Data for Occupations Not Studied in Detail

Employment in the hundreds of occupations covered in detail in the main body of the *Handbook* accounts for more than 133 million or 89 percent of all jobs in the economy. Although occupations covering the full spectrum of work are included, those requiring lengthy education or training generally are given the most attention.

This chapter presents summary data on 128 additional occupations, for which employment projections are prepared, but for which detailed occupational information is not developed. These occupations account for about 7 percent of all jobs. For each occupation, the *Occupational Information Network* (O*NET) code, a brief description of the nature of the work, the number of jobs in 2006, a phrase describing the projected em-

ployment change from 2006 to 2016, and the most significant source of postsecondary education or training are presented. For a complete list of O*NET codes cited in the *Handbook*, refer to a later chapter, *Occupational Information Network Coverage*. For guidelines on interpreting the description of projected employment change, refer to a chapter in the front of the *Handbook*, Occupational Information Included in the *Handbook*.

The approximately 4 percent of all jobs not covered either in the detailed occupational descriptions in the main body of the *Handbook* or in the summary data presented in this chapter are mainly residual categories, such as "all other managers," for which little meaningful information could be developed.

Management, business, and financial occupations

Agents and business managers of artists, performers, and athletes

(O*NET 13-1011.00)

Represent and promote artists, performers, and athletes to prospective employers. May handle contract negotiations and other business matters for clients.

2006 Employment: 25,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Bachelor's or higher degree, plus work experience

Compliance officers, except agriculture, construction, health and safety, and transportation

(O*NET 13-1041.01, 13-1041.02, 13-1041.03, 13-1041.04, 13-1041.06)

Examine, evaluate, and investigate eligibility for or conformity with laws and regulations governing contract compliance of licenses and permits, and other compliance and enforcement inspection activities not classified elsewhere. Exclude tax examiners, collectors, and revenue agents and financial examiners.

2006 Employment: 237,000

Projected 2006-16 employment change: More slowly than average Most significant source of postsecondary education or training: Long-term on-the-job training

Credit analysts

(O*NET 13-2041.00)

Analyze current credit data and financial statements of individuals or firms to determine the degree of risk involved in extending credit or lending money. Prepare reports with this credit information for use in decisionmaking.

2006 Employment: 67,000

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training: Bachelor's degree

Emergency management specialists

(O*NET 13-1061.00)

Coordinate disaster response or crisis management activities, provide disaster preparedness training, and prepare emergency plans and procedures for natural (e.g. hurricanes, floods, earthquakes), wartime, or technological (e.g., nuclear power plant emergencies, hazardous materials spills) disasters or hostage situations.

2006 Employment: 12,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Work experience in a related occupation

Financial examiners

(O*NET 13-2061.00)

Enforce or ensure compliance with laws and regulations governing financial and securities institutions and financial and real estate transactions. May examine, verify correctness of, or establish authenticity of records

2006 Employment: 26,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Bachelor's degree

Legislators

(O*NET 11-1031.00)

Develop laws and statutes at the Federal, State, or local level. Includes only elected officials.

2006 Employment: 65,000

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training: Bachelor's or higher degree, plus work experience

Loan counselors

(O*NET 13-2071.00)

Provide guidance to prospective loan applicants who have problems qualifying for traditional loans. Guidance may include determining the best type of loan and explaining loan requirements or restrictions.

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2006 Employment: 33,000

Projected 2006-16 employment change: More slowly than average Most significant source of postsecondary education or training:

Bachelor's degree

Logisticians

(O*NET 13-1081.00)

Analyze and coordinate the logistical functions of a firm or organization. Responsible for the entire life cycle of a product, including acquisition, distribution, internal allocation, delivery, and final disposal of resources.

2006 Employment: 83,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Bachelor's degree

Postmasters and mail superintendents

(O*NET 11-9131.00)

Direct and coordinate operational, administrative, management, and supportive services of a U.S. post office; or coordinate activities of workers engaged in postal and related work in assigned post office.

2006 Employment: 26,000

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training: Work experience in a related occupation

Social and community service managers

(O*NET 11-9151.00)

Plan, organize, or coordinate the activities of a social service program or community outreach organization. Oversee the program or organization's budget and polices regarding participant involvement, program requirement, and benefits. Work may involve directing social workers, counselors, or probation officers.

2006 Employment: 130,000

Projected 2006-16 employment change: Much faster than average Most significant source of postsecondary education or training: Bachelor's degree

Tax preparers

(O*NET 13-2082.00)

Prepare tax returns for individuals or small businesses but do not have the background or responsibilities of an accredited or certified public accountant.

2006 Employment: 100,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Transportation, storage, and distribution managers

(O*NET 11-3071.01, 11-3071.02)

Plan, direct, or coordinate transportation, storage, or distribution activities in accordance with governmental policies and regulations. Includes logistics managers.

2006 Employment: 94,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Work experience in a related occupation

Professional and related occupations

Audio-visual collections specialists

(O*NET 25-9011.00)

Prepare, plan, and operate audio-visual teaching aids for use in education. May record, catalogue, and file audio-visual materials.

2006 Employment: 7,300

Projected 2006-16 employment change: Decline rapidly

Most significant source of postsecondary education or training: Bachelor's degree

Clergy

(O*NET 21-2011.00)

Conduct religious worship and perform other spiritual functions associated with beliefs and practices of religious faith or denomination.

Provide spiritual and moral guidance and assistance to members.

2006 Employment: 404,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Master's degree

Dietetic technicians

(O*NET 29-2051.00)

Assist dieticians in the provision of food service and nutritional programs. Under the supervision of dieticians, may plan and produce meals based on established guidelines, teach principles of food and nutrition, or counsel individuals.

2006 Employment: 25,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Postsecondary vocational award

Directors, religious activities and education

(O*NET 21-2021.00)

Direct and coordinate activities of a denominational group to meet religious needs of students. Plan, direct, or coordinate church school programs designed to promote religious education among church membership. May provide counseling and guidance relative to marital, health, financial, or religious problems.

2006 Employment: 99,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Bachelor's degree

Farm and home management advisors

(O*NET 25-9021.00)

Advise, instruct, and assist individuals and families engaged in agriculture, agricultural-related processes, or home economics activities. Demonstrate procedures and apply research findings to solve problems; instruct and train in product development, sales, and the utilization of machinery and equipment to promote general welfare. Include county agricultural agents, feed and farm management advisors, home economists, and extension service advisors.

2006 Employment: 15,000

Projected 2006-16 employment change: More slowly than average Most significant source of postsecondary education or training:

Bachelor's degree

Law clerks

(O*NET 23-2092.00)

Assist lawyers or judges by researching or preparing legal documents. May meet with clients or assist lawyers and judges in court. Excludes lawyers, and paralegal and legal assistants.

2006 Employment: 37,000

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training:

Bachelor's degree

Mathematical technicians

(O*NET 15-2091.00)

Apply standardized mathematical formulas, principles, and methodology to technological problems in engineering and physical sciences in relation to specific industrial and research objectives, processes, equipment, and products.

2006 Employment: 1,300

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Master's degree

Merchandise displayers and window trimmers

(O*NET 27-1026.00)

Plan and erect commercial displays, such as those in windows and interiors of retail stores and at trade exhibitions.

2006 Employment: 87,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Orthotists and prosthetists

(O*NET 29-2091.00)

Assist patients with disabling conditions of limbs and spine or with partial or total absence of limb by fitting and preparing orthopedic braces and prostheses.

2006 Employment: 5,700

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Bachelor's degree

Psychiatric technicians

(O*NET 29-2053.00)

Care for mentally impaired or emotionally disturbed individuals, following physician instructions and hospital procedures. Monitor patients' physical and emotional well-being and report to medical staff.

May participate in rehabilitation and treatment programs, help with personal hygiene, and administer oral medications and hypodermic injections.

2006 Employment: 62,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training: Postsecondary vocational award

Set and exhibit designers

(O*NET 27-1027.00)

Design special exhibits and movie, television, and theater sets. May study scripts, confer with directors, and conduct research to determine appropriate architectural styles.

2006 Employment: 12,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Bachelor's degree

Social science research assistants

(O*NET 19-4061.00)

Assist social scientists in laboratory, survey, and other social research. May perform publication activities, laboratory analysis, quality control, or data management. Normally these individuals work under the direct supervision of a social scientist and assist in those activities which are more routine. Excludes graduate teaching assistants, who both teach and do research.

2006 Employment: 18,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Associate degree

Title examiners, abstractors, and searchers

(O*NET 23-2093.00)

Search real estate records, examine titles, or summarize pertinent legal or insurance details for a variety of purposes. May compile lists of mortgages, contracts, and other instruments pertaining to titles by searching public and private records for law firms, real estate agencies, or title insurance companies.

2006 Employment: 69,000

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training: Moderate-term on-the-job training

Service occupations

Amusement and recreation attendants

(O*NET 39-3091.00)

Perform a variety of attending duties at amusement or recreation facilities. May schedule use of recreations facilities, maintain and provide equipment to participants of sporting events or recreational pursuits, or operate amusement concessions and rides.

2006 Employment: 247,000

Projected 2006-16 employment change: Much faster than average Most significant source of postsecondary education or training: Short-term on-the-job training

Animal control workers

(O*NET 33-9011.00)

Handle animals for the purpose of investigations of mistreatment, or control of abandoned, dangerous, or unattended animals.

2006 Employment: 15,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Baggage porters and bellhops

(O*NET 39-6011.00)

Handle baggage for travelers at transportation terminals or for guests at hotels or similar establishments.

2006 Employment: 49,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Short-term on-the-job training

Concierges

(O*NET 39-6012.00)

Assist patrons at hotel, apartment or office building with personal services. May take messages, arrange or give advice on transportation, business services or entertainment, or monitor guest requests for housekeeping and maintenance.

2006 Employment: 20,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Costume attendants

(O*NET 39-3092.00)

Select, fit and take care of costumes for cast members, and aid entertainers.

2006 Employment: 4,300

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Short-term on-the-job training

Crossing guards

(O*NET 33-9091.00)

Guide or control vehicular or pedestrian traffic at such places as streets, schools, railroad crossings, or construction sites.

2006 Employment: 69,000

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training: Short-term on-the-job training

Embalmers

(O*NET 39-4011.00)

Prepare bodies for interment in conformity with legal requirements.

2006 Employment: 9,000

Projected 2006-16 employment change: Faster than average

Most significant source of postsecondary education or training: Postsecondary vocational award

First-line supervisors/managers of food preparation and serving workers

(O*NET 35-1012.00)

Supervise workers engaged in preparing and serving food.

2006 Employment: 817,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Work experience in a related occupation

First-line supervisors/managers of personal service workers

(O*NET 39-1021.00)

Supervise and coordinate activities of personal service workers, such as supervisors of flight attendants, hairdressers, or caddies.

2006 Employment: 215,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Work experience in a related occupation

Funeral attendants

(O*NET 39-4021.00)

Perform a variety of tasks during a funeral, such as placing casket in parlor or chapel prior to service; arranging floral offerings or lights around casket; directing or escorting mourners; closing casket; and issuing and storing funeral equipment.

2006 Employment: 33,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Short-term on-the-job training

Lifeguards, ski patrol, and other recreational protective services

(O*NET 33-9092.00)

Monitor recreational areas, such as pools, beaches, or ski slopes to provide assistance and protection to participants.

2006 Employment: 114,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Short-term on-the-job-training

Locker room, coatroom and dressing room attendants

(O*NET 39-3093.00)

Provide personal items to patrons or customers in locker rooms, dressing rooms, or coatrooms.

2006 Employment: 19,000

Projected 2006-16 employment change: Much faster than average Most significant source of postsecondary education or training: Short-term on-the-job training

Medical equipment preparers

(O*NET 31-9093.00)

Prepare, sterilize, install, or clean laboratory or healthcare equipment. May perform routine laboratory tasks and operate or inspect equipment.

2006 Employment: 45,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Short-term on-the-job training

Motion picture projectionists

(O*NET 39-3021.00)

Set up and operate motion picture projection and related sound reproduction equipment.

2006 Employment: 11,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Short-term on-the-job training

Parking enforcement workers

(O*NET 33-3041.00)

Patrol assigned area, such as public parking lot or section of city to issue tickets to overtime parking violators and illegally parked vehicles.

2006 Employment: 11,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Short-term on-the-job training

Residential advisors

(O*NET 39-9041.00)

Coordinate activities for residents of boarding schools, college fraternities or sororities, college dormitories, or similar establishments. Order supplies and determine need to maintenance, repairs, and furnishings. May maintain household records and assign rooms. May refer residents to counseling resources if needed.

2006 Employment: 57,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Short-term on-the-job training

Tour guides and escorts

(O*NET 39-6021.00)

Escort individuals or groups on sightseeing tours or through places of interest, such as industrial establishments, public buildings, and art galleries.

2006 Employment: 40,000

Projected 2006-16 employment change: Much faster than average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Transportation attendants, except flight attendants and baggage porters

(O*NET 39-6032.00)

Provide services to ensure the safety and comfort of passengers aboard ships, buses, trains, or within the station or terminal. Perform duties, such as greeting passengers, explaining the use of safety equipment, serving meals or beverages, or answering questions related to travel.

2006 Employment: 21,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Short-term on-the-job training

Travel guides

(O*NET 39-6022.00)

Plan, organize, and conduct long distance cruises, tours, and expeditions for individuals or groups.

2006 Employment: 4,700

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Ushers, lobby attendants, and ticket takers

(O*NET 39-3031.00)

Assist patrons at entertainment events by performing duties, such as collecting admission tickets and passes from patrons, assisting in finding seats, searching for lost articles, and locating such facilities as rest rooms and telephones.

2006 Employment: 103,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Short-term on-the-job training

Veterinary assistants and laboratory animal caretakers

(O*NET 31-9096.00)

Feed, water, and examine pets and other nonfarm animals for signs of illness, disease, or injury in laboratories and animal hospitals and clinics. Clean and disinfect cages and work areas, and sterilize laboratory and surgical equipment. May provide routine postoperative care, administer medication orally or topically, or prepare samples for laboratory examination under the supervision of veterinary or laboratory animal technologists or technicians, veterinarians, or scientists. Excludes nonfarm animal caretakers.

2006 Employment: 75,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Short-term on-the-job training

Sales and related occupations

Door-to-door sales workers, news and street vendors, and related workers

(O*NET 41-9091.00)

Sell goods or services door-to-door or on the street.

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2006 Employment: 200,000

Projected 2006-16 employment change: More slowly than average Most significant source of postsecondary education or training:

Short-term on-the-job training

Parts salespersons

(O*NET 41-2022.00)

Sell spare and replacement parts and equipment in repair shop or parts store.

2006 Employment: 238,000

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training: Moderate-term on-the-job training

Telemarketers

(O*NET 41-9041.00)

Solicit orders for goods and services over the telephone.

2006 Employment: 395,000

Projected 2006-16 employment change: Decline rapidly

Most significant source of postsecondary education or training:

Short-term on-the-job training

Office and administrative support occupations

Correspondence clerks

(O*NET 43-4021.00)

Compose letters in reply to request for merchandise, damage claims, credit and other information, delinquent accounts, incorrect billings, or unsatisfactory services. Duties may include gathering data to formulate reply and typing correspondence.

2006 Employment: 17,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Short-term-on-the-job training

Court, municipal, and license clerks

(O*NET 43-4031.01, 43-4031.02, 43-4031.03)

Perform clerical duties in courts of law, municipalities, and governmental licensing agencies and bureaus. May prepare docket of cases to be called; secure information for judges and court; prepare draft agendas or bylaws for town or city council; answer official correspondence; keep fiscal records and accounts; issue licenses or permits; record data, administer tests, or collect fees.

2006 Employment: 115,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Short-term-on-the-job training

Insurance claims and policy processing clerks

(O*NET 43-9041.01, 43-9041.02)

Process new insurance policies, modifications to existing policies, and claims forms. Obtain information from policyholders to verify the accuracy and completeness of information on claims forms, applications

and related documents, and company records. Update existing policies and company records to reflect changes requested by policyholders and insurance company representatives. Excludes claims adjusters, examiners, and investigators.

2006 Employment: 254,000

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training: Moderate-term on-the-job training

Mail clerks and mail machine operators, except Postal Service

(O*NET 43-9051.00)

Prepare incoming and outgoing mail for distribution. Use hand or mail handling machines to time, stamp, open, read, sort, and route incoming mail; and address, seal, stamp, fold, stuff, and affix postage to outgoing mail or packages. Duties may also include keeping necessary records and completed forms.

2006 Employment: 152,000

Projected 2006-16 employment change: Decline rapidly

Most significant source of postsecondary education or training:

Short-term on-the-job training

New account clerks

(O*NET 43-4141.00)

Interview persons desiring to open bank accounts. Explain banking services available to prospective customers and assist them in preparing application form.

2006 Employment: 81,000

Projected 2006-16 employment change: Decline rapidly

Most significant source of postsecondary education or training:

Work experience in a related occupation

Office machine operators, except computer

(O*NET 43-9071.01)

Operate one or more of a variety of office machines, such as photocopying, photographic, and duplicating machines, or other office machines. Excludes computer operators; mail clerks and mail machine operators; and billing and posting clerks and machine operators.

2006 Employment: 94,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Short-term on-the-job training

Proofreaders and copy markers

(O*NET 43-9081.00)

Read transcript or proof type setup to detect and mark for correction any grammatical, typographical, or compositional errors. Excludes workers whose primary duty is editing copy. Includes proofreaders of Braille.

2006 Employment: 18,000

Projected 2006-16 employment change: More slowly than average Most significant source of postsecondary education or training: Short-term on-the-job training

Statistical assistants

(O*NET 43-9111.00)

Compile and compute data according to statistical formulas for use in statistical studies. May perform actuarial computations and compile charts and graphs for use by actuaries. Includes actuarial clerks.

2006 Employment: 23,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Farming, fishing, and forestry occupations

Hunters and trappers

(O*NET 45-3021.00)

Hunt and trap wild animals for human consumption, fur, feed, bait, or other purposes.

2006 Employment: 500

Projected 2006-16 employment change: Decline rapidly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Supervisors, farming, fishing, and forestry workers

(O*NET 45-1011.01, 45-1011.02, 45-1011.03, 45-1011.04, 45-1011.05, 45-1011.06, 45-1012.00)

This broad occupation includes two detailed occupations—first-line supervisors/managers of farming, fishing, and forestry workers; and farm labor contractors. First-line supervisors/managers of farming, fishing, and forestry workers directly supervise and coordinate the activities of agricultural, forestry, aquacultural, and related workers. Farm labor contractors recruit, hire, furnish, and supervise seasonal or temporary agricultural laborers for a fee. May transport, house, and provide meals for workers. Excludes first-line supervisors/managers of landscaping, lawn service, and groundskeeping workers.

2006 Employment: 53,000

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training:

Work experience in a related occupation

Construction and extraction occupations

Continuous mining machine operators

(O*NET 47-5041.00)

Operate self-propelled mining machines that rip coal, metal and nonmetal ores, rock, stone, or sand form the face and load it onto conveyors or into shuttle cars in a continuous operation.

2006 Employment: 10,000

Projected 2006-16 employment change: More slowly than average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Derrick operators, oil and gas

(O*NET 47-5011.00)

Rig derrick equipment and operate pumps to circulate mud through drill hole.

2006 Employment: 19,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Earth drillers, except oil and gas

(O*NET 47-5021.00)

Operate a variety of drills—such as rotary, churn, and pneumatic—to tap subsurface water and salt deposits, to remove core samples during mineral exploration or soil testing, and to facilitate the use of explosives in mining or construction. May use explosives. Includes horizontal and earth boring machine operators.

2006 Employment: 22,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Explosives workers, ordnance handling experts, and blasters

(O*NET 47-5031.00)

Place and detonate explosives to demolish structures or to loosen, remove, or displace earth, rock, or other materials. May perform specialized handling, storage, and accounting procedures. Includes seismograph shooters. Excludes earth drillers, except oil and gas who may also work with explosives.

2006 Employment: 5,300

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training: Moderate-term on-the-job training

Fence erectors

(O*NET 47-4031.00)

Erect and repair metal and wooden fences and fence gates around highways, industrial establishments, residences, or farms, using hand and power tools.

2006 Employment: 32,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Moderate-term on-the-job training

First-line supervisors/managers of construction trades and extraction workers

(O*NET 47-1011.00)

Directly supervise and coordinate activities of construction or extraction workers.

2006 Employment: 772,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Work experience in a related occupation

Helpers—brickmasons, blockmasons, stonemasons, and tile and marble setters

(O*NET 47-3011.00)

Help brickmasons, blockmasons, stonemasons, or tile and marble setters by performing duties of lesser skill. Duties include using, supplying, or holding materials or tools, and cleaning work area and equipment. Excludes apprentice workers and report them with the appropriate skilled construction trade occupation. Excludes construction laborers who do not primarily assist brickmasons, blockmasons, and stonemasons or tile and marble setters.

2006 Employment: 65,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Short-term on-the-job training

Helpers—carpenters

(O*NET 47-3012.00)

Help carpenters by performing duties of lesser skill. Duties include using, supplying, or holding materials or tools, and cleaning work area and equipment. Excludes apprentice workers and report them with the appropriate skilled construction trade occupation. Excludes construction laborers who do not primarily assist carpenters.

2006 Employment: 109,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Short-term on-the-job training

Helpers-electricians

(O*NET 47-3013.00)

Help electricians by performing duties of lesser skill. Duties include using, supplying, or holding materials or tools, and cleaning work area and equipment. Excludes apprentice workers and report them with them with the appropriate skilled construction trade occupation. Excludes construction laborers who do not primarily assist electricians.

2006 Employment: 105,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Short-term on-the-job training

Helpers—extraction workers

(O*NET 47-5081.00)

Help extraction craft workers, such as earth drillers, blasters and explosives workers, derrick operators, and mining machine operators, by performing duties of lesser skill. Duties include supplying equipment or cleaning work area. Excludes apprentice workers.

2006 Employment: 25,000

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training: Short-term on-the-job training

Helpers—painters, paperhangers, plasterers, and stucco masons

(O*NET 47-3014.00)

Help painters, paperhangers, plasterers, or stucco masons by performing duties of lesser skill. Duties including using, supplying, or holding materials or tools, and cleaning work area and equipment. Excludes apprentice workers and report them with the appropriate skilled construction trade occupation. Excludes construction laborers who do not primarily assist painters, paperhangers, plasterers, or stucco masons.

2006 Employment: 24,000

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training: Short-term on-the-job training

Helpers—pipelayers, plumbers, pipefitters, and steamfitters

(O*NET 47-3015.00)

Help pipelayers, plumbers, pipefitters, or steamfitters by performing duties of lesser skill. Duties including using, supplying, or holding materials or tools, and cleaning work area and equipment. Excludes apprentice workers and report them with the appropriate skilled construction trade occupation. Excludes construction laborers who do not primarily assist pipelayers, plumbers, pipefitters or steamfitters.

2006 Employment: 85,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Short-term on-the-job training

Helpers—roofers

(O*NET 47-3016.00)

Help roofers by performing duties of lesser skill. Duties include using, supplying, or holding materials or tools, and cleaning work area and equipment. Excludes apprentice workers and report them with the appropriate skilled construction trade occupation. Excludes construction laborers who do not primarily assist roofers.

2006 Employment: 22,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Short-term on-the-job training

Highway maintenance workers

(O*NET 47-4051.00)

Maintain highways, municipal and rural roads, airport runways, and rights-of-way. Duties include patching broken or eroded pavement, repairing guard rails, highway markers, and snow fences. May also mow or clear brush from along road or plow snow from roadway. Excludes tree trimmers and pruners.

2006 Employment: 145,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Mine cutting and channeling machine operators

(O*NET 47-5042.00)

Operate machinery—such as longwall shears, plows, and cutting machines—to cut or channel along the face or seams of coal mines, stone quarries, or other mining surfaces to facilitate blasting, separating, or removing minerals or materials from mines or from the earth's surface. Includes shale planers.

2006 Employment: 7,900

Projected 2006-16 employment change: More slowly than average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Rail-track laying and maintenance equipment operators

(O*NET 47-4061.00)

Lay, repair, and maintain track for standard or narrow-gauge railroad equipment used in regular railroad service or in plant yards, quarries, sand and gravel pits, and mines. Includes ballast cleaning machine operators and railroad bed tamping machine operators.

2006 Employment: 15,000

Projected 2006-16 employment change: More slowly than average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Rock splitters, quarry

(O*NET 47-5051.00)

Separate blocks of rough dimension stone from quarry mass using jackhammer and wedges.

2006 Employment: 3,900

Projected 2006-16 employment change: Much faster than average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Roof bolters, mining

(O*NET 47-5061.00)

Operate machinery to install roof support bolts in underground mine.

2006 Employment: 4,300

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training: Moderate-term on-the-job training

Rotary drill operators, oil and gas

(O*NET 47-5012.00)

Set up or operate a variety of drills to remove petroleum products from the earth and to find and remove core samples for testing during oil and gas exploration.

2006 Employment: 20,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training: Moderate-term on-the-job training

Roustabouts, oil and gas

(O*NET 47-5071.00)

Assemble or repair oil field equipment using hand and power tools. Perform other tasks as needed.

2006 Employment: 44,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training: Moderate-term on-the-job training

Septic tank servicers and sewer pipe cleaners

(O*NET 47-4071.00)

Clean and repair septic tanks, sewer lines, or drains. May patch walls and partitions of tank, replace damaged drain tile, or repair breaks in underground piping.

2006 Employment: 24,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Service unit operators, oil, gas, and mining

(O*NET 47-5013.00)

Operate equipment to increase oil flow from producing wells or to remove stick pipe, casing, tools, or other obstructions from drilling wells. May also perform similar services in mining exploration operations. Includes fishing-tool technicians.

2006 Employment: 28,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training: Moderate-term on-the-job training

Installation, maintenance, and repair occupations

Bicycle repairers

(O*NET 49-3091.00)

Repair and service bicycles.

2006 Employment: 8,600

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Commercial divers

(O*NET 49-9092.00)

Work below surface of water, using scuba gear to inspect, repair, remove, or install equipment and structures. May use a variety of power and hand tools, such as drills, sledgehammers, torches, and welding equipment. May conduct tests or experiments, rig explosives, or photograph structures or marine life. Excludes fishers and related fishing workers, athletes and sports competitors, and police and sheriff's patrol officers.

2006 Employment: 3,100

Projected 2006-16 employment change: Faster than average

Most significant source of postsecondary education or training: Postsecondary vocational award

Control and valve installers and repairers, except mechanical door

(O*NET 49-9012.00)

Install, repair, and maintain mechanical regulating and controlling devices, such as electric meters, gas regulators, thermostats, safety and flow valves, and other mechanical governors.

2006 Employment: 43,000

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training: Moderate-term on-the-job training

Fabric menders, except garment

(O*NET 49-9093.00)

Repair tears, holes, and other defects in fabrics, such as draperies, linens, parachutes, and tents.

2006 Employment: 1,800

Projected 2006-16 employment change: Little or no change Most significant source of postsecondary education or training: Moderate-term on-the-job training

First-line supervisors/managers of mechanics, installers, and repairers

(O*NET 49-1011.00)

Supervise and coordinate the activities of mechanics, installers, and repairers. Excludes team or work leaders.

2006 Employment: 465,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Work experience in a related occupation

Helpers—installation, maintenance, and repair workers

(O*NET 49-9098.00)

Help installation, maintenance, and repair workers in maintenance, parts replacement, and repair of vehicles, industrial machinery, and electrical and electronic equipment. Perform duties, such as furnishing tools, materials, and supplies to other workers; cleaning work area, machines, and tools; and holding materials or tools for other workers.

2006 Employment: 163,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Short-term on-the-job training

Locksmiths and safe repairers

(O*NET 49-9094.00)

Repair and open locks; make keys; change locks and safe combinations; and install and repair safes.

2006 Employment: 26,000

Projected 2006-16 employment change: Much faster than average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Manufactured building and mobile home installers

(O*NET 49-9095.00)

Move or install mobile homes or prefabricated buildings.

2006 Employment: 12,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Mechanical door repairers

(O*NET 49-9011.00)

Install, service, or repair opening and closing mechanisms of automatic doors and hydraulic door closers. Includes garage door mechanics.

2006 Employment: 15,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Recreational vehicle service technicians

(O*NET 49-3092.00)

Diagnose, inspect, adjust, repair, or overhaul recreational vehicles including travel trailers. May specialize in maintaining gas, electrical, hydraulic, plumbing, or chassis/towing systems as well as repairing generators, appliances, and interior components. Includes workers who perform customized van conversions. Excludes automotive service technicians and mechanics, and bus and truck mechanics and diesel engine specialists who also work on recreation vehicles.

2006 Employment: 14,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Long-term on-the-job training

Refractory materials repairers, except brickmasons

(O*NET 49-9045.00)

Build or repair furnaces, kilns, cupolas, boilers, converters, ladles, soaking pits, ovens, etc., using refractory materials.

2006 Employment: 3,500

Projected 2006-16 employment change: Decline rapidly

Most significant source of postsecondary education or training: Moderate-term on-the-job training

Riggers

(O*NET 49-9096.00)

Set up or repair rigging for construction projects, manufacturing plants, logging yards, ships and shipyards, or for the entertainment industry.

2006 Employment: 12,000

Projected 2006-16 employment change: Little or no change

Most significant source of postsecondary education or training:

Short-term on-the-job training

Security and fire alarm systems installers

(O*NET 49-2098.00)

Install, program, maintain, and repair security and fire alarm wiring and equipment. Ensure that work is in accordance with relevant codes. Excludes electricians who do a broad range of electrical wiring.

2006 Employment: 57,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Postsecondary vocational award

Signal and track switch repairers

(O*NET 49-9097.00)

Install, inspect, test, maintain, or repair electric gate crossings, signals, signal equipment, track switches, section lines, or intercommunications systems within a railroad system.

2006 Employment: 7,200

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Tire repairers and changers

(O*NET 49-3093.00)

Repair and replace tires.

2006 Employment: 106,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training:

Short-term on-the-job training

Production occupations

Cementing and gluing machine operators and tenders

(O*NET 51-9191.00)

Operate or tend cementing and gluing machines to join items for further processing or to form a completed product. Processes include joining veneer sheets into plywood; gluing paper; joining rubber and rubberized fabric parts, plastic, simulated leather, or other materials. Excludes shoe machine operators and tenders.

2006 Employment: 23,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Chemical equipment operators and tenders

(O*NET 51-9011.00)

Operate or tend equipment to control chemical changes or reactions in the processing of industrial or consumer products. Equipment used includes devulcanizers, steam-jacketed kettles, and reactor vessels. Excludes chemical plant and system operators.

2006 Employment: 53,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Chemical plant and system operators

(O*NET 51-8091.00)

Control or operate an entire chemical process or system of machines.

2006 Employment: 53,000

Projected 2006-16 employment change: Decline rapidly

Most significant source of postsecondary education or training:

Long-term on-the-job training

Cleaning, washing, and metal pickling equipment operators and tenders

(O*NET 51-9192.00)

Operate or tend machines to wash or clean products, such as barrels or kegs, glass items, tin plate, food, pulp, coal, plastic, or rubber, to remove impurities.

2006 Employment: 16,000

Projected 2006-16 employment change: Decline rapidly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Cooling and freezing equipment operators and tenders

(O*NET 51-9193.00)

Operate or tend equipment, such as cooling and freezing units, refrigerators, batch freezers, and freezing tunnels, to cool or freeze products, food, blood plasma, and chemicals.

2006 Employment: 11,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Crushing, grinding, and polishing machine setters, operators, and tenders

(O*NET 51-9021.00)

Set up, operate, or tend machines to crush, grind, or polish materials, such as coal, glass, grain, stone, food, or rubber.

2006 Employment: 42,000

Projected 2006-16 employment change: Decline rapidly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Cutters and trimmers, hand

(O*NET 51-9031.00)

Use hand tools or hand-held power tools to cut and trim a variety of manufactured items, such as carpet, fabric, stone, glass, or rubber.

2006 Employment: 29,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training: Short-term on-the-job training

Cutting and slicing machine setters, operators, and tenders

(O*NET 51-9032.00)

Set up, operate, or tend machines that cut or slice materials, such as glass, stone, cork, rubber, tobacco, food, paper, or insulating mate-

rial. Excludes woodworking machines setters, operators, and tenders; cutting, punching, and press machine setters, operators, and tenders, metal and plastic; and textile cutting machine setters, operators, and tenders.

2006 Employment: 79,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Etchers and engravers

(O*NET 51-9194.00)

Engrave or etch metal, wood, rubber, or other materials for identification or decorative purposes. Includes such workers as etcher-circuit processors, pantograph engravers, and silk screen etchers. Includes photoengravers with prepress technicians and workers.

2006 Employment: 14,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Long-term on-the-job training

Extruding, forming, pressing, and compacting machine setters, operators, and tenders

(O*NET 51-9041.00)

Set up, operate, or tend machines, such as glass forming machines, plodder machines, and tuber machines, to shape and form products, such as glassware, food, rubber, soap, brick, tile, clay, wax, tobacco, or cosmetics. Excludes paper goods machine setters, operators, and tenders; and shoe machine operators and tenders.

2006 Employment: 81,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

First-line supervisors/managers of production and operating workers

(O*NET 51-1011.00)

Supervise and coordinate the activities of production and operating workers, such as inspectors, precision workers, machine setters, and operators, assemblers, fabricators, and plant and system operators. Excludes team or work leaders.

2006 Employment: 699,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Work experience in a related occupation

Furnace, kiln, oven, drier, and kettle operators and tenders

(O*NET 51-9051.00)

Operate or tend heating equipment other than basic metal, plastic or food processing equipment. Includes activities, such as annealing glass, drying lumber, curing rubber, removing moisture from materials, or boiling soap.

2006 Employment: 32,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Gas plant operators

(O*NET 51-8092.00)

Distribute or process gas for utility companies and others by controlling compressors to maintain specified pressures on main pipelines.

2006 Employment: 12,000

Projected 2006-16 employment change: Decline rapidly

Most significant source of postsecondary education or training:

Long-term on-the-job training

Grinding and polishing workers, hand

(O*NET 51-9022.00)

Grind, sand, or polish, using hand tools or hand-held power tools, a variety of metal, wood, stone, clay, plastic, or glass objects. Includes chippers, buffers, and finishers.

2006 Employment: 45,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Helpers—production workers

(O*NET 51-9198.00)

Help production workers by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Excludes apprentice workers.

2006 Employment: 542,000

Projected 2006-16 employment change: Little or no change

Most significant source of postsecondary education or training:

Short-term on-the-job training

Mixing and blending machine setters, operators, and tenders

(O*NET 51-9023.00)

Set up, operate, or tend machines to mix or blend materials, such as chemicals, tobacco, liquids, color pigments, or explosive ingredients. Excludes food batchmakers.

2006 Employment: 143,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Molders, shapers, and casters, except metal and plastic

(O*NET 51-9195.03, 51-9195.04, 51-9195.05, 51-9195.07)

Mold, shape, form, cast, or carve products such as food products, figurines, tile, pipes, and candles consisting of clay, glass, plaster, concrete, stone, or combinations of materials.

2006 Employment: 56,000

Projected 2006-16 employment change: Little or no change

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Packaging and filling machine operators and tenders

(O*NET 51-9111.00)

Operate or tend machines to prepare industrial or consumer products for storage or shipment. Includes cannery workers who pack food products.

2006 Employment: 386,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Short-term on-the-job training

Paper goods machine setters, operators, and tenders

(O*NET 51-9196.00)

Set up, operate, or tend paper goods machines that perform a variety of functions, such as converting, sawing, corrugating, banding, wrapping, boxing, stitching, forming, or sealing paper or paperboard sheets into products.

2006 Employment: 113,000

Projected 2006-16 employment change: Decline rapidly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Petroleum pump system operators, refinery operators, and gaugers

(O*NET 51-8093.00)

Control the operation of petroleum refining or processing units. May specialize in controlling manifold and pumping systems, gauging or testing oil in storage tanks, or regulating the flow of oil into pipelines.

2006 Employment: 42,000

Projected 2006-16 employment change: Decline rapidly

Most significant source of postsecondary education or training:

Long-term on-the-job training

Separating, filtering, clarifying, precipitating, and still machine setters, operators and tenders

(O*NET 51-9012.00)

Set up, operate, or tend continuous flow or vat-type equipment; filter presses; shaker screens; centrifuges; condenser tubes; precipitating, fermenting, or evaporating tanks; scrubbing towers; or batch stills. These machines extract, sort, or separate liquids, gases, or solids from other materials to recover a refined product. Includes dairy processing equipment operators. Excludes chemical equipment operators and tenders.

2006 Employment: 44,000

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Tire builders

(O*NET 51-9197.00)

Operate machines to build tires from rubber components.

2006 Employment: 23,000

Projected 2006-16 employment change: Decline rapidly

Most significant source of postsecondary education or training:

Moderate-term on-the-job training

Transportation and material moving occupations

Aircraft cargo handling supervisors

(O*NET 53-1011.00)

Direct ground crew in the loading, unloading, securing, and staging of aircraft cargo and baggage. Determine the quantity and orientation of cargo and compute aircraft center of gravity. May accompany aircraft as member of flight crew and monitor and handle cargo in flight, and assist and brief passengers on safety and emergency procedures. Includes loadmasters.

2006 Employment: 5,800

Projected 2006-16 employment change: Much faster than average Most significant source of postsecondary education or training: Work experience in a related occupation

Airfield operations specialists

(O*NET 53-2022.00)

Ensure the safe takeoff and landing of commercial and military aircraft. Duties include coordination between air-traffic control and maintenance personnel; dispatching; using airfield landing and navigational aids; implementing airfield safety procedures; monitoring and maintaining flight records; and applying knowledge of weather information.

2006 Employment: 4,900

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training:

Long-term on-the-job training

Ambulance drivers and attendants, except emergency medical technicians

(O*NET 53-3011.00)

Drive ambulance or assist ambulance drivers in transporting sick, injured, or convalescent persons. Assist in lifting patients.

2006 Employment: 22,000

Projected 2006-16 employment change: Much faster than average Most significant source of postsecondary education or training: Moderate-term on-the-job training

Bridge and lock tenders

(O*NET 53-6011.00)

Operate and tend bridges, canal locks, and lighthouses to permit marine passage on inland waterways, near shores, and at danger points in waterway passages. May supervise such operations. Includes drawbridge operators, lock tenders and operators, and slip bridge operators

2006 Employment: 3,900

Projected 2006-16 employment change: Decline slowly

Most significant source of postsecondary education or training:

Short-term on-the-job training

First-line supervisors/managers of helpers, laborers, and material movers, hand

(O*NET 53-1021.00)

Supervise and coordinate the activities of helpers, laborers, or material movers.

2006 Employment: 182,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Work experience in a related occupation

First-line supervisors/managers of transportation and material moving machine and vehicle operators

(O*NET 53-1031.00)

Directly supervise and coordinate activities of transportation and material-moving machine and vehicle operators and helpers.

2006 Employment: 226,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Work experience in a related occupation

Parking lot attendants

(O*NET 53-6021.00)

Park automobiles or issue tickets for customers in parking lot or garage. May collect fee.

2006 Employment: 135,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Short-term on-the-job training

Service station attendants

(O*NET 53-6031.00)

Service automobiles, buses, trucks, boats, and other automotive or marine vehicles with fuel, lubricants, and accessories. Collect payment for services and supplies. May lubricate vehicle, change motor oil, install antifreeze, or replace lights or other accessories, such as windshield wiper blades or fan belts. May repair or replace tires.

2006 Employment: 96,000

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Short-term on-the-job training

Traffic technicians

(O*NET 53-6041.00)

Conduct field studies to determine traffic volume, speed, effectiveness of signals, adequacy of lighting, and other factors influencing traffic conditions, under direction of traffic engineer.

2006 Employment: 6,900

Projected 2006-16 employment change: About as fast as average Most significant source of postsecondary education or training: Short-term on-the-job training

Transportation inspectors

(O*NET 53-6051.01, 53-6051.07, 53-6051.08)

Inspect equipment or goods in connection with the safe transport of cargo or people. Includes rail transport inspectors, such as freight inspectors, car inspectors, rail inspectors, and other nonprecision inspectors of other types of transportation vehicles.

2006 Employment: 26,000

Projected 2006-16 employment change: Faster than average Most significant source of postsecondary education or training: Work experience in a related occupation