

Job Outlook

Job opportunities for correctional officers are expected to be excellent through 2010. The need to replace correctional officers who transfer to other occupations, retire, or leave the labor force, coupled with rising employment demand, will generate thousands of job openings each year. In the past, some local and State corrections agencies have experienced difficulty in attracting and keeping qualified applicants, largely due to relatively low salaries and the concentration of jobs in rural locations. This situation is expected to continue.

Employment of correctional officers is expected to increase faster than the average for all occupations through 2010, as additional officers are hired to supervise and control a growing inmate population. The adoption of mandatory sentencing guidelines calling for longer sentences and reduced parole for inmates will continue to spur demand for correctional officers. Moreover, expansion and new construction of corrections facilities also are expected to create many new jobs for correctional officers, although State and local government budgetary constraints could affect the rate at which new facilities are built and staffed. Some employment opportunities also will arise in the private sector as public authorities contract with private companies to provide and staff corrections facilities.

Layoffs of correctional officers are rare because of increasing offender populations. While officers are allowed to join bargaining units, they are not allowed to strike.

Earnings

Median annual earnings of correctional officers were \$31,170 in 2000. The middle 50 percent earned between \$24,650 and \$40,100. The lowest 10 percent earned less than \$20,010, and the highest 10 percent earned more than \$49,310. Median annual earnings in the public sector were \$37,430 in the Federal Government, \$31,860 in State government, and \$29,240 in local government. In the management and public relations industry, where officers employed by privately operated prisons are classified, median annual earnings were \$21,600. According to the Federal Bureau of Prisons, the starting salary for Federal correctional officers was about \$27,000 a year in 2001. Starting Federal salaries were slightly higher in selected areas where prevailing local pay levels were higher.

Median annual earnings of first-line supervisors/managers of correctional officers were \$41,880 in 2000. The middle 50 percent earned between \$32,460 and \$55,540. The lowest 10 percent earned less than \$28,280, and the highest 10 percent earned more than \$67,280. Median annual earnings were \$40,560 in State government and \$49,680 in local government.

In addition to typical benefits, correctional officers employed in the public sector usually are provided with uniforms or a clothing allowance to purchase their own uniforms. Civil service systems or merit boards cover officers employed by the Federal Government and most State governments. Their retirement coverage entitles them to retire at age 50 after 20 years of service or at any age with 25 years of service.

Related Occupations

A number of options are available to those interested in careers in protective services and security. Security guards and gaming surveillance officers protect people and property against theft, vandalism, illegal entry, and fire. Police and detectives maintain law and order, prevent crime, and arrest offenders. Probation officers and correctional treatment specialists monitor and counsel offenders in the community and evaluate their progress in becoming productive members of society.

Sources of Additional Information

Information about correctional jobs in a jail setting is available from:

- The American Jail Association, 2053 Day Rd., Suite 100, Hagerstown, MD 21740. Internet: <http://www.corrections.com/aja/index.html>

Information on entrance requirements, training, and career opportunities for correctional officers at the Federal level may be obtained by calling the Federal Bureau of Prisons at (800) 347-7744. Internet: <http://www.bop.gov>.

Information on obtaining a position as a correctional officer with the Federal Government is available from the Office of Personnel Management (OPM) through a telephone-based system. Consult your telephone directory under U.S. Government for a local number or call (912) 757-3000; Federal Relay Service: (800) 877-8339. The first number is not tollfree and charges may result. Information also is available from the OPM Internet site: <http://www.usajobs.opm.gov>.

Firefighting Occupations

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Significant Points

- Firefighting involves hazardous conditions and long, irregular hours.
- Keen competition for jobs is expected; many people are attracted to the occupation because it provides considerable job security and the opportunity to perform an essential public service.

Nature of the Work

Every year, fires and other emergencies take thousands of lives and destroy property worth billions of dollars. Firefighters help protect the public against these dangers by rapidly responding to a variety of emergencies. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to put out a fire, treat injuries, or perform other vital functions.

During duty hours, firefighters must be prepared to respond immediately to a fire or any other emergency that arises. Because fighting fires is dangerous and complex, it requires organization and teamwork. At every emergency scene, firefighters perform specific duties assigned by a superior officer. At fires, they connect hose lines to hydrants, operate a pump to send water to high pressure hoses, and position ladders to enable them to deliver water to the fire. They also rescue victims and provide emergency medical attention as needed, ventilate smoke-filled areas, and attempt to salvage the contents of buildings. Their duties may change several times while the company is in action. Sometimes they remain at the site of a disaster for days at a time, rescuing trapped survivors and assisting with medical treatment.

Firefighters have assumed a range of responsibilities, including emergency medical services. In fact, most calls to which firefighters respond involve medical emergencies, and about half of all fire departments provide ambulance service for victims. Firefighters receive training in emergency medical procedures, and many fire departments require them to be certified as emergency medical technicians. (For more information, see the *Handbook* statement on emergency medical technicians and paramedics.)

Firefighters work in a variety of settings, including urban and suburban areas, airports, chemical plants, other industrial sites, and



Firefighters secure their equipment after responding to a fire.

rural areas like grasslands and forests. In addition, some firefighters work in hazardous materials units that are trained for the control, prevention, and cleanup of oil spills and other hazardous materials incidents. (For more information, see the *Handbook* statement on hazardous material removal workers.) Workers in urban and suburban areas, airports, and industrial sites typically use conventional firefighting equipment and tactics, while forest fires and major hazardous materials spills call for different methods.

In national forests and parks, *forest fire inspectors and prevention specialists* spot fires from watchtowers and report their findings to headquarters by telephone or radio. Forest rangers patrol to ensure travelers and campers comply with fire regulations. When fires break out, crews of firefighters are brought in to suppress the blaze using heavy equipment, handtools, and water hoses. Forest firefighting, like urban firefighting, can be rigorous work. One of the most effective means of battling the blaze is by creating fire lines through cutting down trees and digging out grass and all other combustible vegetation, creating bare land in the path of the fire that deprives it of fuel. Elite firefighters, called smoke jumpers, parachute from airplanes to reach otherwise inaccessible areas. This can be extremely hazardous because the crews have no way to escape if the wind shifts and causes the fire to burn toward them.

Between alarms, firefighters clean and maintain equipment, conduct practice drills and fire inspections, and participate in physical fitness activities. They also prepare written reports on fire incidents and review fire science literature to keep abreast of technological developments and changing administrative practices and policies.

Most fire departments have a fire prevention division, usually headed by a fire marshal and staffed by *fire inspectors*. Workers in this division conduct inspections of structures to prevent fires and ensure fire code compliance. These firefighters also work with developers and planners to check and approve plans for new buildings. Fire prevention personnel often speak on these subjects in schools and before public assemblies and civic organizations.

Some firefighters become *fire investigators*, who determine the origin and causes of fires. They collect evidence, interview witnesses, and prepare reports on fires in cases where the cause may be arson or criminal negligence. They often are called upon to testify in court.

Working Conditions

Firefighters spend much of their time at fire stations, which usually have features common to a residential facility like a dormitory. When

an alarm sounds, firefighters respond rapidly, regardless of the weather or hour. Firefighting involves risk of death or injury from sudden cave-ins of floors, toppling walls, traffic accidents when responding to calls, and exposure to flames and smoke. Firefighters may also come in contact with poisonous, flammable, or explosive gases and chemicals, as well as radioactive or other hazardous materials that may have immediate or long-term effects on their health. For these reasons, they must wear protective gear that can be very heavy and hot.

Work hours of firefighters are longer and vary more widely than hours of most other workers. Many work more than 50 hours a week, and sometimes they may work even longer. In some agencies, they are on duty for 24 hours, then off for 48 hours, and receive an extra day off at intervals. In others, they work a day shift of 10 hours for 3 or 4 days, a night shift of 14 hours for 3 or 4 nights, have 3 or 4 days off, and then repeat the cycle. In addition, firefighters often work extra hours at fires and other emergencies and are regularly assigned to work on holidays. Fire lieutenants and fire captains often work the same hours as the firefighters they supervise. Duty hours include time when firefighters study, train, and perform fire prevention duties.

Employment

Employment figures in this *Handbook* statement include only paid career firefighters—they do not cover volunteer firefighters, who perform the same duties and may comprise the majority of firefighters in a residential area. Paid career firefighters held about 258,000 jobs in 2000. First-line supervisors/managers of firefighting and prevention workers held about 62,000 jobs; and fire inspectors held about 13,000. More than 9 out of 10 worked in municipal or county fire departments. Some large cities have thousands of career firefighters, while many small towns have only a few. Most of the remainder worked in fire departments on Federal and State installations, including airports. Private firefighting companies employ a small number of firefighters and usually operate on a subscription basis.

In response to the expanding role of firefighters, some municipalities have combined fire prevention, public fire education, safety, and emergency medical services into a single organization commonly referred to as a public safety organization. Some local and regional fire departments are being consolidated into countywide establishments in order to reduce administrative staffs and cut costs, and to establish consistent training standards and work procedures.

Training, Other Qualifications, and Advancement

Applicants for municipal firefighting jobs generally must pass a written exam; tests of strength, physical stamina, coordination, and agility; and a medical examination that includes drug screening. Workers may be monitored on a random basis for drug use after accepting employment. Examinations are generally open to persons who are at least 18 years of age and have a high school education or the equivalent. Those who receive the highest scores in all phases of testing have the best chances for appointment. The completion of community college courses in fire science may improve an applicant's chances for appointment. In recent years, an increasing proportion of entrants to this occupation has had some postsecondary education.

As a rule, entry-level workers in large fire departments are trained for several weeks at the department's training center or academy. Through classroom instruction and practical training, the recruits study firefighting techniques, fire prevention, hazardous materials control, local building codes, and emergency medical procedures, including first aid and cardiopulmonary resuscitation. They also learn how to use axes, chain saws, fire extinguishers, ladders, and

other firefighting and rescue equipment. After successfully completing this training, they are assigned to a fire company, where they undergo a period of probation.

A number of fire departments have accredited apprenticeship programs lasting up to 5 years. These programs combine formal, technical instruction with on-the-job training under the supervision of experienced firefighters. Technical instruction covers subjects such as firefighting techniques and equipment, chemical hazards associated with various combustible building materials, emergency medical procedures, and fire prevention and safety. Fire departments frequently conduct training programs, and some firefighters attend training sessions sponsored by the U.S. National Fire Academy. These training sessions cover topics including executive development, anti-arson techniques, disaster preparedness, hazardous materials control, and public fire safety and education. Some States also have extensive firefighter training and certification programs. In addition, a number of colleges and universities offer courses leading to 2- or 4-year degrees in fire engineering or fire science. Many fire departments offer firefighters incentives such as tuition reimbursement or higher pay for completing advanced training.

Among the personal qualities firefighters need are mental alertness, self-discipline, courage, mechanical aptitude, endurance, strength, and a sense of public service. Initiative and good judgment are also extremely important because firefighters make quick decisions in emergencies. Because members of a crew live and work closely together under conditions of stress and danger for extended periods, they must be dependable and able to get along well with others. Leadership qualities are necessary for officers, who must establish and maintain discipline and efficiency, as well as direct the activities of firefighters in their companies.

Most experienced firefighters continue studying to improve their job performance and prepare for promotion examinations. To progress to higher level positions, they acquire expertise in advanced firefighting equipment and techniques, building construction, emergency medical technology, writing, public speaking, management and budgeting procedures, and public relations.

Opportunities for promotion depend upon written examination results, job performance, interviews, and seniority. Increasingly, fire departments use assessment centers, which simulate a variety of actual job performance tasks, to screen for the best candidates for promotion. The line of promotion usually is to engineer, lieutenant, captain, battalion chief, assistant chief, deputy chief, and finally to chief. Many fire departments now require a bachelor's degree, preferably in fire science, public administration, or a related field, for promotion to positions higher than battalion chief. A master's degree is required for executive fire officer certification from the National Fire Academy and for State chief officer certification.

Job Outlook

Prospective firefighters are expected to face keen competition for available job openings. Many people are attracted to firefighting because it is challenging and provides the opportunity to perform an essential public service, a high school education is usually sufficient for entry, and a pension is guaranteed upon retirement after 20 years. Consequently, the number of qualified applicants in most areas exceeds the number of job openings, even though the written examination and physical requirements eliminate many applicants. This situation is expected to persist in coming years.

Employment of firefighters is expected to increase more slowly than the average for all occupations through 2010 as fire departments continue to compete with other public safety providers for funding. Most job growth will occur as volunteer firefighting positions are converted to paid positions. In addition to job growth, openings are expected to result from the need to replace firefighters

who retire, stop working for other reasons, or transfer to other occupations.

Layoffs of firefighters are uncommon. Fire protection is an essential service, and citizens are likely to exert considerable pressure on local officials to expand or at least preserve the level of fire protection. Even when budget cuts do occur, local fire departments usually cut expenses by postponing equipment purchases or not hiring new firefighters, rather than by laying off staff.

Earnings

Median hourly earnings of firefighters were \$16.43 in 2000. The middle 50 percent earned between \$11.82 and \$21.75. The lowest 10 percent earned less than \$8.03, and the highest 10 percent earned more than \$26.58. Median hourly earnings were \$16.71 in local government and \$15.00 in Federal government.

Median annual earnings of first-line supervisors/managers of firefighting and prevention workers were \$51,990 in 2000. The middle 50 percent earned between \$40,920 and \$64,760. The lowest 10 percent earned less than \$31,820, and the highest 10 percent earned more than \$77,700. First-line supervisors/managers of firefighting and prevention workers employed in local government earned about \$52,390 a year in 2000.

Median annual earnings of fire inspectors and investigators were \$41,630 in 2000. The middle 50 percent earned between \$31,630 and \$53,130 a year. The lowest 10 percent earned less than \$24,790, and the highest 10 percent earned more than \$65,030. Fire inspectors and investigators employed in local government earned about \$44,030 a year.

Median annual earnings of forest fire inspectors and prevention specialists were \$32,140 in 2000. The middle 50 percent earned between \$22,930 and \$41,150 a year. The lowest 10 percent earned less than \$17,060, and the highest 10 percent earned more than \$50,680.

The International City-County Management Association's annual Police and Fire Personnel, Salaries, and Expenditures Survey revealed that 89 percent of the municipalities surveyed provided fire protection services in 2000. The following 2000 salaries pertain to sworn full-time positions.

	<i>Minimum annual average base salary</i>	<i>Maximum annual average base salary</i>
Fire chief	\$58,156	\$74,749
Deputy chief	52,174	65,112
Battalion chief	50,164	62,309
Assistant fire chief	48,391	60,179
Fire captain	41,816	50,848
Fire lieutenant	38,875	46,327
Fire prevention/code inspector	37,142	46,798
Engineer	35,090	44,310
Firefighter	29,316	39,477

Firefighters who average more than a certain number of hours a week are required to be paid overtime. The hours threshold is determined by the department during the firefighter's work period, which ranges from 7 to 28 days. Firefighters often earn overtime for working extra shifts to maintain minimum staffing levels or for special emergencies.

Firefighters receive benefits usually including medical and liability insurance, vacation and sick leave, and some paid holidays. Almost all fire departments provide protective clothing (helmets, boots, and coats) and breathing apparatus, and many also provide dress uniforms. Firefighters are generally covered by pension plans, often providing retirement at half pay after 25 years of service or if disabled in the line of duty.

Related Occupations

Like firefighters, emergency medical technicians and paramedics and police and detectives respond to emergencies and save lives.

Sources of Additional Information

Information about a career as a firefighter may be obtained from local fire departments and from:

- ▶ International Association of Firefighters, 1750 New York Ave. NW., Washington, DC 20006. Internet: <http://www.iaff.org/iaff/index.html>
- ▶ U.S. Fire Administration, 16825 South Seton Ave., Emmitsburg, MD 21727.

Information about firefighter professional qualifications and a list of colleges and universities offering 2- or 4-year degree programs in fire science or fire prevention may be obtained from:

- ▶ National Fire Academy, Degrees at a Distance Program, 16825 South Seton Ave., Emmitsburg, MD 21727. Internet:

<http://www.usfa.fema.gov/nfa/index.htm>

Police and Detectives

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Significant Points

- Police work can be dangerous and stressful.
- The number of qualified candidates exceeds the number of job openings in Federal and State law enforcement agencies but is inadequate to meet growth and replacement needs in many local and special police departments.
- The largest number of employment opportunities will arise in urban communities with relatively low salaries and high crime rates.

Nature of the Work

People depend on police officers and detectives to protect their lives and property. Law enforcement officers, some of whom are State or Federal special agents or inspectors, perform these duties in a variety of ways, depending on the size and type of their organization. In most jurisdictions, they are expected to exercise authority when necessary, whether on or off duty. According to the U.S. Bureau of Justice Statistics, about 65 percent of State and local law enforcement officers are uniformed personnel.

Uniformed police officers who work in municipal police departments of various sizes, small communities, and rural areas have general law enforcement duties including maintaining regular patrols and responding to calls for service. They may direct traffic at the scene of a fire, investigate a burglary, or give first aid to an accident victim. In large police departments, officers usually are assigned to a specific type of duty. Many urban police agencies are becoming more involved in community policing—a practice in which an officer builds relationships with the citizens of local neighborhoods and mobilizes the public to help fight crime.

Police agencies are usually organized into geographic districts, with uniformed officers assigned to patrol a specific area, such as part of the business district or outlying residential neighborhoods. Officers may work alone, but in large agencies they often patrol with a partner. While on patrol, officers attempt to become thoroughly familiar with their patrol area and remain alert for anything unusual. Suspicious circumstances and hazards to public safety are investigated or noted, and officers are dispatched to individual calls

for assistance within their district. During their shift, they may identify, pursue, and arrest suspected criminals, resolve problems within the community, and enforce traffic laws.

Public college and university police forces, public school district police, and agencies serving transportation systems and facilities are examples of special police agencies. There are more than 1,300 of these agencies with special geographic jurisdictions or enforcement responsibilities in the United States. More than 75 percent of the sworn personnel in special agencies are uniformed officers, and about 15 percent are investigators.

Some police officers specialize in such diverse fields as chemical and microscopic analysis, training and firearms instruction, or handwriting and fingerprint identification. Others work with special units such as horseback, bicycle, motorcycle or harbor patrol, canine corps, or special weapons and tactics (SWAT) or emergency response teams. About 10 percent of local and special law enforcement officers perform jail-related duties, and around 4 percent work in courts. Regardless of job duties or location, police officers and detectives at all levels must write reports and maintain meticulous records that will be needed if they testify in court.

Sheriffs and deputy sheriffs enforce the law on the county level. Sheriffs are usually elected to their posts and perform duties similar to those of a local or county police chief. Sheriffs' departments tend to be relatively small, most having fewer than 25 sworn officers. A deputy sheriff in a large agency will have law enforcement duties similar to those of officers in urban police departments. Nationwide, about 40 percent of full-time sworn deputies are uniformed officers assigned to patrol and respond to calls, 12 percent are investigators, 30 percent are assigned to jail-related duties, and 11 percent perform court-related duties, with the balance in administration. Police and sheriffs' deputies who provide security in city and county courts are sometimes called bailiffs. (For information on other officers who work in jails and prisons see correctional officers elsewhere in the *Handbook*.)

State police officers (sometimes called *State troopers* or *highway patrol officers*) arrest criminals Statewide and patrol highways to enforce motor vehicle laws and regulations. Uniformed officers are best known for issuing traffic citations to motorists who violate the law. At the scene of accidents, they may direct traffic, give first aid, and call for emergency equipment. They also write reports used to determine the cause of the accident. State police officers are frequently called upon to render assistance to other law enforcement agencies, especially those in rural areas or small towns.

State law enforcement agencies operate in every State except Hawaii. Seventy percent of the full-time sworn personnel in the 49 State police agencies are uniformed officers who regularly patrol and respond to calls for service. Fifteen percent are investigators; 2 percent are assigned to court-related duties; and the remaining 13 percent work in administrative or other assignments.

Detectives are plainclothes investigators who gather facts and collect evidence for criminal cases. Some are assigned to inter-agency task forces to combat specific types of crime. They conduct interviews, examine records, observe the activities of suspects, and participate in raids or arrests. Detectives and State and Federal agents and inspectors usually specialize in one of a wide variety of violations such as homicide or fraud. They are assigned cases on a rotating basis and work on them until an arrest and conviction occurs or the case is dropped.

The Federal Government maintains a high profile in many areas of law enforcement. The U.S. Department of Justice is the largest employer of sworn Federal officers. *Federal Bureau of Investigation (FBI) agents* are the Government's principal investigators, responsible for investigating violations of more than 260 statutes and conducting sensitive national security investigations.