



# The 2000-10 job outlook in brief

The names of the major occupational clusters are set in large type above large, dark purple bars. The names of the subgroups are set in smaller type on top of narrower, lighter purple bars. Names of occupations are in standard boldface type.

All estimates of employment in 2000 and projected change in employment are based on the BLS Industry-Occupation Matrix, unless otherwise noted. This symbol ★ marks the occupations that are projected to grow the fastest or provide the most new jobs.

The column labeled "Employment prospects" compares the employment change for the occupation with that for total employment. When possible, it also indicates the amount of competition jobseekers can expect. The terms used for these comparisons are defined on page 8.



## Management and business and financial operations

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Accountants and auditors</b>	976,000	19	181,000	Average growth. As the economy grows, businesses will require accountants to prepare tax returns and financial statements and organize financial operations.
<b>Administrative services managers</b>	362,000	20	74,000	Average growth. Organizations will emphasize maintenance of their buildings and grounds, relying on these workers for facilities management. Keen competition is expected.
<b>Advertising, marketing, promotions, public relations, and sales managers</b>	707,000	32	229,000	Faster than average growth. Growth will stem from competition as businesses vie for customers. Keen competition is expected for these sought-after jobs. College graduates with creativity, experience, and excellent communication skills will have the best opportunities.
<b>Budget analysts</b>	70,000	15	10,000	Average growth. Growth in the amount and complexity of available financial information will spur the need for these workers to plan operations. Government agencies at all levels also will rely on budget analysts to allocate funds among programs. Keen competition is expected.
<b>Claims adjusters, appraisers, examiners, and investigators</b>	207,000	15	31,000	Average growth. The number and complexity of insurance claims is rising, providing more opportunities for these workers.

## Management and business and financial operations



Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Computer and information systems managers</b>	313,000	48 ★	150,000	Much faster than average growth. Greater use of computer networks and electronic commerce will increase employment of computer workers and, therefore, their managers. Opportunities will be best for workers who have an MBA degree, advanced technical knowledge, and strong communication and administrative skills.
<b>Construction managers</b>	308,000	16	50,000	Average growth. Employment increases are tied to growth of the construction industry. Excellent opportunities are expected because of the need to replace workers who leave the occupation permanently.
<b>Cost estimators</b>	211,000	17	35,000	Average growth. Growth of the construction industry, in which half of all cost estimators are employed, will drive demand for these workers.
<b>Education administrators</b>	453,000	13	61,000	Average growth. Administrators will be needed to oversee a rise in student enrollments, especially at the college level. Job opportunities should be excellent because of the large number of workers expected to retire.
<b>Engineering and natural sciences managers</b>	324,000	8	26,000	Slower than average growth. Job growth should be closely related to that of the engineers and scientists these workers supervise. Opportunities will be best for those with advanced technical knowledge and good communication and administrative skills.
<b>Farmers, ranchers, and agricultural managers</b>	1,462,000	-22	-318,000	Declining employment. The long-term trend toward consolidation of farms is expected to reduce employment of farmers and ranchers and cause that of agricultural managers to increase more slowly than average. Aquaculture and direct sales to consumers will provide some opportunities.
<b>Financial analysts and personal financial advisors</b>	239,000	29	69,000	Faster than average growth. Both businesses and individuals will be increasing their demand for financial advice. Competition is expected to be keen for financial analyst positions in top securities firms.
<b>Financial managers</b>	658,000	19	122,000	Average growth. Employment growth resulting from an expanding economy and the need for financial expertise will be offset by corporate mergers and downsizing. Candidates with expertise in accounting and finance, especially those with a master's degree, should enjoy the best job prospects.

## Management and business and financial operations



Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Food service managers</b>	465,000	15	70,000	Average growth. Eating and drinking places will provide the most new jobs as the number of establishments increases along with the population, personal incomes, and leisure time.
<b>Funeral directors</b>	39,000	2	900	Little or no change in employment. Growing demand for funeral services will be largely offset by consolidation of tasks as workers take on more duties. Most job openings will result from the need to replace funeral directors who retire or leave the occupation permanently for other reasons. Opportunities are good, especially for those who also embalm.
<b>Human resources, training, and labor relations managers and specialists</b>	709,000	16	116,000	Average growth. Increased demand, stemming from regulations affecting employment standards, will be offset by some computerized information systems that make workers more productive. An abundant supply of qualified graduates and experienced workers will create keen competition.
<b>Industrial production managers</b>	255,000	6	16,000	Slower than average growth. Gains in manufacturing productivity will limit employment growth.
<b>Insurance underwriters</b>	107,000	2	2,100	Little or no change in employment. Underwriting software will continue to make workers more productive. Opportunities will be the best in health insurance.
<b>Loan counselors and officers</b>	265,000	6	16,000	Slower than average growth. Automation of many loan processing tasks is helping these workers handle a growing volume of loan applications.
<b>Lodging managers</b>	68,000	9	6,400	Slower than average growth. Demand for managers will be tempered by an increase in the number of extended-stay and economy hotels, which require fewer management duties. Opportunities should be best for those who have a degree in hotel or restaurant management.
<b>Management analysts</b>	501,000	29	145,000	Faster than average growth. Organizational changes, increasing numbers of mergers and acquisitions, and growth of international business will provide opportunities for these workers to advise businesses. Keen competition is expected for jobs.
<b>Medical and health services managers</b>	250,000	32	81,000	Faster than average growth. Employment will grow fastest in residential care facilities and in practitioners' offices and clinics.



## Professional and related

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Property, real estate, and community association managers</b>	270,000	23	61,000	Faster than average growth. More of these workers will be employed to oversee the growing stock of managed properties, both business and residential. Many opportunities should arise for self-employed managers and those who have a degree or professional designation.
<b>Purchasing managers, buyers, and purchasing agents</b>	536,000	2	12,000	Little or no change in employment. Increased use of automated systems will curtail employment growth. Job gains for purchasing agents of complex equipment will offset losses for other specialties. Opportunities should be best for those with a college degree.
<b>Tax examiners, collectors, and revenue agents</b>	79,000	8	6,600	Slower than average growth. Employment growth will be dampened by the increasing use of technology in filing and processing tax returns.
<b>Top executives</b>	2,999,000	15	464,000 ★	Average growth. Competition for these prestigious jobs should remain keen because of the ample number of qualified applicants and relatively low turnover.



## Professional and related

### Architects, surveyors, and cartographers

<b>Architects, except landscape and naval</b>	102,000	18	19,000	Average growth. Employment is tied to local construction, especially nonresidential construction. Prospective architects may face competition unless there is a decrease in the number of architecture degrees awarded. Those who have career-related experience and familiarity with computer-aided design will have the best prospects.
<b>Landscape architects</b>	22,000	31	6,800	Faster than average growth. Increased construction, emphasis on preservation and restoration of wetlands, and growth in landscape ecology should create opportunities. New graduates should expect competition for jobs in large, prestigious firms. Opportunities will be best for those with strong technical skills and internship experience.

## Professional and related



Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Surveyors, cartographers, photogrammetrists, and surveying technicians</b>	121,000	17	20,000	Average growth. Prospects will be best for surveying and mapping technicians because of the occupation's high turnover. For surveyors, cartographers, and photogrammetrists, opportunities should be best for those who have a bachelor's degree and strong technical skills.
<b>Drafters and engineering technicians</b>				
<b>Drafters</b>	213,000	19	42,000	Average growth. Industrial growth and increasingly complex designs will spur growth in drafting services. As technology advances, opportunities will be best for drafters with at least 2 years of postsecondary training, computer-aided design systems experience, and broad-ranging ability.
<b>Engineering technicians</b>	519,000	12	62,000	Average growth. Employment will be limited by computer-aided design and other technologies that increase productivity. Opportunities will be best for those who have an associate degree or extensive job training.
<b>Engineers<sup>3</sup></b>				
	1,465,000	9	138,000	Slower than average growth. Despite slow growth, overall job opportunities should be good because the number of engineering degrees awarded is not expected to increase significantly.
<b>Aerospace engineers</b>	50,000	14	7,000	Average growth. An expected rise in defense expenditures may result in employment increases. Most openings will result from a need to replace workers who retire or leave the occupation permanently for other reasons.
<b>Agricultural engineers</b>	2,400	15	400	Average growth. Job opportunities should result from an increased demand for agricultural products and desire for more efficient agricultural production and resource conservation.
<b>Biomedical engineers</b>	7,200	31	2,300	Faster than average growth. An aging population more focused on health issues will demand new and better medical equipment, spurring growth.
<b>Chemical engineers</b>	33,000	4	1,400	Slower than average growth. Much of the growth is expected in the services industries, especially research and testing. New graduates may face keen competition.
<b>Civil engineers</b>	232,000	10	24,000	Average growth. The growing population will increase demand for the design, construction, and repair of transportation systems, large building complexes, bridges, and other public structures.



## Professional and related

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Computer hardware engineers</b>	60,000	25	15,000	Faster than average growth. Along with growth in the computer and office equipment industry, consulting opportunities should increase as businesses upgrade and customize complex systems.
<b>Electrical and electronics engineers, except computer</b>	288,000	11	31,000	Average growth. Employment growth will stem from demand for advanced communications equipment and consumer- and defense-related electronics products. Growth is expected to be fastest in the services industries, especially consulting firms. Opportunities are expected to be favorable.
<b>Environmental engineers</b>	52,000	26	14,000	Faster than average growth. Spurring growth will be the need to meet environmental regulations and to develop cleanup methods for existing hazards. Government regulations will largely determine the number of available openings.
<b>Industrial engineers, including health and safety</b>	198,000	6	12,000	Slower than average growth. Employment of industrial engineers, whose jobs are affected by automation in factories and offices, is projected to grow more slowly than that of health and safety engineers, whose outlook will benefit from increasing concern for safe working environments.
<b>Materials engineers</b>	33,000	5	1,800	Slower than average growth. Although there will be a need for new materials for electronics and plastics products, employment declines are expected in many manufacturing industries in which materials engineers work.
<b>Mechanical engineers</b>	221,000	13	29,000	Average growth. Growth is tied to increased demand for improved machinery and machine tools and more complex industrial processes. Employment is expected to grow fastest in business and engineering services firms.
<b>Mining and geological engineers, including mining safety engineers</b>	6,500	-1	-100	Declining employment. Most of the industries employing mining engineers are expected to lose jobs. Openings should result from the need to replace many retiring workers.
<b>Nuclear engineers</b>	14,000	2	300	Little or no change in employment. Demand is limited because no new nuclear power plants are being constructed due to public concern about cost and safety. Good opportunities are expected for workers needed to operate existing nuclear power plants. Most openings will result from replacement needs.

## Professional and related



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		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Petroleum engineers</b>	9,000	-7	-600	Declining employment. Most of the potential petroleum-producing areas in the United States have already been explored. Favorable opportunities are expected, however, with nearly all openings resulting from the need to replace workers who retire or leave this small occupation permanently for other reasons.
<b>Art and design</b>				
<b>Artists and related workers</b>	147,000	20	29,000	Average growth. Expanding electronic media and entertainment industries will offer opportunities for animators, illustrators, and graphic artists. Competition for jobs will be keen.
<b>Designers</b>	492,000	21	104,000	Faster than average growth. Employment growth in this highly competitive occupation will stem from increased demand for newer, high-technology industrial products in medicine, transportation, and other industries and for Internet and video images.
<b>Entertainers and performers, sports and related</b>				
<b>Actors, producers, and directors</b>	158,000	27	42,000	Faster than average growth. Higher employment is projected because of expanding entertainment and media industries, such as broadcast, satellite, and cable television. Job competition should be keen.
<b>Athletes, coaches, umpires, and related workers</b>	129,000	19	24,000	Average growth. Jobs will grow as the public increasingly participates in sports as a form of entertainment, recreation, and physical conditioning. Keen competition is expected at the professional level.
<b>Dancers and choreographers</b>	26,000	16	4,300	Average growth. Employment growth will be limited by funding constraints due to rising production costs. Most opportunities in these highly competitive occupations are expected in dance and opera companies and in film, theatre, and other entertainment industries.
<b>Musicians, singers, and related workers</b>	240,000	19	45,000	Average growth. Increased opportunities are expected, primarily from religious organizations and from nightclubs, restaurants, and other establishments. Competition will be keen.
<b>Media and communication-related</b>				
<b>Announcers</b>	71,000	-6	-4,000	Declining employment. Increasing consolidation of radio and television stations, new technology, and the growth of alternative media sources will contribute to an expected employment decline and keen competition.



## Professional and related

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Broadcast and sound engineering technicians and radio operators</b>	87,000	14	12,000	Average growth. Employment growth resulting from increased hours of programming will be offset by laborsaving technology. Numerous openings will result from the need to replace workers who leave the occupation permanently.
<b>News analysts, reporters, and correspondents</b>	78,000	3	2,200	Slower than average growth. Mergers, consolidations, newspaper closures, decreased circulation, and declines in advertising profits are some of the factors limiting growth.
<b>Photographers</b>	131,000	17	22,000	Average growth. The number of portrait photographers is projected to increase along with the population. New opportunities should arise with Internet-based media companies, but keen competition is expected.
<b>Public relations specialists</b>	137,000	36 ★	49,000	Much faster than average growth. Companies seeking better customer relations will provide opportunities for those with some experience and excellent communication and people skills. Keen competition is expected for entry-level jobs.
<b>Television, video, and motion picture camera operators and editors</b>	43,000	26	11,000	Faster than average growth. Rapid expansion of electronic media, such as made-for-Internet films and videos, is expected to generate new employment opportunities. Competition for jobs will be keen.
<b>Writers and editors</b>	305,000	26	80,000	Faster than average growth. Demand should increase for technical writers with scientific, medical, or technical expertise to write materials for a general audience. Employment of writers for electronic and specialty publications and business, employee, and member newsletters also is projected to increase but remain competitive.

## Community and social services

### Clergy

<b>Protestant ministers</b>	( <sup>4</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	Job outlook varies by denomination but should be best for graduates of theological schools. Competition will be keen for positions serving large, urban congregations; better opportunities are expected in smaller, rural congregations.
<b>Rabbis</b>	( <sup>4</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	Job opportunities are expected in all four major branches of Judaism. Rabbis willing to serve in small, underserved communities should have the best prospects.

## Professional and related



Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Roman Catholic priests</b>	45,000 <sup>6</sup>	( <sup>5</sup> )	( <sup>5</sup> )	The shortage of Roman Catholic priests is expected to continue, resulting in a favorable job outlook. Seminary enrollments remain below the levels needed to overcome the current shortfall of priests.
<b>Counselors</b>	465,000	26	120,000	Faster than average growth. Employment is expected to increase as educational, employment, rehabilitation, and other counseling services expand. Numerous job openings will result from the need to replace counselors who retire.
<b>Probation officers and correctional treatment specialists</b>	84,000	24	20,000	Faster than average growth. Increasing prison, parole, and probation populations should spur employment growth. Many openings will be created by the need to replace workers who leave the occupation permanently. Opportunities are expected to be very good.
<b>Social and human service assistants</b>	271,000	54 ★	147,000	Much faster than average growth. The aging population will boost demand for social and human services. Opportunities should be excellent, especially for those with appropriate postsecondary education.
<b>Social workers</b>	468,000	30	141,000	Faster than average growth. The aging population will drive increasing demand for social services. Competition for jobs is expected in cities, but opportunities should be good in rural areas.
<b>Computer and mathematical</b>				
<b>Actuaries</b>	14,000	5	800	Slower than average growth. Most actuaries are employed by the insurance industry, which is expected to grow slowly. Opportunities should be best in health insurance and financial services.
<b>Computer programmers</b>	585,000	16	95,000	Average growth. Continued demand for programmers to help organizations keep up with changing technology will be limited by sophisticated software eliminating the need for these workers to perform some tasks. Prospects should be best for college graduates with knowledge of various programming languages and tools; those with less formal education or work experience should face keen competition.
<b>Computer software engineers</b>	697,000	95 ★	664,000 ★	Much faster than average growth. There will be strong demand for software engineers as businesses and other organizations continue to adopt and integrate new technologies. Very good opportunities are expected for college graduates who have at least a bachelor's degree in computer engineering or computer science and practical experience working with computers.



## Professional and related

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Computer support specialists and systems administrators</b>	734,000	92 ★	677,000 ★	Much faster than average growth. As computers and software become more complex, support specialists will be needed to provide technical assistance to users. Job prospects should be best for college graduates who keep current with the latest skills and technologies.
<b>Mathematicians</b>	3,600	-2	-100	Declining employment. Despite the demand for workers with a strong mathematical background, many of these workers have occupational titles other than mathematician, such as engineer or computer programmer.
<b>Operations research analysts</b>	47,000	8	3,800	Slower than average growth. Most workers in operations research have other job titles that usually are related to computers. However, there will be some opportunities in consulting as businesses strive to become more competitive.
<b>Statisticians</b>	19,000	2	500	Little or no change in employment. Like mathematicians, many who have these highly demanded skills hold jobs with different occupational titles. Opportunities in the Federal Government will be good because of the need to replace the large number of workers expected to retire.
<b>Systems analysts, computer scientists, and database administrators</b>	887,000	62 ★	554,000 ★	Much faster than average growth. Growth will be driven by rapid increases in the computer and data processing services industry. Employment prospects should be favorable, especially for candidates who have either a degree in computer science or computer engineering or an MBA with a concentration in information systems.

### Education, training, library, and museum

<b>Archivists, curators, and museum technicians</b>	21,000	12	2,600	Average growth. Employment gains from organizations' and the public's interest in historical information are subject to funding cuts, limiting opportunities. Competition is expected to be keen. Job applicants who have extensive computer skills should have the best opportunities.
<b>Instructional coordinators</b>	81,000	25	20,000	Faster than average growth. Employment growth stems from greater efforts to improve the quality of education by training teachers and developing new curricula.
<b>Librarians</b>	149,000	7	10,000	Slower than average growth. Employment growth will be limited by computerized systems that simplify cataloging, a task increasingly handled by library technicians. Numerous opportunities will arise from the need to replace librarians who are expected to retire.

## Professional and related



Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Library technicians</b>	109,000	19	21,000	Average growth. The increasing use of library automation is expected to spur growth. Opportunities in special libraries should be good.
<b>Teacher assistants</b>	1,262,000	24	301,000 ★	Faster than average growth. A growing number of special needs students will require assistance.
<b>Teachers—adult literacy and remedial and self-enrichment education</b>	252,000	19	47,000	Average growth. A growing immigrant population will seek instruction in English and other subjects. Lean public budgets for these programs, however, will moderate job growth. Opportunities are expected to be very good.
<b>Teachers—postsecondary</b>	1,344,000	23	315,000 ★	Faster than average growth. Many jobs will be generated by rising student enrollments of 18- to 24-year-olds and the growing need for postsecondary training for many occupations. Additional openings will be created by the need to replace the large number of workers expected to retire, but competition is expected to continue for tenure-track positions.
<b>Teachers—preschool, kindergarten, elementary, middle, and secondary</b>	3,831,000	15	571,000 ★	Average growth. Despite slowly growing enrollments, a greater emphasis on improving education will result in initiatives such as all-day kindergarten, mandatory preschool, and reductions in class size. Excellent opportunities will be created by the need to replace the large number of expected retirements.
<b>Teachers—special education</b>	453,000	31	140,000	Faster than average growth. More students are expected to be diagnosed with learning disabilities at earlier ages. Job prospects should be excellent.
<b>Legal</b>				
<b>Court reporters</b>	18,000	16	3,000	Average growth. Demand will be spurred by the continuing need for court records and increasing demand for captioning television programs and Internet events.
<b>Judges, magistrates, and other judicial workers</b>	43,000	4	1,600	Slower than average growth. Most job openings will arise as judges retire. The demand for arbitrators, mediators, and conciliators is expected to be strong because of the growing popularity of cost-effective arbitration and other alternatives to litigation.
<b>Lawyers</b>	681,000	18	123,000	Average growth. Continuing demand will result primarily from growth in the population and business activity. Job competition is expected to be keen.



## Professional and related

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		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Paralegals and legal assistants</b>	188,000	33	62,000	Faster than average growth. Employment growth stems from the practice of hiring paralegals in an effort to lower costs and increase the availability and efficiency of legal services. Keen job competition is expected.
<b>Life scientists</b>				
<b>Agricultural and food scientists</b>	17,000	9	1,500	Slower than average growth. A growing population will require more food, and these workers will be needed to support agricultural production and minimize damage to the environment. Opportunities will be best for those who have at least a master's degree.
<b>Biological and medical scientists</b>	138,000	21	30,000	Faster than average growth. The increasing use of pharmaceuticals and the growing importance of biotechnological research is expected to create demand.
<b>Conservation scientists and foresters</b>	29,000	8	2,200	Slower than average growth. Growth will stem from emphasis on environmental protection and responsible land management. Job prospects should be best in Federal, State, and local governments, where nearly three-fourths of these workers are employed.
<b>Physical scientists</b>				
<b>Atmospheric scientists</b>	6,900	17	1,200	Average growth. Most growth will be in private weather consulting firms and in research and testing services firms. Competition is likely for the small number of openings if the number of qualified applicants remains near its current level.
<b>Chemists and materials scientists</b>	92,000	19	18,000	Average growth. Most growth will be in drug manufacturing and in research, development, and testing services firms. Opportunities should be good for persons with a master's or doctoral degree.
<b>Environmental scientists and geoscientists</b>	97,000	21	21,000	Faster than average growth. Compliance with environmental laws and regulations, especially those regarding groundwater contamination, will require more environmental scientists. Growth for hydrologists will be driven by issues related to water conservation, coastal environments, and hazardous pollutants.
<b>Physicists and astronomers</b>	10,000	11	1,100	Average growth. Opportunities should be best for research and development at federally funded centers and in information technology, semiconductor technology, and other applied sciences. Competition should be keen for the few available openings.

## Professional and related



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		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Science technicians</b>				
	198,000	17	34,000	Average growth. An increasing number of jobs will be in biotechnology. Biological and environmental science technicians will have the best opportunities.
<b>Social scientists and related</b>				
<b>Economists and market and survey researchers</b>				
	134,000	25	34,000	Faster than average growth. Reflecting the need for market research in an increasingly competitive economy, job growth for economists is expected to be average and growth for market research analysts and survey researchers faster than average.
<b>Psychologists</b>				
	182,000	18	33,000	Average growth. Employment will grow fastest in outpatient mental health and substance abuse treatment clinics, schools, public and private social service agencies, and management consulting services.
<b>Urban and regional planners</b>				
	30,000	16	4,900	Average growth. These workers will be needed to plan for housing, land use, transportation, and other needs for an expanding population. However, budget constraints will limit growth. Most new jobs will arise in rapidly growing urban and suburban communities.
<b>Social scientists, other</b>				
	15,000	17	2,600	Average growth. Employment growth is expected to be best in social service agencies, research and testing services, and management consulting firms.
<b>Health diagnosing and treating practitioners</b>				
<b>Chiropractors</b>				
	50,000	23	12,000	Faster than average growth. As more people pursue noninvasive treatment, the demand for alternative healthcare services, including chiropractic, will increase. Job prospects are expected to be good.
<b>Dentists</b>				
	152,000	6	8,800	Slower than average growth. Dental offices will employ hygienists and assistants, rather than dentists, to meet increasing demand for routine dental care. Most job openings will result from the need to replace the large number of projected retirees. Prospects are expected to be good if the number of dental school graduates remains steady.
<b>Dietitians and nutritionists</b>				
	49,000	15	7,400	Average growth. Employment growth will result from increasing emphasis on disease prevention through improved dietary habits.
<b>Occupational therapists</b>				
	78,000	34	27,000	Faster than average growth. The Nation's active elderly population, coupled with baby boomers advancing from middle age, will spur demand for therapy.



## Professional and related

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		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Optometrists</b>	31,000	19	5,900	Average growth. Demand for vision care should grow steadily because of growing middle-aged and elderly populations. Replacement needs are low because optometrists usually remain in the profession until they retire.
<b>Pharmacists</b>	217,000	24	53,000	Faster than average growth. Continued employment increases will stem from an aging population and demand for medications to treat more ailments. Very good opportunities are expected for licensed pharmacists.
<b>Physical therapists</b>	132,000	33	44,000	Faster than average growth. An aging and active population, coupled with more recovery from previously debilitating diseases and conditions, will continue to generate strong demand for therapy services.
<b>Physician assistants</b>	58,000	53 ★	31,000	Much faster than average growth. A growing health services industry and cost containment efforts by physician's offices and hospitals should generate strong demand and favorable job prospects.
<b>Physicians and surgeons</b>	598,000	18	107,000	Average growth. Demand for services of physicians and surgeons will continue as the population ages and as technology allows for treatment of previously untreatable conditions.
<b>Podiatrists</b>	18,000	14	2,500	Average growth. Demand for podiatric services should be steady as the incidence of foot-related injuries increases with an aging, active population.
<b>Recreational therapists</b>	29,000	9	2,500	Slower than average growth. Employment will decline slightly in hospitals and nursing homes, the two largest sectors employing recreational therapists, as services shift to outpatient settings and employers try to contain costs.
<b>Registered nurses</b>	2,194,000	26	561,000 ★	Faster than average growth. Employment growth will be driven by technology that allows treatment of a greater number of medical problems; an increasing emphasis on preventive care; and an aging population. Opportunities are expected to be very good.
<b>Respiratory therapists</b>	110,000	35	38,000	Faster than average growth. Increasing incidence of cardiopulmonary and respiratory ailments will stem from growing middle-aged and elderly populations. Job opportunities should be good, especially for respiratory therapists who have cardiopulmonary care skills and experience working with infants.

## Professional and related



Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Speech-language pathologists and audiologists</b>	101,000	40 ★	40,000	Much faster than average growth. Growth will result from the increased demand for health services as the population ages and as medical advances allow more people to survive strokes and other ailments. Additionally, rising school enrollments and an increase in services for special education students will continue to create jobs.
<b>Veterinarians</b>	59,000	32	19,000	Faster than average growth. Demand should grow because of owners' increasing willingness to spend money on their pets, especially for advanced care. Nontraditional veterinary services, such as preventative dental care, should contribute to employment growth.
<b>Health technologists and technicians</b>				
<b>Cardiovascular technologists and technicians</b>	39,000	35	14,000	Faster than average growth. Increases in the middle-aged and elderly populations will boost demand for cardiovascular procedures. However, employment of EKG technicians is expected to decline as other healthcare workers perform basic EKG's.
<b>Clinical laboratory technologists and technicians</b>	295,000	18	53,000	Average growth. The volume of laboratory tests will increase with population growth and development of new tests. Employment growth will be offset by increasing automation and use of nonlaboratory personnel to perform basic tests.
<b>Dental hygienists</b>	147,000	37 ★	54,000	Much faster than average growth. Growth will be spurred by increasing demand for dental care and by use of hygienists to perform services previously performed by dentists. Job prospects should be very good, especially for those seeking part-time employment.
<b>Diagnostic medical sonographers</b>	33,000	26	8,600	Faster than average growth. Demand will be driven by growth in health services, low health risks associated with ultrasound, and technological advances.
<b>Emergency medical technicians and paramedics</b>	172,000	31	54,000	Faster than average growth. The growing and urbanized population will demand more emergency services, increasing the demand for professional emergency medical technicians and paramedics.
<b>Licensed practical and licensed vocational nurses</b>	700,000	20	142,000	Average growth. Employment growth will result from the long-term care needs of a rapidly increasing elderly population and from the growth of health care.



## Professional and related

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Medical records and health information technicians</b>	136,000	49 ★	66,000	Much faster than average growth. Increases will result from rapid growth in the number of medical tests, treatments, and procedures scrutinized by third-party payers, regulators, courts, and consumers. Opportunities are expected to be very good.
<b>Nuclear medicine technologists</b>	18,000	22	4,100	Faster than average growth. Growth will be driven by increases in the number of middle-aged and older persons, the primary users of nuclear medicine tests. However, job openings will be limited because of the occupation's small size.
<b>Occupational health and safety specialists and technicians</b>	35,000	15	5,200	Average growth. The rate of employment increase balances continuing public demand for a safe work environment against the desire for smaller government and fewer regulations. The number of job openings will be relatively few because the occupation is small.
<b>Opticians, dispensing</b>	68,000	19	13,000	Average growth. Sustained demand for eyeglasses and contact lenses will create jobs. However, job opportunities fluctuate with the business cycle.
<b>Pharmacy technicians</b>	190,000	36 ★	69,000	Much faster than average growth. More medications, increased medical needs of an aging population, and additional tasks given to these workers will create many good job opportunities, especially for those with formal training and certification.
<b>Radiologic technologists and technicians</b>	167,000	23	39,000	Faster than average growth. The growing and aging population will demand more diagnostic testing. Opportunities will be favorable, especially for those trained in multiple disciplines.
<b>Surgical technologists</b>	71,000	35	25,000	Faster than average growth. Demand for these workers will rise as the population ages and as new technologies allow for more and varied surgeries. Hospitals will remain the primary employer, but physician offices and clinics, including ambulatory surgical centers, will provide the most new jobs.



## Service

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Building and grounds cleaning and maintenance</b>				
<b>Building cleaning workers</b>	4,200,000	10	431,000 ★	Average growth. Additional workers will be needed to clean new offices and other buildings. But most of the openings expected will result from the need to replace workers who leave this very large occupation permanently. High turnover should contribute to these replacement needs.
<b>Grounds maintenance workers</b>	1,132,000	27	304,000 ★	Faster than average growth. The upkeep and maintenance of landscaping and grounds will create demand for these workers. Job opportunities should be plentiful due to high turnover.
<b>Pest control workers</b>	58,000	22	13,000	Faster than average growth. Increased public concern about pest problems will drive employment growth. Job prospects should be favorable for qualified applicants because many people find this work unattractive.
<b>Food preparation and serving related</b>				
<b>Chefs, cooks, and food preparation workers</b>	2,847,000	12	345,000 ★	Average growth. Employment growth stems from increasing population and incomes, resulting in more people dining out. Job openings for these workers are expected to be plentiful because of the need to replace workers who leave this large occupation permanently.
<b>Food and beverage serving and related workers</b>	6,500,000	18	1,156,000 ★	Average growth. Increasing population and incomes, resulting in more people dining out, will drive employment growth. Job openings are expected to be abundant because of high turnover in this large occupation. Keen competition is expected in popular restaurants and fine dining establishments.
<b>Healthcare support</b>				
<b>Dental assistants</b>	247,000	37 ★	92,000	Much faster than average growth. Rising demand for dental care should result in good job prospects, as more people keep their natural teeth and as dentists increasingly rely on assistants to perform routine tasks.
<b>Medical assistants</b>	329,000	57 ★	187,000	Much faster than average growth. A growing and aging population and technological advances in medicine make this one of the fastest growing occupations.



## Service

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Medical transcriptionists</b>	102,000	30	30,000	Faster than average growth. Driving growth will be a growing and aging population, which receives more medical tests, treatments, and procedures than other populations. Demand also will be sustained by the continued need for documentation that can be shared electronically among providers, third-party payers, regulators, and consumers.
<b>Nursing, psychiatric, and home health aides</b>	2,053,000	30	623,000 ★	Faster than average growth. Employment growth is tied, in part, to increased need for long-term care. Growth will be much faster than average for home health aides, faster than average for nursing aides, and average for psychiatric aides. Excellent job opportunities are expected.
<b>Occupational therapist assistants and aides</b>	25,000	42 ★	10,000	Much faster than average growth. An aging and more active population, coupled with more treatments for previously debilitating diseases and conditions, will continue to generate strong demand for therapy services.
<b>Pharmacy aides</b>	57,000	19	11,000	Average growth. Many new positions, mostly in retail pharmacies, will arise to help pharmacists and pharmacy technicians dispense more medications. Good opportunities are expected, especially for those with related work experience.
<b>Physical therapist assistants and aides</b>	80,000	45 ★	36,000	Much faster than average growth. The Nation's active elderly population, coupled with cost-conscious management practices, will spur demand for these workers.
<b>Personal care and service</b>				
<b>Animal care and service workers</b>	145,000	21	31,000	Faster than average growth. Job prospects should be good because of increased spending for specialty animal services for pets. Many opportunities will stem from high turnover. Job prospects are expected to be very good.
<b>Barbers, cosmetologists, and other personal appearance workers</b>	790,000	11	90,000	Average growth. Population growth and expanding services are expected to create good job prospects among hairdressers and among manicurists and pedicurists. However, employment of barbers is projected to decline as fewer people opt for barbering licenses.
<b>Childcare workers</b>	1,193,000	11	127,000	Average growth. Increasing enrollments in daycare and before- and after-school programs will spur employment growth. High turnover should create good job opportunities.

## Service



Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Flight attendants</b>	124,000	18	23,000	Average growth. Rising population and income will drive demand for airline travel and the need for these workers. Most job openings should result from the need to replace flight attendants who retire or leave the occupation permanently for other reasons. Favorable opportunities are expected. Those who have attended college for at least 2 years and have experience dealing with the public should have the best prospects.
<b>Gaming services occupations</b>	167,000	26	44,000	Faster than average growth. Rising incomes and demand for more gaming tables and dealers at gaming establishments will result in job growth. Prospects are best for those with a degree or certification in gaming or a hospitality-related field, previous training or work experience in casino gaming, and strong customer service skills.
<b>Personal and home care aides</b>	414,000	62 ★	258,000 ★	Much faster than average growth. Growth will result from an increased number of older people, many of whom need assistance; technology that allows home care; and efforts to shorten hospitalizations. A large number of job openings is expected because of substantial employment growth and high turnover.
<b>Recreation and fitness workers</b>	427,000	28	118,000	Faster than average growth. Increased consumer spending on leisure and fitness activities will drive employment growth. Job growth is expected to be faster for fitness workers than for recreation workers. Competition will be keen for career positions in recreation.
<b>Protective service</b>				
<b>Correctional officers</b>	457,000	32	145,000	Faster than average growth. Continued demand will be spurred by the adoption of mandatory sentencing guidelines that call for longer sentences and reduced parole for inmates. Job opportunities should be excellent.
<b>Firefighting occupations</b>	332,000	9	29,000	Slower than average growth. Fire departments must compete with other public services for funding, and advancements in construction science have reduced the number and severity of fire emergencies. Competition for firefighting positions will be keen because of the occupation's slow growth and low turnover.
<b>Police and detectives</b>	834,000	21	174,000	Faster than average growth. A more security-conscious, urbanized society will contribute to the increasing demand for police services.



## Sales and related

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Private detectives and investigators</b>	39,000	24	9,200	Faster than average growth. Increased demand for these workers will result from concern about crime, increased litigation, and the need to protect property and confidential information. Competition for openings will be keen because the occupation is small and turnover is low.
<b>Security guards and gaming surveillance officers</b>	1,117,000	35	393,000 ★	Faster than average growth. Demand for guards will grow as private security firms increasingly perform duties formerly handled by government police officers and marshals. Casinos will continue to hire more surveillance officers as more States legalize gaming and as the number of casinos increases in States where gaming is already legal. Favorable opportunities are expected.



## Sales and related

<b>Cashiers</b>	3,363,000	15	488,000 ★	Average growth. Employment growth will be due to increased demand for goods and services. High turnover will provide many opportunities.
<b>Counter and rental clerks</b>	423,000	19	82,000	Average growth. Entry-level and part-time jobs will arise as businesses strive to improve customer service and as some industries employing this occupation grow rapidly.
<b>Demonstrators, product promoters, and models</b>	121,000	25	30,000	Faster than average growth. Demonstrators and product promoters should have many opportunities because of larger trade shows and more numerous in-store promotions. Models face keen competition.
<b>Insurance sales agents</b>	378,000	3	13,000	Slower than average growth. Many insurance companies will sell policies through direct mail, telephone solicitation, and the Internet instead of through agents. Favorable prospects are expected for qualified workers.
<b>Real estate brokers and sales agents</b>	432,000	9	41,000	Slower than average growth. Increased use of Internet real estate Web sites will limit growth, especially of part-time workers.
<b>Retail salespersons</b>	4,109,000	12	510,000 ★	Average growth. Job growth reflects rising retail sales spurred by population increases. High turnover will provide many entry-level opportunities.

## Office and administrative support



Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Sales engineers</b>	85,000	18	15,000	Average growth. Employment growth will be due to the increased variety and number of technical goods to be sold. Job prospects will be best for those with appropriate technical expertise and the personal traits necessary for successful sales work.
<b>Sales representatives, wholesale and manufacturing</b>	1,821,000	6	111,000	Slower than average growth. The increasing use of electronic purchasing will limit employment growth. However, the occupation's large size will result in many job openings because of the need to replace workers who leave the occupation permanently.
<b>Sales worker supervisors</b>	2,504,000	8	193,000	Slower than average growth. More workers per supervisor, competition from large stores, and few opportunities for self-employment will limit growth.
<b>Securities, commodities, and financial services sales agents</b>	367,000	22	82,000	Faster than average growth. Heightened public interest in investing, especially in retirement accounts, will generate jobs. Earnings can be high in these highly competitive jobs, but many leave the occupation because they cannot develop a sufficient clientele.
<b>Travel agents</b>	135,000	3	4,300	Slower than average growth. Demand will be limited by technology that allows travelers to make their own arrangements.



## Office and administrative support

<b>Communications equipment operators</b>	339,000	-19	-65,000	Declining employment. Increasing automation of many operator functions should cause declining employment.
<b>Computer operators</b>	194,000	-17	-33,000	Declining employment. New software makes computer systems more user-friendly, reducing the need for operators. Opportunities will be best for operators who have formal computer-related education, are familiar with a variety of operating systems, and keep current with the latest technology.
<b>Data entry and information processing workers</b>	806,000	-4	-32,000	Declining employment. Demand will be reduced because of the prevalence of personal computers, which allow workers to do their own data entry, and because of new techniques for capturing data. Job prospects will be best for those with strong technical skills, especially in appropriate software applications.



## Office and administrative support

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Desktop publishers</b>	38,000	67 ★	25,000	Much faster than average growth. Desktop publishing is replacing much of the prepress work done by compositors and typesetters, enabling organizations to reduce costs while speeding production. Those who have certification or a college degree will have the best opportunities.
<b>Financial clerks<sup>3</sup></b>	3,696,000	3	126,000	Slower than average growth. Office automation will slow the growth of some of these occupations. Opportunities should be plentiful.
<b>Bill and account collectors</b>	400,000	25	101,000	Faster than average growth. More collectors will be hired as debt continues to rise and as companies increase their efforts to collect overdue payments.
<b>Billing and posting clerks and machine operators</b>	506,000	9	43,000	Slower than average growth. Significant employment increases in health services will be tempered by loss of jobs to automation in other industries.
<b>Bookkeeping, accounting, and auditing clerks</b>	1,991,000	2	39,000	Little or no change in employment. Employment growth is limited because accounting functions are becoming more automated. Numerous openings are expected because of high turnover. Bookkeepers who perform a variety of accounting functions will have the best job prospects.
<b>Gaming cage workers</b>	22,000	25	5,500	Faster than average growth. Growth will be driven by an increasing number of casinos, especially on Indian reservations.
<b>Payroll and timekeeping clerks</b>	201,000	2	4,600	Little or no change in employment. The increasing automation of timekeeping will be offset by the need to handle increasingly complex benefits packages and tax computations.
<b>Procurement clerks</b>	76,000	-12	-9,300	Declining employment. Employment declines will result from more Internet purchasing and from automation that allows many orders to be placed directly with suppliers.
<b>Tellers</b>	499,000	-12	-59,000	Declining employment. The growing use of automatic teller machines, direct deposit, and online banking will reduce the need for tellers. However, opportunities will be plentiful because of high turnover.
<b>Information and record clerks<sup>3</sup></b>	5,099,000	20	1,000,000 ★	Average growth. Numerous job openings should arise in most of these occupations because of employment growth and the need to replace workers who leave the occupations permanently.
<b>Brokerage clerks</b>	70,000	-1	-1,000	Declining employment. Demand will be limited by the emergence of online trading and widespread records automation in the securities and commodities industry.

## Office and administrative support



Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Credit authorizers, checkers, and clerks</b>	86,000	4	3,600	Slower than average growth. Automation will allow fewer workers to process, check, and authorize credit applications.
<b>Customer service representatives</b>	1,946,000	32	631,000 ★	Faster than average growth. Employment should grow rapidly as organizations strive to improve customer service. Numerous job openings also will result from the need to replace workers who retire or leave the occupation permanently for other reasons.
<b>File clerks</b>	288,000	9	26,000	Slower than average growth. Employment will be slowed by automation and consolidation of clerical jobs. But temporary or part-time opportunities should be plentiful, especially during peak business periods. Jobseekers who have typing and other secretarial skills and are familiar with a range of office machines, including personal computers, should have the best prospects.
<b>Hotel, motel, and resort desk clerks</b>	177,000	33	59,000	Faster than average growth. Demand for workers will increase as more hotels, motels, and other lodging establishments are built and occupancy rates rise. Opportunities for part-time work should continue to be plentiful for staffing front desks open around the clock.
<b>Human resources assistants, except payroll and timekeeping</b>	177,000	19	34,000	Average growth. Growth resulting from the need for human resources assistants in hiring new workers will be offset by job losses resulting from automation of many job duties.
<b>Interviewers</b>	410,000	1	2,300	Little or no change in employment. Employment of these workers by governments is projected to decline, but employment elsewhere is expected to increase faster than average, reflecting rapid growth in health services industries. Prospects will be best for applicants who have a broad range of job skills and for those seeking part-time or temporary jobs.
<b>Library assistants, clerical</b>	98,000	20	19,000	Average growth. Efforts to contain costs in local governments and academic institutions will result in a preference for hiring library support staff instead of librarians. Good job prospects are expected.
<b>Order clerks</b>	348,000	-20	-71,000	Declining employment. Demand for workers will decrease because of growth in online retailing, business-to-business electronic commerce, and the use of automated systems that simplify order placement.



## Office and administrative support

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Receptionists and information clerks</b>	1,078,000	24	256,000 ★	Faster than average growth. Job growth will be driven by rapid increases in services industries, where most receptionists are employed. Opportunities should be best for experienced workers who have a range of clerical and technical skills.
<b>Reservation and transportation ticket agents and travel clerks</b>	191,000	15	28,000	Average growth. Employment growth from increased travel will be offset by technology that allows travelers to make their own arrangements. Keen competition is expected for reservation and transportation ticket agent jobs because of their minimal training requirements and because people often enter the airline or travel industry through these types of positions.
<b>Material recording, scheduling, dispatching, and distributing occupations, except postal workers<sup>3</sup></b>	3,550,000	10	346,000 ★	Average growth. Growth varies by detailed occupation. Numerous openings will result from the need to replace workers who leave these occupations permanently.
<b>Cargo and freight agents</b>	60,000	8	5,000	Slower than average growth. Openings will result from increased Internet sales, but use of bar codes and other technological advances will limit job growth.
<b>Couriers and messengers</b>	141,000	-4	-5,500	Declining employment. Growth will continue to be adversely affected by electronic information-handling technology, but demand for these workers will continue for transporting materials that cannot be sent electronically.
<b>Dispatchers</b>	254,000	20	50,000	Average growth. Increased demand for emergency services will spur growth for public safety dispatchers. Population growth is expected to increase growth for other dispatchers.
<b>Meter readers, utilities</b>	49,000	-26	-13,000	Declining employment. Automated meter reading technology will reduce demand. Some openings will result from the need to replace workers who are leaving the occupation permanently.
<b>Production, planning, and expediting clerks</b>	332,000	18	60,000	Average growth. Increasing pressure on companies to streamline goods production and delivery will spur job growth.
<b>Shipping, receiving, and traffic clerks</b>	890,000	9	83,000	Slower than average growth. Although automation will negatively affect employment, openings will arise for jobs that cannot be automated.

## Farming, fishing, and forestry



Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Stock clerks and order fillers</b>	1,679,000	8	142,000	Slower than average growth. Automation will limit growth in these occupations in manufacturing and wholesale trade industries. Some job openings will result from catalog, mail, telephone, and Internet purchases.
<b>Weighers, measurers, checkers, and samplers, recordkeeping</b>	83,000	18	15,000	Average growth. Demand for flawless materials and accurate information will increase demand for workers.
<b>Office and administrative support worker supervisors and managers</b>	1,392,000	9	130,000	Slower than average growth. Employment is tied to the number of administrative support workers, which is expected to grow slowly due to increasing office automation. Competition for these jobs, like that of other supervisory positions, is expected to be keen.
<b>Office clerks, general</b>	2,705,000	16	430,000 ★	Average growth. Opportunities will stem from employment growth, the occupation's large size, and high turnover.
<b>Postal Service workers</b>	688,000	-1	-4,500	Declining employment. Declining volume of first-class mail and increased use of automated mail processing systems are expected to dampen employment.
<b>Secretaries and administrative assistants</b>	3,902,000	7	265,000 ★	Slower than average growth. Average growth is expected for medical and legal secretaries and executive secretaries and administrative assistants. Employment of other secretaries is projected to decline because of increasing office automation and organizational restructuring.



## Farming, fishing, and forestry

<b>Agricultural workers</b>	987,000	4	37,000	Slower than average growth. Continued consolidation of farms and advances in technology will dampen growth; workers in landscape and horticultural services should increase fastest. Opportunities should be abundant because of high turnover.
<b>Fishers and fishing vessel operators</b>	53,000	-12	-6,400	Declining employment. Employment will decline because many fishing operations are at or beyond sustainable yield. Some workers leave the occupation because of the strenuous work and lack of a steady, year-round income.
<b>Forest, conservation, and logging workers</b>	90,000	-2	-1,600	Declining employment. Employment of logging workers will decline because of increased environmental regulation and international competition. Employment of forest and conservation workers should grow slightly because of emphasis on environmental protection.



## Construction trades and related



## Construction trades and related

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Boilermakers</b>	27,000	2	600	Little or no change in employment. Growth will be limited by the trend toward repairing and retrofitting, rather than replacing, existing boilers; the use of small boilers, which require less on-site assembly; and automation of production technologies.
<b>Brickmasons, blockmasons, and stonemasons</b>	158,000	13	21,000	Average growth. Employment will increase as population and business growth create a need for new houses, schools, and other structures. Excellent opportunities are expected, largely arising from the need to replace workers who leave the occupation permanently.
<b>Carpenters</b>	1,204,000	8	98,000	Slower than average growth. The use of pre-fabricated components and more efficient construction methods will increase productivity, limiting employment growth. Excellent opportunities are expected, however, because of the need to replace workers who leave this large occupation permanently.
<b>Carpet, floor, and tile installers and finishers</b>	167,000	13	22,000	Average growth. Employment growth stems primarily from the continued need to renovate and refurbish existing structures.
<b>Cement masons, concrete finishers, segmental pavers, and terrazzo workers</b>	166,000	3	5,000	Slower than average growth. Although productivity improvements from new technology and equipment will limit employment increases, opportunities for trained workers are expected to be excellent.
<b>Construction and building inspectors</b>	75,000	15	11,000	Average growth. Growing concern for public safety and improvements in quality should stimulate demand. Opportunities will be best for experienced supervisors and craftworkers who have some college education, engineering or architectural training, or certification as inspectors or plan examiners.
<b>Construction equipment operators</b>	416,000	8	34,000	Slower than average growth. Equipment improvements are expected to raise worker productivity and moderate demand, but job opportunities are expected to be good—due, in part, to a shortage of training programs.

## Construction trades and related



Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Construction laborers</b>	791,000	17	135,000	Average growth. Growth in employment will be spurred by emphasis on environmental remediation and rebuilding the Nation's infrastructure. Job opportunities are expected to be good because of the need to replace workers who leave the occupation permanently.
<b>Drywall installers, ceiling tile installers, and tapers</b>	188,000	9	17,000	Slower than average growth. Employment growth will stem from increases in new construction and remodeling. Opportunities are expected to be excellent because of turnover and a shortage of training programs.
<b>Electricians</b>	698,000	17	120,000	Average growth. As the population and economy grow, more electricians will be needed to install and maintain electrical devices and wiring in homes, offices, and other structures. Job opportunities are expected to be excellent, largely arising from the need to replace electricians who leave the occupation permanently.
<b>Elevator installers and repairers</b>	23,000	17	4,000	Average growth. Job growth is tied to increasing construction of nonresidential buildings that require elevators and escalators. Job opportunities are expected to be limited because of the occupation's small size.
<b>Glaziers</b>	49,000	15	7,200	Average growth. Demand will result from growth in residential and nonresidential construction, the continuing need to modernize and repair existing structures, and the popularity of glass in bathroom and kitchen design. Job opportunities are expected to be excellent, largely arising from the need to replace workers who leave the occupation permanently.
<b>Hazardous materials removal workers</b>	37,000	33	12,000	Faster than average growth. Regulations requiring safer and cleaner buildings, homes, and public spaces will spur employment. Job opportunities are expected to be excellent, in part because of turnover.
<b>Insulation workers</b>	53,000	14	7,200	Average growth. New jobs will arise from growth in residential and nonresidential construction, renovation, and efforts to improve insulation in existing structures. Because the strenuous work and minimal training requirements for entry results in high turnover, job opportunities are excellent.
<b>Painters and paperhangers</b>	518,000	19	99,000	Average growth. New construction and maintenance of existing buildings are expected to continue. Job prospects should be good because of the need to replace workers who leave these occupations permanently.



## Installation, maintenance, and repair

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Pipelayers, plumbers, pipefitters, and steamfitters</b>	568,000	10	59,000	Average growth. Demand will stem from new construction and renovation, repair, and maintenance of existing buildings. Job opportunities should be excellent because of a shortage in the number of people seeking training.
<b>Plasterers and stucco masons</b>	54,000	12	6,400	Average growth. Employment growth will result from a growing appreciation for the durability and attractiveness of troweled finishes. Job opportunities are expected to be good, especially in the South and Southwest.
<b>Roofers</b>	158,000	19	31,000	Average growth. Roof repair and new construction are expected to contribute to employment increases. Jobs should be plentiful because the strenuous work and minimal training requirements result in high turnover.
<b>Sheet metal workers</b>	224,000	23	51,000	Faster than average growth. Employment growth will stem from demand for sheet metal fixtures for energy efficiency and decorative purposes. Job opportunities are expected to be excellent for workers in the construction industry and in construction-related sheet metal fabrication.
<b>Structural and reinforcing iron and metal workers</b>	111,000	18	20,000	Average growth. Growth is tied to new industrial and commercial construction. Job opportunities vary by location and the condition of the economy.



## Installation, maintenance, and repair

### Electrical and electronic equipment mechanics, installers, and repairers

<b>Computer, automated teller, and office machine repairers</b>	172,000	14	24,000	Average growth. Growth will be driven by increasing dependence on and use of computers, automatic teller machines, and office machines in everyday life.
<b>Electrical and electronics installers and repairers</b>	171,000	9	15,000	Slower than average growth. Improvements in equipment reliability and design, which make repairs easier, should limit employment growth.

## Installation, maintenance, and repair



Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Electronic home entertainment equipment installers and repairers</b>	37,000	-18	-6,600	Declining employment. Employment is expected to decline because of improved reliability and decreasing prices of new consumer electronics items.
<b>Radio and telecommunications equipment installers and repairers</b>	196,000	-4	-7,500	Declining employment. Improvements in both telecommunications equipment reliability and transmission capacity will cause employment declines.
<b>Vehicle and mobile equipment mechanics, installers, and repairers</b>				
<b>Aircraft and avionics equipment mechanics and service technicians</b>	173,000	16	28,000	Average growth. Good job prospects will result from fewer workers entering these occupations from the U.S. Armed Forces and the need to replace the large number of workers retiring or leaving the occupations permanently.
<b>Automotive body and related repairers</b>	221,000	10	23,000	Average growth. Employment growth will result from the need to repair and maintain the increasing number of vehicles. Opportunities should be best for persons with formal training in automotive body repair and mechanics.
<b>Automotive service technicians and mechanics</b>	840,000	18	151,000	Average growth. Job opportunities are expected to be very good for persons with formal training, strong diagnostic and problemsolving skills, and knowledge of electronics and mathematics. A large number of openings will arise from replacement needs.
<b>Diesel service technicians and mechanics</b>	285,000	14	40,000	Average growth. Employment growth will result from increased manufacture of buses and trucks powered by durable, economical diesel engines. Good opportunities are expected for those with formal diesel mechanic training and experience with electronic and diagnostic equipment.
<b>Heavy vehicle and mobile equipment service technicians and mechanics</b>	185,000	9	17,000	Slower than average growth. Some growth will occur as construction vehicles become more complex and as construction activity increases. Job opportunities should be best for persons with formal training.
<b>Small engine mechanics</b>	73,000	9	6,200	Slower than average growth. Employment growth will be limited by technological improvements to engines and consumer preference for replacement over repair. Job prospects should be best for persons with formal mechanic training.



## Installation, maintenance, and repair

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Other installation, maintenance, and repair</b>				
<b>Coin, vending, and amusement machine servicers and repairers</b>	37,000	18	6,800	Average growth. Demand for these workers to stock additional machines will be offset by reduced need for servicing technologically advanced machines that require less maintenance. Opportunities should be good for people with electronics knowledge.
<b>Heating, air-conditioning, and refrigeration mechanics and installers</b>	243,000	22	54,000	Faster than average growth. Employment will increase with growth in the population and in business activity; environmental regulations will increase the demand for more efficient heating and air-conditioning systems. Job prospects should be very good, especially for those with formal training.
<b>Home appliance repairers</b>	43,000	6	2,700	Slower than average growth. Limited employment growth resulting from improvements in appliances and consumer preference for replacement over repair may be offset somewhat by the need for repair of higher priced appliances. Prospects should be good for well-trained repairers with electronics knowledge.
<b>Industrial machinery installation, repair, and maintenance workers</b>	1,636,000	5	75,000	Slower than average growth. Need for repairers will be reduced because many new machines are self-diagnosing. Applicants with broad skills in machine repair should have favorable job prospects.
<b>Line installers and repairers</b>	263,000	21	54,000	Faster than average growth. Expanding demand for telecommunications services should drive job growth.
<b>Precision instrument and equipment repairers</b>	63,000	10	6,100	Average growth. Projected growth varies by occupational specialty, but good opportunities are expected for most types of these workers. Increased need for medical equipment will cause job growth in some specialties, and the popularity of inexpensive cameras will slow it in others. Numerous opportunities will result from the need to replace workers who retire.



## Production

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Assemblers and fabricators</b>				
	2,653,000	6	171,000	Slower than average growth. Employment growth will be limited by improving automation and offshore assembly.
<b>Food processing occupations</b>				
	760,000	3	23,000	Slower than average growth. Job growth will be concentrated among lower skilled workers as meat cutting and processing shifts from retail stores to food processing plants.
<b>Metal workers and plastic workers</b>				
<b>Computer control programmers and operators</b>	186,000	19	36,000	Average growth. Employment growth will be driven by increasing use of computer-controlled machining. Opportunities are expected to be excellent because few people are entering training programs.
<b>Machinists</b>	430,000	9	39,000	Slower than average growth. Despite rising productivity that is expected to limit employment growth, opportunities should be excellent because not enough qualified people are attracted to production-related occupations.
<b>Machine setters, operators, and tenders—metal and plastic</b>	1,641,000	5	74,000	Slower than average growth. Rising manufacturing productivity and foreign competition should limit employment growth. Opportunities will arise from the need to replace workers who retire or leave this large occupation permanently.
<b>Tool and die makers</b>	130,000	2	2,800	Little or no change in employment. A lack of new entrants, increasing foreign competition, and rising manufacturing productivity should limit employment growth. Applicants with appropriate skills and background should enjoy excellent opportunities because of the need to replace workers who retire or leave the occupation permanently.
<b>Welding, soldering, and brazing workers</b>	521,000	19	97,000	Average growth. Technological improvements that increase welding productivity will be balanced by the increased range of welding applications. Job prospects should be excellent for skilled candidates.



## Production

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Plant and system operators</b>				
<b>Power plant operators, distributors, and dispatchers</b>	55,000	0	-200	Little or no change in employment. Increased automation, low turnover, and more competition among power providers will result in limited opportunities. Job applicants may face keen competition. Those who have computer training will have the best prospects.
<b>Stationary engineers and boiler operators</b>	57,000	-1	-800	Declining employment. Continuing development will increase the amount of equipment to be operated and maintained, but more efficient equipment will reduce the number of jobs. Applicants may face competition.
<b>Water and liquid waste treatment plant and system operators</b>	88,000	18	16,000	Average growth. Employment will grow as the result of increased demand from an expanding population for these essential treatment services. Job prospects are expected to be good for qualified applicants.
<b>Printing</b>				
<b>Bookbinders and bindery workers</b>	115,000	7	8,500	Slower than average growth. As productivity in bindery operations increases, most job openings will result from the need to replace experienced workers who retire or leave the occupation permanently.
<b>Prepress technicians and workers</b>	162,000	-8	-13,000	Declining employment. Increased use of desktop publishing should eliminate many prepress jobs.
<b>Printing machine operators</b>	222,000	5	12,000	Slower than average growth. Use of more efficient printing processes will curb employment growth of these workers. Applicants are likely to face keen competition from experienced operators and prepress workers who have been displaced by new technology, especially those who have completed retraining programs.
<b>Textile, apparel, and furnishings occupations</b>				
	1,317,000	-2	-32,000	Declining employment. Employment in most apparel and textile occupations will decline because of increased productivity through automation, increasing imports, and offshore assembly.
<b>Woodworkers</b>				
	409,000	9	37,000	Slower than average growth. Employment growth will be limited by technological advances in manufacturing and materials and foreign competition. Job prospects will be best for highly skilled workers and those with knowledge of computerized machine tool operation.



Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Other production occupations</b>				
<b>Dental laboratory technicians</b>	43,000	6	2,700	Slower than average growth. Improved dental health resulting in decreased demand for full dentures will be offset somewhat by rising disposable income leading to increased demand for cosmetic prostheses. Job opportunities should be favorable, in part because of the public's unfamiliarity with the occupation.
<b>Inspectors, testers, sorters, samplers, and weighers</b>	602,000	-2	-11,000	Declining employment. Employment will be adversely affected by automation and the reassignment of inspection duties to other production workers.
<b>Jewelers and precious stone and metal workers</b>	43,000	1	600	Little or no change in employment. Increasing demand for jewelry will provide excellent opportunities for highly skilled jewelers. Automation will eliminate some lower skilled jobs, such as assembler and polisher.
<b>Ophthalmic laboratory technicians</b>	32,000	6	1,800	Slower than average growth. Increased automation will continue to improve worker productivity. Job openings are expected to be limited because the occupation is small.
<b>Painting and coating workers, except construction and maintenance</b>	195,000	14	28,000	Average growth. Employment growth for highly skilled transportation painters and automotive refinishers is projected to be slightly faster than that for lower skilled painting, coating, and spraying machine operators.
<b>Photographic process workers and processing machine operators</b>	76,000	2	1,600	Little or no change in employment. Growing preference for digital photography over traditional formats is expected to limit growth.
<b>Semiconductor processors</b>	52,000	32	17,000	Faster than average growth. Demand will be spurred by use of semiconductors in computers, appliances, machinery, and telecommunications devices. Job prospects should be best for those with postsecondary education in electronics or semiconductor technology.



## Transportation and material moving



## Transportation and material moving

Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Air transportation</b>				
<b>Aircraft pilots and flight engineers</b>	117,000	10	11,000	Average growth. Keen competition is expected because many qualified persons are attracted to the high earnings, prestige, and travel benefits of this occupation. Those with the best prospects are pilots who have logged the most flying hours, which often gives military pilots an advantage.
<b>Air traffic controllers</b>	27,000	7	1,900	Slower than the average growth. The implementation of computerized air traffic control systems will limit job growth. Keen competition is expected, especially because of a Federal policy allowing eligible retired military controllers to apply for positions.
<b>Material moving occupations</b>				
	4,986,000	14	710,000 ★	Average growth. Employment growth from the expanding economy and increased spending on the Nation's infrastructure will be offset by increased automation. Job openings are expected to be numerous because of high turnover in this large occupation.
<b>Motor vehicle operators</b>				
<b>Busdrivers</b>	666,000	13	88,000	Average growth. Growth resulting from increased school enrollments and an overall rise in population will be offset by competition from other kinds of transportation. Opportunities should be good for those who have good driving records and are willing to work a part-time or irregular schedule and for those who are willing to work as school busdrivers.
<b>Taxi drivers and chauffeurs</b>	176,000	24	43,000	Faster than average growth. Growth will arise from an increase in local and suburban travel and from Federal legislation requiring broader services for persons with disabilities. Opportunities are expected to be best in rapidly growing metropolitan areas. Candidates with good driving records who are able to work flexible schedules will have the best prospects.



Occupation	Employment, 2000	Employment change, projected 2000-10		Employment prospects
		Percent <sup>1</sup>	Numeric <sup>2</sup>	
<b>Truckdrivers and driver/sales workers</b>	3,268,000	18	589,000 ★	Average growth. Growth will stem from an increase in freight and packages needing transport; additional openings will result from the need to replace workers who leave the occupation permanently. Growth of driver/sales workers will be slow as sales tasks are transferred to office staff. Opportunities for truckdrivers should be favorable.

## ■ Rail transportation occupations

	115,000	-19	-21,000	Declining employment. Technology will adversely affect employment. Job openings will be limited because of low turnover resulting from the high pay and job security associated with these occupations.
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## ■ Water transportation occupations

	70,000	4	3,100	Slower than average growth. Growth will be dampened by adoption of innovations that allow smaller crews to operate ships and by competition from foreign ships. Keen competition is expected.
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## Job opportunities in the U.S. Armed Forces

	1,500,000 <sup>7</sup>	( <sup>5</sup> )	( <sup>5</sup> )	Opportunities should be good for qualified individuals in all branches of the U.S. Armed Forces. Most enlisted personnel need at least a high school diploma, while officers need a bachelor's or higher degree.
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<sup>1</sup>The percent change is calculated from unrounded figures for current and projected employment.

<sup>2</sup>The numeric change is calculated from unrounded figures for current and projected employment.

<sup>3</sup>Individual estimates do not sum to total due to rounding.

<sup>4</sup>Estimate not available from the Bureau of Labor Statistics.

<sup>5</sup>Projections not available from the Bureau of Labor Statistics.

<sup>6</sup>Estimate from *The Official Catholic Directory*.

<sup>7</sup>Estimate from the U.S. Department of Defense.