



## **SkillTRAN LLC**

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### ***Software & Internet Services for Vocational Decisions***

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May 23, 2014

Ms. Nora Kincaid  
BLS Clearance Office  
Division of Management Systems  
Bureau of Labor Statistics, Room 4080  
2 Massachusetts Avenue NE  
Washington, DC 20212

RE: Occupational Requirements Survey Comment Request

Dear Ms. Kincaid:

Thank you for the opportunity to comment on the published request and for obtaining the ORS documents a while back. These are helpful to gaining a better understanding of the process of the ORS. I do have a few comments, grouped into the general areas as suggested.

### **Data Collection Utility**

The various data elements to be gathered in this study are essential for more accurate claims adjudication by the Social Security Administration (SSA). The impact of this kind of new data is also highly significant in many other industries, including both public and private venues such as: State and Federal Vocational Rehabilitation, Veterans Rehabilitation, Workers Compensation, Special Education, Career Training (Secondary, Community College, and University), Work Force Development, Long-Term Disability Insurance, Career Counseling, Outplacement, and various civil proceedings (such as wrongful death, marital dissolution, personal injury, discrimination, wrongful termination, medical malpractice, and product liability). The stakes are high, as the amount of money involved in all of these kinds of situations is highly significant and an ever-increasing economic burden. Current, high quality data is essential to the equitable resolution of both disability claims management and return-to-work efforts.

### **Estimate of Burden – Validity of Methodology and Assumptions**

All collected data must meet the burden of both scientific and legal scrutiny. The legal community is becoming more sophisticated in its understanding of various data sources.

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It would not surprise me that results would be subjected to a "Daubert challenge". This should not be unduly burdensome to BLS provided that all factors for which data are collected have a solid foundation in established research, that the methods and procedures are clearly defined and documented so that the data collection effort could be replicated, that error rates are reported, that standards for data collection be well established and carefully followed, and that the results become accepted and useable by the disability industry.

The current and historic focus of the NCS is on industry/establishment sampling rather than occupational sampling. In several supporting papers and documents, it became clear that it was difficult to figure out which occupations are more likely to be found in a specific establishment/industry. There is an excellent opportunity for NCS to turn this around by using the guidance of the staffing patterns established from the existing OES program. The OES sampling frame is 1.2 M employers – ORS production is only 2.5% of that (30K establishments). Use the excellent known staffing patterns of the OES program to guide the identification of occupations likely to be found via the NAICS code for the establishment, then select the specific occupations to inquire about using the guidance of missing data needing to be collected. This should maximize the likelihood of finding the occupation in the establishment, minimize over- or under-sampling at the occupational level, and possibly also help the OES program to strengthen what is actually found.

Look at your real-time needs for missing occupational sampling to guide selection of the occupations to survey in an establishment. This can all be done proportionately using that OES staffing pattern as a guide.

The geography of the sampling frame may be inadequate for certain occupations which are regional/industry-specific in nature. Study this possibility using the Location Quotient values embedded in the OES data.

Time allotted for collection of Cognitive, Physical, and Environmental values is likely to be significantly underestimated. Branched questioning will help but this is going to take more time than estimated.

The mental-cognitive factors are a composite cluster of multiple construct dimensions. There are simply too many different constructs implied in the existing definitions. See the notes below in the next section for specific problems and suggestions. Generally, consider breaking these out into discrete individual constructs, then later aggregate them if really necessary. The Complexity factor itself is too complex!

How do NCS observations of full-time and part-time work compare to values reported by the Current Population Survey? Accurate information here is important to the SSA evaluation of a person's ability to engage in work at a level consistent with its definition of Substantial Gainful Activity (SGA).

How does the pre-production sample, once actually collected, compare to the expected staffing pattern/Occupational Density seen using OES data?

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## **Suggested Enhancements for Quality, Utility, and Clarity**

Occupations should be observed as performed and measured where such is possible to have greater scientific rigor. It would not be unexpected for an attorney to challenge the NCS method as "hearsay evidence". At least go out on site and do some actual measurement at each job site to confirm what HR professionals assert. Thorough evaluation of this is critical, particularly in production and trade occupations.

Up to this point, the disability industry has not been able to readily embrace the O\*NET (8-digit SOC) for a variety of reasons, including perceived flaws in both the data collection methods used (self-report), poor definition of various factors, fuzzy scales that do not correspond to real world medical and testing terminology, and large standard errors of measurement due to the over-aggregation of occupational definitions into a single 8-digit O\*NET-SOC group.

Among the 841 6-digit SOC groups (OES), 133 of these groups cross-reference to 77% of all the occupations in the older Dictionary of Occupational Titles (DOT). This averages 74 DOT codes per O\*NET-SOC group, which is/will be the greatest source of variation for variables that are essential to the disability evaluation process. The danger is that without further disaggregation beyond the O\*NET-SOC level, the standard error for many factors will be so great as to render the new data useless. One possible alternative is to report collected data for an occupation at the NAICS industry level, but this will require greater than a 2-digit NAICS level ... more likely 3-4-5 digits of NAICS depth. This will impact sample size requirements, but it is likely to be essential if the data is to be useable. Preliminary research can be done to determine the depth of NAICS coding needed.

Will work tasks be identified by the O\*NET Detailed Work Activities or by the task statements in the O\*NET description, then confirmed in the interview? Take the interview opportunity to confirm that O\*NET's newest Intermediate Work Activities (IWA) are appropriate as well. Doing this is critical to establish use of the IWA in transferable skills analyses later needed by SSA. Will these tasks be further captured/reported by the specific NAICS industries in which they are captured?

It would be interesting to see how the ORS establishment size sample compares to Country Business Patterns data, which also reflects the universe of establishments.

Consider alternate or supplementary methods of data collection, particularly in remote areas/occupations, including trained, contracted personnel who can travel to remote locations to capture needed information.

Compare actual measurement of required values vs. estimates obtained from HR personnel and from small business owners. Both OSHA and NIOSH measure factors at establishment locations. So can you.

What specific studies will be done to collect data for SSA's Occupations of Interest?

With 244 of the 8-digit occupations (25%) in one employment class size, a focused survey of these occupations should be done first to collect data needed quickly and eliminate it from the PSO pool. The result should be more effective sampling for the remaining 75% of the 8-digit occupations.

The "Field Economist Reference Guide" is really an updated *Revised Handbook for Analyzing Jobs*. It is essential that this be fully fleshed out and vetted by the job analysts during this pre-production study so that this becomes both the production guide and the final definition of what each factor really means. The guide should include a glossary of terms, definitions, and acronyms. Each level of each factor should have a variety of examples to guide the job analyst in selecting an appropriate value.

**ORS Form 4 PPD-4P** (and all similar forms):

As a note-taking instrument, it is unclear how ratings for each of the selected occupations (particularly if there are 8 of them) is to be gathered, noted and reported for each of the factors for each of the 8 occupations. It seems more appropriate to use one form per occupation per establishment.

**ORS Form – page 2**

Not sure what the Job Code is ... DOT code? Some other internal system?  
What is Work Setting?

Educational requirements – Education obtained in the US or from some other country?

Read and write – English is assumed but not specified. Be clear.

Language proficiency – is this English (specify this!) or in one's own native language?

Professional certifications area should migrate to prior page. Note that this will vary greatly from state to state.

Will the "Job Tasks/Notes" area be prefilled from existing O\*NET-SOC information? Will these be the detailed work activities (DWA) or intermediate work activities (IWA)? Or task statements from O\*NET?

**ORS Form – page 4 – Cognitive Elements**

Page 4 heading "PHYSICAL DEMANDS" should not be present.

Questions 1, 2, and 3 are "COGNITIVE ELEMENTS".

Questions 4, 4a, 4b, and 4c should be labeled as "SOCIAL ELEMENTS".

**Cognitive element 1 - Complexity.** The levels shown and particularly the definitions given are messy. There are too many constructs lumped together in this area. While the constructs may be acceptable, data should be collected for each construct. Later, collected data can be aggregated as appropriate if necessary. But first, collect at the deconstructed level. The constructs seem to cover multiple, simpler dimensions:

- Number of tasks (few vs. multiple)
- Relationship of tasks to each other – which implies additional skill sets might be needed to perform this occupation because of its diversity of task requirements
- Reasoning required (rote vs. fact-based vs. analysis vs. interpretation)
- Temperament (from old DOT) – Judgment
- Data – Compare, Copy, Compute, Compile, Analyze, Coordinate, Synthesize

**Cognitive Element 2 – Close Control.** Again, these are muddled, multiple constructs:

- Autonomy (Limited vs. Lots)
- Temperament (from old DOT) – Tolerances – precise/strict or not
- Quantity vs. quality
- Level of supervision required
- Level of discretionary choices (highly structured vs. general parameters only)

**Cognitive Element 3 – Predictability**

- Temperament R or V (old DOT) – Routine/Repetitive vs. Variety
- Cycle time – short, repetitive vs. lengthy
- Reaction needed – swift response to alerts vs. making needed adjustments
- Goal Control – Pre-set production requirements (quota) vs. worker-based goal setting, planning, and achievement
- Consider other factors including ingenuity, responsibility, and goal setting.
- There should be capture of elements like swing shifts, over-time, seasonal demands, though these may be establishment specific rather than occupation-specific.

**Cognitive Element 4a – Collaboration**

There are at least two elements here – contrast production line dependencies to think-tank dependencies. Does achievement of one’s work impact the production of another? How does collaboration occur? By phone? In person? Email? Text/Chat? Writing? Video?

**Cognitive Element 4c – Type of Contact**

This makes me think back to the mix of elements used in the DOT Data-People Worker Functions with an additional mix of Temperament I (Influencing) and a few GOE interests added as well. This all seems very sloppy.

The old DOT People scales might be helpful for guidance, particularly if updated and re-worded. Old words were: Mentoring, Negotiating, Instructing, Supervising, Diverting, Persuading, Speaking-Signalling, Serving, and Taking-Instructions/Helping. There are constructs suggested here for problem-solving and taking charge/leading. There are just too many constructs lumped together in the suggested categories. Rate these dimensions separately, then aggregate later if needed.

**PHYSICAL DEMANDS** – ORS page 5 – Put all instructions in same column

“General Public: People not seen on a regular basis, such as retail customers” is a note that is orphaned from page 4 – keep this definition together with its two siblings: Coworkers and Familiar Contacts on page 4.

**In general** – Add some columns to this form so that quantitative data can be collected for at least one occupation at a time. Add fields to capture the amount of time spent in each activity, by hours or minutes.

**Keyboarding** – Is there a minimum WPM/data entry requirement?

**Writing** – What kind of writing: Handwriting? Creative? Customer Notes? Correspondence?

**Communicating Verbally** (presumed by Talking) – Which language? With whom: Coworkers, Supervisors, Public, or Vendors?

### **Hearing and Vision Requirements**

What about responsiveness to non-verbal hand signals? – Really important in a noisy environment!

What happened to Depth Perception – DOT says needed in 50% of all occupations

What about "Accommodation ... the ability of the eye to focus near then far then near again. – DOT rated this present in nearly 40% of occupations.

**Manipulation** – All these need to be defined in very clear ways. Have enough columns to collect data for one/both rather than blank space.

**Lifting/Carrying** – How is this going to be measured? This is simple to do and critical to not violate the residual physical capacity of a disabled person that has been set by medical professionals!

Seldom is defined twice – first as (<2% up to 1/3) and then as (<2%)

Use proper labels such as not present or rare.

### **Reaching**

What about reaching forward or laterally (sideways)?

### **Driving**

What kind of terrain? Can O\*NET Tools and Technologies (T2) help here?

Is a CDL or Regular license required?

**"Getting Low" vs. "Getting High?"** Find another label – Such as "Posture"  
Be sure to capture duration and frequency for each of these important variables

### **Climbing and Balancing**

Not sure what "Related to the structure" means

Add Terrain – or at least inside/outside dimensions

## **ENVIRONMENTAL CONDITIONS** – ORS – page 6

**Noise Intensity** – Capture this in decibels. Easy to do this with a \$20 device!

Add: BioHazards – Blood, bandages, biological hazards, sharps

Add: Other: \_\_\_\_\_

After the formal data collection is done, do ask about accommodations. Some employers have spent a lot of money on this and should be happy to share their thoughts!

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For improved inter-rater reliability, planned periodic recalibration of job analysts is an excellent plan. How often will this be scheduled?

## **Minimization of Reporting Burden – Particularly through electronic means**

Various tools such as the Occupation Finder should be helpful. It would also be helpful to build/develop a tool to identify the occupations most likely in an industry – particularly if it identified missing data most need by related NAICS!

It is unclear if BLS is developing software for internal use only or for data collection and external searching and reporting.

What are the plans for distribution of the collected data? Development of software usable by SSA or by the public?

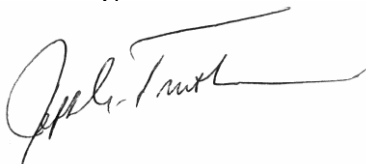
What is the time frame for collection of a sufficient quantity of data that is of production level quality?

How often will this data be collected going forward?

Production study is estimating about 30 observations per occupational definition? Is this enough? It may be enough for occupations found in just a few industries, but more interviews per occupation will be needed when an occupation is found in many industries. Consider setting a cut point based on proportionate/cumulative OES industry occupational density.

Thanks for the opportunity to make some comments. I would be very interested in discussing these further if there is some interest by BLS and/or SSA.

Sincerely,



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Certified Vocational Evaluator - CVE