

Workforce Information Advisory Council

Summary of Meeting

November 1-2, 2017

Washington, D.C.

The Workforce Information Advisory Council (WIAC) was convened at 8:30 A.M. on November 1, 2017, at the Janet Norwood Conference and Training Center, Postal Square Building, Washington D.C. The Council was convened pursuant to Section 308 of the Workforce Innovation and Opportunity Act of 2014 (WIOA) (Pub. L. 113-128), which amends section 15 of the Wagner-Peyser Act of 1933 (29 U.S.C. § 491-2) and in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended (5 U.S.C. App.) and its implementing regulation at 41 CFR 102-3.

Mr. Steven Rietzke, Chief, Division of National Programs, Tools, and Technical Assistance (DNPTTA), Employment and Training Administration (ETA) of the U.S. Department of Labor (DOL) and Designated Federal Officer (DFO) for the Council, convened the meeting, which was chaired by Ms. Cynthia Forland of Washington and was open to the public in its entirety. The two-day meeting of the Council concluded at 4:00 P.M. on November 2, 2017.

In Attendance:

Members of the Workforce Information Advisory Council

Bruce Madson, Ohio Department of Job and Family Services

Cynthia Forland, Washington State Employment Security Department (chair)

Brenda Lisbon, South Carolina Department of Employment and Workforce

Mathew Barewicz, Vermont Department of Labor

Angela Pate, University of Florida Startup Quest, OwnForce, Inc.

Jennifer Zeller, Georgia Power

Mark McKeen, General Motors

Chelsea Orvella, Society of Professional Engineering Employees in Aerospace, IFPTE Local 2001

Bruce Ferguson, CareerSource of Northeast Florida

Aaron Fichtner, New Jersey Department of Labor and Workforce Development

Andrew Reamer, George Washington Institute of Public Policy

Staff

Steve Rietzke, DNPTTA, ETA (DFO)
Don Haughton, ETA
Pam Frugoli, ETA
Lauren Fairley, ETA
Robert Viegas, ETA
Mike DeMale, ETA
Mike Horrigan, OEUS, BLS
Rebecca Rust, BLS

Ruth Peebles, The INS Group, LLC
Donald Palmer, Jr., The INS Group, LLC
Kristin Thompson, The INS Group, LLC
Lester Coffey, Coffey Consulting, LLC
Roger Therrien, Coffey Consulting, LLC
Dani Abdullah, Coffey Consulting, LLC
Mason Erwin, Coffey Consulting, LLC
JJ Ketchum, Coffey Consulting LLC

Invited Speakers

Alexander Acosta, Secretary of Labor
Mike Horrigan, Office of Employment and Unemployment Statistics (OEUS), BLS
Bruce Meyer, The University of Chicago Harris School of Public Policy, speaking on behalf of the Commission on Evidence-Based Policymaking (CEP)
Thomas Giancola, Office of Administrative Services (OAS), speaking on behalf of the DOL Innovation Council
Pam Frugoli, O*NET/CareerOneStop/Competency Assessment Team Lead, ETA

Attendees Offering Comments or Called Upon to Address the Council

Rebecca Rust, Occupational Employment Statistics and Projections, BLS
Lou Camerlengo, Five Star Development, Inc.
Robert Sienkiewicz, Census Bureau

Others Attending for All or a Portion of the Meeting

Amanda Ahlstrand, Office of Workforce Investment (OIA), ETA
William Wiatrowski, Acting Commissioner, Bureau of Labor Statistics (BLS)
John Marotta, Center for Regional Economic Competitiveness (CREC)
Lindsey Johnson, CREC
Mark Troppe, Council for Community and Economic Research (C2ER)
Christina Peña, Workforce Data Quality Campaign (WDQC)
Yvette Chocolaad, National Association of State Workforce Agencies (NASWA)
John Thompson, Council of Professional Associations on Federal Statistics (COPAFS)
John Finamore, National Center for Science and Engineering Statistics (NCSES), National Science Foundation (NSF)
Sharon Boivin, National Center for Education Statistics (NCES), Department of Education (ED)
James Painter, Career Source North Central Florida
Robert Sivinski, Office of Management and Budget (OMB)

Subcommittees Reporting During this Meeting

Subcommittee One

Mathew Barewicz (chair)

Mark McKeen

Bruce Ferguson

Angela Pate

Subcommittee Two

Jennifer Zeller (chair)

Brenda Lisbon

Bruce Madson

Chelsea Orvella

Subcommittee Three

Andrew Reamer (chair)

Cynthia Forland

Aaron Fichtner

Day One Proceedings

Welcome

8:30 A.M. to 9:00 A.M.

MS. FORLAND opened the meeting by welcoming attendees. She informed the Council that two former members, **ELLEN GOLOMBEK** and **PAMELA BUCY**, had resigned from the Council due to having accepted new positions.

With regard to the new support contract for the Council, **MR. RIETZKE** introduced The INS Group, which will be working with Coffey Consulting to support the Council. He requested that requests for support that go beyond the basic note-taking, documentation and meeting support provided pursuant to FACA be submitted through ETA so that it may more fully involve ETA staff and allocate resources effectively. Such requests should be sent to **MR. RIETZKE**, **MR. HAUGHTON** and **MR. VIEGAS**, with a copy to **MS. FORLAND**.

MR. RIETZKE informed the Council that Secretary of Labor **ALEXANDER ACOSTA** was expected to stop by the Council meeting later in the morning. He further stated that acting Assistant Secretary of ETA **BYRON ZUIDEMA** had retired at the end of September and that **NANCY ROONEY** was serving as ETA's acting agency head. He stated that, while currently in a continuing resolution through December 8, notices had not yet been issued to fill the openings on the Council, and it appeared that notices would not be issued while awaiting confirmation of the ETA Assistant Secretary. **MS. FORLAND** noted that the lack of movement in filling WIAC vacancies was not meant to signal that WIAC was not valued. She further expressed her appreciation for **MR. ZUIDEMA'S** work and service.

MR. MADSON inquired whether there was a contingency plan for filling vacancies on the Council. **MR. RIETZKE** responded that WIOA provided that members of the Council may continue to serve after their terms expire until a successor is appointed and that he hoped to use that to make the case that the Council can keep meeting even if new members are not selected. **MS. FORLAND** queried whether there was a restriction on serving consecutive terms and expressed the desire to retain as many current Council members as possible. **MR. RIETZKE** confirmed that WIOA provided that members may be appointed for not more than two consecutive terms.

BLOC Update

9:00 A.M. to 9:30 A.M.

MS. FORLAND welcomed BLS Associate Commissioner **MIKE HARRIGAN** to provide an update on recent developments at BLS and the BLS LMI Oversight Committee (BLOC). **DR. HARRIGAN** indicated that he would speak mainly about the BLOC, reminding the Council that it was

focused primarily on BLS federal-state programs and used to be the Workforce Information Council (WIC).

DR. HARRIGAN stated that **WILLIAM BEACH** had been nominated for BLS Commissioner and noted that the nominee had both an appreciation of and a facility with data. Reporting on the BLS budget, he reminded the Council that BLS had been flat-budgeted at \$609 million for a number of years and that the Bureau had to continue producing its product line while paying contracts whose prices were increasing. He noted that the issue was the subject of ongoing discussion internally, and with the BLOC.

Highlighting recent accomplishments at BLS, **DR. HARRIGAN** noted that it had converted the Quarterly Census of Employment and Wages (QCEW) to the 2017 update of the North American Industry Classification System (NAICS). The Bureau released the 2016-2026 employment projections two months early, to help high school guidance counselors, and planned to retain the September release date in the future. The Bureau also hoped to change from a biennial to an annual cycle after the next biennial update. Additionally, BLS released experimental firm size class estimates in the Job Openings and Labor Turnover Survey (JOLTS). The Bureau was also working on modeling JOLTS estimates to the state level. He stated that some states had shown interest in having sample-based representation in JOLTS. He acknowledged some related concerns about quality control, but indicated that BLS would also be interested in having some state sample-based representation in JOLTS. **MS. PATE** suggested including zero employee establishments in JOLTS.

DR. HARRIGAN reported that BLS recently released data from the American Time Use Survey (ATUS), including data on unpaid elder care. The Bureau also did cognitive research related to employer-provided training and research into the ability of a Current Population Survey (CPS) proxy respondent, which he clarified is a single representative who responds to survey questions on behalf of the household, to identify family members as LGBT. He noted that there is a great deal of interest across the government in gathering such data; however, there is concern in the CPS that proxy respondents may not know of their family members' status and it may be a confidential or sensitive question. He indicated that the highly anticipated Contingent Worker Survey (CWS) supplement to the CPS would be coming out in May with additional questions related to gig employment.

DR. REAMER inquired about the likelihood of continuing the CWS. **DR. HARRIGAN** responded that BLS had received funding for one-time issuance of the CWS supplement and future collection was not currently in the budget, adding that the survey costs \$1.2 million. He further observed that there is substantial interest in the study and that the Bureau continued to request funding.

Turning to the BLOC, **DR. HARRIGAN** stated that it had projects that extended across the federal-state programs as well as Policy Councils with activities focused on each individual federal-state collaborative program, including QCEW, Local Area Unemployment Statistics

(LAUS), Occupational Employment Statistics (OES), Current Employment Statistics (CES), and also for the Projections Managing Partnership (PMP). As to the first of the cross-cutting issues, in-demand jobs, the BLOC had surveyed the states and found a number of commonalities, but also idiosyncrasies. He noted that **MR. BAREWICZ** had assisted with the survey validation. The evaluation raised the question of how to define in-demand jobs in the future: would there be more standardization? He opined that the subject falls under WIAC's purview. Second, he referenced a group established to discuss budget allocations. Participants had shared details of their programs and discussed topics such as who the states are actually hiring using their federal allocations. The group concluded that OES struggled to hit its response rates and that states tended to have more negatives regarding spending on OES and more positives regarding other programs. He indicated that the BLOC was considering a number of changes to the OES and how they would impact workloads and efficiencies within OES. Third, he noted that BLS was currently working on a pilot project with several states to access unemployment insurance (UI) wage records, as well as a separate effort led by OMB to share wage record data among BLS, Census, and ED. He added that the Ryan Commission (Commission on Evidence-based Policymaking (CEP)) was considering increasing data sharing in general and had shown interest in wage records.

DR. HERRIGAN further stated that BLOC had developed a vision for its work. In a valuable exercise that extended over a few meetings, the Committee had discussed vision buckets and placed the projects that the Policy Councils had been working on into those buckets. He noted that the current progress reports from the Policy Councils only reflected this year's activities, which was a subset of all the projects in progress. Next year, he added, the Committee would evaluate the project portfolio with respect to the identified priorities and planned to do an annual review moving forward to assure that it remained focused on the big picture and vision.

DR. HERRIGAN reported on some of the more significant projects currently being undertaken by the BLS Policy Councils. For the QCEW, he indicated that BLS had begun testing an accelerated release schedule in order to evaluate its impact on other parts of the system. Additionally, he described an effort to create a quick response survey capability, based on a sample of respondents from the QCEW, to allow for short follow-up supplements without the need for additional funding.

Related to the CES program, **DR. HERRIGAN** reported on ongoing work to enable concurrent state and area seasonal adjustments and a conversation with the states to develop publication criteria for legacy products. He also noted a BLS project to implement a unified benchmarking process for the QCEW and CES. Next, he described work on a new methodology in the LAUS program that would improve the explainability of labor force estimates. For the OES program, he reported that BLS had recently implemented a new estimation methodology to impute OES staffing patterns to industry employment in the QCEW to improve local data. He added that BLS planned to implement the 2018 revisions to the Standard Occupational Classification (SOC) in OES early next year, continued to develop its auto-coding capability for implementation in

OES data collection planned for mid-2018, and was working on an OES case assignment management modernization project, all of which he hoped would help improve response rates.

DR. HARRIGAN then described ongoing projects under the purview of the PMP. He noted that the BLS Employment Projections program was currently implementing a new separations rate methodology to reduce the bias in the old replacement rates and that the program was moving to annual projections. He added that the BLOC had asked the PMP to consider whether the number of projections products was potentially confusing, with two-year, ten-year, and potentially five-year projections, in the system, and how those products should be managed. He further described plans to revise the update process for the Occupational Outlook Handbook (OOH) and the annual projections by moving to a continuous (likely quarterly) update schedule for the OOH, with priority given to more dynamic occupations. Lastly, he described ongoing work in partnership with ETA to produce more video products as part of an overall vision to improve communication with the public and also produce detailed methodological videos for use in educational settings.

MS. FORLAND inquired when auto-coding of job titles would be available for pilot by the states.

MS. RUST responded that there were currently eleven pilot states testing auto-coding, and data was in from nine. She expressed hope that it would be extended nationwide in the near future.

DR. REAMER asked what questions might be asked in a quick response survey. **DR. HARRIGAN** indicated that they would be short business-related questions to which the respondent would know the answer without having to turn the survey over to someone else (considered the kiss of death for response rates). Reasonable questions might relate to whether the business provides training or what types of workers the business employs. In general, it would provide the possibility of exploring new topics. Noting the positive press received by the recent projections, **DR. REAMER** inquired to what the positive press was attributed. **DR. HARRIGAN** responded that BLS has a marketing plan and that the Department has been interested in what BLS has been doing, particularly with regard to apprenticeships. There is a lot of interest in good jobs for people without a college education, he noted, and the Bureau publishes a lot of data relevant to that.

Evidence-Based Policymaking

9:30 A.M. to 10:15 A.M.

MS. FORLAND then welcomed **DR. BRUCE MEYER**, a member of the CEP, who outlined the Commission's recommendations on how to increase the availability and use of data in order to build evidence about government programs, while protecting privacy and confidentiality. She encouraged Council members to consider how their subcommittee work aligns with CEP's efforts.

DR. MEYER reminded the group that the Commission was the product of discussions about how data could better be used to guide policy suggestions. Representatives Paul Ryan and Patty Murray sponsored the bipartisan legislation that created the Commission, on which five of the 15 members specialized in privacy and confidentiality. The Commission produced its final report about two months ago.

He continued, reporting that there has been a great deal of interest in the use of statistics in decision making—including in government—and there is interest from students at all levels. The Commission commenced with an eight-month fact-finding process, with public hearings and testimony from experts, and accepted public comments. It also sent a survey to 209 federal agencies that gather data, and met with 40 additional groups. After seven months of deliberation, CEP produced 22 consensus recommendations. There were three themes identified in the Commission's final report, which primarily address the statistical use of data by professional researchers: (1) improved access to data in terms of laws and processes; (2) stronger privacy protections—currently federal agencies are not dynamic and apply protections unevenly; and (3) greater capacity to use the data for evaluation and research.

Regarding access, CEP recommended the establishment of a National Secure Data Service (NSDS). Contrary to the concept of a centralized federal data clearinghouse, which would present security concerns, the NSDS would allow distributed data to be linked, with identifying information removed, so that the resulting data could be analyzed in a secure setting. After the research was completed, the original linked data would be destroyed.

CEP also offered recommendations for improving access to existing data, which would address inconsistencies and barriers in law. For example, the use of data by many agencies has been justified exclusively based on how it benefits that agency, rather than how it could benefit the government as a whole. Furthermore, there should be a presumption that data would be made publicly available unless there is a compelling reason not to, and there should always be a risk assessment before releasing de-identified data. CEP also made recommendations to improve the capacity of agencies for program evaluation and research. It recommended that employees should undergo an approval and training process in order to use confidential data.

He indicated that the Commission is skeptical of many of the existing bans on government collection of data, and recommended that all current bans should be carefully reviewed and future bans should be carefully considered. He noted that in terms of privacy protections, in addition to risk assessments, there are many new technologies that allow examination of data without revealing personally identifiable information. He also indicated that CEP recommended assigning a senior official in each agency to act as steward for its data.

Regarding evaluation capacity, **DR. MEYER** reported CEP's recommendation that each department designate a chief evaluation officer and establish multiyear learning plans to assist in developing increased evaluation capacity. The Commission also recommended increased coordination across agencies and suggested that OMB take an increased role. It further

recommended improvements to the processes for creating new data collections, and that sufficient resources be dedicated to support evidence building across the government. In addition, the Commission recommended that there should be a single federal source through which state-collected quarterly earnings data are made available for statistical purposes based on feedback that obtaining data from multiple states is prohibitively difficult, making it difficult in turn to track people across state lines. **DR. MEYER** noted that, while quarterly data is compiled in the National Directory of New Hires in the Department of Health and Human Services (HHS) and the Longitudinal Employer–Household Dynamics (LEHD) program in Census, those sources are not typically available for research.

DR. MEYER further reported that CEP also recommended that federal departments that acquire state-collected administrative data should make those data available for research and statistical purposes and that where there is substantial federal investment in a state-operated programs, the program data should be made available to support evidence building.

The NSDS, he added, would facilitate secure access to data by having stringent privacy protections using state-of-the-art methods to link data from multiple sources. It would also have the capacity to provide technical assistance to states and to perform analyses on a fee-for-service basis.

DR. MEYER concluded by describing plans for moving from CEP’s recommendations to action, noting that draft legislation with action on each of the three recommendation theme areas would soon be available on the CEP website. He indicated that the Commission expected the legislation to be introduced soon and encouraged Council members to be champions of evidence-based policymaking in their own organizations. He then opened the floor for questions.

In the context of **DR. MEYER’S** discussion of establishing qualified researchers, making data available, and fee-for service applications, **MS. FORLAND** observed that, while the states are the source of the quarterly wage data, they cannot get IRS data and struggle to get educational data as well, and she asked for **DR. MEYER** to speak to this issue. **DR. MEYER** responded that qualified researchers could be federal or state researchers. He observed that there were currently approximately 25 secure research centers where researchers could work on linked data. For example, while it was not currently possible to learn what programs displaced workers receive benefits from because a researcher cannot get information from more than one state and the data available are collected program-by-program, the recommendations would make that feasible.

DR. HARRIGAN stated that, at a recent briefing by **KATHARINE ABRAHAM** at NASWA, he had asked about whether the NSDS was going to accommodate production uses of the data, i.e., using linked data to enhance or produce new data products by federal agencies or states. He noted that CEP used the words statistical purposes and research purposes, and in the report the idea of research and evaluation came through but production use did not. **DR. MEYER**

confirmed that there was specific language in the recommendations that data should be available for production, and noted that linked data for specific research projects would be destroyed after a defined time period. **MR. BAREWICZ** asked whether the recommended steward for data in every department would be a civil servant, and **DR. MEYER** explained that it would typically be the chief of the principle statistical agency in each department. **MS. BOIVIN** noted that the steward would be someone who knows statistical procedures and risk mitigation processes for the data, who could also assure that the administrative data was suited for statistical production and research.

MR. TROPPE observed that CREC had a project that brought five states together to assist them in working together on data sharing at a practical and policy level. **DR. MEYER** expressed the hope that states would want to use this service for data sharing because it would have expertise in linking and advanced privacy protection technologies. **MR. FICHTNER** observed that his state was working on data sharing and would like to hear how the NSDS can help with that. In addition, he queried how a qualified researcher was defined and how the recommendations would deal with the ownership of the data. **DR. MEYER** replied that, if a researcher is qualified to access data from one agency, he or she should be approved to access secure data from all agencies. Similar background checks and training are typically in place across agencies, and having gone through the process once, a researcher should not have to go through it again for each agency. In terms of approvals for access, he observed that the report is ambiguous but summarized its intent that the data storage would be distributed, but the access would be centralized. As such, once a researcher is approved to access the service, he or she would be approved to access the data from many agencies. **MR. FICHTNER** observed that when federal agencies do evaluations, there are review processes to ensure rigor, and sometimes peer review, and urged consideration of the possibility that by opening the doors too widely, a researcher could get access without rigorous vetting. **MR. MADSON** observed that often even experts in one type of data do not really understand data from other sources. He expressed concern that a researcher might not understand the specifics of how data are collected and defined in each state or how the states' different laws affect the data. **DR. MEYER** stated that he was aware of situations where qualified researchers could not get access, but was interested to hear of the concern about access going too far. He observed that the current situation gives rise to cases in which one person in an agency can get access and another cannot for administrative reasons, rather than whether they understand the data. **MS. FORLAND** noted that states that have done some internal data sharing have learned lessons about how the data might be used for fishing expeditions, and she suggested that their experience could be valuable. **DR. MEYER** responded that the report recommended a careful proposal review period, where researchers would have to submit research proposals that establish what they are going to do and their methodology. **DR. HORRIGAN** suggested integration of state expertise—perhaps virtually—into the evaluation and approval processes.

MS. FORLAND queried how WIAC could best partner with members from CEP moving forward, observing that there was a great deal of excitement and conversation about data and data access. **DR. MEYER** indicated that the report was available on the website at www.cep.gov and that support of the legislation as it moves forward would be valuable. He anticipated that the first round of draft legislation would be available in the next few days.

DR. REAMER noted that one of the few data sets mentioned is the wage record and queried whether there were any specific suggestions regarding the wage record. **DR. MEYER** replied that the recommendation is that the data should be available somewhere and that CEP would welcome WIAC's recommendation as to where it would be available. **MS. FORLAND** stated that, because there are variations in the wage record across states, recommendations about the elements would be appreciated. **DR. MEYER** responded that CEP was not specific on that point and would welcome input from WIAC.

Roundtable: Process and Timeline for Developing the WIAC Recommendations

10:30 A.M. to 11:30 A.M.

Discussion of WIAC Charter and Report Process

MS. FORLAND convened a roundtable discussion of how the Council would develop a draft document of recommendations and what the final product might look like. She opened the roundtable with a review of the Council's Charter in order to refresh the members on their purpose and role. She reminded the Council that the Charter provided that DOL would consult with WIAC twice a year on the design and maintenance of the workforce and labor market information (WLMI) system and that WIAC would provide written recommendations on the evaluation and improvement of the system for the Secretary's two-year plan. She emphasized that there was also a broader audience for the recommendations beyond the Secretary before calling for comments from the members.

MS. PATE stated that her subcommittee had discussed the practicality of its recommendations. In particular, they discussed the fact that, while some of the recommendations might be heavy lifts, they are important, and therefore the group should consider practical next steps rather than becoming overwhelmed by the scope of their task. **MS. FORLAND** expressed concern about the production of a two-year plan and directed the Council to consider making its recommendations freestanding from the two-year plan. **MS. ZELLER** commented on the value of communicating that the recommendations would be long-term, extending beyond the current members' time on the Council.

DR. REAMER requested **MR. RIETZKE'S** guidance as to what Secretary Acosta would like to hear about during his visit on the second day of the meeting. **MR. RIETZKE** relayed his understanding that the Secretary was interested in advisory committees in general, and had

expressed interest in data based on his background in economics before serving as a U.S. Attorney and Dean of Florida International University College of Law.

MR. BAREWICZ asked for details of the two-year plan: was it required, who enforced the requirement, and whether it would actually provide value. **MS. FORLAND** responded that it was required in the Workforce Investment Act (WIA) and was carried over in WIOA. She stated that a two-year plan had never been produced, and that there was no enforcement or consequence for failing to produce the plan. **DR. REAMER** indicated that there had been a draft produced by the predecessor to the WIAC, but that it had not developed into a formal plan. **MS. FORLAND** replied that it would be valuable to see any prior drafts.

MS. FORLAND turned the discussion to the recommendations, directing the members to take an active interest in the recommendations from all subcommittees as the Council would jointly determine whether each would be adopted. She reminded the group that Council staff would develop a final format for the document, without making any changes to the content of the subcommittees' recommendations. **MR. RIETZKE** added that the subcommittee chairs would be asked to review the document for a cohesive presentation of the recommendations, probably in the December time frame, and that the Council would convene in a full virtual meeting in January to approve the final draft.

MS. ZELLER asked about the format of the document, and **MS. FORLAND** explained that it would retain the same "What/Why/How" format as the current subcommittee reports, with a target of one page for each recommendation, plus appendices. **MS. ZELLER** suggested consideration of a video introduction to generate interest. **MS. FORLAND** concurred.

DR. REAMER asked whether there should be a public awareness campaign around submission of the recommendations to the Secretary. **MS. FORLAND** expressed interest in engaging stakeholders by generating as much publicity as possible. **MR. RIETZKE** stated that FACA reports come in through the program office, and BLS/ETA draft a memo reacting to the recommendations. He indicated his understanding that the final recommendations would not be published by the DOL until the Secretary signed off. He also indicated that he was not aware of the DOL's plans relating to public awareness. **MR. HAUGHTON** observed that, in the case of WIAC's Informational Report, the Secretary had wanted to approve the document before initiating any promotion of it. As such, the document discussed at the virtual meeting, which will be public record, will be labeled as a draft. The group discussed whether to call for public comment on the draft documents in the Federal Register notice of the virtual meeting and determined to address the question before adjourning the current meeting.

MS. PATE queried whether the disbandment of the DOL Innovation Council, which had been a resource for WIAC, would have any negative implications for the report. **MR. RIETZKE** remarked that the recommendations of the WIAC should stand independently of the existence of other councils. **MS. FORLAND** noted that the WIAC could recommend that an innovation council be permanently established.

Subcommittee Presentations

1:00 P.M. to 4:30 P.M.

In anticipation of the subcommittee reports, **MS. FORLAND** led a brief review of the short Informational Report published by the Council to remind the members of the opportunities they originally identified. She then called upon the subcommittee chairs to report the suggested improvements identified by their subcommittees. (Copies of the reports submitted by the subcommittees, as well as the Informational Reports prepared by the Council, are available at <https://www.doleta.gov/wioa/wiac/>. Page 3 of this document provides a listing of the subcommittees and their members.)

Subcommittee One

MR. BAREWICZ, chair of Subcommittee One, reminded the group that the subcommittee's focus was on the infrastructure of the WLMI system. He introduced **MR. MCKEEN** to discuss the first recommended improvement, "Create a 21st century WLMI system using advanced technologies." He also noted that this recommendation aligned with Opportunity 5.

MR. MCKEEN informed the group that the subcommittee started with a review of the DOL's five-year plan for its information technology (IT) infrastructure and the five strategic objectives identified for 2014-18. While the subcommittee concluded that the goals it had set at the time were appropriate, the group wanted them to go further, including the establishment of a distributed knowledge management system (DKMS). **MS. PATE** explained that a DKMS is currently being used by several government agencies, including NASA. Instead of maintaining data in a centrally located repository, a DKMS offers a user-friendly interface with data housed in distributed locations using standardized structures. The interface allows access not just to a catalog of data, but to a knowledge base presented in a way that a human can easily interact with it. **MR. MCKEEN** relayed the subcommittee's conclusion that developing an open source system would allow DOL to keep pace with technology advancements and better meet stakeholder needs, particularly in terms of presenting an interactive, easy-to-use user interface.

MS. FORLAND asked how a user would use such a system. As an example, **MS. PATE** stated that eventually a student or guidance counselor could query the system as to what kinds of occupations were best for a person who was detail-oriented and had a foreign language, or a person who enjoyed working outside—in much the same way as one can currently query "Alexa." The healthcare industry, she noted, is using a similar approach for diagnostics training for nurses, who converse with avatars that ask questions about symptoms, etc. **MS. FORLAND** observed that similar information is on O*NET and probed for how this would be different. **MS. PATE** replied that the interface would be extremely different, allowing the user to exchange knowledge with the system. In addition, while O*NET data resides in a central repository, the

distributed nature of the data in a DKMS would allow real-time updates of information across the country.

MR. MCKEEN stated that the subcommittee also looked at the requirements to make a system like this possible and determined that a primary requirement was an infrastructure to support a natural language interface. **MS. PATE** stated that the subcommittee determined that a consultant should be retained to craft an RFI to obtain information on the state of the art and how such a system could be created. The subcommittee originally envisioned that the DOL Innovation Council would be the best entity to sponsor the RFI, and consequently the group was considering a recommendation to continue the Innovation Council. Alternatively, a consultant could be engaged to craft the RFI. **MR. BAREWICZ** summarized that there were two prongs to this recommendation—one was to build a roadmap for moving to a DKMS and the other was to establish a task force of passionate subject-matter experts similar to the Innovation Council to continue these initiatives.

DR. REAMER noted that he had recently learned that HHS was funding two relevant comparative research evaluations. The first was the Patient-Centered Outcomes Research Network (PCORNET), which allowed data from all hospitals and treatment centers to be linked in a distributed data network to support evidence-based medicine. The second was an HHS-funded group called Patient Centered Outcomes Research Institute (PCORI) that issued an RFP looking for groups of organizations who wanted to share data. The RFP formed groups by geography, groups by type of institution, and groups centered around specific diseases, all of which agreed to share data in support of evidence-based medicine. This system went live in 2014. In addition, ten years ago, the FDA set up a prototype of such a system, sharing drug research.

DR. REAMER asked which data sources the subcommittee anticipated would be part of the DKMS. **MS. PATE** replied that the group had not targeted specific data sources, but noted that integrating the posting of jobs with the postings from qualified individuals and eliminating the barriers between them was the goal. **DR. REAMER** indicated that the U.S. Chamber of Commerce Foundation was working on a job listing database that might be a resource for this. **MS. PATE** agreed and emphasized that the goal was to create a standard that all organizations would choose to adopt.

MR. FICHTNER noted that the radically new technology was exciting and wondered whether there was a way to establish a specific goal with a tangible recommendation so that end users could see how it would benefit them. For example, one could use this to create a better career information system or to manage administrative records to improve decision-making. The group considered whether a proof-of-concept recommendation would be the way to start. Particular substantive suggestions included: jobs, careers, and credentialing.

MS. FORLAND noted that, for all subcommittee presentations, the subcommittee should document the feedback it received, without the necessity to respond immediately with

solutions, and integrate that feedback into the documentation of the final improvement. The group agreed that concrete recommendations are valuable.

MR. BAREWICZ turned the discussion to the subcommittee's second improvement, "Increase public awareness of industry, occupation, and skill data," noting that it aligned with Opportunities 1 and 5 and also related to **DR. HARRIGAN'S** discussion earlier in the day about improving public content. **MR. BAREWICZ** observed that, in spite of our very successful education system, there was a disconnect between students, jobseekers and workers and the information that is available to them regarding the labor market. Therefore, the goal of the improvement was to integrate career awareness into the curriculum, starting at the elementary level and moving up through secondary schools. The WLMI system can be overwhelming, he stated, so it is important to develop better education about how to use LMI, as students often do not know how their skills are valued and referred to in the workplace. He observed that this improvement could include a partnership with the Department of Education (ED).

MS. FORLAND queried the resources required—perhaps by ETA—to "create an education framework," as proposed. **MR. BAREWICZ** envisioned it as a collaborative effort, perhaps as either a subcommittee of the BLOC or a coalition of the willing, without any additional funding needed. **MS. FORLAND** suggested including a recommendation to start with state pilots.

DR. REAMER noted that some resources were called out in the documentation, such as MySkillsMyFuture.com, and suggested documenting the necessary resources within the DOL. The group discussed naming the ED as a necessary resource or inviting its participation.

MS. FRUGOLI suggested that there might be curricula available from the National Career Development Association or other associations. She also clarified (relative to the subcommittee's first improvement) a few details regarding O*NET, including that, while the entire system is updated every ten years, updates to subsets of the data are made every year. She also noted that O*NET was available for download or via web services.

MS. FORLAND emphasized that a distributed technology development ecosystem would allow users to exploit data collected from myriad sources, including private citizens, employers, and O*NET itself. The point would not be to replace O*NET, but to pull from it and other sources, and creating a more user-friendly interface for all users.

MS. FRUGOLI pointed out that Schema.org has already developed a standard schema for job openings, but employers have been slow to use it. If the U.S. Chamber of Commerce Foundation could build support for its use, it would contribute to improving the data, she added.

MR. FICHTNER urged more specificity in the improvement in order to make it easier for the Secretary to approve it. He asked what specifically could be included to help the K-12 education community use LMI more effectively. **MR. BAREWICZ** replied that the improvement contemplated a train-the-trainers model, which would teach education professionals how to

engage students on LMI topics. He expressed his hope that it would leverage other platforms and existing materials, as well. **DR. REAMER** stated that there were two parts to the recommendation: content development and transmission of the content. He encouraged as much specificity as possible in either context to facilitate the Secretary's understanding of the recommendation. For example, regarding content, the recommendation should specify where the data in question resides currently. The group also acknowledged that too much specificity could lead to a check-box mentality rather than to rethinking how LMI data is used.

MS. ZELLER noted that the best programs she has observed are ones that expose high school kids to actual production environments to let them see that they have the ability to do the work. **MR. BAREWICZ** acknowledged the value of such programs but noted that industry awareness has to be age-appropriate; for example, around fifth grade is the right time for some. **MS. ZELLER** suggested inclusion of industry partnerships in the recommendation.

MR. BAREWICZ turned the discussion to the subcommittee's third improvement, "Improve consistency and availability of program evaluation data" and noted that this improvement ties into Opportunities 2 and 3. He observed that many state LMI departments are facing significant budget constraints. At the same time, he noted, WIOA directs a great deal of program evaluation be performed, but it does not identify the entity responsible. He added that LMI shops could be valuable resources for performing such evaluations or conducting research more generally.

DR. REAMER noted that, in related news, a bill based on CEP's recommendations had just been introduced in the U.S. Congress. In it, he noted, each agency is directed to develop a plan to identify the questions it wants to answer and its plan to answer them. States will also give feedback, per the proposal, and then the OMB will synthesize the data into a unified plan. Furthermore, the proposed legislation requires each agency to identify how to make its data available and places emphasis on sharing data between BLS, the Bureau of Economic Analysis (BEA), and Census. He added that it requires that there should only be a single application to become a qualified researcher. Additionally, DOL will be required to produce this evidence-based analysis agenda every year, which, he suggested, ties it into this improvement.

MR. BAREWICZ observed that apprenticeship programs might be served by this improvement, as well.

MR. MADSON indicated that, in the past, his agency evaluated overall programs, but now also has to look at different levels and versions of the same program.

MS. FORLAND stated that, while not all LMI shops might have this capability, the community should look to them first before turning to outside contractors for research. She added that, if there is a requirement for an independent evaluation, another state's LMI shop might be able to provide it.

DR. REAMER suggested citing the portions of WIOA that call for program evaluation. **MS. FORLAND** suggested also citing the appropriate sections of the recent Presidential Executive Order Expanding Apprenticeships in America.

MS. PATE noted a frustration with current management of access to data, noting that users in the field, who are typically not academic researchers, have difficulty accessing data due to privacy concerns, even though they actually provided the original data. She offered an example in which her organization conducted a programmatic experiment under a DOL grant and provided a DOL approved independent evaluator with the participant data. The DOL then only allowed the evaluator to return the data scrubbed of personally identifiable information. As it was the organization's data originally, it had to manually add participant data back in order to use it, which created more work. She therefore queried whether there could be levels of clearance, or some other mechanism that recognized that practitioners require access to data as do researchers.

MR. BAREWICZ noted that his organization was currently performing evaluations for state funded worker training programs, noting that no one else has access to the information they use, which makes it impossible for others to study their methods or findings. He observed that this situation would be different if there were a designated entity for program evaluation in each state, which could allow for peer validation of the analyses.

MR. BAREWICZ thanked the subcommittee members and **MR. THERRIEN** and **MS. KETCHUM**, who pulled the report together.

Subcommittee Two

MS. FORLAND turned the discussion over to **MS. ZELLER**, chair of Subcommittee Two.

MS. ZELLER recognized Coffey Consulting and everyone on the staff for their support, as well as the other chairs, and **DR. HARRIGAN** and **MS. FRUGOLI** for their expertise. She stated that the subcommittee focused on enhancing data and evaluation programs, and observed that, while the group wanted to enhance everything, it realized that it had to make choices. The first recommended improvement she described was to "Enhance UI wage records."

She noted that enhancing the UI wage records had come up in a number of discussions. The group had expressed interest in adding occupational title, work hours and work site, enabling the capture of valuable and previously unavailable information in areas such as: occupational pathways, educational outcomes, full-time work, wages and hours, structure of work, and how job titles relate into given industries and job opportunities. She acknowledged that adding these data elements to the wage record would initially be challenging for employers and states, but could reduce the data collected in OES, which could result in an overall savings of money, help inform a time-series, and help identify emerging industries and occupations.

She stated that the subcommittee envisioned a carefully planned process involving collaboration with the states to ensure its proper execution. Currently, she noted, private companies look initially to private data sources, but this enhancement might help turn companies' attention to BLS for their labor market analysis needs. She observed that the enhancements would also provide value to students, allowing them to better understand their career pathways.

MS. FORLAND expressed her appreciation for the subcommittee's consideration of career pathways. She noted that it was expressly referenced in WIOA, but had to this point been the focus predominantly of colleges—thus only relating to career pre-requisites. **MR. MADSON** also acknowledged the value of being able to track what occupation a student pursued after his or her education.

MR. FICHTNER supported the concept of giving data back to employers, but noted that the group should remain mindful that there would also be real costs to states. While the benefits would outweigh the costs, he suggested that the Council needed to make a very strong and clear case. He also observed that, of all the things the Council could recommend, this would have the most impact on the group's priority interests. **MR. MADSON** urged mindfulness in convincing business users of the value of the enhancement, noting that if business opposed it, it would not be successful. **MR. MCKEEN** observed that businesses currently pay for these data from private vendors, reflecting the existence of demand for the information.

DR. REAMER observed that, under the "Why" heading, there were two elements: the ultimate benefits to end users and the benefits to specific federal data programs. He suggested that the benefits be expressly called out, in order to connect the dots for the Administration. He also suggested that the report point out that it would help states and agencies identify in-demand occupations. He observed that this recommended improvement was a good complement to Subcommittee One's proposed improvement relating to access to data.

He also made the general recommendation that, for all the Council's recommendations, the "How" section should also include who would perform the actions. He finally urged the subcommittees to recommend specific actions to be taken by the Secretary, with acknowledgement that the Council's recommendations were building on pilot studies and other actions taken by the WIC. He wanted the subcommittees to avoid requiring the Secretary's staff work to figure out how to connect those dots.

MS. RUST observed that, in general, the points in the "Why" section of the improvement added up to enabling the workforce system to produce a more skilled workforce, which would ultimately benefit businesses. The recommendation, she noted, would also reduce UI processing costs and welfare costs and would be of particular interest to payroll service providers, who would be able to provide more services.

The group discussed one potential benefit identified by **MS. FORLAND**: eliminating the need for the OES survey. **MS. RUST** noted that, while the survey itself could be eliminated if the improvement were implemented nationwide, there would still be a need for manpower to clean up the data collected on the wage record. **MS. ZELLER** stated that the subcommittee had considered including elimination of the OES in the recommendation, but it needed more data to be assured that the possibility could be stated so strongly. **MS. PATE** queried whether a single-state pilot might be implemented, and **MS. RUST** confirmed that a few states were collecting additional data along those lines, some with voluntary participation, and that there was an effort to analyze whether the additional data would conceptually allow elimination of the OES. She acknowledged that the evaluation of the state efforts and whether they could eliminate the need for OES was ongoing.

DR. REAMER noted that the potential savings in time spent filling out the OES might be significant. **MR. BAREWICZ**, however, noted that it would involve transferring a large reporting burden on a few responders to a small burden on many more employers and that there might also be unanticipated barriers to reconciling current data collections with the proposed data elements. **MR. MADSEN** suggested that, from an IT perspective, the required change to UI databases would be relatively minor, and **MS. LISBON** added that South Carolina's implementation of an expanded wage record had not been technically challenging.

MS. FORLAND observed that there were two audiences for the recommendations, the general public (e.g., businesses, students, and workers) and the Secretary. She opined that a primary emphasis on benefits for employers, employees and students, rather than improving bureaucratic efficiencies and other administrative benefits, might be more effective. She observed that UI agencies may see it as an additional burden that does not help them collect taxes and businesses may see it as another burden that does not benefit their operations. **MS. ZELLER** suggested a cost-benefit analysis be included in the recommendation.

The group discussed the relative value of implementations in individual states versus a nationwide initiative and agreed that there were important benefits to a nationally guided and supported implementation. Regarding phasing of implementation, **MS. ZELLER** stated that the recommendation contemplated implementation across all states, over time. She clarified that the recommended timeframe would be less than the five-to-ten year timeframe suggested during the discussion. She also emphasized the importance of a comprehensive communication plan.

MS. RUST noted that the implementation would require a law change in some states and observed that the administration was wary of mandating wholesale standards across the states. **MS. FORLAND** observed that, from the state perspective, federal law and ETA are very proscriptive about the UI program. She suggested that a tool that the administration might use effectively is the supplemental budget request (SBR) mechanism to condition the grant of funds upon a state's implementation of the change. **MR. MADSON** observed that, rather than using that mechanism, the DOL could establish a conformity requirement, conditioning tax credits for

that state's businesses on implementation of the change. Commenting on further discussion of voluntary vs. mandatory implementation, **MR. FICHTNER** opined that, with any mechanism, it would be necessary to focus on demonstrating significant benefits to the constituency, in the form of big savings, to counterbalance a perception that this was just another big government solution.

MR. BAREWICZ stated that he was unconvinced of potential cost savings and of the presumptions that the change would lessen the burden on employers or that much of the data could not come from reliable proxies such as surveys or samples. **MR. FICHTNER** noted that the argument was that states would get better outcomes from their education and workforce programs, especially from tracking outcomes for students who left their states. **MR. BAREWICZ** questioned the underpinnings of that argument, citing the difficulties of tracking human behaviors, and opined that the "Whys" in this improvement raised more questions than answers. **MR. FICHTNER** observed that the current data do not allow tracking of outcomes for educational programs, but acknowledged questions about how much scrutiny employment pathways would bear. **MR. MCKEEN** added that, while private businesses are wary of additional reporting burdens, they might want to be better informed about talent pools and talent channels, so the business opinion might be split on this.

MS. ZELLER observed that, while businesses do not generally support new processes, often the objections were rooted in a lack of familiarity. She suggested that initial resistance could be surmounted by thoughtful analysis and proactive communication, including consideration of the outlay for private studies. **DR. REAMER** suggested that business might also see the benefit of getting better analyses of higher education students' subsequent career pathways.

MS. PATE suggested incenting participation by adding the fields to the record, allowing voluntary reporting and offering access to the data only to those employers that report, adding that eventually more and more employers would choose to participate. **MR. FICHTNER** reminded the group that states with old UI systems would find adding fields to the database to be prohibitive. He supported voluntary incentive programs like SBRs, rather than having the DOL mandate participation.

MS. RUST highlighted another obstacle, noting that it would be necessary to define hourly wage because states define the concept differently, sometimes as a matter of state law.

MS. ORVELLA noted that the enhanced data would bring cost savings to individuals in the form of both families who were able to place students in the right education programs and dislocated workers who are able to take advantage of relevant training.

The group considered the value of recommending that the chief evaluation officer at DOL conduct a study to better quantify the benefits of this recommendation. **MS. FORLAND** opined that such a study would delay implementing the actual changes, and might easily be used as a method to avoid investing in the substantive recommendation. **DR. REAMER** asserted that a

study would provide the data necessary to fully justify the investment, and that it could be conducted in parallel and presented in a way to discourage using it to delay other efforts.

In further support of the improvement, **MS. ZELLER** observed that businesses will not relocate or expand if they are not certain of the workforce and the availability of necessary skills. These data are critical for planning investments, and therefore have a significant impact on GDP and U.S. productivity. She suggested that the recommendations include an introductory paragraph outlining these points. **MS. FORLAND** opined that economic development personnel in states often make assertions in their sales pitches that would benefit from the support of real data.

Wrapping up the day's meeting, **MS. FORLAND** reminded the members that, while the Council was tasked to think aspirationally, it was critical for them to craft and present recommendations that were concrete and practical and presented a defined path forward so that they would be difficult to disregard.

She confirmed that, even with the addition of the day's input, the goal remained to present the improvements in one page in the final report, with the addition of appendices as necessary. She thanked the members for a very productive discussion and reminded them that the next day's agenda would include informational presentations regarding the Innovation Council and WLMI tools, a visit from **SEC. ACOSTA**, and continued discussion of the subcommittee recommendations.

MR. RIETZKE thanked the group for the enthusiastic discussion and adjourned for the day.

DAY TWO PROCEEDINGS

Informational Presentations

8:30 A.M. to 10:15 A.M.

MS. FORLAND convened the Council for the second day. Without objection, the schedule for the day was modified to accommodate **SEC. ACOSTA'S** visit in the morning. The Council then welcomed informational presentations by two speakers who had offered valuable input to subcommittee deliberations. The first, **MR. TOM GIANCOLA**, from the DOL Innovation Council, was a significant resource for Subcommittee One. He offered the group a presentation on "New Technologies and the WLMI System."

MR. GIANCOLA introduced himself as a human resources specialist with OAS. He stated that he previously ran a modernization program for the Wage and Hour Division. The Innovation Council, he reported, was a group of volunteers bringing a wide variety of skills from many different agencies within DOL with a mission to make DOL more efficient, effective, accountable and responsive to itself and the public. **MR. GIANCOLA** informed the members that he had spent substantial time in the previous year working with ETA and BLS data because they represent some of the best information available, which provides a good opportunity for leverage and growth to benefit DOL's constituency. He reported that there was a great deal of discussion in Subcommittee One about DKMS, which he characterized as "the wisdom of the crowd." He likened it to gathering a large group of smart, informed people in a room sharing—and distributing—their knowledge. He proceeded to describe how this applied to WIAC's work.

MR. GIANCOLA began his presentation by posing the questions, "How do people find a job now? By word of mouth? A job board? CareerOneStop? American Job Center?" We can use standardized data structures to begin to answer those questions. Currently, he reported, much of the data, even at BLS, is in closed databases that are siloed. Using an example of the job markets in the abutting states of Vermont and New Hampshire, he observed that a job seeker living near the border would wish to include both states in his search, but would be forced to conduct separate searches due to the siloed nature of the data contained in each state's databases. If, however, the data were structured similarly, it could begin to share the same language and talk to itself, allowing communication across the silos formed by the state systems. He assured the group that the concept of DKMS did not require an owner of certain data to give up its information or lose control of it, but rather to share it in a way that is accessible to everyone.

When data do not communicate effectively, he opined, nuances that are easily understood by humans are difficult to capture programmatically. It can be done, he added, but it takes a large amount of communication and sharing. He then introduced the concept of schemas and presented an illustrative concept: when one refers to an apple, everyone knows what an apple

is. Whether an apple is appealing or not, though, is dependent on its characteristics. Identifying attributes of the apple, such as red, sweet, crisp, allows one to assess whether it is appealing or not. Schemas, he observed, allow data to say the same thing, over and over, adding that they may be employed to describe even an intangible concept such as “job” by defining its attributes, such as location, hours, pay, duties, etc. A schema, he stated, tags these concepts within a standard structure, producing a powerful way to capture, describe, communicate and repurpose data. He referred the group to the cross-platform website www.schema.org for more information.

In general, he reported, the improved online search results currently available are due to new and better tags. For example, O*NET has already provided a great schema for jobs, but it can be extended to training programs, etc. Education, training, safety factors, location: these are all attributes of jobs that may be leveraged to build a stronger data model.

Turning to artificial intelligence (AI), **MR. GIANCOLA** opined that “it is not as smart as people think it is.” In a nutshell, he said we are trying to train computers to act more like us. He explained that when we talk about a job opening, we know what that means, but the computer does not. The schema allows us to tell the computer what the data mean to itself, which allows us to do some “neat computer tricks.” As an example, **MR. GIANCOLA**, reported that he had recently gathered a team from DOL to participate in an afternoon hackathon at the GSA building in D.C. The challenge to the team was to use a publicly available dataset to make something work on a voice digital assistant. The DOL team, he reported, decided to use an ETA data set and Amazon’s Alexa digital assistant. Their goal was to be able to ask Alexa where the nearest American Job Center (AJC) was, and in about an hour and a half, they succeeded. They went on to add the ability to tell users about occupations from the ETA data and to read job descriptions from the AJC job listings. Finally, in order to demonstrate the transportability of the process to different platforms, they were able to direct a chatbot to respond to queries using the same information. This exercise demonstrated what a cross section of DOL people, who had never worked together before, and some of whom had only seen the data a day or two before, could repurpose that data on an “artificial intelligence” platform and build three different skills in the course of an afternoon. He emphasized that the group was able to perform these tasks so quickly and with such success because the data had already been collected, distributed, and placed in a common schema. He challenged WIAC to imagine what could be accomplished with more data and more development resources.

MR. GIANCOLA next turned to the topic of blockchain, which he characterized variously as “the next big thing,” “a disruptor of technologies,” and “a disruption to society’s established concepts of data and monetary systems.” In a simplification of a very complex topic, he explained that data residing in a schema forms a block of data. As datasets are built, the blocks of data are chained together, using deep software security measures, to create a record that cannot be altered. For example, if an employer publishes a job listing for a welder to a blockchain, and the job subsequently gets filled, the employer cannot revise the original listing,

so it becomes a permanent, irrefutable record of the transaction. The attributes of the transaction are collected in a robust schema, which, in turn, any AI technology can tap into. This structure would allow all the LMI data contained in a blockchain to be leveraged and repurposed.

MR. MCKEEN requested that **MR. GIANCOLA** use Bitcoin as an example. Without commenting on the monetary system, **MR. GIANCOLA** explained that Bitcoin, at its core, is something of value that a holder may transfer to someone else in order to purchase something. Because the starting balance, the transfer, and the finishing balance are all chained together in a permanent, unalterable record, the transaction is secure and cannot be changed. Bitcoin transactions are verified blindly by distributed servers. The record is public, so the buyer cannot double pay, nor can the fact that a transaction took place be disputed.

MS. PATE noted that property appraisers are looking at blockchain to record deed transfers, and it is also being considered for applications in healthcare and insurance. For LMI, she opined, it could be used for something that is unchangeable and undisputable.

DR. REAMER requested some examples of potential blockchain applications that are feasible and aspirational. Starting at the more aspirational end of the spectrum, **MR. GIANCOLA** hypothesized a state in which every job, whether filled or vacant, would be recorded in a ledger, along with its attributes (e.g., location, company, pay, skills required). As job seekers were hired for those jobs, the jobs would be moved from one side of the ledger to the other and data about the successful job seeker would be recorded (e.g., education, training, skills). Because the information would be captured—and available for analysis—in real time, there would be no need to wait for surveys or formalized reporting. Analysts could have a picture of what was happening overall in that state and would have the information to spot trends immediately.

Turning his focus to steps that could be taken in the much nearer term, **MR. GIANCOLA** described a scenario in which all the jobs currently available in the state were posted in a standard way and made available on a distributed system. In his scenario, job seekers would take the jobs out of the chain when they were filled, thereby removing access to the listing. This would provide real time access to one subset of the LMI system. He observed that the Google Jobs API is trying to tackle this problem, suggesting that there is potentially a lot of money available in the private sector for being able to read every job listing online. Although it is ambitious, he added that there is an opportunity for the government to leverage the private sector's search function in the public sphere rather than creating new proprietary data. While the private sector excels at tailoring what a user sees to his or her preferences, he opined, the government excels at analyzing the data and publishing it.

MR. BAREWICZ queried what might be a good first step. **MR. GIANCOLA** replied that a DKMS utilizing the underlying schema was the platform from which the information could best be leveraged because unified underlying data would allow users to share information across state lines. He acknowledged that this would be a massive project, taking years of collaboration. In terms of actual first steps, though, the enhanced wage record could be the starting point. He

agreed that an RFI to establish a roadmap for the process would be necessary, as the project would require substantial assistance from professionals. Given the magnitude of incorporating wage records collected by individual states, on different systems, **MR. GIANCOLA** emphasized the need for a high-level designer to develop the architecture and match it to the capabilities required across the system.

MR. FICHTNER asked about the implications for privacy and security, noting that UI wage records cannot be public, although job listings can. **MR. GIANCOLA** observed that blockchain can provide a great deal of anonymity, as demonstrated in healthcare and financial cryptocurrency applications. To the world, he reported, those distributed records appear as random, undecipherable, cryptographic hash. Privacy is one of the things that blockchain is best at, he noted, as evidenced by the fact that there has yet to be a successful hack of cryptocurrencies, notwithstanding that they exist in a very public, accessible, international sphere.

MS. FORLAND observed that there are two questions before the Council: one relating to technology and what is technically possible and the other being a political question relating to identification of the biggest wins DOL can deliver for the public. Relative to the latter question, **MS. FORLAND** contrasted the value of providing a sleek, contemporary AI interface for the public to use in querying jobs data with providing enhancement to the quarterly job report. She opined that the former would be more valuable.

DR. REAMER queried how blockchain aligned with CEP's recommendations for building a distributed NSDS system for linked records research. **MR. GIANCOLA** stated that there was currently active bipartisan interest in the technology, as evidenced by the formation of the Congressional Blockchain Caucus, formerly chaired by Mick Mulvaney, the current Director of OMB. Among federal agencies, he pointed to blockchain work being done at the Department of Homeland Security (DHS) and the Department of State, including active development for visa applications. He also referenced work being done at the Department of Defense (DoD) and at Treasury, as well as significant and interesting work at the state level. **MS. FRUGOLI** noted that Illinois is working on employing blockchain to unify occupational licensing information across different agencies.

DR. REAMER inquired about the status of the Innovation Council, and **MR. GIANCOLA** concluded with a note that the Council is currently awaiting approval from the new assistant secretary, when he or she is confirmed.

MS. FORLAND thanked **MR. GIANCOLA** and welcomed **MS. PAM FRUGOLI** from ETA, who presented an overview of the WLMI tools CareerOneStop, O*NET, and MyNextMove.

MS. FRUGOLI began with a demonstration of the CareerOneStop website, which may be accessed at <https://www.careeronestop.org/>. It is designed to be a 24-hour AJC, she indicated, offering not just career information, but also services, referrals and how-to tips to assist job

seekers. She demonstrated that the site is organized into functional areas to help job seekers: Exploring Careers, Find Training, Job Search, Find Local Help, Toolkit, and other Resources, and, in addition, it offers resources for job seekers with specific needs, such as veterans, workers with disabilities and people with criminal records. It also offers topical information, including Top Questions, Top Pages, and Top News, she reported, as well as links to Facebook and Twitter and links to assist developers.

Next, she demonstrated CareerOneStop, which provides a gateway to federal and local job banks and other resources distributed across the nation (e.g., US.Jobs, state job banks, local training and community services). She noted that it also provides access to data sources available only on CareerOneStop, including databases relating to certifications, AJCs and job clubs, workforce development boards, and occupational licenses. **MS. FRUGOLI** also highlighted the services offered on the website, including assessments for interests and skills. For example, she pointed out, the user can specify his or her skills and the system will match those skills to particular jobs. She went on to report that the site also offers assistance with writing resumes and cover letters and with preparing for interviews. Within the Career Profiles section, she noted that CareerOneStop is developing videos in conjunction with the OOH. In the discussion of the AJC section of the website, **MS. FRUGOLI** observed that the Alexa challenge discussed in **MR. GIANCOLA'S** presentation was so successful in part because the information was already compiled and accessible via CareerOneStop. In terms of current-technology advances related to the website, she also noted that the developers had made the website mobile-accessible and were working on adding a chatbot.

MS. FRUGOLI indicated that when clicking on the Online Job Search link, the website accesses the federal job bank, US.Jobs, to pull up listings for a specified job. It allows the user, she noted, to access jobs from different states, rather than having to go to those states' sites. It also connects to other job banks, such as America's Job Exchange and CareerBuilder, she added, and it provides a database of occupations and licenses for each state that the user can download. **MS. ORVELLA** inquired whether a job seeker can apply for a job on the site. **MS. FRUGOLI** responded that the system provides a link to the associated job bank and whether a job application is available is a feature of that job bank. She added that often employers require the job seeker to click through to the employer's website, and that in some jurisdictions the application process is centralized and does not pass through to the employer.

MS. FRUGOLI demonstrated the certification database, unique to CareerOneStop, which houses 5,700 job-related certifications, noting that the site distinguishes among core certifications, which can be completed at the entry level; advanced certifications, which cannot; and product-specific certifications. She highlighted icons associated with various certifications, designed to assist the user in assessing relevance. The data are sourced through internet research, she explained, and, while the database does not comprise the full universe of certifications, it is the sole compilation of such data and is considered quite comprehensive.

MS. FRUGOLI then turned the discussion to O*NET, which may be accessed at <https://www.onetonline.org/>. O*NET, she reported, is an occupation database, housing extensive data about each occupation sourced from worker surveys focused on the characteristics and descriptors of each occupation. The information contained in the database, she added, is accessed by searches tailored to the needs of different users, including keyword, outlook, career clusters, industry, job family, job zone, Science Technology Engineering Mathematics (STEM), tasks, tools, and technologies.

O*NET is changed as needed to keep up with changes in the labor market, stated **MS. FRUGOLI**, who referenced the addition of current technology skills as an example, indicating that O*NET currently highlights “hot” skills identified in many job postings with a fire icon. Hot skills are updated quarterly, she noted, and at least 100 occupations are fully updated every year, with the update cycle providing a refresh for all occupations over ten years. As a result of surveys, job searches and job postings, O*NET adds new job titles and aligns them, she added.

She further reported that access to O*NET and CareerOneStop information is available from either site, including BLS data, links to salary data and links to state data. Over 1,000 private and public sector apps use the O*NET and CareerOneStop web services, she noted, generating almost 100 million documented views annually.

MS. FRUGOLI quickly introduced the group to MyNextMove, which may be accessed at <https://www.mynextmove.org/>. Because the amount of data and search options available on O*NET and CareerOneStop can be overwhelming, she explained, MyNextMove offers a simplified initial entry point to the resources offered by those websites. She went on to state that it also offers interest profiles to match users with jobs based on a series of interest-based questions. The user can easily link into the broader resources available on the main sites, she concluded.

Remarks and Discussion with Secretary of Labor Alexander Acosta

10:30 A.M. to 10:45 A.M.

MR. RIETZKE welcomed **SECRETARY ALEXANDER ACOSTA** to the meeting and asked the members of the Council to introduce themselves.

SEC. ACOSTA thanked the members of the Council for their participation in WIAC and thanked **MS. FORLAND** for chairing the Council. Highlighting the geographic diversity of the members, **SEC. ACOSTA** noted that the Department receives a large number of requests for flexibility from the states. He stated that he was inclined to offer as much flexibility as he was empowered to give as long as that flexibility was supported by metrics. He emphasized that the metrics on which he was focused were outputs rather than inputs. For example, he was interested in the successes achieved by a program rather than the number of participants served by the program.

As an illustration, **SEC. ACOSTA** posed questions to **MS. PATE** about the University of Florida, with which she is associated, including how many students were enrolled, how many students graduate annually, and how many graduates get jobs within a given period of time after graduation. **MS. PATE** had ready responses to each question, and **SEC. ACOSTA** observed that, while many respondents can state the enrollment, most cannot state the number of graduates, and, of the roughly one hundred times he had posed that set of queries, this was only the second time the respondent could quantify the number of graduates who find employment. **SEC. ACOSTA** observed that the exercise illustrated the inclination to measure input rather than output and quantity rather than success. He offered an analogy from the private sector of a business reporting how many items were on its shelf rather than how many items it sold or its ultimate margins. With this analogy, he emphasized the importance of tracking results—in the case of higher education: how many students graduate and how many get jobs.

He noted that the fact that University of Florida's tracking reveals that only about half of its graduates get jobs in their chosen fields within five years of graduation raises the question of whether the system is functioning properly. The Secretary asserted that it is time to re-evaluate how we enable people to become both life-long learners and life-long earners. He added that states must be given flexibility to achieve that goal because the roadmaps to that goal vary from state to state. **SEC. ACOSTA** reiterated that his approach was to provide as much flexibility as he is empowered to give, as long as that flexibility is supported by metrics to measure success and accountability to those metrics. He indicated that he was not empowered to provide as much flexibility as he would like to give and had requested more flexibility from Congress so that funds could be allocated to the highest use within every state. Concluding his remarks, the Secretary invited the Council's input and recommendations, both in this meeting and as a part of the formal recommendations submitted by the Council.

Noting that there have been many studies evaluating the results of pilots and programs across the country, **MS. PATE** queried whether the Secretary's office was looking at evaluation studies to identify best practices. **SEC. ACOSTA** indicated that he had asked his staff to recommend changes to the metrics of such studies to ensure that they were measuring outcomes rather than, for example, the number of people served. He recognized the high variability in programs—and outcomes—geographically, and stated that due consideration should be paid to normalizing the measures of success for each program and location across the nation.

DR. REAMER reiterated that WIAC's charge was to make recommendations to the Secretary of Labor to improve the functioning of the WLMI system. Noting that **SEC. ACOSTA** had identified one type of information he would like to see—the connection between people's participation in a particular program and whether they get jobs—**DR. REAMER** inquired whether there were other points of information the Secretary considered valuable in helping labor markets function better. **SEC. ACOSTA** noted that, while he had spoken frequently about the "skills gap" on previous occasions, he had recently shifted his vocabulary to focus on the "career awareness gap." Giving credit to Michigan Governor Rick Snyder for the concept, he explained that the

skills gap arises from a career awareness gap that starts before high school and becomes amplified in high school, where there is too much focus on getting the top students into selective colleges. He explained that, if high schools measure selective college admissions as their key metric and high school counselors are judged by whether they guide students to apply to selective colleges, those metrics drive a bias in counseling. Gov. Snyder, the Secretary continued, proposes offering an 8th grade career awareness class in which students can learn about different careers and the paths they will need to take to enter those careers. With that awareness, he added, students can begin to make informed choices as they go through high school. **SEC. ACOSTA** relayed a conversation he once had with a member of Congress whose brother had asked for her approval not to attend college. Instead, he wanted to become a carpenter. The brother was relieved when she offered her support, as he had feared that she would be ashamed of him. The Secretary challenged the group to consider how that interaction reflects on society and opined that society has made a mistake in labelling some careers as preferred while attaching stigmas to others. He urged consideration of a system that would address career choices with more neutrality.

MS. LISBON inquired about the Secretary's thoughts on WIAC's work so far. **SEC. ACOSTA** stated that he was looking forward to the Council's recommendations. He noted that there was a lot of room for improvement in how a successful program is identified and its replication incentivized. He opined that the goal was not to pick winners and losers, but rather to encourage everyone to be a winner in order to achieve organic movement in a positive direction. He added that it was difficult to achieve that goal from Washington, D.C., and that he looks forward to recommendations that both identify successful programs and address how to provide states the flexibility to reallocate resources to the programs that have higher rates of return. **DR. REAMER** noted that it would appear to be a priority for the Department to invest in creating the information needed to do that. **SEC. ACOSTA** responded that, as a believer in metrics, he considered step one to be determining what metrics were needed; step two to be determining how to adjust the metrics for geographic and population variance; and finally, step three to be gathering the metrics.

MS. PATE asked whether the shift in the workforce from traditional jobs toward alternative work arrangements, such as independent contracting, was attracting the Secretary's attention. **SEC. ACOSTA** replied that he was excited about the important work BLS was doing related to the contingent worker supplement because that work would provide the starting point for an important conversation. He noted that the relationship between employers and employees has changed, as has the fact that many individuals have multiple simultaneous employers. How the system deals with these changing relationships will be important, he noted. Additionally, he remarked that the release of the data will provide a good starting place to reexamine and refresh current thinking, but he recognized that outreach to stakeholders will be critical. He anticipated that there will be conferences or other events organized to assist in evaluating that shift more fully.

MS. FORLAND expressed her desire to schedule the Council's next meeting to coincide with the release of the data. She expressed her appreciation, on behalf of the Council, to **SEC. ACOSTA** for joining the Council and sharing his views.

Subcommittee Presentations (Continued)

10:45A.M. to 11:30A.M.

MS. FORLAND turned the meeting over to **MS. ZELLER** to continue the discussion of Subcommittee Two's recommendations.

MS. ZELLER thanked the members for yesterday's valuable discussion of enhancing wage records and solicited further thoughts. **MR. BAREWICZ** indicated that **MR. GIANCOLA'S** presentation had alleviated most of the concerns he had expressed yesterday. **MS. ZELLER** noted that the ability to include local data should be included as an additional "Why" for the improvement. **MS. FORLAND** echoed the value of local data, noting that in some states certain Metropolitan Statistical Areas (MSA) had been combined for the purposes of the OES survey, which had led to a reduction in both the quality of the data and the funding received. **DR. REAMER** reminded the group of the emphasis WIOA places on state data.

MS. ZELLER asked **MS. ORVELLA** to present the subcommittee's second improvement, "Expand data on occupations and skills." **MS. ORVELLA** began by proposing to integrate some of the structure ideas discussed earlier for consistency and continuity between the improvements. She articulated the subcommittee's recommendation to update O*NET more frequently, creatively, and strategically to provide more occupation data—particularly for those occupations that are changing more rapidly. The recommendation, she added, contemplates inputs from private sources (e.g., job postings), from the DKMS, and, if wage records are enhanced to include job titles, the identification of new occupations from that source as well. It also urges focus on not only the addition of tech-related skills, but also the transferability of skills between occupations. She reported that the recommendations would benefit workers, training providers, and business looking for talent pools. Regarding the "How," she stated that the improvement recommends that the critical majority of O*NET be updated every five years. She added that, as a footnote, the report notes that SOC should be updated more frequently than its current ten-year cycle.

MS. ZELLER noted that the group had made a considered choice to focus on skills versus SOC codes, as skillsets were becoming more important than occupation titles to the development of careers. **MS. FORLAND** agreed, noting that the current thinking on automation considers what skills will be automated, rather than what jobs, adding that SOC codes have become the middle-man between employers and skill sets. **MS. ORVELLA** noted that the subcommittee worked with **MS. FRUGOLI** on the wording of the recommendation and its feasibility. **MS. FRUGOLI** suggested

a pilot to explore bundling skills in ways outside the historical occupation structure, and **DR. REAMER** suggested consideration of such a pilot.

DR. HERRIGAN asked to comment briefly on **MS. ZELLER'S** introductory remarks about the recommended improvement before departing due to a prior commitment. He suggested expanding the sources for identification of emerging occupations even further than set out in the recommendation. He suggested, for example, that exceptions to auto-coding of job titles may reveal trends leading to identification of new titles. He also noted that BLS was working on a pilot with the Occupational Requirements Survey (ORS), collecting information on the physical and cognitive requirements of jobs, and suggested that it might provide valuable analytical input as well. Because the survey is based on personal visits, he noted, it should produce high quality information.

DR. REAMER asked about the status of the SOC 2018 update and whether the ten-year frequency of update was optimal, and if not, whether the length of the cycle was due to resource constraints. **MS. RUST** stated that the update was currently with OMB, and the anticipated release was early 2018. **DR. HERRIGAN** indicated that, if resources were not a constraint, BLS could update the SOC more frequently and update past data to reflect the changes. He noted, however, that there had been no analysis of the optimal frequency of updates. Such analysis, he added, would need to consider how many occupations emerged within each of the last cycles and the detriment to the knowledge about the economy as a result of those occupations not being measured. **DR. REAMER** queried whether there should be a recommendation to the Secretary to study that question, and **DR. HERRIGAN** indicated that he would welcome such a recommendation. He also observed that, without the ability to update past data, there would be no continuity in the time-series data.

MS. FORLAND observed that, as long as OES exists as a survey, the added costs and challenges with time-series comparability will exist. Introducing an enhanced wage record, including job title, would allow the combination of resources to allow similar capabilities as those offered by QCEW at a local level, and would result in an automatic time series, she added. **DR. HERRIGAN** indicated his agreement and shared his vision that in the future OES would be on wage records, and that, unless BLS received access to wage records, it would be out of the business of producing OES and projections. He emphasized that he would welcome WIAC's recommendation that BLS have access to wage records. In response to a query from **MR. FICHTNER**, he added that current access to wage records is limited by the fact that BLS had not executed agreements with the states, as Census had, and had no other legal authority to access state records.

Turning the discussion back to the subject of skills, **MR. BAREWICZ** posed a what-if scenario in which the government stopped tracking job titles entirely and instead tracked skills, noting that such an approach would be more universal. **MS. ORVELLA** agreed that it would be desirable to enhance the tracking of skills. Citing the desirability of cross-walking skills with Classification

of Instructional Programs (CIP) codes, **MS. FORLAND** queried whether the subcommittee might wish to include recommendations targeting education, to better define and quantify skills imparted by particular education and training programs. She expressed frustration that higher education had primarily defined career pathways from its perspective.

MS. FORLAND proposed a partnership with the ED to focus on identifying specific skills imparted by education and training programs. **MR. BAREWICZ** reminded the members of the distinct education-related improvement proposed by Subcommittee One and urged a purposeful treatment that either distinguished or correlated the two recommendations. **MS. FORLAND** noted that the presentation of the recommended improvements would not necessarily include grouping them by subcommittee, but that a smaller group would organize the presentation optimally. **MR. BAREWICZ** observed that there was also correlation between the first improvements of Subcommittees One and Two.

DR. REAMER recalled **DR. HARRIGAN'S** statement that, without access to enhanced wage records, OES projections would not survive. He observed that, if funding remained flat, BLS would have to make choices about which programs to cut, given an unwillingness to accept reduced quality across all programs. The last time BLS was confronted with this choice, Mass Layoff Statistics was cut, **DR. REAMER** noted, suggesting that projections and OES might be next. He noted that the Council's recommendations, if taken, would certainly result in a request for a budget increase; however, the recommendations did not expressly defend the current occupational data programs. He proposed that the final report include a recommendation to provide sufficient funding to keep projections and OES functioning. He furthermore suggested that such a recommendation be linked with the recommendations of Subcommittee Two. He stated that the Secretary needed to be advised that the projections were at risk. **MS. LISBON** noted that adequate funding also related to the states' ability to have local data for training and development programs. **MS. RUST** concurred, observing that, while principal federal economic indicators were always safe, in times of lean funding the leadership was forced to evaluate whether to make across-the-board cuts or to cut entire programs. **DR. REAMER** added that, even if BLS got access to wage records tomorrow, that access would not be sufficient for OES because the records currently do not include occupation titles. Awaiting the enhanced wage record, he added, would make this a ten-year effort, and adequate funding in the meantime would be critical.

MS. FORLAND inquired about how to integrate the recommendations in a coherent way. **MS. PATE** suggested starting with the "Whys" relating to enhanced wage records and adding new "Whys" outlining the value of OES, including narrative to make the point that the benefits of OES would not accrue without adequate funding.

DR. REAMER offered context: traditionally, he noted, the role of the primary economic indicators was to inform the Federal Reserve and the Council of Economic Advisors for policy purposes. Accordingly, BLS was organized around providing federal data for federal decisions, rather

than to provide data for workers and employers and promote better-working labor markets. As such, he continued, the recommendation must elevate the value of these data in helping labor markets work better, opining that Congress had created WIAC for just such a purpose.

MR. FERGUSON noted that the justification for the improvement, consistent with **SEC. ACOSTA'S** priorities, focused on outcomes, not inputs. By having these data, he added, BLS might provide better services, get more people jobs, and fill more openings.

MS. ZELLER proposed a specific modification to the current recommendation, adding the following sentence to bullet #8 of the "Whys" for enhancing wage records: "OES has continued to be cut, hampering the ability to understand the knowledge of jobs at the local level and impacting the career awareness gap."

DR. REAMER emphasized the importance of linking support for occupational statistics with closing the career awareness gap.

MS. ZELLER asked whether the group was satisfied with the footnote treatment of the SOC codes. **DR. REAMER** recalled that **DR. HERRIGAN** accepted the concept of a study to examine the change in occupational structure and the effects on the SOC codes. He also noted that the Secretary mentioned an interest in contingent work, which would relate as well. He suggested requesting some language from **DR. HERRIGAN**. The group discussed the length of the SOC update cycle, the administrative and bureaucratic overhead associated with the update and whether those could be lessened, whether the process could be more data driven, and whether focus on the SOC was a sufficient priority to warrant focus in this forum, noting that the current cycle should not be maintained due solely to institutional momentum and that technical standards, such as collectability, would need to be taken into account when making any changes.

Public Comment Period

1:00 P.M. to 1:15 P.M.

MS. FORLAND opened the floor for the scheduled public comment period.

LOU CAMERLENGO, President and founder of Five Star, LLC, a business in Pittsburg, PA, described work his company had done with the Massachusetts Community College system. The contract, he stated, involved developing and piloting a series of technologies to support an integrated data system connecting the public higher education and public workforce systems. He described the objective as being twofold: to provide solutions enabling high school students and adult learners to make informed choices about career options and investing in their education, and to equip higher education leaders to assess program efficacy based on job outcomes. The work was funded under a TAACCCT grant, according to **MR. CAMERLENGO**.

MR. CAMERLENGO described three applications related to the project. The first was a student pathway portal designed to guide prospective students into local community college programs that met their interests and aligned with certain high-demand careers. Using the types of tools that O*NET provided, it guided students through a series of questions and assessments to provide matches with relevant careers. The students received an action plan that summarized the careers and provided next steps toward enrollment. The action plan was also made available to admissions counselors for further personalized assistance.

The second was a credit-for-prior-learning application, which helped the community college system promote and streamline the provision of college credit for formal and experiential learning obtained prior to the student's enrollment. **MR. CAMERLENGO** noted that studies had demonstrated that credit for prior learning increased the likelihood of graduation by two to three times. The application included a survey that collected the student's experiences and matched them to the appropriate programs, applications, and processes, including counsel from a specialist.

The third application **MR. CAMERLENGO** described was a tool providing a framework for research and reporting. The tool acted as a warehouse combining LMI and educational data from federal and state sources. It enabled researchers to evaluate the efficacy of programs based upon student outcomes, in order to create actionable metrics. With the compilation of enough data, he added, the tools would also become predictive.

MR. CAMERLENGO added that the applications addressed four areas: they mapped credentials, certifications and degrees to occupations; they matched students to occupations using that information; they centralized credit for prior learning; and they provided an outcome metrics tool. **MR. CAMERLENGO** thanked the Council and expressed interest in supporting WIAC's efforts.

ROBERT SIENKIEWICZ, Assistant Center Chief, LEHD, at the Census Bureau, updated the Council on certain efforts at the LEHD program. In conjunction with the University of Texas system and the Colorado University system, he reported that his organization had implemented a higher education pilot project to develop new higher education metrics and link them to labor market outcomes. He reminded the group that LEHD is a voluntary partnership with the states' LMI Directors whereby the states provide UI wage records that are used to produce several data sets, including the Quarterly Workforce Indicators (QWI) and LEHD Origin Destination Employment Statistics (LODES), among others. By participating in the program, he added, state partners are provided access to valuable demographic information related to these indicators. Citing the need for more refined educational outcome metrics, he described the efforts to increase the granularity of educational attainment data. He indicated that the current system tracked only four levels of educational attainment, including: no high school degree, high school graduate, some college (or Associates degree), and college graduate. In response to a query from **MS. FORLAND** regarding state longitudinal data, **MR. SIENKIEWICZ** noted that a

benefit of partnering with Texas was working with that state's very refined local longitudinal data system. The benefit to Texas, he reported, was the provision of federal data to augment the state data; for example, data relating to Texas graduates who moved to another state. **MS. FORLAND** inquired as to the nature of the data the states received back. **MR. SIENKIEWICZ** indicated that the states received tables that had undergone disclosure review, not raw data. The tables were not yet able to be disclosed to the public, he added, as privacy controls were still being addressed. He noted that the intention was for the tables to be released publically, but the timetable had not been finalized.

MR. SIENKIEWICZ also described another current project, with the U.S. Army, in which LEHD was partnering with West Point to explore labor market outcomes associated with prior military service. He posited a demographic variable relating to military service as a parallel to higher education. He reported that the database in question contained ten to twenty years' of data, and that he anticipated results in six to eight months.

Subcommittee Presentations (Continued)

1:15 P.M. to 3:45 P.M.

MS. FORLAND turned the meeting over to **MR. MADSON** to discuss Subcommittee Two's third improvement, "Credentials."

MR. MADSON acknowledged the efforts of CareerOneStop to capture the scope of credentials, which range from graduate degrees down to private-sector credentials that might be short-term in nature. He stated that the subcommittee focused on capturing the scope of credentials and their effect on a job search, and that the intent of this improvement was to close the loop for employers seeking certain skills and to inform investments at the workforce development level to better connect people with jobs. To that end, he reported that the subcommittee recommended that DOL compile a comprehensive repository of credentials and associated labor market outcomes. Such a repository, he stated, would allow correlation between the acquisition of a credential and getting a job. He drew an analogy to the educational data that reflects a correlation between graduate degrees and incomes. **MR. MADSON** identified the need to better understand how credentials add value to the job seeker. He proposed sourcing the information from the providers, as currently there is no way to track how many people seek certain credentials and the outcomes associated with their acquisition. He asserted that decisions to invest in a credential are improved when fueled by data.

Among the "Hows" proposed was the mining of resumes and Internet sites such as LinkedIn to enable an understanding of how a credential benefits the job seeker. The subcommittee recommended that DOL take the lead in establishing the importance of credentials in today's market and finding ways to better acquire and leverage the information.

MS. FORLAND inquired about Credential Engine. **MR. MADSON** replied that it was attempting to gather a database of credentials broader than just those credentials conferred by educational institutions, including credentials awarded by private companies such as Microsoft. **DR. REAMER** offered additional detail: the CEO of Credential Engine is Scott Chaney, one of the authors of WIOA. It is a distributed database, he continued, where credential-granting institutions report the credentials they offer. **MR. MADSON** indicated that the intent of the recommendation was for DOL to work with Credential Engine to create efficiencies and commonality beyond what might be achieved on a state-by-state basis.

MR. FICHTNER recounted a recent effort in New Jersey to identify “industry valued credentials.” The effort included mining job postings, he reported, but had the most success with an extensive employer outreach effort, ultimately identifying 198 credentials deemed to have value in the state. The effort also involved mapping credentials to occupations, he added, and noted that New Jersey has just partnered with Credential Engine. **MR. FICHTNER** also noted the importance of distinguishing between certifications and credentials.

MR. MCKEEN stated that his company’s national association partnered with NASWA to perform a daily scrape of job sites that might help find valuable credentials. **MR. FICHTNER** noted that New Jersey had used data from the same source, as well as data from Burning Glass. He added that he considered those sources valuable, but imperfect, finding that trends they help identify were most valuable for his purposes.

Regarding large dislocations, **MR. MADSON** observed that workers often seek credentials based on marketing that misrepresents the actual value of the credential. It would be valuable, he concluded, to have better data to offer more informed choices for policy and individuals.

DR. REAMER noted that Credential Engine has asked each contributing institution to supply information on employment outcomes. Because this is such a burdensome request, he added, Credential Engine is exploring ways to work with the federal government to glean that information from employee wage records.

MS. FORLAND queried as to the potential redundancy of requesting information already available as part of the Eligible Training Provider List (ETPL). **MS. LISBON** indicated that her state requires SSN reporting from training providers in order to participate. **MR. FICHTNER** stated that his state extends the ETPL to state, as well as federal, workforce programs and requires all private career schools to report SSNs in order to be licensed. His state, he added, has not yet established data collection protocols for those institutions to track the credentials they were providing. **MS. FORLAND** urged the subcommittee to consult with **MR. FICHTNER** to understand some of the practices that his state had pursued.

DR. REAMER recommended referencing the National Labor Exchange and consideration of the value of establishing a schema to standardize job postings. He referenced HR-XML, an

organization supporting such standardization. He also offered to introduce **MR. MADSON** to Credential Engine.

MS. ZELLER emphasized that the improvement specifically recommended that DOL take ownership of this universe and invest in it to make sure it has a steward. **MS. FORLAND** suggested referencing and building on the states' ETPLs, and the group discussed successful and unsuccessful implementations thereof in various states.

MS. ZELLER turned the meeting over to **MS. LISBON** to discuss the improvement regarding the "Structure of Work."

MS. LISBON stated that this improvement sought a better understanding of the scope and volume of alternative work arrangements. She referenced significant increases in freelance, or contract, workers and workers having multiple part-time jobs in lieu of the traditional full-time job. A thorough understanding of the changing market, she stated, would allow greater insights into the impacts of the changing workforce on business, individuals and families. She reported that the recommendations included permanent funding of the CWS as well as provision of an option for states to invest in expanded samples for more comprehensive data.

MS. FORLAND observed that one often thinks of low-wage workers as being in these arrangements, but opined that most of the attendees of this meeting probably did not regularly work a standard 40-hour work schedule. She also noted that there was overlap between the American Community Survey (ACS) and the CPS and observed, as an example, that her state preferred acquiring its data relating to employment of veterans from the ACS due to the larger sample size. As such, she suggested that the subcommittee consider recommending an increase to the sample size for the CPS and a cost estimate for such an increase. **DR. REAMER** suggested exploring adding a contingent work question to the ACS. Because ACS data are available at the Congressional District level, he added, this would allow members to learn how their constituents were connected to the contingent workforce. He further suggested that, once the CWS data were released, the Council recommend that representatives of DOL engage in an effort to use the data to gain support for the CWS in Congress.

MR. MADSON noted that the gig economy varies a great deal geographically, and raised a concern as to whether a small sample size might render a picture of the nation as a whole that did not accurately reflect any given local market. **MS. FORLAND** offered that significant differences between the 2005 and 2017 surveys might spark an interest in Congress for additional data. She referred to interim estimates reflecting that the online gig economy had been miniscule compared to the 1099 population.

MR. MCKEEN noted that another class of contingent workers had arisen due to private-sector employers retaining workers approaching retirement age on a part-time basis.

MS. PATE stated that, while wage records were available for employees, BLS had no data for independent workers. Noting that Census had access to certain IRS records, she floated the idea

of seeking access to IRS records to learn whether a worker had filed a Schedule C or other tax document reflecting earnings as an independent worker. **MS. FORLAND** indicated that Subcommittee Three was offering a relevant recommendation. **DR. REAMER** stated that BLS was prohibited from looking at tax data. **MR. FICHTNER** highlighted that the group was discussing the rise of the 1099 economy on one hand, and the importance of an enhanced wage record, which would not include those individuals, on the other. Moreover, he noted, the OES data did not include information for 1099 workers and suggested that WIAC give consideration to collecting data on employees who are not in traditional work arrangements. **MS. ORVELLA** suggested including consideration of benefits, as well.

Subcommittee Three

MS. FORLAND turned the discussion over to **DR. REAMER**, chair of Subcommittee Three.

Before turning to the recommendations of Subcommittee Three, **DR. REAMER** considered the remarks made by **SEC. ACOSTA** earlier in the day and posed a recommendation that the Council frame its final recommendations to address the Secretary's three stated priorities. He summarized those priorities as including: to provide the ability to measure outcomes for program evaluation; to provide information to allow primary- and secondary-school students to bridge the career awareness gap; and to better understand the changing nature of work.

DR. REAMER then opened the discussion of Subcommittee Three's recommendations with an observation that, while the other subcommittees focused on specifics—the trees—Subcommittee Three focused on the system—the forest. He characterized the subcommittee's three Improvements in terms of (1) getting the band together, (2) funding for states, and (3) sharing of data.

As background for the subcommittee's first proposed improvement, to create a "Base for WLMI system agency collaboration," **DR. REAMER** reminded the group that WIOA directed the Secretary to create, maintain and improve the WLMI system, which includes not only DOL agencies, but also other federal agencies, as well as the states—with particular focus on state education agencies. He noted that Federal statistical agencies tend to stay on their own turf and have limited interactions. Given the requirement for a more integrated information system, he stated that the Council has a role in suggesting what agencies might be included and how to catalyze their talking to each other. He observed that the recommendation was an intentionally low-bar entry effort aimed at eventually convincing the Secretary to approve regular conversations among the agencies that are already involved with WLMI: BLS, ETA, the Census Bureau, NCES, NCSSES, and the National Center for Health Workforce Analysis (NCHWA). The latter, he noted, is not a traditional statistical agency, but was created by the Affordable Care Act (ACA) to help the health workforce meet demand. As that organization has been working on supply-demand analysis, he suggested, it would benefit the conversation to have it involved. He reported that the subcommittee also proposed including representatives of state workforce, LMI, and education systems. The WLMI system, he continued, is diagramed in the schematic

prepared by the subcommittee entitled Federal-State Workforce and Labor Market Information System (WLMIS), which is available at <https://www.doleta.gov/wioa/wiac/>.

The subcommittee's first recommendation, **DR. REAMER** stated, therefore focused primarily on the Secretary's directing BLS and ETA to host a meeting in early 2018 to allow these federal and state agencies to introduce themselves, present their products and services, and begin the process of working together. A more formal working group could follow, he added, but the subcommittee determined that recommending a single meeting would be a more practical first step. Another prong of the proposed improvement, **DR. REAMER** continued, was to remind the Secretary of his obligations under WIOA. He noted that a recurring theme in WIOA is the direction to allocate funds at the state and local level on the basis of in-demand occupations. Identifying and assessing "in-demand occupations" expressly requires good LMI, he concluded.

MS. FORLAND expressed her approval of this type of meeting as a starting point, preferring it to a major task force carrying bureaucratic overhead. **MR. RIETZKE** agreed and noted that the event would tend to raise the profile of the effort. **DR. REAMER** stated that the recommendation contemplated a one-time meeting initially, under the philosophy that keeping the demands low would attract attendees.

In response to **MS. PATE'S** point that state representation should not be taken as synonymous with local representation and suggestion to include the workforce agencies and the local workforce community, **MS. FORLAND** stated that the initial focus would be on the data generators, rather than the data users. **DR. REAMER** elaborated that the intent was for the data generators to get together and start dreaming up exciting ideas to create together before bringing the data users—the customers—into the mix.

DR. REAMER turned to the subcommittee's second improvement, "Double funding for Workforce Information Grants to the States (WIGS) and BLS federal-state cooperative program grants." He reminded the group that WIGS are vital to the states as co-collaborators in the WLMI system. Notwithstanding the emphasis WIOA puts on identifying in-demand occupations, the funding to the states to accomplish that objective has been flat for 20 years, he reported. This disconnect, he continued, reflects that high-level policymakers, including those in the DOL and Congress do not fully appreciate the relationship between adequate funding for information and the outcomes they are trying to achieve. **DR. REAMER** reported that his research into historical funding revealed that states currently receive workforce grants totaling \$97 million, nominally down from \$110 million in 2001. Adjusted for inflation, he added, the grants were down from \$178 million. In light of the importance of state and local information to WIOA specifically, and labor markets in general, he indicated that the subcommittee recommended that the money going to the states be doubled in the next possible budget request.

The subcommittee's "How" recommendation, **DR. REAMER** reported, was for the Secretary to put this number in the budget and to task the DOL Chief Evaluation Officer to evaluate the returns on investments in WLMI. **DR. REAMER** also proposed to include an analysis of the

impact of the fall in real funding on the capacity of state LMI agencies. The group discussed publishing concrete examples of programs and products that could be added with the increased funding, as well as those that could no longer be supported due to lack of funding. **MS. ZELLER** emphasized the importance of specifically describing how the proposed funding increase would result in putting people to work, rather than merely listing programs.

DR. REAMER asked **MS. FORLAND** to lead the discussion of the subcommittee's third improvement, "Propose a mechanism to overcome legal barriers to data sharing." **MS. FORLAND** outlined the need for effective sharing of data among federal and state agencies and observed that, while there are some restrictions limiting such sharing, even when there are not, agencies often do not share data in order to limit their risk. The subcommittee, she reported, recommended leveraging work that states had already done due to the states' understanding of local data issues. She continued to state that, the subcommittee recommended that the Secretary's office work with Congress to incorporate these recommendations into future legislation based on CEP's work.

MS. PATE described a financial literacy training company that was unable to obtain outcome data from state agencies, noting that it finally developed a data sharing agreement and convinced over 300 colleges and workforce boards to agree to it. Key to its success, she observed, was the fact that the company did not ask the agencies to share the data, but rather developed a need-to-know matrix identifying the specific information it required and asking only for that limited set of data. She urged consideration of such an approach. **DR. REAMER** requested a brief write-up of the scenario.

DR. REAMER discussed linking state data into the NSDS and providing access via the secure portal to qualified state researchers—and producers—for both interstate and intrastate analysis. He also observed that the NSDS would benefit from state expertise in interpreting the data, particularly given state-to-state variation in the data provided.

DR. REAMER also discussed the provision of state expertise to the NSDS, noting the value of local knowledge of the data provided by the states. **MS. FORLAND** emphasized the importance of allowing state oversight over data being reported.

DR. REAMER introduced a discussion of how to respond to CEP's recommendations on including wage records in the NSDS. He noted that the bill that had recently been introduced, characterized as "CEP light," included a relatively noncontroversial subset of CEP's recommendations and that the NSDS component would follow in later legislation. He opined that this would give the Council an opportunity to piggyback on that legislation to shape the landscape on issues such as state connections to the NSDS, ensuring that states are included as qualified researchers—including a unified qualification process, and two-way data sharing—including sharing among states.

The group discussed BLS access to the UI wage records. Issues raised included: the importance of the Council's setting the standard rather than deferring to CEP; certain states' concerns with the current sharing arrangement with Census and consequent hesitation to expand that access to BLS; potential standardization of memoranda of understanding; a current five-state pilot of wage-record sharing at BLS; the complexity arising from the variability of state data and systems; and possible incentives for state participation in the NSDS or other data sharing efforts. It was noted that interest in participation in the BLS wage-record sharing pilot should be directed to **DR. HARRIGAN**. **MR. FICHTNER** suggested that, in the future, information about participation in such pilots be provided to others beyond the LMI shop chiefs.

MR. THERRIEN noted that, while the discussion had revolved around the exchange of data between the states and DOL, the proposed improvement included a list of federal agencies beyond the DOL. He proposed that the subcommittee revise the "What" statement to reflect those other agencies. He further suggested that the subcommittee consider a step-wise path forward, starting with sharing of wage record data based on the DOL five-state pilot and to be followed later by negotiating shared access to data from the other sources, such as proposing legislation to change the laws that limit data sharing by the IRS. **MS. FORLAND** objected to such a phased approach, pointing out that the states would have no leverage after turning over their UI wage records and therefore they would need to include access to IRS data, and any other desired data, at the same time.

DR. REAMER stated that the Council wanted to be proactive in suggesting that the states give access to wage records in exchange for the data sources indicated.

Concluding Remarks and Adjournment

3:45 P.M. to 4:00 P.M.

The Council decided that all of the identified improvements would be included in the final report, rather than selecting a subset. It was noted that the reports would retain the current format, with a goal to limit each Improvement to one page. **DR. REAMER** volunteered to provide a one-paragraph preface describing **SEC. ACOSTA'S** priorities as articulated to the Council.

The Council scheduled its next two meetings to be two-hour virtual meetings on January 11, 2018, and January 25, 2018 (each at 1 P.M. Eastern time), to finalize the recommendations. **MS. FORLAND** established that the subcommittee report revisions would be due by November 20, 2017, to be followed by a subcommittee chair meeting. The drafts, she stated, would be published to the website for public comment on January 2 or 3, 2018.

DR. REAMER inquired about the Council's focus after publication of the recommendations. **MS. FORLAND** indicated that the next meeting should include a focus on the results of the CWS, an

update on the status of the recommendations, and an update on activity resulting from CEP's recommendations.

MS. FORLAND and **MR. RIETZKE** thanked everyone for their participation and adjourned the meeting.