and educational or health care facilities.

Employment of private household cooks is projected to grow by 9 percent, about as fast as the average. While the employment of personal chefs is expected to increase—reflecting the growing popularity and convenience of eating restaurant-quality meals at home—the number of private chefs will not grow as fast, reflecting slower growth in private household service employment.

Job prospects. Job openings for chefs, cooks, and food preparation workers are expected to be plentiful through 2016; however, competition should be keen for jobs in the top kitchens of higher end restaurants. Although job growth will create many new positions, the overwhelming majority of job openings will stem from the need to replace workers who leave this large occupational group. Many chef, cook, and food preparation worker jobs are attractive to people seeking first-time or short-term employment, additional income, or a flexible schedule. Employers typically hire a large number of part-time workers, but many of these workers soon transfer to other occupations or

stop working, creating numerous openings for those entering the field. At higher end restaurants, the fast pace, long hours, and high energy levels required to succeed also cause some top chefs and cooks to leave for other jobs, creating job openings.

Earnings

Earnings of chefs, cooks, and food preparation workers vary greatly by region and the type of employer. Earnings usually are highest in elegant restaurants and hotels, where many executive chefs are employed, and in major metropolitan and resort areas.

Median annual wage-and-salary earnings of chefs and head cooks were \$34,370 in May 2006. The middle 50 percent earned between \$25,910 and \$46,040. The lowest 10 percent earned less than \$20,160, and the highest 10 percent earned more than \$60,730. Median annual earnings in the industries employing the largest number of chefs and head cooks were:

Other amusement and recreations industries	\$46,460
Traveler accommodation.....	40,020
Special food services	36,450
Full-service restaurants	32,360
Limited-service eating places	27,560

Median annual wage-and-salary earnings of cooks, private household were \$22,870 in May 2006. The middle 50 percent earned between \$17,960 and \$31,050. The lowest 10 percent earned less than \$14,690, and the highest 10 percent earned more than \$55,040.

Median annual wage-and-salary earnings of institution and cafeteria cooks were \$20,410 in May 2006. The middle 50 percent earned between \$16,280 and \$25,280. The lowest 10 percent earned less than \$13,450, and the highest 10 percent earned more than \$30,770. Median annual earnings in the industries employing the largest numbers of institution and cafeteria cooks were:

General medical and surgical hospitals.....	\$22,980
Special food services.....	21,650
Community care facilities for the elderly	20,910
Nursing care facilities	20,470
Elementary and secondary schools	18,770

Median annual wage-and-salary earnings of restaurant cooks were \$20,340 in May 2006. The middle 50 percent earned between \$16,860 and \$24,260. The lowest 10 percent earned less than \$14,370, and the highest 10 percent earned more than \$28,850. Median annual earnings in the industries employing the largest numbers of restaurant cooks were:

Traveler accommodations	\$23,400
Full-service restaurants	20,100
Limited-service eating places	18,200

Median annual wage-and-salary earnings of short-order cooks were \$17,880 in May 2006. The middle 50 percent earned between \$14,960 and \$21,820. The lowest 10 percent earned less than \$12,930, and the highest 10 percent earned more than \$26,110. Median annual earnings in full-service restaurants were \$18,340.

Median annual wage-and-salary earnings of food preparation workers were \$17,410 in May 2006. The middle 50 percent earned between \$14,920 and \$21,230. The lowest 10 percent earned less than \$13,190, and the highest 10 percent earned more than \$25,940. Median annual earnings in the industries employing the largest number of food preparation workers were:

Grocery stores	\$18,920
Full-service restaurants	17,390
Limited-service eating places	15,550

Median annual wage-and-salary earnings of fast-food cooks were \$15,410 in May 2006. The middle 50 percent earned between \$13,730 and \$17,700. The lowest 10 percent earned less than \$12,170, and the highest 10 percent earned more than \$20,770. Median annual earnings were \$15,360 in full-service restaurants and \$15,350 in limited-service eating places.

Some employers provide employees with uniforms and free meals, but Federal law permits employers to deduct from their employees' wages the cost or fair value of any meals or lodging provided, and some employers do so. Chefs, cooks, and food preparation workers who work full time often receive typical benefits, but part-time and hourly workers usually do not.

In some large hotels and restaurants, kitchen workers belong to unions. The principal unions are the Hotel Employees and Restaurant Employees International Union and the Service Employees International Union.

Related Occupations

People who perform tasks similar to those of chefs, cooks, and food preparation workers include those in food processing occupations, such as butchers and meat cutters, and bakers. Others who work closely with these workers include food service managers and food and beverage serving and related workers.

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 chefs, cooks, and other kitchen workers, including a directory of 2- and 4-year colleges that offer courses or training programs is available from:

➤ National Restaurant Association, 1200 17th St.NW., Washington, DC 20036.

Internet: <http://www.restaurant.org>

Information on the American Culinary Federation's apprenticeship and certification programs for cooks and a list of accredited culinary programs is available from:

➤ American Culinary Federation, 180 Center Place Way, St.Augustine, FL 32095.

Internet: <http://www.acfchefs.org>

For information about becoming a personal or private chef, contact:

➤ American Personal & Private Chef Association, 4572 Delaware St., San Diego, CA 92116.

Internet: <http://www.personalchef.com>

For information about culinary apprenticeship programs registered with the U.S. Department of Labor, contact the local office of your State employment service agency, check the department's apprenticeship Web site: http://www.doleta.gov/atels_bat or call the toll free helpline: (877) 872-5627.

Child Care Workers

(O*NET 39-9011.00)

Significant Points

- About 35 percent of child care workers are self-employed, most of whom provided child care in their homes.
- Training requirements range from a high school diploma to a college degree, although a high school diploma and a little experience are adequate for many jobs.
- Many workers leave these jobs every year, creating good job opportunities.

Nature of the Work

Child care workers nurture and care for children who have not yet entered formal schooling. They also supervise older children before and after school. These workers play an important role in children's development by caring for them when parents are at work or away for other reasons. In addition to attending to children's basic needs, child care workers organize activities and implement curricula that stimulate children's physical, emotional, intellectual, and social growth. They help children explore individual interests, develop talents and independence, build self-esteem, and learn how to get along with others.

Child care workers generally are classified into three different groups based on where they work: private household workers, who care for children at the children's home; family child care providers, who care for children in the provider's own home; and child care workers who work at separate child care centers.

Private household workers who are employed on an hourly basis usually are called *babysitters*. These child care workers bathe, dress, and feed children; supervise their play; wash their clothes; and clean their rooms. Babysitters also may put children to bed and wake them, read to them, involve them in educational games, take them for doctors' visits, and discipline them. Those who are in charge of infants, sometimes called *infant nurses*, also prepare bottles and change diapers. *Nannies* work for a single family. They generally take care of children from birth to age 12, tending to the child's early education, nutrition, health, and other needs. They also may perform the duties of a housekeeper, including cleaning and laundry.

Family child care providers often work alone with a small group of children, though some work in larger settings with multiple adults. Child care centers generally have more than one adult per group of children; in groups of older children, a child care worker may assist a more experienced preschool teacher.

Most child care workers perform a combination of basic care and teaching duties, but the majority of their time is spent on care giving activities. Workers whose primary responsibility is teaching are classified as preschool teachers. (Teachers—preschool, kindergarten, elementary, middle, and secondary are covered elsewhere in the *Handbook*.) However, many basic care activities also are opportunities for children to learn. For example, a worker who shows a child how to tie a shoelace teaches the child while also providing for that child's basic needs.

Child care workers spend most of their day working with children. However, they do maintain contact with parents or guardians through informal meetings or scheduled conferences to discuss each child's progress and needs. Many child care workers keep records of each child's progress and suggest ways in which parents can stimulate their child's learning and development at home. Some child care centers and before- and after-school programs actively recruit parent volunteers to work with the children and participate in administrative decisions and program planning.

Young children learn mainly through play. Child care workers recognize this and capitalize on children's play to further language development (storytelling and acting games), improve social skills (working together to build a neighborhood in a sandbox), and introduce scientific and mathematical concepts (balancing and counting blocks when building a bridge or mixing colors when painting). Often a less structured approach is used to teach young children, including small-group lessons; one-on-one instruction; and creative activities such as art, dance, and music. Child care workers play a vital role in preparing children to build the skills they will need in school.

Child care workers in child care centers or family child care homes greet young children as they arrive, help them with their jackets, and select an activity of interest. When caring for infants, they feed and change them. To ensure a well-balanced program, child care workers prepare daily and long-term schedules of activities. Each day's activities balance individual and group play, as well as quiet and active time. Children are given some freedom to participate in activities in which they are interested. As children age, child care workers may provide more guided learning opportunities, particularly in the areas of math and reading.

Concern over school-aged children being home alone before and after school has spurred many parents to seek alternative ways for their children to constructively spend their time. The purpose of before- and after-school programs is to watch over school-aged children during the gap between school hours and the end of their parents' daily work hours. These programs also may operate during the summer and on weekends. Workers in before- and after-school programs may help students with their homework or engage them in other extracurricular activities. These activities may include field trips, sports, or learning about computers, painting, photography, or other fun subjects. Some child care workers are responsible for taking children to school in the morning and picking them up from school in the afternoon. Before- and after-school programs may be operated by public school systems, local community centers, or other private organizations.

Helping to keep children healthy is another important part of the job. Child care workers serve nutritious meals and snacks and teach good eating habits and personal hygiene. They ensure that children have proper rest periods. They identify children who may not feel well and, in some cases, may help parents locate programs that will provide basic health services. Child care workers also watch for children who show signs of emotional or developmental problems and discuss these matters with their supervisor and the child's parents. Early identification of children with special needs—such as those with behavioral, emotional, physical, or learning disabilities—is important to improve their future learning ability. Special education teachers often work with preschool children to provide the individual attention they need. (Special education teachers are discussed elsewhere in the *Handbook*.)

Work environment. Helping children grow, learn, and gain new skills can be very rewarding. The work is sometimes routine but new activities and challenges mark each day. Child care can be physically and emotionally taxing, as workers constantly stand, walk, bend, stoop, and lift to attend to each child's interests and problems.

States regulate child care facilities, the number of children per child care worker, staff qualifications, and the health and safety of the children. State regulations in all of these areas vary. To ensure that children in child care centers receive proper supervision, State or local regulations may require a certain ratio of workers to children. The ratio varies with the age of the children. Child development experts generally recommend that a single caregiver be responsible for no more than 3 or 4 infants (less than 1 year old) and toddler's (1 to 2 years old) or 6 or 7 preschool-aged children (between 2 and 5 years old). In before- and after-school programs, workers may be responsible for many school-aged children at a time.

Family child care providers work out of their own homes. While this arrangement provides convenience, it also requires that their homes be accommodating to young children. Private household workers usually work in the homes or apartments of their employers. Most live in their own homes and travel to work, though some live in the home of their employer and generally are provided with their own room and bath. They often come to feel like part of their employer's family.

The work hours of child care workers vary widely. Child care centers usually are open year round, with long hours so



Child care workers nurture and care for young children.

that parents can drop off and pick up their children before and after work. Some centers employ full-time and part-time staff with staggered shifts to cover the entire day. Some workers are unable to take regular breaks during the day due to limited staffing. Public and many private preschool programs operate during the typical 9- or 10-month school year, employing both full-time and part-time workers. Family child care providers have flexible hours and daily routines, but they may work long or unusual hours to fit parents' work schedules. Live-in nannies usually work longer hours than do those who have their own homes. However, although nannies may work evenings or weekends, they usually get other time off.

Training, Other Qualifications, and Advancement

Licensure and training requirements vary greatly by State, but many jobs require little more than a high school diploma.

Education and training. The training and qualifications required of child care workers vary widely. Each State has its own licensing requirements that regulate caregiver training. These requirements range from a high school diploma, a national Child Development Associate (CDA) credential to community college courses or a college degree in child development or early childhood education. State requirements are generally higher for workers at child care centers than for family child care providers. Child care workers in private settings who care for only a few children often are not regulated by States at all. Child care workers generally can obtain some form of employment with a high school diploma and little or no experience, but certain private firms and publicly funded programs have more demanding training and education requirements. Some employers may prefer workers who have taken secondary or postsecondary courses in child development and early childhood education or who have work experience in a child care setting. Other employers require their own specialized training. An increasing number of employers require an associate degree in early childhood education.

Licensure. Many States require child care centers, including those in private homes, to be licensed if they care for more than a few children. In order to obtain their license, child care centers may require child care workers to pass a background check and get immunizations. Furthermore, child care workers may need to be trained in first aid and CPR and receive continuous training on topics of health and safety.

Other qualifications. Child care workers must anticipate and prevent problems, deal with disruptive children, provide fair but firm discipline, and be enthusiastic and constantly alert. They must communicate effectively with the children and their parents, as well as with teachers and other child care workers. Workers should be mature, patient, understanding, and articulate and have energy and physical stamina. Skills in music, art, drama, and storytelling also are important. Self-employed child care workers must have business sense and management abilities.

Certification and advancement. Some employers prefer to hire child care workers who have earned a nationally recognized Child Development Associate (CDA) credential or the Certified Childcare Professional (CCP) designation from the Council for Professional Recognition and the National Child Care Association, respectively. Requirements include child care experience and coursework, such as college courses or employer-provided seminars.

Opportunities for advancement are limited. However, as child care workers gain experience, some may advance to supervisory or administrative positions in large child care centers or preschools. Often, these positions require additional training, such as a bachelor's or master's degree. Other workers move on to work in resource and referral agencies, consulting with parents on available child services. A few workers become involved in policy or advocacy work related to child care and early childhood education. With a bachelor's degree, workers may become preschool teachers or become certified to teach in public or private schools. Some workers set up their own child care businesses.

Employment

Child care workers held about 1.4 million jobs in 2006. Many worked part time. About 35 percent of child care workers were self-employed; most of these were family child care providers.

Child day care services employed about 18 percent of all child care workers and about 20 percent work for private households. The remainder worked primarily in educational services; nursing and residential care facilities; religious organizations; amusement and recreation industries; civic and social organizations; individual and family services; and local government, excluding education and hospitals. Some child care programs are for-profit centers, which may be affiliated with a local or national company. Religious institutions, community agencies, school systems, and State and local governments operate non-profit programs. A very small percentage of private industry establishments operate onsite child care centers for the children of their employees.

Job Outlook

Child care workers are expected to experience job growth that is faster than the average for all occupations. Job prospects will be excellent because of the many workers who leave and need to be replaced.

Employment change. Employment of child care workers is projected to increase by 18 percent between 2006 and 2016, which is faster than the average for all occupations. Child care workers will have a very large number of new jobs arise, almost 248,000 over the projections decade. The proportion of chil-

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Child care workers	39-9011	1,388,000	1,636,000	248,000	18

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*.

dren being cared for exclusively by parents or other relatives is likely to continue to decline, spurring demand for additional child care workers. Concern about the safety and supervision of school-aged children during nonschool hours also should increase demand for before- and after-school programs and the child care workers who staff them.

The growth in demand for child care workers will be moderated, however, by an increasing emphasis on early childhood education programs, which hire mostly preschool workers instead of child care workers. While only a few States currently provide targeted or universal preschool programs, many more are considering or starting such programs. A rise in enrollment in private preschools is likely as the value of formal education before kindergarten becomes more widely accepted. Since the majority of workers in these programs are classified as preschool teachers, this growth in preschool enrollment will mean less growth among child care workers.

Job prospects. High replacement needs should create good job opportunities for child care workers. Qualified persons who are interested in this work should have little trouble finding and keeping a job. Many child care workers must be replaced each year as they leave the occupation to fulfill family responsibilities, to study, or for other reasons. Others leave because they are interested in pursuing other occupations or because of low wages.

Earnings

Pay depends on the educational attainment of the worker and the type of establishment. Although the pay generally is very low, more education usually means higher earnings. Median annual earnings of wage-and-salary child care workers were \$17,630 in May 2006. The middle 50 percent earned between \$14,790 and \$21,930. The lowest 10 percent earned less than \$12,910, and the highest 10 percent earned more than \$27,050. Median annual earnings in the industries employing the largest numbers of child care workers in 2006 were as follows:

Other residential care facilities	\$20,770
Elementary and secondary schools	20,220
Civic and social organizations	16,460
Child day care services	16,320
Other amusement and recreation industries	16,300

Earnings of self-employed child care workers vary depending on the number of hours worked, the number and ages of the children, and the location.

Benefits vary but are minimal for most child care workers. Many employers offer free or discounted child care to employees. Some offer a full benefits package, including health insurance and paid vacations, but others offer no benefits at all. Some employers offer seminars and workshops to help workers

learn new skills. A few are willing to cover the cost of courses taken at community colleges or technical schools. Live-in nannies receive free room and board.

Related Occupations

Child care work requires patience; creativity; an ability to nurture, motivate, teach, and influence children; and leadership, organizational, and administrative skills. Others who work with children and need these qualities and skills include teacher assistants; teachers—preschool, kindergarten, elementary, middle, and secondary; and teachers—special education.

Sources of Additional Information

For an electronic question-and-answer service on child care, information on becoming a child care provider, and other resources, contact:

➤ National Child Care Information Center, 243 Church St.NW., 2nd floor, Vienna, VA 22180.

Internet: <http://www.nccic.org>

For eligibility requirements and a description of the Child Development Associate credential, contact:

➤ Council for Professional Recognition, 2460 16th St., NW., Washington, DC 20009-3575.

Internet: <http://www.cdacouncil.org>

For eligibility requirements and a description of the Certified Childcare Professional designation, contact:

➤ National Child Care Association, 2025 M St., NW., Suite 800, Washington, DC 20036. Internet: <http://www.nccanet.org>

For information about a career as a nanny, contact:

➤ International Nanny Association, 191 Clarksville Rd., Princeton Junction, NJ 08550-3111. Telephone (tollfree): 888-878-1477. Internet: <http://www.nanny.org>

State departments of human services or social services can supply State regulations and training requirements for child care workers.

Fitness Workers

(O*NET 39-9031.00)

Significant Points

- Many fitness and personal training jobs are part time, but many workers increase their hours by working at several different facilities or at clients' homes.
- Night and weekend hours are common.
- Most fitness workers need to be certified.
- Job prospects are expected to be good.

Nature of the Work

Fitness workers lead, instruct, and motivate individuals or groups in exercise activities, including cardiovascular exercise, strength training, and stretching. They work in health clubs, country clubs, hospitals, universities, yoga and Pilates studios, resorts, and clients' homes. Increasingly, fitness workers also are found in workplaces, where they organize and direct health and fitness programs for employees of all ages. Although gyms and health clubs offer a variety of exercise activities such as weightlifting, yoga, cardiovascular training, and karate, fitness workers typically specialize in only a few areas.

Personal trainers work one-on-one with clients either in a gym or in the client's home. They help clients assess their level of physical fitness and set and reach fitness goals. Trainers also demonstrate various exercises and help clients improve their exercise techniques. They may keep records of their clients' exercise sessions to monitor clients' progress toward physical fitness. They may also advise their clients on how to modify their lifestyle outside of the gym to improve their fitness.

Group exercise instructors conduct group exercise sessions that usually include aerobic exercise, stretching, and muscle conditioning. Cardiovascular conditioning classes are often set to music. Instructors choose and mix the music and choreograph a corresponding exercise sequence. Two increasingly popular conditioning methods taught in exercise classes are Pilates and yoga. In these classes, instructors demonstrate the different moves and positions of the particular method; they also observe students and correct those who are doing the exercises improperly. Group exercise instructors are responsible for ensuring that their classes are motivating, safe, and challenging, yet not too difficult for the participants.

Fitness directors oversee the fitness-related aspects of a health club or fitness center. They create and oversee programs that meet the needs of the club's members, including new member orientations, fitness assessments, and workout incentive programs. They also select fitness equipment; coordinate personal training and group exercise programs; hire, train, and supervise fitness staff; and carry out administrative duties.

Fitness workers in smaller facilities with few employees may perform a variety of functions in addition to their fitness duties, such as tending the front desk, signing up new members, giving tours of the fitness center, writing newsletter articles, creating posters and flyers, and supervising the weight training and cardiovascular equipment areas. In larger commercial facilities, personal trainers are often required to sell their services to members and to make a specified number of sales. Some fitness workers may combine the duties of group exercise instructors and personal trainers, and in smaller facilities, the fitness director may teach classes and do personal training.

Work environment. Most fitness workers spend their time indoors at fitness centers and health clubs. Fitness directors and supervisors, however, typically spend most of their time in an office. Those in smaller fitness centers may split their time among office work, personal training, and teaching classes. Directors and supervisors generally engage in less physical activity than do lower-level fitness workers. Nevertheless, workers at all levels risk suffering injuries during physical activities.

Since most fitness centers are open long hours, fitness workers often work nights and weekends and even occasional holi-



Personal trainers usually must have certification to begin working with clients.

days. Some may travel from place to place throughout the day, to different gyms or to clients' homes, to maintain a full work schedule.

Fitness workers generally enjoy a lot of autonomy. Group exercise instructors choreograph or plan their own classes, and personal trainers have the freedom to design and implement their clients' workout routines.

Training, Other Qualifications, and Advancement

For most fitness workers, certification is critical. Personal trainers usually must have certification to begin working with clients or with members of a fitness facility. Group fitness instructors may begin without a certification, but they are often encouraged or required by their employers to become certified.

Education and training. Fitness workers usually do not receive much on-the-job training; they are expected to know how to do their jobs when they are hired. Workers may receive some organizational training to learn about the operations of their new employer. They occasionally receive specialized training if they are expected to teach or lead a specific method of exercise or focus on a particular age or ability group. Because the requirements vary from employer to employer, it may be helpful to contact your local fitness centers or other potential employers to find out what background they prefer before pursuing training.

The education and training required depends on the specific type of fitness work: personal training, group fitness, or a specialization such as Pilates or yoga each need different preparation. Personal trainers often start out by taking classes to become certified. They then may begin by working alongside an experienced trainer before being allowed to train clients alone. Group fitness instructors often get started by participating in exercise classes until they are ready to successfully audition as instructors and begin teaching class. They also may improve their skills by taking training courses or attending fitness conventions. Most employers require instructors to work toward becoming certified.

Training for Pilates and yoga instructors is changing. Because interest in these forms of exercise has exploded in recent years, the demand for teachers has grown faster than the ability to train them properly. However, because inexperienced teach-

ers have contributed to student injuries, there has been a push toward more standardized, rigorous requirements for teacher training.

Pilates and yoga teachers need specialized training in their particular method of exercise. For Pilates, training options range from weekend-long workshops to year-long programs, but the trend is toward requiring more training. The Pilates Method Alliance has established training standards that recommend at least 200 hours of training; the group also has standards for training schools and maintains a list of training schools that meet the requirements. However, some Pilates teachers are certified group exercise instructors who attend short Pilates workshops; currently, many fitness centers hire people with minimal Pilates training if the applicants have a fitness certification and group fitness experience.

Training requirements for yoga teachers are similar to those for Pilates teachers. Training programs range from a few days to more than 2 years. Many people get their start by taking yoga; eventually, their teachers may consider them ready to assist or to substitute teach. Some students may begin teaching their own classes when their yoga teachers think they are ready; the teachers may even provide letters of recommendation. Those who wish to pursue teaching more seriously usually pursue formal teacher training.

Currently, there are many training programs through the yoga community as well as programs through the fitness industry. The Yoga Alliance has established training standards requiring at least 200 training hours, with a specified number of hours in areas including techniques, teaching methodology, anatomy, physiology, and philosophy. The Yoga Alliance also registers schools that train students to its standards. Because some schools may meet the standards but not be registered, prospective students should check the requirements and decide if particular schools meet them.

An increasing number of employers require fitness workers to have a bachelor's degree in a field related to health or fitness, such as exercise science or physical education. Some employers allow workers to substitute a college degree for certification, but most employers who require a bachelor's degree also require certification.

Certification and other qualifications. Most personal trainers must obtain certification in the fitness field to gain employment. Group fitness instructors do not necessarily need certification to begin working. The most important characteristic that an employer looks for in a new fitness instructor is the ability to plan and lead a class that is motivating and safe. However, most organizations encourage their group instructors to become certified over time, and many require it.

In the fitness field, there are many organizations—some of which are listed in the last section of this statement—that offer certification. Becoming certified by one of the top certification organizations is increasingly important, especially for personal trainers. One way to ensure that a certifying organization is reputable is to see that it is accredited by the National Commission for Certifying Agencies.

Most certifying organizations require candidates to have a high school diploma, be certified in cardiopulmonary resuscitation (CPR), and pass an exam. All certification exams have a written component, and some also have a practical component.

The exams measure knowledge of human physiology, proper exercise techniques, assessment of client fitness levels, and development of appropriate exercise programs. There is no particular training program required for certifications; candidates may prepare however they prefer. Certifying organizations do offer study materials, including books, CD-ROMs, other audio and visual materials, and exam preparation workshops and seminars, but exam candidates are not required to purchase materials to take exams.

Certification generally is good for 2 years, after which workers must become recertified by attending continuing education classes or conferences, writing articles, or giving presentations. Some organizations offer more advanced certification, requiring an associate or bachelor's degree in an exercise-related subject for individuals interested in training athletes, working with people who are injured or ill, or advising clients on general health.

Pilates and yoga instructors usually do not need group exercise certifications to maintain employment. It is more important that they have specialized training in their particular method of exercise. However, the Pilates Method Alliance does offer certification.

People planning fitness careers should be outgoing, excellent communicators, good at motivating people, and sensitive to the needs of others. Excellent health and physical fitness are important due to the physical nature of the job. Those who wish to be personal trainers in a large commercial fitness center should have strong sales skills. All personal trainers should have the personality and motivation to attract and retain clients.

Advancement. A bachelor's degree in exercise science, physical education, kinesiology (the study of muscles, especially the mechanics of human motion), or a related area, along with experience, usually is required to advance to management positions in a health club or fitness center. Some organizations require a master's degree. As in other occupations, managerial skills are also needed to advance to supervisory or managerial positions. College courses in management, business administration, accounting, and personnel management may be helpful, but many fitness companies have corporate universities in which they train employees for management positions.

Personal trainers may advance to head trainer, with responsibility for hiring and overseeing the personal training staff and for bringing in new personal training clients. Group fitness instructors may be promoted to group exercise director, responsible for hiring instructors and coordinating exercise classes. Later, a worker might become the fitness director, who manages the fitness budget and staff. Workers might also become the general manager, whose main focus is the financial aspects of an organization, particularly setting and achieving sales goals; in a small fitness center, however, the general manager is usually involved with all aspects of running the facility. Some workers go into business for themselves and open their own fitness centers.

Employment

Fitness workers held about 235,000 jobs in 2006. Almost all personal trainers and group exercise instructors worked in physical fitness facilities, health clubs, and fitness centers, mainly in the amusement and recreation industry or in civic and

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Fitness trainers and aerobics instructors	39-9031	235,000	298,000	63,000	27

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*.

social organizations. About 8 percent of fitness workers were self-employed; many of these were personal trainers, while others were group fitness instructors working on a contract basis with fitness centers. Many fitness jobs are part time, and many workers hold multiple jobs, teaching or doing personal training at several different fitness centers and at clients' homes.

Job Outlook

Jobs for fitness workers are expected to increase much faster than the average for all occupations. Fitness workers should have good opportunities due to rapid job growth in health clubs, fitness facilities, and other settings where fitness workers are concentrated.

Employment change. Employment of fitness workers is expected to increase 27 percent over the 2006-2016 decade, much faster than the average for all occupations. These workers are expected to gain jobs because an increasing number of people are spending time and money on fitness, and more businesses are recognizing the benefits of health and fitness programs for their employees.

Aging baby boomers are concerned with staying healthy, physically fit, and independent. Moreover, the reduction of physical education programs in schools, combined with parents' growing concern about childhood obesity, has resulted in rapid increases in children's health club membership. Increasingly, parents are also hiring personal trainers for their children, and the number of weight-training gyms for children is expected to continue to grow. Health club membership among young adults also has grown steadily, driven by concern with physical fitness and by rising incomes.

As health clubs strive to provide more personalized service to keep their members motivated, they will continue to offer personal training and a wide variety of group exercise classes. Participation in yoga and Pilates is expected to continue to increase, driven partly by the aging population that demands low-impact forms of exercise and seeks relief from arthritis and other ailments.

Job prospects. Opportunities are expected to be good for fitness workers because of rapid job growth in health clubs, fitness facilities, and other settings where fitness workers are concentrated. In addition, many job openings will stem from the need to replace the large numbers of workers who leave these occupations each year. Part-time jobs will be easier to find than full-time jobs.

Earnings

Median annual earnings of fitness trainers and aerobics instructors in May 2006 were \$25,910. The middle 50 percent earned between \$18,010 and \$41,040. The bottom 10 percent earned less than \$14,880, while the top 10 percent earned \$56,750 or more. These figures do not include the earnings of the self-employed. Earnings of successful self-employed personal trainers

can be much higher. Median annual earnings in the industries employing the largest numbers of fitness workers in 2006 were as follows:

General medical and surgical hospitals.....	\$29,640
Local government	27,720
Fitness and recreational sports centers.....	27,200
Other schools and instruction.....	22,770
Civic and social organizations	22,630

Because many fitness workers work part time, they often do not receive benefits such as health insurance or retirement plans from their employers. They are able to use fitness facilities at no cost, however.

Related Occupations

Other occupations that focus on physical fitness include athletes, coaches, umpires, and related workers. Physical therapists also do related work when they create exercise plans to improve their patients' flexibility, strength, and endurance. Dietitians and nutritionists advise individuals on improving and maintaining their health, like fitness workers do. Also like fitness workers, many recreation workers lead groups in physical activities.

Sources of Additional Information

For more information about fitness careers and universities and other institutions offering programs in health and fitness, contact:

➤ IDEA Health and Fitness Association, 10455 Pacific Center Court., San Diego, CA 92121-4339.

➤ National Strength and Conditioning Association, 1885 Bob Johnson Drive, Colorado Springs, CO 80906.

Internet: <http://www.nscf-lift.org>

For information about personal trainer and group fitness instructor certifications, contact:

➤ American College of Sports Medicine., P.O. Box 1440, Indianapolis, IN 46206-1440. Internet: <http://www.acsm.org>

➤ American Council on Exercise., 4851 Paramount Dr., San Diego, CA 92123. Internet: <http://www.acefitness.org>

➤ National Academy of Sports Medicine., 26632 Agoura Rd., Calabasas, CA 91302. Internet: <http://www.nasm.org>

➤ NSCA Certification Commission, 3333 Landmark Circle, Lincoln, NE 68504. Internet: <http://www.nscf-cc.org>

For information about Pilates certification and training programs, contact:

➤ Pilates Method Alliance, P.O. Box 370906, Miami, FL 33137-0906.

Internet: <http://www.pilatesmethodalliance.org>

For information on yoga teacher training programs, contact:

➤ Yoga Alliance, 7801 Old Branch Ave., Suite 400, Clinton, MD 20735. Internet: <http://www.yogaalliance.org>

To find accredited fitness certification programs, contact:

- National Commission for Certifying Agencies, 2025 M St., NW., Suite 800, Washington, DC 20036.

Internet: <http://www.noca.org/ncca/accredorg.htm>

For information about health clubs and sports clubs, contact:

- International Health, Racquet, and Sportsclub Association, 263 Summer St., Boston, MA 02210.

Internet: <http://www.ihrsa.org>

Flight Attendants

(O*NET 39-6031.00)

Significant Points

- Competition for positions is expected to remain keen because the opportunity for travel attracts more applicants than there are jobs.
- Job duties are learned through formal on-the-job training at a flight training center.
- A high school diploma is the minimum educational requirement; however, applicants with a college degree and with experience in dealing with the public are likely to have the best job opportunities.

Nature of the Work

Major airlines are required by law to provide flight attendants for the safety and security of the traveling public. Although the primary job of the flight attendants is to ensure that security and safety regulations are followed, attendants also try to make flights comfortable and enjoyable for passengers.

At least 1 hour before each flight, attendants are briefed by the captain—the pilot in command—on such things as emergency evacuation procedures, coordination of the crew, the length of the flight, expected weather conditions, and special issues having to do with passengers. Flight attendants make sure that first-aid kits and other emergency equipment are aboard and in working order and that the passenger cabin is in order, with adequate supplies of food, beverages, and any other provided amenities. As passengers board the plane, flight attendants greet them, check their tickets, and tell them where to store carry-on items.

Before the plane takes off, flight attendants instruct all passengers in the use of emergency equipment and check to see that seatbelts are fastened, seat backs are in upright positions, and all carry-on items are properly stowed. In the air, helping passengers in the event of an emergency is the most important responsibility of a flight attendant. Safety-related actions may range from reassuring passengers during rough weather to directing passengers who must evacuate a plane following an emergency landing. Flight attendants also answer questions about the flight; distribute reading material, pillows, and blankets; and help small children, elderly or disabled persons, and any others needing assistance. They may administer first aid to passengers who become ill. Flight attendants generally serve beverages and other refreshments and, on many flights, especially international, heat and distribute precooked meals

or snacks. Prior to landing, flight attendants take inventory of headsets, alcoholic beverages, and moneys collected. They also report any medical problems passengers may have had, the condition of cabin equipment, and lost and found articles.

Lead, or first, flight attendants, sometimes known as pursers, oversee the work of the other attendants aboard the aircraft, while performing most of the same duties.

Work environment. Because airlines operate around the clock and year round, flight attendants may work nights, holidays, and weekends. In most cases, agreements between the airline and the employees' union determine the total daily and monthly working time. Scheduled on-duty time usually is limited to 12 hours per day although some contracts provide daily actual maximums of 14 hours, with somewhat greater maximums for international flying.

Attendants usually fly 65 to 90 hours a month and generally spend another 50 hours a month on the ground preparing planes for flights, writing reports following completed flights, and waiting for planes to arrive. Most airlines guarantee a minimum of 65 to 85 flight hours per month, with the option to work additional hours. Flight attendants receive extra compensation for increased hours.

Flight attendants may be away from their home base at least one-third of the time. During this period, the airlines provide hotel accommodations and an allowance for meal expenses.

Flight attendants must be flexible and willing to relocate. However, many flight attendants elect to live in one place and commute to their assigned home base. Home bases and routes worked are bid for on a seniority basis. The longer the flight attendant has been employed, the more likely he or she is to work on chosen flights. Almost all flight attendants start out working on reserve status or on call. On small corporate airlines, flight



In addition to flying, flight attendants also work on the ground preparing planes for flights, writing reports following completed flights, and waiting for planes to arrive.

attendants often work on an as-needed basis and must adapt to varying environments and passengers.

The combination of free time and discount fares provides flight attendants the opportunity to travel and see new places. However, the work can be strenuous and trying. Flight attendants stand during much of the flight and must remain pleasant and efficient, regardless of how tired they are or how demanding passengers may be. Occasionally, flight attendants must deal with disruptive passengers. Also, turbulent flights can add to possible difficulties regarding service, including potential injuries to passengers.

Working in a moving aircraft leaves flight attendants susceptible to injuries. For example, back injuries and mishaps can occur when opening overhead compartments or while pushing heavy service carts. In addition, medical problems can arise from irregular sleeping and eating patterns, dealing with stressful passengers, working in a pressurized environment, and breathing recycled air.

Training, Other Qualifications, and Advancement

Flight attendants must be certified by the Federal Aviation Administration (FAA). A high school diploma is the minimum educational requirement, but airlines increasingly prefer applicants who have a college degree. Experience in dealing with the public is important because flight attendants must be able to interact comfortably with strangers and remain calm under duress.

Education and training. A high school diploma is the minimum educational requirement. However, airlines increasingly prefer applicants with a college degree and with experience in dealing with the public. Applicants who attend schools and colleges that offer flight attendant training may have an advantage over other applicants. Highly desirable areas of concentration include people-oriented disciplines such as psychology, communications, sociology, nursing, anthropology, police or fire science, travel and tourism, hospitality and education. Flight attendants for international airlines generally must speak a foreign language fluently. For their international flights, some of the major airlines prefer candidates who can speak two major foreign languages.

Once hired, all candidates must undergo a period of formal training. The length of training, ranging from 3 to 8 weeks, depends on the size and type of carrier and takes place at the airline's flight training center. Airlines that do not operate training centers generally send new employees to the center of another airline. Some airlines may provide transportation to the training centers and an allowance for room, board, and school supplies, while other airlines charge individuals for training. New trainees are not considered employees of the airline until they successfully complete the training program. Trainees learn emergency procedures such as evacuating an airplane, operating emergency systems and equipment, administering first aid, and surviving in the water. In addition, trainees are taught how to deal with disruptive passengers and with hijacking and terrorist situations. New hires learn flight regulations and duties, gain knowledge of company operations and policies, and receive instruction on personal grooming and weight control. Trainees for the international routes get additional instruction in passport and customs regulations. Trainees must perform many drills and duties unaided, in front of the training staff. Throughout training,

they also take tests designed to eliminate unsuccessful trainees. Toward the end of their training, students go on practice flights. Upon successful completion of training, flight attendants receive the FAA's Certificate of Demonstrated Proficiency. Flight attendants also are required to go through periodic retraining and pass an FAA safety examination to continue flying.

Licensure and certification. All flight attendants must be certified by the FAA. In order to be certified, flight attendants are required to successfully complete training requirements, such as evacuation, fire fighting, medical emergency, and security procedures established by the FAA and the Transportation Security Administration. They also must perform the assigned duties of a cabin crew member and complete an approved proficiency check. Flight attendants are certified for specific types of aircraft, regardless of the carrier. Therefore, only 1-day or 2-day recurrent training, with the new carrier, is needed for those flight attendants who change airlines, as long as the type of aircraft remains the same.

Other qualifications. Airlines prefer to hire poised, tactful, and resourceful people who can interact comfortably with strangers and remain calm under duress. Flight attendants must be in excellent health, and have the ability to speak clearly. Airlines usually have age, physical, and appearance requirements. Applicants usually must be at least 18 to 21 years old, although some carriers may have higher minimum-age requirements. Applicants must meet height requirements for reaching overhead bins, which often contain emergency equipment, and most airlines want candidates with weight proportionate to height. Vision is required to be correctable to 20/30 or better with glasses or contact lenses (uncorrected no worse than 20/200). Men must have their hair cut above the collar and be clean shaven. Airlines prefer applicants with no visible tattoos, body piercing, or unusual hairstyles or makeup.

In addition to education and training, airlines conduct a thorough background check as required by the FAA, which goes back as many as 10 years. Everything about an applicant is investigated, including date of birth, employment history, criminal record, school records, and gaps in employment. Employment is contingent on a successful background check. An applicant will not be offered a job or will be immediately dismissed if his or her background check shows any discrepancies. All U.S. airlines require that applicants be citizens of the United States or registered aliens with legal rights to obtain employment in the United States.

Advancement. After completing initial training, flight attendants are assigned to one of their airline's bases. New flight attendants are placed on reserve status and are called either to staff extra flights or to fill in for crewmembers who are sick, on vacation, or rerouted. When they are not on duty, reserve flight attendants must be available to report for flights on short notice. They usually remain on reserve for at least 1 year but, in some cities, it may take 5 to 10 years or longer to advance from reserve status. Flight attendants who no longer are on reserve bid monthly for regular assignments. Because assignments are based on seniority, usually only the most experienced attendants get their choice of assignments. Advancement takes longer today than in the past because experienced flight attendants are remaining in this career longer than in the past.

Some flight attendants become supervisors, moving from senior or lead flight attendant, to check flight attendant, to flight attendant supervisor, then on to base manager, and finally to manager or vice president of in-flight operations. They may take on additional duties such as recruiting, instructing, or developing in-flight products. Their experience also may qualify them for numerous airline-related jobs involving contact with the public, such as reservation ticket agent or public relations specialist. Flight attendants who do not want to travel often for various reasons may move to a position as an administrative assistant. With additional education, some flight attendants may decide to transfer to other areas of the airline for which they work, such as risk management or human resources.

Employment

Flight attendants held about 97,000 jobs in 2006. Commercial airlines employed the vast majority of flight attendants, most of whom lived in their employer’s home-base city. A small number of flight attendants worked for large companies that operated aircraft for business purposes.

Job Outlook

Competition for jobs is expected to remain keen because the opportunity for travel attracts more applicants than there are jobs.

Employment change. Employment of flight attendants is expected to grow 11 percent, about as fast as the average for all occupations over the 2006-16 projection period. Population growth and an improving economy are expected to boost the number of airline passengers. As airlines expand their capacity to meet rising demand by increasing the number and size of planes in operation, more flight attendants will be needed.

Job prospects. Despite growing demand for flight attendants, competition is expected to be keen because this job usually attracts more applicants than there are jobs, with only the most qualified eventually being hired. College graduates who have experience dealing with the public should have the best chance of being hired. Job opportunities may be better with the faster growing regional and commuter, low-cost, and charter airlines. There also are job opportunities for professionally trained flight attendants to work for companies operating private aircraft for their executives.

The majority of job opportunities through the year 2016 will arise from the need to replace flight attendants who leave the labor force or transfer to other occupations, often for higher earnings or a more stable lifestyle. With the job now viewed increasingly as a profession, however, fewer flight attendants leave their jobs, and job turnover is not as high as in the past. The average job tenure of attendants is currently more than 14 years and is increasing.

In the long run, opportunities for persons seeking flight attendant jobs should improve as the airline industry expands. Over

the next decade, however, demand for flight attendants will fluctuate with the demand for air travel, which is highly sensitive to swings in the economy. During downturns, as air traffic declines, the hiring of flight attendants declines, and some experienced attendants may be laid off until traffic recovers.

Earnings

According to data from the Association of Flight Attendants, beginning attendants had median earnings of \$15,849 a year in 2006. Beginning pay scales for flight attendants vary by carrier, however. New hires usually begin at the same pay scale regardless of experience, and all flight attendants receive the same future pay increases based on an established pay scale.

Some airlines offer incentive pay for working holidays, night and international flights, or taking positions that require additional responsibility or paperwork.

Flight attendants and their immediate families are entitled to free or discounted fares on their own airline and reduced fares on most other airlines. Some airlines require that the flight attendant be with an airline for 3 to 6 months before taking advantage of this benefit. Other benefits may include medical, dental, and life insurance; 401K or other retirement plan; sick leave; paid holidays; stock options; paid vacations; and tuition reimbursement. Flight attendants also receive a “per diem” allowance for meal expenses while on duty away from home. Flight attendants are required to purchase uniforms and wear them while on duty. The airlines usually pay for uniform replacement items, and may provide a small allowance to cover cleaning and upkeep of the uniforms.

The majority of flight attendants hold union membership, primarily with the Association of Flight Attendants. Other unions that represent flight attendants include the Transport Workers Union of America and the International Brotherhood of Teamsters.

Related Occupations

Other jobs that involve helping people as a safety professional, while requiring the ability to be calm even under trying circumstances, include emergency medical technicians and paramedics as well as firefighting occupations.

Sources of Additional Information

Information about job opportunities and qualifications required for work at a particular airline may be obtained by writing to the airline’s human resources office.

- For further information on flight attendants, contact:
 - Association of Flight Attendants, 501 Third St. NW., Washington, DC 20001.
 - Internet: <http://www.afanet.org>

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Flight attendants.....	39-6031	97,000	107,000	10,000	11

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

Food and Beverage Serving and Related Workers

(O*NET 35-3011.00, 35-3021.00, 35-3022.00, 35-3031.00, 35-3041.00, 35-9011.00, 35-9021.00, 35-9031.00, 35-9099.99)

Significant Points

- Most jobs are part time and have few educational requirements, attracting many young people to the occupation—more than one-fifth of these workers were 16 to 19 years old, about five times the proportion for all workers.
- Job openings are expected to be abundant through 2016, which will create excellent opportunities for jobseekers.
- Tips comprise a major portion of earnings, so keen competition is expected for jobs in fine dining and more popular restaurants where potential tips are greatest.

Nature of the Work

Food and beverage serving and related workers are the front line of customer service in restaurants, coffee shops, and other food service establishments. These workers greet customers, escort them to seats and hand them menus, take food and drink orders, and serve food and beverages. They also answer questions, explain menu items and specials, and keep tables and dining areas clean and set for new diners. Most work as part of a team, helping coworkers to improve workflow and customer service.

Waiters and waitresses, the largest group of these workers, take customers' orders, serve food and beverages, prepare itemized checks, and sometimes accept payment. Their specific duties vary considerably, depending on the establishment. In coffee shops serving routine, straightforward fare, such as salads, soups, and sandwiches, servers are expected to provide fast, efficient, and courteous service. In fine dining restaurants, where more complicated meals are prepared and often served over several courses, waiters and waitresses provide more formal service emphasizing personal, attentive treatment and a more leisurely pace. They may recommend certain dishes and identify ingredients or explain how various items on the menu are prepared. Some prepare salads, desserts, or other menu items tableside. Additionally, servers may meet with managers and chefs, before each shift to discuss the menu and any new items or specials, review ingredients for any potential food allergies, or talk about any food safety concerns, coordination between the kitchen and the dining room, and any customer service issues from the previous day or shift. Servers usually also check the identification of patrons to ensure they meet the minimum age requirement for the purchase of alcohol and tobacco products wherever those items are sold.

Waiters and waitresses sometimes perform the duties of other food and beverage service workers. These tasks may include

escorting guests to tables, serving customers seated at counters, clearing and setting up tables, or operating a cash register. However, full-service restaurants frequently hire other staff, such as hosts and hostesses, cashiers, or dining room attendants, to perform these duties.

Bartenders fill drink orders either taken directly from patrons at the bar or through waiters and waitresses who place drink orders for dining room customers. Bartenders check the identification of customers seated at the bar to ensure they meet the minimum age requirement for the purchase of alcohol and tobacco products. They prepare mixed drinks, serve bottled or draught beer, and pour wine or other beverages. Bartenders must know a wide range of drink recipes and be able to mix drinks accurately, quickly, and without waste. Besides mixing and serving drinks, bartenders stock and prepare garnishes for drinks; maintain an adequate supply of ice, glasses, and other bar supplies; and keep the bar area clean for customers. They also may collect payment, operate the cash register, wash glassware and utensils, and serve food to customers who dine at the bar. Bartenders usually are responsible for ordering and maintaining an inventory of liquor, mixes, and other bar supplies.

Most bartenders directly serve and interact with patrons. Bartenders should be friendly and at ease talking with customers. Bartenders at service bars, on the other hand, have less contact with customers. They work in small bars often located off the kitchen in restaurants, hotels, and clubs where only waiters and waitresses place drink orders. Some establishments, especially larger, higher volume ones, use equipment that automatically measures, pours, and mixes drinks at the push of a button. Bartenders who use this equipment, however, still must work quickly to handle a large volume of drink orders and be familiar with the ingredients for special drink requests. Much of a bartender's work still must be done by hand.

Hosts and hostesses welcome guests and maintain reservation or waiting lists. They may direct patrons to coatrooms, restrooms, or to a place to wait until their table is ready. Hosts and hostesses assign guests to tables suitable for the size of their group, escort patrons to their seats, and provide menus. They also schedule dining reservations, arrange parties, and organize any special services that are required. In some restaurants, they act as cashiers.

Dining room and cafeteria attendants and bartender helpers assist waiters, waitresses, and bartenders by cleaning tables, removing dirty dishes, and keeping serving areas stocked with supplies. Sometimes called backwaiters or runners, they bring meals out of the kitchen and assist waiters and waitresses by distributing dishes to individual diners. They also replenish the supply of clean linens, dishes, silverware, and glasses in the dining room and keep the bar stocked with glasses, liquor, ice, and drink garnishes. Dining room attendants set tables with clean tablecloths, napkins, silverware, glasses, and dishes and serve ice water, rolls, and butter. At the conclusion of meals, they remove dirty dishes and soiled linens from tables. Cafeteria attendants stock serving tables with food, trays, dishes, and silverware and may carry trays to dining tables for patrons. Bartender helpers keep bar equipment clean and glasses washed. *Dishwashers* clean dishes, cutlery, and kitchen utensils and equipment.

Counter attendants take orders and serve food in cafeterias, coffee shops, and carryout eateries. In cafeterias, they serve food displayed on steam tables, carve meat, dish out vegetables, ladle sauces and soups, and fill beverage glasses. In lunchrooms and coffee shops, counter attendants take orders from customers seated at the counter, transmit orders to the kitchen, and pick up and serve food. They also fill cups with coffee, soda, and other beverages and prepare fountain specialties, such as milkshakes and ice cream sundaes. Counter attendants also take carryout orders from diners and wrap or place items in containers. They clean counters, write itemized bills, and sometimes accept payment. Some counter attendants may prepare short-order items, such as sandwiches and salads.

Some food and beverage serving workers take orders from customers at counters or drive-through windows at fast-food restaurants. They assemble orders, hand them to customers, and accept payment. Many of these are *combined food preparation and serving workers* who also cook and package food, make coffee, and fill beverage cups using drink-dispensing machines.

Other workers serve food to patrons outside of a restaurant environment. They might deliver room service meals in hotels or meals to hospital rooms or act as carhops, bringing orders to parked cars.

Work environment. Food and beverage service workers are on their feet most of the time and often carry heavy trays of food, dishes, and glassware. During busy dining periods, they are under pressure to serve customers quickly and efficiently. The work is relatively safe, but care must be taken to avoid slips, falls, and burns.

Part-time work is more common among food and beverage serving and related workers than among workers in almost any other occupation. In 2006, those on part-time schedules included half of all waiters and waitresses and 39 percent of all bartenders.



Food and beverage serving and related workers need good interpersonal skills to deal with customers.

Food service and drinking establishments typically maintain long dining hours and offer flexible and varied work opportunities. Many food and beverage serving and related workers work evenings, weekends, and holidays. Many students and teenagers seek part time or seasonal work as food and beverage serving and related workers as a first job to gain work experience or to earn spending money. More than one-fifth of all food and beverage serving and related workers were 16 to 19 years old—about five times the proportion for all workers.

Training, Other Qualifications, and Advancement

Most food and beverage service jobs require little or no previous experience and provide training on the job.

Education and training. There are no specific educational requirements for most food and beverage service jobs. Many employers prefer to hire high school graduates for waiter and waitress, bartender, and host and hostess positions, but completion of high school usually is not required for fast-food workers, counter attendants, dishwashers, and dining room attendants and bartender helpers. For many people, a job as a food and beverage service worker serves as a source of immediate income, rather than a career. Many entrants to these jobs are in their late teens or early twenties and have a high school education or less. Usually, they have little or no work experience. Many are full-time students or homemakers. Food and beverage service jobs are a major source of part-time employment for high school and college students.

All new employees receive some training from their employer. They learn safe food handling procedures and sanitation practices, for example. Some employers, particularly those in fast-food restaurants, teach new workers using self-study programs, on-line programs, audiovisual presentations, and instructional booklets that explain food preparation and service skills. But most food and beverage serving and related workers pick up their skills by observing and working with more experienced workers. Some full-service restaurants also provide new dining room employees with some form of classroom training that alternates with periods of on-the-job work experience. These training programs communicate the operating philosophy of the restaurant, help establish a personal rapport with other staff, teach formal serving techniques, and instill a desire to work as a team. They also provide an opportunity to discuss customer service situations and the proper ways of handling unpleasant circumstances or unruly patrons.

Some food serving workers can acquire more skills by attending relevant classes offered by public or private vocational schools, restaurant associations, or large restaurant chains. Some bartenders also acquire their skills by attending a bartending or vocational and technical school. These programs often include instruction on State and local laws and regulations, cocktail recipes, proper attire and conduct, and stocking a bar. Some of these schools help their graduates find jobs. Although few employers require any minimum level of educational attainment, some specialized training is usually needed in food handling and legal issues surrounding serving alcoholic beverages. Employers are more likely to hire and promote based on people skills and personal qualities rather than education.

Other qualifications. Restaurants rely on good food and quality customer service to retain loyal customers and succeed

in a competitive industry. Food and beverage serving and related workers who exhibit excellent personal qualities—such as a neat clean appearance, a well-spoken manner, an ability to work as a part of a team, and a pleasant way with patrons—will be highly sought after. All workers who serve alcoholic beverages must be at least 21 years of age in most jurisdictions and should be familiar with State and local laws concerning the sale of alcoholic beverages. For bartender jobs, many employers prefer to hire people who are 25 or older.

Waiters and waitresses need a good memory to avoid confusing customers’ orders and to recall faces, names, and preferences of frequent patrons. These workers also should be comfortable using computers to place orders and generate customers’ bills. Some may need to be quick at arithmetic so they can total bills manually. Knowledge of a foreign language is helpful to communicate with a diverse clientele and staff. Prior experience waiting on tables is preferred by restaurants and hotels that have rigid table service standards. Jobs at these establishments often offer higher wages and have greater income potential from tips, but they may also have stiffer employment requirements, such as prior table service experience or higher education than other establishments.

Advancement. Due to the relatively small size of most food-serving establishments, opportunities for promotion are limited. After gaining experience, some dining room and cafeteria attendants and bartender helpers advance to waiter, waitress, or bartender jobs. For waiters, waitresses, and bartenders, advancement usually is limited to finding a job in a busier or more expensive restaurant or bar where prospects for tip earnings are better. Some bartenders, hosts and hostesses, and waiters and waitresses advance to supervisory jobs, such as dining room supervisor, maitre d’hotel, assistant manager, or restaurant general manager. A few bartenders open their own businesses. In larger restaurant chains, food and beverage service workers who excel often are invited to enter the company’s formal management training program. (For more information, see the section on food service managers elsewhere in the *Handbook*.)

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Food and beverage serving and related workers	—	7,422,000	8,415,000	993,000	13
Food and beverage serving workers.....	35-3000	6,081,000	6,927,000	846,000	14
Bartenders	35-3011	495,000	551,000	56,000	11
Fast food and counter workers	35-3020	3,036,000	3,542,000	506,000	17
Combined food preparation and serving workers, including fast food	35-3021	2,503,000	2,955,000	452,000	18
Counter attendants, cafeteria, food concession, and coffee shop.....	35-3022	533,000	587,000	54,000	10
Waiters and waitresses	35-3031	2,361,000	2,615,000	255,000	11
Food servers, nonrestaurant	35-3041	189,000	219,000	30,000	16
Other food preparation and serving related workers.....	35-9000	1,341,000	1,488,000	147,000	11
Dining room and cafeteria attendants and bartender helpers....	35-9011	416,000	466,000	49,000	12
Dishwashers	35-9021	517,000	571,000	54,000	10
Hosts and hostesses, restaurant, lounge, and coffee shop.....	35-9031	351,000	388,000	37,000	10
Food preparation and serving related workers, all other.....	35-9099	56,000	64,000	7,300	13

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

Employment

Food and beverage serving and related workers held 7.4 million jobs in 2006. The distribution of jobs among the various food and beverage serving occupations was as follows:

Combined food preparation and serving workers, including fast food	2,503,000
Waiters and waitresses	2,361,000
Counter attendants, cafeteria, food concession, and coffee shop	533,000
Dishwashers	517,000
Bartenders	495,000
Dining room and cafeteria attendants and bartender helpers	416,000
Hosts and hostesses, restaurant, lounge, and coffee shop	351,000
Food servers, non restaurant	189,000
All other food preparation and serving related workers	56,000

The overwhelming majority of jobs for food and beverage serving and related workers were found in food services and drinking places, such as restaurants, sandwich shops, and catering or contract food service operators. Other jobs were in hotels, motels, and other traveler accommodation establishments; amusement, gambling, and recreation establishments; educational services; grocery stores; nursing care facilities; civic and social organizations; and hospitals.

Jobs are located throughout the country but are typically plentiful in large cities and tourist areas. Vacation resorts offer seasonal employment, and some workers alternate between summer and winter resorts.

Job Outlook

Average employment growth is expected, and job opportunities should be excellent for food and beverage serving and related workers, but job competition is often keen at upscale restaurants.

Employment change. Overall employment of these workers is expected to increase by 13 percent over the 2006-16 decade, which is about as fast as the average for all occupations. Food

and beverage serving and related workers are projected to have one of the largest numbers of new jobs arise, about 993,000, over this period. The popularity of eating out is expected to increase as the population expands and as customers seek the convenience of restaurants and other dining options. Projected employment growth varies somewhat by job type. Employment of combined food preparation and serving workers, which includes fast-food workers, is expected to increase faster than the average in response to the continuing fast-paced lifestyle of many Americans and the addition of healthier foods at many fast-food restaurants. Average employment growth is expected for waiters and waitresses, hosts and hostesses, and bartenders. Restaurants that offer table service, more varied menus, and an active bar scene are growing in number in response to consumer demands for convenience and to increases in disposable income, especially among families who frequent casual family-oriented restaurants; affluent young professionals, who patronize trendier, more upscale establishments; and retirees and others who dine out as a way to socialize. Employment of dishwashers, dining room and cafeteria attendants, and bartender helpers also will grow about as fast as average.

Job prospects. Job opportunities at most eating and drinking places will be excellent because many people in service sector occupations change jobs frequently and the number of food service outlets needing food service workers will continue to grow. Many of these workers, such as teens, those seeking part-time employment, or multiple jobholders, do so to satisfy short-term income needs before moving on to jobs in other occupations or leaving the workforce. Keen competition is expected, however, for jobs in popular restaurants and fine dining establishments, where potential earnings from tips are greatest.

Earnings

Food and beverage serving and related workers derive their earnings from a combination of hourly wages and customer tips. Earnings vary greatly, depending on the type of job and establishment. For example, fast-food workers and hosts and hostesses usually do not receive tips, so their wage rates may be higher than those of waiters and waitresses and bartenders in full-service restaurants but their overall earnings might be lower. In many full-service restaurants, tips are higher than wages. In some restaurants, workers contribute all or a portion of their tips to a tip pool, which is distributed among qualifying workers. Tip pools allow workers who don't usually receive tips directly from customers, such as dining room attendants, to feel a part of a team and to share in the rewards of good service.

In May 2006, median hourly wage-and-salary earnings (including tips) of waiters and waitresses were \$7.14. The middle 50 percent earned between \$6.42 and \$9.14. The lowest 10 percent earned less than \$5.78, and the highest 10 percent earned more than \$12.46 an hour. For most waiters and waitresses, higher earnings are primarily the result of receiving more in tips rather than higher hourly wages. Tips usually average between 10 and 20 percent of guests' checks; waiters and waitresses working in busy, expensive restaurants earn the most.

Bartenders had median hourly wage-and-salary earnings (including tips) of \$7.86. The middle 50 percent earned between \$6.77 and \$10.10. The lowest 10 percent earned less than \$6.00, and the

highest 10 percent earned more than \$13.56 an hour. Like waiters and waitresses, bartenders employed in public bars may receive more than half of their earnings as tips. Service bartenders often are paid higher hourly wages to offset their lower tip earnings.

Median hourly wage-and-salary earnings (including tips) of dining room and cafeteria attendants and bartender helpers were \$7.36. The middle 50 percent earned between \$6.62 and \$8.59. The lowest 10 percent earned less than \$5.91, and the highest 10 percent earned more than \$10.60 an hour. Most received over half of their earnings as wages; the rest of their income was a share of the proceeds from tip pools.

Median hourly wage-and-salary earnings of hosts and hostesses were \$7.78. The middle 50 percent earned between \$6.79 and \$8.97. The lowest 10 percent earned less than \$5.99, and the highest 10 percent earned more than \$10.80 an hour. Wages comprised the majority of their earnings. In some cases, wages were supplemented by proceeds from tip pools.

Median hourly wage-and-salary earnings of combined food preparation and serving workers, including fast food, were \$7.24. The middle 50 percent earned between \$6.47 and \$8.46. The lowest 10 percent earned less than \$5.79, and the highest 10 percent earned more than \$10.16 an hour. Although some combined food preparation and serving workers receive a part of their earnings as tips, fast-food workers usually do not.

Median hourly wage-and-salary earnings of counter attendants in cafeterias, food concessions, and coffee shops (including tips) were \$7.76. The middle 50 percent earned between \$6.85 and \$9.00 an hour. The lowest 10 percent earned less than \$6.11, and the highest 10 percent earned more than \$10.86 an hour.

Median hourly wage-and-salary earnings of dishwashers were \$7.57. The middle 50 percent earned between \$6.78 and \$8.62. The lowest 10 percent earned less than \$6.01, and the highest 10 percent earned more than \$10.00 an hour.

Median hourly wage-and-salary earnings of food servers outside of restaurants were \$8.70. The middle 50 percent earned between \$7.27 and \$10.87. The lowest 10 percent earned less than \$6.36, and the highest 10 percent earned more than \$13.81 an hour.

Many beginning or inexperienced workers earn the Federal minimum wage of \$5.85 an hour. However, a few States set minimum wages higher than the Federal minimum. Under Federal law, this wage will increase to \$6.55 in the summer of 2008 and to \$7.25 in the summer of 2009. Also, various minimum wage exceptions apply under specific circumstances to disabled workers, full-time students, youth under age 20 in their first 90 days of employment, tipped employees, and student-learners. Tipped employees are those who customarily and regularly receive more than \$30 a month in tips. The employer may consider tips as part of wages, but the employer must pay at least \$2.13 an hour in direct wages.

Many employers provide free meals and furnish uniforms, but some may deduct from wages the cost, or fair value, of any meals or lodging provided. Food and beverage service workers who work full time often receive typical benefits, but part-time workers usually do not. In some large restaurants and hotels, food and beverage serving and related workers belong to unions—principally the Unite HERE and the Service Employees International Union.

Related Occupations

Other workers who prepare food for diners include chefs, cooks, and food preparation workers. Those whose job involves serving customers and handling money include cashiers, flight attendants, gaming services workers, and retail salespersons.

Sources of Additional Information

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

A guide to careers in restaurants plus a list of 2- and 4-year colleges offering food service programs and related scholarship information is available from:

► National Restaurant Association, 1200 17th St.NW., Washington, DC20036. Internet: <http://www.restaurant.org>

For general information on hospitality careers, contact:

► International Council on Hotel, Restaurant, and Institutional Education, 2810 North Parham Rd., Suite 230, Richmond, VA 23294. Internet:<http://www.chrie.org>

Food Service Managers

(O*NET 11-9051.00)

Significant Points

- Experience in food and beverage preparation and serving jobs is necessary for most food service manager positions.
- Food service managers coordinate a wide range of activities, but their most difficult task may be dealing with irate customers and uncooperative employees.
- Job opportunities for food service managers should be good as the number of outlets of restaurant chains increases to meet customer demand for convenience and value.

Nature of the Work

Food service managers are responsible for the daily operations of restaurants and other establishments that prepare and serve meals and beverages to customers. Besides coordinating activities among various departments, such as kitchen, dining room, and banquet operations, food service managers ensure that customers are satisfied with their dining experience. In addition, they oversee the inventory and ordering of food, equipment, and supplies and arrange for the routine maintenance and upkeep of the restaurant's equipment and facilities. Managers generally are responsible for all of the administrative and human-resource functions of running the business, including recruiting new employees and monitoring employee performance and training.

Managers interview, hire, train, and when necessary, fire employees. Retaining good employees is a major challenge facing food service managers. Managers recruit employees at career fairs, contact schools that offer academic programs in hospitality or culinary arts, and arrange for newspaper advertising to attract additional applicants. Managers oversee the training

of new employees and explain the establishment's policies and practices. They schedule work hours, making sure that enough workers are present to cover each shift. If employees are unable to work, managers may have to call in alternates to cover for them or fill in themselves when needed. Some managers may help with cooking, clearing tables, or other tasks when the restaurant becomes extremely busy.

Food service managers ensure that diners are served properly and in a timely manner. They investigate and resolve customers' complaints about food quality or service. They monitor orders in the kitchen to determine where backups may occur, and they work with the chef to remedy any delays in service. Managers direct the cleaning of the dining areas and the washing of tableware, kitchen utensils, and equipment to comply with company and government sanitation standards. Managers also monitor the actions of their employees and patrons on a continual basis to ensure the personal safety of everyone. They make sure that health and safety standards and local liquor regulations are obeyed.

In addition to their regular duties, food service managers perform a variety of administrative assignments, such as keeping employee work records, preparing the payroll, and completing paperwork to comply with licensing laws and tax, wage and hour, unemployment compensation, and Social Security laws. Some of this work may be delegated to an assistant manager or bookkeeper, or it may be contracted out, but most general managers retain responsibility for the accuracy of business records. Managers also maintain records of supply and equipment purchases and ensure that accounts with suppliers are paid.

Managers tally the cash and charge receipts received and balance them against the record of sales. They are responsible for depositing the day's receipts at the bank or securing them in a safe place. Finally, managers are responsible for locking up the establishment, checking that ovens, grills, and lights are off, and switching on alarm systems.

Technology influences the jobs of food service managers in many ways, enhancing efficiency and productivity. Many restaurants use computers to track orders, inventory, and the seating of patrons. Point-of-service (POS) systems allow servers to key in a customer's order, either at the table using a hand-held device, or from a computer terminal in the dining room, and send the order to the kitchen instantaneously so preparation can begin. The same system totals and prints checks, functions like a cash register, connects to credit card authorizers, and tracks sales. To minimize food costs and spoilage, many managers use inventory-tracking software to compare sales records with a record of the current inventory. Some establishments enter an inventory of standard ingredients and suppliers into their POS system. When supplies of particular ingredients run low, they can be ordered directly from the supplier using preprogrammed information. Computers also allow restaurant and food service managers to keep track of employee schedules and paychecks more efficiently.

Food service managers use the Internet to track industry news, find recipes, conduct market research, purchase supplies or equipment, recruit employees, and train staff. Internet access also makes service to customers more efficient. Many restaurants maintain Web sites that include menus and online promo-

tions, provide information about the restaurant's location, and offer patrons the option of making a reservation.

In most full-service restaurants and institutional food service facilities, the management team consists of a *general manager*, one or more *assistant managers*, and an *executive chef*. The executive chef is responsible for all food preparation activities, including running kitchen operations, planning menus, and maintaining quality standards for food service. In limited-service eating places, such as sandwich shops, coffee bars, or fast-food establishments, managers, not executive chefs, are responsible for supervising routine food preparation operations. Assistant managers in full-service facilities generally oversee service in the dining rooms and banquet areas. In larger restaurants and fast-food or other food service facilities that serve meals daily and maintain longer business hours, individual assistant managers may supervise different shifts of workers. In smaller restaurants, formal titles may be less important, and one person may undertake the work of one or more food service positions. For example, the executive chef also may be the general manager or even sometimes an owner. (For additional information on these other workers, see material on top executives and chefs, cooks, and food preparation workers elsewhere in the *Handbook*.)

In restaurants where there are both food service managers and executive chefs, the managers often help the chefs select successful menu items. This task varies by establishment depending on the seasonality of menu items, the frequency with which restaurants change their menus, and the introduction of daily, weekly, or seasonal specials. Many restaurants rarely change their menus while others make frequent alterations. Managers or executive chefs select menu items, taking into account the likely number of customers and the past popularity of dishes. Other issues considered when planning a menu include whether there was any food left over from prior meals that should not be wasted, the need for variety, and the seasonal availability of foods. Managers or executive chefs analyze the recipes of the dishes to determine food, labor, and overhead costs, work out the portion size and nutritional content of each plate, and assign prices to various menu items. Menus must be developed far enough in advance that supplies can be ordered and received in time.

Managers or executive chefs estimate food needs, place orders with distributors, and schedule the delivery of fresh food and supplies. They plan for routine services or deliveries, such as linen services or the heavy cleaning of dining rooms or kitchen equipment, to occur during slow times or when the dining room is closed. Managers also arrange for equipment maintenance and repairs, and coordinate a variety of services such as waste removal and pest control. Managers or executive chefs receive deliveries and check the contents against order records. They inspect the quality of fresh meats, poultry, fish, fruits, vegetables, and baked goods to ensure that expectations are met. They meet with representatives from restaurant supply companies and place orders to replenish stocks of tableware, linens, paper products, cleaning supplies, cooking utensils, and furniture and fixtures.

Work environment. Food service managers are among the first to arrive in the morning and the last to leave at night. Long hours—12 to 15 per day, 50 or more per week, and sometimes 7 days a week—are common. Managers of institutional food service facilities, such as school, factory, or office cafeterias,

work more regular hours because the operating hours of these establishments usually conform to the operating hours of the business or facility they serve. However, hours for many managers are unpredictable.

Managers should be calm, flexible, and able to work through emergencies, such as a fire or flood, to ensure everyone's safety. They also should be able to fill in for absent workers on short notice. Managers often experience the pressures of simultaneously coordinating a wide range of activities. When problems occur, it is the manager's responsibility to resolve them with minimal disruption to customers. The job can be hectic, and dealing with irate customers or uncooperative employees can be stressful.

Managers also may experience the typical minor injuries of other restaurant workers, such as muscle aches, cuts, or burns. They might endure physical discomfort from moving tables or chairs to accommodate large parties, receiving and storing daily supplies from vendors, or making minor repairs to furniture or equipment.

Training, Other Qualifications, and Advancement

Experience in the food services industry, whether as a cook, waiter or waitress, or counter attendant, is the most common training for food service managers. Many restaurant and food service manager positions, particularly self-service and fast-



Food service managers keep an inventory of food and supplies and perform other bookkeeping functions.

food, are filled by promoting experienced food and beverage preparation and service workers.

Education and training. Experience as a waiter or waitress, cook, or counter help is the most common way to enter the occupation. Executive chefs, in particular, need extensive experience working as chefs. Many food service management companies and national or regional restaurant chains recruit management trainees from 2- and 4-year college hospitality management programs, which require internships and real-life experience to graduate. Some restaurant chains prefer to hire people with degrees in restaurant and institutional food service management, but they often hire graduates with degrees in other fields who have demonstrated experience, interest, and aptitude.

Postsecondary education is preferred for many food service manager positions, but it is not a significant qualification for many others: More than 40 percent of food service managers have a high school diploma or less; less than one-quarter have a bachelor's or graduate degree. However, a postsecondary degree is preferred by higher end full-service restaurants and for many corporate positions, such as managing a regional or national restaurant chain or franchise or overseeing contract food service operations at sports and entertainment complexes, school campuses, and institutional facilities. A college degree also is beneficial for those who want to own or manage their own restaurant.

Almost 1,000 colleges and universities offer 4-year programs in restaurant and hospitality management or institutional food service management; a growing number of university programs offer graduate degrees in hospitality management or similar fields. For those not interested in pursuing a 4-year degree, community and junior colleges, technical institutes, and other institutions offer programs in the field leading to an associate degree or other formal certification.

Both 2- and 4-year programs provide instruction in subjects such as nutrition, sanitation, and food planning and preparation, as well as accounting, business law and management, and computer science. Some programs combine classroom and laboratory study with internships providing on-the-job experience. In addition, many educational institutions offer culinary programs in food preparation. Such training can lead to careers as cooks or chefs and provide a foundation for advancement to executive chef positions.

Many larger food service operations will provide, or offer to pay for, technical training, such as computer or business courses, so that employees can acquire the business skills necessary to read spreadsheets or understand the concepts and practices of running a business. Generally, this requires a long-term commitment on the employee's part to both the employer and to the profession.

Most restaurant chains and food service management companies have rigorous training programs for management positions. Through a combination of classroom and on-the-job training, trainees receive instruction and gain work experience in all aspects of the operation of a restaurant or institutional food service facility. Areas include food preparation, nutrition, sanitation, security, company policies and procedures, personnel management, recordkeeping, and preparation of reports. Training on use of the restaurant's computer system is increasingly important as well. Usually, after 6 months or a year, trainees receive their first permanent assignment as an assistant manager.

Other qualifications. Most employers emphasize personal qualities when hiring managers. Workers who are reliable, show initiative, and have leadership qualities are highly sought after for promotion. Other qualities that managers look for are good problem-solving skills and the ability to concentrate on details. A neat and clean appearance is important, because food service managers must convey self-confidence and show respect in dealing with the public. Because food service management can be physically demanding, good health and stamina are important.

Managers must be good communicators as they deal with customers, employees, and suppliers for most of the day. They must be able to motivate employees to work as a team, to ensure that food and service meet appropriate standards. Additionally, the ability to speak multiple languages is helpful to communicate with staff and patrons.

Certification and advancement. The certified Foodservice Management Professional (FMP) designation is a measure of professional achievement for food service managers, and although not a requirement for employment or necessary for advancement, voluntary certification can provide recognition of professional competence, particularly for managers who acquired their skills largely on the job. The National Restaurant Association Educational Foundation 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 meet standards of work experience in the field.

Willingness to relocate often is essential for advancement to positions with greater responsibility. Managers typically advance to larger or more prominent establishments or regional management positions within restaurant chains. Some may open their own food service establishments or franchise operation.

Employment

Food service managers held about 350,000 jobs in 2006. The majority of managers are salaried, but 45 percent are self-employed as owners of independent restaurants or other small food service establishments. Thirty-eight percent of all salaried jobs for food service managers are in full-service restaurants or limited-service eating places, such as fast-food restaurants and cafeterias. Other salaried jobs are in special food services—an industry that includes food service contractors who supply food services at institutional, governmental, commercial, or industrial locations, and educational services, primarily in elementary and secondary schools. A smaller number of salaried jobs are in hotels; amusement, gambling, and recreation industries; nursing care facilities; and hospitals. Jobs are located throughout the country, with large cities and resort areas providing more opportunities for full-service dining positions.

Job Outlook

Food service manager jobs are expected to grow 5 percent, or more slowly than the average for all occupations through 2016. However, job opportunities should be good because, in addition to job growth, many more openings will arise from the need to replace managers who leave the occupation.

Employment change. Employment of food service managers is expected to grow 5 percent, or more slowly than the aver-

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Food service managers.....	11-9051	350,000	368,000	18,000	5

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*.

age for all occupations, during the 2006-16 decade. New eating and drinking places will open to meet the growing demand for convenience and value from a growing population, generating new employment opportunities for food service managers. Employment growth is projected to vary by industry. Most new jobs will be in full-service restaurants, but they are expected to decline among limited service restaurants. Manager jobs will also increase in special food services, an industry that includes food service contractors that provide food for schools, health care facilities, and other commercial businesses and in nursing and residential care for the elderly. Self-employment of these workers will generate nearly 30 percent of new jobs.

Job prospects. In addition to job openings from employment growth, the need to replace managers who transfer to other occupations or stop working will create good job opportunities. Although practical experience is an integral part of finding a food service management position, applicants with a degree in restaurant, hospitality or institutional food service management will have an edge when competing for jobs at upscale restaurants and for advancement in a restaurant chain or into corporate management.

Earnings

Median annual earnings of salaried food service managers were \$43,020 in May 2006. The middle 50 percent earned between \$34,210 and \$55,100. The lowest 10 percent earned less than \$27,400, and the highest 10 percent earned more than \$70,810. Median annual earnings in the industries employing the largest numbers of food service managers were as follows:

Traveler accommodation.....	\$48,890
Special food services.....	48,710
Full-service restaurants	45,650
Elementary and secondary schools	39,650
Limited-service eating places	39,070

In addition to receiving typical benefits, most salaried food service managers are provided free meals and the opportunity for additional training, depending on their length of service. Some food service managers, especially those in full-service restaurants, may earn bonuses depending on sales volume or revenue.

Related Occupations

Food service managers direct the activities of a hospitality-in-dustry business and provide a service to customers. Other managers and supervisors in hospitality-oriented businesses include gaming managers, lodging managers, sales worker supervisors, and first-line supervisors or managers of food preparation and serving workers.

Sources of Additional Information

Information about a career as a food service manager, 2- and 4-year college programs in restaurant and food service management, and certification as a Foodservice Management Professional is available from:

➤ National Restaurant Association Educational Foundation, 175 West Jackson Blvd., Suite 1500, Chicago, IL 60604-2702. Internet: <http://www.nraef.org>

Career information about food service managers, as well as a directory of 2- and 4-year colleges that offer courses or programs that prepare persons for food service careers is available from:

➤ National Restaurant Association, 1200 17th St.NW., Washington, DC 20036-3097. Internet: <http://www.restaurant.org>

General information on hospitality careers may be obtained from:

➤ The International Council on Hotel, Restaurant, and Institutional Education, 2810 North Parham Rd., Suite 230, Richmond, VA 23294. Internet: <http://www.chrie.org>

Additional information about job opportunities in food service management may be obtained from local employers and from local offices of State employment services agencies.

Gaming Services Occupations

(O*NET 11-9071.00, 39-1011.00, 39-1012.00, 39-3011.00, 39-3012.00, 39-3019.99)

Significant Points

- Job opportunities are available nationwide and are no longer limited to Nevada and New Jersey.
- Workers need a license issued by a regulatory agency, such as a State casino control board or commission.
- Employment is projected to grow much faster than average.
- Job prospects will be best for those with a degree or certification in gaming or a hospitality-related field, previous training or experience in casino gaming, and strong interpersonal and customer service skills.

Nature of the Work

Legalized gambling in the United States today includes casino gaming, State lotteries, pari-mutuel wagering on contests such as horse or dog racing, and charitable gaming. Gaming, the playing of games of chance, is a multibillion-dollar

industry that is responsible for the creation of a number of unique service occupations.

The majority of all gaming services workers are employed in casinos. Their duties and titles may vary from one establishment to another. Some positions are associated with oversight and direction—supervision, surveillance, and investigation—while others involve working with the games or patrons themselves by tending slot machines, dealing cards or running games, handling money, writing and running tickets, and other activities. In nearly any gaming job, workers interact directly with patrons, and part of their responsibility is to make those interactions enjoyable.

Like nearly every business establishment, casinos have workers who direct and oversee day-to-day operations. *Gaming supervisors* and *gaming managers* oversee the gaming operations and personnel in an assigned area. They circulate among the tables and observe the operations to ensure that all of the stations and games are covered for each shift and workers and gamblers adhere to the rules of the games. Gaming supervisors and gaming managers often explain and interpret the operating rules of the house to patrons who may have difficulty understanding the rules. They also may plan and organize activities to create a friendly atmosphere for the guests staying in casino hotels. Periodically, they address complaints about service.

Gaming managers also have additional responsibilities beyond those of supervisors. For example, gaming managers prepare work schedules and station assignments for their subordinates. They are responsible for interviewing, hiring, training, and evaluating new workers.

Managers supervise a variety of other workers. Some of these workers need specialized skills—dealing blackjack, for example—that are unique to casino work. Others require skills common to most business workers, such as the ability to conduct financial transactions.

Slot key persons coordinate and supervise the slot machine department and its workers. Their duties include verifying and handling payoff winnings to patrons, resetting slot machines after completing the payoff, and refilling machines with money. Slot key persons must be familiar with a variety of slot machines and be able to make minor repairs and adjustments to the machines as needed. If major repairs are required, slot key persons determine whether the slot machine should be removed from the floor. Working the floor as frontline personnel, they enforce safety rules and report hazards.

Gaming and sportsbook writers and runners assist in the operations of games such as bingo and keno, in addition to taking bets on sporting events. They scan tickets presented by patrons and calculate and distribute winnings. Some writers and runners operate the equipment that randomly selects the numbers. Others may announce numbers selected, pick up tickets from patrons, collect bets, or receive, verify, and record patrons' cash wagers.

Gaming dealers operate table games such as craps, blackjack, and roulette. Standing or sitting behind the table, dealers provide dice, dispense cards to players, or run the equipment. Some dealers also monitor the patrons for infractions



Gaming service workers are required to have a license.

of casino rules. Gaming dealers must be skilled in customer service and in executing their game. Dealers determine winners, calculate and pay winning bets, and collect losing bets. Because of the fast-paced work environment, most gaming dealers are competent in at least two games, usually blackjack and craps.

Work environment. Most casinos are open 24 hours a day, 7 days a week and offer 3 staggered shifts. Employees can be expected to work weekends and holidays. The atmosphere in casinos is generally filled with fun and often considered glamorous. However, casino work can also be physically demanding. Most occupations require that workers stand for long periods; some require the lifting of heavy items. The atmosphere in casinos exposes workers to certain hazards, such as cigarette, cigar, and pipe smoke. Noise from slot machines, gaming tables, and talking workers and patrons may be distracting to some, although workers wear protective headgear in areas where loud machinery is used to count money.

Training, Other Qualifications, and Advancement

Each casino establishes its own education, training, and experience requirements, but all gaming service workers must obtain a license from a regulatory agency, such as a State casino control board or commission.

Education and training. There usually are no minimum educational requirements for entry-level gaming jobs, although most employers prefer workers with at least a high school diploma or GED.

Each casino establishes its own requirements for education, training, and experience. Some of the major casinos and slot manufacturers run their own training schools, and almost all provide some form of in-house training in addition to requiring certification. The type and quantity of classes needed may vary. Many institutions of higher learning give training toward certificates in gaming, as well as offering an associate, bachelor's, or master's degree in a hospitality-related field such as hospitality management, hospitality administration, or hotel management. Some schools offer training in games, gaming supervision, slot attendant and slot repair

technician work, slot department management, and surveillance and security.

Slot key persons do not need to meet formal educational requirements to enter the occupation, but completion of slot attendant or slot technician training is helpful. As with most other gaming workers, slot key persons receive on-the-job training during the first several weeks of employment.

Gaming and sports book writers and runners must have at least a high school diploma or GED. Most of these workers receive on-the-job training. Because gaming and sportsbook writers and runners work closely with patrons, they need excellent customer service skills.

Most gaming dealers acquire their skills by attending a dealer school or vocational and technical school. They teach the rules and procedures of the games as well as State and local laws and regulations. Graduation from one of these schools does not guarantee a job at a casino, however, as most casinos also require prospective dealers to audition for open positions. During the audition, personal qualities are assessed along with knowledge of the games.

For most gaming supervisor and gaming manager positions, an associate or bachelor’s degree is beneficial, but it is not required. Most employees in these occupations have experience in other gaming occupations, typically as dealers, and have a broad knowledge of casino rules, regulations, procedures, and games.

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

Other qualifications. In addition to possessing a license, gaming services workers need superior customer service skills. Casino gaming workers provide entertainment and hospitality to patrons, and the quality of their service contributes to an establishment’s success or failure. Therefore, gaming workers need good communication skills, an outgoing personality, and the ability to maintain their composure even when dealing with angry or demanding patrons. Personal integrity also is important because workers handle large amounts of money.

Gaming services workers who manage money should have some experience handling cash or using calculators or com-

puters. For such positions, most casinos administer a math test to assess an applicant’s level of competency.

Gaming supervisors and gaming managers must have strong leadership, organizational, and communication skills. Excellent customer service and employee relations skills also are necessary.

Advancement. Advancement opportunities in casino gaming depend less on workers’ previous casino duties and titles than on their ability and eagerness to learn new jobs. For example, an entry-level gaming worker eventually might advance to become a dealer or card room manager or to assume some other supervisory position.

Employment

Gaming services occupations provided 160,000 jobs in 2006. Gaming services workers are found mainly in the traveler accommodation and gaming industries. Most are employed in commercial casinos, including riverboat casinos, casino hotels, and pari-mutuel racetracks—known as “racinos”—that in 20 States offer casino games. The largest number work in casinos in Nevada. Mississippi, which boasts the greatest number of riverboat casinos in operation, employs the most workers in that venue. In addition, there are 28 States with Indian casinos. Legal lotteries are held in 41 States and the District of Columbia, and pari-mutuel wagering is legal in 43 States. Forty-seven States and the District of Columbia also allow charitable gaming. Other States are considering legislation to permit gambling, but no casinos have been opened as of yet.

For most workers, gaming licensure requires proof of residency in the State in which gaming workers are employed. But some gaming services workers do not limit themselves to one State or even one country, finding jobs on the small number of casinos located on luxury cruise liners that travel the world. These individuals live and work aboard the vessel.

Job Outlook

Employment of gaming service workers is expected to grow much faster than the average for all occupations., Opportunities will be best for those with previous casino gaming experience, a degree or technical or vocational training in gaming or a hospitality-related field, and strong customer service skills.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Gaming services occupations.....	—	160,000	214,000	40,000	23
Gaming managers	11-9071	4,000	5,000	1,000	24
First-line supervisors/managers of gaming workers	39-1010	54,000	64,000	10,000	19
Gaming supervisors	39-1011	34,000	42,000	7,900	23
Slot key persons	39-1012	20,000	22,000	2,200	11
Gaming dealers	39-3011	84,000	104,000	20,000	24
Gaming and sports book writers and runners	39-3012	18,000	24,000	5,200	28

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

Employment change. With demand for gaming showing no sign of waning, employment in gaming services occupations is projected to grow by 23 percent between 2006 and 2016, which is much faster than the average for all occupations. The increasing popularity and prevalence of Indian casinos and racinos will provide substantial new job openings. With many States benefiting from casino gambling in the form of tax revenue or agreements with Indian tribes, additional States are reconsidering their opposition to legalized gambling and will likely approve the construction of more casinos and other gaming establishments during the next decade. Additional job growth will occur in established gaming areas in Nevada and Atlantic City, New Jersey, as they solidify their positions as tourist destinations.

The increase in gaming reflects growth in the population and in its disposable income, both of which are expected to continue. Higher expectations for customer service among gaming patrons also should result in more jobs for gaming services workers. Because of increasing demand in gaming establishments for additional table games, particularly poker, the largest growth is expected among gaming dealers. Conversely, advancements in slot machine technology, such as coinless slot machines—known as “Ticket-in, Ticket-Out machines”—will limit job growth for slot key persons relative to other gaming service occupations. Ticket-in, Ticket-out technology reduces the need for slot key persons to payout jackpots, fill hoppers, and reset machines. Additionally, slot machines linked to a network allow adjustments to be made from a central computer server rather than from the floor by a slot key person. However, there will still be some new jobs for slot key persons because of the casino industry’s focus on customer service and the rising popularity of racinos and slot machines in States that have recently legalized gambling or are expected to do so in the future.

Job prospects. Job prospects in gaming services occupations will be best for those with previous casino gaming experience, a degree or technical or vocational training in gaming or a hospitality-related field, and strong interpersonal and customer service skills.

In addition to job openings arising from employment growth, opportunities will result from the need to replace workers transferring to other occupations or leaving the labor force. Despite this, keen competition for jobs as gaming dealers is expected. There are generally more applicants than jobs. Experienced dealers who are able to attract new or return business will have the best job prospects.

Earnings

Wage earnings for gaming services workers vary according to occupation, level of experience, training, location, and size of the gaming establishment. The following were median earnings for various gaming services occupations in May 2006:

Gaming managers	\$62,820
Gaming supervisors	41,160
Slot key persons	22,720
Gaming and sports book writers and runners	18,800
Gaming dealers	14,730

Gaming dealers generally receive a large portion of their earnings from tokens, which are tips in the form of tokens received from players. Earnings from tokens vary depending on the table games the dealer operates, the personal traits of the dealer, and the pooling policies of the casino.

Related Occupations

Many other occupations provide hospitality and customer service. Some examples of related occupations are security guards and gaming surveillance officers, sales worker supervisors, cashiers, gaming change persons and booth cashiers, retail salespersons, gaming cage workers, and tellers.

Sources of Additional Information

For additional information on careers in gaming, visit your public library and your State gaming regulatory agency or casino control commission.

- Information on careers in gaming also is available from:
- American Gaming Association, 1299 Pennsylvania Ave. NW., Suite 1175, Washington, DC 20004.
 - Internet: <http://www.americangaming.org>

Grounds Maintenance Workers

(O*NET 37-1012.00, 37-3011.00, 37-3012.00, 37-3013.00, 37-3019.99)

Significant Points

- Opportunities should be very good, especially for workers willing to work seasonal or variable schedules, because of significant job turnover and increased demand for landscaping.
- Many beginning jobs have low earnings and are physically demanding.
- Most workers learn through short-term on-the-job training.

Nature of the Work

Attractively designed, healthy, and well-maintained lawns, gardens, and grounds create a positive impression, establish a peaceful mood, and increase property values. Grounds maintenance workers perform the variety of tasks necessary to achieve a pleasant and functional outdoor environment. They also care for indoor gardens and plantings in commercial and public facilities, such as malls, hotels, and botanical gardens.

These workers use handtools such as shovels, rakes, pruning and handsaws, hedge and brush trimmers, and axes, as well as power lawnmowers, chain saws, snowblowers, and electric clippers. Some use equipment such as tractors and twin-axle vehicles. Landscaping and groundskeeping workers at parks, schools, cemeteries, and golf courses may lay sod after preparing the ground. Workers at sod farms use sod cutters to harvest sod that will be replanted elsewhere.

Grounds maintenance workers can be divided into landscaping workers and groundskeeping workers, depending on whether they mainly install new landscape elements or maintain existing

ones, but their duties often overlap. Other grounds maintenance workers are pesticide handlers and tree trimmers.

Landscaping workers install plants and other elements into landscaped areas and often maintain them. They might mow, edge, trim, fertilize, dethatch, water, and mulch lawns and grounds many times during the growing season. They grade property by creating or smoothing hills and inclines, install lighting or sprinkler systems, and build walkways, terraces, patios, decks, and fountains. They also transport and plant new vegetation, and transplant, mulch, fertilize, and water existing plants, trees, and shrubs. A growing number of residential and commercial clients, such as managers of office buildings, shopping malls, multiunit residential buildings, and hotels and motels, favor full-service landscape maintenance.

Groundskeeping workers, also called *groundskeepers*, usually focus on maintaining existing grounds. They might work on athletic fields, golf courses, cemeteries, university campuses, and parks. In addition to caring for sod, plants, and trees, they rake and mulch leaves, clear snow from walkways and parking lots, and use irrigation methods to adjust the amount of water consumption and prevent waste. They see to the proper upkeep and repair of sidewalks, parking lots, groundskeeping equipment, pools, fountains, fences, planters, and benches.

Groundskeeping workers who care for athletic fields keep natural and artificial turf in top condition, mark out boundaries, and paint turf with team logos and names before events. They must make sure that the underlying soil on fields with natural turf has the required composition to allow proper drainage and to support the grasses used on the field. Groundskeeping workers mow, water, fertilize, and aerate the fields regularly. In sports venues, they vacuum and disinfect synthetic turf after its use to prevent the growth of harmful bacteria, and they remove the turf and replace the cushioning pad periodically.

Groundskeepers in parks and recreation facilities care for lawns, trees, and shrubs; maintain playgrounds; clean buildings; and keep parking lots, picnic areas, and other public spaces free of litter. They also may erect and dismantle snow fences, and maintain swimming pools. These workers inspect buildings and equipment, make needed repairs, and keep everything freshly painted.

Workers who maintain golf courses are called greenskeepers. Greenskeepers do many of the same things as other groundskeepers, but they also periodically relocate the holes on putting greens to prevent uneven wear of the turf and to add interest and challenge to the game. Greenskeepers also keep canopies, benches, ball washers, and tee markers repaired and freshly painted.

Some groundskeepers specialize in caring for cemeteries and memorial gardens. They dig graves to specified depths, generally using a backhoe. They mow grass regularly, apply fertilizers and other chemicals, prune shrubs and trees, plant flowers, and remove debris from graves.

Pesticide handlers, sprayers, and applicators, vegetation mix herbicides, fungicides, or insecticides and apply them through sprays, dusts, or vapors into the soil or onto plants. Those working for chemical lawn service firms are more specialized, inspecting lawns for problems and applying fertilizers, pesticides, and other chemicals to stimulate growth and prevent or control weeds, diseases, or insect infestation. Many practice integrated pest-management techniques.

Tree trimmers and pruners cut away dead or excess branches from trees or shrubs to clear roads, sidewalks, or utilities' equipment or to improve the appearance, health, and value of trees. Some of these workers also specialize in pruning, trimming and shaping ornamental trees and shrubs for private residences, golf courses, or other institutional grounds. Tree trimmers and pruners use handsaws, pole saws, shears, and clippers. When trimming near power lines, they usually work on truck-mounted lifts and use power pruners.

Supervisors of landscaping and groundskeeping workers oversee grounds maintenance work. They prepare cost estimates, schedule work for crews on the basis of weather conditions or the availability of equipment, perform spot checks to ensure the quality of the service, and suggest changes in work procedures. In addition, supervisors train workers in their tasks; keep employees' time records and record work performed; and even assist workers when deadlines are near. Supervisors who own their own business are also known as *landscape contractors*. They also often call themselves *landscape designers* if they create landscape design plans. Landscape designers also design exterior floral displays by planting annual or perennial flowers. Some work with landscape architects. (Landscape architects, discussed elsewhere in the *Handbook*, create more technical architectural plans and usually work on larger projects.) Supervisors of workers on golf courses are known as superintendents.

Supervisors of tree trimmers and pruners are called *arborists*. Arborists specialize in the care of individual trees, diagnosing and treating tree diseases and recommending preventative health measures. Some arborists plant trees. Most can recommend types of trees that are appropriate for a specific location, as the wrong tree in the wrong location could lead to future problems with crowding, insects, diseases, or poor growth.

Arborists are employed by cities to improve urban green space, utilities to maintain power distribution networks, companies to care for residential and commercial properties, as well as many other settings.

Work environment. Many grounds maintenance jobs are seasonal, available mainly in the spring, summer, and fall, when most planting, mowing, trimming, and cleanup are necessary. Most of the work is performed outdoors in all kinds of weather. It can be physically demanding and repetitive, involving



Grounds maintenance workers often use power equipment.

much bending, lifting, and shoveling. Workers in landscaping and groundskeeping may be under pressure to get the job completed, especially when they are preparing for scheduled events such as athletic competitions.

Those who work with pesticides, fertilizers, and other chemicals, as well as dangerous equipment and tools such as power lawnmowers, chain saws, and power clippers, must exercise safety precautions. Workers who use motorized equipment must take care to protect their hearing.

Training, Other Qualifications, and Advancement

Most grounds maintenance workers learn on-the-job. However, some occupations may require formal training in areas such as landscape design, horticulture, or business management.

Education and training. There usually are no minimum educational requirements for entry-level positions in grounds maintenance. In 2006, most workers had a high school education or less. Short-term on-the-job training generally is sufficient to teach new hires how to operate and repair equipment such as mowers, trimmers, leaf blowers, and small tractors and to follow correct safety procedures. They must also learn proper planting and maintenance procedures for their localities. Large institutional employers such as golf courses or municipalities may supplement on-the-job training with coursework in subjects like horticulture or small engine repair for those employees showing ability and willingness to learn.

Landscaping supervisors or contractors who own their own business, arborists, and landscape designers usually need formal training in landscape design, horticulture, arboriculture, or business. A bachelor’s degree may be needed for those who want to become specialists or own their own business.

Licensure. Most States require licensure or certification for workers who apply pesticides. Requirements vary but usually include passing a test on the proper use and disposal of insecticides, herbicides, and fungicides. Some States require that landscape contractors be licensed.

Other qualifications. Employers look for responsible, self-motivated individuals because grounds maintenance workers often work with little supervision. Employers want people who can learn quickly and follow instructions accurately so that time is not wasted and plants are not damaged. Workers who deal directly with customers must get along well with people.

Driving a vehicle is often needed for these jobs. If driving is required, preference is given to applicants with a driver’s license, a good driving record, and experience driving a truck.

Certification and advancement. The Professional Grounds Management Society offers voluntary certification to grounds managers who have a bachelor’s degree in a relevant major with at least 4 years of experience, including 2 years as a supervisor; an associate degree in a relevant major with 6 years of experience, including 3 years as a supervisor; or 8 years of experience including 4 years as a supervisor, and no degree. Additionally, candidates for certification must pass an examination covering subjects such as equipment management, personnel management, environmental issues, turf care, ornamentals, and circulatory systems. Certification as a grounds technician is also offered by this organization.

The Professional Landcare Network offers six certifications to those who seek to demonstrate specific knowledge in an area

of landscaping and grounds maintenance. Obtaining certification may be an asset for career advancement. The Tree Care Industry Association offers four levels of credentials. Currently available credentials include Tree Care Apprentice, Ground Operations Specialist, Tree Climber Specialist, and Tree Care Specialist, as well as a certification program in safety.

Laborers who demonstrate a willingness to work hard and quickly, have good communication skills, and take an interest in the business may advance to crew leader or other supervisory positions. Becoming a grounds manager or landscape contractor usually requires some formal education beyond high school and several years of progressively more responsible experience. Some workers with groundskeeping backgrounds may start their own businesses after several years of experience.

Employment

Grounds maintenance workers held about 1.5 million jobs in 2006. Employment was distributed as follows:

Landscaping and groundskeeping workers	1,220,000
First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers	202,000
Tree trimmers and pruners	41,000
Pesticide handlers, sprayers, and applicators, vegetation	31,000
Grounds maintenance workers, all other.....	28,000

More than one-third of the workers in grounds maintenance were employed in companies providing landscaping services to buildings and dwellings. Others worked for amusement and recreation facilities, such as golf courses and racetracks; educational institutions, both public, and private; and property management and real-estate development firms. Some were employed by local governments, installing and maintaining landscaping for parks, hospitals, and other public facilities. Almost 24 percent of grounds maintenance workers were self-employed, providing landscape maintenance directly to customers on a contract basis.

About 14 percent of grounds maintenance workers worked part time; about 9 percent were younger than age twenty.

Job Outlook

Those interested in grounds maintenance occupations should find very good job opportunities in the future. Employment of grounds maintenance workers is expected to grow faster than average for all occupations through the year 2016.

Employment change. Employment of grounds maintenance workers is expected to grow about 18 percent during the 2006-16 decade. Grounds maintenance workers will have among the largest numbers of new jobs arise, around 270,000 over the 2006-16 period.

More workers will be needed to keep up with increasing demand by lawn care and landscaping companies. Increased construction of office buildings, shopping malls, and residential housing and of highways and parks is expected to increase demand for grounds maintenance workers. In addition, the upkeep and renovation of existing landscaping and grounds are continuing sources of demand for grounds maintenance workers. Major institutions, such as universities and corporate headquarters, recognize the importance of good landscape design in attracting personnel and clients and are expected to use grounds

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Grounds maintenance workers and related first-line supervisors/managers	—	1,521,000	1,791,000	270,000	18
First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers	37-1012	202,000	237,000	36,000	18
Grounds maintenance workers.....	37-3000	1,319,000	1,554,000	235,000	18
Landscaping and groundskeeping workers.....	37-3011	1,220,000	1,441,000	221,000	18
Pesticide handlers, sprayers, and applicators, vegetation	37-3012	31,000	35,000	4,300	14
Tree trimmers and pruners	37-3013	41,000	45,000	4,500	11
Grounds maintenance workers, all other.....	37-3019	28,000	33,000	4,600	17

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

maintenance services more extensively to maintain and upgrade their properties. Grounds maintenance workers working for State and local governments, however, may face budget cuts, which may affect hiring.

Homeowners are a growing source of demand for grounds maintenance workers. Many two-income households lack the time to take care of their lawns so they increasingly hire people to maintain them. Also, as the population ages, more elderly homeowners will require lawn care services to help maintain their yards. In addition, there is a growing interest by homeowners in their backyards and a desire to make yards more attractive for outdoor entertaining. With many newer homes having more and bigger windows overlooking the property, it is becoming more important to maintain and beautify the grounds.

Job opportunities for tree trimmers and pruners should also increase as utility companies step up pruning of trees around electric lines to prevent power outages. Additionally, tree trimmers and pruners will be needed to help combat infestations caused by new species of insects from other countries. For example, ash trees from Chicago to Washington, D.C. are under threat by a pest from China, and preventative eradication may be employed to control the pest.

Job prospects. Jobs for grounds maintenance workers are increasing, and because wages for beginners are low and the work is physically demanding, many employers have difficulty attracting enough workers to fill all openings, creating very good job opportunities.

Job opportunities for nonseasonal work are more numerous in regions with temperate climates, where landscaping and lawn services are required all year. Opportunities may vary with local economic conditions.

Earnings

Median hourly earnings in May 2006 of grounds maintenance workers were as follows:

First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers	\$17.93
Tree trimmers and pruners	13.58
Pesticide handlers, sprayers, and applicators, vegetation	12.84
Landscaping and groundskeeping workers	10.22
Grounds maintenance workers, all others.....	9.82

Median hourly earnings in the industries employing the largest numbers of landscaping and groundskeeping workers were as follows:

Local government	\$11.64
Services to buildings and dwellings.....	10.17
Landscaping services	10.17
Other amusement and recreation industries.....	9.47
Employment services	9.09

Related Occupations

Grounds maintenance workers perform most of their work outdoors and have some knowledge of plants and soils. Others whose jobs may require that they work outdoors are agricultural workers; farmers, ranchers, and agricultural managers; forest, conservation, and logging workers; landscape architects; and biological scientists.

Sources of Additional Information

For career and certification information on tree trimmers and pruners, contact:

► Tree Care Industry Association, 3 Perimeter Rd., Unit I, Manchester, NH 03103-3341.

Internet: <http://www.treecareindustry.org>

► International Society of Arboriculture, P.O. Box 3129, Champaign, IL 61826-3129. Internet:

<http://www.isa-arbor.com/careersInArboriculture/careers.aspx>

For information on work as a landscaping and groundskeeping worker, contact the following organizations:

► Professional Grounds Management Society, 720 Light St., Baltimore, MD 21230-3816. Internet: <http://www.pgms.org>

► Professional Landcare Network, 950 Herndon Parkway, Suite 450, Herndon, VA 20170-5528.

Internet: <http://www.landcarenetwork.org/>

For information on becoming a licensed pesticide applicator, contact your State’s Department of Agriculture or Department of Environmental Protection or Conservation.

Personal and Home Care Aides

(O*NET 39-9021.00)

Significant Points

- Job opportunities are expected to be excellent because of rapid growth in home health care and high replacement needs.
- Skill requirements are low, as is the pay.
- About 1 out of 3 personal and home care aides work part time; most aides work with a number of different clients, each job lasting a few hours, days, or weeks.

Nature of the Work

Personal and home care aides help people who are elderly, disabled, ill, and/or mentally disabled to live in their own homes or in residential care facilities instead of in health facilities or institutions. Most personal and home care aides work with elderly or physically or mentally disabled clients who need more extensive personal and home care than family or friends can provide. Some aides work with families in which a parent is incapacitated and small children need care. Others help discharged hospital patients who have relatively short-term needs. (*Home health aides*—who provide health-related services are discussed in the section on nursing, psychiatric, and home health aides, elsewhere in the *Handbook*.)

Personal and home care aides—also called *homemakers*, *caregivers*, *companions*, and *personal attendants*—provide housekeeping and routine personal care services. They clean clients' houses, do laundry, and change bed linens. Aides may plan meals (including special diets), shop for food, and cook. Aides also may help clients get out of bed, bathe, dress, and groom. Some accompany clients to doctors' appointments or on other errands.

Personal and home care aides provide instruction and psychological support to their patients. They may advise families and patients on nutrition, cleanliness, and household tasks. Aides also may assist in toilet training a severely mentally handicapped child, or they may just listen to clients talk.

In home health care agencies, a registered nurse, physical therapist, or social worker assigns specific duties and supervises personal and home care aides. Aides keep records of services performed and of clients' condition and progress. They report changes in the client's condition to the supervisor or case manager. In carrying out their work, aides cooperate with health care professionals, including registered nurses, therapists, and other medical staff.

The personal and home care aide's daily routine may vary. Aides may go to the same home every day for months or even years. Aides often visit four or five clients on the same day. However, some aides may work solely with one client who is in need of more care and attention. In some situations, this may involve working with other aides in shifts so the client has an aide throughout the day and night.

Personal and home care aides generally work on their own, with periodic visits by their supervisor. They receive detailed



Personal and home care aides assist elderly and disabled clients with daily tasks, like housekeeping and personal hygiene.

instructions explaining when to visit clients and what services to perform for them.

Aides are individually responsible for getting to the client's home. They may spend a good portion of the work day traveling from one client to another. Aides must be careful to avoid over-exertion or injury when they assist clients.

Work environment. Surroundings differ from case to case. Some homes are neat and pleasant, whereas others are untidy and depressing. Some clients are pleasant and cooperative; others are angry, abusive, depressed, or otherwise difficult. Aides may spend a large portion of each day traveling between clients' homes.

About 33 percent of aides work part time, and some work weekends or evenings to suit the needs of their clients.

Training, Other Qualifications, and Advancement

In some States, the only requirement for employment is on-the-job training, which generally is provided by employers. Other States may require formal training, which is available from community colleges, vocational schools, elder care programs, and home health care agencies.

Education and training. Most personal and home care aides receive short term on-the-job training in a range of job functions. Aides are instructed on how to properly cook for a client, which includes information on nutrition and special diets.

Furthermore, they may be trained on basic housekeeping tasks, such as making a bed and keeping the home sanitary and safe for the client. Generally, they are taught how to respond to an emergency situation, learning basic safety techniques. Employers may also train aides to conduct themselves in a professional and courteous manner while in a clients' home.

Other qualifications. Personal and home care aides should have a desire to help people and not mind hard work. They should be responsible, compassionate, patient, emotionally stable, and cheerful. In addition, aides should be tactful, honest, and discreet because they work in private homes. Aides also must be in good health. A physical examination, including State-mandated tests for tuberculosis and other diseases, may be required. A criminal background check, credit check, and good driving record may also be required for employment. Additionally, personal and home care aides are responsible for their own transportation to reach patients' homes.

Certification and advancement. The National Association for Home Care and Hospice (NAHC) offers national certification for personal and home care aides. Certification is a voluntary demonstration that the individual has met industry standards. Certification requires the completion of a 75-hour course, observation and documentation of 17 skills for competency assessed by a registered nurse and passing a written exam developed by NAHC.

Advancement for personal and home care aides is limited. In some agencies, workers start out performing homemaker duties, such as cleaning. With experience and training, they may take on more personal care duties. Some aides choose to receive additional training to become nursing and home health aides, licensed practical nurses, or registered nurses. Some experienced personal and home care aides may start their own home care agency or work as a self-employed aide. Self-employed aides have no agency affiliation or supervision and accept clients, set fees, and arrange work schedules on their own.

Employment

Personal and home care aides held about 767,000 jobs in 2006. The majority of jobs were in home health care services; individual and family services; residential care facilities; and private households. In 2006, about 8 percent of personal and home care aides were self-employed.

Job Outlook

Excellent job opportunities are expected for this occupation because rapid employment growth and high replacement needs are projected to produce a large number of job openings.

Employment change. Employment of personal and home care aides is projected to grow by 51 percent between 2006 and 2016, which is much faster than the average for all occupations. This occupation will be amongst the occupations adding the most new

jobs, growing by about 389,000 jobs. The expected growth is due, in large part, to the projected rise in the number of elderly people, an age group that often has mounting health problems and that needs some assistance with daily activities. The elderly and other patients, such as the mentally disabled, increasingly rely on home care.

This trend reflects several developments. Inpatient care in hospitals and nursing homes can be extremely expensive, so more patients return to their homes from these facilities as quickly as possible to contain costs. Patients who need assistance with everyday tasks and household chores rather than medical care can reduce medical expenses by returning to their homes. Furthermore, most patients—particularly the elderly—increasingly prefer care in their homes rather than in nursing homes or other in-patient facilities. This trend is aided by the realization that treatment can be more effective in familiar surroundings. Finally, home care has become easier and more feasible with the development of better medical technologies for in-home treatment.

Job prospects. In addition to job openings created by the increased demand for these workers, replacement needs are expected to lead to many openings. The relatively low skill requirements, low pay, and high emotional demands of the work result in high replacement needs. For these same reasons, many people are reluctant to seek jobs in the occupation. Therefore, persons who are interested in and suited for this work—particularly those with experience or training as personal care, home health, or nursing aides—should have excellent job prospects.

Earnings

Median hourly earnings of wage-and-salary personal and home care aides were \$8.54 in May 2006. The middle 50 percent earned between \$7.09 and \$10.19 an hour. The lowest 10 percent earned less than \$6.05, and the highest 10 percent earned more than \$11.60 an hour. Median hourly earnings in the industries employing the largest numbers of personal and home care aides were as follows:

Residential mental retardation facilities.....	\$9.54
Services for the elderly and persons with disabilities.....	9.18
Home health care services	7.19

Most employers give slight pay increases with experience and added responsibility. Aides usually are paid only for the time they work in the home, not for travel time between jobs. Employers often hire on-call hourly workers and provide no benefits.

Related Occupations

Personal and home care aides combine the duties of caregivers and social service workers. Workers in related occupations that

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Personal and home care aides	39-9021	767,000	1,156,000	389,000	51

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*.

involve personal contact to help others include childcare workers; nursing, psychiatric, and home health aides; occupational therapist assistants and aides; physical therapist assistants and aides; and social and human service assistants.

Sources of Additional Information

Information about employment opportunities may be obtained from local hospitals, nursing care facilities, home health care agencies, psychiatric facilities, residential mental health facilities, social assistance agencies, and local offices of the State employment service.

For information about voluntary credentials for personal and home care aides, contact:

► National Association for Homecare and Hospice, 228 Seventh St., SE., Washington, DC 20003.

Internet: <http://www.nahc.org>

Pest Control Workers

(O*NET 37-2021.00)

Significant Points

- A high school diploma is the minimum educational requirement; however, about 4 in 10 workers
- have either attended college or earned a degree.
- Laws require pest control workers to be certified through training and examination.
- Job prospects should be favorable, especially in warmer climates.

Nature of the Work

Unwanted creatures that infest households, buildings, or surrounding areas are pests that can pose serious risks to health and safety. The most common pests are roaches, rats, mice, spiders, termites, fleas, ants, and bees. It is a pest control worker's job to remove them.

Pest control workers locate, identify, destroy, control, and repel pests. They use their knowledge of pests' biology and habits, along with an arsenal of pest management techniques such as applying chemicals, setting traps, operating equipment, and even modifying structures to alleviate pest problems. The final choice of which type of pest management is used often is decided by the consumer.

After a pest management plan is agreed upon, action needs to be taken. Some pests need to be eliminated and require pesticide application. Pest control workers use two different types of pesticides—general use and restricted use. General use pesticides are the most widely used and are readily available. They are available to the public in diluted concentrations. Restricted use pesticides are available only to certified professionals for controlling the most severe infestations. Their registration, labeling, and application are regulated by Federal law and interpreted by the U.S. Environmental Protection Agency (EPA), because of their potential harm to pest control workers, customers, and the environment.

Pesticides are not pest control workers' only tool. Pest control workers increasingly use a combination of pest management techniques, known as integrated pest management. One method involves using proper sanitation and creating physical barriers. Pests cannot survive without food and will not infest a building if they cannot enter it. Another method involves using baits, some of which destroy the pests and others that prevent them from reproducing. Yet another method involves using mechanical devices, such as traps, that remove pests from the immediate environment.

Integrated pest management is popular for several reasons. Pesticides can pose environmental and health risks and some States heavily restrict the application of pesticides. Some pests are becoming more resistant to pesticides in certain situations. Finally, an integrated pest management plan is more effective in the long term than use of a pesticide alone.

New technology has been introduced that allows pest control workers to conduct home inspections, mainly of termites, in much less time. The technology works by implanting microchips in baiting stations, which emit signals that can tell pest control workers if there is termite activity at one of the baiting stations. Workers pick up the signals using a device similar to a metal detector and it allows them to more quickly assess the presence of termites.

Most pest control workers are employed as pest control technicians, applicators, or supervisors. Position titles vary by State, but the hierarchy—based on the training and responsibility required—remains consistent.

Pest control technicians identify potential pest problems, conduct inspections, and design control strategies. They work directly with the customer. Some technicians require a higher level of training depending on their task. If certain products are used, the technician may be required to become a certified applicator.

Applicators that specialize in controlling termites are called termite control technicians. They use chemicals and modify structures to eliminate termites and prevent future infestation. To treat infested areas, termite control technicians drill holes and cut openings into buildings to access infestations and install physical barriers or bait systems around the structure. Some termite control technicians even repair structural damage caused by termites.

Fumigators are applicators who control pests using poisonous gases called fumigants. Fumigators pretreat infested buildings by examining, measuring, and sealing the buildings. Then, using cylinders, hoses, and valves, they fill structures with the proper amount and concentration of fumigant. They also monitor the premises during treatment for leaking gas. To prevent accidental fumigant exposure, fumigators padlock doors and post warning signs.

Pest control supervisors, also known as *operators*, direct service technicians and certified applicators. Supervisors are licensed to apply pesticides, but they usually are more involved in running the business. Supervisors are responsible for ensuring that employees obey rules regarding pesticide use, and they must resolve any problems that arise with regulatory officials or customers. Most States require each pest control establishment



Laws require pest control workers to be certified through training and examination.

to have a supervisor. Self-employed business owners usually are supervisors.

Work environment. Pest control workers travel to visit clients. Pest control workers must kneel, bend, reach, and crawl to inspect, modify, and treat structures. They work both indoors and out, in all weather conditions. During warm weather, applicators may be uncomfortable wearing the heavy protective gear, such as respirators, gloves, and goggles that are required for working with pesticides.

There are health risks associated with pesticide use. Various pest control chemicals are toxic and could be harmful if not used properly. Health risks are minimized, however, by the extensive training required for certification and the use of recommended protective equipment, resulting in fewer reported cases of lost work.

About 47 percent of all pest control workers work a 40-hour week, but 26 percent work more hours. Pest control workers often work evenings and weekends, but many work consistent shifts.

Training, Other Qualifications, and Advancement

Both Federal and State laws require pest control workers to be certified. Although a high school diploma is generally the minimum educational requirement, about 4 in 10 pest control workers have either attended college or earned a degree. Most pest control workers begin their careers as apprentice technicians.

Education and training. A high school diploma or equivalent is the minimum qualification for most pest control jobs. Pest control workers must have the basic knowledge needed to pass certification tests. In many States, training usually involves spending 10 hours in the classroom and 60 hours on the job for each category of work that the pest control worker would like to perform. Categories may include general pest control, rodent control, termite control, fumigation, and ornamental and turf control. In addition, technicians must attend general training in pesticide safety and use. After completing the required training, workers can provide supervised pest control services.

Pest control workers usually begin their careers as apprentice technicians. They receive both formal classroom and on-the-job training provided by the employer, but they also must study on their own. Because pest control methods change, workers must attend continuing education classes to maintain their certification, often provided by product manufacturers.

Licensure and certification. Both Federal and State laws regulate pest control workers. These laws require them to be certified through training and examination. Most pest control firms provide training and help their employees prepare for the examination. Requirements for pest control workers vary by State. To be eligible to become applicators, technicians must have a combination of experience and education and pass a test. This requirement is sometimes waived for individuals who have either a college degree in biological sciences or extensive related work experience. To become certified as applicators, technicians must pass an additional set of category exams. Depending on the State, applicators must attend additional classes every 1 to 6 years to be recertified. The amount of time allowed to pass the basic certification depends on the State.

Other qualifications. Because of the extensive interaction that pest control workers have with their customers, employers prefer to hire people who have good communication and interpersonal skills. In addition, most pest control companies require their employees to have a good driving record. Some states require a background check for workers prior to certification. Pest control workers must be in good health because of the physical demands of the job, and they also must be able to withstand extreme conditions—such as the heat of climbing into an attic in the summertime or the chill of sliding into a crawlspace during winter.

Advancement. Applicators with several years of experience often become supervisors. To qualify as a pest control supervisor, applicators may have to pass State-administered exams and have relevant experience, usually a minimum of 2 years. Others may choose to take the knowledge and experience that they have gained, and start their own pest management company.

Employment

Pest control workers held about 70,000 jobs in 2006; about 85 percent of workers were employed in the services to buildings and dwellings industry, which includes pest control firms. About 9 percent of workers were self employed. Jobs are concentrated in States with warmer climates and larger cities, due to the greater number of pests in these areas that thrive year round.

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Pest control workers.....	37-2021	70,000	81,000	11,000	15

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

Job Outlook

With faster-than-average growth and a limited supply of workers, job prospects should be favorable, especially in warmer climates.

Employment change. Employment of pest control workers is expected to grow 15 percent between 2006 and 2016, which is faster than the average for all occupations. One factor limiting job growth, however, is the lack of sufficient numbers of workers willing to go into this field. Demand for pest control workers is projected to increase for a number of reasons. Growth in the population will generate new residential and commercial buildings that will require inspections by pest control workers. Also, more people are expected to use pest control services as environmental and health concerns, greater numbers of dual-income households, and improvements in the standard of living convince more people to hire professionals rather than attempt pest control work themselves. In addition, tougher regulations limiting pesticide use will demand more complex integrated pest management strategies.

Concerns about the effects of pesticide use in schools have increasingly prompted more school districts to investigate alternative means of pest control, such as integrated pest management. Furthermore, use of some newer materials for insulation around foundations has made many homes more susceptible to pest infestation. Finally, continuing population shifts to the more pest-prone Sunbelt States should increase the number of households in need of pest control.

Job prospects. Job prospects should be favorable for qualified applicants because of relatively fast job growth and because the nature of pest control work is not appealing to many people. In addition to job openings arising from employment growth, opportunities will result from the need to replace workers who leave the occupation.

Earnings

Median hourly earnings of full-time wage and salary pest control workers were \$13.41 in May 2006. The middle 50 percent earned between \$10.79 and \$16.76. The lowest 10 percent earned less than \$8.88, and the top 10 percent earned over \$20.85. Pest control supervisors usually earn the most and technicians the least, with earnings of certified applicators falling somewhere in between. Some pest control workers earn commissions based on the number of contracts for pest control services they sell. Others may earn bonuses for exceeding performance goals.

Related Occupations

Pest control workers visit homes and places of business to provide building services. Other workers who provide services to buildings include building cleaning workers; grounds maintenance workers; various construction trades workers, such as

carpenters and hazardous materials removal workers; and heating, air-conditioning, and refrigeration mechanics and installers. Similar to pest control workers, pesticide handlers, sprayers, and applicators, vegetation also apply pesticides in a safe manner to lawns, trees, and other plants.

Sources of Additional Information

Private employment agencies and State employment services offices have information about available job opportunities for pest control workers.

For information about the training and certification required in your State, contact your local office of the U.S. Department of Agriculture or your State's Environmental Protection (or Conservation) Agency.

For more information about pest control careers and training, contact:

► National Pest Management Association, Suite 301, 9300 Lee Hwy., Fairfax, VA 22031.

Internet: <http://www.npmapestworld.org/PTPP/>

Recreation Workers

(O*NET 39-9032.00)

Significant Points

- The recreation field offers an unusually large number of part-time and seasonal job opportunities.
- Educational requirements range from a high school diploma to a graduate degree.
- Opportunities for part-time, seasonal, and temporary recreation jobs will be good, but competition will remain keen for full-time career positions.

Nature of the Work

People spend much of their leisure time participating in a wide variety of organized recreational activities, such as arts and crafts, the performing arts, camping, and sports. Recreation workers plan, organize, and direct these activities in local playgrounds and recreation areas, parks, community centers, religious organizations, camps, theme parks, and tourist attractions. Increasingly, recreation workers also are found in businesses where they organize and direct leisure activities for employees.

Recreation workers hold a variety of positions at different levels of responsibility. Workers who provide instruction and coaching in art, music, drama, swimming, tennis, or other activities may be called *activity specialists*.

Camp counselors lead and instruct children and teenagers in outdoor recreation, such as swimming, hiking, horseback riding, and camping. In addition, counselors teach campers special subjects such as archery, boating, music, drama, gymnastics, tennis, and computers. In residential camps, counselors also provide guidance and supervise daily living and socialization. *Camp directors* typically supervise camp counselors, plan camp activities or programs, and perform the various administrative functions of a camp.

Recreation leaders, who are responsible for a recreation program's daily operation, primarily organize and direct participants. They may lead and give instruction in dance, drama, crafts, games, and sports; schedule the use of facilities; keep records of equipment use; and ensure that recreation facilities and equipment are used properly.

Recreation supervisors oversee recreation leaders and plan, organize, and manage recreational activities to meet the needs of a variety of populations. These workers often serve as liaisons between the director of the park or recreation center and the recreation leaders. Recreation supervisors with more specialized responsibilities also may direct special activities or events or oversee a major activity, such as aquatics, gymnastics, or performing arts.

Directors of recreation and parks develop and manage comprehensive recreation programs in parks, playgrounds, and other settings. Directors usually serve as technical advisors to State and local recreation and park commissions and may be responsible for recreation and park budgets. (Workers in a related occupation, *recreational therapists*, help individuals to recover from or adjust to illness, disability, or specific social problems; this occupation is described elsewhere in the *Handbook*.)

Work environment. Recreation workers may work in a variety of settings—for example, a cruise ship, a woodland recreational park, a summer camp, or a playground in the center of a large urban community. Regardless of the setting, most



Many recreation workers are only seasonally employed.

recreation workers spend much of their time outdoors and may work in a variety of weather conditions. Recreation directors and supervisors, however, typically spend most of their time in an office, planning programs and special events. Directors and supervisors generally engage in less physical activity than do lower level recreation workers. Nevertheless, recreation workers at all levels risk suffering injuries during physical activities.

Some recreation workers work about 40 hours a week. However, many people entering this field, such as camp counselors, may have some night and weekend work, irregular hours, and seasonal employment.

Training, Other Qualifications, and Advancement

The educational and training requirements for recreation workers vary widely depending on the type of job. Full-time career positions usually require a college degree. Many jobs, however, can be learned with only a short period of on-the-job training.

Education and training. Educational requirements for recreation workers range from a high school diploma—or sometimes less for those seeking summer jobs—to graduate degrees for some administrative positions in large public recreation systems. Full-time career professional positions usually require a college degree with a major in parks and recreation or leisure studies, but a bachelor's degree in any liberal arts field may be sufficient for some jobs in the private sector. In industrial recreation, or “employee services” as it is more commonly called, companies prefer to hire those with a bachelor's degree in recreation or leisure studies and a background in business administration. Some college students work part time as recreation workers while earning degrees.

Employers seeking candidates for some administrative positions favor those with at least a master's degree in parks and recreation, business administration, or public administration. Most required at least an associate degree in recreation studies or a related field.

An associate or bachelor's degree in a recreation-related discipline and experience are preferred for most recreation supervisor jobs and are required for most higher level administrative jobs. Graduates of associate degree programs in parks and recreation, social work, and other human services disciplines also enter some career recreation positions. High school graduates occasionally enter career positions, but this is not common.

Programs leading to an associate or bachelor's degree in parks and recreation, leisure studies, or related fields are offered at several hundred colleges and universities. Many also offer master's or doctoral degrees in the field. In 2006, about 100 bachelor's degree programs in parks and recreation were accredited by the National Recreation and Park Association (NRPA). Accredited programs provide broad exposure to the history, theory, and practice of park and recreation management. Courses offered include community organization; supervision and administration; recreational needs of special populations, such as the elderly or disabled; and supervised fieldwork. Students may specialize in areas such as therapeutic recreation, park management, outdoor recreation, industrial or commercial recreation, or camp management.

Specialized training or experience in a particular field, such as art, music, drama, or athletics, is an asset for many jobs. Some jobs also require certification. For example, a lifesaving certificate is a prerequisite for teaching or coaching water-related activities.

The large number of seasonal and part-time workers learn through on-the-job training.

Licensure and certification. The NRPA certifies individuals for professional and technical jobs. Certified Park and Recreation Professionals must pass an exam; earn a bachelor’s degree with a major in recreation, park resources, or leisure services from a program accredited by the NRPA or earn a bachelor’s degree and have at least 5 years of relevant full-time work experience. Continuing education is necessary to remain certified.

Many areas require lifeguards to be certified. Training and certification details vary from State to State and county to county. Information on lifeguards is available from your local Parks and Recreation Department.

Other qualifications. People planning recreation careers should be outgoing, good at motivating people, and sensitive to the needs of others. Excellent health and physical fitness are often required, due to the physical nature of some jobs. Volunteer experience, part-time work during school, or a summer job can lead to a full-time career as a recreation worker.

Advancement. Recreation workers with experience and managerial skills may advance to supervisory or managerial positions.

Employment

Recreation workers held about 320,000 jobs in 2006, and many additional workers held summer jobs in the occupation. About 32 percent of recreation workers worked for local governments, primarily in park and recreation departments. About 16 percent of recreation workers were employed by nursing and residential care facilities and another 10 percent were employed in civic and social organizations, such as the Boy Scouts or Girl Scouts or the Red Cross.

Job Outlook

Jobs opportunities for part-time, seasonal, and temporary recreation workers will be good, but competition will remain keen for career positions as recreation workers. Average growth is expected.

Employment change. Overall employment of recreation workers is projected to increase by 13 percent between 2006 and 2016, which is about as fast as the average for all occupations. Although people will spend more time and money on recreation, budget restrictions in State and local government will moderate the number of jobs added. Many of the new jobs will be in social assistance organizations and in nursing and residential care facilities.

Growth will be driven by retiring baby boomers who, with more leisure time, high disposable income, and concern for health and fitness, are expected to increase the demand for recreation services.

Job prospects. Applicants for part-time, seasonal, and temporary recreation jobs should have good opportunities, but competition will remain keen for career positions because the recreation field attracts many applicants and because the number of career positions is limited compared with the number of lower-level seasonal jobs. Opportunities for staff positions should be best for people with formal training and experience in part-time or seasonal recreation jobs. Those with graduate degrees should have the best opportunities for supervisory or administrative positions. Job openings will stem from growth and the need to replace the large numbers of workers who leave the occupation each year.

Earnings

In May 2006, median annual earnings of recreation workers who worked full time were \$20,470. The middle 50 percent earned between \$16,360 and \$27,050. The lowest paid 10 percent earned less than \$14,150, while the highest paid 10 percent earned \$35,780 or more. However, earnings of recreation directors and others in supervisory or managerial positions can be substantially higher. Most public and private recreation agencies provide full-time recreation workers with typical benefits; part-time workers receive few, if any, benefits. In May 2006, median annual earnings in the industries employing the largest numbers of recreation workers were as follows:

Nursing care facilities	\$21,510
Individual and family services	20,410
Local government	20,100
Other amusement and recreation industries	18,810
Civic and social organizations	17,920

The large numbers of temporary, seasonal jobs in the recreation field typically are filled by high school or college students, generally do not have formal education requirements, and are open to anyone with the desired personal qualities. Employers compete for a share of the vacationing student labor force, and although salaries in recreation often are lower than those in other fields, the nature of the work and the opportunity to work outdoors are attractive to many.

Part-time, seasonal, and volunteer jobs in recreation include summer camp counselors, craft specialists, and after-school and weekend recreation program leaders. In addition, many teachers and college students accept jobs as recreation workers when school is not in session. The vast majority of volunteers serve as activity leaders at local day camp programs, or in youth orga-

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16	
				Number	Percent
Recreation workers	39-9032	320,000	360,000	41,000	13

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

nizations, camps, nursing homes, hospitals, senior centers, and other settings.

Related Occupations

Recreation workers must exhibit leadership and sensitivity when dealing with people. Other occupations that require similar personal qualities include counselors; probation officers and correctional treatment specialists; psychologists; recreational therapists; teachers—self enrichment education; athletes, coaches, umpires, and related workers; and social workers.

Sources of Additional Information

For information on jobs in recreation, contact employers such as local government departments of parks and recreation, nurs-

ing and personal care facilities, the Boy Scouts or Girl Scouts, or local social or religious organizations.

For career, certification, and academic program information in parks and recreation, contact:

➤ National Recreation and Park Association, 22377 Belmont Ridge Rd., Ashburn, VA 20148-4501.

Internet: <http://www.nrpa.org>

For career information about camp counselors, contact:

➤ American Camping Association, 5000 State Road 67 North, Martinsville, IN 46151-7902.

Internet: <http://www.acacamps.org>