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Part IV

Office of Management and Budget

1998 Standard Occupational Classification; Notice

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

15-1040 Computer Support Specialists
15-1041 Computer Support Specialists

15-1050 Computer Systems Analysts
15-1051 Computer Systems Analysts

15-1060 Database Administrators
15-1061 Database Administrators

15-1070 Network and Computer Systems Administrators
15-1071 Network and Computer Systems Administrators

15-1080 Network Systems and Data Communications Analysts
15-1081 Network Systems and Data Communications Analysts

15-1090 Miscellaneous Computer Specialists
15-1099 Computer Specialists, All Other

15-2000 Mathematical Scientists
15-2010 Actuaries
15-2011 Actuaries

15-2020 Mathematicians
15-2021 Mathematicians

15-2030 Operations Research Analysts
15-2031 Operations Research Analysts

15-2040 Statisticians
15-2041 Statisticians

15-2090 Miscellaneous Mathematical Scientists
15-2099 Mathematical Scientists, All Other

15-3000 Mathematical Technicians
15-3010 Mathematical Technicians
15-3011 Mathematical Technicians

17-0000 Architecture and Engineering Occupations
17-1000 Architects, Surveyors, and Cartographers
17-1010 Architects, Except Naval
17-1011 Architects, Except Landscape and Naval

17-1012 Landscape Architects

17-1020 Surveyors, Cartographers, and Photogrammetrists
17-1021 Cartographers and Photogrammetrists

17-1022 Surveyors

17-2000 Engineers
17-2010 Aerospace Engineers
17-2011 Aerospace Engineers

17-2020 Agricultural Engineers
17-2021 Agricultural Engineers

17-2030 Biomedical Engineers
17-2031 Biomedical Engineers

17-2040 Chemical Engineers
17-2041 Chemical Engineers

17-2050 Civil Engineers
17-2051 Civil Engineers

17-2060 Computer Hardware Engineers
17-2061 Computer Hardware Engineers

17-2070 Electrical and Electronics Engineers
17-2071 Electrical Engineers

17-2072 Electronics Engineers, Except Computer

17-2080 Environmental Engineers
17-2081 Environmental Engineers

17-2110 Industrial Engineers, Including Health and Safety
17-2111 Health and Safety Engineers, Except Mining Safety Engineers and Inspectors

17-2112 Industrial Engineers

17-2120 Marine Engineers and Naval Architects
17-2121 Marine Engineers and Naval Architects

17-2130 Materials Engineers
17-2131 Materials Engineers

17-2140 Mechanical Engineers
17-2141 Mechanical Engineers

17-2150 Mining and Geological Engineers, Including Mining Safety Engineers
17-2151 Mining and Geological Engineers, Including Mining Safety Engineers

17-2160 Nuclear Engineers
17-2161 Nuclear Engineers

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

19-3030 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
19-4091 Environmental Science and Protection Technicians, Including Health

19-4092 Forensic Science Technicians

19-4093 Forest and Conservation Technicians

19-4099 Life, Physical, and Social Science Technicians, All Other

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
21-2099 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 Archeology 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 Analysts, 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

29-1130 Veterinarians

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

39-1000 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

39-3020 Motion Picture Projectionists
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

41-2000 Retail Sales Workers
41-2010 Cashiers
41-2011 Cashiers

41-2012 Gaming Change Persons and Booth Cashiers

41-2020 Counter and Rental Clerks and Parts Salespersons
41-2021 Counter and Rental Clerks

41-2022 Parts Salespersons

41-2030 Retail Salespersons
41-2031 Retail Salespersons

41-3000 Sales Representatives, Services
41-3010 Advertising Sales Agents
41-3011 Advertising Sales Agents

41-3020 Insurance Sales Agents
41-3021 Insurance Sales Agents

41-3030 Securities, Commodities, and Financial Services Sales Agents
41-3031 Securities, Commodities, and Financial Services Sales Agents

41-3040 Travel Agents
41-3041 Travel Agents

41-3090 Miscellaneous Sales Representatives, Services
41-3099 Sales Representatives, Services, All Other

41-4000 Sales Representatives, Wholesale and Manufacturing
41-4010 Sales Representatives, Wholesale and Manufacturing
41-4011 Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products

41-4012 Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products

41-9000 Other Sales and Related Workers
41-9010 Models, Demonstrators, and Product Promoters
41-9011 Demonstrators and Product Promoters

41-9012 Models

41-9020 Real Estate Brokers and Sales Agents
41-9021 Real Estate Brokers

41-9022 Real Estate Sales Agents

41-9030 Sales Engineers
41-9031 Sales Engineers

41-9040 Telemarketers
41-9041 Telemarketers

41-9090 Miscellaneous Sales and Related Workers
41-9091 Door-To-Door Sales Workers, News and Street Vendors, and Related Workers

41-9099 Sales and Related Workers, All Other

43-0000 Office and Administrative Support Occupations
43-1000 Supervisors, Office and Administrative Support Workers
43-1010 First-Line Supervisors/Managers of Office and Administrative Support Workers
43-1011 First-Line Supervisors/Managers of Office and Administrative Support Workers
43-2000 Communications Equipment Operators
43-2010 Switchboard Operators, Including Answering Service
43-2011 Switchboard Operators, Including Answering Service

43-2020 Telephone Operators
43-2021 Telephone Operators

43-2090 Miscellaneous Communications Equipment Operators
43-2099 Communications Equipment Operators, All Other

43-3000 Financial Clerks
43-3010 Bill and Account Collectors
43-3011 Bill and Account Collectors

43-3020 Billing and Posting Clerks and Machine Operators
43-3021 Billing and Posting Clerks and Machine Operators

43-3030 Bookkeeping, Accounting, and Auditing Clerks
43-3031 Bookkeeping, Accounting, and Auditing Clerks

43-3040 Gaming Cage Workers
43-3041 Gaming Cage Workers

43-3050 Payroll and Timekeeping Clerks
43-3051 Payroll and Timekeeping Clerks

43-3060 Procurement Clerks
43-3061 Procurement Clerks

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
43-9011 Computer Operators

43-9020 Data Entry and Information Processing Workers
43-9021 Data Entry Keyers

43-9022 Word Processors and Typists

43-9030 Desktop Publishers
43-9031 Desktop Publishers

43-9040 Insurance Claims and Policy Processing Clerks
43-9041 Insurance Claims and Policy Processing Clerks

43-9050 Mail Clerks and Mail Machine Operators, Except Postal Service
43-9051 Mail Clerks and Mail Machine Operators, Except Postal Service

43-9060 Office Clerks, General
43-9061 Office Clerks, General

43-9070 Office Machine Operators, Except Computer
43-9071 Office Machine Operators, Except Computer

43-9080 Proofreaders and Copy Markers
43-9081 Proofreaders and Copy Markers

43-9110 Statistical Assistants
43-9111 Statistical Assistants

43-9190 Miscellaneous Office and Administrative Support Workers
43-9199 Office and Administrative Support Workers, All Other

45-0000 Farming, Fishing, and Forestry Occupations
45-1000 Supervisors, Farming, Fishing, and Forestry Workers
45-1010 First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers
45-1011 First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers

45-2000 Agricultural Workers
45-2010 Agricultural Inspectors
45-2011 Agricultural Inspectors

45-2020 Animal Breeders
45-2021 Animal Breeders

45-2030 Farm Labor Contractors
45-2031 Farm Labor Contractors

45-2040 Graders and Sorters, Agricultural Products
45-2041 Graders and Sorters, Agricultural Products

45-2090 Miscellaneous Agricultural Workers
45-2091 Agricultural Equipment Operators

45-2092 Farmworkers and Laborers, Crop, Nursery, and Greenhouse

45-2093 Farmworkers, Farm and Ranch Animals

45-2099 Agricultural Workers, All Other

45-3000 Fishing and Hunting Workers
45-3010 Fishers and Related Fishing Workers
45-3011 Fishers and Related Fishing Workers

45-3020 Hunters and Trappers
45-3021 Hunters and Trappers

45-4000 Forest, Conservation, and Logging Workers
45-4010 Forest and Conservation Workers
45-4011 Forest and Conservation Workers

45-4020 Logging Workers
45-4021 Fallers

45-4022 Logging Equipment Operators

45-4023 Log Graders and Scalers

45-4029 Logging Workers, All Other

45-9000 Other Farming, Fishing, and Forestry Workers
45-9090 Miscellaneous Farming, Fishing, and Forestry Workers
45-9099 Farming, Fishing, and Forestry Workers, All Other

47-0000 Construction and Extraction Occupations
47-1000 Supervisors, Construction and Extraction Workers
47-1010 First-Line Supervisors/Managers of Construction Trades and Extraction Workers
47-1011 First-Line Supervisors/Managers of Construction Trades and Extraction Workers

47-2000 Construction Trades Workers
47-2010 Boilermakers
47-2011 Boilermakers

47-2020 Brickmasons, Blockmasons, and Stonemasons
47-2021 Brickmasons and Blockmasons

47-2022 Stonemasons

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

49-2090 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

49-3043 Rail Car Repairers

49-3050 Small Engine Mechanics
49-3051 Motorboat Mechanics

49-3052 Motorcycle Mechanics

49-3053 Outdoor Power Equipment and Other Small Engine Mechanics

49-3090 Miscellaneous Vehicle and Mobile Equipment Mechanics, Installers, and Repairers

49-3091 Bicycle Repairers

49-3092 Recreational Vehicle Service Technicians

49-3093 Tire Repairers and Changers

49-9000 Other Installation, Maintenance, and Repair Occupations
49-9010 Control and Valve Installers and Repairers
49-9011 Mechanical Door Repairers

49-9012 Control and Valve Installers and Repairers, Except Mechanical Door

49-9020 Heating, Air Conditioning, and Refrigeration Mechanics and Installers
49-9021 Heating, Air Conditioning, and Refrigeration Mechanics and Installers

49-9030 Home Appliance Repairers
49-9031 Home Appliance Repairers

49-9040 Industrial Machinery Installation, Repair, and Maintenance Workers
49-9041 Industrial Machinery Mechanics

49-9042 Maintenance and Repair Workers, General

49-9043 Maintenance Workers, Machinery

49-9044 Millwrights

49-9045 Refractory Materials Repairers, Except Brickmasons

49-9050 Line Installers and Repairers
49-9051 Electrical Power-Line Installers and Repairers

49-9052 Telecommunications Line Installers and Repairers

49-9060 Precision Instrument and Equipment Repairers

49-9061 Camera and Photographic Equipment Repairers

49-9062 Medical Equipment Repairers

49-9063 Musical Instrument Repairers and Tuners

49-9064 Watch Repairers

49-9069 Precision Instrument and Equipment Repairers, All Other

49-9090 Miscellaneous Installation, Maintenance, and Repair Workers
49-9091 Coin, Vending, and Amusement Machine Servicers and Repairers

49-9092 Commercial Divers

49-9093 Fabric Menders, Except Garment

49-9094 Locksmiths and Safe Repairers

49-9095 Manufactured Building and Mobile Home Installers

49-9096 Riggers

49-9097 Signal and Track Switch Repairers

49-9098 Helpers--Installation, Maintenance, and Repair Workers

49-9099 Installation, Maintenance, and Repair Workers, All Other

51-0000 Production Occupations
51-1000 Supervisors, Production Workers
51-1010 First-Line Supervisors/Managers of Production and Operating Workers
51-1011 First-Line Supervisors/Managers of Production and Operating Workers

51-2000 Assemblers and Fabricators
51-2010 Aircraft Structure, Surfaces, Rigging, and Systems Assemblers
51-2011 Aircraft Structure, Surfaces, Rigging, and Systems Assemblers

51-2020 Electrical, Electronics, and Electromechanical Assemblers
51-2021 Coil Winders, Tapers, and Finishers

51-2022 Electrical and Electronic Equipment Assemblers

51-2023 Electromechanical Equipment Assemblers

51-2030 Engine and Other Machine Assemblers
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 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

51-4110 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

51-9190 Miscellaneous Production Workers
51-9191 Cementing and Gluing Machine Operators and Tenders

51-9192 Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders

51-9193 Cooling and Freezing Equipment Operators and Tenders

51-9194 Etchers and Engravers

51-9195 Molders, Shapers, and Casters, Except Metal and Plastic

51-9196 Paper Goods Machine Setters, Operators, and Tenders

51-9197 Tire Builders

51-9198 Helpers--Production Workers

51-9199 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

53-2020 Air Traffic Controllers and Airfield Operations Specialists
53-2021 Air Traffic Controllers

53-2022 Airfield Operations Specialists

53-3000 Motor Vehicle Operators
53-3010 Ambulance Drivers and Attendants, Except Emergency Medical Technicians
53-3011 Ambulance Drivers and Attendants, Except Emergency Medical Technicians

53-3020 Bus Drivers
53-3021 Bus Drivers, Transit and Intercity

53-3022 Bus Drivers, School

53-3030 Driver/Sales Workers and Truck Drivers
53-3031 Driver/Sales Workers

53-3032 Truck Drivers, Heavy and Tractor-Trailer

53-3033 Truck Drivers, Light or Delivery Services

53-3040 Taxi Drivers and Chauffeurs
53-3041 Taxi Drivers and Chauffeurs

53-3090 Miscellaneous Motor Vehicle Operators
53-3099 Motor Vehicle Operators, All Other

53-4000 Rail Transportation Workers
53-4010 Locomotive Engineers and Operators
53-4011 Locomotive Engineers

53-4012 Locomotive Firers

53-4013 Rail Yard Engineers, Dinkey Operators, and Hostlers

53-4020 Railroad Brake, Signal, and Switch Operators
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

53-5000 Water Transportation Workers
53-5010 Sailors and Marine Oilers
53-5011 Sailors and Marine Oilers

53-5020 Ship and Boat Captains and Operators
53-5021 Captains, Mates, and Pilots of Water Vessels

53-5022 Motorboat Operators

53-5030 Ship Engineers
53-5031 Ship Engineers

53-6000 Other Transportation Workers
53-6010 Bridge and Lock Tenders
53-6011 Bridge and Lock Tenders

53-6020 Parking Lot Attendants
53-6021 Parking Lot Attendants

53-6030 Service Station Attendants
53-6031 Service Station Attendants

53-6040 Traffic Technicians
53-6041 Traffic Technicians

53-6050 Transportation Inspectors
53-6051 Transportation Inspectors

53-6090 Miscellaneous Transportation Workers
53-6099 Transportation Workers, All Other

53-7000 Material Moving Workers
53-7010 Conveyor Operators and Tenders
53-7011 Conveyor Operators and Tenders

53-7020 Crane and Tower Operators
53-7021 Crane and Tower Operators

53-7030 Dredge, Excavating, and Loading Machine Operators
53-7031 Dredge Operators

53-7032 Excavating and Loading Machine and Dragline Operators

53-7033 Loading Machine Operators, Underground Mining

53-7040 Hoist and Winch Operators
53-7041 Hoist and Winch Operators

53-7050 Industrial Truck and Tractor Operators

53-7051 Industrial Truck and Tractor Operators

53-7060 Laborers and Material Movers, Hand
53-7061 Cleaners of Vehicles and Equipment

53-7062 Laborers and Freight, Stock, and Material Movers, Hand

53-7063 Machine Feeders and Offbearers

53-7064 Packers and Packagers, Hand

53-7070 Pumping Station Operators
53-7071 Gas Compressor and Gas Pumping Station Operators

53-7072 Pump Operators, Except Wellhead Pumpers

53-7073 Wellhead Pumpers

53-7080 Refuse and Recyclable Material Collectors
53-7081 Refuse and Recyclable Material Collectors

53-7110 Shuttle Car Operators
53-7111 Shuttle Car Operators

53-7120 Tank Car, Truck, and Ship Loaders
53-7121 Tank Car, Truck, and Ship Loaders

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

55-2000 First-Line Enlisted Military Supervisor/Managers
55-2010 First-Line Enlisted Military Supervisors/Managers
55-2011 First-Line Supervisors/Managers of Air Crew Members

55-2012 First-Line Supervisors/Managers of Weapons Specialists/Crew Members

55-2013 First-Line Supervisors/Managers of All Other Tactical Operations Specialists

55-3000 Military Enlisted Tactical Operations and Air/Weapons Specialists and Crew Members

55-3010 Military Enlisted Tactical Operations and Air/Weapons Specialists and Crew Members

55-3011 Air Crew Members

55-3012 Aircraft Launch and Recovery Specialists

55-3013 Armored Assault Vehicle Crew Members

55-3014 Artillery and Missile Crew Members

55-3015 Command and Control Center Specialists

55-3016 Infantry

55-3017 Radar and Sonar Technicians

55-3018 Special Forces

55-3019 Military Enlisted Tactical Operations and Air/Weapons Specialists and Crew Members, All Other

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