

## Skills-Based Employment Projections: Software Release v2.0

### **What is different in SBP v2.0?**

The Skills-Based Projections (SBP) software utilizes state occupational projections and O\*NET as the two primary input data sources. State analysts produce occupational projections for a variety of time horizons (two-year and ten-year) and geographies (statewide, local workforce board areas, and metropolitan statistical areas). Analysts typically estimate current employment and projected employment for more than seven hundred occupations. This cycle of activity is either annual or biennial depending on the demands within the state.

O\*NET is used in the generation of a broad array of career information products. It provides more than one hundred measures of knowledge, skills and work activities (collectively referred to as KSW) specific to 726 SOC-based occupations. Simply, the SBP software uses the SOC-based occupation to attach state employment projections to KSW's in the O\*NET database. For each specific knowledge, skill and work activity, the SBP creates a set of links to all occupations for which it is required. The SBP then estimates base and projected skill demand by summing the employment levels for the linked occupations.

SBP v1.0 was developed as a pilot project under the administration of the Projections Managing Partnership and used O\*NET 7.0. The initial release of the software in April 2005 generated much user interest and, consequently, the US Department of Labor, Employment and Training Administration made monies available to proceed with a second release. SBP v2.0 includes O\*NET v11.0, the most up-to-date version at the time.

- While the KSW characteristics in the prior O\*NET databases were populated mostly by occupation analysts, more recent updates reflect the actual work experiences of the current labor force.
- Updating to O\*NET v11.0 assures continued consistency between the SBP and other O\*NET-based LMI products and resources.
- The expanded O\*NET v11.0, will enable the system to report projection data for more occupations, enhancing its capabilities for exploring and analyzing state and regional skill trends.
- O\*NET v11.0 includes new data components such as Tools & Technologies and Detailed Work Activities that were not available in earlier versions. While funding did not permit the direct incorporation of these pieces in SBP v2.0, it is possible to link results from the software to these information sources outside the system.

## Why update to O\*NET v11.0?

- Since v7.0, job requirement data has been updated for more than 400 occupations.
- More of the state's projection data will be imported by the system, which now includes thirty-four occupations that had no data in v.7.0. Only seven non-residual SOC occupations remain without job requirement data. See Table 1-1.
- Beginning with v10.0, O\*NET has upgraded its occupational taxonomy to O\*NET 2006, resulting in even greater correspondence between OES SOC and O\*NET-SOC. A summary of the taxonomy update is available at [http://www.onetcenter.org/dl\\_files/UpdatingTaxonomy\\_Summary.pdf](http://www.onetcenter.org/dl_files/UpdatingTaxonomy_Summary.pdf).
- With O\*NET v11.0, more occupations will be represented in the SBP analysis results. In v7.0, 39 non-residual occupations had no skill data and almost 150 occupations did not meet the moderate cut-off for any job requirement. With the extensive revision for v11.0, only 61 occupations failed to meet the default criteria for at least one area of skill, knowledge, or work activity. These "failed" occupations mostly require little or no preparation, education or experience.
- In all, our upgrade to O\*NET v11.0 means that an additional 118 occupations will contribute their employment to the skill demand estimate, compared to v7.0. This set of occupations together accounted for over 15% of the total US workforce in 2005.

**Table 1-1**  
**Non-Residual SOC Occupations Added Since O\*NET v7.0**

	Release	SOC Code and Title
1.	8.0	19.4093 Forest & Conservation Technicians
2.	8.0	25.1011 Business Teachers, Post2ndry
3.	8.0	25.1031 Architecture Teachers, Post2ndry
4.	8.0	25.1051 Atmospheric, Earth, Marine, & Space Sci Teacher,Post2ndry
5.	8.0	25.1053 Environmental Science Teachers, Post2ndry
6.	8.0	25.1064 Geography Teachers, Post2ndry
7.	8.0	25.1081 Ed Teachers, Post2ndry
8.	8.0	25.1082 Library Science Teachers, Post2ndry
9.	8.0	25.1111 Criminal Justice & Law Enforcement Teachers, Post2ndry
10.	8.0	25.1112 Law Teachers, Post2ndry
11.	8.0	25.1113 Social Work Teachers, Post2ndry
12.	8.0	25.1122 Communications Teachers, Post2ndry
13.	8.0	25.1126 Philosophy & Religion Teachers, Post2ndry
14.	8.0	25.1192 Home Economics Teachers, Post2ndry
15.	8.0	25.1193 Recreation & Fitness Studies Teachers, Post2ndry
16.	8.0	27.1014 Multi-Media Artists & Animators
17.	8.0	41.2012 Gaming Change Persons & Booth Cashiers
18.	9.0	13.1061 Emergency Management Specialists
19.	9.0	19.3022 Survey Researchers
20.	9.0	23.2091 Court Reporters
21.	9.0	31.9011 Massage Therapists
22.	9.0	39.5094 Skin Care Specialists
23.	9.0	43.5053 Postal Service Sorters, Processors, & Processing Machine Ops
24.	9.0	47.4091 Segmental Pavers
25.	9.0	51.2092 Team Assemblers
26.	10.0	17.2031 Biomedical Engineers
27.	10.0	21.1013 Marriage & Family Therapists
28.	10.0	21.1015 Rehabilitation Counselors
29.	10.0	31.9094 Medical Transcriptionists
30.	10.0	33.1011 First Line Supervisors, Managers of Correctional Officers
31.	10.0	35.2013 Cooks, Private Household
32.	10.0	53.2022 Airfield Operations Specialist
33.	11.0	49.2098 Security & Fire Alarm Systems Installers
34.	11.0	29.9012 Occupational Health and safety Technicians

**Non-Residual Occupations without O\*NET Skills, Knowledge & Work Activity Data**

1.	11.1031 Legislators
2.	15.1011 Computer & Information Scientists, Research
3.	39.5093 Shampooers
4.	45-1012 Farm Labor Contractors
5.	47.3016 Helpers, Roofers
6.	51.2091 Fiberglass Laminators & Fabricators
7.	53.1011 Aircraft Cargo Handling Sups

**How to upload state data into the SBP v2.0 software to produce skills projections using O\*NET v11.0?**

If you would like to import your occupational projections into the Skills-Based Projections (SBP) System, please follow the instructions posted at <http://dev.projectionscentral.com/sbproj/sbprojections.html>. For reference from within the SBP software, see “Step 1: Manage Employment Projections”. If you decide to use the occupational projections files that you processed in SBP v1.0, those files should be re-imported in the SBP v2.0 software in order to fully utilize the value-added features of O\*NET v11.0.

## **What should state analysts do with skills projections that were produced using SBP v1.0 (O\*NET v7.0)?**

The implementation of SBP v2.0 on the production server for the Projections Managing Partnership did not delete any of the files that state analysts created using SBP v1.0. The latter, in fact, are still displayed on the various SBP software screens with the appropriate projections time horizons. However, analysts should keep in mind that SBP v1.0 software used O\*NET v7.0 that, in many ways, is quite different from O\*NET v11.0. For a full description of the differences between these two versions of O\*NET, please refer to the aforementioned section, **Why update to O\*NET v11.0?**

The SBP project team strongly discourages state analysts from comparing the employment projections results generated with SBP v1.0 and SBP v2.0 because the two versions of O\*NET (v7.0 and v11.0) are distinctly different. If the goal of the analyst is to compare the skills projections across different time horizons, then we recommend that the state analyst should re-run the prior occupational projections files through the import and analysis modules of SBP v2.0. The results of this re-run can be legitimately compared to the results of more recent projections files.

## **Do you need technical support?**

In the past, state analysts have actively offered technical support to one another for the implementation of the Skills Based Projections (SBP) software. The development of community expertise has been facilitated by the availability of the Skills-Based Projections listserv as a forum where analysts post questions and solicit response from their peers. Directions for subscribing to, and using, the listserv can be found at: <http://dev.projectionscentral.com/sbproj/forum.html>

In addition, the Projections Managing Partnership (PMP) understands that some types of technical support require intervention from the developers of the Skills-Based Employment Projections (SBP) software. Unfortunately, funding constraints limit the initial availability of technical support from the developers to a window of thirty days, extending from May 7, 2007 to June 7, 2007. During this period, the software developers will be monitoring the SBP listserv and responding to inquiries that are specific to their expertise. At the conclusion, the PMP will assess the nature and cost of the demand for this service and discuss with the project group the options for ongoing developer technical support. Once again, directions for subscribing to, and using, the listserv can be found at: <http://dev.projectionscentral.com/sbproj/forum.html>