

OFFICE OF MANAGEMENT AND BUDGET**1998 Standard Occupational Classification**

AGENCY: Office of Management and Budget, Executive Office of the President.

ACTION: Notice of final decisions.

SUMMARY: Under title 44 U.S.C. 3504, the Office of Management and Budget (OMB) is announcing final decisions for the 1998 Standard Occupational Classification (SOC). In consultation with the Standard Occupational Classification Revision Policy Committee (SOCRPC), OMB based its decisions on public comments received in response to the SOCRPC's final recommendations that were published in the **Federal Register** on August 5, 1998 (63 FR 41895–41923). The 1998 Standard Occupational Classification replaces the 1980 version. It covers all jobs in the national economy, including occupations in the public, private, and military sectors.

All Federal agencies that collect occupational data will use the 1998 SOC. Similarly, all State and local government agencies, as well as private sector organizations, are strongly encouraged to use this national system that provides a common language for categorizing occupations in the world of work. The new SOC system will be used by the Occupational Employment Statistics program of the Bureau of Labor Statistics for gathering occupational information. It will also replace the Bureau of the Census' 1990 occupational classification system and will be used for the 2000 Census. In addition, the new SOC will serve as the framework for information being gathered through the Department of Labor's Occupational Information Network (O*NET) which will replace the Dictionary of Occupational Titles (DOT).

In four prior **Federal Register** notices (February 28, 1995, 60 FR 10998–11002; October 5, 1995, 60 FR 52284–52286; July 7, 1997, 62 FR 36337–36409; and August 5, 1998 (63 FR 41895–41923)), OMB and the SOCRPC requested comment on the uses of occupational data; the existing 1980 SOC classification principles, purpose and scope, and conceptual options; the SOCRPC's proposed revision process; the composition of detailed occupations; the hierarchical structure and numbering system; and update procedures.

The hierarchical structure, numbering system, and occupational categories of

the 1998 SOC are presented in Appendix A of this notice. Changes from the SOCRPC's final recommendations are outlined below in the **SUPPLEMENTARY INFORMATION** section. The SOCRPC is preparing the 1998 Standard Occupational Classification Manual for publication. Committee members have completed definitions and assigned associated titles; agencies with occupational classification systems are developing crosswalks from their existing systems to the 1998 SOC. To ensure that the successful efforts of the SOCRPC continue and that the 1998 SOC remains appropriate to the world of work, OMB plans to establish a new standing committee, the Standard Occupational Classification Policy Committee (SOCPC). The SOCPC will consult periodically to ensure that the implementation of the 1998 SOC is comparable across Federal agencies. This consultation will include regularly scheduled interagency communication to ensure a smooth transition to the 1998 SOC. The SOCPC will also perform SOC maintenance functions, such as recommending changes in the SOC occupational definitions and placement of new occupations. It is anticipated that the next major review and revision of the SOC will begin in 2005 in preparation for use in the 2010 Decennial Census.

DATES: Publication of the 1998 Standard Occupational Classification Manual is planned for the first half of 2000. Federal statistical agencies will begin using the 1998 SOC for occupational data they publish for reference years beginning on or after January 1, 2000. (The Bureau of Labor Statistics will begin using it for some data series for the last quarter of 1999.) Further information can be found in the **SUPPLEMENTARY INFORMATION** section below. Use of the SOC for nonstatistical purposes (e.g., for administrative, regulatory, or taxation functions) will be determined by the agency or agencies that have chosen to use the SOC for nonstatistical purposes. Readers interested in the effective dates for the use of the 1998 SOC for nonstatistical purposes should contact the relevant agency to determine the agency's plans, if any, for a transition from the 1980 SOC to the 1998 SOC.

ADDRESSES: Correspondence about the adoption and implementation of the SOC as described in this **Federal Register** notice should be sent to: Katherine K. Wallman, Chief Statistician, Office of Management and Budget, 10201 New Executive Office Building, Washington, DC 20503, telephone number: (202) 395–3093, FAX

number: (202) 395–7245 or E-mailed to <soc@omb.eop.gov>.

Electronic Availability: This document is available on the Internet from the Bureau of Labor Statistics via WWW browser and E-mail. To obtain this document via WWW browser, connect to <http://stats.bls.gov/soc/soc_home.htm>. This WWW page contains links to the 1998 SOC major groups; the complete 1998 SOC hierarchical structure and detailed occupational definitions; a numerical index of detailed occupations; an SOC user's guide; and an SOC search capability, as well as previous SOC **Federal Register** notices and related documents. To obtain this document via E-mail, send a message to <socrevision@bls.gov>.

Inquiries about the definitions of particular occupations or requests for electronic copies of the SOC structure that cannot be satisfied by use of the web site should be addressed to Laurie Salmon, Standard Occupational Classification Revision Policy Committee, Bureau of Labor Statistics, Room 4840, Washington, DC 20212, telephone number: (202) 606–6511, FAX number: (202) 606–6645.

FOR FURTHER INFORMATION CONTACT: Paul Bugg, 10201 New Executive Office Bldg., Washington, DC 20503, E-mail address: soc@omb.eop.gov, telephone number: (202) 395–3093, FAX number: (202) 395–7245.

SUPPLEMENTARY INFORMATION:**Purpose**

The 1998 SOC was developed in response to a concern that the 1980 SOC did not meet the need for a universal occupational classification system that all Federal Government agencies and other collectors of occupational information would adopt. Despite the existence of the 1980 SOC, a variety of Government agencies have continued to collect and use occupational data based on unique classification systems designed for their individual needs. The existence of different occupational data collection systems in the Federal Government presents a major problem. Comparisons across these systems are limited by the completeness and accuracy of crosswalks between them. For example, data on occupation by educational attainment collected through the Current Population Survey can only be used with data on employment from the Occupational Employment Statistics program for those occupations that are considered comparable in both data collections. Observing this problem, the Bureau of Labor Statistics hosted an International

Occupational Classification Conference in September 1992 to establish a new context for the SOC revision process. Many new ideas and approaches were presented that subsequently influenced the SOCRPC. Similarly, the Employment and Training Administration's Advisory Panel for the Dictionary of Occupational Titles had completed a review of the dictionary and in May 1993 had recommended substantial changes. It became increasingly clear that development of an occupational classification standard that garners universal adherence would aid analysis of demographic, economic, educational, and other factors that affect employment, wages, and other worker characteristics.

Revision Process

Persuaded that a reconciliation was in order, OMB invited all Federal agencies with occupational classification systems to join together to revise the SOC and chartered the SOC Revision Policy Committee (SOCRPC) in October 1994. The SOCRPC included representatives from the Bureau of Labor Statistics, the Bureau of the Census, the Defense Manpower Data Center, the Employment and Training Administration, and the Office of Personnel Management. In addition, *ex officio* members included the National Occupational Information Coordinating Committee, the National Science Foundation, and OMB. Other Federal agencies, such as the Department of Education, the Department of Health and Human Services, and the Equal Employment Opportunity Commission, participated either in meetings of the SOCRPC or in the Federal Consultation Group, a group of Federal agency representatives with interests in the outcome of the SOC revision.

In February 1995, the Standard Occupational Classification Revision Policy Committee published a notice in the **Federal Register** (February 28, 1995, 60 FR 10998–11002) calling for comments specifically on the following: (1) the uses of occupational data, (2) the purpose and scope of occupational classification, (3) the principles underlying the 1980 SOC, (4) conceptual options for the new SOC, and (5) the SOC revision process. The SOCRPC chose the Occupational Employment Statistics system, an occupational classification currently used by the Bureau of Labor Statistics to gather occupational information, as the starting point for the new Standard Occupational Classification framework. The Committee also relied heavily on the Department of Labor's Occupational Information Network (O*NET), which is

replacing the Dictionary of Occupational Titles. To carry out the bulk of the revision effort, the Committee created six work groups to examine occupations in the following areas:

- Administrative and Clerical occupations; Science, Engineering, Law, Health, Education, and Arts occupations;
- Services and Sales occupations;
- Agriculture, Construction, Extraction, and Transportation occupations;
- Mechanical and Production occupations; and
- Military Specific occupations.

The Committee charged the work groups with ensuring that the occupations under their consideration conformed to the criteria laid out in the October 5, 1995, **Federal Register** notice (60 FR 52284–52286):

The Classification should cover all occupations in which work is performed for pay or profit, including work performed in family-operated enterprises by family members who are not directly compensated. It should exclude occupations unique to volunteers.

The Classification should reflect the current occupational structure of the United States and have sufficient flexibility to assimilate new occupations into the structure as they become known.

While striving to reflect the current occupational structure, the Classification should maintain linkage with past systems. The importance of historical comparability should be weighed against the desire for incorporating substantive changes to occupations occurring in the work force.

Occupations should be classified based upon work performed, skills, education, training, licensing, and credentials.

Occupations should be classified in homogeneous groups that are defined so that the content of each group is clear.

Each occupation should be assigned to only one group at the lowest level of the Classification.

The employment size of an occupational group should not be the major reason for including or excluding it from separate identification.

Supervisors should be identified separately from the workers they supervise wherever possible in keeping with the real structure of the world of work. An exception should be made for professional and technical occupations where supervisors or lead workers should be classified in the appropriate group with the workers they supervise.

Apprentices and trainees should be classified with the occupations for which they are being trained, while helpers and aides should be classified separately since they are not in training for the occupation they are helping.

Comparability with the International Standard Classification of Occupations (ISCO-88) should be considered in the structure, but should not be an overriding factor.

In carrying out their reviews, the work groups carefully considered all

proposals received in response to **Federal Register** notices issued by OMB and the SOCRPC. The work groups invited experts from many areas to testify and also requested written recommendations using the SOC revision guidelines. Their procedure was to develop a proposed structure plus a title, a definition, and a list of associated job titles. Each proposed occupation was reviewed by the SOCRPC.

General Characteristics of the Revised SOC

The 1998 SOC is designed to ensure comparable occupational classification across the spectrum of surveys of the world of work while mirroring the current occupational structure in the Nation. The new system should lead to the collection of meaningful data about the workforce and benefit various users of occupational data. These users include education and training planners; job seekers, students, and others seeking career guidance; various government programs, including occupational safety and health, welfare-to-work, and equal employment opportunity; and private companies wishing to relocate or to set salary scales.

Reflecting advances in factory and office automation and information technology, the shift to a services-oriented economy, and increasing concern for the environment, the new classification structure has more professional, technical, and service occupations and fewer production and administrative support occupations. Although the designation "professional" does not exist in the 1998 SOC, the new classification system reflects expanded coverage of major occupational groups, such as computer and mathematical occupations, community and social services occupations, healthcare practitioners and technical occupations, and legal occupations. Designers, systems analysts, drafters, counselors, dentists, physicians, artists, and social scientists are among the occupations that are covered in greater detail in the 1998 SOC. For example, the SOC breaks out a number of designer specialties "commercial and industrial, fashion, floral, graphic, interior, and set and exhibit designers. Similarly, the new classification breaks out additional social science specialties "market and survey researchers, sociologists, anthropologists and archeologists, geographers, historians, and political scientists.

Examples of new occupations include environmental engineers; environmental engineering technicians; environmental

scientists and specialists, including health; environmental science and protection technicians, including health; computer software engineers; multimedia artists and animators; and forensic science technicians. In the services groups, gaming occupations, such as gaming and sports book writers and runners, have been added as a result of growth among these occupations in several States. Other relatively new service occupations include skin care specialists, concierges, massage therapists, and fitness trainers and aerobics instructors.

Production occupations, on the other hand, have undergone significant consolidation. For example, various printing machine operators have been combined into one occupation in the 1998 SOC. Because many factories now employ one person to perform the tasks of setting up and operating machines, both tasks have been combined into one occupation. In addition, many factories now employ teams in which each team member is able to perform all or most of the team assembly activities; these people are included in the occupation, team assemblers. The SOC also includes relatively new production occupations such as semiconductor processors and fiberglass laminators and fabricators.

Office and administrative support occupations "for example, office machine operators" also have been consolidated. Relatively new office and administrative support occupations include customer service representatives and executive secretaries and administrative assistants.

To accommodate the needs of different data collection agencies, the SOC enables data collection at more detailed or less detailed levels, while still allowing data comparability at given levels of the hierarchy. In response to comments received in reference to the July 7, 1997, **Federal Register** notice (62 FR 36337-36409), the SOCRPC significantly modified the hierarchical structure and numbering system of the revised SOC to ensure that all detailed occupations are placed within a broad occupation. In the 1998 SOC, there are four levels of aggregation: (1) Major group; (2) minor group; (3) broad occupation; and (4) detailed occupation. All occupations are clustered into 23 major groups (listed below), such as Management Occupations or Healthcare Practitioners and Technical Occupations. These major groups are broken down into occupationally-specific minor groups, such as Operations Specialties Managers in the Management Occupations major group or Health Diagnosing and

Treating Practitioners in the Healthcare Practitioners and Technical Occupations major group. Minor groups, in turn, are divided into broad occupations, such as Human Resources Managers or Therapists, which are further divided into detailed occupations, such as Compensation and Benefits Managers, or Physical Therapists.

The 1998 SOC contains 822 detailed occupations, aggregated into 452 broad occupations. These broad occupations are grouped into 98 minor groups, that are, in turn, grouped into the 23 major groups. For comparison purposes, the 1980 SOC included 664 unit groups (comparable to detailed occupations in the 1998 SOC), 223 minor groups (comparable to broad occupations in the 1998 SOC), 60 major groups (comparable to minor groups in the 1998 SOC), and 22 divisions (comparable to major groups in the 1998 SOC).

Each item in the hierarchy is designated by a six-digit code. The first two digits of the 1998 SOC code represent the major group; the third digit represents the minor group; the fourth and fifth digits represent the broad occupation; and the sixth digit represents the detailed occupation. Major group codes end with 0000 (e.g., 29-0000, Healthcare Practitioners and Technical Occupations), minor groups end with 000 (e.g., 29-1000, Health Diagnosing and Treating Practitioners), broad occupations end with 0 (e.g., 29-1120, Therapists), and detailed occupations end with a nonzero digit (e.g., 29-1123, Physical Therapists). The hyphen between the second and third digit is used only for presentation clarity.

All residuals ("Other," "Miscellaneous," or "All Other"), whether at the minor group, broad occupation, or detailed occupation level, will contain a 9 at the level of the residual. Minor groups that are major group residuals will end in 9000 (e.g., 11-9000, Other Management Occupations); broad occupations that are minor group residuals will end in 90 (e.g., 11-9190, Miscellaneous Managers); and residual detailed occupations will end in 9 (e.g., 11-9199, Managers, All Other):

11-0000 Management Occupations
11-9000 Other Management Occupations
11-9190 Miscellaneous Managers
11-9199 Managers, All Other

In cases where there are more than 9 broad occupations in a minor group (or more than eight, if there is no residual),

the xx-x090 will be skipped (reserved for residuals), the xx-x000 will be skipped (reserved for minor groups), and the numbering system will go to xx-x110. The residual broad occupation will then be xx-x190 or xx-x290 (e.g., 51-9190, Miscellaneous Production Workers).

The 1998 SOC occupational groups and detailed occupations presented in Appendix A are not always consecutively numbered, both to accommodate these coding conventions and to allow for the insertion of additional occupational groups in future revisions of the SOC. In addition, data collection agencies wanting more detail to measure additional worker characteristics can split a defined occupation into more detailed occupations by adding a decimal point and more digits to the SOC code. For example, Secondary School Teachers, Except Special and Vocational Education (25-2031) is a detailed occupation. Agencies wishing to collect more particular information on teachers by subject matter might use 25-2031.1 for secondary school science teachers or 25-2031.12 for secondary school biology teachers. Additional levels of detail also may be used to distinguish workers who have different training, demographic characteristics, or years of experience. It is recommended that users needing extra detail use the structure currently being implemented for the Employment and Training Administration's O*NET.

Each occupation in the revised SOC will be placed within one of the following 23 major groups:

- 11-0000 Management Occupations
- 13-0000 Business and Financial Operations Occupations
- 15-0000 Computer and Mathematical Occupations
- 17-0000 Architecture and Engineering Occupations
- 19-0000 Life, Physical, and Social Science Occupations
- 21-0000 Community and Social Services Occupations
- 23-0000 Legal Occupations
- 25-0000 Education, Training, and Library Occupations
- 27-0000 Arts, Design, Entertainment, Sports, and Media Occupations
- 29-0000 Healthcare Practitioners and Technical Occupations
- 31-0000 Healthcare Support Occupations
- 33-0000 Protective Service Occupations
- 35-0000 Food Preparation and Serving Related Occupations
- 37-0000 Building and Grounds Cleaning and Maintenance Occupations
- 39-0000 Personal Care and Service Occupations
- 41-0000 Sales and Related Occupations
- 43-0000 Office and Administrative Support Occupations

45-0000 Farming, Fishing, and Forestry Occupations
 47-0000 Construction and Extraction Occupations
 49-0000 Installation, Maintenance, and Repair Occupations
 51-0000 Production Occupations
 53-0000 Transportation and Material Moving Occupations
 55-0000 Military Specific Occupations

For users wanting less detail in data tabulations, the SOCRPC suggests combining the 23 major groups into 11, or even 6, groups as presented below.

Intermediate Level Aggregation (11 groups)

11-0000-13-0000 Management, Business, and Financial Occupations
 15-0000-29-0000 Professional and Related Occupations
 31-0000-39-0000 Service Occupations
 41-0000 Sales and Related Occupations
 43-0000 Office and Administrative Support Occupations
 45-0000 Farming, Fishing, and Forestry Occupations
 47-0000 Construction and Extraction Occupations
 49-0000 Installation, Maintenance, and Repair Occupations
 51-0000 Production Occupations
 53-0000 Transportation and Material Moving Occupations
 55-0000 Military Specific Occupations

High Level Aggregation (6 groups)

11-0000-29-0000 Management, Professional, and Related Occupations
 31-0000-39-0000 Service Occupations
 41-0000-43-0000 Sales and Office Occupations
 45-0000-49-0000 Natural Resources, Construction, and Maintenance Occupations
 51-0000-53-0000 Production, Transportation, and Material Moving Occupations
 55-0000 Military Specific Occupations

Significant Changes and Responses to Comments

In response to public comments received on the August 5, 1998, **Federal Register** notice (63 FR 41895-41923), OMB, in consultation with the SOCRPC, revised the SOCRPC's final recommendations by adding a few occupations, mostly in the gaming occupations (to reflect their growth) and the primary and secondary teaching occupations (to distinguish further special and vocational education teachers); changing some occupational titles; and making necessary renumbering changes. These changes are reflected in the listing of the 1998 SOC presented in Appendix A. New broad occupations added include the following:

11-9070 Gaming Managers

25-2010 Preschool and Kindergarten Teachers
 25-2020 Elementary and Middle School Teachers
 25-2030 Secondary School Teachers
 33-9030 Security Guards and Gaming Surveillance Officers

New detailed occupations added include the following:

11-9071 Gaming Managers
 25-1194 Vocational Education Teachers, Postsecondary
 25-2011 Preschool Teachers, Except Special Education
 25-2012 Kindergarten Teachers, Except Special Education
 25-2021 Elementary School Teachers, Except Special Education
 25-2022 Middle School Teachers, Except Special and Vocational Education
 25-2023 Vocational Education Teachers, Middle School
 25-2031 Secondary School Teachers, Except Special and Vocational Education
 25-2032 Vocational Education Teachers, Secondary School
 25-2041 Special Education Teachers, Preschool, Kindergarten, and Elementary School
 25-2042 Special Education Teachers, Middle School
 25-2043 Special Education Teachers, Secondary School
 27-4011 Audio and Video Equipment Technicians
 33-9031 Gaming Surveillance Officers and Gaming Investigators
 39-1011 Gaming Supervisors
 39-1012 Slot Key Persons
 39-3011 Gaming Dealers
 39-3012 Gaming and Sports Book Writers and Runners
 39-3019 Gaming Service Workers, All Other
 41-2012 Gaming Change Persons and Booth Cashiers
 43-3041 Gaming Cage Cashiers
 47-4091 Segmental Pavers

Next Steps in Process

Implementation of the 1998 SOC

The SOCRPC is preparing the 1998 Standard Occupational Classification Manual for publication. Committee members have completed definitions and assigned associated titles, while agencies with occupational classification systems are developing crosswalks from their existing systems to the 1998 SOC. The SOCRPC will consult periodically to ensure that the implementation of the 1998 SOC is comparable across Federal agencies. This consultation will include regularly scheduled interagency communication to ensure that there is a smooth Federal transition to the 1998 SOC. It is anticipated that the next major review and revision of the SOC will begin in 2005 in preparation for use in the 2010 Decennial Census.

All Federal Government agencies that collect occupational data are expected to adopt the 1998 SOC over the next few years. The following implementation schedule will be used by the Bureau of Labor Statistics and the Bureau of the Census—the agencies with the most comprehensive occupational data collection systems.

Bureau of Labor Statistics

The annual Occupational Employment Statistics survey will first reflect the 1998 SOC in 1999; national, State, and Metropolitan Statistical Area data are expected to be available in early 2001. The Bureau of Labor Statistics' Office of Employment Projections develops new national employment projections every 2 years, reflected in its "industry-occupation matrix." This matrix presents estimates of current and projected employment—covering a 10-year period—by detailed industry and occupation. The occupational staffing pattern, or detailed occupational makeup, of each industry in the matrix reflects Occupational Employment Statistics survey data. The 1998 SOC will first be reflected in the industry-occupation matrix covering the 2002-12 period, which is expected to be released in late 2003.

The Office of Employment Projections also produces the Occupational Outlook Handbook, which is among the most widely used career guidance resources in the Nation, and related publications based on the Bureau's biennial employment projections. Occupational definitions and data completely based on the 1998 SOC will be incorporated for the first time in the 2004-05 edition of the Handbook, which is expected to be published in early 2004.

Bureau of the Census

Data collected by the 2000 Census of Population will be coded to the 1998 SOC and published in 2002. Data from the Current Population Survey will be based on the new classification for the first time in 2003.

Where To Find More Information

The complete occupational structure of the 1998 SOC will be contained in Bureau of Labor Statistics Report 929, forthcoming. The final 1998 SOC ultimately will be published in a two-volume 1998 Standard Occupational Classification Manual. Volume I will contain the hierarchical structure, a complete list of occupational titles and their definitions, a description of the SOC revision process, and a section on frequently asked questions. Volume II will contain a list of some 30,000 job titles that are commonly used by

individuals and establishments when reporting employment by occupation with their corresponding SOC codes. The second volume also will include an alphabetical index of all associated titles and industries and will reference them to the occupations in which they are found. Volumes I and II of the 1998 SOC also will be available at the following Internet address: http://stats.bls.gov/soc/soc_home.htm

O*NET, the Occupational Information Network of the Employment and Training Administration, adheres to the 1998 SOC. Information on this occupational classification system appears in "Replace with a Database: O*NET Replaces the Dictionary of Occupational Titles," Occupational Outlook Quarterly (Bureau of Labor Statistics, Spring 1999). O*NET also may be accessed at the following Internet address: <http://www.doleta.gov/programs/onet>

The 1998 SOC will be incorporated into the Occupational Outlook Handbook and the Bureau of Labor Statistics industry-occupation matrix. Both the Handbook and matrix can be accessed at the following Internet address: <http://stats.bls.gov/emphome.htm>

To facilitate historical comparisons, the Bureau of Labor Statistics will develop a crosswalk showing the relationship between occupations in the 1998 SOC and the 1997 Occupational Employment Statistics survey. The Bureau of the Census also is developing a crosswalk showing the relationship between the occupations in the 1998 SOC and those of the 1990 and 2000 Censuses. This crosswalk will be available at the following Bureau of the Census Internet address: <http://www.census.gov/hhes/www/occupation.html>.

Standard Occupational Classification Policy Committee

It has been eighteen years since the last revision of the SOC. OMB plans to establish a new standing committee, the Standard Occupational Classification

Policy Committee (SOCPC), to ensure that the successful efforts of the SOCRPC continue and that the 1998 SOC remains appropriate to the world of work. The new committee will meet twice per year to perform SOC maintenance functions, such as recommending changes in the SOC occupational definitions and placement of new occupations. In addition, it will provide timely advice to the Bureau of the Census during its 2000 Census occupation coding operation, particularly with respect to the proper classification of unfamiliar job descriptions and job titles. The committee will also undertake a thorough review of the entire SOC once per decade, in conjunction with preparations for the decennial census. The next major review and revision of the SOC is expected to begin in 2005 in preparation for use in the 2010 Decennial Census.

It is anticipated that the SOCPC will consist of representatives of the following agencies:

Department of Commerce, Bureau of the Census
Department of Defense, Defense Manpower Data Center
Department of Education
Department of Health and Human Services, Bureau of Health Professions
Department of Labor, Bureau of Labor Statistics
Department of Labor, Employment and Training Administration
Equal Employment Opportunity Commission
National Occupational Information Coordinating Committee
National Science Foundation
Office of Management and Budget (*ex-officio*)
Office of Personnel Management

The Bureau of Labor Statistics will chair the committee and staff its secretariat which will carry out the day-to-day work of the SOCPC, such as organizing working groups to make recommendations for changes.

Nonstatistical Uses of the SOC

The 1998 SOC was designed, as was the 1980 SOC, solely for statistical

purposes. Although it is likely that the 1998 SOC, like the 1980 SOC, will also be used for various nonstatistical purposes (e.g., for administrative, regulatory, or taxation functions), the requirements of government agencies that choose to use the 1998 SOC for nonstatistical purposes have played no role in its development, nor will OMB modify the classification to meet the requirements of any nonstatistical program.

Consequently, as has been the case with the 1980 SOC (Statistical Policy Directive No. 10, Standard Occupational Classification), the 1998 SOC is not to be used in any administrative, regulatory, or tax program unless the head of the agency administering that program has first determined that the use of such occupational definitions is appropriate to the implementation of the program's objectives. If the terms, "Standard Occupational Classification" or "SOC" are to be used in the operative text of any law or regulation to define an occupation or group of occupations, language similar to the following should be used to ensure sufficient flexibility: "An occupation or grouping of occupations shall mean a Standard Occupational Classification detailed occupation or grouping of occupations as defined by the Office of Management and Budget, subject to such modifications with respect to individual occupations or groupings of occupations as the Secretary (Administrator) may determine to be appropriate for the purpose of this Act (regulation)."

In addition, if an agency decides to require its respondents to provide an SOC code for a nonstatistical purpose, the agency needs to have trained personnel available to answer the respondent's questions and otherwise assist them in providing the appropriate SOC codes.

John T. Spotila,

Administrator, Office of Information and Regulatory Affairs.

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APPENDIX A: 1998 SOC Occupations and Structure

11-0000 Management Occupations	11-3071 Transportation, Storage, and Distribution Managers
11-1000 Top Executives	11-9000 Other Management Occupations
11-1010 Chief Executives	11-9010 Agricultural Managers
11-1011 Chief Executives	11-9011 Farm, Ranch, and Other Agricultural Managers
11-1020 General and Operations Managers	11-9012 Farmers and Ranchers
11-1021 General and Operations Managers	11-9020 Construction Managers
11-1030 Legislators	11-9021 Construction Managers
11-1031 Legislators	11-9030 Education Administrators
11-2000 Advertising, Marketing, Promotions, Public Relations, and Sales Managers	11-9031 Education Administrators, Preschool and Child Care Center/Program
11-2010 Advertising and Promotions Managers	11-9032 Education Administrators, Elementary and Secondary School
11-2011 Advertising and Promotions Managers	11-9033 Education Administrators, Postsecondary
11-2020 Marketing and Sales Managers	11-9039 Education Administrators, All Other
11-2021 Marketing Managers	11-9040 Engineering Managers
11-2022 Sales Managers	11-9041 Engineering Managers
11-2030 Public Relations Managers	11-9050 Food Service Managers
11-2031 Public Relations Managers	11-9051 Food Service Managers
11-3000 Operations Specialties Managers	11-9060 Funeral Directors
11-3010 Administrative Services Managers	11-9061 Funeral Directors
11-3011 Administrative Services Managers	11-9070 Gaming Managers
11-3020 Computer and Information Systems Managers	11-9071 Gaming Managers
11-3021 Computer and Information Systems Managers	11-9080 Lodging Managers
11-3030 Financial Managers	11-9081 Lodging Managers
11-3031 Financial Managers	11-9120 Natural Sciences Managers
11-3040 Human Resources Managers	11-9121 Natural Sciences Managers
11-3041 Compensation and Benefits Managers	11-9110 Medical and Health Services Managers
11-3042 Training and Development Managers	11-9111 Medical and Health Services Managers
11-3049 Human Resources Managers, All Other	11-9130 Postmasters and Mail Superintendents
11-3050 Industrial Production Managers	11-9131 Postmasters and Mail Superintendents
11-3051 Industrial Production Managers	11-9140 Property, Real Estate, and Community Association Managers
11-3060 Purchasing Managers	11-9141 Property, Real Estate, and Community Association Managers
11-3061 Purchasing Managers	11-9150 Social and Community Service Managers
11-3070 Transportation, Storage, and Distribution Managers	11-9151 Social and Community Service Managers

- 11-9190 Miscellaneous Managers
11-9199 Managers, All Other
- 13-0000 Business and Financial Operations Occupations
- 13-1000 Business Operations Specialists
13-1010 Agents and Business Managers of Artists, Performers, and Athletes
13-1011 Agents and Business Managers of Artists, Performers, and Athletes
- 13-1020 Buyers and Purchasing Agents
13-1021 Purchasing Agents and Buyers, Farm Products
- 13-1022 Wholesale and Retail Buyers, Except Farm Products
- 13-1023 Purchasing Agents, Except Wholesale, Retail, and Farm Products
- 13-1030 Claims Adjusters, Appraisers, Examiners, and Investigators
13-1031 Claims Adjusters, Examiners, and Investigators
- 13-1032 Insurance Appraisers, Auto Damage
- 13-1040 Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation
13-1041 Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation
- 13-1050 Cost Estimators
13-1051 Cost Estimators
- 13-1060 Emergency Management Specialists
13-1061 Emergency Management Specialists
- 13-1070 Human Resources, Training, and Labor Relations Specialists
13-1071 Employment, Recruitment, and Placement Specialists
- 13-1072 Compensation, Benefits, and Job Analysis Specialists
- 13-1073 Training and Development Specialists
- 13-1079 Human Resources, Training, and Labor Relations Specialists, All Other
- 13-1080 Logisticians
13-1081 Logisticians
- 13-1110 Management Analysts
13-1111 Management Analysts
- 13-1120 Meeting and Convention Planners
13-1121 Meeting and Convention Planners
- 13-1190 Miscellaneous Business Operations Specialists
- 13-1199 Business Operations Specialists, All Other
- 13-2000 Financial Specialists
13-2010 Accountants and Auditors
13-2011 Accountants and Auditors
- 13-2020 Appraisers and Assessors of Real Estate
13-2021 Appraisers and Assessors of Real Estate
- 13-2030 Budget Analysts
13-2031 Budget Analysts
- 13-2040 Credit Analysts
13-2041 Credit Analysts
- 13-2050 Financial Analysts and Advisors
13-2051 Financial Analysts
- 13-2052 Personal Financial Advisors
- 13-2053 Insurance Underwriters
- 13-2060 Financial Examiners
13-2061 Financial Examiners
- 13-2070 Loan Counselors and Officers
13-2071 Loan Counselors
- 13-2072 Loan Officers
- 13-2080 Tax Examiners, Collectors, Preparers, and Revenue Agents
13-2081 Tax Examiners, Collectors, and Revenue Agents
- 13-2082 Tax Preparers
- 13-2090 Miscellaneous Financial Specialists
13-2099 Financial Specialists, All Other
- 15-0000 Computer and Mathematical Occupations
- 15-1000 Computer Specialists
15-1010 Computer and Information Scientists, Research
15-1011 Computer and Information Scientists, Research
- 15-1020 Computer Programmers
15-1021 Computer Programmers
- 15-1030 Computer Software Engineers
15-1031 Computer Software Engineers, Applications

15-1032 Computer Software Engineers, Systems Software	17-1022 Surveyors
15-1040 Computer Support Specialists	17-2000 Engineers
15-1041 Computer Support Specialists	17-2010 Aerospace Engineers
15-1050 Computer Systems Analysts	17-2011 Aerospace Engineers
15-1051 Computer Systems Analysts	17-2020 Agricultural Engineers
15-1060 Database Administrators	17-2021 Agricultural Engineers
15-1061 Database Administrators	17-2030 Biomedical Engineers
15-1070 Network and Computer Systems Administrators	17-2031 Biomedical Engineers
15-1071 Network and Computer Systems Administrators	17-2040 Chemical Engineers
15-1080 Network Systems and Data Communications Analysts	17-2041 Chemical Engineers
15-1081 Network Systems and Data Communications Analysts	17-2050 Civil Engineers
15-1090 Miscellaneous Computer Specialists	17-2051 Civil Engineers
15-1099 Computer Specialists, All Other	17-2060 Computer Hardware Engineers
15-2000 Mathematical Scientists	17-2061 Computer Hardware Engineers
15-2010 Actuaries	17-2070 Electrical and Electronics Engineers
15-2011 Actuaries	17-2071 Electrical Engineers
15-2020 Mathematicians	17-2072 Electronics Engineers, Except Computer
15-2021 Mathematicians	17-2080 Environmental Engineers
15-2030 Operations Research Analysts	17-2081 Environmental Engineers
15-2031 Operations Research Analysts	17-2110 Industrial Engineers, Including Health and Safety
15-2040 Statisticians	17-2111 Health and Safety Engineers, Except Mining Safety Engineers and
15-2041 Statisticians	Inspectors
15-2090 Miscellaneous Mathematical Scientists	17-2112 Industrial Engineers
15-2099 Mathematical Scientists, All Other	17-2120 Marine Engineers and Naval Architects
15-3000 Mathematical Technicians	17-2121 Marine Engineers and Naval Architects
15-3010 Mathematical Technicians	17-2130 Materials Engineers
15-3011 Mathematical Technicians	17-2131 Materials Engineers
17-0000 Architecture and Engineering Occupations	17-2140 Mechanical Engineers
17-1000 Architects, Surveyors, and Cartographers	17-2141 Mechanical Engineers
17-1010 Architects, Except Naval	17-2150 Mining and Geological Engineers, Including Mining Safety Engineers
17-1011 Architects, Except Landscape and Naval	17-2151 Mining and Geological Engineers, Including Mining Safety Engineers
17-1012 Landscape Architects	17-2160 Nuclear Engineers
17-1020 Surveyors, Cartographers, and Photogrammetrists	17-2161 Nuclear Engineers
17-1021 Cartographers and Photogrammetrists	

- 17-2170 Petroleum Engineers
17-2171 Petroleum Engineers
- 17-2190 Miscellaneous Engineers
17-2199 Engineers, All Other
- 17-3000 Drafters, Engineering, and Mapping Technicians
17-3010 Drafters
17-3011 Architectural and Civil Drafters
- 17-3012 Electrical and Electronics Drafters
- 17-3013 Mechanical Drafters
- 17-3019 Drafters, All Other
- 17-3020 Engineering Technicians, Except Drafters
17-3021 Aerospace Engineering and Operations Technicians
- 17-3022 Civil Engineering Technicians
- 17-3023 Electrical and Electronic Engineering Technicians
- 17-3024 Electro-Mechanical Technicians
- 17-3025 Environmental Engineering Technicians
- 17-3026 Industrial Engineering Technicians
- 17-3027 Mechanical Engineering Technicians
- 17-3029 Engineering Technicians, Except Drafters, All Other
17-3030 Surveying and Mapping Technicians
17-3031 Surveying and Mapping Technicians
- 19-0000 Life, Physical, and Social Science Occupations
19-1000 Life Scientists
19-1010 Agricultural and Food Scientists
19-1011 Animal Scientists
- 19-1012 Food Scientists and Technologists
19-1013 Soil and Plant Scientists
- 19-1020 Biological Scientists
19-1021 Biochemists and Biophysicists
- 19-1022 Microbiologists
- 19-1023 Zoologists and Wildlife Biologists
- 19-1029 Biological Scientists, All Other
- 19-1030 Conservation Scientists and Foresters
19-1031 Conservation Scientists
- 19-1032 Foresters
- 19-1040 Medical Scientists
19-1041 Epidemiologists
- 19-1042 Medical Scientists, Except Epidemiologists
- 19-1090 Miscellaneous Life Scientists
19-1099 Life Scientists, All Other
- 19-2000 Physical Scientists
19-2010 Astronomers and Physicists
- 19-2011 Astronomers
- 19-2012 Physicists
- 19-2020 Atmospheric and Space Scientists
19-2021 Atmospheric and Space Scientists
- 19-2030 Chemists and Materials Scientists
19-2031 Chemists
- 19-2032 Materials Scientists
- 19-2040 Environmental Scientists and Geoscientists
19-2041 Environmental Scientists and Specialists, Including Health
- 19-2042 Geoscientists, Except Hydrologists and Geographers
- 19-2043 Hydrologists
- 19-2090 Miscellaneous Physical Scientists
19-2099 Physical Scientists, All Other
- 19-3000 Social Scientists and Related Workers
19-3010 Economists
- 19-3011 Economists
- 19-3020 Market and Survey Researchers
19-3021 Market Research Analysts
- 19-3022 Survey Researchers

- 19-4099 Life, Physical, and Social Science Technicians, All Other
- 19-3030 Psychologists
- 19-3031 Clinical, Counseling, and School Psychologists
- 19-3032 Industrial-Organizational Psychologists
- 19-3039 Psychologists, All Other
- 19-3040 Sociologists
- 19-3041 Sociologists
- 19-3050 Urban and Regional Planners
- 19-3051 Urban and Regional Planners
- 19-3090 Miscellaneous Social Scientists and Related Workers
- 19-3091 Anthropologists and Archeologists
- 19-3092 Geographers
- 19-3093 Historians
- 19-3094 Political Scientists
- 19-3099 Social Scientists and Related Workers, All Other
- 19-4000 Life, Physical, and Social Science Technicians
- 19-4010 Agricultural and Food Science Technicians
- 19-4011 Agricultural and Food Science Technicians
- 19-4020 Biological Technicians
- 19-4021 Biological Technicians
- 19-4030 Chemical Technicians
- 19-4031 Chemical Technicians
- 19-4040 Geological and Petroleum Technicians
- 19-4041 Geological and Petroleum Technicians
- 19-4050 Nuclear Technicians
- 19-4051 Nuclear Technicians
- 19-4060 Social Science Research Assistants
- 19-4061 Social Science Research Assistants
- 19-4090 Miscellaneous Life, Physical, and Social Science Technicians, Including Health
- 19-4091 Environmental Science and Protection Technicians, Including Health
- 19-4092 Forensic Science Technicians
- 19-4093 Forest and Conservation Technicians
- 21-0000 Community and Social Services Occupations
- 21-1000 Counselors, Social Workers, and Other Community and Social Service Specialists
- 21-1010 Counselors
- 21-1011 Substance Abuse and Behavioral Disorder Counselors
- 21-1012 Educational, Vocational, and School Counselors
- 21-1013 Marriage and Family Therapists
- 21-1014 Mental Health Counselors
- 21-1015 Rehabilitation Counselors
- 21-1019 Counselors, All Other
- 21-1020 Social Workers
- 21-1021 Child, Family, and School Social Workers
- 21-1022 Medical and Public Health Social Workers
- 21-1023 Mental Health and Substance Abuse Social Workers
- 21-1029 Social Workers, All Other
- 21-1090 Miscellaneous Community and Social Service Specialists
- 21-1091 Health Educators
- 21-1092 Probation Officers and Correctional Treatment Specialists
- 21-1093 Social and Human Service Assistants
- 21-1099 Community and Social Service Specialists, All Other
- 21-2000 Religious Workers
- 21-2010 Clergy
- 21-2011 Clergy
- 21-2020 Directors, Religious Activities and Education
- 21-2021 Directors, Religious Activities and Education
- 21-2090 Miscellaneous Religious Workers
- 21-2100 Religious Workers, All Other
- 23-0000 Legal Occupations
- 23-1000 Lawyers, Judges, and Related Workers
- 23-1010 Lawyers
- 23-1011 Lawyers

- 23-1020 Judges, Magistrates, and Other Judicial Workers
23-1021 Administrative Law Judges, Adjudicators, and Hearing Officers
- 23-1022 Arbitrators, Mediators, and Conciliators
- 23-1023 Judges, Magistrate Judges, and Magistrates
- 23-2000 Legal Support Workers
23-2010 Paralegals and Legal Assistants
23-2011 Paralegals and Legal Assistants
- 23-2090 Miscellaneous Legal Support Workers
- 23-2091 Court Reporters
- 23-2092 Law Clerks
- 23-2093 Title Examiners, Abstractors, and Searchers
- 23-2099 Legal Support Workers, All Other
- 25-0000 Education, Training, and Library Occupations
25-1000 Postsecondary Teachers
25-1010 Business Teachers, Postsecondary
- 25-1011 Business Teachers, Postsecondary
- 25-1020 Math and Computer Teachers, Postsecondary
25-1021 Computer Science Teachers, Postsecondary
- 25-1022 Mathematical Science Teachers, Postsecondary
- 25-1030 Engineering and Architecture Teachers, Postsecondary
25-1031 Architecture Teachers, Postsecondary
- 25-1032 Engineering Teachers, Postsecondary
- 25-1040 Life Sciences Teachers, Postsecondary
25-1041 Agricultural Sciences Teachers, Postsecondary
- 25-1042 Biological Science Teachers, Postsecondary
- 25-1043 Forestry and Conservation Science Teachers, Postsecondary
- 25-1050 Physical Sciences Teachers, Postsecondary
25-1051 Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary
- 25-1052 Chemistry Teachers, Postsecondary
- 25-1053 Environmental Science Teachers, Postsecondary
- 25-1054 Physics Teachers, Postsecondary
- 25-1060 Social Sciences Teachers, Postsecondary
- 25-1061 Anthropology and Archaeology Teachers, Postsecondary
- 25-1062 Area, Ethnic, and Cultural Studies Teachers, Postsecondary
- 25-1063 Economics Teachers, Postsecondary
- 25-1064 Geography Teachers, Postsecondary
- 25-1065 Political Science Teachers, Postsecondary
- 25-1066 Psychology Teachers, Postsecondary
- 25-1067 Sociology Teachers, Postsecondary
- 25-1069 Social Sciences Teachers, Postsecondary, All Other
- 25-1070 Health Teachers, Postsecondary
25-1071 Health Specialties Teachers, Postsecondary
- 25-1072 Nursing Instructors and Teachers, Postsecondary
- 25-1080 Education and Library Science Teachers, Postsecondary
25-1081 Education Teachers, Postsecondary
- 25-1082 Library Science Teachers, Postsecondary
- 25-1110 Law, Criminal Justice, and Social Work Teachers, Postsecondary
25-1111 Criminal Justice and Law Enforcement Teachers, Postsecondary
- 25-1112 Law Teachers, Postsecondary
- 25-1113 Social Work Teachers, Postsecondary
- 25-1120 Arts, Communications, and Humanities Teachers, Postsecondary
25-1121 Art, Drama, and Music Teachers, Postsecondary
- 25-1122 Communications Teachers, Postsecondary
- 25-1123 English Language and Literature Teachers, Postsecondary
- 25-1124 Foreign Language and Literature Teachers, Postsecondary
- 25-1125 History Teachers, Postsecondary
- 25-1126 Philosophy and Religion Teachers, Postsecondary

- 25-1191 Graduate Teaching Assistants
- 25-1192 Home Economics Teachers, Postsecondary
- 25-1193 Recreation and Fitness Studies Teachers, Postsecondary
- 25-1194 Vocational Education Teachers Postsecondary
- 25-1199 Postsecondary Teachers, All Other
- 25-2000 Teachers, Primary, Secondary, and Special Education
 - 25-2010 Preschool and Kindergarten Teachers
 - 25-2011 Preschool Teachers, Except Special Education
- 25-2012 Kindergarten Teachers, Except Special Education
- 25-2020 Elementary and Middle School Teachers
 - 25-2021 Elementary School Teachers, Except Special Education
- 25-2022 Middle School Teachers, Except Special and Vocational Education
- 25-2023 Middle School Vocational Education Teachers
- 25-2030 Secondary School Teachers
 - 25-2031 Secondary School Teachers, Except Special and Vocational Education
- 25-2032 Secondary School, Vocational Education Teachers
- 25-2040 Special Education Teachers
- 25-2041 Special Education Teachers, Preschool, Kindergarten, and Elementary School
- 25-2042 Special Education Teachers, Middle School
- 25-2043 Special Education Teachers, Secondary School
- 25-3000 Other Teachers and Instructors
 - 25-3010 Adult Literacy, Remedial Education, and GED Teachers and Instructors
- 25-3011 Adult Literacy, Remedial Education, and GED Teachers and Instructors
- 25-3020 Self-Enrichment Education Teachers
 - 25-3021 Self-Enrichment Education Teachers
- 25-3090 Miscellaneous Teachers and Instructors
 - 25-3099 Teachers and Instructors, All Other
- 25-4000 Librarians, Curators, and Archivists
 - 25-4010 Archivists, Curators, and Museum Technicians
 - 25-4011 Archivists
- 25-4012 Curators
- 25-4013 Museum Technicians and Conservators
- 25-4020 Librarians
 - 25-4021 Librarians
- 25-4030 Library Technicians
 - 25-4031 Library Technicians
- 25-9000 Other Education, Training, and Library Occupations
 - 25-9010 Audio-Visual Collections Specialists
 - 25-9011 Audio-Visual Collections Specialists
- 25-9020 Farm and Home Management Advisors
 - 25-9021 Farm and Home Management Advisors
- 25-9030 Instructional Coordinators
 - 25-9031 Instructional Coordinators
- 25-9040 Teacher Assistants
 - 25-9041 Teacher Assistants
- 25-9090 Miscellaneous Education, Training, and Library Workers
 - 25-9099 Education, Training, and Library Workers, All Other
- 27-0000 Arts, Design, Entertainment, Sports, and Media Occupations
 - 27-1000 Art and Design Workers
 - 27-1010 Artists and Related Workers
 - 27-1011 Art Directors
 - 27-1012 Craft Artists
 - 27-1013 Fine Artists, Including Painters, Sculptors, and Illustrators
 - 27-1014 Multi-Media Artists and Animators
- 27-1019 Artists and Related Workers, All Other
 - 27-1020 Designers
 - 27-1021 Commercial and Industrial Designers
 - 27-1022 Fashion Designers
 - 27-1023 Floral Designers
 - 27-1024 Graphic Designers
- 27-1025 Interior Designers

- 27-1026 Merchandise Displayers and Window Trimmers
- 27-1027 Set and Exhibit Designers
- 27-1029 Designers, All Other
- 27-2000 Entertainers and Performers, Sports and Related Workers
- 27-2010 Actors, Producers, and Directors
- 27-2011 Actors
- 27-2012 Producers and Directors
- 27-2020 Athletes, Coaches, Umpires, and Related Workers
- 27-2021 Athletes and Sports Competitors
- 27-2022 Coaches and Scouts
- 27-2023 Umpires, Referees, and Other Sports Officials
- 27-2030 Dancers and Choreographers
- 27-2031 Dancers
- 27-2032 Choreographers
- 27-2040 Musicians, Singers, and Related Workers
- 27-2041 Music Directors and Composers
- 27-2042 Musicians and Singers
- 27-2090 Miscellaneous Entertainers and Performers, Sports and Related Workers
- 27-2099 Entertainers and Performers, Sports and Related Workers, All Other
- 27-3000 Media and Communication Workers
- 27-3010 Announcers
- 27-3011 Radio and Television Announcers
- 27-3012 Public Address System and Other Announcers
- 27-3020 News Analysis, Reporters and Correspondents
- 27-3021 Broadcast News Analysts
- 27-3022 Reporters and Correspondents
- 27-3030 Public Relations Specialists
- 27-3031 Public Relations Specialists
- 27-3040 Writers and Editors
- 27-3041 Editors
- 27-3042 Technical Writers
- 27-3043 Writers and Authors
- 27-3090 Miscellaneous Media and Communication Workers
- 27-3091 Interpreters and Translators
- 27-3099 Media and Communication Workers, All Other
- 27-4000 Media and Communication Equipment Workers
- 27-4010 Broadcast and Sound Engineering Technicians and Radio Operators
- 27-4011 Audio and Video Equipment Technicians
- 27-4012 Broadcast Technicians
- 27-4013 Radio Operators
- 27-4014 Sound Engineering Technicians
- 27-4020 Photographers
- 27-4021 Photographers
- 27-4030 Television, Video, and Motion Picture Camera Operators and Editors
- 27-4031 Camera Operators, Television, Video, and Motion Picture
- 27-4032 Film and Video Editors
- 27-4090 Miscellaneous Media and Communication Equipment Workers
- 27-4099 Media and Communication Equipment Workers, All Other
- 29-0000 Healthcare Practitioners and Technical Occupations
- 29-1000 Health Diagnosing and Treating Practitioners
- 29-1010 Chiropractors
- 29-1011 Chiropractors
- 29-1020 Dentists
- 29-1021 Dentists, General
- 29-1022 Oral and Maxillofacial Surgeons
- 29-1023 Orthodontists
- 29-1024 Prosthodontists
- 29-1029 Dentists, All Other Specialists
- 29-1030 Dietitians and Nutritionists
- 29-1031 Dietitians and Nutritionists
- 29-1040 Optometrists

- 29-1041 Optometrists
- 29-1050 Pharmacists
- 29-1051 Pharmacists
- 29-1060 Physicians and Surgeons
- 29-1061 Anesthesiologists
- 29-1062 Family and General Practitioners
- 29-1063 Internists, General
- 29-1064 Obstetricians and Gynecologists
- 29-1065 Pediatricians, General
- 29-1066 Psychiatrists
- 29-1067 Surgeons
- 29-1069 Physicians and Surgeons, All Other
- 29-1070 Physician Assistants
- 29-1071 Physician Assistants
- 29-1080 Podiatrists
- 29-1081 Podiatrists
- 29-1110 Registered Nurses
- 29-1111 Registered Nurses
- 29-1120 Therapists
- 29-1121 Audiologists
- 29-1122 Occupational Therapists
- 29-1123 Physical Therapists
- 29-1124 Radiation Therapists
- 29-1125 Recreational Therapists
- 29-1126 Respiratory Therapists
- 29-1127 Speech-Language Pathologists
- 29-1129 Therapists, All Other
- 29-1131 Veterinarians
- 29-1190 Miscellaneous Health Diagnosing and Treating Practitioners
- 29-1199 Health Diagnosing and Treating Practitioners, All Other
- 29-2000 Health Technologists and Technicians
- 29-2010 Clinical Laboratory Technologists and Technicians
- 29-2011 Medical and Clinical Laboratory Technologists
- 29-2012 Medical and Clinical Laboratory Technicians
- 29-2020 Dental Hygienists
- 29-2021 Dental Hygienists
- 29-2030 Diagnostic Related Technologists and Technicians
- 29-2031 Cardiovascular Technologists and Technicians
- 29-2032 Diagnostic Medical Sonographers
- 29-2033 Nuclear Medicine Technologists
- 29-2034 Radiologic Technologists and Technicians
- 29-2040 Emergency Medical Technicians and Paramedics
- 29-2041 Emergency Medical Technicians and Paramedics
- 29-2050 Health Diagnosing and Treating Practitioner Support Technicians
- 29-2051 Dietetic Technicians
- 29-2052 Pharmacy Technicians
- 29-2053 Psychiatric Technicians
- 29-2054 Respiratory Therapy Technicians
- 29-2055 Surgical Technologists
- 29-2056 Veterinary Technologists and Technicians
- 29-2060 Licensed Practical and Licensed Vocational Nurses
- 29-2061 Licensed Practical and Licensed Vocational Nurses
- 29-2070 Medical Records and Health Information Technicians
- 29-2071 Medical Records and Health Information Technicians
- 29-2080 Opticians, Dispensing
- 29-2081 Opticians, Dispensing
- 29-2090 Miscellaneous Health Technologists and Technicians

- 29-2091 Orthotists and Prosthetists
- 29-2099 Health Technologists and Technicians, All Other
- 29-9000 Other Healthcare Practitioners and Technical Occupations
- 29-9010 Occupational Health and Safety Specialists and Technicians
- 29-9011 Occupational Health and Safety Specialists
- 29-9012 Occupational Health and Safety Technicians
- 29-9090 Miscellaneous Health Practitioners and Technical Workers
- 29-9091 Athletic Trainers
- 29-9099 Healthcare Practitioners and Technical Workers, All Other
- 31-0000 Healthcare Support Occupations
- 31-1000 Nursing, Psychiatric, and Home Health Aides
- 31-1010 Nursing, Psychiatric, and Home Health Aides
- 31-1011 Home Health Aides
- 31-1012 Nursing Aides, Orderlies, and Attendants
- 31-1013 Psychiatric Aides
- 31-2000 Occupational and Physical Therapist Assistants and Aides
- 31-2010 Occupational Therapist Assistants and Aides
- 31-2011 Occupational Therapist Assistants
- 31-2012 Occupational Therapist Aides
- 31-2020 Physical Therapist Assistants and Aides
- 31-2021 Physical Therapist Assistants
- 31-2022 Physical Therapist Aides
- 31-9000 Other Healthcare Support Occupations
- 31-9010 Massage Therapists
- 31-9011 Massage Therapists
- 31-9090 Miscellaneous Healthcare Support Occupations
- 31-9091 Dental Assistants
- 31-9092 Medical Assistants
- 31-9093 Medical Equipment Preparers
- 31-9094 Medical Transcriptionists
- 31-9095 Pharmacy Aides
- 31-9096 Veterinary Assistants and Laboratory Animal Caretakers
- 31-9099 Healthcare Support Workers, All Other
- 33-0000 Protective Service Occupations
- 33-1000 Supervisors, Protective Service Workers
- 33-1010 First-Line Supervisors/Managers, Law Enforcement Workers
- 33-1011 First-Line Supervisors/Managers of Correctional Officers
- 33-1012 First-Line Supervisors/Managers of Police and Detectives
- 33-1020 First-Line Supervisors/Managers, Fire Fighting and Prevention Workers
- 33-1021 First-Line Supervisors/Managers of Fire Fighting and Prevention Workers
- 33-1090 Miscellaneous Supervisors, Protective Service Workers
- 33-1099 Supervisors, Protective Service Workers, All Other
- 33-2000 Fire Fighting and Prevention Workers
- 33-2010 Fire Fighters
- 33-2011 Fire Fighters
- 33-2020 Fire Inspectors
- 33-2021 Fire Inspectors and Investigators
- 33-2022 Forest Fire Inspectors and Prevention Specialists
- 33-3000 Law Enforcement Workers
- 33-3010 Bailiffs, Correctional Officers, and Jailers
- 33-3011 Bailiffs
- 33-3012 Correctional Officers and Jailers
- 33-3020 Detectives and Criminal Investigators
- 33-3021 Detectives and Criminal Investigators
- 33-3030 Fish and Game Wardens
- 33-3031 Fish and Game Wardens
- 33-3040 Parking Enforcement Workers
- 33-3041 Parking Enforcement Workers
- 33-3050 Police Officers
- 33-3051 Police and Sheriff's Patrol Officers
- 33-3052 Transit and Railroad Police
- 33-9000 Other Protective Service Workers
- 33-9010 Animal Control Workers
- 33-9011 Animal Control Workers

- 33-9020 Private Detectives and Investigators
 - 33-9021 Private Detectives and Investigators
- 33-9030 Security Guards and Gaming Surveillance Officers
 - 33-9031 Gaming Surveillance Officers and Gaming Investigators
- 33-9032 Security Guards
 - 33-9090 Miscellaneous Protective Service Workers
 - 33-9091 Crossing Guards
- 33-9092 Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers
 - 33-9099 Protective Service Workers, All Other
- 35-0000 Food Preparation and Serving Related Occupations
 - 35-1000 Supervisors, Food Preparation and Serving Workers
 - 35-1010 First-Line Supervisors/Managers, Food Preparation and Serving Workers
 - 35-1011 Chefs and Head Cooks
 - 35-1012 First-Line Supervisors/Managers of Food Preparation and Serving Workers
 - 35-2000 Cooks and Food Preparation Workers
 - 35-2010 Cooks
 - 35-2011 Cooks, Fast Food
 - 35-2012 Cooks, Institution and Cafeteria
 - 35-2013 Cooks, Private Household
 - 35-2014 Cooks, Restaurant
 - 35-2015 Cooks, Short Order
 - 35-2019 Cooks, All Other
 - 35-2020 Food Preparation Workers
 - 35-2021 Food Preparation Workers
 - 35-3000 Food and Beverage Serving Workers
 - 35-3010 Bartenders
 - 35-3011 Bartenders
 - 35-3020 Fast Food and Counter Workers
 - 35-3021 Combined Food Preparation and Serving Workers, Including Fast Food
 - 35-3022 Counter Attendants, Cafeteria, Food Concession, and Coffee Shop
 - 35-3030 Waiters and Waitresses
- 35-3031 Waiters and Waitresses
 - 35-3040 Food Servers, Nonrestaurant
 - 35-3041 Food Servers, Nonrestaurant
- 35-9000 Other Food Preparation and Serving Related Workers
 - 35-9010 Dining Room and Cafeteria Attendants and Bartender Helpers
 - 35-9011 Dining Room and Cafeteria Attendants and Bartender Helpers
- 35-9020 Dishwashers
 - 35-9021 Dishwashers
- 35-9030 Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop
 - 35-9031 Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop
- 35-9090 Miscellaneous Food Preparation and Serving Related Workers
 - 35-9099 Food Preparation and Serving Related Workers, All Other
- 37-0000 Building and Grounds Cleaning and Maintenance Occupations
 - 37-1000 Supervisors, Building and Grounds Cleaning and Maintenance Workers
 - 37-1010 First-Line Supervisors/Managers, Building and Grounds Cleaning and Maintenance Workers
 - 37-1011 First-Line Supervisors/Managers of Housekeeping and Janitorial Workers
 - 37-1012 First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers
 - 37-2000 Building Cleaning and Pest Control Workers
 - 37-2010 Building Cleaning Workers
 - 37-2011 Janitors and Cleaners, Except Maids and Housekeeping Cleaners
 - 37-2012 Maids and Housekeeping Cleaners
 - 37-2019 Building Cleaning Workers, All Other
 - 37-2020 Pest Control Workers
 - 37-2021 Pest Control Workers
 - 37-3000 Grounds Maintenance Workers
 - 37-3010 Grounds Maintenance Workers
 - 37-3011 Landscaping and Groundskeeping Workers
 - 37-3012 Pesticide Handlers, Sprayers, and Applicators, Vegetation
 - 37-3013 Tree Trimmers and Pruners
 - 37-3019 Grounds Maintenance Workers, All Other
- 39-0000 Personal Care and Service Occupations
 - 39-0000 Personal Care and Service Occupations

- 39-1000 Supervisors, Personal Care and Service Workers
 - 39-1010 First-Line Supervisors/Managers of Gaming Workers
 - 39-1011 Gaming Supervisors
- 39-1012 Slot Key Persons
- 39-1020 First-Line Supervisors/Managers of Personal Service Workers
 - 39-1021 First-Line Supervisors/Managers of Personal Service Workers
- 39-2000 Animal Care and Service Workers
 - 39-2010 Animal Trainers
 - 39-2011 Animal Trainers
 - 39-2020 Nonfarm Animal Caretakers
 - 39-2021 Nonfarm Animal Caretakers
- 39-3000 Entertainment Attendants and Related Workers
 - 39-3010 Gaming Services Workers
 - 39-3011 Gaming Dealers
 - 39-3012 Gaming and Sports Book Writers and Runners
 - 39-3019 Gaming Service Workers, All Other
 - 39-3021 Motion Picture Projectionists
- 39-3030 Ushers, Lobby Attendants, and Ticket Takers
 - 39-3031 Ushers, Lobby Attendants, and Ticket Takers
- 39-3090 Miscellaneous Entertainment Attendants and Related Workers
 - 39-3091 Amusement and Recreation Attendants
 - 39-3092 Costume Attendants
 - 39-3093 Locker Room, Coatroom, and Dressing Room Attendants
 - 39-3099 Entertainment Attendants and Related Workers, All Other
- 39-4000 Funeral Service Workers
 - 39-4010 Embalmers
 - 39-4011 Embalmers
 - 39-4020 Funeral Attendants
 - 39-4021 Funeral Attendants
- 39-5000 Personal Appearance Workers
 - 39-5010 Barbers and Cosmetologists
 - 39-5011 Barbers
- 39-5012 Hairdressers, Hairstylists, and Cosmetologists
- 39-5090 Miscellaneous Personal Appearance Workers
 - 39-5091 Makeup Artists, Theatrical and Performance
- 39-5092 Manicurists and Pedicurists
- 39-5093 Shampooers
- 39-5094 Skin Care Specialists
- 39-6000 Transportation, Tourism, and Lodging Attendants
 - 39-6010 Baggage Porters, Bellhops, and Concierges
 - 39-6011 Baggage Porters and Bellhops
 - 39-6012 Concierges
- 39-6020 Tour and Travel Guides
 - 39-6021 Tour Guides and Escorts
 - 39-6022 Travel Guides
- 39-6030 Transportation Attendants
 - 39-6031 Flight Attendants
- 39-6032 Transportation Attendants, Except Flight Attendants and Baggage Porters
- 39-9000 Other Personal Care and Service Workers
 - 39-9010 Child Care Workers
 - 39-9011 Child Care Workers
 - 39-9020 Personal and Home Care Aides
 - 39-9021 Personal and Home Care Aides
- 39-9030 Recreation and Fitness Workers
 - 39-9031 Fitness Trainers and Aerobics Instructors
 - 39-9032 Recreation Workers
- 39-9040 Residential Advisors
 - 39-9041 Residential Advisors
- 39-9090 Miscellaneous Personal Care and Service Workers
 - 39-9099 Personal Care and Service Workers, All Other
- 41-0000 Sales and Related Occupations
 - 41-1000 Supervisors, Sales Workers
 - 41-1010 First-Line Supervisors/Managers, Sales Workers
 - 41-1011 First-Line Supervisors/Managers of Retail Sales Workers

41-1012 First-Line Supervisors/Managers of Non-Retail Sales Workers	41-9022 Real Estate Sales Agents
41-2000 Retail Sales Workers	41-9030 Sales Engineers 41-9031 Sales Engineers
41-2010 Cashiers	41-9040 Telemarketers 41-9041 Telemarketers
41-2011 Cashiers	
41-2012 Gaming Change Persons and Booth Cashiers	41-9090 Miscellaneous Sales and Related Workers
41-2020 Counter and Rental Clerks and Parts Salespersons	41-9091 Door-To-Door Sales Workers, News and Street Vendors, and Related Workers
41-2021 Counter and Rental Clerks	
41-2022 Parts Salespersons	41-9099 Sales and Related Workers, All Other
41-2030 Retail Salespersons	43-0000 Office and Administrative Support Occupations
41-2031 Retail Salespersons	43-1000 Supervisors, Office and Administrative Support Workers
41-3000 Sales Representatives, Services	43-1010 First-Line Supervisors/Managers of Office and Administrative Support Workers
41-3010 Advertising Sales Agents	43-1011 First-Line Supervisors/Managers of Office and Administrative Support Workers
41-3011 Advertising Sales Agents	
41-3020 Insurance Sales Agents	43-2000 Communications Equipment Operators
41-3021 Insurance Sales Agents	43-2010 Switchboard Operators, Including Answering Service 43-2011 Switchboard Operators, Including Answering Service
41-3030 Securities, Commodities, and Financial Services Sales Agents	43-2020 Telephone Operators
41-3031 Securities, Commodities, and Financial Services Sales Agents	43-2021 Telephone Operators
41-3040 Travel Agents	43-2090 Miscellaneous Communications Equipment Operators
41-3041 Travel Agents	43-2099 Communications Equipment Operators, All Other
41-3090 Miscellaneous Sales Representatives, Services	43-3000 Financial Clerks
41-3099 Sales Representatives, Services, All Other	43-3010 Bill and Account Collectors 43-3011 Bill and Account Collectors
41-4000 Sales Representatives, Wholesale and Manufacturing	43-3020 Billing and Posting Clerks and Machine Operators
41-4010 Sales Representatives, Wholesale and Manufacturing	43-3021 Billing and Posting Clerks and Machine Operators
41-4011 Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	
41-4012 Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	43-3030 Bookkeeping, Accounting, and Auditing Clerks 43-3031 Bookkeeping, Accounting, and Auditing Clerks
41-9000 Other Sales and Related Workers	43-3040 Gaming Cage Workers 43-3041 Gaming Cage Workers
41-9010 Models, Demonstrators, and Product Promoters	
41-9011 Demonstrators and Product Promoters	43-3050 Payroll and Timekeeping Clerks 43-3051 Payroll and Timekeeping Clerks
41-9012 Models	
41-9020 Real Estate Brokers and Sales Agents	43-3060 Procurement Clerks 43-3061 Procurement Clerks
41-9021 Real Estate Brokers	
	43-3070 Tellers

- 43-3071 Tellers
43-4000 Information and Record Clerks
43-4010 Brokerage Clerks
43-4011 Brokerage Clerks
- 43-4020 Correspondence Clerks
43-4021 Correspondence Clerks
- 43-4030 Court, Municipal, and License Clerks
43-4031 Court, Municipal, and License Clerks
- 43-4040 Credit Authorizers, Checkers, and Clerks
43-4041 Credit Authorizers, Checkers, and Clerks
- 43-4050 Customer Service Representatives
43-4051 Customer Service Representatives
- 43-4060 Eligibility Interviewers, Government Programs
43-4061 Eligibility Interviewers, Government Programs
- 43-4070 File Clerks
43-4071 File Clerks
- 43-4080 Hotel, Motel, and Resort Desk Clerks
43-4081 Hotel, Motel, and Resort Desk Clerks
- 43-4110 Interviewers, Except Eligibility and Loan
43-4111 Interviewers, Except Eligibility and Loan
- 43-4120 Library Assistants, Clerical
43-4121 Library Assistants, Clerical
- 43-4130 Loan Interviewers and Clerks
43-4131 Loan Interviewers and Clerks
- 43-4140 New Accounts Clerks
43-4141 New Accounts Clerks
- 43-4150 Order Clerks
43-4151 Order Clerks
- 43-4160 Human Resources Assistants, Except Payroll and Timekeeping
43-4161 Human Resources Assistants, Except Payroll and Timekeeping
- 43-4170 Receptionists and Information Clerks
43-4171 Receptionists and Information Clerks
- 43-4180 Reservation and Transportation Ticket Agents and Travel Clerks
- 43-4181 Reservation and Transportation Ticket Agents and Travel Clerks
- 43-4190 Miscellaneous Information and Record Clerks
43-4199 Information and Record Clerks, All Other
- 43-5000 Material Recording, Scheduling, Dispatching, and Distributing Workers
43-5010 Cargo and Freight Agents
43-5011 Cargo and Freight Agents
- 43-5020 Couriers and Messengers
43-5021 Couriers and Messengers
- 43-5030 Dispatchers
43-5031 Police, Fire, and Ambulance Dispatchers
- 43-5032 Dispatchers, Except Police, Fire, and Ambulance
- 43-5040 Meter Readers, Utilities
43-5041 Meter Readers, Utilities
- 43-5050 Postal Service Workers
43-5051 Postal Service Clerks
- 43-5052 Postal Service Mail Carriers
- 43-5053 Postal Service Mail Sorters, Processors, and Processing Machine Operators
- 43-5060 Production, Planning, and Expediting Clerks
43-5061 Production, Planning, and Expediting Clerks
- 43-5070 Shipping, Receiving, and Traffic Clerks
43-5071 Shipping, Receiving, and Traffic Clerks
- 43-5080 Stock Clerks and Order Fillers
43-5081 Stock Clerks and Order Fillers
- 43-5110 Weighers, Measurers, Checkers, and Samplers, Recordkeeping
43-5111 Weighers, Measurers, Checkers, and Samplers, Recordkeeping
- 43-6000 Secretaries and Administrative Assistants
43-6010 Secretaries and Administrative Assistants
43-6011 Executive Secretaries and Administrative Assistants
- 43-6012 Legal Secretaries
- 43-6013 Medical Secretaries
- 43-6014 Secretaries, Except Legal, Medical, and Executive
- 43-9000 Other Office and Administrative Support Workers

43-9010 Computer Operators	45-2090 Miscellaneous Agricultural Workers
43-9011 Computer Operators	45-2091 Agricultural Equipment Operators
43-9020 Data Entry and Information Processing Workers	45-2092 Farmworkers and Laborers, Crop, Nursery, and Greenhouse
43-9021 Data Entry Keyers	45-2093 Farmworkers, Farm and Ranch Animals
43-9022 Word Processors and Typists	45-2099 Agricultural Workers, All Other
43-9030 Desktop Publishers	45-3000 Fishing and Hunting Workers
43-9031 Desktop Publishers	45-3010 Fishers and Related Fishing Workers
43-9040 Insurance Claims and Policy Processing Clerks	45-3011 Fishers and Related Fishing Workers
43-9041 Insurance Claims and Policy Processing Clerks	45-3020 Hunters and Trappers
43-9050 Mail Clerks and Mail Machine Operators, Except Postal Service	45-3021 Hunters and Trappers
43-9051 Mail Clerks and Mail Machine Operators, Except Postal Service	45-4000 Forest, Conservation, and Logging Workers
43-9060 Office Clerks, General	45-4010 Forest and Conservation Workers
43-9061 Office Clerks, General	45-4011 Forest and Conservation Workers
43-9070 Office Machine Operators, Except Computer	45-4020 Logging Workers
43-9071 Office Machine Operators, Except Computer	45-4021 Fallers
43-9080 Proofreaders and Copy Markers	45-4022 Logging Equipment Operators
43-9081 Proofreaders and Copy Markers	45-4023 Log Graders and Scalers
43-9110 Statistical Assistants	45-4029 Logging Workers, All Other
43-9111 Statistical Assistants	45-9000 Other Farming, Fishing, and Forestry Workers
43-9190 Miscellaneous Office and Administrative Support Workers	45-9090 Miscellaneous Farming, Fishing, and Forestry Workers
43-9199 Office and Administrative Support Workers, All Other	45-9099 Farming, Fishing, and Forestry Workers, All Other
45-0000 Farming, Fishing, and Forestry Occupations	47-0000 Construction and Extraction Occupations
45-1000 Supervisors, Farming, Fishing, and Forestry Workers	47-1000 Supervisors, Construction and Extraction Workers
45-1010 First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	47-1010 First-Line Supervisors/Managers of Construction Trades and Extraction
45-1011 First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	Workers
45-2000 Agricultural Workers	47-1011 First-Line Supervisors/Managers of Construction Trades and Extraction
45-2010 Agricultural Inspectors	Workers
45-2011 Agricultural Inspectors	47-2000 Construction Trades Workers
45-2020 Animal Breeders	47-2010 Boilermakers
45-2021 Animal Breeders	47-2011 Boilermakers
45-2030 Farm Labor Contractors	47-2020 Brickmasons, Blockmasons, and Stonemasons
45-2031 Farm Labor Contractors	47-2021 Brickmasons and Blockmasons
45-2040 Graders and Sorters, Agricultural Products	47-2022 Stonemasons
45-2041 Graders and Sorters, Agricultural Products	47-2030 Carpenters

- 47-2031 Carpenters
- 47-2040 Carpet, Floor, and Tile Installers and Finishers
- 47-2041 Carpet Installers
- 47-2042 Floor Layers, Except Carpet, Wood, and Hard Tiles
- 47-2043 Floor Sanders and Finishers
- 47-2044 Tile and Marble Setters
- 47-2050 Cement Masons, Concrete Finishers, and Terrazzo Workers
- 47-2051 Cement Masons and Concrete Finishers
- 47-2053 Terrazzo Workers and Finishers
- 47-2060 Construction Laborers
- 47-2061 Construction Laborers
- 47-2070 Construction Equipment Operators
- 47-2071 Paving, Surfacing, and Tamping Equipment Operators
- 47-2072 Pile-Driver Operators
- 47-2073 Operating Engineers and Other Construction Equipment Operators
- 47-2080 Drywall Installers, Ceiling Tile Installers, and Tapers
- 47-2081 Drywall and Ceiling Tile Installers
- 47-2082 Tapers
- 47-2110 Electricians
- 47-2111 Electricians
- 47-2120 Glaziers
- 47-2121 Glaziers
- 47-2130 Insulation Workers
- 47-2131 Insulation Workers, Floor, Ceiling, and Wall
- 47-2132 Insulation Workers, Mechanical
- 47-2140 Painters and Paperhangers
- 47-2141 Painters, Construction and Maintenance
- 47-2142 Paperhangers
- 47-2150 Pipelayers, Plumbers, Pipefitters, and Steamfitters
- 47-2151 Pipelayers
- 47-2152 Plumbers, Pipefitters, and Steamfitters
- 47-2160 Plasterers and Stucco Masons
- 47-2161 Plasterers and Stucco Masons
- 47-2170 Reinforcing Iron and Rebar Workers
- 47-2171 Reinforcing Iron and Rebar Workers
- 47-2180 Roofers
- 47-2181 Roofers
- 47-2210 Sheet Metal Workers
- 47-2211 Sheet Metal Workers
- 47-2220 Structural Iron and Steel Workers
- 47-2221 Structural Iron and Steel Workers
- 47-3000 Helpers, Construction Trades
- 47-3010 Helpers, Construction Trades
- 47-3011 Helpers—Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters
- 47-3012 Helpers—Carpenters
- 47-3013 Helpers—Electricians
- 47-3014 Helpers—Painters, Paperhangers, Plasterers, and Stucco Masons
- 47-3015 Helpers—Pipelayers, Plumbers, Pipefitters, and Steamfitters
- 47-3016 Helpers—Roofers
- 47-3019 Helpers, Construction Trades, All Other
- 47-4000 Other Construction and Related Workers
- 47-4010 Construction and Building Inspectors
- 47-4011 Construction and Building Inspectors
- 47-4020 Elevator Installers and Repairers
- 47-4021 Elevator Installers and Repairers
- 47-4030 Fence Erectors
- 47-4031 Fence Erectors
- 47-4040 Hazardous Materials Removal Workers
- 47-4041 Hazardous Materials Removal Workers
- 47-4050 Highway Maintenance Workers
- 47-4051 Highway Maintenance Workers

- 47-4060 Rail-Track Laying and Maintenance Equipment Operators
47-4061 Rail-Track Laying and Maintenance Equipment Operators
- 47-4070 Septic Tank Servicers and Sewer Pipe Cleaners
47-4071 Septic Tank Servicers and Sewer Pipe Cleaners
- 47-4090 Miscellaneous Construction and Related Workers
47-4091 Segmental Pavers
- 47-4099 Construction and Related Workers, All Other
- 47-5000 Extraction Workers
47-5010 Derrick, Rotary Drill, and Service Unit Operators, Oil, Gas, and Mining
47-5011 Derrick Operators, Oil and Gas
- 47-5012 Rotary Drill Operators, Oil and Gas
- 47-5013 Service Unit Operators, Oil, Gas, and Mining
- 47-5020 Earth Drillers, Except Oil and Gas
47-5021 Earth Drillers, Except Oil and Gas
- 47-5030 Explosives Workers, Ordnance Handling Experts, and Blasters
47-5031 Explosives Workers, Ordnance Handling Experts, and Blasters
- 47-5040 Mining Machine Operators
47-5041 Continuous Mining Machine Operators
- 47-5042 Mine Cutting and Channeling Machine Operators
- 47-5049 Mining Machine Operators, All Other
- 47-5050 Rock Splitters, Quarry
47-5051 Rock Splitters, Quarry
- 47-5060 Roof Bolters, Mining
47-5061 Roof Bolters, Mining
- 47-5070 Roustabouts, Oil and Gas
47-5071 Roustabouts, Oil and Gas
- 47-5080 Helpers—Extraction Workers
47-5081 Helpers—Extraction Workers
- 47-5090 Miscellaneous Extraction Workers
47-5099 Extraction Workers, All Other
- 49-0000 Installation, Maintenance, and Repair Occupations
49-1000 Supervisors of Installation, Maintenance, and Repair Workers
- 49-1010 First-Line Supervisors/Managers of Mechanics, Installers, and Repairers
- 49-1011 First-Line Supervisors/Managers of Mechanics, Installers, and Repairers
- 49-2000 Electrical and Electronic Equipment Mechanics, Installers, and Repairers
49-2010 Computer, Automated Teller, and Office Machine Repairers
49-2011 Computer, Automated Teller, and Office Machine Repairers
- 49-2020 Radio and Telecommunications Equipment Installers and Repairers
49-2021 Radio Mechanics
- 49-2022 Telecommunications Equipment Installers and Repairers, Except Line
Installers
- 49-2030 Miscellaneous Electrical and Electronic Equipment Mechanics, Installers, and
Repairers
- 49-2091 Avionics Technicians
- 49-2092 Electric Motor, Power Tool, and Related Repairers
- 49-2093 Electrical and Electronics Installers and Repairers, Transportation
Equipment
- 49-2094 Electrical and Electronics Repairers, Commercial and Industrial Equipment
- 49-2095 Electrical and Electronics Repairers, Powerhouse, Substation, and Relay
- 49-2096 Electronic Equipment Installers and Repairers, Motor Vehicles
- 49-2097 Electronic Home Entertainment Equipment Installers and Repairers
- 49-2098 Security and Fire Alarm Systems Installers
- 49-3000 Vehicle and Mobile Equipment Mechanics, Installers, and Repairers
49-3010 Aircraft Mechanics and Service Technicians
49-3011 Aircraft Mechanics and Service Technicians
- 49-3020 Automotive Technicians and Repairers
49-3021 Automotive Body and Related Repairers
- 49-3022 Automotive Glass Installers and Repairers
- 49-3023 Automotive Service Technicians and Mechanics
- 49-3030 Bus and Truck Mechanics and Diesel Engine Specialists
49-3031 Bus and Truck Mechanics and Diesel Engine Specialists
- 49-3040 Heavy Vehicle and Mobile Equipment Service Technicians and Mechanics
- 49-3041 Farm Equipment Mechanics

49-3042	Mobile Heavy Equipment Mechanics, Except Engines	49-9061	Camera and Photographic Equipment Repairers
49-3043	Rail Car Repairers	49-9062	Medical Equipment Repairers
49-3050	Small Engine Mechanics	49-9063	Musical Instrument Repairers and Tuners
49-3051	Motorboat Mechanics	49-9064	Watch Repairers
49-3052	Motorcycle Mechanics	49-9069	Precision Instrument and Equipment Repairers, All Other
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	49-9090	Miscellaneous Installation, Maintenance, and Repair Workers
49-3090	Miscellaneous Vehicle and Mobile Equipment Mechanics, Installers, and Repairers	49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers
49-3091	Bicycle Repairers	49-9092	Commercial Divers
49-3092	Recreational Vehicle Service Technicians	49-9093	Fabric Menders, Except Garment
49-3093	Tire Repairers and Changers	49-9094	Locksmiths and Safe Repairers
49-9000	Other Installation, Maintenance, and Repair Occupations	49-9095	Manufactured Building and Mobile Home Installers
49-9010	Control and Valve Installers and Repairers	49-9096	Riggers
49-9011	Mechanical Door Repairers	49-9097	Signal and Track Switch Repairers
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	49-9098	Helpers—Installation, Maintenance, and Repair Workers
49-9020	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9099	Installation, Maintenance, and Repair Workers, All Other
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	51-0000	Production Occupations
49-9030	Home Appliance Repairers	51-1000	Supervisors, Production Workers
49-9031	Home Appliance Repairers	51-1010	First-Line Supervisors/Managers of Production and Operating Workers
49-9040	Industrial Machinery Installation, Repair, and Maintenance Workers	51-1011	First-Line Supervisors/Managers of Production and Operating Workers
49-9041	Industrial Machinery Mechanics	51-2000	Assemblers and Fabricators
49-9042	Maintenance and Repair Workers, General	51-2010	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers
49-9043	Maintenance Workers, Machinery	51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers
49-9044	Millwrights	51-2020	Electrical, Electronics, and Electromechanical Assemblers
49-9045	Refractory Materials Repairers, Except Brickmasons	51-2021	Coil Winders, Tapers, and Finishers
49-9050	Line Installers and Repairers	51-2022	Electrical and Electronic Equipment Assemblers
49-9051	Electrical Power-Line Installers and Repairers	51-2023	Electromechanical Equipment Assemblers
49-9052	Telecommunications Line Installers and Repairers	51-2030	Engine and Other Machine Assemblers
49-9060	Precision Instrument and Equipment Repairers	51-2031	Engine and Other Machine Assemblers
		51-2040	Structural Metal Fabricators and Fitters

- 51-2041 Structural Metal Fabricators and Fitters
- 51-2090 Miscellaneous Assemblers and Fabricators
- 51-2091 Fiberglass Laminators and Fabricators
- 51-2092 Team Assemblers
- 51-2093 Timing Device Assemblers, Adjusters, and Calibrators
- 51-2099 Assemblers and Fabricators, All Other
- 51-3000 Food Processing Workers
- 51-3010 Bakers
- 51-3011 Bakers
- 51-3020 Butchers and Other Meat, Poultry, and Fish Processing Workers
- 51-3021 Butchers and Meat Cutters
- 51-3022 Meat, Poultry, and Fish Cutters and Trimmers
- 51-3023 Slaughterers and Meat Packers
- 51-3090 Miscellaneous Food Processing Workers
- 51-3091 Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders
- 51-3092 Food Batchmakers
- 51-3093 Food Cooking Machine Operators and Tenders
- 51-4000 Metal Workers and Plastic Workers
- 51-4010 Computer Control Programmers and Operators
- 51-4011 Computer-Controlled Machine Tool Operators, Metal and Plastic
- 51-4012 Numerical Tool and Process Control Programmers
- 51-4020 Forming Machine Setters, Operators, and Tenders, Metal and Plastic
- 51-4021 Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic
- 51-4022 Forging Machine Setters, Operators, and Tenders, Metal and Plastic
- 51-4023 Rolling Machine Setters, Operators, and Tenders, Metal and Plastic
- 51-4030 Machine Tool Cutting Setters, Operators, and Press Machine Setters, Operators, and Tenders, Metal and Plastic
- 51-4031 Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic
- 51-4032 Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic
- 51-4033 Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic
- 51-4034 Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic
- 51-4035 Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic
- 51-4040 Machinists
- 51-4041 Machinists
- 51-4050 Metal Furnace and Kiln Operators and Tenders
- 51-4051 Metal-Refining Furnace Operators and Tenders
- 51-4052 Pourers and Casters, Metal
- 51-4060 Model Makers and Patternmakers, Metal and Plastic
- 51-4061 Model Makers, Metal and Plastic
- 51-4062 Patternmakers, Metal and Plastic
- 51-4070 Molders and Molding Machine Setters, Operators, and Tenders, Metal and Plastic
- 51-4071 Foundry Mold and Coremakers
- 51-4072 Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic
- 51-4080 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic
- 51-4081 Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic
- 51-4100 Tool and Die Makers
- 51-4111 Tool and Die Makers
- 51-4120 Welding, Soldering, and Brazing Workers
- 51-4121 Welders, Cutters, Solderers, and Brazers
- 51-4122 Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders
- 51-4190 Miscellaneous Metalworkers and Plastic Workers
- 51-4191 Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic
- 51-4192 Lay-Out Workers, Metal and Plastic
- 51-4193 Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic

- 51-4194 Tool Grinders, Filers, and Sharpeners
- 51-4199 Metalworkers and Plastic Workers, All Other
- 51-5000 Printing Workers
- 51-5010 Bookbinders and Bindery Workers
- 51-5011 Bindery Workers
- 51-5012 Bookbinders
- 51-5020 Printers
- 51-5021 Job Printers
- 51-5022 Prepress Technicians and Workers
- 51-5023 Printing Machine Operators
- 51-6000 Textile, Apparel, and Furnishings Workers
- 51-6010 Laundry and Dry-Cleaning Workers
- 51-6011 Laundry and Dry-Cleaning Workers
- 51-6020 Pressers, Textile, Garment, and Related Materials
- 51-6021 Pressers, Textile, Garment, and Related Materials
- 51-6030 Sewing Machine Operators
- 51-6031 Sewing Machine Operators
- 51-6040 Shoe Workers
- 51-6041 Shoe and Leather Workers and Repairers
- 51-6042 Shoe Machine Operators and Tenders
- 51-6050 Tailors, Dressmakers, and Sewers
- 51-6051 Sewers, Hand
- 51-6052 Tailors, Dressmakers, and Custom Sewers
- 51-6060 Textile Machine Setters, Operators, and Tenders
- 51-6061 Textile Bleaching and Dyeing Machine Operators and Tenders
- 51-6062 Textile Cutting Machine Setters, Operators, and Tenders
- 51-6063 Textile Knitting and Weaving Machine Setters, Operators, and Tenders
- 51-6064 Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders
- 51-6090 Miscellaneous Textile, Apparel, and Furnishings Workers
- 51-6091 Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers
- 51-6092 Fabric and Apparel Patternmakers
- 51-6093 Upholsterers
- 51-6099 Textile, Apparel, and Furnishings Workers, All Other
- 51-7000 Woodworkers
- 51-7010 Cabinetmakers and Bench Carpenters
- 51-7011 Cabinetmakers and Bench Carpenters
- 51-7020 Furniture Finishers
- 51-7021 Furniture Finishers
- 51-7030 Model Makers and Patternmakers, Wood
- 51-7031 Model Makers, Wood
- 51-7032 Patternmakers, Wood
- 51-7040 Woodworking Machine Setters, Operators, and Tenders
- 51-7041 Sawing Machine Setters, Operators, and Tenders, Wood
- 51-7042 Woodworking Machine Setters, Operators, and Tenders, Except Sawing
- 51-7090 Miscellaneous Woodworkers
- 51-7099 Woodworkers, All Other
- 51-8000 Plant and System Operators
- 51-8010 Power Plant Operators, Distributors, and Dispatchers
- 51-8011 Nuclear Power Reactor Operators
- 51-8012 Power Distributors and Dispatchers
- 51-8013 Power Plant Operators
- 51-8020 Stationary Engineers and Boiler Operators
- 51-8021 Stationary Engineers and Boiler Operators
- 51-8030 Water and Liquid Waste Treatment Plant and System Operators
- 51-8031 Water and Liquid Waste Treatment Plant and System Operators
- 51-8090 Miscellaneous Plant and System Operators
- 51-8091 Chemical Plant and System Operators
- 51-8092 Gas Plant Operators
- 51-8093 Petroleum Pump System Operators, Refinery Operators, and Gaugers
- 51-8099 Plant and System Operators, All Other

- 51-9000 Other Production Occupations
51-9010 Chemical Processing Machine Setters, Operators, and Tenders
51-9011 Chemical Equipment Operators and Tenders
- 51-9012 Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders
- 51-9020 Crushing, Grinding, Polishing, Mixing, and Blending Workers
51-9021 Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders
- 51-9022 Grinding and Polishing Workers, Hand
- 51-9023 Mixing and Blending Machine Setters, Operators, and Tenders
- 51-9030 Cutting Workers
51-9031 Cutters and Trimmers, Hand
- 51-9032 Cutting and Slicing Machine Setters, Operators, and Tenders
- 51-9040 Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders
- 51-9041 Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders
- 51-9050 Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders
51-9051 Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders
- 51-9060 Inspectors, Testers, Sorters, Samplers, and Weighers
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers
- 51-9070 Jewelers and Precious Stone and Metal Workers
51-9071 Jewelers and Precious Stone and Metal Workers
- 51-9080 Medical, Dental, and Ophthalmic Laboratory Technicians
51-9081 Dental Laboratory Technicians
- 51-9082 Medical Appliance Technicians
- 51-9083 Ophthalmic Laboratory Technicians
- 51-9110 Packaging and Filling Machine Operators and Tenders
51-9111 Packaging and Filling Machine Operators and Tenders
- 51-9120 Painting Workers
51-9121 Coating, Painting, and Spraying Machine Setters, Operators, and Tenders
- 51-9122 Painters, Transportation Equipment
- 51-9123 Painting, Coating, and Decorating Workers
- 51-9130 Photographic Process Workers and Processing Machine Operators
51-9131 Photographic Process Workers
- 51-9132 Photographic Processing Machine Operators
- 51-9140 Semiconductor Processors
51-9141 Semiconductor Processors
- 51-9142 Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders
- 51-9143 Cooling and Freezing Equipment Operators and Tenders
- 51-9144 Etchers and Engravers
- 51-9145 Molders, Shapers, and Casters, Except Metal and Plastic
- 51-9146 Paper Goods Machine Setters, Operators, and Tenders
- 51-9147 Tire Builders
- 51-9148 Helpers—Production Workers
- 51-9149 Production Workers, All Other
- 53-0000 Transportation and Material Moving Occupations
53-1000 Supervisors, Transportation and Material Moving Workers
53-1010 Aircraft Cargo Handling Supervisors
53-1011 Aircraft Cargo Handling Supervisors
- 53-1020 First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand
- 53-1021 First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand
- 53-1030 First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators
- 53-1031 First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators
- 53-2000 Air Transportation Workers
53-2010 Aircraft Pilots and Flight Engineers
- 53-2011 Airline Pilots, Copilots, and Flight Engineers

53-2012 Commercial Pilots	53-5000 Water Transportation Workers
53-2020 Air Traffic Controllers and Airfield Operations Specialists	53-5010 Sailors and Marine Oilers 53-5011 Sailors and Marine Oilers
53-2021 Air Traffic Controllers	53-5020 Ship and Boat Captains and Operators
53-2022 Airfield Operations Specialists	53-5021 Captains, Mates, and Pilots of Water Vessels
53-3000 Motor Vehicle Operators	53-5022 Motorboat Operators
53-3010 Ambulance Drivers and Attendants, Except Emergency Medical Technicians	53-5030 Ship Engineers 53-5031 Ship Engineers
53-3011 Ambulance Drivers and Attendants, Except Emergency Medical Technicians	53-6000 Other Transportation Workers
53-3020 Bus Drivers	53-6010 Bridge and Lock Tenders 53-6011 Bridge and Lock Tenders
53-3021 Bus Drivers, Transit and Intercity	53-6020 Parking Lot Attendants 53-6021 Parking Lot Attendants
53-3022 Bus Drivers, School	53-6030 Service Station Attendants 53-6031 Service Station Attendants
53-3030 Driver/Sales Workers and Truck Drivers	53-6040 Traffic Technicians
53-3031 Driver/Sales Workers	53-6041 Traffic Technicians
53-3032 Truck Drivers, Heavy and Tractor-Trailer	53-6050 Transportation Inspectors 53-6051 Transportation Inspectors
53-3033 Truck Drivers, Light or Delivery Services	53-6090 Miscellaneous Transportation Workers 53-6099 Transportation Workers, All Other
53-3040 Taxi Drivers and Chauffeurs	53-7000 Material Moving Workers 53-7010 Conveyor Operators and Tenders
53-3041 Taxi Drivers and Chauffeurs	53-7011 Conveyor Operators and Tenders
53-3090 Miscellaneous Motor Vehicle Operators	53-7020 Crane and Tower Operators 53-7021 Crane and Tower Operators
53-3099 Motor Vehicle Operators, All Other	53-7030 Dredge, Excavating, and Loading Machine Operators 53-7031 Dredge Operators
53-4000 Rail Transportation Workers	53-7032 Excavating and Loading Machine and Dragline Operators
53-4010 Locomotive Engineers and Operators	53-7033 Loading Machine Operators, Underground Mining
53-4011 Locomotive Engineers	53-7040 Hoist and Winch Operators 53-7041 Hoist and Winch Operators
53-4012 Locomotive Firemen	53-7050 Industrial Truck and Tractor Operators
53-4013 Rail Yard Engineers, Dinkey Operators, and Hostlers	53-7099 Miscellaneous Rail Transportation Workers
53-4020 Railroad Brake, Signal, and Switch Operators	53-4099 Rail Transportation Workers, All Other
53-4021 Railroad Brake, Signal, and Switch Operators	
53-4030 Railroad Conductors and Yardmasters	
53-4031 Railroad Conductors and Yardmasters	
53-4040 Subway and Streetcar Operators	
53-4041 Subway and Streetcar Operators	
53-4090 Miscellaneous Rail Transportation Workers	
53-4099 Rail Transportation Workers, All Other	

53-7051 Industrial Truck and Tractor Operators	55-2000 First-Line Enlisted Military Supervisor/Managers
53-7060 Laborers and Material Movers, Hand	55-2010 First-Line Enlisted Military Supervisors/Managers
53-7061 Cleaners of Vehicles and Equipment	55-2011 First-Line Supervisors/Managers of Air Crew Members
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	55-2012 First-Line Supervisors/Managers of Weapons Specialists/Crew Members
53-7063 Machine Feeders and Offbearers	55-2013 First-Line Supervisors/Managers of All Other Tactical Operations Specialists
53-7064 Packers and Packagers, Hand	55-3000 Military Enlisted Tactical Operations and Air/Weapons Specialists and Crew Members
53-7070 Pumping Station Operators	55-3010 Military Enlisted Tactical Operations and Air/Weapons Specialists and Crew Members
53-7071 Gas Compressor and Gas Pumping Station Operators	55-3011 Air Crew Members
53-7072 Pump Operators, Except Wellhead Pumpers	55-3012 Aircraft Launch and Recovery Specialists
53-7073 Wellhead Pumpers	55-3013 Armored Assault Vehicle Crew Members
53-7080 Refuse and Recyclable Material Collectors	55-3014 Artillery and Missile Crew Members
53-7081 Refuse and Recyclable Material Collectors	55-3015 Command and Control Center Specialists
53-7110 Shuttle Car Operators	55-3016 Infantry
53-7111 Shuttle Car Operators	55-3017 Radar and Sonar Technicians
53-7120 Tank Car, Truck, and Ship Loaders	55-3018 Special Forces
53-7121 Tank Car, Truck, and Ship Loaders	55-3019 Military Enlisted Tactical Operations and Air/Weapons Specialists and Crew Members, All Other
53-7190 Miscellaneous Material Moving Workers	
53-7199 Material Moving Workers, All Other	
55-0000 Military Specific Occupations	
55-1000 Military Officer Special and Tactical Operations Leaders/Managers	
55-1010 Military Officer Special and Tactical Operations Leaders/Managers	
55-1011 Air Crew Officers	
55-1012 Aircraft Launch and Recovery Officers	
55-1013 Armored Assault Vehicle Officers	
55-1014 Artillery and Missile Officers	
55-1015 Command and Control Center Officers	
55-1016 Infantry Officers	
55-1017 Special Forces Officers	
55-1019 Military Officer Special and Tactical Operations Leaders/Managers, All Other	