



Improving Workforce Programs Through Enhanced Data and Data Linkages

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The Workforce Data Quality Initiative (WDQI) effort is 10 years old. The majority of states have received at least one WDQI grant, and in 2021 the U.S. Department of Labor (U.S. DOL) will launch its eighth cohort of states receiving WDQI funding. To date, the WDQI program has provided over \$71,285,133 to states to improve workforce data.

The focus of the WDQI effort has been to build better state-level systems for managing individual-level data on workforce training and to foster linkages to education, labor, welfare, and other data systems. Under normal circumstances, a strong data system at the state level can function as an accelerator, helping the state build evidence to inform policy and helping programs identify improvement opportunities continuously rather than only in response to particular evaluation studies.

The COVID-19 crisis has made clear the importance of quality data systems for responding to crises as well. State unemployment insurance (UI) systems came under great strain during the early days of the pandemic. The inability to adapt quickly to program changes introduced by the Coronavirus Aid, Relief and Economic Security (CARES) Act, such as supplemental payments, and by new initiatives, such as Pandemic Unemployment Assistance (PUA), proved the most obvious system failure for reasons that have been documented elsewhere.¹

UI systems support payments for people who have lost jobs and they serve as cornerstones of state-level labor market information and workforce data systems. The wage records employers submit as part of a UI program are key to following the progression of learners and workers in the labor market and to assessing the efficacy of policies, programs, and interventions across many federal and state agencies. States and local areas need quality data and robust linkages between UI and other programs in order to create coherent responses to problems in the short term and evidence-based policy over time. Because UI systems are so important they need to be robust and this brief offers three strategies for doing so.

Three Ways to Make State Data-Matching Systems More Robust

States support workforce data systems. At the same time, federal policy, state-level agency partners, and even private-sector, civic-tech, and nonprofit partners can play important roles in improving the quality of workforce data. Three options for making state data-matching systems more robust are discussed below.

1. Link Wage Data From More Workers

As noted, UI wage records are at the heart of the data systems that most states are building. While wage records are an excellent source of information on work and earnings—covering some 90 percent of workers in most states—they do miss significant subpopulations of

¹ See Goger et al. (2020), Simon-Mishel et al. (2020), and Zipperer and Gould (2020).

workers, including federal workers and workers not eligible for traditional unemployment insurance, such as self-employed workers, business owners, and independent contractors (“gig” workers).

The PUA program was launched under the CARES Act and was subsequently extended through September 6, 2021, by the American Rescue Plan. It represents the first time workers in nonstandard work arrangements became eligible for UI benefits. The COVID-19 crisis made this a necessity, since government-imposed bans and shutdowns made work impossible for many people. (Prior to the pandemic, over 35 million people filed 1099 forms, reflecting income generated from nonstandard employment.) Workers whose only source of income is nonstandard work are not included in UI wage records, however, making their movement through the labor market invisible to policymakers.

Other critical groups of workers missing from UI wage record data include federal workers, members of the U.S. military, and those employed by the U.S. Postal Service. This creates problems for states with large numbers of federal or military workers. Virginia and Maryland, for example, are home to a significant share of the District of Columbia’s federal workforce. Workforce data in both states are skewed by this absence. In Ohio, Texas, North Carolina, California, and other states with large military bases, the absence of military workers from wage record data leads to a lack of critical information on a highly skilled workforce. Again, this leaves states with an incomplete picture of their human capital.²

2. Enhance Wage Record Data

Despite the overall quality of UI wage data, states vary in the level of detail they collect or make available for analysis through WDQI-funded data systems. For example, very few states offer occupational data as part of enhanced wage records. This makes it difficult to see how people progress through the labor market and undercuts major policy efforts, such as career pathways. Pay rates are also missing. We can access total pay, but without an hourly rate it is difficult to determine whether the work is full time or part time. Under WDQI, Indiana has piloted collecting occupational data; other states are exploring similar efforts. (Alaska has collected occupational data for many years.) Private sector solutions are also emerging, such as the U.S. Chamber of Commerce Foundation’s [Job Data Exchange](#) (JDX). However, no consistent approach has emerged across states.

Finally, linking data across states enhances data systems and can boost the quality of analyses. Cross-state data sharing can, for example, improve labor market analysis in states with regional economies that extend across state lines. It can also help states see the inflow and outflow of students and graduates and of workers throughout their careers. Cross-state data sharing remains a significant challenge, however, despite federal encouragement of data exchanges, including WRIS (Wage Record Interchange System), WRIS2, and SWIS (State Wage Interchange System). The Coleridge Initiative and the team at New York University’s Administrative Data Research Facility have worked with a number of states to develop strategies to overcome this problem, resulting in the emergence of the [Midwest Collaborative](#) and at least two other parallel efforts.

² The Federal Employment Data Exchange (FEDES) once provided a pathway for data exchange, but no state has been able to secure individual-level data since the FEDES agreement expired in 2018.

3. Expand Education and Workforce Data Linkages

Because of the large-scale investment the U.S. DOL has made in data systems for nearly two decades, most states maintain fairly robust longitudinal data systems that include individual-level data on K–12 and postsecondary students. Since WDQI joined the Statewide Longitudinal Data System (SLDS) effort launched by the U.S. Department of Education, more and more states have built connections that allow them to match individual-level data across education and workforce systems so we can see the movement of students and graduates into work. However, the data systems in individual states have significant blinders:

- **Students who drop out of high school prior to graduation.** There is no data system that enables researchers and policymakers to track reengagement with the education system. Although the explanation for this is complicated and rooted in the decentralized and highly fragmented U.S. K–12 education system, the costs are clear: We have too little access to data about the most vulnerable learners and workers and too few ways to reengage them in learning or skill development early in their careers.
- **Learners and workers participating in nondegree education and training programs.** New initiatives like [Credential Engine](#) are documenting investments in credentials, but few states are using credential data to understand the impact of nondegree programs on individual outcomes.
- **Learner and workers in job training** (on the job or self-funded). We have a limited view into human resource development and training at the firm level. In fact, the most recent federally sponsored survey was in 1994. As the workforce system advances employer engagement in training, quality jobs, and work-based learning, finding better ways to link education and training occurring at work will be more critical.

Retrofitting existing WDQI funded data systems will be costly. However, the COVID-19 pandemic has reinforced the need to think about investments in an ongoing way, not just from one grant to the next. Addressing these critical gaps in education and workforce data systems will ensure states can respond to the next crisis.

Checklist for Enhancing Workforce Data

- ❑ **Think about data coverage.** Which learners or workers are missing? How might we connect or include them in our analysis now and in systems going forward?
- ❑ **Pay attention to data about work.** The quality of information about work is as critical. Are wages full time or part time? How might we enhance our understanding of the nature and quality of work where it is most relevant?
- ❑ **Consider education data linkages.** Think about transitions. Who is missing in the journey from education to career? How is nondegree learning reflected? How might education data linkages provide insight on career advancement and progression?
- ❑ **Account for the cost of technology infrastructure.** Consider investments in technology systems, especially those that allow for robust data sharing using tiered access as allowed under the Foundations for Evidence-Based Policymaking Act.³
- ❑ **Think about people in “traditional” jobs or in the labor market.** Former workers on disability. Potential workers without a job history. People in gig work. Data systems that cover as many of us as possible can inform more robust solutions.

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³ <https://www.congress.gov/bill/115th-congress/house-bill/4174>