
Occupational Information System Project

The Need for Occupational Information

Our disability claims policy and the process to implement this policy require that we evaluate medical, and in most cases, work information. When we evaluate work information, we take into account work in the national economy to determine whether a claimant can do his or her past work or adjust to other work as it is performed in the national economy. Our main source of occupational information, the Dictionary of Occupational Titles (DOT), was developed by the Department of Labor (DOL) in 1938.

However, the DOL stopped updating the DOT in 1991. In order to make accurate decisions, we must have information that reflects current occupations and their requirements. As a result, we are developing a new Occupational Information System (OIS), which will replace the DOT as the primary source of occupational information SSA staff use in our disability adjudication process.

Our Vision for the New OIS

Our new OIS is a collection of occupational-related data from multiple sources, which will be housed, accessed, and operationalized through an online platform called the Vocational Information Tool (VIT). Once completed, the new OIS will provide updated occupational information measured and defined in a way that meets the following SSA program needs:

- The OIS will define work as it is generally performed in the national economy; it will describe the ways in which most workers carry out the typical tasks associated with the critical functions of their occupations.
- The OIS will combine Bureau of Labor Statistics (BLS) data with task information from the Department of Labor Occupational Information Network (O*NET), military occupations from the Military Occupational Classification (MOC), and data from BLS' Occupational Employment Statistics into a web-based, publicly available, information technology platform known as the VIT. BLS' Occupational Requirements Survey (ORS) will be the primary source of information on the requirements of work.
- We expect to publish our first OIS in 2020 and to update OIS every five years.
- We are considering expanding beyond DOT information by including descriptions of the basic mental and cognitive requirements of work. BLS is testing these elements.

The earliest we would anticipate including information about the mental and cognitive demands of work in the second release of the OIS in 2024.

The Occupational Requirements Survey (ORS)

In July 2012, we entered into an interagency Agreement (IAA) with the Bureau of Labor Statistics (BLS) to test the feasibility of using their National Compensation Survey (NCS) to collect new occupational data for use in our disability adjudication process.

BLS used the NCS infrastructure to develop the ORS. Following three years of successful testing and improvements to the survey and methods, BLS began production data collection in 2015.

We worked closely with BLS to: 1) identify the job requirements most important to us in our disability adjudication process, such as strength and other physical requirements and necessary skills, and 2) to collect and report those elements to mirror, as closely as possible, what adjudicators currently use in the DOT. However, the structure of the ORS is drastically different from the DOT, which requires planning to implement.

- The DOT created its own taxonomy that includes about 12,000 detailed occupations. No other Federal agencies use the DOT's taxonomy.
- BLS is using the O*NET Standard Occupational Classification (SOC) to classify the data. The SOC is the OMB-mandated classification system for Federal statistical agencies, and its use will facilitate sharing research and information among federal agencies. The SOC reflects the occupational structure of the US economy and classifies all occupations in which work performed for pay or profit. The O*NET SOC contains 974 occupations.
- As a result, the ORS will classify occupations at a more aggregated level than in the DOT.

On November 29, 2017, we received the second year of production data collection. Our first set of published data was received last December 2016, which included information from approximately 6,500 employers, with full or partial data on 160 SOC-level occupations. After 3 years of data collection, BLS estimates that they will publish data on 431 SOC codes, accounting for 90 percent of workers in the economy. BLS will not be able to capture the job requirements of all 974 SOC codes, because some of the occupations are rare.

Ongoing Data Collection

Based on BLS research on the shelf life of occupational data, we are planning a 5-year data refresh cycle, beginning in September 2018. BLS has proposed a sampling approach that will target rarer occupations in the first two years of the refresh, which they estimate will result in more publishable SOC-level occupations at the end of the five year period.

OIS Implementation Plan

Initially, OIS development started with the goal of supporting current policy with minimal change. However, as SSA and BLS have moved through testing and the first year of production collection and learned more about the data, we have determined that larger changes to policy will be necessary to support the data.

In order for disability adjudicators to use the new OIS in our program, we need:

- 3 years of production data from BLS
- The Vocational Information tool (VIT)
- Revised policy and regulations

Based on what we now know, following receipt and analysis of the first BLS data release (year 1 of 3), we plan to implement the OIS in calendar year 2020 with the publication of final regulations, and the introduction of a Vocational Information Tool (VIT) that adjudicators will use to decide claims.

Vocational Information Tool

The OIS will combine BLS data (ORS and NCS) with task information from O*NET, MOC, and data from BLS' Occupational Employment Statistics into a web-based, information technology platform called the VIT.

Enhancing Occupational Data with Mental and Cognitive Work Demands

The DOT contains discrete and well-established descriptions of the physical demands of occupations, but it does not provide information on the mental and cognitive requirements. Our work with BLS allows us the unique opportunity to consider including descriptions of the mental and cognitive requirements of work in the new OIS.

To ensure that BLS collects the mental and cognitive data elements that are most useful in disability adjudication, we contacted disability program experts for help. We organized an internal workgroup of disability vocational policy experts and contracted psychiatric and psychological consultants to identify the mental and cognitive occupational descriptors

that we need to adjudicate disability claims. We started with a long, all-inclusive list of job requirements and worked it down to a manageable and collectible set.

BLS started testing the collection of the new mental-cognitive elements in 2014. Following testing, we responded to feedback from BLS field economists who collect the data and worked with BLS to revise the questions. The new set of questions were developed, then tested by SSA to better define cognitive concepts, definitions and thresholds needed for adjudication.

BLS will test the wide-scale collection of these new questions in the third year (production data collection) beginning in the Fall of 2017. If the testing is successful, the new questions would debut in the first year of the five-year refresh cycle of data collection in FY 2018. BLS plans to publish data each year of the five-year refresh cycle and therefore we are estimating we will have two-years of data on the mental/cognitive demands of work by the end of calendar year 2020.

More Information on the OIS project

For more information regarding the development of the OIS, please contact us at ordes.ois@ssa.gov.

A Brief History of the Occupational Information System Project (page)

Our Activities in Fiscal Year 2012-2019

In FY 2012-2019, list the following activities:

FY 2012

- In July 2012, we entered into an interagency Agreement (IAA) with the Bureau of Labor Statistics (BLS) to test the feasibility of using their National Compensation Survey (NCS) to collect new occupational data for use in our disability adjudication process.
- In FY 2012 and FY 2013, we identified data elements that capture the physical demands and environmental conditions of work along with the necessary vocational preparation. We also organized an internal workgroup of disability vocational policy experts and contracted psychiatric and psychological consultants to develop data elements that describe the mental and cognitive requirements of work, which is information not contained in the DOT.

FY 2013

- In FY 2013 BLS designed and carried out a series of tests to assess the feasibility of using the National Compensation Survey (NCS) platform to collect the occupational data we need.
- BLS conducted three phases of testing which started with a small proof-of-concept collection in the Washington, DC, Metro Area and expanded to a broader-scale collection across six cities.

FY 2014

- BLS performed additional testing to refine protocols and methods and to ensure that they accurately and consistently capture the occupational data.
- BLS also tested the collection of the new mental and cognitive work requirements of work.

FY 2015

- In FY 2015, BLS conducted a nationwide pre-production test to evaluate all aspects of the survey in preparation for production data collection, and released a limited amount of data to us. BLS also conducted further testing of the new mental and cognitive data elements and directly observed a select number of occupations to help determine the reliability and validity of the data collection methodology.
- In September 2015, BLS began the first year of ORS production data collection.

FY 2016

- In FY 2016, the Bureau of Labor Statistics (BLS) finished collecting the first year of occupational data and started collecting the second year of production data in May 2016 and continued analysis of the pre-production test data to improve collection methods and ensure data quality.
- BLS conducted research into the shelf life of occupational data to help us identify an appropriate update cycle that will keep our OIS current while maintaining cost efficiency.

In FY 2017

- On December 1, 2016, the Bureau of Labor Statistics (BLS) published the first set of data. We will have our first complete set of occupational data in 2019 after BLS completes the third year of data collection
- After extensive testing of the mental and cognitive data elements, a new set of questions were developed, then tested by SSA to better define cognitive concepts,

definitions and thresholds needed for adjudication. BLS will test the wide-scale collection of these new questions in the third year (production data collection) beginning in the Fall of 2017. If the testing were successful, the new questions would debut in the first five-year refresh cycle of data collection in FY 2018.

In FY 2018

- BLS published the data from the second year of production data collection on 11/29/17
- BLS will complete the third year of production data collection and begin collecting the first year of the first five-year refresh cycle.
- BLS will continue ongoing sample design research.
- We will use the first two years of data to inform decisions about modernizing the medical-vocational regulations.
- We will complete the development and design of the VIT platform based on policy changes, user testing, and research results.

In FY 2019

- BLS will complete the fourth year, and begin the fifth year, of production data collection as part of the first five-year refresh cycle.
- BLS will publish the data from the third year of production data collection from the initial three-year data collection cycle and complete sample design research for the refresh cycle.
- We will finalize updates to regulations and policy needed to support the new OIS, and design a training and rollout scheduled with an eye toward implementing the new OIS in calendar year 2020.

