
7-23-2020

Workforce Data (and Knowledge) under Pressure

Joshua D. Hawley

The Ohio State University, hawley.32@osu.edu

Follow this and additional works at: https://research.upjohn.org/empl_research



Part of the [Labor Economics Commons](#)

Citation

Hawley, Joshua D. 2020. "Workforce Data (and Knowledge) under Pressure." *Employment Research* 27(3): 4-6. [https://doi.org/10.17848/1075-8445.27\(3\)-2](https://doi.org/10.17848/1075-8445.27(3)-2)

This title is brought to you by the Upjohn Institute. For more information, please contact repository@upjohn.org.

The Enduring Local Harm from Recessions

What explains these long-term impacts? We are actively working on this question, but at a fundamental level, employment opportunities shift across areas more quickly than people do.

Altogether, our research indicates that recessions produce enduring economic disruptions to local economies, and this pattern has existed for at least the past five

Recessions produce enduring economic disruptions to local economies, and this pattern has existed for at least the past five decades.

decades. Consequently, recessions likely play a role in the shift of economic activity across places over time; this, in turn, has implications for economic opportunity for people who grow up in areas badly hit—especially repeatedly—by recessions. The social safety net meant to deal with cyclical, temporary labor market disruption—unemployment insurance, SNAP (food stamps), and one-time cash grants—has not, in the past, led areas to recover. Instead, public policy may need to come up with more extensive and longer-term programs to help workers improve their skills, help businesses retool, and, more broadly, help communities reinvest in economic development.

Financial support for this project was provided by the U.S. Department of Labor Scholars Program.

Brad J. Hershbein is a senior economist at the Upjohn Institute, and Bryan A. Stuart is an assistant professor of economics at George Washington University.

Workforce Data (and Knowledge) under Pressure

Joshua D. Hawley

In the first half of 2020, more than 40 million people filed an initial unemployment insurance claim, and according to the U.S. Department of Labor, over 33 million people were collecting benefits—both all-time highs (see Figure 1). As a result of COVID-19 and its effect on the economy, nearly every county in the United States experienced record unemployment growth in April, with little improvement since.

Strengthening Workforce Data Is Critical

To address such rampant unemployment, policymakers require more powerful and more robust employment data systems than currently exist. In my role as a professor and researcher at the Ohio State University, I worked with state agencies and academic colleagues to build a longitudinal data system linking information from education, workforce development, and social services. The linked data have allowed researchers in government

and academia to study the impact of individual outcomes for public policies, such as employment or education. The book *Data Science in the Public Interest: Improving Government Performance in the Workforce*, recently published by the Upjohn Institute (see p. 7 for more details), describes how state-specific data systems like the one in Ohio can help us improve the capacity to address challenges such as the rapid increases in unemployment (Hawley 2020).

I recommend four specific steps:

- 1) Increase the use of administrative records in employment statistics.
- 2) Better fund workforce data system infrastructure.
- 3) Explore partnerships with private organizations that have significant data on the labor force.
- 4) Build on the partnerships between universities and states to make use of these data, especially to focus attention on inequalities in the labor market.

ARTICLE HIGHLIGHTS

- *The COVID-19 pandemic is an unprecedented challenge for federal and state data systems needed to design policy responses.*
- *States cannot improve their systems on their own but need federal investment and collaboration with outside partners.*
- *Cloud computing and tiered access to data offer efficiency advantages, but both the federal and many state systems need technology modernization for the shift to happen.*
- *Partnerships with universities are critical to ensuring that data systems are used to their full potential to solve social problems, including racial inequality in labor markets.*

Increase Use of Administrative Records

Each month, the Bureau of Labor Statistics releases employment statistics based on two surveys, the household-based Current Population Survey (CPS) and the business-based Current Employment Survey (CES). There are significant strengths to these two surveys. They ask detailed questions allowing granular analysis, and (between the two) their scope is broad, covering nearly all types of employment. However, the sample sizes are still limited, with the CPS surveying some 60,000 of the more than 120 million households in the country, and the CES capturing 145,000 firms relative to the more than 10 million business establishments. Moreover, these surveys suffer from nonresponse. In a good month, some 15 percent of sampled households refuse to complete the CPS survey. During the COVID-19 crisis, the overall [CPS nonresponse rate has grown to over one-third](#), with similar if smaller increases for the CES. Since we do not know whether this nonresponse is random, it is difficult to understand whether the information collected is completely representative of the entire U.S. labor market.

Fortunately, administrative data—data collected for the administration of certain government programs—can fill some of these gaps. State unemployment insurance wage record systems, for instance, collect employment and wage information from employers for all workers covered by unemployment insurance, as authorized in the Federal Unemployment Tax Act of 1937. Through agreements with the states, [the Census Bureau uses these data for statistical purposes](#), producing trends in employment, earnings, and job transitions down to the county level, and for different industries and demographic groups of workers. Although not all workers are included (the self-employed are a large excluded group), the greater scope allows far

more detailed, if less timely, statistics than those allowed by surveys.

Additionally, several individual [states increasingly use their unemployment insurance systems for research and evaluation of their own labor markets](#), sometimes in conjunction with other states. One such effort is through the Coleridge Initiative (see sidebar).

Invest in Administrative Data Capacity

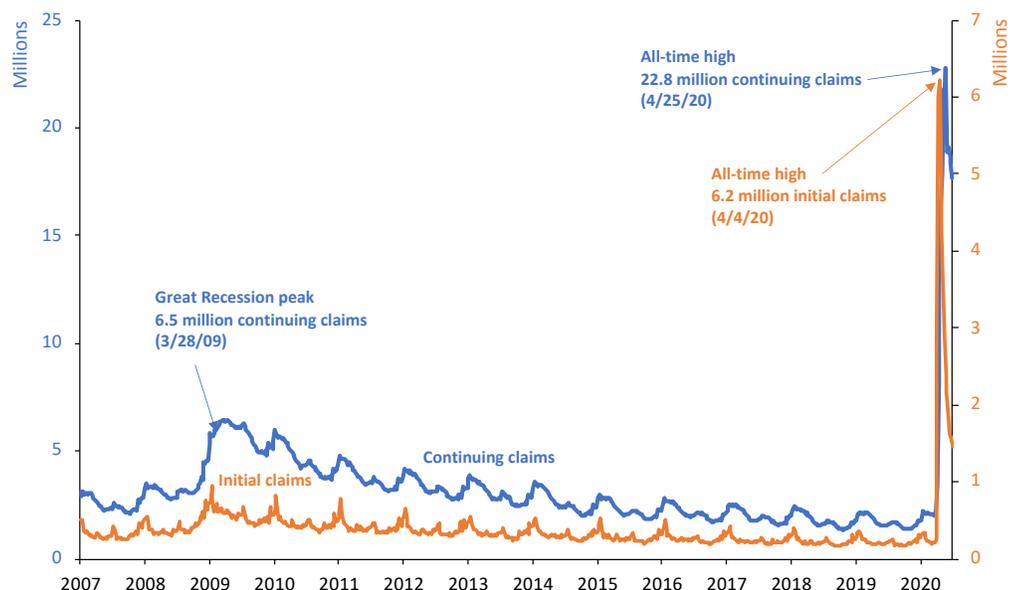
State workforce data systems are aging. Many states still run their unemployment insurance systems on old software and computer equipment—some that are 40 years old. [A well-publicized effort](#) in April aimed to recruit programmers familiar with old computer languages systems, such as COBOL. A decade ago, the National Association of State Workforce Agencies identified the long-term neglect of computer systems as a key barrier to resiliency, reporting that states simply could not handle the demands of claims during the Great Recession (let alone the current one).

The Coleridge Initiative

States often need to share workforce data to solve pressing economic and social problems—like an economic recession or natural disaster such as COVID-19—while preserving privacy and state autonomy over their own records. The [Coleridge Initiative](#) is a nonprofit organization that maintains state administrative data with cutting-edge, cloud-based security protocols (the FedRamp standard), granting access to specific, approved projects. The initiative also offers training courses to state and university analysts, providing a context to use the data in the public interest. (The author is a collaborator on the Coleridge Initiative.)

The problems have grown as [the federal government has reduced funding](#) for helping states maintain their systems.

Figure 1 U.S. Unemployment Insurance Claims, 2007–2020



SOURCE: U.S. Department of Labor, <https://oui.doleta.gov/unemploy/claims.asp>.

Workforce Data (and Knowledge) under Pressure

These issues could be rectified with additional funding and staffing support from both state and federal sources, as there is [already agreement on best practices](#). Additionally, greater support could also expand the usefulness of

Nearly every county in the United States experienced record unemployment growth in April, with little improvement since.

the data, such as providing linkages to employees of the federal government (not currently covered by state unemployment systems) or providing additional worker detail, such as demographics and occupation and job title.

Private Sector Data

Employers, schools, and workforce providers often store their data with a wide range of private sector vendors. For example, payroll firms, such as ADP, maintain records on employment, pay, and benefits for a wide range of organizations, and often include information not in unemployment insurance records, such as occupation and rate of pay.

Many states still run their unemployment insurance systems on old software and computer equipment—some that are 40 years old.

Credit bureaus, such as Equifax, track individual credit information and loan repayment history based on business financial transactions. Because companies submit these data as they are processed, records are more up to date than resources from the federal or state governments. Payroll and credit firms have typically sold access to these

data to employers and other businesses, but they are increasingly being used by researchers on an anonymized basis, such as the [Opportunity Insights economic recovery tracker](#). Furthermore, although use of private data still faces legal hurdles, there are new examples from [California](#) of statewide efforts to use anonymized credit data for public policy.

Partnerships to Improve Capacity and Focus on Inequities

The most pressing needs to improve data systems are not technical resources—rather, human resources are needed to create an effective governance structure for assembling, sharing, and analyzing the data (Lane 2020). Limits in existing human capital—often due to limited budgets—mean that simple automated reporting takes the place of sophisticated analyses. Diagnosing the current crisis in unemployment, and understanding why, for example, African Americans and women face greater challenges, requires new operation models. One such new model is through greater partnership with state universities. Ohio, for instance, has partnered with the Ohio State University to expand its research and analysis capacity (Hawley 2020), and California has similar efforts underway through the California Policy Lab at the University of California Berkeley and Los Angeles campuses. The collaboration with state government has led to greater use of data for dashboards, such as the [Workforce Success Measures](#) and the [Workforce Data Tools](#). The investments in data science have given us the ability during the COVID-19 pandemic to pivot quickly to dashboards on [unemployment and food security](#). These partnerships are increasingly regional—the Midwest states, for example, collaborate on data analysis.

Conclusion

The current unemployment crisis drives home the weaknesses in state workforce systems. State administrative data are increasingly important to workforce policy decision-making and help compensate for limitations in existing survey-based data. Most states sit on a wealth of valuable data that unfortunately are siloed, and they have few resources with which to analyze the data to promote sound and effective public policy. With relatively small increases in funding, however, substantial improvements in the quality and timeliness of workforce data are possible, including supplementing administrative data with data collected by the private sector. Additionally, partnerships, such as the one between the Ohio State University and state and local governments, help leverage existing resources more cost-effectively, and provide examples for how other states can better understand labor market changes during crises and policies to address them.

References

- Hawley, Joshua. 2020. *Data Science in the Public Interest: Improving Government Performance in the Workforce*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Lane, Julia. 2020. *Democratizing Our Data: A Manifesto*. Cambridge, MA: MIT Press.
- Thanks to Tian Lou, postdoctoral researcher at CHRR, for assistance with the data analysis.*

Joshua D. Hawley is a professor at the John Glenn College of Public Affairs and an associate director at CHRR, both at the Ohio State University.