Work Experience Analysis Subcommittee

Content Model and Classification Recommendations

APPENDIX D

Report of the

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Work Experience Analysis Subcommittee

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REPORT OF THE

WORK EXPERIENCE ANALYSIS SUBCOMMITTEE

OF THE

OCCUPATIONAL INFORMATION DEVELOPMENT ADVISORY PANEL

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September 2009

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Executive Summary

The Work Experience Analysis Subcommittee (WEA; formerly known as the Transferable Skills Analysis Subcommittee) was created by the Occupational Information Development Advisory Panel ("OIDAP" or "Panel") to analyze the Social Security Administration's (SSA) Occupational Information System (OIS) data needs for work history and transferable skills assessments performed in its disability adjudication process. The broad arena of review includes identifying the data elements needed for SSA's "skills" and work experience assessments, as well as data analyses and studies that would enable SSA to validate the Content Model data elements relevant to these assessments. These initial data analyses and studies may assist SSA in determining the programmatic and operational effects of the new data elements in its work experience and transferable skills analysis (TSA) process, and they may inform SSA policy development for improvements to the process that would assist SSA in swifter and more accurate adjudication of claims.

The subcommittee initiated a review of relevant literature regarding TSA. It convened a Roundtable of subject matter experts to discuss current models, theory and practice in utilization of TSA for adjudication. Subcommittee members heard presentations by academic experts, staff members of the SSA and State Disability Determination Services (DDS) during Panel meetings, and participated in site visits to DDS offices and the Appeals Council office in Falls Church, Virginia. Finally, subcommittee members engaged in a teleconference with the Work Taxonomy & Classification subcommittee regarding their work and elicited broader commentary from the public through the User Needs & Relations subcommittee. No studies of a scientific nature have been recommended by the WEA Subcommittee to date.

The subcommittee describes the results of its analyses and outlines its recommendations to the Panel regarding data elements for the OIS Content Model that we believe SSA needs for work history and transferable skills assessment in its disability adjudication process (see Recommendations for Skills and TSA Data Elements for the OIS Content Model section). Below, the subcommittee summarizes the recommendations to the Panel for its deliberation. In short, we suggest that the Panel consider recommending the following activities to SSA:

1. The OIS be developed in such a way that the inference necessary to apply its data is reduced to the greatest extent practical and that the degree of overlap or redundancy between data elements and between ratings of data elements be reduced to the greatest extent practical.

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2. Validation studies be conducted on the occupational information collected on the data elements that the WEA Subcommittee recommends in this report to determine whether the data that have been captured are the data that were intended to be captured and if the data that have been captured fulfills the function and need described in this report.

3. For Content Model and data development purposes. SSA could use work activities as observable and measurable data elements for skills.

4. The work activity data collected be studied to determine 1) which of the work activities may rise to a level appropriate to be called a "skill," and 2) what continuum of "skill" level may be appropriately assigned to identified skills for SSA's application in the disability adjudication process.

   a. "Degrees of transferability" could be considered by the OIS. Consequently, what identified skills lead to a worker's capacity to perform work activities of other occupations? That is, what factors indicate that skills could be transferable? Can transferability be predicted? Could an error rate be estimated for that prediction?

   b. If or what work activities or identified skills could provide the worker with vocational advantage? Could these be quantified along any scale of work activity within or between occupations?

5. A method be developed for determining the complexity level of the occupation and the individual work activities. Considerations could include:

   a. Review could include the CIP, the O*Net 11-point educational scale or its Tools and Technology Scales, or the SCANS[1] scale and other measures to inform a complexity system.

   b. Potential complexity components in relation to transferability issues could be considered such as possibly weighting of measures to result in overall ranking number for the occupation.

6. A method be developed to identify the time to proficiency for satisfactory performance of an occupation.

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[1] US Department of Labor (August 2000). *Workplace Essential Skills: Resources Related to the SCANS Competencies and Foundation Skills.*

7. Explore methods to consider the viability of work activities.

Work context factors for the OIS be included (e.g., industry, work settings, tools, machines, technologies, raw materials, products, subject matter, processes, and services) related to an occupation.

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Introduction

As the OIDAP progresses in its work, it sometimes recognizes the need to establish subcommittees that are useful to focus attention on subtopics. As the OIDAP began its work on the Content Model, it decided there existed a need to create a subcommittee to evaluate and anticipate not only any possible effects that might result to the transferable skills analysis (TSA) and the work experience analysis processes due to the new taxonomy and content in the OIS, but also to explore the basis of these processes themselves to consider any improvements that would assist the SSA in swifter and more accurate adjudication of claims.

The WEA Subcommittee was formed during the April quarterly meeting. Original membership of the Panel changed with the resignation of James Woods in April 2009. Current subcommittee members are: Thomas A. Hardy (Chair), Mary Barros-Bailey (Interim Chair, OIDAP), Sylvia E. Karman, Lynnae M. Ruttledge, and Nancy G. Shor.

Scope of the Charge to the OIDAP and the WEA Subcommittee

The charter for the OIDAP provides the following statement regarding the Panel's objective and scope of activities:

> The Panel will provide independent advice and recommendations on plans and activities to replace the *Dictionary of Occupational Titles* used in the Social Security Administration's (SSA) disability determination process. The Panel will advise the agency on creating an occupational information system tailored specifically for SSA's disability programs and adjudicative needs. The Panel will provide advice and recommendations related to SSA's disability programs in the following areas: medical and vocational analysis of disability claims; occupational analysis, including definitions, rating, and capture of physical and mental/cognitive demands of work, and other occupational information critical to SSA disability programs; data collection; use of occupational information in SSA's disability programs; and any other area(s) that would enable SSA to develop an occupational information system suited to its disability programs and improve the medical-vocational adjudication policies and processes.

At the inaugural meeting of the Panel, we were advised that the work of the Panel did not include recommending changes to SSA's disability policies; rather, we were instructed to treat SSA's disability policies as though they were "standing still." Through further conversations, it was learned that SSA intended that the focus of our recommendations be upon the OIS itself rather than SSA policy or possible effects upon said policy. That is, the OIS we are helping to

create must meet SSA's current adjudicative needs at a minimum. The OIS should provide a platform from which SSA can develop and test revisions to its disability process and policies as the OIS data are obtained. Statistical analyses of OIS data and applied research will provide empirical bases for policy evolution that may result in proposed policy revisions that will be developed according to the Administrative Procedures Act (APA).[2]

Given this scope, we recognize that it is not our responsibility to redefine the terms "skill" and "transferable skills" for SSA policy considerations. Instead, it is our charge to identify the data elements that SSA should collect in order to adjudicate claims using its current policy as a starting point, with the understanding that the current policy is based on DOT constructs and definitions and, as such, analyses of newly-obtained OIS data may suggest changes to the current policy.

 The OIS and data collection and subsequent analyses, applied research, and other studies may also indicate the need for SSA to revise its initial Content Model data elements considerations. That is, we recognize that the OIS research and data analyses will inform the OIS development process as well as SSA disability process and policy iteratively.

We admit that we have encountered difficulty attempting to define OIS Content Model data elements using terminology in ways that do not have SSA policy implications. We acknowledge that the DOT constructs that SSA currently uses to perform work experience analysis and TSAs do not directly link to SSA's definitions of skills and transferable skills. The SSA uses several DOT constructs as proxies, or substitutes, for the type of data it needs. Therefore, we must distinguish between the policy (and vocational application) terms with which SSA and external users are familiar and the Content Model data elements we recommend to the Panel. We use the terms "skills," "transferable skills," and "TSA" to refer to applied concepts as they are presently conceived in SSA's disability process and policy.

The development of a new OIS provides SSA with the opportunity to: 1) deconstruct the elements that form the bases of the concepts of skill and transferable skills analysis for disability evaluation and vocational assessment; 2) collect the exact data that are critical to the agency's disability process 3) apply of these data in light of how work experience analysis and TSA are presently conceptualized; and, 4) explore potential improvements for considering work experience and skills and how they transfer given a person's impairment and residual functional capacity to perform work at the substantial gainful activity (SGA) level.

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[2] 5 U.S.C. § 556

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This subcommittee is comprised of practitioners who interact with clients and claimants who have functional limitations resulting from medical or psychological impairments, or professionals who work in closely related fields that deal with SSA issues on a daily basis. We have detailed knowledge of the constructs found in the DOT and how those constructs are currently applied to evaluating the vocational aspects of a disability claim. We understand the type of data that is needed in order to support SSA's current disability adjudication process based on the DOT constructs, and we understand how that data is used. We also have a vision for how the future might be shaped, for the better, by improved evidence about the world of work. While we make our recommendations to support SSA's current disability adjudication process, we remain mindful of the incredible potential of this new OIS to improve the lives of our clients and SSA's disability claimants.

The Panel is comprised of individuals with a wide variety of expertise. While this subcommittee makes recommendations regarding only one portion of the Content Model, the full Panel will bring about the final set of Content Model recommendations. We find reassurance in the knowledge that we will have an opportunity to review the data that is collected, and that this will inform further recommendations as this new OIS is developed. This is an iterative process. We are at the first stop sign along the roadmap.

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Methodology and Procedures

1. Initial activity began with identification of salient articles regarding not only the theory of TSA, but also the philosophical underpinnings of the process along with any relevant current research.

2. A convocation of subject matter experts was held in SSA headquarters, Baltimore, on May 12, 2009 to elicit commentary regarding the TSA process. Experts in the private sector possessing knowledge in the evaluation of TSA models that have been applied in the vocational rehabilitation community, theory, and process, or members who have created computer models for performance of private sector TSA, were invited to attend.

3. Members of the WEA Subcommittee were in attendance at all in person Panel meetings and teleconferences held by the SSA and were, therefore, presented with valuable information regarding the work experience and TSA process through arranged presentations, previously prepared papers and public commentary (see Panel minutes for summary of presentations or transcribed session notes for presentation/testimony detail).

4. Opportunity was given to all OIDAP members to visit a local DDS or Office of Disability Adjudication and Review (ODAR) hearing office. These site visits were designed by the OIDAP to be utilized for Panel members to address any questions regarding the five-step disability evaluation process. Subcommittee members were particularly interested in assessing the current use of the work experience and TSA processes as utilized in the determination process. No formal notes or reports were prepared based upon individual visits.

   Opportunity to visit to the Falls Church office of the SSA Appeals Council was also given to all OIDAP members. Visits were conducted in the month of July. Again, the site visits were designed by the OIDAP to be utilized for Panel members to address any questions regarding the five-step disability evaluation process. Subcommittee members were particularly interested in assessing the current use of the work experience analysis and TSA process as utilized in the determination process. No formal notes or reports were prepared based upon individual visits.

5. The OIDAP, through the User Needs & Relations Subcommittee, has elicited commentary from the public regarding a contemplated OIS. Comments have included input regarding the current TSA process utilized by the SSA.

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Analysis

Review of Literature

A final bibliography of 38 articles and books was gathered for the subcommittee to review (see "References"). Articles were assigned to SSA staff and Panel members. Each reviewer was asked to provide a cogent and concise summary including a recommendation on the "usefulness" of the article for possible review by the entire subcommittee.

The most striking finding to date has been that while numerous articles exist regarding the TSA process, all focus is upon the process as utilized by sectors other than SSA. As noted within this paper, while a common language is utilized in discussing "skills" and "skill transfer," SSA is historically guided in using these concepts by their determination process. The literature review suggests that the concept of skill and TSA as applied in other venues is very different than within SSA at Step 5. Consequently, there is considerable room for misunderstanding how these concepts are used in SSA disability adjudication and among other disability systems or in rehabilitation. As such, we currently have the opportunity to examine the essential building blocks of "skill" and "skills transfer" and to focus this research on application of these concepts with the SSA process of transferability of skill and work experience analysis. As the OIS begins to examine the components of "skill" and define them into measurable and observable units of analysis, these findings may impact the traditional model of skills analysis and allow for a further evaluation of the process within the requirements of the SSA. While several articles were noted for their potential usefulness in reviewing the theory behind the TSA, none were considered to directly address the unique process as performed by the Step 5 of the sequential analysis.

Expert Panel Roundtable

The purpose of the meeting was to discuss the concepts involved in the TSA process and how a change to the underlying database presents a unique opportunity to revisit the basic tenets of the TSA. Participants were advised that consensus was not the goal, rather expression of individual opinion by recognized experts leading to areas of potential interest or exploration by the OIDAP. All participants were instructed to consider SSA's policy as "standing still" to facilitate focused discussion on the actual Content Model data that SSA needs to assess skills in its current policy framework at a minimum with the understanding that the OIS would provide a platform for policy and TSA method evolution. Participants were advised that analyses and study of the OIS data captured would be needed first to inform any improvements to the SSA TSA process and policy.

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The invited experts were unanimous in their support of the OIDAP Charter and SSA's goal to create an OIS tailored toward its needs. In the ensuing conversation, the experts were generally in accord about the majority of topic areas covered, with exceptions noted in the detail found in Appendix A, regarding the data elements to be included in the OIS and those utilized specifically in the TSA process. It was recognized that the terminology of the DOT infuses all conversations due to the pervasiveness of the definitions and measures that have been historically utilized as a standard for the last seventy or more years. However, it was also agreed that, while the pervasive language sometimes causes confusion in discussion when trying to create new measures or to formulate either new and different utilization of current measures, the underlying concepts are sound and to be retained.

The Roundtable experts were in accord regarding the current definition of a "skill" utilized by SSA and suggested that a short working definition for purposes of the current meeting might be "learned behaviors, techniques, methods, and activities that enable individual workers to perform substantial gainful employment." As a foundation of the skill definition, the experts were unanimous in their recommendation that "categories of technologies that reflect how work gets done and what gets done as a result of the work activity; the purpose of the job" (labeled Work Fields in *The Revised Handbook for Analyzing Jobs* [RHAJ], i.e., cleaning, drafting, protecting, etc.) should be captured by the OIS. The experts agreed that data collection in this area could most easily be achieved through use of work activities and materials, products, subject matter and services. It was recognized that the measures of these items in the DOT are psychometrically flawed. As broad categories of data collection they remain valid areas of consideration. Additional research will be required to establish data elements that accurately reflect these items in a defensible manner under current legal and technical requirements.

The experts strongly urged the OIDAP to consider examining the present method in which skills is conceptualized and potentially what elements constitute the proxy. That is, SVP is a composite and has served as a proxy for how skills, which are person-side attributes, are applied at a work-side measure or level. Studying the underlying constructs of the concept and composite might be useful to consider better ways to conceptualize skill, work experience analysis, and TSA. One possible way to do this would be a break out of the amount of time required by a typical worker to learn the techniques, acquire the information and develop the facility needed for average performance (labeled Specific Vocational Preparation (SVP) in the RHAJ) into component pieces. It was noted that this information remains key to transferability assessment. The experts further suggested a review of the present rating of unskilled, noting that, in their opinion, all work requires some basic skills; thus, the wording of the current rating is confusing. Specifically, although there is a category for "unskilled" work, when

the definition is examined for the types of work that fall into that range, each depicts some level of learning, albeit very basic. That learning, by definition, involves some level of skill acquisition. Thus, the category "unskilled" is a misnomer and confusing. Whether the skills learned in that range as presently defined are sufficient to provide a claimant with the capacity to perform other work at the level of substantial gainful activity is altogether a different question. However, the subcommittee found these concepts are often confounded by users. Experts discussed ways of identifying the complexity level of an occupation, including a complexity quotient involving how work activities must be performed.

Finally, it agreed that a TSA performed for SSA purposes differs in many ways from that being performed, for example, for job seeker placement. Clarity in purpose, and clarity in language, was recognized by all in attendance as being the key to avoiding confusion in the future.

A full summary of this meeting is located in Appendix A of this document.

<u>OIDAP Site Visits</u>

While designed to allow Panel members to address any topic of interest, these visits presented a unique opportunity for in depth discussion of the TSA process as utilized by the SSA in the adjudication of claims. Subcommittee members Thomas Hardy, Nancy Shor, and Mary Barros-Bailey were participants in this program. No formal notes were retained, nor summaries of impressions or visits transcribed. Subcommittee members noted in general that the "end users" of the proposed OIS and eventual TSA process were enthusiastic regarding the possibility for the creation of a user friendly product that would facilitate rapid and accurate adjudication of claims. The proposed OIS was generally seen as a significant asset and was eagerly anticipated.

Anecdotal evidence was obtained via site visits; no attempt was made to create a scientific analysis of the work experience or the TSA processes or use. Based upon the site visits, it appears that the TSA process currently is seen by end users as a time consuming and complex process at Step 5. End users appear reluctant to utilize current methodologies to conduct the TSA and were extremely positive in their response to a more user friendly product being created that would help with the work experience analysis and TSA processes. Responses included requests for a computerized process that would enable the end user to key in past relevant work, adjust for residual functional capacities and receive a summation of remaining skills that would be automatically either connected to occupations existing in sufficient numbers in the national economy, or a finding of no occupations matching the residual profile for the claimant.

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<u>Solicited Comments from SSA and Professional Organizations</u>

The OIDAP has utilized the *Federal Register* to initiate a link with the public and to provide formal notice of meetings and the goals of Panel. The public has been advised that submission of written or verbal commentary to the Panel can be made regarding any area under consideration by the Panel. Further, the Panel has solicited input from users and interested parties regarding the OIS and has been reviewing and organizing the resulting responses through the User Needs & Relations Subcommittee.

To date, user input remains an ongoing process. It is requested that the User Needs & Relations Subcommittee provide a detailed breakdown of those comments specific to the TSA as performed within SSA. Preliminary analysis of the information provided by the public or professional organizations whose members are indicative of users along SSA's disability determination continuum, result in the following categories:

1. Suggestions and requests for revision of the SVP scales that might include additional educational levels and vocational training to assess vocational preparation.

2. Investigation of occupational prerequisite information, such as type and length of experience needed for occupations.

3. Analysis of how skill is classified along the present spectrum as defined by the ranges of unskilled to skilled work.

<u>Subcommittee Discussions of TSA Factors</u>

The WEA Subcommittee has utilized teleconferences and face-to-face meetings, when possible, to facilitate investigation of issues and discussion within the subcommittee about information and relevant questions members have identified.

On July 13, 2009, the WEA Subcommittee participated in a teleconference with the Work Taxonomy & Classification subcommittee to coordinate efforts of the subcommittees and identify not only areas of mutual concern, but also to eliminate any potential duplication of effort. The teleconference resulted in potential ideas for the subcommittees to consider as they prepare recommendations for the Panel to consider:

1. Deconstruction of "skill" as it is presently conceptualized as a proxy within the DOT and considering other terminology to describe the deconstructed concepts due to the conflation of meanings by disparate users outside of the SSA arena.

2.   Review of work activities or how the work gets done, which is currently reflected in the DOT task descriptions. The essential nugget of this topic is the granularity required in data collection to adequately describe the work activity so that conclusions about how skills transfer carry greater validity.

3.   Review of a complexity level for occupations.

4.   Examining the time required to reach "proficiency" (to be defined) within an occupation. [Note: any attempt to firmly anchor this definition will result in a requirement for further research into a variety of topics including on-the-job experience factors, education levels, and the minimal standard to be utilized.]

5.   Research how long an occupation's "skills" or work activities may be viable. Currently, SSA's definition of Past Relevant Work (PRW)[3] stipulates a relevance period of fifteen (15) years. Work that meets the definition of PRW is analyzed to identify any skills that may be potentially transferred during the TSA at step 5, depending on the individual's age, education, work experience, and RFC. If future research results in a recommendation that a viability factor should be created, this will result in the need for additional questions for review and consideration by the Panel.

6.   Delineating the concept of vocational advantage as currently utilized. Currently vocational advantage is recognized at identified levels of the SVP. Its quantification and interaction with new definitions of SVP or skill will result in a necessary analysis of this concept.

Teleconference participants agreed that the subcommittees may need to revisit these and other related issues as the OIS Content Model is developed and as the OIS data and their statistical analyses become available. Suggested approaches are addressed in the recommendations   section of this report.

<u>Pertinent Presentations</u>

As members of the OIDAP, all subcommittee members were present for the Panel meetings held February 23-25, 2009 in Washington, D.C., April 27-29, 2009 in Atlanta, Georgia, and June 9-11, 2009 in Chicago, Illinois. At the above

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[3] 20 CFR 404.1560(b)(1) and 416.960(b)(1).

referenced meetings, presentations and testimony were heard by the subcommittee members. All referenced presentations can be found on the Panel's website www.ssa.gov/oidap The presentations that provided significant input into the subcommittee's work included:

- *Statutory Significance of the use of Occupational Information in SSA's Disability Programs* by Jeffrey Blair

- *SSA's Sequential Evaluation Process for Assessing Disability* by Tom Johns

- *Utilizing Vocational Expert Testimony at the Hearing Level* by The Honorable David Hatfield

- *Claim Intake and Initial Development of Medical and Vocational Evidence* by John E. Owen III

- *Vocational Evaluation—Past Relevant Work* by Shirleen Roth

- *Vocational Evaluation—Other* Work by Shirleen Roth

- *Perspectives from Hearing Office and Office of Appellate Operations* by The Honorable Judge Cam Oetter and Judge Robert Goldberg

- *Perspectives from Vocational Experts and Case Analysis* by Scott Stipe and Lynne Tracy

- *Perspectives from Claimant Representatives and Case Analysis* by Art Kaufman and Charles Martin

- *Presentation: National Council of Disability Determination Directors* by Trudy Lyon-Hart

- *Presentation: National Association of Disability Examiners* by Georgina Huskey

Previously prepared papers by SSA staff were part of the materials presented to Panel members for the meetings. These papers have no attributable author. The papers include:

1) *Working Paper: What is a Content Model?*

2) *Working Paper: Developing an Initial Classification System*

3) *Working Paper: Social Security Administration's Legal, Program and Technical/Data Occupational Information Requirements*

4) *Working Paper: SSA Plans and Methods for Developing a Content Model: Key Questions to be Addressed*

In addition, the subcommittee reviewed input from SSA users of occupational information and from stakeholder organizations. This information is summarized and addressed in the appendix entitled "Report from the User Needs & Relations Subcommittee" and includes:

1) Comments received from the American Board of Vocational Experts (ABVE).

2) Letter from the American Occupational Therapy Association.

3) Letter from the American Physical Therapy Association.

4) Comments received from the International Association of Rehabilitation Professionals (IARP).

5) Comments received from the National Organization of Social Security Claimant Representatives (NOSSCR)

6) User Needs Analysis: Maryland Disability Determination Services (DDS) and Office of Disability Adjudication and Review; Office of Appellate Operations.

7) National Association of Disability Representatives (NADR) OIDAP Committee – Collaborative Opinion: July 2009.

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WEA Subcommittee Findings and Recommendations

In conducting this investigation into skills and the concept of transferable skills, it quickly became apparent to the subcommittee that definitions for the term skill, as well as application of the concept of transferable skills, are widely varied. For this reason, before attempting to provide recommendations on data collection to inform the Content Model of the OIS regarding skills, we describe some of the definitions and uses for these terms below. It is important for the reader to consider this foundational information before attempting to understand why this subcommittee is offering its set of recommendations.

When the SSA uses the terms skill and transferable skill, it is to make a decision about an individual's eligibility for disability benefits. Clearly, this decision is critical to the individual who has filed the claim, so the decision should be made with the best possible evidence. Currently, SSA makes these decisions based on a claimant's age, education, work experience, and residual functional capacity. In making this decision, it does not consider, for example, the training that might be provided to the individual to assist with vocational rehabilitation. It does not consider special equipment or other accommodations which might be provided to the individual to assist with work adjustment. In administering its entitlement programs, SSA makes a decision based on the individual's residual functional capacity as it exists today[4] without intervention.

There are many forensic uses of occupational information. Examples of use include determining eligibility for a number of types of benefits, such as workers' compensation, long term disability from private insurance, and SSA's disability programs. Occupational information is used for vocational counseling for newly graduated students and for recently unemployed workers. It is used for vocational rehabilitation, such as for placement or to retrain individuals with disabilities for other work. Industrial organizational psychologists study and provide testimony about the world of work. Any of these sample groups may consider different factors when it defines the term skill and may conceptualize transferable skills quite differently. For all of these reasons, we urge the SSA to have care in utilizing this term and in explaining how the concept will be applied as it develops the OIS.

<u>What is a Skill?</u>

In conducting the investigations for this recommendation report, a wide variety of definitions of the term skill were examined. Each subcommittee member brought their own understanding of the term based on our years of experience applying

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[4] Or that period of disability identified by the claim.

the term within our work and we also considered a wide variety of other uses and definitions of the term.

Examination was made of the definitions that are contained in SSA's own references, such as the definitions for unskilled work, semi-skilled work, and skilled work in SSA's regulations.[5] We also looked at the way in which skills are referenced in SSA's regulations when it describes transferable skills, which implies that skills refer to "skilled or semi-skilled work activities"[6] that presumably provide a vocational advantage. We looked at the definitions of skills in SSA's ruling on transferable skills, which defines skills in this way:

> What a "skill" is. A skill is knowledge of a work activity which requires the exercise of significant judgment that goes beyond the carrying out of simple job duties and is acquired through performance of an occupation which is above the unskilled level (requires more than 30 days to learn). It is practical and familiar knowledge of the principles and processes of an art, science or trade, combined with the ability to apply them in practice in a proper and approved manner. This includes activities like making precise measurements, reading blueprints, and setting up and operating complex machinery. A skill gives a person a special advantage over unskilled workers in the labor market.

> Skills are not gained by doing unskilled jobs, and a person has no special advantage if he or she is skilled or semiskilled but can qualify only for an unskilled job because his or her skills cannot be used to any significant degree in other jobs. The table rules in Appendix 2 are consistent with the provisions regarding skills because the same conclusion is directed for individuals with an unskilled work background and for those with a skilled or semiskilled work background whose skills are not transferable. A person's acquired work skills may or may not be commensurate with his or her formal educational attainment.[7]

Previously prepared papers provided by SSA that include definition of skills were reviewed. One of these definitions stated that "skills are the learned capacity to perform the specific activities required on jobs, based on past experience,

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[5] Code of Federal Regulations (CFR). 20 CFR 404.1568 and 416.968.

[6] 20 CFR 404.1568(b) and 416.968 (b).

[7] Social Security Ruling (SSR) 82-41: Titles II and XVI: Work Skills and Their Transferability as Intended by the Expanded Vocational Factors Regulations Effective February 26, 1979.

training, and knowledge."[8] Another said that, while skill is used to refer to a very wide range of things. For the purposes of that paper, it would be defined as "the capacity of a person to perform specific duties, tasks, or other psychomotor activities that are required by an occupation."[9] For this definition, we would have preferred some clarification, since "psychomotor activities" could refer, for example, to walking, standing, or lifting, which we do not believe to be skills. Again, this points to the need for clarity in this definition among all users. As indicated earlier, for purposes of this report, we consider skill to be work activities.

The subcommittee researched how the term was used by Human Resources and Skills Development in Canada when it identified essential skills. We investigated the way in which the term skills is used in the Australian and New Zealand Standard Classification of Occupations (ANZSCO),[10] which states, "Skill level is defined as a function of the range and complexity of the set of tasks performed in a particular occupation. The greater the range and complexity of the set of tasks, the greater the skill level of an occupation" Additionally, the subcommittee explored how the term was used in a wide variety of literature in vocational rehabilitation counseling.

Also considered was how the U.S. Department of Labor (DOL) identifies skills for the O*NET, and how they were identified in the DOT. Vocational rehabilitation specialists and the experts at the May 2009 Roundtable all agreed with the statement that, in sum, "Skills are learned behaviors, techniques, methods and activities that enable individual workers to perform substantial gainful employment."[11]

The RHAJ defines work fields as "categories of technologies that reflect how work gets done and what gets done as a result of the work activities of a job: the purpose of the job" and lists ninety-six work fields, such as appraising, cleaning, data processing, drafting, and researching.[12] Roundtable participants indicated that the purpose of the job or work field was useful in considering how skill is demonstrated. We also considered comments by the experts at the Roundtable who noted the work fields listing, as currently shown in the DOT, are not

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[8] SSA Working Paper: *What is a Content Model?* (June 2009).

[9] SSA Working Paper: *SSA Plans and Methods for Developing a Content Model: Key Questions to be Addressed* (April 2009).

[10] http://www.immigration.govt.nz/migrant/general/generalinformation/anzsco

[11] See Summary of Roundtable in Appendix A.

[12] *Revised Handbook for Analyzing Jobs.* US Department of Labor, 1991.

comprehensive enough and that there may exist hundreds of work fields just for is white collar occupations and needed significant review. The subcommittee also considered the proxy that SSA uses in its transferable skills analyses, that is, the task lists identified for each occupation in the DOT. Examination of the lists elicited words like grinds, fabricates, weighs, engraves, polishes, etc. These words appear much like work fields, only requiring them to be converted into gerunds.

<u>What is a Transferable Skill?</u>

Just as there exist numerous definitions of skills, so there are numerous uses for a transferable skills analysis and a wide variety of methods to perform the TSA. For example, vocational rehabilitation specialists might use this process, first, to identify the skills that a person with an impairment has and, then, to identify work for which he or she might be trained and rehabilitated into. When developing the rehabilitation plan. the vocational rehabilitation specialist might consider a wide variety of factors, including a person's preferences, interests, the person's geographic location, or personality traits,. The TSA and rehabilitation plan open up a range of new possibilities and opportunities for the person with an impairment.

SSA uses the TSA process in a very different way, that is, to determine eligibility for benefits or the *residual* work capacity. At the last step of the decision making process, SSA must consider whether the claimant can do work that is different than the work he or she did in the past. To do this, SSA compares the claimant's age, education, work experience, and residual functional capacity with a series of tables in its regulations.[13] These tables take into account unskilled work that exists in the national economy. A TSA, if applicable, is performed at this point in the process because a claimant with transferable skills has access to a larger pool of jobs than a claimant who is limited to unskilled work. The purpose of a TSA is to determine, first, whether a claimant has transferable skills and, second, whether any identified skills transfer to a significant number of occupations found in the national economy. SSA does not consider retraining or any other form of rehabilitation or accommodation in making this decision. And, unlike vocational rehabilitation, SSA cannot consider factors such as a person's preferences, interests, where a person lives, or a person's personality when making this determination.[14]

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[13] 20 CFR Part 404, Subpart P, Appendix 2.

[14] Social Security Act, section 223(d)(2)(A).

SSA's data requirements for conducting a TSA can be inferred from its regulations,[15] reproduced here:

> d) Skills that can be used in other work (transferability)
>
> (1) What we mean by transferable skills. We consider you to have skills that can be used in other jobs, when the skilled or semi-skilled work activities you did in past work can be used to meet the requirements of skilled or semi-skilled work activities of other jobs or kinds of work. This depends largely on the similarity of occupationally significant work activities among different jobs.
>
> (2) How we determine skills that can be transferred to other jobs. Transferability is most probable and meaningful among jobs in which—
>
> > (i) The same or a lesser degree of skill is required;
> >
> > (ii) The same or similar tools and machines are used; and,
> >
> > (iii) The same or similar raw materials, products, processes, or services are involved.
>
> (3) Degrees of transferability. There are degrees of transferability of skills ranging from very close similarities to remote and incidental similarities among jobs. A complete similarity of all three factors is not necessary for transferability. However, when skills are so specialized or have been acquired in such an isolated vocational setting (like many jobs in mining, agriculture, or fishing) that they are not readily usable in other industries, jobs, and work settings, we consider that they are not transferable.
>
> (4) Transferability of skills for individuals of advanced age. If you are of advanced age (age 55 or older), and you have a severe impairment(s) that limits you to sedentary or light work, we will find that you cannot make an adjustment to other work unless you have skills that you can transfer to other skilled or semiskilled work (or you have recently completed education which provides for direct entry into skilled work) that you can do despite your impairment(s). We will decide if you have transferable skills as follows. If you are of advanced age and you have a severe impairment(s) that limits you to no more than sedentary work, we will find that you have

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[15] 20 CFR 404.1568(d) and 416.968(d)

> skills that are transferable to skilled or semiskilled sedentary work only if the sedentary work is so similar to your previous work that you would need to make very little, if any, vocational adjustment in terms of tools, work processes, work settings, or the industry. (See §404.1567(a) and §201.00(f) of appendix 2.) If you are of advanced age but have not attained age 60, and you have a severe impairment(s) that limits you to no more than light work, we will apply the rules in paragraphs (d)(1) through (d)(3) of this section to decide if you have skills that are transferable to skilled or semiskilled light work (see §404.1567(b)). If you are closely approaching retirement age (age 60-64) and you have a severe impairment(s) that limits you to no more than light work, we will find that you have skills that are transferable to skilled or semiskilled light work only if the light work is so similar to your previous work that you would need to make very little, if any, vocational adjustment in terms of tools, work processes, work settings, or the industry. (See §404.1567(b) and Rule 202.00(f) of appendix 2 to this subpart.)

We have described our interpretation of these needs in the next section, which contains our recommendations for the data that SSA needs to collect for the new OIS in order to be able to perform a TSA.

Recommendations for Skills and TSA Data Elements for the OIS Content Model

As we have indicated, the terms skills and transferable skills have been used for many purposes and analyzed using many different methods. The terms have so much end-user-specific historical context, with much implied but unspoken content, that we believe it is necessary to discuss the data elements using new terms that do not carry these connotations.

In addition, many of the rating scales that SSA has necessarily used in the past, and continues to use, are composites of multiple concepts that do not serve SSA or the claimant well. In order to fully understand the information that SSA needs, we have deconstructed, or taken apart, the DOT concepts now in use so that we can identify and address the underlying need that they were supposed to serve. By going back to basics, we believe that can better identify the type of information that SSA needs for skills assessment.

Before discussing the data elements themselves, we would like to raise several concerns related to data elements in general.

- First, we recommend to the Panel that SSA develop the OIS in such a way so that the inference necessary to apply it is reduced to the greatest extent practical. That is, little inference is required to

compare a work requirement for lifting 20 pounds with a claimant limitation of an inability to lift over 10 pounds. It is clear that the individual can not meet the requirement. A great deal of inference may be needed, however, to compare an individual's cognitive limitation with an occupational rating of 3 on SVP.

- Second, we recommend to the OIDAP that SSA develop the OIS in such a way that the degree of overlap or redundancy between data elements and between ratings of data elements be reduced to the greatest extent practical.

- Third, once the data is collected on the data elements suggested in this report, we recommend to the OIDAP that SSA conduct validation studies to determine 1), whether the data that have been captured are the data that were intended to be captured, and 2) whether the data that have been captured fulfill the function of providing sufficient information to determine skills that provide or do not provide a claimant with vocational advantage.

After conducting this investigation, we recommend to the OIDAP that SSA collect information on the following data elements, which are critical for skills assessment for disability evaluation and forensic purposes.

- Work activities

  We recommend use of work activities as a measurable data element that can be used as an interim proxy for skill. We further recommend that once the work activity data is collected and validated, further research be conducted to differentiate between the various levels of skill in work activities. This may be done, for example, by comparison of these work activities with the other occupational information discussed in this section to differentiate the activity such as cleaning (e.g., cleaning a test tube, cleaning an office, cleaning a printing press).

  Work activities will need to be collected at a specific enough level so that a discrete occupation will be identifiable from all others. Once collected, we recommend that work activities be compared with other occupational information discussed in this section to determine which of the work activities, when combined with other items, rise to a level appropriate to be called a skill.

  Once the levels of work activities are identified, we recommend that they be named using a common language across occupations

allowing comparisons to be made between occupations, so that SSA adjudicators can readily utilize them for adjudication purposes.

We also recommend that work activities be analyzed to establish if there exists a category of skills that are extremely specialized to the extent that they are not readily transferable to other work. For example, the skills needed to bind historical texts may be highly specialized in that a worker may not be able to readily transfer those skills into other jobs. Should such a category be identified, further research may need to be conducted to determine if this skill can be linked to the existence of a "substantial number of jobs" in the national economy as reflected through the OIS.

- Complexity Level

  We recommend that a rating system be developed for the complexity level of the occupation and for the individual work activities which, when combined with other requirements of an occupation, may rise to a level appropriate to be called a "skill." We believe ratings at both the work activity and occupational levels will improve the accuracy of SSA's TSAs.

  The complexity level relates to the need identified in SSA's regulations at 20 CFR 404.1568(d)(2)(i) and 416.968(d)(2)(i), that is, "The same or a lesser degree of skill is required."

  SSA currently uses the SVP of an occupation to identify the complexity level of the occupation. However, SVP was never intended to rate complexity level. The rating that we have recommended is a new concept that will enhance usability of the new OIS and reduce the inference that users must make when comparing an individual's RFC with the demands of work.

  Further development of the complexity rating will have to include deconstructed measures including the level of formal education and training, amount of previous experience in a related occupation, the amount of on the job training and time to proficiency as initial elements. Further evaluation by the Panel may result in other measures being identified.

- Time to Proficiency

  We recommend that a rating system be developed to identify the time to proficiency for satisfactory performance of an occupation and composite work activities. SSA needs to be able to determine

whether an individual has performed a work activity or occupation long enough to learn how to do it. This concept comes from the definition of past relevant work and is incorporated by reference in the concept of TSA, as currently SSA regulations stipulate that only past relevant work provides transferable skills.[16]

We note that the "time to proficiency" we identify is not a rating of the degree of expertise or level of proficiency that a worker may have. It may be true that, for any given job in an establishment, some workers will perform the job better than other workers. However, SSA does not consider this degree of proficiency in determining disability and does not need a rating scale for it.

SSA currently uses the SVP of an occupation to identify the time to proficiency, but the scale has been problematic in application. For example, it does not take into account all methods by which a person might prepare for a job; it is a single item scale even though multiple factors are probably involved.

We believe that developing a time to proficiency rating system will be among the most daunting in the development of the new OIS. For this reason, we recommend that SSA conduct research on this topic. Research questions that will need to be resolved include, for example, "What factors should SSA include in considering time to proficiency?" "How can the factors be measured and quantified in a manner that is operationally feasible both from a data collection perspective and a program application perspective?" We note that some occupations require no on-the-job experience for the new job incumbent to be considered proficient, yet are highly skilled occupations. In these cases, for example, proficiency might be based on education or vocational training alone or a combination of education and on the job training. Another research question might be, "To what extent does the economy drive the educational level of recently hired job incumbents?" Methodology for not only assessing individual time to proficiency for a skill, but internal organization of skills within occupations will have to be considered.

- Length of viability

We recommend that a rating scale be developed for the length of viability of "skills," both by work activity and by occupation. For example, it is possible that the work activities of some occupations

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[16] 20 CFR 404.1565 and 416.965.

may be so subject to change due to changes in technology, tools, machinery, processes, etc. that the "skills" required by a worker to complete the work activity may be obsolete if the worker had not engaged in these activities over a period of, say, two years. Conversely, there may be some work activities that have not changed in an occupation, except in trivial ways, in thirty years and someone's skill level may still be relevant for a much longer period than in the first example.

This type of information is not currently available. We believe that the length of viability of a skill would enhance SSA's skills assessment as well as provide an opportunity for the claimant to receive a decision that is more equitable than is now possible. Based on the definition of past relevant work, SSA currently considers skills for all work to be viable for 15 years.[17]

Because this is a new concept, we recommend that SSA conduct research to examine it. Research questions could include, "What is the actual length of viability of skills, by work activity and by occupation?" "What factors moderate the length of viability of skills?" SSA could build upon its previous contracted work in this area.[18]

- Work context

    We recommend that occupational information be developed on work context factors, such as the industry, work settings, tools, machines, technologies, raw materials, products, subject matter, processes, and services related to the occupation.

    This information relates to the needs identified in SSA's regulations at 20 CFR 404.1568(d)(2)(ii)-(iii) and (d)(4) and at 416.968(d)(2)(ii)-(iii) and (d)(4). These sections list many factors that may be considered by SSA, including whether the "same or similar tools and machines are used," whether the "same or similar raw materials, products, processes, or services are involved," and

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[17] 20 CFR 404.1565 and 416.965.

[18] American Institutes for Research. *The Effects of Time and Disuse on the Capabilities Required for Prior Work* (June 29, 2001) and *Refining the Social Security Administration's Disability Determination Process: The "Past Relevant Work" Issue* (July 15, 2001).

whether any vocational adjustment in terms of tools, work processes, work settings, or the industry is involved.

SSA currently uses the DOT industry code to determine industry and for information on work setting. It looks at the detailed, occupationally specific list of tasks in the DOT for additional data on work context. Vocational rehabilitation specialists and experts at the May, 2009 Roundtable pointed to the DOT rating for Materials, Products, Subject Matter, and Services (MPSMS) for additional information on work context. The RHAJ also contains a reference to Machines, Tools, Equipment, and Work Aids (MTEWA). We note that all of these codes relate to the type of information needed, but none are truly comprehensive enough to fully meet SSA's adjudicative needs for work context information.

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Future Considerations

Through the content and technical papers reviewed, user input, and Panel deliberations, a variety of issues regarding transferability were identified. Although these do not pertain, per se, to the current Content Model and classification recommendations, they remain issues that SSA may need to consider or study at some point:

- The *What is a Content Model?* paper identifies the need to obtain information about the number of jobs available in the national economy. We suggest that research be conducted to determine if the number of jobs for each occupation in the new OIS can be accurately estimated.

- We suggest that research be conducted to determine the level of granularity of job collection and clustering to satisfy the term "occupation" per SSA policy utilization.

- Engage Vocational Experts who provide testimony for SSA for their feedback on ease of use regarding any prototype system that provides TSA information or results.

Extra Data Elements

- The age of the worker is important in considering vocational adjustment or other issues involving the transfer of skill at the end of the worklife. The year of birth of an incumbent may provide a good data element to collect.

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Definition of Terms

Formal discussion and review by Full Panel of the following items is recommended:

- Occupation

- Skill

- Transferability of skill(s)

- Transferable skills analysis

- Work experience analysis

Legal, Technical, and Data Issues

Legal, technical and data issues are certain to occur regarding the creation of a new OIS due to the immense ramifications of the system upon potential claimants within the SSA adjudicatory system. It is also anticipated that the OIS will be used by other organizations and individuals throughout the United States, who will also have a keen interest in the underpinning data elements and structures that infuse the OIS. The OIDAP has consistently been cognizant of the need for all data to meet current legal standards which include, but are not limited, to, validity, reliability, reproducibility, peer review, creation of quality guidelines, and transparency.

At this time the subcommittee does not attempt to present an analysis of the current state of the law regarding the proposed OIS. As the TSA process is integral in the determination of disability under the Five Step process currently used, and as there is a current body of regulation regarding the information utilized, the process to be followed, and the promulgation of individual results and collective findings, specific care is necessary in the coming process to ensure adherence to all applicable regulation.

Below is a brief summary of currently identified standards to be considered in the creation of a new OIS. This summary is not to be used as legal advice nor as a statement of the views of the Panel, either as a whole or individuals, rather, it is a starting place to provide the reader with a sample of legal issues that the OIDAP and SSA will need to consider during the process of creating an OIS.

<u>*Daubert* and *Federal Rule of Evidence 702*</u>

In *Daubert*, the Supreme Court addressed how a district judge should evaluate an expert's opinion about scientific knowledge under Federal Rule of Evidence 702. *Daubert*, 509 U.S. at 589-93. The Supreme Court set forth several factors a district judge may consider:

- whether a theory or technique can be (and has been) tested;

- whether a theory or technique has been subjected to peer review and publication;

- whether, in respect to a particular technique, there is a high known or potential rate of error;,

- whether there are standards controlling the technique's operation; and,

- whether the theory or technique enjoys general acceptance within a relevant scientific community.

<u>Id.</u> at 592-594. Using these factors, a district judge determines whether to allow or exclude expert testimony about scientific knowledge, i.e., functions as a gatekeeper with respect to such testimony. <u>Id.</u> at 597.

Several years after *Daubert*, the Supreme Court held that a district court should consider the *Daubert* factors when evaluating an expert's testimony not only about scientific knowledge, but also when evaluating an expert's testimony about technical or other specialized knowledge. See *Kumho Tire*, 526 U.S. at 147-49. The Supreme Court further held in *Kumho Tire* that, in a given case, the *Daubert* factors may or may not apply depending on the nature of the issue, the expert's particular expertise, and the subject of his or her testimony. <u>Id.</u> at 150.

Federal Rule of Evidence 702 was amended to reflect *Daubert* and *Kumho Tire*:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Fed. R. Evid. 702. Under amended Rule 702 as well as under *Daubert*, when an expert purports to apply principles and methods in accordance with professional standards, and yet reaches a conclusion that other experts in the field would not

reach, the district judge may conclude that the principles and methods have not been faithfully applied. Id. (Advisory Committee's Notes). Consistent with *Kumho Tire*, a district judge applying Rule 702 does not distinguish between scientific and other forms of expert testimony when performing his or her gatekeeping function.

Data Quality Act and Information Quality Act

Section 515 of the Treasury and General Government Appropriations Act of 2001 (P.L. 106-544; H.R. 5658) directs the Office of Management and Budget (OMB) to issue guidelines applicable to all federal agencies. Section 515(a) requires that such guidelines "provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies …."

OMB's Bulletin establishes fairly extensive requirements, including that important scientific information be peer reviewed by qualified specialists before it is disseminated by the federal government. The selection of an appropriate peer review mechanism is left to the agency's discretion.

OMB has set out a policy to apply stricter quality standards to the dissemination of information that is considered influential, when used in the phrase "influential scientific, financial, or statistical information." This higher standard is triggered when "the agency can reasonably determine that dissemination of the information will have or does have a clear and substantial impact on important public policies or important private sector decisions." If the agency disseminates influential scientific, financial, or statistical information, then agency guidelines "shall include a high degree of transparency about data and methods to facilitate the reproducibility of such information by qualified third parties."

Under this statute, each agency must issue its own information quality guidelines, and establish procedures that allow people to seek correction of information disseminated by an agency on or after October 1, 2002. In response, the SSA has issued *Social Security Administration Information Quality Guidelines*, which sets out standards designed to ensure the quality of information products.

Potential Challenges Based on Charges of Discrimination

The Supreme Court in *Griggs* (1971) considered a challenge pursuant to Title VII of the Civil Rights Act of 1964 to an employer's requirement that all employees must possess a high school diploma or pass an intelligence test as a condition of employment or job transfer. In practice, these requirements rendered a disproportionate number of black applicants and workers ineligible for hiring or

promotion. Yet, the Court tells us that, absent a showing of a discriminatory purpose, the employer's use of the requirements was permitted.

Department of Labor Guidelines at 41 C.F.R. Part 60-3, *Uniform Guidelines on Employee Selection Procedures*, concern employers' selection procedures that are used as a basis for making employment decisions. The *Guidelines* state, "The use of any selection procedure which has an adverse impact on the hiring, promotion, or other employment or membership opportunities of members of any race, sex, or ethnic group will be considered to be discriminatory and inconsistent with these guidelines, unless the procedure has been validated in accordance with these guidelines …" For the purposes of satisfying these guidelines, users may rely upon criterion-related validity studies content validity studies or construct validity studies. Standards for these studies are set out at section 14 of Part 60.

For purposes of developing a new OIS, *Griggs*, Title VII, and the Department of Labor Guidelines remind us that the process of data collection must be free from reflecting any unlawful discriminatory practices in the workplace.

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Appendix A─TSA Expert Panel Roundtable Summary

<u>Meeting</u>

On May 12, 2009, at SSA headquarters in Baltimore, MD., a one-day meeting was held to elicit comment from recognized leaders in the theory and practice of performing transferable skills analyses for consideration by the Occupational Information Development Advisory Panel. The overarching goal was to engage in a highly theoretical discussion of the concepts that underlie the current process of transferring skills, as that process is applied in the private sector.

Attendees present either in person or via telephone were:

Invited Experts (Participants): Gale Gibson, Jeff Truthan, Karl F. Botterbusch, Patrick L. Dunn, Timothy F. Field.

OIDAP Members (Participants): Thomas Hardy (WEA Subcommittee Chair), Lynnae Ruttledge, Mary Barros-Bailey (Interim Chair, OIDAP), Sylvia Karman (Project Director, SSA).

SSA Staff (Observers): Anne Vollmer, Deborah Harkin, Debra Tidwell-Peters, Elaina Wise, Mark Trapani, Michael S. Dunn, Michele Schaefer, Nancy Torkas, Robert Pfaff, and Shirleen Roth.

<u>Charge</u>

After a brief introduction of participants and a summary of OIDAP progress to date, the agenda for the day and the charge for discussion was reviewed by the Chair. Participants were advised that consensus was not the goal, rather expression of individual opinion by recognized experts leading to areas of potential interest or exploration by the OIDAP. The purpose of the meeting was to discuss the concepts involved in the TSA process and how a change to the underlying database presents a unique opportunity to revisit the basic tenets of the TSA. All participants were reminded that, at present, no change in SSA policy is being entertained nor anticipated and that the final product would have to conform to present policy, but suggestions of any nature were being requested for consideration and deliberation. The format for the meeting, while being broken into topic areas within a time framework, was encouraged to be open and conversational.

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Content Model and Classification Recommendations

Summary

The invited experts were unanimous in their support of the OIDAP Charter and goal to create an OIS for SSA. In the ensuing conversation, the experts were in accord regarding the majority of topic areas covered, with exceptions noted in the detail below, regarding the conceptual elements to be included in the OIS and those utilized specifically in the TSA process. It was recognized that the terminology of the DOT infuses all conversations due to the pervasiveness of the definitions and measures that have been utilized as a standard for the last seventy-plus years. However, it was also agreed that, while the pervasive language sometimes causes confusion in discussion when trying to create new measures or formulate either new and different utilization of current measures, the underlying concepts are sound and to be retained.

The Roundtable experts were in accord regarding the current definition of a "skill" utilized by SSA and suggested that a short working definition for purposes of the current meeting might be "Learned behaviors, techniques, methods, and activities that enable individual workers to perform substantial gainful employment." As a foundation of the skill definition, the experts were unanimous in their recommendation that "categories of technologies that reflect how work gets done and what gets done as a result of the work activity; the purpose of the job" (labeled Work Fields in the RHAJ, i.e., cleaning, drafting, protecting, etc.) should be retained in the OIS. The experts agreed that data collection in this area could most easily be achieved through use of "work activities" which identify worker relationships to data, people, and things (Worker Functions, or "DPT" codes in the RHAJ) and materials, products, subject matter and services (MPSMS).

The experts strongly urged the OIDAP to consider a "break out" of the amount of time required by a typical worker to learn the techniques, acquire the information and develop the facility needed for average performance (SVP) into smaller component pieces. It was noted that this information remains a key area in transferability. The experts further suggested a review of the rating of "unskilled," noting that, in their opinion, all work requires some basic skills. A "complexity quotient" was advanced as a new way of gathering information regarding areas currently captured under "Traits" and other categories in the DOT.

Finally, it was suggested that greater emphasis be placed upon the "end purpose" of the TSA as a descriptor for the type of TSA being performed. It was agreed that a TSA performed for SSA purposes differs in many ways from that being performed, for example, for job seeker placement. Clarity in purpose, and clarity in language, was recognized by all in attendance as being the key to avoiding confusion in the future.

Questions raised for further investigation are contained at the end of the summary.

A copy of this summary is to be circulated to all attendees for review and solicitation of further comment.

<u>Skills Definition</u>

The experts unanimously agreed that the current SSA definition for TSA found in the CFR is comprehensive and remains useful:

A person has transferable skills when "the skilled, or semi-skilled work activities performed in past work can be used to meet the requirements of skilled, or semi-skilled work activities of other jobs or kinds of work. This depends largely on the similarity of occupationally significant work activities among different jobs. Transferability is most probable and meaningful among jobs in which:

     i.   The same or a lesser degree of skill is required (SVP);

     ii.   The same or similar tools and machines are used (Work Fields); and

     iii.   The same or similar raw materials, products, processes, or services are involved (MPSMS).[19]

There was also agreement that the current definition of "skill" utilized by SSA remains useful:[20]

> A skill is knowledge of a work activity which requires the exercise of significant judgment that goes beyond the carrying out of simple job duties and is acquired through performance of an occupation which is above the unskilled level (requires more than 30 days to learn). It is practical and familiar knowledge of the principles and processes of an art, science or trade, combined with the ability to apply them in practice in a proper and approved manner. This includes activities like making precise measurements, reading blueprints, and setting up and operating complex machinery. A skill gives a person a special advantage over unskilled workers in the labor market.

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[19] 20 CFR 404.1568 and 416.968

[20] Social Security Ruling 82-41, § 2.a.

> Skills are not gained by doing unskilled jobs, and a person has no special advantage if he or she is skilled or semiskilled but can qualify only for an unskilled job because his or her skills cannot be used to any significant degree in other jobs. The table rules in Appendix 2 are consistent with the provisions regarding skills because the same conclusion is directed for individuals with an unskilled work background and for those with a skilled or semiskilled work background whose skills are not transferable. A person's acquired work skills may or may not be commensurate with his or her formal educational attainment.

The experts all agreed with a briefer statement that, in sum, "Skills are learned behaviors, techniques, methods and activities that enable individual workers to perform substantial gainful employment."

All agreed that, as the OIDAP moves ahead in its work, any definition must be held to a *Daubert* standard and thus whatever measurements are ultimately, if at all, tied to "skill" must be amenable to the multi prong test set forth. The OIDAP is currently reviewing Daubert and other Data requirements and will report on findings throughout the evolution of the OIS.

An expert noted the inherent value in the flexibility of a given skill to apply to a variety of occupations. The "marketability,", or those employment situations in which a skill can be applied, affects the value both socially and economically of a given skill. Thus, one skill may have greater value (and possibly transferability) than others.

The question of the erosion of skills over time was raised. It was suggested that, with changes in technology, skill requirements will change for an occupation. General discussion ensued as to whether a change in technology was more a change in "categories of technologies that reflect how work gets done and what gets done as a result of the work activity; the purpose of the job" (labeled "Work Fields" in the RHAJ, e.g., cleaning, drafting, protecting, etc.) or rather a change in the basic materials, processes, the final products made, the subject matter or data dealt with, or services rendered (labeled "MPSPMS" in the RHAJ). No consensus was reached on this topic.

Subsequently, a larger theoretical conversation regarding the underpinnings of skill was pursued. The component, "the purpose of the job" (Work Field), was urged as the basis for skill, but it was noted that activities which identify worker relationships to data, people, and things (Worker Functions or "DPT" codes in the RHAJ) and MPSMS may be the easiest way to collect data. It was proposed that a less linear approach to skills transfer, with a greater emphasis on "the purpose of the job" (Work Field), and a movement to a "concentric circle" view of "the purpose of the job" that would overlap might be a better process.

There was agreement by all that "the purpose of the job" is the strongest base of skill transferability. The larger question remains that, since currently there are approximately 100 "purpose of the job" words (gerunds), do all remain current and are there new "purpose of the job" words to be discovered? One expert noted that, in his work on white collar occupations, he had identified over 300 different gerunds. OIDAP was encouraged unanimously by the panel to explore this area further in their work.

An ancillary discussion regarding "traits" indicated that, while these are important, they are not transferable and, unlike skills, cannot be acquired per se.

Skill Levels/SVP

Currently occupations may involve many different skills but the totality is utilized to obtain a single skill level. A theoretical question of the implication of breaking out individual skills and assigning concrete levels would require greater investigation. OIDAP was cautioned that, when a skill transfers, it doesn't mean that the incumbent can therefore perform the occupation, it means the ability to perform the occupation is enhanced by the presence of the skill.

The experts strongly encouraged the OIDAP to break out the current SVP definition into, at a minimum, two tiers allowing for general/specific education and training/experience. It was suggested that the Classification of Instructional Programs (CIP) be investigated for education and that the O*Net Tools and Training measurements be investigated for training/experience. Certification was discussed as a possible additional variable to be tracked for utilization by other end users who deal in placement arenas. The scale should indicate the minimum level of competency for the occupation.

"Reading, math, language" (RMLs) was discussed briefly. These measures were found to remain viable categories and would be useful in establishing levels of complexity within the SVP.

As a subset, "aptitudes" were discussed. It was asserted that in the TSA arena, aptitudes become irrelevant. There was a general discussion on this topic but no real consensus was achieved and the area may require further review, less for transferability and more as a general requirement of the OIS.

"Data/People/Thing" (DPT) codes were briefly considered. Several experts noted that the scales are not consistent, which causes problems. All agreed that DPT should not be hierarchical, e.g. just because a worker can "mentor" does not mean the worker is competent at any other "people"-related activities.

Work Experience Analysis Subcommittee

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Skilled vs. Unskilled

The experts were asked to address if it is possible for an occupation to truly be unskilled: restated, "Does not every occupation require some skill"? It was generally agreed that "unskilled" is a misnomer and that all occupations require some basic skill. A scale of "low skill", "moderate skill" and "high skill" was suggested and generally accepted.

On a theoretical level, it was suggested that the use of the word "skill" itself may be problematic or misleading and that the use of a "complexity level index" might be more satisfactory, but the experts opined that the use of such an index would not be feasible for SSA at this time.

Discussion moved to center on a possible "complexity quotient" that would gather judgment, responsibility, control, latitude in the way a job is performed, and other categories, as possible rated items. It was noted that this nears the "temperaments" area of the current DOT and would have to be investigated for feasibility under both a Daubert standard and the necessity for such information under the general charge of the OIDAP.

General Discussion/Conclusion

The topic of academic achievement, otherwise known as General Educational Development or the GED levels, as part of the above complexity measurement was raised. It was suggested that the O*Net or SCANS rating scales could be investigated by the OIDAP as a possible substitute for the current GED levels (presently unused by SSA but valuable to other end users).

The place of "hobbies" or volunteer work in the TSA was briefly discussed. Currently, SSA adjudicates only on past relevant work (PRW) and it would be unclear how these areas would be assessed under current SSA structure.

Participants noted that a new RHAJ would be necessary. They encouraged SSA to consider tracking additional information within the OIS even if not utilized by SSA for adjudication. It was suggested that occupational group arrangement (OGA) will have to be reviewed and the classification of the OIS will need refinement so that all digits in the occupation code will have actual meaning.

Complexity was again urged as a valid area of consideration along with a reevaluation of the emphasis placed upon age in the performance of the TSA under SSA regulations. Panel members agreed that the TSA itself may need to be defined more precisely based upon the purpose of the TSA such as "rehabilitative" versus "forensic,"

The experts were unanimous in urging OIDAP to update the DOT and work on selected measurements without making large changes to the basic structure of the DOT.

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Appendix B—Biographical Information: TSA Expert Panel

Gale Gibson

Gale Gibson is Founder and President of VERTEK, a software application program development organization located in Bellevue, Washington. His company develops, publishes, and supports OccuBrowse+, OASYS, and other computer software that facilitates transferable skills analysis, access to occupational, wage, employment, training program information, nationwide job openings, and nationwide business listings. Mr. Gibson has been involved with the design and development of software products that utilize occupational information databases since 1979 when he was Director of National Marketing for Ability Information Systems in Spokane, Washington. He organized VERTEK in 1983 and he holds a Bachelor of Science degree from Iowa State University, along with Bachelor of Arts and Master of Arts degrees from the University of Washington.

Jeff Truthan

Jeff Truthan has served the rehabilitation and disability management industry since 1973. He is a 1973 graduate of the University of Notre Dame. He earned a Master's Degree from the Illinois Institute of Technology in 1975 in Rehabilitation Counseling. Jeff spent nine years in direct client services as both a Vocational Rehabilitation Counselor and Vocational Evaluator. He was recognized as Ohio's "Outstanding Rehabilitationist of the Year" in 1985. Using his "knowledge from the trenches" from 1985 to 1997, he served in a variety of support, sales, training, administrative, and product management capacities at Ability Information Systems / CAPCO: The Capability Corporation / JobQuest where he had the opportunity to design and support a variety of software products, including EZ-DOT, Job Browser Pro, Placement Problem Solver, PREPOST, Career Capability Search, and the Job Search Service.

As President of SkillTRAN since 1998, Mr. Truthan spearheads a multi-year effort to reengineer these services into a web-based format. This leads to many new product features, including a new foundation for estimating employment numbers at the Dictionary of Occupational Titles level, which was rolled out in the Job Browser Pro software in June, 2008.

Karl F. Botterbusch, Ph.D.

Karl F. Botterbusch earned a Bachelor of Arts degree in psychology, English, history, and philosophy from Elizabethtown College in 1965, a Master of Arts degree in social psychology and psychometrics from the University of Pittsburgh

in 1966, and a doctorate in social psychology, personnel psychology, tests, and measurements from George Washington University in 1974.

Dr. Botterbusch has held a number of government and university positions. This has included work as a Personal Research Psychologist at the U.S. Army Enlisted Evaluation Center, U.S. Department of Defense, as a Research Psychologist at the U.S. Employment Service, U.S. Department of Labor, as a Senior Development Specialist at Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout, and as a Senior Research Scientist, Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout. He has been the sole owner of Vocational Consulting Associates, Inc., Menomonie, WI. Since 1977.

Dr. Botterbusch has published over 45 monographs, chapters, and referred journal articles. He has made over 40 presentations. His areas of expertise include job analysis, database development, the Social Security disability program, the Dictionary of Occupational Titles, applied research into vocational rehabilitation program effectiveness and model programs development, employment models and services, computerized job matching systems, vocational expert witness, technical and grant writing, and graduate level instruction in research methodology and job analysis.

Patrick L. Dunn, Ph.D., CRC

Patrick L. Dunn, Ph.D., CRC earned a Bachelor of Arts degree in Counseling and Rehabilitation from Marshall University in 1987, a Master of Science degree in Vocational Rehabilitation with a concentration in Vocational Evaluation from the University of Wisconsin-Stout in 1990, a Master of Arts degree in Rehabilitation Counseling from the Ohio State University in 1995, and a Doctor of Philosophy in Rehabilitation Services from Ohio State in 1998. Dr. Dunn is currently an Associate Professor of Counselor Education and Coordinator of the Rehabilitation Counseling concentration at the University of Tennessee-Knoxville. He has also served on the rehabilitation counseling faculty at Syracuse University and the University of Alabama.

Before beginning his academic career, Dr. Dunn was employed in a number of different positions as a vocational evaluator and rehabilitation counselor in both the private and public sectors. This employment included work as a vocational evaluator for the Ohio Bureau of Workers' Compensation and multiple proprietary rehabilitation companies in the state of Ohio. Currently a resident of Knoxville, Tennessee, Dr. Dunn continues to be available as a vocational consultant and vocational forensic expert in addition to his scholarly endeavors.

From the beginning of his academic career Dr. Dunn's research agenda has focused on rehabilitation and reintegration of injured or displaced workers in the work force. In particular, he has examined the relevance of worker traits and occupational characteristics to better understand the relevance of how workers transfer skills from one job to another. His work has been published in numerous scholarly journals, including Rehabilitation Counseling Bulletin, The Journal of Forensic Vocational Analysis, and Vocational Evaluation and Work Adjustment Bulletin. He has also presented on rehabilitation and assessment issues at numerous conferences of national counseling and rehabilitation organizations, including the American Board of Vocational Experts, The American Counseling Association, the International Association of Rehabilitation Professionals, the National Rehabilitation Association, and the National Council on Rehabilitation Education.

Timothy F. Field, Ph.D.

Timothy F. Field earned a Bachelor of Arts degree in psychology from Barrington College in 1963, a Master of Arts degree in rehabilitation counseling from Michigan State University in 1965, and his doctorate in Counseling & Personnel Services from the University of Maryland in 1971.

Dr. Field has been an author, consultant, educator, and vocational expert within the public and private rehabilitation sectors since joining the faculty at the University of Georgia (UGA) in 1972. As an academic advisor and major professor at UGA, more than 75 masters candidates and 19 doctoral candidates graduated with degrees in counseling and rehabilitation. Dr. Field was a vocational expert and advisor to the social security program and to both plaintiff and defense attorneys in personal injury litigation. Over the last 15 years, Dr. Field has conducted over 350 seminars to rehabilitation professionals on the topics of job analysis, transferable work skills, loss of employability, and lost earning capacity. In recent years, Dr. Field has concentrated on authoring books and developing related resources (e.g., journals, study guides, etc.) through printing and publishing for professionals in the rehabilitation industry. Dr. Field is a frequent contributor of articles to the professional journals in rehabilitation. In terms of presentations, Dr. Field has presented annually at state, regional, and national conferences for over 30 years.

In 1986, Elliott & Fitzpatrick, Inc. (E & F) purchased a local printing company, which became the publishing arm of E & F. Today, E & F enjoys a respected national reputation as a publisher of rehabilitation journals, texts, and other resource manuals, and the developer of one of the more successful software programs (Labor Market Access) in the field of jobs and rehabilitation. In his

capacity as president of E & F, Dr. Field continues to write, conduct seminars, serve as both editor and publisher of several rehabilitation resources, and serve as a consultant to other rehabilitation professionals, as well as a frequent speaker to professional groups and organizations, including annual presentations at the IARP National and Forensic conferences.