Classifying jobs: From the Dictionary of Occupational Titles (DOT) to the Standard Occupational Classification (SOC)

The Dictionary of Occupational Titles (DOT) was first published in 1939 by the Department of Labor and classified jobs into over 12,000 titles based on the tasks performed and industry designation. The DOT was created under the sponsorship of the Employment and Training Administration (ETA) and was last updated in 1991. The DOT was replaced by the Occupational Information Network (O*NET), and ETA no longer supports the DOT. A copy of the fourth edition of the DOT is available.

The Standard Occupational Classification (SOC) system was first introduced in 1977 and classifies jobs based on work performed, and required skills, education, training, or credentials. However, even after the SOC was introduced, many federal agencies continued to use other occupational classification systems, such as the DOT or the Occupational Classification System (OCS). In 2000, the SOC system became the mandated federal statistical standard and continues to be required for use by federal statistical agencies classifying workers into occupational categories for the purpose of collecting, calculating, or disseminating data. Standardizing the classification system used in occupation-based surveys allows users the ability to compare data across federal surveys. For more information on the development and design of the SOC system, see *Revising the Standard Occupational Classification system*.

Occupational requirements

In addition to classifying jobs, the DOT provided information on the requirements of jobs. It has been the primary source of occupational information used by the Social Security Administration (SSA) in their disability adjudication process. The need for an up-to-date source of this information led to establishing the Occupational Requirements Survey (ORS). The ORS is produced by the Bureau of Labor Statistics (BLS) and SSA intends to use the ORS, along with information from other occupational sources, to update its vocational rules.[1] For more information on the development and design of the ORS, see the ORS research page and ORS Handbook of Methods.

Data users familiar with the DOT may benefit from understanding the differences between the DOT and SOC now that ORS, and other occupational sources, must use SOC to classify occupations. Exhibit 1 displays a comparison of the two systems.

Exhibit 1. Comparison of DOT and SOC

Characteristics	Dictionary of Occupational Titles (DOT)	Standard Occupational Classification (SOC)
Occupations vs jobs (titles)	Classified jobs into over 12,000 job titles.	Classifies jobs into over 800 occupations. The SOC lists job titles that are commonly used and associates them with a SOC code. Around 6,500 job titles are included. [1]
Number of jobs	Job incidence by DOT classification is no longer available.	The OEWS program publishes the number of workers by SOC on an annual basis.
Available occupational data	• Specific vocational preparation • Environmental conditions • Physical demands	Published by SOC in the ORS annually [2]: • Cognitive and mental requirements • Specific vocational preparation • Environmental conditions • Physical demands
Update schedule	No longer updated	Revised every 8-10 years
Developed and maintained by	Department of Labor's Employment and Training Administration	SOC Policy Committee comprised of representatives from Federal agencies that collect occupational statistics or have expertise in occupational classification including, but not limited to the Bureau of Labor Statistics, Census Bureau, Defense Manpower Data Center, Employment and Training Administration, and Office of Personnel Management.

[1] See the SOC Direct Match Title File at www.bls.gov/soc/2018/home.htm#DMTF.
[2] Final ORS estimates are collected and published over multiple years, see 'wave' definition in the ORS Handbook of Methods.
Source: U.S. Bureau of Labor Statistics, Occupational Requirements Survey.

The ORS publishes occupational requirements by SOC and employment numbers are available through the Occupational Employment and Wage Statistics (OEWS). Examples of how the ORS and OEWS can be combined using SOC are available in Calculating occupational employment for job requirements.

The SOC maintains a Direct Match Title File (DMTF) that lists associated job titles for detailed SOC occupations. Each of these titles is a direct match to a single SOC occupation. All workers with a job title listed in the DMTF are classified in only one detailed SOC occupation code. For example, because a "criminal law professor" would only be classified under 25-1112 Law Teachers, Postsecondary, it is considered a direct match. However, because a title such as "painter" could be classified in more than one occupation, including 27-1013 Fine Artists, Including Painters, Sculptors, and Illustrators; 47-2141 Painters, Construction and Maintenance; or 51-9124 Coating, Painting, and Spraying Machine Setters, Operators, and Tenders, the title "painter" is not a direct match. There are currently over 6,500 job titles in the 2018 Direct Match Title File.

Additional resources:

- Latest news release
- Archived ORS news releases
- Handbook of Methods
- Collection manuals
- Factsheets

Articles:

- The Economics Daily (TED) articles on ORS
- Minds at work: what's required according to the Occupational Requirements Survey (PDF)
- A look at teachers' job requirements, employer costs, and benefits (PDF)
- Occupational Requirements Survey: Third wave testing report (PDF)
- Occupational Requirements Survey: results from a job observation pilot test
- The Occupational Requirements Survey: estimates from preproduction testing

For additional information on occupational requirements see the ORS homepage or download the ORS complete dataset to explore the latest estimates.

[1] See SSA's Occupational Information Systems (OIS) project.