

Table IV-3. Factors changing occupational utilization, 2002-12

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
11-1031	Legislators	Small decreases will occur in State and local government, excluding education and hospitals, to account for virtually no growth in the number of elected officials as other parts of government grow.
11-2011	Advertising and promotions managers	A moderate increase will occur in advertising and related services because of increasing global competition for the sale of goods and services and because more companies are expected to outsource their advertising to these agencies.
11-2021	Marketing managers	A moderate increase is expected in computer systems design and related services as these establishments promote their services and strive to broaden their client bases in a competitive marketplace. A small increase will result in advertising and related services from increased outsourcing of advertising work by other industries.
11-2022	Sales managers	Small to moderate increases are expected across all industries to manage increased marketing efforts.
11-2031	Public relations managers	A moderate increase is expected in advertising and related services as companies take a proactive approach to avoiding bad public relations, building trust in their products, and raising their visibility.
11-3011	Administrative services managers	A moderate increase is expected in management, scientific, and technical consulting services as firms in other industries increasingly utilize administrative management consulting services.
11-3021	Computer and information systems managers	Small increases are expected across all industries as firms continue to embrace new technologies and employ more computer specialists who must be managed.
11-3061	Purchasing managers	Small decreases are anticipated in most industries as electronic commerce increases productivity and allows for smaller staffs, resulting in a reduced need for managers.
11-9011	Farm, ranch, and other agricultural managers	Small increases are expected across all industries as corporate and absentee ownership increases demand for professional management.
11-9031	Education administrators, preschool and childcare center/program	A small increase is expected in local government educational services due to the expansion of formal preschool programs as fewer private households care for young children.
11-9033	Education administrators, postsecondary	The number of postsecondary school students is projected to grow more rapidly than other student populations, resulting in a small increase in private educational services.
11-9071	Gaming managers	A small increase will occur in traveler accommodation due to greater consumer interest in gambling and because growth in the average establishment size will result in a need for more management workers.
11-9081	Lodging managers	A small decrease is expected in traveler accommodation because extended-stay and economy-class establishments, which will account for an increasing share of lodging establishments, require a lower proportion of lodging managers.
11-9111	Medical and health services managers	The increasing complexity of physician practices and hospitals, a more stringent regulatory environment, and an increased reliance on managers for efficient and effective office operations will result in small increases in offices of physicians and public and private hospitals.
11-9141	Property, real estate, and community association managers	A small decrease in lessors of real estate and small to moderate increases in activities related to real estate and offices of real estate agents and brokers will result as real estate sales practices shift from individual owner-operators toward professional third-party management companies.
13-1022	Wholesale and retail buyers, except farm products	Small decreases will result in most industries as efficiency gains from electronic commerce allow customers to circumvent buyers and connect directly with business Web sites and with purchasing operations that are more centralized.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
13-1051	Cost estimators	Small increases are expected in nonresidential building construction, residential building construction, and utility system construction due to the continuing need to control costs and the increased complexity of estimating construction costs.
13-1061	Emergency management specialists	Small increases are expected in all industries as the demand for emergency-related services continues to rise.
13-1072	Compensation, benefits, and job analysis specialists	Small increases will occur across all industries to help implement legislative and court rulings on benefits and other employment matters.
13-1073	Training and development specialists	Small to moderate increases are expected in most industries as the rising complexity of jobs results in higher training requirements.
13-1111	Management analysts	A moderate increase is expected in management, scientific, and technical consulting services because regulations that restrict accounting firms from providing consulting services will result in more businesses seeking these services from traditional consulting firms. A moderate increase in Federal government will result as more management analysts are used to help streamline operations and reduce costs. A small increase is anticipated in computer systems design and related services as computer firms increase their consulting operations, especially in electronic commerce and technology management. A moderate increase in office administrative services will occur as more firms outsource the management of day-to-day business activities. A very large decrease is expected in accounting, tax preparation, bookkeeping, and payroll services because of new regulations that restrict accounting firms from providing consulting services.
13-1198	All other business operations specialists	Small increases will occur in all industries as companies seek to cut costs and increase efficiency.
13-2011	Accountants and auditors	A small increase is expected in accounting, tax preparation, bookkeeping, and payroll services as accounting firms focus more on their primary services and less on other services, such as consulting, as a result of accounting scandals. Moderate decreases are expected in Federal government and in State government, excluding education and hospitals, as accounting software increases efficiency and as governments outsource accounting services.
13-2051	Financial analysts	A small decrease is expected in securities and commodity contracts intermediation and brokerage as a result of industry consolidation. A moderate increase is expected in depository credit intermediation as a result of industry deregulation.
13-2052	Personal financial advisors	Moderate increases are expected in all industries as a result of growing demand for financial services, such as retirement planning, and because of industry deregulation, which allows insurance agents, stockbrokers, and bankers to offer a wider range of products.
13-2053	Insurance underwriters	A small decrease is anticipated in agencies, brokerages and other insurance activities as workers become more productive due to the implementation of underwriting software and information technology.
15-1021	Computer programmers	Small decreases across all industries are expected as establishments shift emphasis from programming to design, development, and analysis and due to the outsourcing of programming to other countries.
15-1031	Computer software engineers, applications	Small increases are expected across all industries due to increasing demand for computer applications software and specialized utility programs designed and developed to meet users' needs.
15-1032	Computer software engineers, systems software	Small to moderate increases are expected across all industries due to the continuing need to design and develop new operating systems-level software and network distribution software, as well as to the need to maintain current systems and insure information security.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
15-1051	Computer systems analysts	Small increases are expected across all industries due to increasing demand for new applications of technology, such as networking and systems integration.
15-1061	Database administrators	Small to moderate increases will result across all industries as the growing amount of information available requires more database administrators to store and administer data effectively and securely.
15-1071	Network and computer systems administrators	Small increases are expected across all industries as organizations develop and expand network, Internet, and Intranet systems and conduct more business electronically.
15-1081	Network systems and data communications analysts	Moderate increases are expected across all industries due to the continued expansion of the Internet, increasingly complex wired and wireless networks, firms' growing reliance on Web sites, and more emphasis overall on the security and protection of electronic information.
15-2021	Mathematicians	A small decrease is expected in all industries as other workers with mathematical backgrounds, but a wider range of skills—such as engineers, computer scientists, and physicists—perform work traditionally performed by mathematicians.
15-2031	Operations research analysts	A large decrease is expected in computer systems design and related services and data-processing, hosting, and related services as firms hire more computer scientists and systems analysts, who have a broader range of computer skills, rather than operations research analysts.
15-2041	Statisticians	Small decreases will result in all industries as improved statistical packages decrease the need for statisticians and as more statistical work is performed by workers with broader skills, such as engineers, computer scientists, and other scientists.
17-1021	Cartographers and photogrammetrists	A small increase is expected in architectural, engineering, and related services as these firms diversify and expand to include services such as cartography and photogrammetry.
17-2031	Biomedical engineers	Small increases are expected in all industries due to an aging population and increased emphasis on health issues, which will increase the need for sophisticated biomedical equipment.
17-2071	Electrical engineers	Small decreases are anticipated across most industries as engineering services are increasingly purchased from abroad.
17-2072	Electronics engineers, except computer	Small increases are expected in most industries as these workers continue to be at the forefront of developing and integrating new information and communication technologies.
17-2081	Environmental engineers	Moderate increases are expected in all industries due to increased demand for environmental-related engineering projects and as this occupation gains acceptance as a separate engineering discipline.
17-2112	Industrial engineers	Moderate increases are expected in motor vehicle and motor vehicle parts manufacturing due to an increased use of these workers to improve quality and productivity.
17-2141	Mechanical engineers	Small decreases are expected in most industries as engineering services are increasingly purchased from abroad.
17-3011	Architectural and civil drafters	Small decreases are expected across all industries, except architectural, engineering, and related services, as computer-aided design and drafting systems improve worker productivity.
17-3012	Electrical and electronics drafters	Small decreases will occur in all industries as computer-aided design and drafting systems improve worker productivity.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
17-3013	Mechanical drafters	Small decreases are expected across all industries as computer-aided design and drafting systems improve worker productivity.
17-3025	Environmental engineering technicians	Small increases are expected in all industries due to increased demand for environmental-related engineering projects and as this occupation gains acceptance as a separate occupation distinct from other engineering technicians.
17-3031	Surveying and mapping technicians	Small to moderate increases are expected in all industries as the demand increases for geographic information systems-related data-entry services.
19-1021	Biochemists and biophysicists	A moderate increase will occur in scientific research and development services, and a small increase will take place in pharmaceutical and medicine manufacturing, due to increased biotechnology-related research.
19-1022	Microbiologists	A moderate increase is expected in scientific research and development services, and small increases are anticipated in pharmaceutical and medicine manufacturing and Federal government, due to increased biotechnology-related research.
19-1029	Biological scientists, all other	Moderate increases are anticipated in scientific research and development services and in Federal government as the National Institute of Health's (NIH's) budget continues to grow, resulting in increased basic research and Federal grant money for drug development and design and for basic biological research.
19-1041	Epidemiologists	Small increases are expected in all industries due to a heightened awareness of bioterrorism and to infectious diseases increasing the need for epidemiological information.
19-1042	Medical scientists except epidemiologists	Small increases are expected in all industries due to budget increases for NIH that will translate into more basic medical research and development.
19-2031	Chemists	Small increases will result in scientific and research and development services, pharmaceutical and medicine manufacturing, and the Federal government as chemists become more heavily involved in drug research, design, and discovery.
19-2032	Materials scientists	A moderate increase will result in scientific research and development services as the chemical industry increasingly outsources work to firms that perform such services.
19-2041	Environmental scientists and specialists including health	Small increases will result in most industries due to a general heightened awareness regarding the need to monitor and improve the quality of the environment.
19-2042	Geoscientists, except hydrologists and geographers	As geoscientists perform more environmental audits and more site and risk assessments to meet environmental regulations, there will be a small increase in architectural, engineering, and related services.
19-2043	Hydrologists	Small increases are expected in Federal government and in architectural, engineering, and related services as more hydrologists are needed to evaluate issues related to water conservation, deteriorating coastal environments, rising sea levels, pollution control, and waste disposal.
19-4051	Nuclear technicians	A small decrease is expected in electric power generation, transmission, and distribution as the Nation's dependence on nuclear power as a source of energy decreases relative to its reliance on other sources of energy.
19-4091	Environmental science and protection technicians, including health	Due to increased emphasis on environmental issues, including the preservation of ecosystems, there will be a moderate increase across all industries.
19-4092	Forensic science technicians	Advances in forensics will increase the use of forensic science techniques to solve crimes, resulting in small increases in all industries.
19-4093	Forest and conservation technicians	A small decrease will occur in local government, excluding education and hospitals, as funding for forestry programs is expected to decrease in this industry.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
21-1013	Marriage and family therapists	Small decreases are expected in State and local government, excluding education and hospitals, as counseling services are increasingly outsourced.
21-1014	Mental health counselors	Small decreases are expected in State and local government, excluding education and hospitals, as counseling services are increasingly outsourced.
21-1015	Rehabilitation counselors	Small decreases are expected in State and local government, excluding education and hospitals, as counseling services are increasingly outsourced.
21-1022	Medical and public health social workers	There will be a small increase across most private healthcare and social assistance industries as a rapidly growing elderly population increases the demand for social services to coordinate the care of patients discharged from hospitals. Small decreases are expected in State and local government, excluding education and hospitals, due to governments increasingly outsourcing social work functions to private organizations and employing more social and human service assistants rather than social workers.
21-1023	Mental health and substance abuse social workers	Small increases are expected across most private healthcare and social assistance industries due to increasing demand for social services aimed at the mentally ill and at the prevention and treatment of substance abuse. There will be small decreases in State and local government, excluding education and hospitals, due to governments increasingly outsourcing social work functions to private organizations and employing more social and human service assistants rather than social workers.
21-1092	Probation officers and correctional treatment specialists	A small increase is expected in State government, excluding education and hospitals, due to the increasing number of offenders in prison and on parole and probation.
21-1093	Social and human service assistants	Small to moderate increases are expected across all industries, except State and local government, excluding education and hospitals, as a growing and aging population increases demand for social services and as establishments control costs by using more of these workers rather than social workers. Small decreases are expected in State and local governments, excluding education and hospitals, as governments increasingly outsource social work functions to private organizations.
21-2011	Clergy	A small decrease is expected in religious organizations as laypeople perform more duties and as religious organizations provide more social and educational activities.
23-1011	Lawyers	Large increases are expected in State and local government, excluding education and hospitals, as more lawyers are needed to prosecute a growing number of court cases and deal with a growing number of regulatory issues.
23-2011	Paralegals and legal assistants	Small increases are expected across all industries as firms increasingly substitute relatively lower cost paralegals and legal assistants for lawyers and law clerks.
23-2092	Law clerks	Small decreases are anticipated across all industries as firms replace law clerks with paralegals and legal assistants in an effort to contain the costs of delivering legal services.
23-2093	Title examiners, abstractors, and searchers	All industries are expected to experience moderate decreases as the increased use of electronic databases boosts productivity. In addition, many title examiners will be replaced by legal assistants.
25-1000	Postsecondary teachers	Small to moderate increases are expected in religious organizations and in State, local, and private educational services as the number of adult and college-aged students grows more rapidly than other student populations.
25-2011	Preschool teachers, except special education	Small increases are expected in local government educational services and religious organizations due to an expansion of formal preschool programs as fewer private households care for young children.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
25-2012	Kindergarten teachers, except special education	There will be a small increase in local government educational services, a moderate decrease in private educational services, and a small decrease in child daycare services as more States offer all-day kindergarten, causing a shift of employment from private educational services and child daycare centers into public elementary schools.
25-2021	Elementary school teachers, except special education	A moderate decrease is expected in private educational services as the number of elementary school students is projected to grow more slowly than other student populations in this industry.
25-2022	Middle school teachers, except special and vocational education	The number of middle school students is projected to grow more slowly than other student populations, resulting in a small decrease in local government educational services and a moderate decrease in private educational services.
25-2023	Vocational education teachers, middle school	A moderate decrease in private educational services and a small decrease in local government educational services are expected due to reduced funding for vocational education relative to funding for other areas of education.
25-2031	Secondary school teachers, except special and vocational education	A moderate decrease is anticipated in private educational services as the number of secondary school students is projected to grow more slowly than the postsecondary student population in this industry.
25-2032	Vocational education teachers, secondary school	Small to moderate decreases are expected in all industries as more emphasis is placed on academic achievement and accountability instead of vocational education.
25-2040	Special education teachers	A small increase is anticipated in local government educational services as an increasing number of students are classified as disabled.
25-3021	Self-enrichment education teachers	A rising trend toward lifelong learning is expected to spur small to moderate increases in almost all industries as the baby-boom generation enters retirement and has more leisure time to dedicate to self-enrichment.
25-4021	Librarians	Small to moderate decreases are expected in State, local, and private educational services as a result of the automation of library services and as libraries substitute more library technicians.
25-9021	Farm and home management advisors	Fewer farms and a shrinking farm population will result in small decreases in all industries.
25-9031	Instructional coordinators	A small increase is expected in private educational services due to changing curriculums. A small increase is expected in scientific research and development services due to an increased focus on improving education through research, as well as increasing Federal research funds.
27-1014	Multi-media artists and animators	A small increase is expected in newspaper, periodical, book, and directory publishers as firms retain multi-media artists and animators to generate more advertising revenue and improve the visual layout of their publications. A moderate decrease is anticipated in computer systems design and related services due to relatively faster growth in demand for hardware and software designers than for creative artists. A small decrease will occur in advertising and related services, an industry in which more workers are expected to work on a freelance or contract basis rather than as employees.
27-1022	Fashion designers	A moderate increase is expected in apparel, piece goods, and notions merchant wholesalers as wholesalers continue to expand their fashion design labels and enhance store branding by mass marketing clothing lines for distribution to their stores. A moderate increase is also expected in cut and sew apparel manufacturing as design work is retained while manufacturing moves offshore.
27-1024	Graphic designers	Moderate increases are expected in newspaper, periodical, book, and directory publishers, as well as in printing and related support activities, as graphic designers remain the principal creative talent for industry products and provide more graphics and visual images for Internet publications.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
27-1026	Merchandise displayers and window trimmers	A moderate decrease in advertising and related services and small decreases in other support services and management, scientific, and technical consulting services are expected as more of this work is performed by freelance designers who work on a project-by-project basis rather than as in-house staff.
27-1027	Set and exhibit designers	A small decrease is expected in performing arts companies as many set and exhibit designers switch from salaried jobs to contract or freelance positions.
27-1099	All other art and design workers	A small decrease in Federal government is anticipated due to the tendency to contract out functions that are not inherently governmental.
27-2011	Actors	A small decrease will occur in the motion picture and video industries as these industries become more diversified and rely more on contract performers rather than wage and salary employees.
27-2012	Producers and directors	A small decrease is expected in radio and television broadcasting as consolidation and nationalization lead to fewer on-air producers and directors of broadcasts and telecasts.
27-2031	Dancers	A small decrease will occur in performing arts companies, other amusement and recreation industries, and private educational services as dance is expected to become a smaller proportion of these industries.
27-2032	Choreographers	A small decrease is expected in State, local, and private educational services as tight budgets affect subject areas outside core courses.
27-3010	Announcers	Moderate decreases will occur in all industries as the radio industry consolidates, increases syndication, and improves technology.
27-3031	Public relations specialists	Small to moderate increases are expected in all industries as companies take a proactive approach to avoiding bad public relations, building trust in their products, and raising their visibility.
27-3041	Editors	Small decreases are expected in business, professional, labor, political, and similar organizations; radio and television broadcasting; advertising and related services; and State, local, and private educational services as more editorial work is done by managers and others or by freelance contractors.
27-3043	Writers and authors	Small decreases are expected in religious organizations; advertising and related services; and State, local, and private educational services as writing work is increasingly contracted out.
27-4013	Radio operators	Small to moderate decreases will result in all industries due to improvements in technology, especially the replacement of two-way radios with cell phones.
27-4021	Photographers	Small decreases are expected in newspaper, periodical, book, and directory publishers and other professional, scientific, and technical services as digital photography becomes less expensive and more widely available and enables individuals to produce and print their own photographs more easily.
29-1011	Chiropractors	A small decrease is expected in offices of other health practitioners as demand for chiropractic services will grow more slowly than demand for other healthcare services provided by this industry.
29-1020	Dentists	A moderate decrease is expected in offices of dentists as dentists hire more dental assistants and dental hygienists to perform routine tasks.
29-1031	Dietitians and nutritionists	A moderate decrease in nursing care facilities and a small decrease in State government, excluding education and hospitals, are expected as these industries continue to contract out services or substitute lower cost labor.
29-1041	Optometrists	A moderate decrease is expected in offices of other health practitioners because demand for optometric care will not increase as rapidly as demand for other healthcare services provided by the industry.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
29-1051	Pharmacists	Very large increases are expected in grocery, department, and other general merchandise stores because a rising proportion of these stores will have pharmacies. A moderate increase is expected in Federal government because more pharmacists will be needed to test the rising number of drugs and to help design and manage drug benefit plans for seniors. A moderate increase is expected in drugs and druggists' sundries merchant wholesalers because, as demand for cheaper medications rises, pharmacists will increasingly sell drugs at the wholesale level, especially to mail-order pharmacies.
29-1071	Physician assistants	A large increase is expected in public and private hospitals, and a small increase is anticipated in offices of physicians, as these cost-effective workers provide a growing proportion of services previously provided by physicians.
29-1081	Podiatrists	A moderate decrease is expected in offices of other health practitioners, and a small decrease is anticipated in offices of physicians, as the demand for other healthcare services provided by these industries increases more rapidly than demand for podiatric services.
29-1111	Registered nurses	Small increases are expected in nursing care facilities; offices of physicians; Federal government; outpatient care centers; and State, local, and private educational services due to sustained demand for high-quality healthcare, an aging population, increased regulation, and increases in health research.
29-1122	Occupational therapists	A moderate increase in nursing care facilities and small increases in offices of other health practitioners and in public and private hospitals are expected as a more active and independent elderly population demands more services.
29-1123	Physical therapists	Small increases are expected in nursing care facilities and in public and private hospitals as a growing and aging population demands more therapy services.
29-1124	Radiation therapists	Small increases are expected in offices of physicians and public and private hospitals as the result of increasing demand for therapy to meet the needs of an aging population.
29-1125	Recreational therapists	Small to moderate decreases are expected in most industries as cost-containment pressures limit the provision of recreational therapy services.
29-1126	Respiratory therapists	A moderate increase will result in public and private hospitals as the aging population leads to a higher incidence of heart and pulmonary diseases, boosting demand for respiratory therapists.
29-1127	Speech-language pathologists	Small increases are expected in nursing care facilities and in public and private hospitals as the incidence of speech and language disorders related to strokes and other age-related conditions rises with the growing elderly population.
29-2021	Dental hygienists	A small increase is expected in offices of dentists as dentists delegate more tasks to dental hygienists.
29-2031	Cardiovascular technologists and technicians	A moderate increase is expected in public and private hospitals as the demand for cardiovascular procedures increases due to an aging population that is more susceptible to heart disease.
29-2041	Emergency medical technicians and paramedics	A small increase is expected in local government, excluding education and hospitals, because these workers will be increasingly likely to work as paid professionals instead of volunteers.
29-2052	Pharmacy technicians	Large increases are expected in grocery, department, and other general merchandise stores because a rising proportion of these stores will have pharmacies. A small increase in health and personal care stores will result as pharmacy technicians increasingly take on routine tasks, such as counting pills and labeling containers.
29-2054	Respiratory therapy technicians	A moderate increase is expected in public and private hospitals as the aging population incurs a higher incidence of heart and pulmonary diseases, boosting demand for respiratory therapy technicians.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
29-2055	Surgical technologists	Small increases will result in offices of physicians and in public and private hospitals as cost-effective surgical technologists replace other personnel in the operating room.
29-2061	Licensed practical and licensed vocational nurses	Small decreases are expected in public and private hospitals, offices of physicians, and community care facilities as establishments substitute nursing or other health aides to provide nursing care.
29-2071	Medical records and health information technicians	A large increase in offices of physicians and small increases in nursing care facilities and public and private hospitals are expected as these establishments work to meet increasingly complex and demanding requirements for health information and insurance accountability.
29-2081	Opticians, dispensing	A moderate decrease is expected in offices of other health practitioners because demand for optometric care will not increase as rapidly as demand for other healthcare services provided by the industry.
31-1011	Home health aides	Moderate increases are anticipated in community care facilities for the elderly, nursing care facilities, and other residential care facilities as these facilities increasingly utilize home health aides to provide care for residents.
31-2011	Occupational therapist assistants	A moderate increase in offices of other health practitioners and a small increase in nursing care facilities will occur as a more active and independent elderly population demands more therapy services.
31-2012	Occupational therapist aides	Moderate increases will result in nursing care facilities and offices of other health practitioners as a more active and independent elderly population demands more therapy services.
31-2021	Physical therapist assistants	A moderate increase is expected in public and private hospitals, and small increases are anticipated in offices of other health practitioners and nursing care facilities, as a growing and aging population demands more therapy services.
31-2022	Physical therapist aides	A moderate increase in offices of other health practitioners, and small increases are anticipated in nursing care facilities and public and private hospitals, as a growing and aging population demands more therapy services.
31-9091	Dental assistants	A small increase in offices of dentists is expected as dentists continue to delegate routine tasks to dental assistants.
31-9092	Medical assistants	A moderate increase in offices of physicians, a large increase in public and private hospitals, and a small increase in offices of other health practitioners are expected as these flexible and relatively low cost workers are increasingly utilized.
31-9094	Medical transcriptionists	A small decrease is expected in public and private hospitals as more hospitals invest in speech-recognition and other technologies that allow for faster dissemination of medical reports and charts. These technologies will increase productivity and reduce the need for transcriptionists.
31-9096	Veterinary assistants and laboratory animal caretakers	A small decrease will result in other professional, scientific, and technical services as these workers are replaced by more highly skilled veterinary technicians and technologists.
33-1011	First-line supervisors/managers of correctional officers	A small increase is expected in Federal government as prisoner populations continue to rise. A small increase also is expected in State government, excluding education and hospitals, because State penal facilities tend to harbor criminals serving long sentences with little likelihood of parole.
33-1012	First-line supervisors/managers of police and detectives	Growth in the number of law-enforcement officers will result in moderate increases for Federal government and State government, excluding education and hospitals.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
33-1021	First-line supervisors/managers of firefighting and prevention workers	A small increase is expected in local government, excluding education and hospitals, as local governments assume an increasing amount of firefighting duties and as the number of paid professional firefighters increases.
33-2011	Firefighters	Small increases will result in State and local government, excluding education and hospitals, as more firefighting duties are delegated to State and local governments and as more firefighters become paid professionals.
33-3012	Correctional officers and jailers	A moderate increase is expected in State government, excluding education and hospitals, because State penal facilities tend to harbor criminals serving long sentences with little likelihood of parole. A moderate increase also is expected in Federal government as prisoner populations increase because of mandatory sentences with less likelihood of parole. A moderate increase is expected in facilities support services as these firms benefit from increased government outsourcing of correctional services.
33-3021	Detectives and criminal investigators	A large increase in Federal government and a small increase in State government, excluding education and hospitals, are expected due to the increasing need for improved intelligence and security.
33-3051	Police and sheriff's patrol officers	Small increases in State and local government, excluding education and hospitals, and a large increase in Federal government are expected as increasing emphasis is placed on public safety and security.
33-9021	Private detectives and investigators	A moderate increase in investigation and security services and small decreases in most other industries are expected as firms increasingly outsource investigative work.
35-1011	Chefs and head cooks	Small to moderate decreases are expected in limited-service eating places, traveler accommodation, other amusement and recreation industries, and drinking places (places that serve alcoholic beverages) as simplified menus reduce the demand for skilled chefs and head cooks. A small increase will result in special food services as the growing number of small establishments increases demand for chefs and head cooks.
35-1012	First-line supervisors/managers of food preparation and serving workers	Small to moderate decreases will occur in nursing care facilities; public and private hospitals; traveler accommodation; State, local, and private educational services; and other amusement and recreation industries as these establishments hire outside contractors to provide food services. Small increases are expected in special food services and grocery stores due to growing demand for catered, preprepared food and food service contractors.
35-2011	Cooks, fast food	A small decrease is expected in limited-service eating places due to the increased use of preprepared food. A small decrease is anticipated in full-service restaurants, where food preparation will require more skill than these workers typically possess.
35-2012	Cooks, institution and cafeteria	As establishments increasingly use outside contractors to provide food services, moderate decreases will result in all industries except special food services, in which a small increase is anticipated as these firms benefit from increased outsourcing by other industries.
35-2014	Cooks, restaurant	A moderate decrease is expected in other amusement and recreation industries because food service is not expected to grow as rapidly as other portions of the industry. A small decrease will occur in limited-service eating places as simplified menus reduce the demand for these workers.
35-2015	Cooks, short order	Small decreases are expected in full-service restaurants, limited-service eating places, and other amusement and recreation industries due to relatively slower growth in demand for short-order cooking.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
35-2021	Food preparation workers	A small increase is expected in full-service restaurants due to an increasing share of casual family-dining establishments that rely heavily on these workers. A moderate increase is expected in grocery stores as more prepared foods are offered as a convenience. Small to moderate decreases are expected in community care facilities for the elderly; public and private hospitals; nursing care facilities; and State, local, and private educational services as these establishments use outside contractors to provide food services.
35-3011	Bartenders	Small decreases will result in all industries, except drinking places (places that serve alcoholic beverages), as establishments eliminate full bar service.
35-3021	Combined food preparation and serving workers, including fast food	A small increase is expected in limited-service eating places as more work is done by workers who can combine steps and improve efficiency. A small decrease is expected in full-service restaurants because workers in this industry are more likely to be specialized.
35-3022	Counter attendants, cafeteria, food concession, and coffee shop	Small decreases are expected in traveler accommodation and in motion picture and video industries due to outsourcing. A small decrease will also occur in full-service restaurants due to the elimination of counter service.
35-3031	Waiters and waitresses	A small decrease is expected in traveler accommodation as these establishments use outside contractors to provide food services. A small decrease also is anticipated in limited-service eating places due to a reduction in table service.
35-3041	Food servers, nonrestaurant	Small decreases are anticipated in all industries as establishments use outside contractors to provide food services.
35-9011	Dining room and cafeteria attendants and bartender helpers	Small to moderate decreases are anticipated in all industries except full-service restaurants due to the contracting out of food services and relatively faster growth in less formal, more limited food services arrangements, which tend not to employ many in this occupation.
35-9031	Hosts and hostesses, restaurant, lounge, and coffee shop	A small decrease is expected in traveler accommodation as these establishments increasingly seek outside contractors to provide food services. A small decrease will result in limited-service eating places due to a reduction in table service arrangements that use these workers.
35-9098	All other food preparation and serving related workers	Small decreases are expected in State, local, and private educational services; traveler accommodation; nursing care facilities; and public and private hospitals as these establishments use outside contractors to provide food services. A small decrease in full-service restaurants is expected due to the trend to employ workers with more clearly defined duties.
37-2021	Pest control workers	A small decrease is expected in services to buildings and dwellings as technological advances increase worker productivity.
37-3011	Landscaping and groundskeeping workers	Increasing homeownership in subdivisions and complexes with common areas to maintain is expected to contribute to a small increase in services to buildings and dwellings.
37-3013	Tree trimmers and pruners	A small decrease is expected in local government, excluding education and hospitals, as work is increasingly contracted out.
37-9099	All other building and grounds cleaning and maintenance workers	A small decrease is expected in local government, excluding education and hospitals, as work is increasingly contracted out.
39-1011	Gaming supervisors	A small increase will result in traveler accommodation as the proportion of lodging establishments that offer gaming increases.
39-1012	Slot key persons	A small increase is expected in traveler accommodation as the proportion of lodging establishments that offer gaming increases.
39-3011	Gaming dealers	A small increase is expected in traveler accommodation as the proportion of lodging establishments that offer gaming increases.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
39-3012	Gaming and sports book writers and runners	A small increase is anticipated in traveler accommodation as the proportion of lodging establishments that offer gaming increases. A small increase will occur in spectator sports as gambling activities at these venues become more widespread.
39-3021	Motion picture projectionists	Moderate decreases are expected in all industries due to technology that allows projectionists to oversee multiple screens at the same time.
39-3031	Ushers, lobby attendants, and ticket takers	Small decreases are expected in all industries as technologies such as Internet and automated ticket purchasing diminish the need for these workers.
39-4021	Funeral attendants	A small increase is expected in death-care services due to the growing need for persons to assist funeral directors in the many tasks involved with funeral services, including helping individuals cope with their loss during the funeral.
39-5012	Hairdressers, hairstylists, and cosmetologists	A small decrease is expected in department stores as beauty shops become less prevalent in those stores.
39-6011	Baggage porters and bellhops	A small decrease will occur in traveler accommodation as economy and all-suite hotels grow in popularity compared with full-service hotels.
39-6032	Transportation attendants, except flight attendants and baggage porters	Small to moderate increases will result in scheduled air transportation and travel arrangement and reservation services as these workers are given more responsibility for safety and security.
39-9021	Personal and home care aides	A moderate increase is expected in individual and family services as demand for adult daycare and homemaker services grows. A small increase in private households is expected due to increasing demand for services from an aging population.
39-9031	Fitness trainers and aerobics instructors	A moderate increase is expected in other amusement and recreation industries due to a greater concern for health and fitness, resulting in the rapid growth of health clubs.
39-9099	Personal care and service workers, all other	Moderate increases are expected in civic and social organizations, individual and family services, nursing care facilities, vocational rehabilitation services, and community care facilities for the elderly as an aging population increases the need for adult daycare, homemaker, and other social services.
41-2022	Parts salespersons	Small to moderate decreases are expected in all industries due to increasing automation resulting from the use of the Internet, electronic commerce, and electronic data interchange.
41-3031	Securities, commodities, and financial services sales agents	A small decrease is expected in securities and commodity contracts intermediation and brokerage as the industry becomes more automated. A small increase is expected in depository credit intermediation due to industry deregulation, which allows securities, commodities, and financial services sales agents to offer a wider range of products.
41-3041	Travel agents	Small decreases are expected in all industries due to the automation of travel arrangement services and the increased use of the Internet for travel bookings.
41-9011	Demonstrators and product promoters	Small increases will occur across most industries, reflecting the increased use of demonstrations as an alternative or complement to other forms of marketing.
41-9012	Models	Small to moderate increases are expected across most industries as the increased volume of catalog and Internet sales requires more models to advertise merchandise.
41-9041	Telemarketers	Moderate decreases are expected in all industries as more people are given the opportunity to opt out of receiving telemarketing calls through no-call lists and the increased use of technology such as caller ID and devices that block calls.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
43-1011	First-line supervisors/managers of office and administrative support workers	Small decreases are expected in all industries as automation and technology increase the productivity of the workers of these supervisors, reducing the number of office and administrative support workers and hence the need for supervisors.
43-2011	Switchboard operators, including answering service	Small to moderate decreases are expected in all industries due to advances in voice recognition and other technologies.
43-2021	Telephone operators	Very large decreases are expected in all industries with the elimination of operator jobs due to automated information systems, voice-recognition technology, and the movement of operator jobs to other countries.
43-2099	All other communications equipment operators	Large decreases are expected in all industries with the elimination of jobs due to automated communications systems.
43-3011	Bill and account collectors	Small increases in all industries will occur as companies place greater emphasis on getting bills collected.
43-3021	Billing and posting clerks and machine operators	Automation will simplify the billing process, resulting in small decreases in all industries except accounting, tax preparation, bookkeeping, and payroll services—the industry in which companies are taking on the billing function as part of their services.
43-3031	Bookkeeping, accounting, and auditing clerks	Small decreases will result in all industries from the greater use of computers to simplify accounting processes.
43-3041	Gaming cage workers	Small decreases are expected in most industries due to the increased use of debitlike cards and other noncash payment mechanisms in place of cash.
43-3051	Payroll and timekeeping clerks	The implementation of automated timekeeping systems will result in small decreases in all industries except accounting, tax preparation, bookkeeping, and payroll services, which will benefit from outsourcing of payroll functions by other industries.
43-3061	Procurement clerks	The increased use of electronic commerce and the Internet to make purchases will result in small to moderate decreases in all industries.
43-4011	Brokerage clerks	Moderate to large decreases are expected in all industries due to growth of online trading.
43-4021	Correspondence clerks	Small to moderate decreases will occur across all industries due to productivity gains from the electronic handling of accounts and correspondence.
43-4041	Credit authorizers, checkers, and clerks	Moderate decreases will result in all industries as credit checking becomes highly automated, with new software that quickly analyzes credit histories.
43-4051	Customer service representatives	A small increase will result in depository credit intermediation as marketing and customer service play an increasing role at banks.
43-4061	Eligibility interviewers, government programs	Moderate decreases will occur in all industries as government programs, such as welfare, continue to be reformed and the role of government is decreased.
43-4071	File clerks	Moderate decreases are anticipated in all industries due to automation and the consolidation of recordkeeping functions.
43-4111	Interviewers, except eligibility and loan	A small increase is expected in public and private hospitals, as admitting clerks take on more functions.
43-4121	Library assistants, clerical	A small increase will result in local government, excluding education and hospitals, as library assistants take on tasks formerly performed by librarians.
43-4131	Loan interviewers and clerks	Moderate decreases will result in all industries as the process of applying and determining one's eligibility for a loan becomes increasingly automated and as simpler credit-scoring systems further reduce the need for personal followups.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
43-4151	Order clerks	Moderate decreases are expected in all industries except electronic shopping and mail-order houses as electronic commerce continues to expand and affect all transactions between consumers, businesses, and government, reducing the need for these clerks.
43-4171	Receptionists and information clerks	A small decrease is expected in offices of physicians due to the trend toward larger group practices, in which many practitioners share the services of one receptionist. An increasing number of independently operated beauty salons will result in a moderate increase in personal care services.
43-4181	Reservation and transportation ticket agents and travel clerks	A small decrease is expected in scheduled air transportation due to the increasing adoption of electronic ticketing and other technological advances.
43-4999	All other financial, information, and record clerks	Small decreases are anticipated in all industries due to increased automation of recordkeeping.
43-5011	Cargo and freight agents	Small decreases will result in most industries as technological improvements boost productivity.
43-5021	Couriers and messengers	Small to moderate decreases will occur in all industries. Despite an increasing volume of parcels and documents that must be handled and delivered as the economy expands, demand for these workers will continue to be adversely affected by the more widespread use of electronic information handling technologies such as e-mail and fax.
43-5032	Dispatchers, except police, fire, and ambulance	Small decreases will result in most industries due to the increased use of automated dispatching devices such as computers and global positioning systems.
43-5041	Meter readers, utilities	Moderate decreases are expected in all industries as automated meter-reading systems are increasingly used to improve productivity.
43-5053	Postal service mail sorters, processors, and processing machine operators	A small decrease is expected in the Postal Service due to the increasing automation of mail sorting.
43-5071	Shipping, receiving, and traffic clerks	Small decreases will result in all industries as increased automation, such as hand-held scanners and personal computers, boosts productivity.
43-5081	Stock clerks and order fillers	Small to moderate decreases are expected in all industries as the widespread use of computerized inventory control and other automated equipment improves productivity.
43-5199	All other material recording, scheduling, dispatching, and distributing workers	Moderate decreases will occur in all industries as the growing use of barcodes, scanners, and computerized recordkeeping software increases productivity.
43-6011	Executive secretaries and administrative assistants	Small decreases are anticipated across all industries due to the increased use of word-processing and other computer-related programs that allow other workers to do the work formerly done by these workers.
43-6013	Medical secretaries	Small decreases are anticipated across all industries due to the increased use of word-processing and other computer-related programs that allow other workers to do the work formerly done by these workers.
43-6014	Secretaries, except legal, medical, and executive	Moderate decreases are expected across all industries due to the adoption of word-processing and other computer-related programs that allow other workers to do the work formerly done by these workers.
43-9011	Computer operators	Moderate to large decreases will result across all industries due to the automation of systems and a shift in computer operation duties to other workers.
43-9021	Data entry keyers	Moderate to large decreases are expected in most industries due to the increased use of technology such as barcode scanners and voice- and character-recognition systems and because more data entry will be handled by other workers.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
43-9022	Word processors and typists	Very large decreases will result across all industries due to improvements in technology that allow other workers to perform these tasks.
43-9031	Desktop publishers	Moderate increases will occur across all industries due to improvements in technology that will continue to simplify the process of creating publication-ready material.
43-9041	Insurance claims and policy processing clerks	Small decreases are expected in all industries as computer technology boosts productivity.
43-9051	Mail clerks and mail machine operators, except postal service	Moderate decreases are expected across all industries as more communications are sent electronically.
43-9071	Office machine operators, except computer	Moderate decreases are anticipated across all industries as a result of computerization and easier-to-use technology that allow other workers to do the work formerly done by these workers.
43-9081	Proofreaders and copy markers	Small to moderate decreases are expected in all industries as proofreading software helps authors and writers proof their own work.
43-9111	Statistical assistants	Moderate decreases are expected across all industries as employers substitute workers with broader skills and as more powerful statistical software reduces the need for statistical assistants.
43-9999	All other secretaries, administrative assistants, and other office support workers	Moderate decreases will result in all industries from continuing automation that simplifies many of the tasks performed by these workers or allows other workers to do work previously done by these workers.
45-1000	Supervisors, farming, fishing, and forestry workers	Small increases are expected in crop and animal production, as these industries increasingly convert from independent farming to incorporated entities.
45-2091	Agricultural equipment operators	Small increases are expected in crop production and support activities for agriculture and forestry as an increasing number of farms are incorporated and less work is performed by self-employed farmers.
45-2093	Farmworkers, farm and ranch animals	A moderate increase is expected in animal production as an increasing number of farms are incorporated.
45-4011	Forest and conservation workers	A small decrease is expected in local government, excluding education and hospitals, as the result of local government budgetary constraints and a shift of work to State agencies.
47-2011	Boilermakers	Small decreases will occur across all industries due to the use of small boilers which generally require less assembly, and due to the assumption of some boilermaker duties by workers in other occupations.
47-2043	Floor sanders and finishers	A small decrease will result in all industries as the increased use of prefinished flooring replaces some sanded-in-place flooring.
47-2044	Tile and marble setters	Increased popularity of tiles and marble will result in small to moderate increases across all industries.
47-2051	Cement masons and concrete finishers	Small increases are expected across all industries due to increasing use of cement for its durability and strength.
47-2081	Drywall and ceiling tile installers	Small to moderate increases are expected across all industries due to occupational specialization taking away some of this work from carpenters and other construction workers, who sometimes do drywall and ceiling tile work.
47-2082	Tapers	Small increases are expected across all industries due to the increased use of occupational specialists to perform taping work previously performed by some carpenters and other construction workers.
47-2111	Electricians	Small to moderate increases are expected across all industries except building equipment contractors as new technologies increase the demand for electricians to install electrical-related technology and upgrade existing installations.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
47-2142	Paperhangers	A small decrease is expected in building finishing contractors as the demand for wallpapering is not likely to grow as rapidly as that for other services provided by the industry.
47-3011	Helpers—brickmasons, blockmasons, stonemasons and tile and marble setters	Small decreases will result across all industries due to more efficient building methods and the use of apprentices rather than helpers.
47-3015	Helpers—pipelayers, plumbers, pipefitters, and steamfitters	More efficient building methods and the use of apprentices rather than helpers will result in a small increase in building equipment contractors.
47-4011	Construction and building inspectors	A small increase will occur in architectural, engineering, and related services due to the increasing use of home inspectors in real estate transactions.
47-4041	Hazardous materials removal workers	A small increase is anticipated in all industries due to a growing awareness of hazardous materials—especially mold—and their effects, which will increase the demand for removal of these materials from the environment.
47-4061	Rail-track laying and maintenance equipment operators	Small decreases will result in all industries as improved tracklaying equipment boosts productivity.
47-5051	Rock splitters, quarry	A small increase is anticipated in nonmetallic mineral mining and quarrying as more of these workers are needed to extract stone and gravel to meet the growing needs of construction projects.
49-2011	Computer, automated teller, and office machine repairers	Small decreases are expected in most industries, as a result of increasing productivity and more reliable computers, automated teller machines, and other office equipment.
49-2021	Radio mechanics	Large decreases are expected in all industries as radio communications systems are replaced with cell-phone-based systems.
49-2022	Telecommunications equipment installers and repairers, except line installers	Small decreases are expected in most industries as technological improvements such as higher capacity switches and routers increase productivity.
49-2091	Avionics technicians	A small to moderate increase is expected in aerospace product and parts manufacturing as these firms increasingly perform repairs. A small decrease is expected in scheduled air transportation as these firms increasingly outsource repair work.
49-2092	Electric motor, power tool, and related repairers	Small decreases are expected in most industries due to improvements in electrical motor design that make motors more reliable and easier to repair.
49-2097	Electronic home entertainment equipment installers and repairers	Small decreases are expected in most industries, primarily as a result of the lower maintenance requirements of equipment with microelectronic circuitry.
49-3011	Aircraft mechanics and service technicians	Small decreases are expected in scheduled air transportation and Federal government as these industries increasingly outsource repair work. A small increase is expected in support activities for air transportation as these firms benefit from increased outsourcing by other industries. A moderate increase is expected in aerospace product and parts manufacturing as these firms increasingly perform repair work.
49-3023	Automotive service technicians and mechanics	A moderate increase is expected in automotive parts, accessories, and tire stores as these stores offer a broader array of automotive services, such as oil changes. A moderate decrease is expected in gasoline stations as they focus on other services, such as carwashes and convenience store amenities, rather than repair services.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
49-3031	Bus and truck mechanics and diesel engine specialists	Small decreases are expected in most industries as firms increasingly contract out repair services. However, a small increase is expected in automotive repair and maintenance as these shops provide more contract repair services. A small increase is also expected in motor vehicle and motor vehicle parts and supplies merchant wholesalers because an increasing number of diesel-trained mechanics and specialists will be needed to repair and tune the growing number of diesel-powered vehicles.
49-3043	Rail car repairers	A small decrease is expected in railroad transportation due to the consolidation of worker responsibilities.
49-9021	Heating, air-conditioning, and refrigeration mechanics and installers	Small to moderate increases are expected across all industries as maintenance, repair, and retrofitting of heating, air-conditioning, and ventilation equipment become higher priorities for customers due to unstable or increasing energy prices and greater energy consciousness.
49-9041	Industrial machinery mechanics	Small increases will result in all industries as technology is increasingly implemented in production facilities, thereby stimulating the demand for mechanics to install, repair, and maintain machinery.
49-9061	Camera and photographic equipment repairers	Moderate decreases will occur in all industries as digital camera technology improves and prices of new cameras fall, making more cameras cheaper to replace than repair.
49-9063	Musical instrument repairers and tuners	A small decrease is expected in sporting good, hobby, and musical instrument stores because growth in demand for musical instruments will remain closely tied to population growth.
49-9064	Watch repairers	A small decrease is expected in jewelry, luggage, and leather goods stores because most watches are not worth repairing.
49-9091	Coin, vending, and amusement machine servicers and repairers	A moderate increase is expected in grocery and related product wholesalers as consumers increasingly prefer the convenience of coin-operated vending machines. A small increase is expected in other amusement and recreation industries in response to increasing demand for coin-operated vending and amusement machines.
49-9095	Manufactured building and mobile installers	Increasing sales of manufactured and mobile homes relative to standard housing will result in small increases across all industries.
51-2021	Coil winders, tapers, and finishers	Small to moderate decreases will result in all industries as other technologies replace coils and as more productive equipment is introduced.
51-2022	Electrical and electronic equipment assemblers	Small to moderate decreases are expected in all industries as more productive equipment and manufacturing processes are used and strong foreign competition persists.
51-2023	Electromechanical equipment assemblers	Small decreases are anticipated in all industries as more productive equipment and manufacturing processes are used and strong foreign competition persists.
51-2031	Engine and other machine assemblers	Small decreases are anticipated in all industries as more productive equipment and manufacturing processes are used and strong foreign competition persists.
51-2041	Structural metal fabricators and fitters	Small decreases will result in most industries as more efficient equipment and manufacturing processes are used and strong foreign competition persists.
51-2092	Team assemblers	Small decreases will result in all industries as more efficient equipment and manufacturing processes are used and strong foreign competition persists.
51-2099	All other assemblers and fabricators	Moderate decreases will occur in all industries as more productive equipment and manufacturing processes are used and strong foreign competition persists.
51-3021	Butchers and meat cutters	A moderate decrease in grocery stores and a small decrease in specialty food stores are expected as more retail stores buy prepackaged meats.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
51-4021	Extruding and drawing machine setters, operators, and tenders, metal and plastic	Small decreases will result in most industries as more productive equipment and manufacturing processes are used and strong foreign competition persists.
51-4022	Forging machine setters, operators, and tenders, metal and plastic	Small decreases will occur in all industries as more productive equipment and manufacturing processes are used and strong foreign competition persists.
51-4052	Pourers and casters, metal	Small decreases will result in all industries as more efficient equipment and manufacturing processes are used and strong foreign competition persists.
51-4111	Tool and die makers	Small decreases will result in all industries due to advances in automation, including CNC machine tools and computer-aided design, that will increase productivity.
51-4194	Tool grinders, filers, and sharpeners	Small to moderate decreases are expected in all industries due to the increasing use of replaceable cutting tools.
51-4199	All other metal workers and plastic workers	Small decreases are expected in most industries as more productive equipment and manufacturing processes are used and strong foreign competition persists.
51-5011	Bindery workers	Small to moderate decreases are expected in most industries as bindery work is shifted to printing press operators.
51-5022	Prepress technicians and workers	Small to moderate decreases will occur in all industries as digital technology increases efficiency and allows much of this work to be done by clients.
51-6011	Laundry and dry-cleaning workers	Small decreases are expected in nursing care facilities and in public and private hospitals as these industries increasingly outsource laundry services.
51-6041	Shoe and leather workers and repairers	A small decrease is expected in other leather and allied product manufacturing as people increasingly prefer to buy relatively cheap new shoes instead of repairing old shoes.
51-6042	Shoe machine operators and tenders	Increasing offshore production and rising imports will lead to a small decrease in all industries.
51-6052	Tailors, dressmakers, and custom sewers	Small to moderate decreases will occur in most industries as customers continue to purchase new, ready-to-wear items instead of having older clothes altered, repaired, or made from scratch.
51-6062	Textile cutting machine setters, operators, and tenders	Advances in production technology will increase productivity, resulting in small decreases in most industries.
51-6091	Extruding and forming machine setters, operators, and tenders, synthetic and glass fibers	A small increase will occur in fiber, yarn, and thread mills due to increasing demand for synthetic fiber relative to other fibers.
51-6092	Fabric and apparel patternmakers	A small decrease is expected in cut and sew apparel manufacturing due to increased productivity in patternmaking by using computer-aided design.
51-6093	Upholsterers	As manufacturers become more automated and efficient in producing furniture and automotive seat coverings that are more durable, moderate decreases will occur across all industries.
51-7040	Woodworking, machine setters, operators, and tenders, except sawing	Small decreases are expected in all industries due to the introduction of more efficient machinery and manufacturing processes.
51-7041	Sawing machine setters, operators, and tenders, wood	Small decreases are expected in all industries due to the introduction of more productive higher capacity machinery.
51-7099	All other woodworkers	Small decreases will result in all industries due to the introduction of more productive machinery and manufacturing processes.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
51-8012	Power distributors and dispatchers	A small decrease is expected in local government, excluding education and hospitals, as the result of increasing automation.
51-8021	Stationary engineers and boiler operators	A small decrease is expected in most industries. Although commercial and industrial development will increase the number of systems to monitor and maintain, increased automation will boost worker productivity.
51-8031	Water and liquid waste treatment plant and system operators	A moderate increase is expected in water, sewage, and other systems as Federal guidelines on operator certification cause many existing and new small communities to contract out plant operations to firms in this sector.
51-8092	Gas plant operators	Moderate to large increases are expected in natural-gas distribution, the pipeline transportation of natural gas, and electric power generation, transmission and distribution as automation decreases the need for other workers in these industries. There is usually only one plant operator per facility, so it is not often possible to eliminate gas plant operators.
51-9021	Crushing, grinding, and polishing machine setters, operators, and tenders	Small decreases are expected in most industries as more productive equipment and manufacturing processes are used and strong foreign competition persists.
51-9023	Mixing and blending machine setters, operators, and tenders	Small decreases are expected in most industries as more productive equipment and manufacturing processes are used and strong foreign competition persists.
51-9041	Extruding, forming, pressing, and compacting machine setters, operators, and tenders	Small decreases are expected in most industries as more productive equipment and manufacturing processes are used and strong foreign competition persists.
51-9061	Inspectors, testers, sorters, samplers, and weighers	Small decreases are anticipated in most industries as production workers increasingly perform quality inspections in addition to their other duties.
51-9071	Jewelers and precious stone and metal workers	A small increase will occur in other miscellaneous manufacturing. While some technological advances have rendered jewelrymaking more efficient, many tasks cannot be fully automated.
51-9081	Dental laboratory technicians	A moderate decrease is expected in offices of dentists as more work is contracted out to dental laboratories.
51-9083	Ophthalmic laboratory technicians	Small to moderate decreases are expected in offices of other health practitioners, employment services, and health and personal care stores due to increased automation of lensmaking machinery, which boosts productivity.
51-9131	Photographic process workers	Small decreases are expected in all industries as digital technology makes it easier for individuals to print, copy, and alter photographs with the use of personal computers and equipment.
51-9132	Photographic processing machine operators	Small decreases are expected in all industries as digital technology makes it easier for individuals to print, copy, and alter photographs with the use of personal computers and equipment.
51-9198	Helpers—production workers	Small decreases are expected in most industries as more efficient equipment and manufacturing processes are used and strong foreign competition persists.
53-2011	Airline pilots, copilots, and flight engineers	A moderate increase is expected in couriers because of increasing security requirements for shipping freight on scheduled air carriers.
53-2021	Air traffic controllers	A small increase is expected in Federal government due to an anticipated increase in commercial aircraft traffic.
53-3011	Ambulance drivers and attendants, except emergency medical technicians	A moderate decrease is expected in other ambulatory healthcare services because these workers are concentrated in a portion of the industry that will not grow as rapidly as the rest of the industry.

Table IV-3. Factors changing occupational utilization 2002-12—Continued

<i>Matrix code</i>	<i>Matrix occupation title</i>	<i>Factors changing occupational utilization</i>
53-3031	Driver/sales workers	Small decreases are expected across most industries as companies increasingly shift sales, ordering, and customer service tasks to sales and office staffs and use regular truck drivers to make deliveries to customers.
53-4021	Railroad brake, signal, and switch operators	Moderate decreases are expected in all industries due to technological improvements and the consolidation of job responsibilities.
53-4039	Subway, streetcar operators and all other rail transportation workers	A moderate increase is expected in rail transportation due to increasing demand for passenger rail transit in many municipalities.
53-6031	Service station attendants	Small decreases will result in all industries due to the continued shift to self-service.
53-7051	Industrial truck and tractor operators	Small decreases are expected in most industries due to the growing automation of material handling in factories and warehouses.
53-7061	Cleaners of vehicles and equipment	Small decreases will result in all industries from technological improvements in cleaning equipment that raise productivity.
53-7062	Laborers and freight, stock, and material movers, hand	Small to moderate decreases are expected in all industries due to automation and advances in material-moving machinery and equipment.
53-7063	Machine feeders and offbearers	Small decreases are expected in most industries due to the automation of machine-tending tasks.
53-7081	Refuse and recyclable material collectors	A small decrease is expected in local government, excluding education and hospitals, due to the increased outsourcing of refuse collection to independent contractors.
53-7111	Shuttle car operators	The increased use of technology, such as conveyor belts that reduce the need for shuttle cars, will lead to a small decrease in coal mining.
53-7199	Material moving workers, all other	Small decreases are anticipated in most industries due to more productive material-handling machinery and procedures.