



SSA's Ideal Occupational Information System

The Legal, Program and Data Requirements

Inaugural Meeting

Occupational Information Development Advisory Panel

February 24, 2009

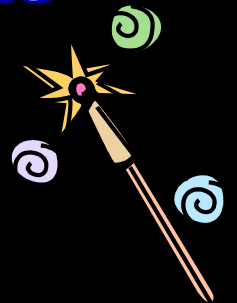
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SSA's Ideal Occupational Information System



- ❖ **Must Reflect National Existence and Incidence of Work**
- ❖ **Must Reflect Work Requirements**
- ❖ **Must Be Legally Defensible**



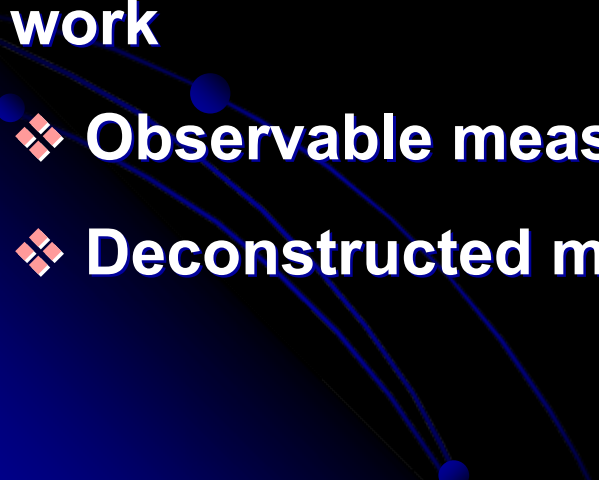
Requirements for SSA's

Occupational Information System

- ▶ Uses descriptors for the requirements of work that are
 - Relevant to disability evaluation, vocational rehabilitation and job placement for individuals with disabilities, and
 - Readily associated with medical evidence of human function; e.g. handling or lifting requirements.
- ▶ Uses descriptors for vocational factors that clearly define jobs and can be associated with an individual's vocational profile, e.g. skills or literacy level required.

SSA's OIS must bridge medical and vocational analysis.

Additional Requirements for the Occupational System & Database

- ❖ Classification System
 - ❖ Occupational Aggregation
 - ❖ Core Tasks
 - ❖ Range of levels for requirements needed to work
 - ❖ Observable measures
 - ❖ Deconstructed measures
 - ❖ Number of constructs
 - ❖ Sampling methodology
 - ❖ Inter-rater agreement
 - ❖ Accurate data collection plans
 - ❖ Reproducible data
 - ❖ Accommodations and job restructuring
 - ❖ Terminology and operational definitions
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Classification System: The OIS numbering must correspond to the Standard Occupational Classification system (SOC) which is used by all Federal statistical agencies to classify workers.

SOC Major Groups:

11-0000 Management

**13-0000 Business and Financial
Operations**

15-0000 Computer and Mathematical

17-0000 Architecture and Engineering

**19-0000 Life, Physical and Social
Science**

21-0000 Community and Social Services

23-0000 Legal Occupations

25-0000 Education, Training and Library

**27-0000 Arts, Design, Entertainment,
Sports and Media**

**29-0000 Healthcare Practitioners and
Technical**

31-0000 Healthcare Support

33-0000 Protective Service

**35-0000 Food Preparation and Serving
Related**

**37-0000 Building and Grounds
Cleaning and Maintenance**

39-0000 Personal Care and Service

41-0000 Sales and Related

**43-0000 Office and Administrative
Support**

45-0000 Farming, Fishing and Forestry

47-0000 Construction and Extraction

**49-0000 Installation, Maintenance, and
Repair**

51-0000 Production

**53-0000 Transportation and Material
Moving**

55-0000 Military Specific

(SSA's OIS classification will be at a more detailed level.)

O*NET Occupational Unit:

47-2031.01 - Construction Carpenters: Construct, erect, install, and repair structures and fixtures of wood, plywood, and wallboard, using carpenter's hand tools and power tools.

Jobs from the DOT that fall into this classification:

739.684-190	Casket Assembler (SVP 3, medium)	860.381-070	Tank Erector (SVP 7, very heavy)
764.684-022	Cooper (SVP 5, medium)	860.664-010	Carpenter I (SVP 4, medium)
764.684-026	Hogshead Cooper I (SVP 2, heavy)	860.681-010	Carpenter II (SVP 5, medium)
769.684-038	Repairer, Assembled Wood Products (SVP 5, medium)	860.684-010	Builder, Beam (SVP 3, medium)
806.281-058	Carpenter, Prototype (SVP 7, heavy)	860.684-014	Sider (SVP 3, heavy)
807.361-014	Boat Repairer (SVP 7, medium)	863.684-010	Composition-Weatherboard Applier (SVP 4, medium)
842.361-010	Lather (SVP 6, medium)	863.684-014	Sider (SVP 4, medium)
842.361-014	Lather Apprentice (SVP 6, medium)	869.381-010	House Repairer (SVP 7, medium)
860.281-010	Carpenter, Maintenance (SVP 7, medium)	869.381-014	Laboratory-Equipment Installer (SVP 7, very heavy)
860.281-014	Carpenter, Ship (SVP 7, medium)	869.684-018	Assembler, Subassembly (SVP 3, medium)
860.361-010	Boatbuilder, Wood (SVP 6, medium)	869.684-034	Lay-Out Worker (SVP 6, medium)
860.361-014	Boatbuilder Apprentice, Wood (SVP 6, medium)	869.684-038	Panel Installer (SVP 2, medium)
860.381-022	Carpenter (SVP 7, medium)	869.684-042	Roof Assembler I (SVP 3, medium)
860.381-026	Carpenter Apprentice (SVP 7, medium)	869.684-062	Stull Installer (SVP 2, medium)
860.381-034	Carpenter, Mold (SVP 7, medium)	869.684-066	Trimmer (SVP 2, medium)
860.381-038	Carpenter, Railcar (SVP 7, medium)	899.684-042	Window Repairer (SVP 4, medium)
860.381-050	Joiner (SVP 6, medium)	920.684-010	Crater (SVP 3, medium)
860.381-054	Joiner Apprentice (SVP 6, medium)	962.281-010	Prop Maker (SVP 7, medium)
860.381-058	Shipwright (SVP 8, medium)		
860.381-062	Shipwright Apprentice (SVP 8, medium)		
860.381-066	Tank Builder And Erector (SVP 7, medium)		

Entry from the *Dictionary of Occupational Titles*

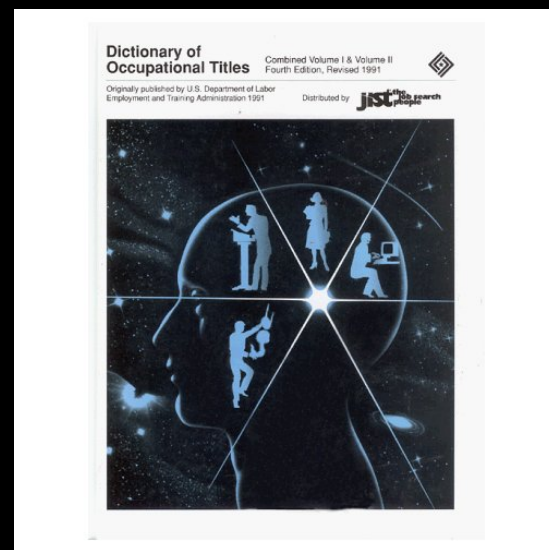
860.381-058 SHIPWRIGHT (ship-boat mfg.) alternate titles: carpenter, ship; woodworker: Constructs or repairs ships, following blueprints or ship's plans: Sights, plots, and marks reference points and lines on building dock or shipway to maintain alignment of vessel during construction or repair, using transit, plumb bob, tapes, and levels. Builds keel and bilge blocks, cradles, and shoring for supporting ships in drydock, marine railways, shipways, or building docks, using woodworking handtools and power tools. Positions and secures blocking and other structures on dock platform, according to ship's blueprints. Aligns vessel over blocks [DOCK HAND (ship-boat mfg.)]. Establishes reference points and lines on ship's hull for locating machinery and other equipment, in accordance with ship's alignment and shape. Fabricates and installs furring pieces, aprons, uprights, and other wood framing in ship. Shapes, finishes, and installs wooden spars, masts, and cargo and boat booms. Trims wooden frames and other timbers, using broadax and adz. Spikes or bolts metal fittings, plates, and bulkheads to wooden parts of ship, using brace and bits, augers, mauls, and wrenches.

GOE: 05.05.02 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

Aggregation of Occupations: Data must be occupationally specific; however, aggregation must be low enough to capture information specific to an occupation and high enough to be manageable in terms of data collection.



Too General?



Too Specific?

What lessons can we learn from O*NET and the DOT? Does the ideal data aggregation lie somewhere in between?

Core Tasks: occupations must be described in terms of *core tasks*; the levels of the measures of job demands and vocational profiles must be based only on the performance of core tasks.

FROM THE REVISED HANDBOOK FOR ANALYZING JOBS:

Element: An Element is the smallest step into which it is practical to subdivide any work activity without analyzing separate motions, movements, and mental processes involved.

Task: A Task is one or more elements and is one of the distinct activities that constitute logical and necessary steps in the performance of work by the worker. A task is created whenever human effort, physical or mental, is exerted to accomplish a specific purpose.

Position: A Position is a collection of tasks constituting the total work assignment of a single worker. There are as many positions as there are workers in the country.

HELP WANTED

Accounting Assistant responsible for:

- the preparation and maintenance of payroll
- recording receipts
- accounting for petty cash
- preparing month-end billings
- recording accounts payable
- assisting with month end closing
- May be required to compile spreadsheets using account data
- May be required to reconcile bank statements

High school diploma with a minimum of two years booking/accounting experience required. Familiarity with computerized payroll/ accounting systems preferred. Must be computer proficient (Word, Excel req'd), detail oriented, highly organized and have strong customer service skills



Requirements needed for work: the measures of the requirements of work should reflect the minimum levels (or the appropriate range of levels) necessary to perform the core tasks of an occupation at a satisfactory level.

✓ *What is the least amount of time the worker needs to stand? Sit?*

✓ *What is the heaviest lifting involved?*

✓ *How much handling and fingering is required?*



Observable Measures: constructs must be objectively measurable and capable of being validated through direct observation.

For example – How much walking does a job require? What is the minimum walking distance and frequency required?

BUT, how do you measure concentration?



Our Challenge:

- The DOT does not include information about the cognitive and mental demands of work.
- Our Occupational Information System must include mental and cognitive work demands.
- Can we objectively measure and validate the mental/cognitive demands?



Deconstructed Measures: constructs developed should reflect individual elements of job demands to enable accurate and reliable measurement; global or theoretical constructs should be avoided.

The DOT's occupational strength levels are global or composite constructs, e.g.

Definition of Sedentary work:

- * Requires **lifting** no more than 10 pounds at a time and occasionally **lifting or carrying** small items like files.
- * Although **sitting** is involved, a certain amount of **walking** and **standing** is often necessary.
- * Periods of **standing** or **walking** should total no more than 2 hours of an 8-hour workday and **sitting** should total approximately 6 hours of an 8-hour workday.
- * Most unskilled sedentary jobs require **repetitive handling and fingering** actions.
- * Does not entail significant **stooping** or **crouching**.

Number of constructs: the number of constructs developed for the OIS must be sufficient to reflect job demands and vocational factors relevant to disability adjudication and voc rehab, but not so numerous as to be burdensome.

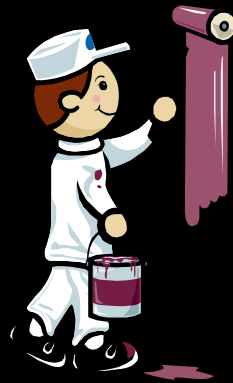


The *ideal* number of constructs would be the minimum SSA needs to determine a person's ability to work.

**Only a small percentage of the 200+ O*NET constructs appear to be relevant to SSA's medical-vocational process.*



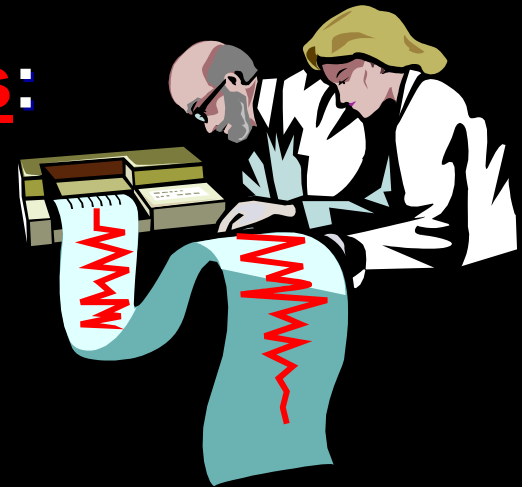
Sampling methodology: must be sufficient to capture the full range of skill levels of a pertinent selection of work in the US economy, ranging from unskilled to highly skilled work and everything in between.



Inter-rater agreement: Instruments used to analyze occupations should be sufficient to obtain reliable, standardized results.

Data Collection Plans: must rely on methods that ensure accurate and comprehensive results

Reproducible Data Collection Plans: data must be valid, accurate and reproducible; all analytic methods should be validated.



Accommodations and job restructuring: potential opportunities for accommodations and job restructuring for occupational core tasks should be identified when they are commonly available throughout the nation

e.g. A grocery store allows a cashier to sit on a stool if a medical condition prevents the employee from standing for prolonged periods.



Terminology: operational definitions must be consistent with standard medical practice.