

Revising the Standard Occupational Classification

Information about occupations – employment levels and trends, pay and benefits, demographic characteristics, skills required, and many other items – is widely used by individuals, businesses, researchers, educators, and public policy-makers. The Standard Occupational Classification or SOC helps ensure that occupational data produced across the Federal statistical system are comparable and can be used together in analysis.

To reflect changes in the economy and the nature of work, the SOC must be revised periodically. Input from the public is a key part of the revision process. The following discussion is intended to provide audiences interested in providing recommendations on revising the SOC with background on several topics:

- [What is the SOC?](#)
- [How is the SOC structured,](#)
- [Revising the SOC,](#)
- [The process for the next SOC revision,](#) and
- [Input requested by the SOC Policy Committee](#) - What type of information is critical in making decisions on whether to add, delete, or revise the classification of the occupations included in the SOC.

The discussion begins with background information on what the SOC is, who is responsible for it, and how it is structured. A brief history of SOC revisions is provided, and the process and general timeline for the 2018 revision are described. The discussion wraps up with how to provide input for the revision, the type of information needed for the revision, and how readers can stay connected with the revision process.

What is the SOC?

The SOC is one of several standard classification systems established by the Office of Management and Budget (OMB) for use in the Federal statistical system. All Federal agencies that publish occupational data for statistical purposes are required to use the SOC to increase data comparability across Federal programs.

The statistical system in the U.S. is decentralized, with 13 principal statistical agencies that have data collection as their primary mission and numerous other agencies that collect data along with carrying out another primary mission. OMB sets statistical policy and standards for all of these activities.

The purpose of the OMB standard classification systems is to provide comparability across the data produced by these various agencies, critical to facilitating analysis using multiple data sources. In addition to the SOC, OMB has established other standard classification systems, such as the North American Industry Classification System (NAICS), Metropolitan and Micropolitan Statistical Areas, and Standards for Classification of Federal Data on Race and Ethnicity.

The SOC is developed to serve statistical purposes. While the SOC may be used for other purposes, these purposes play no role in its development or revision.

Who is responsible for the SOC?

Responsibility for the SOC is, first and foremost, with the Office of Management and Budget. OMB requires the use of the SOC when publishing Federal statistics about occupations, makes the final decisions about the SOC, publishes the SOC Manual, and charters the SOC Policy Committee.

The SOC Policy Committee assists OMB by conducting the revision process, resulting in recommendations for changes to the SOC, and serving as a standing committee to maintain the classification. The SOC Policy Committee is comprised of representatives of Federal agencies that collect occupational statistics or have expertise in occupational classification, such as expertise in major areas of the economy. The following agencies are represented:

- Bureau of Labor Statistics, Department of Labor
- Bureau of Transportation Statistics, Department of Transportation
- Census Bureau, Department of Commerce
- Defense Manpower Data Center, Department of Defense
- Employment and Training Administration, Department of Labor
- Equal Employment Opportunity Commission
- Health Resources and Services Administration, Department of Health and Human Services
- National Center for Education Statistics, Department of Education
- National Center for Science and Engineering Statistics, National Science Foundation
- Office of Personnel Management
- Office of Management and Budget (ex-officio)

Other agencies participate through SOC Policy Committee working groups.

The Bureau of Labor Statistics (BLS) chairs the SOC Policy Committee and provides staff resources to carry out the work of the committee.

How is the SOC structured?

The SOC uses specific organizational structures, described below. These include the occupational hierarchy and its related coding system, and the structure used to describe detailed occupations.

Occupation hierarchy. The 2010 SOC groups occupations using a tiered system with four levels, shown below with the number of categories at each level, with 840 detailed occupations organized into broad occupations, minor occupation groups, and major occupation groups.

23 Major occupation groups
97 Minor occupation groups
461 Broad occupations
840 Detailed occupations

The 23 major occupation groups are listed in Chart 1.

Chart 1. 2010 SOC Major Groups

<i>Code</i>	<i>Title</i>	<i>Code</i>	<i>Title</i>
11-0000	Management Occupations	35-0000	Food Preparation and Serving Related Occupations
13-0000	Business and Financial Operations Occupations	37-0000	Building and Grounds Cleaning and Maintenance Occupations
15-0000	Computer and Mathematical Occupations	39-0000	Personal Care and Service Occupations
17-0000	Architecture and Engineering Occupations	41-0000	Sales and Related Occupations
19-0000	Life, Physical, and Social Science Occupations	43-0000	Office and Administrative Support Occupations
21-0000	Community and Social Service Occupations	45-0000	Farming, Fishing, and Forestry Occupations
23-0000	Legal Occupations	47-0000	Construction and Extraction Occupations
25-0000	Education, Training, and Library Occupations	49-0000	Installation, Maintenance, and Repair Occupations
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	51-0000	Production Occupations
29-0000	Healthcare Practitioners and Technical Occupations	53-0000	Transportation and Material Moving Occupations
31-0000	Healthcare Support Occupations	55-0000	Military Specific Occupations
33-0000	Protective Service Occupations		

Coding system. The SOC coding system uses a 6-digit code, with the first two digits indicating the major occupation group. The third digit indicates the minor occupation group, the fourth and fifth digits indicate the broad occupation, and finally the sixth digit indicates the detailed occupation. This hierarchy is illustrated in Table 1 with the example of the detailed occupation Animal Scientists:

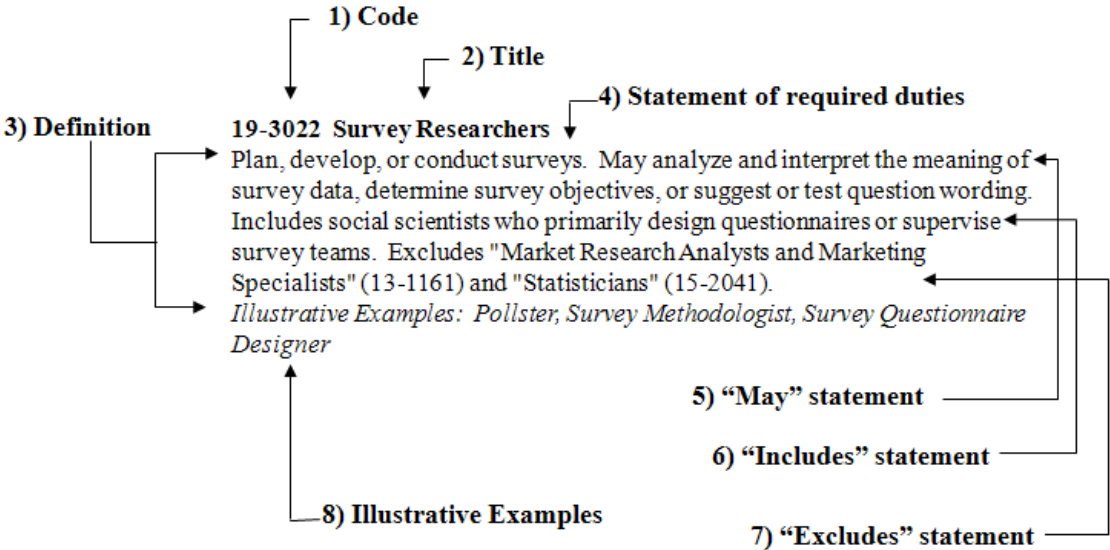
Table 1. The SOC Coding System.

Hierarchy level	Example SOC Codes, Titles, and Definition
Major occupation group	19-0000 Life, Physical, and Social Science Occupations
Minor occupation group	19-1000 Life Scientists
Broad occupation	19-1010 Agricultural and Food Scientists This broad occupation includes the following three detailed occupations: 19-1011 Animal Scientists 19-1012 Food Scientists and Technologists 19-1013 Soil and Plant Scientists
Detailed occupation	19-1011 Animal Scientists Conduct research in the genetics, nutrition, reproduction, growth, and development of domestic farm animals.

Structure of detailed occupations. Organizations and individuals who provide recommendations for changing the SOC are most often interested in the detailed occupations. In preparing recommendations, these SOC users should understand the structure used for detailed occupations.

Figure 1 illustrates the elements of a detailed SOC occupation. All detailed occupations have a code (1), a title (2), and a definition (3). All workers classified in an occupation are required to perform the duties described in the first sentence of the definition (4). Some definitions also have a “may” statement (5), an “includes” statement (6), and/or an “excludes” statement (7).

Figure 1. Elements of a detailed SOC occupation.



In the example occupation shown in Figure 1, the “may” statement describes duties that workers in that occupation may – but are not required to – perform in order to be classified as 19-3022 Survey Researchers. The “includes” statement identifies particular workers who should be classified as Survey Researchers. The “excludes” statement indicates other detailed occupations that may be similar to Survey Researchers and clarifies that workers who fall into those occupations should be excluded from Survey Researchers.

Many occupations have one or more “illustrative examples” (8), presented in alphabetical order. Illustrative examples are job titles classified in only that occupation, and were selected from the Direct Match Title File. The Direct Match Title File lists associated job titles for many detailed SOC occupations. Each of these titles is a direct match to a single detailed SOC occupation. All workers with a job title listed in the Direct Match Title File are classified in only one detailed SOC occupation code.

Conceptual basis of the SOC

Several fundamental concepts provide the framework to the SOC. These concepts, updated in 2010, include:

- The Classification Principles, listed in Chart 2, which are the foundation for making classification decisions, and
- The Coding Guidelines, listed in Chart 3, which help data collectors and others use the SOC to code occupations, and help data users understand what is included in each detailed SOC occupation.

SOC Classification Principles. For the 2018 revision, the SOC Policy Committee will consider whether these principles and guidelines should be modified. Because the Classification Principles are the basis of the SOC, the SOC Policy Committee strongly encourages organizations and individuals who are considering recommendations for the 2018 revision to carefully review the Classification Principles. The SOC Policy Committee will refer to these principles when considering changes to existing detailed occupations, creation of new occupations, and placement of detailed occupations in the SOC structure. Thus, in considering any recommendation from the public for changing or adding occupations, the SOC

Chart 2. 2010 SOC Classification Principles

1. The SOC covers 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 excludes occupations unique to volunteers. Each occupation is assigned to only one occupational category at the lowest level of the classification.
2. Occupations are classified based on work performed and, in some cases, on the skills, education, and/or training needed to perform the work at a competent level.
3. Workers primarily engaged in planning and directing are classified in management occupations in Major Group 11-0000. Duties of these workers may include supervision.
4. Supervisors of workers in Major Groups 13-0000 through 29-0000 usually have work experience and perform activities similar to those of the workers they supervise, and therefore are classified with the workers they supervise.
5. Workers in Major Group 31-0000 Healthcare Support Occupations assist and are usually supervised by workers in Major Group 29-0000 Healthcare Practitioners and Technical Occupations. Therefore, there are no first-line supervisor occupations in Major Group 31-0000.
6. Workers in Major Groups 33-0000 through 53-0000 whose primary duty is supervising are classified in the appropriate first-line supervisor category because their work activities are distinct from those of the workers they supervise.
7. Apprentices and trainees are classified with the occupations for which they are being trained, while helpers and aides are classified separately because they are not in training for the occupation they are helping.
8. If an occupation is not included as a distinct detailed occupation in the structure, it is classified in an appropriate "All Other," or residual, occupation. "All Other" occupations are placed in the structure when it is determined that the detailed occupations comprising a broad occupation group do not account for all of the workers in the group. These occupations appear as the last occupation in the group with a code ending in "9" and are identified in their title by having "All Other" appear at the end.
9. The U.S. Bureau of Labor Statistics and the U.S. Census Bureau are charged with collecting and reporting data on total U.S. employment across the full spectrum of SOC major groups. Thus, for a detailed occupation to be included in the SOC, either the Bureau of Labor Statistics or the Census Bureau must be able to collect and report data on that occupation.

Source: Standard Occupational Classification Manual 2010, Office of Management and Budget

Policy Committee needs information to help it evaluate how the recommendation is consistent with the Classification Principles shown in Chart 2.

Classification Principles 1 and 2 are fundamental to the SOC and apply across all occupations. Because the purpose of the SOC is to provide consistent statistical information on the workforce, it is important to specify its scope. Principle 1 does this by specifying that the SOC covers all work performed for pay or profit, and specifying that occupations unique to volunteer work are not included.

Classification Principle 2 establishes the work performed as the main criterion for classifying a detailed occupation and determining where to place it in the structure. Thus, the SOC Policy Committee needs specific information describing the work performed by workers in the occupation, such as specific duties and tasks. The SOC Policy Committee uses this information to evaluate whether the work performed in a recommended new occupation is sufficiently different from work performed in existing occupations, and to determine where in the classification structure a new occupation should be placed. In revising existing occupations, the SOC Policy Committee needs information on whether the nature of the work has changed since the last revision.

As noted in Classification Principle 2, skills, education, or training are sometimes used to guide the classification decisions. For example, the definition for 29-1071 Physician Assistants specifies that workers classified here “Must graduate from an accredited educational program for physician assistants” while the definition for 29-1171 Nurse Practitioners states that these workers “Must be registered nurses who have specialized graduate education.”

Classification Principles 3 through 6 indicate how managers and supervisors are classified. Principle 3 defines manager occupations as including workers primarily engaged in planning and directing duties, and recognizes that managers may also supervise other workers. Classification Principles 4 through 6 indicate how supervisors are classified and establish the differences across major occupation groups.

Classification Principle 7 relates to the classification of apprentices and trainees and how they differ from helpers and aides. Classification Principle 8 indicates how residual or “All Other” categories are to be used.

Finally, Classification Principle 9 deals with “collectability” – that is, whether data can actually be collected on the occupation. For a detailed occupation to be included in the SOC, either BLS or the Census Bureau must be able to collect and report data on the occupation. BLS and the Census Bureau are responsible for producing data across the entire range of occupations in the U.S. labor market, and conduct comprehensive household and business surveys that collect occupational data.

Collectability is partly a function of the size of the occupation – it must be large enough to be detected in sample household or business surveys. In evaluating collectability, however, the SOC Policy Committee does not use a specific employment size cut-off. Small occupations that are concentrated in certain industries or geographic areas may be collectable, while occupations of similar or larger employment that are spread throughout the economy may not be collectable.

Size is not the only consideration in collectability. Collectability is also related to the type of data collection used, specifically the comprehensive household and business surveys in BLS and the Census Bureau.

In general, household surveys can collect a more limited set of information for identifying the occupation of individuals than is possible in business surveys. For example, the Current Population Survey (CPS) and the American Community Survey (ACS) collect the individual's job title and a very brief description of the person's most important activities or duties. In most household surveys, coders are not able to recontact the respondent for clarification. Since less information is available for assigning classification codes, household surveys generally provide less occupational detail than business surveys. Thus, occupational categories with fine distinctions from one another may not be collectable in household surveys.

Household surveys such as the CPS and ACS are the main sources of demographic information on workers by occupation, especially educational attainment, gender, age, and race/ethnicity. In addition, the CPS and ACS are the main sources of occupational data for parts of the workforce not covered by business surveys, namely the self-employed, unpaid family workers, and workers in private households and most agriculture industries. Occupations that are primarily comprised of these types of workers or mainly found in private households or agriculture therefore must be collectable on household surveys.

Business surveys collect data on occupations directly from employers. These surveys rely on the employer for information about the workers' duties, and often coders may recontact the employer to obtain clarifications. Thus, it is often possible to obtain detailed information about the work performed, allowing occupational coding to more detail than possible in most household surveys. Business surveys provide data on employment, wages, and benefits by occupation, and sometimes on other characteristics of the job or worker. In general, however, business surveys do not provide demographic information, nor do they include the self-employed, unpaid family workers, workers in private households, or workers in most agriculture industries.

SOC Coding Guidelines. The SOC Policy Committee developed the 2010 SOC Coding Guidelines shown in Chart 3 to assist users in consistently assigning SOC codes and titles to survey responses and in other coding activities.

Chart 3. 2010 SOC Coding Guidelines

1. A worker should be assigned to an SOC occupation code based on work performed.
2. When workers in a single job could be coded in more than one occupation, they should be coded in the occupation that requires the highest level of skill. If there is no measurable difference in skill requirements, workers should be coded in the occupation in which they spend the most time. Workers whose job is to teach at different levels (e.g., elementary, middle, or secondary) should be coded in the occupation corresponding to the highest educational level they teach.
3. Data collection and reporting agencies should assign workers to the most detailed occupation possible. Different agencies may use different levels of aggregation, depending on their ability to collect data.
4. Workers who perform activities not described in any distinct detailed occupation in the SOC structure should be coded in an appropriate “All Other” or residual occupation. These residual occupational categories appear as the last occupation in a group with a code ending in “9” and are identified by having the words “All Other” appear at the end of the title.
5. Workers in Major Groups 33-0000 through 53-0000 who spend 80 percent or more of their time performing supervisory activities are coded in the appropriate first-line supervisor category in the SOC. In these same Major Groups (33-0000 through 53-0000), persons with supervisory duties who spend less than 80 percent of their time supervising are coded with the workers they supervise.
6. Licensed and non-licensed workers performing the same work should be coded together in the same detailed occupation, except where specified otherwise in the SOC definition.

Source: Standard Occupational Classification Manual 2010, Office of Management and Budget

Coding Guideline 1 indicates that coding should be based on the work performed, consistent with Classification Principle 2.

Coding Guideline 2 reflects the reality of many workplaces – that individual workers may perform a variety of activities that could be classified into more than one occupation. This is probably a common situation in smaller establishments. This guideline helps produce consistent treatment of these situations. Except for teachers, the main criterion is the skill level required by the various activities performed in the occupation. For example, a sales manager who also does selling would be classified in the occupation 11-2022 Sales Managers if the managerial activities are regarded as requiring higher skills than the selling activities. If the skill levels are regarded as similar, the share of time spent managing versus selling should be used as a tie-breaker. For teachers, those who teach at more than one level (e.g., elementary and middle school) should be classified at the higher level.

Coding Guidelines 3 and 4 encourage coding at the most detailed occupation level possible, and indicate how residual occupations should be used. Coding Guideline 5 deals with coding of supervisors and the differences in treatment across major occupation groups. Coding Guideline 6 specifies classifying licensed and non-licensed workers performing the same work in the same detailed occupation, unless the SOC definition indicates otherwise.

Revising the SOC

This section provides a brief history of SOC revisions, discusses the reasons for selecting 2018 as the year for the next revision, reviews the revision process and how public input will be solicited, and describes the general timeline.

History of SOC revisions. The SOC was first issued in 1977, with a subsequent revision in 1980. Although the 1980 SOC was the basis for the occupational classification used in the Census of Population and Housing in 1980 and 1990, neither the 1977 nor 1980 SOC was widely used in other Federal data sources.

With the implementation of the 2000 SOC, for the first time all major occupational data sources produced by the Federal statistical system provided comparable data, greatly improving the usefulness of the data. The most recent revision resulted in the 2010 SOC, now in use in Federal statistical programs. The next revision is planned for 2018.

Note that the year referenced in the revision is the year in which the revised SOC is to be implemented in data collection, not the year of its publication.

Over the 30-plus years since the SOC was first introduced, it has remained a four-level hierarchy described earlier. However, between the 1977 SOC and 2010 SOC, the number of major occupation groups has increased from 21 to 23, and the number of detailed occupations has grown from 662 to 840.

The 2018 revision. Why a 2018 SOC? The 2018 revision date is intended to minimize disruption to data producers and users by promoting simultaneous adoption of revised occupational and industry classification systems for those data series that use both. This is best accomplished by timing revisions of the SOC for a year following a NAICS revision. The next such year is 2018, following the 2017 NAICS revision. This date has the additional benefit of coinciding with the beginning year of the American Community Survey's next 5-year set of surveys. OMB intends to consider revisions of the SOC every 10 years from 2018.

The revision process. To conduct the 2018 SOC revision, the SOC Policy Committee will carry out a number of activities:

- Review and possibly recommend revision of the SOC Classification Principles and the SOC Coding Guidelines,
- Consider whether the major occupation group structure should be revised,
- Reach out to organizations and individuals who may wish to provide recommendations for the revision,
- Solicit initial input from the public and Federal agencies through a *Federal Register* ,
- Review initial input and develop proposed recommendations to OMB,
- Solicit public comments on the proposed recommendations, and
- Review comments and make final recommendations to OMB.

OMB will consider the final recommendations and approve the final 2018 SOC. Once the 2018 SOC is approved, the SOC Policy Committee will revise the 2018 SOC Manual and supporting materials, make them available to the public, and continue its role of maintaining the classification, leading up to the next revision.

Soliciting public input. A critical part of the SOC revision process is to solicit input from the public on what should be added, changed, or deleted from the SOC, as well as on the Classification Principles, the Coding Guidelines, and the major occupation group structure. Because the SOC is a Federal statistical standard, the solicitation of input is a formal process open to any organization or individual who wishes to comment.

As with past revisions, OMB will publish solicitations for public comment in the *Federal Register*. As with the 2010 revision, the SOC Policy Committee expects that three *Federal Register* notices will be published:

- The first notice soliciting comments on any proposed changes to the Classification Principles, Coding Guidelines, major occupation group structure, and requesting input on changes to existing occupations or addition of new occupations.
- A second notice requesting comments on the proposed structure for the 2018 SOC, that is, the proposed list of revised occupation codes and titles.
- A third notice issuing the final 2018 SOC structure and summarizing the comments received in response to the second notice.

The SOC Policy Committee is reaching out to producers and users of occupational information to help them understand the revision process and the type of information the SOC Policy Committee needs to develop its recommendations to OMB.

In addition to outreach and soliciting public input, the SOC Policy Committee will conduct its own research and information gathering. This will include understanding the experience of Federal statistical agencies in using the 2010 SOC in data collection, presentation, and analysis; outreach to Federal agencies with expertise in particular occupational areas; analysis of the comments and recommendations received from public input; and research using a wide range of resources from businesses, business and professional associations, labor unions, academics and other research organizations, statistical data, and other sources.

General timeline for the SOC revision. Revising the SOC is a multi-year process -- the 2010 revision took about 5 years. For the 2018 revision, the SOC Policy Committee began planning in early 2012, and expects to solicit public input through the first *Federal Register* notice in spring 2014. This process is expected to lead to publication of the proposed revision for public comment through the second *Federal Register* notice in spring 2015 and publication of the final 2018 SOC structure in spring 2017.

Input Requested by the SOC Policy Committee

In considering recommendations for the 2018 revision – especially recommendations for new occupations – the SOC Policy Committee needs information to help it evaluate the recommendation in light of the Classification Principles and the Coding Guidelines.

The following types of information are particularly important:

1. Nature of the work performed. What duties do the workers in the occupation perform? Which duties are common to all jobs in the occupation and would therefore appear in the “required

duties” statement in the occupation definition (as illustrated in Figure 1). What duties are frequent but not performed by all workers and might be identified in “may” statements in the occupation definition. Are there supervisory or management duties? If so, what types of workers are supervised and what types of management activities are performed? For revisions to existing occupations, is the work described in the SOC definition accurate and up to date?

2. How the work performed is distinct from other detailed occupations in the SOC. Does the same or similar work appear in other SOC occupations? If so, how is the proposed occupation distinct? What changes should be made to existing SOC occupations that have the same or similar work?
3. Job titles. What job titles are commonly used by workers in this occupation? Are these titles unique to the proposed occupation? Are titles listed in the Direct Match Title File actually in use? Are there other titles that should be included in the file?
4. Indications of the number of jobs or workers in the occupation. Information on employment size and expected growth is helpful in evaluating the proposed occupation against Classification Principle 9 concerning collectability.
5. Types of employers. In what industries does this occupation occur? This information is useful in understanding the nature of the work performed as well as evaluating collectability.
6. Education and training. What education and training are typically required for workers to be able to perform this occupation? What types of schools or training providers offer this education or training? How long does the education or training take? What degrees or other credentials are generally required, if any? Identification of specific education and training programs and institutions is helpful.
7. Licensing. Are licenses usually required? Identification of specific licenses and licensing agencies is helpful.
8. Tools and technologies. What tools and technologies are generally used by workers in performing the occupation? Are the tools and technologies mentioned in existing SOC occupation definitions accurate and up to date?
9. Professional or trade associations and unions. Are there professional or trade associations or labor unions related to the proposed occupation? Identification of specific associations or unions is helpful.

How to provide input to the 2018 SOC revision

The comments and recommendations from organizations and individuals who respond to the *Federal Register* notices are likely to comprise the bulk of the information the SOC Policy Committee will use in developing recommendations to OMB. Thus, the SOC Policy Committee encourages potential commenters to consider the following activities:

1. Carefully review the Classification Principles and Coding Guidelines. As these provide benchmarks for the SOC Policy Committee’s reference in developing its recommendations. Comments that reflect these principles and guidelines are more relevant.
2. Carefully review the elements of a detailed SOC occupation, shown in Figure 1 above.
3. Review the “***Input Requested by the SOC Policy Committee***” section above. Provide specific and detailed information and documentation that addresses — as much as possible — the types of information described in that section.

4. Provide information on the nature of the work performed, including specific activities and tasks. This is the most important type of information. Indications of activities that are required of all workers and those that “may” be performed by the worker are also helpful.
5. Prepare well-organized and concise comments. Remember that the SOC Policy Committee will likely be reviewing hundreds of comments.

All comments should be submitted as responses to the *Federal Register* notices, using the submittal procedures described in the notices. This will ensure comments and recommendations are included on the dockets that the SOC Policy Committee will review.

The SOC Policy Committee encourages those interested in commenting, as well as others, to monitor the SOC revision process on the SOC website at www.bls.gov/SOC. On this site, you can subscribe to receive e-mail updates. You can also review SOC materials, including the 2010 SOC, the Direct Match Title File, the 2010 SOC Classification Principles and Coding Guidelines, the *Federal Register* notices for the 2010 revision, and more.

References

Office of Management and Budget statistical standards,
http://www.whitehouse.gov/omb/inforeg_statpolicy

SOC website, www.bls.gov/SOC. In particular on this page see:

- 2010 SOC Manual
- 2010 Revision *Federal Register* notices
- Direct Match Title File
- “Revising the Standard Occupational Classification System for 2010,” Theresa Cosca and Alissa Emmel, *Monthly Labor Review*, August 2010.
- “The 2010 SOC: A classification system gets an update,” Alissa Emmel and Theresa Cosca, *Occupational Outlook Quarterly*, Summer 2010.

Some key Federal occupational data sources that use the SOC:

- American Community Survey, Census Bureau, <http://www.census.gov/acs/www/>
- Current Population Survey (Census Bureau and Bureau of Labor Statistics), <http://www.census.gov/cps/> and <https://www.bls.gov/cps/>
- Census Bureau occupation codes, crosswalks, and indexes, <http://www.census.gov/hhes/www/ioindex/>
- Employment Projections, Bureau of Labor Statistics, <https://www.bls.gov/emp/> and *Occupational Outlook Handbook* <https://www.bls.gov/ooh/>
- National Compensation Survey, Bureau of Labor Statistics, <https://www.bls.gov/ncs/>
- Occupational Employment Statistics, Bureau of Labor Statistics, <https://www.bls.gov/oes/>
- Occupational Safety and Health Statistics, Bureau of Labor Statistics, <https://www.bls.gov/iif/>
- O*NET, Employment and Training Administration, <http://www.onetcenter.org/>