

Overview of DOL-Wide Innovation Projects

What are we doing to innovate, enhance, and use workforce and education data?

National Workforce Data Initiative

The goal of the Workforce Data Initiative, led by DOL and supported by the White House Office of Science and Technology Policy, University of Chicago, and 22 non-profit and for-profit partners, is to gather data on training, skills, jobs, and wages, and combine them with cutting-edge big data techniques to make the results open and available, enabling a new ecosystem of products and services. As a result of making the data accessible, tech developers like PairIn have partnered with DoD on connecting military spouses with the skills and jobs they need after relocating, a high priority for the First Lady's Joining Forces initiative. Other examples of using this data come from organizations such as Hackernest (which unites tech communities), Ushahidi (which uses crowdmapping), and the Flatiron Coding School students (who developed a skills app for high school students). The public is actively experimenting with integration of the skills data into tools for consumers and job-seekers. <http://www.dataatwork.org/>

The Opportunity Project

The Opportunity Project, an initiative out of the White House, puts data and tools in the hands of civic leaders, community organizations, and individuals to spur innovation outside the government to help citizens navigate information about critical resources such as access to jobs, housing, transportation, schools, and other neighborhood programs.

<http://opportunity.census.gov/>

As part of this government-wide initiative to promote open data, DOL presented a critical and key opportunity: the need to effectively connect Americans to skills and jobs by unlocking dynamic, rich data about the workforce. Job placement professionals such as vocational caseworkers at one-stop shops and community resource centers do not have access to real-time, geographically relevant information to connect their clients to the training and job opportunities that fit them best. They rely primarily on word-of-mouth and or physical walk-throughs of neighborhoods to find job openings to refer their clients. This method is neither efficient nor effective at placing individuals in positions that are best suited to their needs and skills sets. The following list of applications were developed during the event, and picked as outstanding participants:

- **Training Finder:** Uses data from eligible training provider lists (ETPL) to surface education options that lead to in-demand careers for job seekers. <https://www.linkedin.com/training>
- **Job Seeker:** Uses skills data from o*net and the Workforce Data Initiative to match individuals to the jobs in their area that provide the greatest opportunity for personal and professional success. <http://opportunity.pairin.com/>
- **Opportunity by Hackernest:** Uses labor/employment info from multiple federal data sources to help navigate careers in government. <http://opportunity.hackernest.com/>
- **Opportunity Enabler:** Uses nationwide opportunity indexes to make searching for opportunities more easily obtainable. <https://goo.gl/DVL3bD>

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- **CareerSpark:** A mobile application that uses employment statistics and occupational data from the Bureau of Labor Statistics to make career exploration easy and accessible for high school students. <https://goo.gl/MIYoAI>

What are we doing to develop innovative digital products and services?

DOL Digital Community of Practice

Agencies throughout government are improving their digital services—the citizen-facing products and services they provide. DOL has convened a Digital Community of Practice to allow representatives of DOL agencies to collaborate, share best practices, and pursue common technologies and solutions. The group implements the U.S. Digital Services Playbook, a plain-English guide for agencies of best practices, particularly in relation to open source code and open data initiatives. Representatives from each agency share business processes such as methods of agile procurement, and communicate on departmental resources such as quality assurance and 508-compliance, avoiding the need to “reinvent the wheel” on digital and IT issues that all or many agencies face. To date, the group has been successful in accomplishing the following actions:

- Adoption of the latest industry-standard software-as-a-service (SaaS), like Slack (<http://slack.com/>) and Trello (<https://trello.com/>);
- Streamlining of IT procurement and security review for individual agency digital application requests;
- Laying the foundation for the procurement and adoption of state-of-the-art workstations, including MacBooks and MacBook Pros;
- Designing and eventual roll-out of agency-wide digital training in partnership with 18F, PIF, and non-federal groups.

How are we using new digital platforms to communicate with the public and keep workers informed and empowered?

worker.gov: Helping Workers Understand and Exercise Their Rights

DOL just launched worker.gov, a new online tool that synthesizes content from DOL, DOJ, NLRB, and EEOC in language that is easy to understand and visuals that supplement comprehension. Developed with support from three Presidential Innovation Fellows, the tool assists America’s workers in understanding their rights under federal worker protection statutes by guiding them on a structured journey that provides them with opportunities to take action or find help if they have had wages stolen, been injured on the job, faced discrimination, or been retaliated against for joining together to seek better wages or conditions at work. Users describe themselves and their concerns, and the tool helps eliminate guesswork about which federal agency or statute covers their complaint. worker.gov

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Launch of DOL E-Books Bookstore on Amazon.com

U.S. DOL and Amazon's Kindle Bookstore have agreed to terms of service that will allow for the publishing of e-books at no cost to readers. Publications to include:

- **US Department of Labor Employment Workshop Participant Guide: Transition from Military to Civilian Workforce**
 - The official participant guide used during the Department of Labor (DOL) Employment Workshop for transitioning service members. As part of the Transition Assistance Program (TAP), DOL conducts these workshops on military installations worldwide.
- **Women's Employment Rights Guide**
 - The Women's Bureau is providing the first update to "A Working Woman's Guide to Her Job Rights" in almost 25 years. Producing the guide as an e-book will help educate the user about her rights in a way that she can customize and personalize.

Growing and Institutionalizing the Digital Team within OPA

Over the last eight years, social media and digital content creation have become critical parts of any comprehensive communications strategy. The Office of Public Affairs has worked to modernize its communications strategies by expanding its digital presence. As the digital team has grown in size, it has also worked to develop and institutionalize strategies and practices that can be carried forward into the next administration. The team has taken the following steps toward this goal:

- Expanded the use of social media to agency-specific accounts, allowing DOL's sub-agencies to communicate directly with their distinct constituencies;
- Developed a plan for the establishment of a strategic email communications program, including an overhaul of the DOL-wide newsletter that now reaches nearly half a million subscribers;
- Increased the use of video, infographics and other dynamic content to increase engagement with the public; and
- Expanded the collection of analytic data that better informs our digital content and dissemination strategies.

How have we embraced mobile development to connect more effectively with workers?

OSHA Heat Safety Tool

Dozens of Americans are injured or die each year from heat-related workplace illnesses. OSHA created an app in 2011 to alert and assist workers. We have since updated it for a more modern user experience. The tool was rebuilt for more modern iPhones with a modern, simple user interface that made the content much more accessible and intuitive to workers. Outreach was also conducted to key stakeholders and business owners to allow for ongoing and iterative updates. OSHA also procured an updated Android version of the app and a plan for sustained

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maintenance and development of the service for the future.

https://www.osha.gov/SLTC/heatillness/heat_index/heat_app.html

DOL Hearing Conservation Technology Challenge

Twenty-two million workers are exposed to potentially damaging noise at work each year. Last year, U.S. business paid more than \$1.5 million in penalties for not protecting workers from noise. While it's impossible to put a number to the human toll of hearing loss, an estimated \$242 million is spent annually on workers' compensation for hearing loss disability.

- So we issued a challenge to America's innovators and technologists to:
 - Design technology that will enhance employer training so that workers consistently wear hearing protection when needed.
 - Design a real-time detection system that will alert workers, wirelessly through their mobile devices, when hearing protection is not blocking enough noise to prevent hearing loss.
 - Design selective hearing protectors that allow workers to hear important alerts or human voices while protected from harmful noise.
- Update: DOL received 28 high-value qualifying submissions. Judges included representatives from USPTO, DOL, NIOSH, and a collection of universities and industry representatives. A winner was selected and promoted through social media.

ILAB Sweat & Toil Child Labor App

ILAB's annual Congressionally-mandated reports are voluminous paperback tomes that are difficult to carry, search quickly, or share. Working with ILAB to begin modernizing the way they manage and deliver their data, we:

- Conducted extensive user research to identify the most-frequently accessed data from their reports, designing and launching an app experience easier to use and more portable than the paper report for a wide range of users, from diplomats and foreign implementers to ILAB staff themselves.
- Open-sourced ILAB's data for the first time, publishing it along with DOL's other open data and allowing developers to access, research, and build on the data easily.
- Launched the app, which has had nearly 4,000 downloads.
- Worked with ILAB on development and procurement processes that will allow them to continue to develop the app experience and modernize other parts of their data management going forward.

How are we modernizing our processes to better fulfill the DOL mission?

WIOA Customer Centered Design

Passage of the Workforce Innovation and Opportunity Act provided a powerful opportunity to rethink the way we deliver services to our job seeker and business customers. ETA sponsored

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free online Human Centered Design training to teams of workforce development workers around the country, and over 1000 people were trained to rapidly come up with innovative new concepts, quickly prototype them, and then make ideas come to life with positive results for customers. By engaging federal, state, and local workforce professionals, we can better understand our customers and what they need. Services are now designed with employer and job seeker needs at the center of the process.

Modernization of Wage & Hour Field Occupations Handbook

WHD transformed their voluminous paper-based Field Operations Handbook (FOH)—the 2,500 page tool that investigators rely on for guidance while conducting investigations—by converting it into a digital, searchable, and more accessible resource. The team used agile practices—including discovery sprints, prototyping to experiment with different options, and customer engagement. Now, WHD investigators can pull up a searchable FOH on their iPhones while out in the field.

Enforcement collaboration

The Enforcement Working Group within DOL was created to foster greater collaboration among the enforcement agencies, to better leverage resources, and to increase the reach of DOL's enforcement presence. One goal of this group is to cross-train agencies using modern training modules. The training will be distributed through LearningLink, the Department's online learning platform and will be mandatory for all incoming enforcement staff.

Preparing to Implement Fair Pay and Safe Workplaces

As the lead implementing agency for the July 2014 Executive Order 13673 Fair Pay and Safe Workplaces (FPSW), DOL faced IT and data barriers both internally and across relevant agencies. The ability for Agency Labor Compliance Advisors (LCAs) to readily access Enforcement Agency data was critical for them to fulfill their ALCA analysis and assessment responsibilities. With no such system previously existing, DOL worked to create (1) the Master Data Repository (MDR) to house DOL's enforcement agencies' data, and (2) the Labor Compliance Advisor (LCA) Hub (hosted on OMB MAX) that LCAs would use to complete analysis and assessment responsibilities. This system interfaces the DOL MDR, with systems at GSA, NLRB, and EEOC. In less than two years, both systems were designed, developed, tested, and operational by the October 25, 2016, EO effective date.

What are we doing to sustain a culture of innovation at DOL?

Innovation Council

The Innovation Council is tasked with finding ways to make our work more efficient, streamlined, and integrated while being responsive to employee suggestions. In serving as the governing body overseeing Department-wide innovation-enhancing initiatives, the Council's goals are as follows: Coordinating and maximizing Department-wide innovation efforts; Identifying, promoting, and rewarding valuable innovation initiatives across the Department;

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Developing solutions to overcome any barriers to innovation. The Council builds upon, furthers, and sustains the innovation work begun through the IdeaMill platform – an interactive, virtual “suggestion box.” Now the Council will consider how to make IdeaMill even more responsive to your suggestions. The Council was formed in October 2016 with 14 members – innovative leaders from the national office and the regions. Eighty-five employees applied to the Council.

How are we working with innovative federal groups like GSA’s 18F to meet challenges?

Paid Family & Medical Leave Program Innovation Program

Women’s Bureau has entered into an Inter-Agency Agreement with 18F, the General Services Administration’s in-house consulting and digital services delivery group, to develop guidance and resources that may be useful to states looking to develop a paid leave insurance program. In recent years, three states (California, New Jersey, and Rhode Island) have implemented their own paid family leave insurance programs; a fourth state, New York, will begin implementing its program in 2018. These states have been able to establish paid family leave insurance programs by building upon their state Temporary Disability Insurance systems. Most states, however, do not have a TDI system, and thus lack the infrastructure through which to administer and finance a paid leave insurance program. Numerous states have indicated that lack of administrative and fiscal infrastructure is a major impediment to implementing a paid leave insurance program.

To help states address these challenges, OSEC, ETA, and Women’s Bureau worked with 18F to develop the below deliverables: By the end of December, DOL and 18F will provide states with:

- An inventory of the business requirements necessary for all aspects of a state paid leave insurance program (claims-taking, eligibility determination, management of medical information, taxing functions, claims payment, and fiscal accountability);
- A guide to best practices for modular procurement and development to mitigate the costs of a full-scale enterprise development project;
- A proof of concept (i.e., an adaptable “front-end” user interface), along with the underlying code as well as a description of the technology tools used to develop the proof of concept and guidance to states regarding its potential use(s);
- State-specific takeaways regarding possible next steps (for states that participate in interviews with the Servicing Agency); and
- A two-hour online workshop for all states, presented at the conclusion of the project.

Digital FLSA Section 14(c) certificate application for the employer community

WHD has partnered with 18F to conduct workshops with a cross-functional team of policy, certification processing, and program staff to develop a shared vision for modernizing the 14(c) program to fit with current policy objectives, including creating a new online certification module. WHD worked with 18F to adopt agile practices to identify user stories and prioritize features for the first release, which were incorporated in one of the first contracts out for bid under GSA’s new agile blanket purchasing agreement. WHD engaged SOL, OCIO, and the Office

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of Procurement in this effort. A contract award was made to an agile vendor in September 2016 and the team is now working to create the first online certification module.

Talent Development

WHD is taking a two-pronged approach to developing talent in the agency. First, they have partnered with 18F to launch a customized 10-week course for 35 participants from across the agency who will get intensive, hand-on training in lean start-up, agile, and human-centered design practices. The participants will apply the practices to priority projects within the agency and receive coaching and mentoring from 18F staff. In addition to developing existing staff, WHD partnered with OASAM/HR to create a new Schedule A hiring authority within the department to recruit digital services talent. WHD is recruiting candidates under the new hiring authority to stand up a formal team to lead agency transformation efforts.

What's Next?

Strategically using data to advance our goals

One key way that DOL can continue to advance its mission across its research, operations, policy and customer service is through the establishment of a Chief Data Officer to responsibly manage, curate and leverage data in a way that fosters progress, supports decision-making, and informs and engages the public.

The Chief Data Officer Role would be supported by the newly appointed DOL Data Board, led by agency representatives who are responsible for using data to implement their agency's strategic and aspirational vision to obtain the best possible outcomes for workers, to define DOL's data capacity-building plan.

The Chief Data Officer would act as DOL's executive business lead, ensuring that DOL data are available, reliable, consistent, internally and externally accessible, secure and timely to support the mission and activities of the agency. Together, the Chief Data Officer, and Data Board would be charged with developing a DOL data management philosophy and culture focused on making data reliable and useful for decision-making.

From a government-wide angle, the operation would also be supported by the White House-led Data Cabinet and Data Science Interagency Working Group.