

# **DAY** **ONE** **PROJECT**

## **Incorporating Health and Safety Data in CareerOneStop Websites to Optimize Career- change Guidance**

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## Summary

The Department of Labor (DOL) should update CareerOneStop’s “mySkills myFuture” website and other web properties to provide prospective career changers with comparative information on job-related pollution and safety metrics.

As the United States transitions towards a clean energy economy, a majority of workers in traditional fossil fuel industries will need to find new employment. In its January 27, 2021 Executive Order “Tackling the Climate Crisis at Home and Abroad”, the Biden-Harris Administration called for revitalizing “energy communities” — that is, communities whose economies have traditionally been based on the energy industry. Revitalization includes creating good and sustainable opportunities for labor. DOL is a member of the Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization authorized by the January 27<sup>th</sup> Executive Order, which has been tasked with providing federal leadership to support coal, oil and gas communities during the energy transition. DOL’s “mySkills myFuture” interactive web portal guides experienced job seekers to discover new careers that match their existing skill sets. However, information presented on the portal lacks key quantitative factors that support worker well-being. To enable transitioning workers in declining fields to make more informed choices about future jobs, the DOL should update its career guidance tools to include data on health and safety risks associated with different job options.

## Challenge and Opportunity

Approximately 1 million American workers are employed in the coal, oil, and gas industries. Many of these workers are seeing — and will continue to see — their employment phased out over the next decade.<sup>1</sup> Federal and state governments collaborate via the American Job Center network to help workers by providing resources for career exploration, training, and job searches. A leading government-sponsored resource is the DOL’s CareerOneStop, a collection of web platforms that tailors employment assistance to various audiences. Career changers are directed to use the “mySkills myFuture” site, where they enter a present or previous job title and are shown multiple job matches entailing similar skills.

For instance, when a petroleum refinery worker searches for alternative careers, they may see a job description for a biofuels processing technician displayed. The worker can then click to compare characteristics between their current job and the suggested job. Information presented in this job comparison chart includes:

- Salary (median annual)
- Similar skills & knowledge
- Skills & knowledge gaps
- Typical level of training (education)

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<sup>1</sup> Saha, D.; Neuberger, J. (2021). [Steps to Aid US Fossil Fuel Workers in the Clean Energy Transition](#). World Resources Institute, January 25.

- Licensing, if any
- Certifications, if any

Left out is any information on possible health and safety tradeoffs between jobs. Workers need to know about workforce wellbeing in order to make fully informed decisions about future career choices — especially given the workplace hazards that many oil and gas workers face. For instance, if the refinery worker of our example visited the “mySkills myFuture” site they would only see that transitioning to a career in biofuels processing would mean a 20% pay cut and the need to upskill in two areas. The worker would not see whether these disadvantages are offset by reduced exposure to toxins or other occupational hazards in the biofuels job.

## Plan of Action

To optimize career change guidance for workers, DOL should update its CareerOneStop web properties as follows:

- (1) **The “mySkills myFuture” platform should include scores from the Environmental Protection Agency’s (EPA) Risk-Screening Environmental Indicators (RSEI) Model.**<sup>2</sup> Since 1990, this model has tracked air and water pollutants linked to geographically specific industrial activities that must be reported annually by hundreds of facilities across the country. EPA uses the model to prioritize and plan community-based projects for preventing and mitigating toxin release from these facilities. Ample public health research shows the healthcare cost externalities borne by labor and local communities<sup>3</sup> resulting from industrial pollution. Workers have a right to know if and how their employment choices may affect their and their dependents’ health. This could be achieved by using the model to create a new Industry Toxics Score comparison category on the “mySkills myFuture” search results page. The Industry Toxics Score would display RSEI numbers at the NAICS<sup>4</sup> level for different jobs and would be accompanied by a Help page with explainers (as is currently available for all other comparison categories). Achieving this functionality would be technically straightforward, requiring only the development of an application programming interface (API) to connect “mySkills myFuture” to the RSEI data. Development of such an API can be considered an information-technology maintenance activity covered by the DOL Chief Information Officer (CIO)’s budget. The CIO’s office could lead this activity internally and/or request support from the General Services Administration (GSA)’s Technology Transformation Service (TTS).

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<sup>2</sup> Available at <https://www.epa.gov/rsei>.

<sup>3</sup> Lavaine, E.; Neidell, M.J. (2013). Energy Production and Health Externalities: Evidence from Oil Refinery Strikes in France. National Bureau of Economic Research, Working Paper 18974.

<sup>4</sup> The North American Industry Classification System (NAICS) is the standard used by federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. (Source: U.S. Census Bureau. (2021). North American Industry Classification System.)

- (2) **The suite of CareerOneStop websites should display Occupational Safety and Health Administration (OSHA) standards data that help users assess relative hazards of different workplaces.** Data displayed should include both aggregated numbers indicating the total numbers of OSHA citations received by different industries, as well as more targeted health statistics maintained by the National Institute for Occupational Safety and Health (NIOSH). OSHA’s existing data & statistics portal<sup>5</sup> already accommodates public queries, including queries of the most frequently cited federal and state OSHA standards for a given NAICS code. The NIOSH data gateway<sup>6</sup> is also publicly accessible and linkable to specific industries. Like the RSEI data, OSHA data can be presented as a new comparison category with dual link expressions (“Safety Record — Industry” and “Safety Record — Job”) pointing to the associated data levels. Just like the RSEI data, adding these comparison categories to all CareerOneStop websites would only require a relatively simple API that could be developed and led by the DOL CIO’s office with existing authority and funding, with optional support available from TTS.

These two updates directly align with two of the mechanisms for prioritizing federal support identified in the Interagency Working Group’s *Initial Report to the President on Empowering Workers Through Revitalizing Energy Communities*.<sup>7</sup> Specifically, as noted in the Executive Summary:

- **Mechanism 1: For immediate investment using existing federal programs.** The report recommends prioritizing “[g]rant funding for regional economic development aligned workforce development — enabling Energy Communities to prepare workers for new markets and industries.” Including RSEI and OSHA data on the CareerOneStop websites would enable workers in different communities to make more informed decisions about the careers they want to pursue, which in turn would enable better-tailored workforce development programs.
- **Mechanism 2: Steps the group will take within a year.** The report states that the Interagency Working Group will “[w]ithin one year, establish and expand efforts to create a ‘one-stop shop’ for Energy Communities seeking access to federal resources, and identify mechanisms to coordinate the activities of federal agencies and the delivery of federal resources to reinforce the economic revitalization goals of the Interagency Working Group. ”Updating the CareerOneStop websites with RSEI and OSHA data is a simple step that the federal government can take to quickly provide a functional resource for job changers in Energy Communities.

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<sup>5</sup> Available at <https://www.osha.gov/data>.

<sup>6</sup> Available at <https://www.cdc.gov/niosh/data/default.html>.

<sup>7</sup> Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization. (2021). *Initial Report to the President on Empowering Workers Through Revitalizing Energy Communities*. April.

## Conclusion

There is growing recognition of the need to equitably facilitate the American workforce transition towards climate-positive growth careers, particularly for workers who are switching out of relatively higher wage jobs in fossil fuel industries. The DOL can support workers as they “build a bridge from [their] last job to [their] next job”<sup>8</sup> by highlighting workplace health and safety considerations in its career guidance websites.

## Frequently Asked Questions

### **1. Would the actions proposed in this memo also benefit workers looking to transition who are not in fossil fuel industries?**

Yes. EPA and OSHA data on environmental, health, and safety factors span many sectors and industries. After the CareerOneStop websites are updated, these data would be displayed in job recommendation results regardless of what type of job is input into the initial search field.

### **2. What is an example of an existing program that DOL runs that is pertinent to the mandate of the Interagency Working Group?**

The Employment and Training Administration began a demonstration grant initiative in 2018 called Workforce Opportunity for Rural Communities (WORC), administered with the Appalachian Regional Commission and the Delta Regional Authority. Among the grant activities is “job matching assistance”, and the latest round of funding (Spring 2021 release) emphasizes Energy Communities.

### **3. Why is it so important for the federal government to help fossil fuel workers during the clean energy transition?**

A March 2021 article in *Grist*,<sup>9</sup> published before the release of the working group’s report, provides an excellent answer to this question. The article highlights the need for federal agencies to be aligned in providing programmatic “coordinated support” and “early notification” for impacted energy communities.

### **4. Has DOL previously considered actions like those recommended in this memo?**

No. DOL’s Workforce Information Advisory Council (WIAC), which sits under the Employment & Training Administration (ETA), delivered recommendations in January 2018 to improve labor market information. Two of those recommendations (“2. expand information on occupations, skills, and credentials” and “6. overcome barriers to data sharing”) broadly overlap with elements of this memo, but the specific actions proposed in this memo are new.

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<sup>8</sup> U.S. Department of Labor. (n.d.). [Employment and Training Administration](#).

<sup>9</sup> Pontecorvo, E. (2021). [As coal dies, the US has no plan to help the communities left behind](#). *Grist*, March 3.

## **5. How many web visitors use the mySkills myFuture portal?**

Per CareerOneStop's 2020 annual report,<sup>10</sup> the sites that comprise the CareerOneStop platform received more than 44 million distinct visits in 2020, averaging almost 15 million page views and 3 million visits each month. The platform experienced a 47% year-on-year increase in page views from 2019 to 2020, much of which occurred following the onset of the COVID-19 pandemic. While more granular traffic data by site is not available, among the top ten most popular features / tools available on CareerOneStop were Job Finder at 6.5%, Occupation Profile at 4.1% and Skills Matcher at 3.7%. Each of these features/tools contribute functionality to mySkills myFuture and each could be updated with the proposed data integrations.

## **6. Does the CareerOneStop team have experience adding new features to their platforms?**

Yes. In 2020, the team responded to pandemic needs in a major way by adding unemployment insurance information that was refreshed daily, launched an Employment Recovery portal, and delivered a host of new tools — including the Work Values Matcher and the Compare Salaries tool — in under a year. The Work Values Matcher is particularly relevant to this memo. The tool comprises an interactive set of 20 cards containing statements that a job seeker can arrange in priority-rank groups in order to generate a customized chart showing their relative preferences along “6 universal work values”. “Working Conditions” is one of those six values and “The job has safe working conditions” is one of the twenty available statements.

## **7. Is CareerOneStop data already available for external access via APIs?**

Yes. The platform offers its data to third parties via web APIs<sup>11</sup> and logged more than 170 million data requests this way in 2020. The platform also provides information on its data sources<sup>12</sup> used in its tools and on how frequently these sources are updated. As the team offers external developers such capabilities, it would be a comparable effort to create new data-pull APIs across agencies.

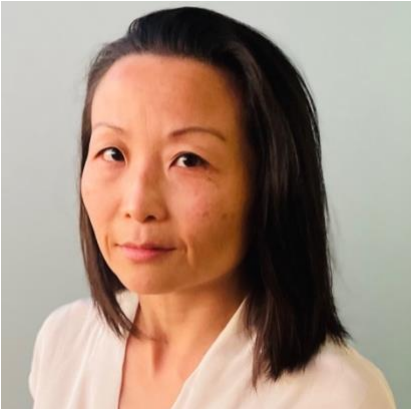
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<sup>10</sup> U.S. Department of Labor. (n.d.). [2020 Annual Highlights](#). CareerOneStop.

<sup>11</sup> Available at <https://www.careeronestop.org/Developers/WebAPI/Web-API.aspx>.

<sup>12</sup> Available at <https://www.careeronestop.org/Help/data-sources.aspx>.

## About the Author



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