Administrative data on employment and earnings, commonly referred to as wage data or wage records, can be used to assess the labor market outcomes of workforce, education, and other programs, providing policymakers, administrators, researchers, and the public with valuable information. However, there is no single readily accessible federal source of wage data which covers all workers.¹

Noting the importance of employment and earnings data to decision makers, the Commission on Evidence-Based Policymaking called for the creation of a single federal source of wage data for statistical purposes and evaluation. They recommended three options for further exploration: expanding access to systems that already exist at the U.S. Census Bureau or the U.S. Department of Health and Human Services (HHS), or creating a new database at the U.S. Department of Labor (DOL).²

This paper reviews current coverage and allowable uses, as well as federal and state actions required to make each option viable as a single federal source of wage data that can be accessed by government agencies and authorized researchers. Congress and the President, in conjunction with relevant federal and state agencies, should develop one or more of those options to improve wage information for multiple purposes.

Although not assessed in the following review, financial as well as privacy and security considerations would influence the viability of each scenario.³ Moreover, if a system like the Commission-recommended National Secure Data Service for sharing data between agencies comes to fruition, then a wage system might require additional changes to work with the new service.⁴

Background on wage record sources
States manage separate Unemployment Insurance (UI) programs within general guidelines established by federal law.⁵ Most employers must pay into the UI system so that eligible unemployed jobseekers can receive funds. To ensure compliance, states mandate the reporting of basic information on employer UI wage records. Most states require reporting on a quarterly basis, although some states require reporting more frequently. The UI wage records include information such as the employee’s full name, Social Security Number, employer name, address of the employer’s headquarters, Employer Identification Number, the employees’ wages earned during the reporting period, along with the employer’s applicable North American Industry Classification System (NAICS) code.

To maintain privacy and security, the sensitive data are intentionally difficult to access for purposes beyond administering UI programs.⁶ However, Congress has mandated that states use UI wage record data to show the performance of some federally funded programs, such as those supported by the Workforce Innovation and Opportunity Act (WIOA), which require reporting on employment and earnings at quarterly intervals.⁷

UI wage records do not include data on federal employees and self-employed individuals that are important for providing a complete picture of the workforce. The Office of Personnel Management retains wage data on federal workers, although the government holds military personnel and U.S. Postal employee records separately. The U.S. Department of the Treasury holds W-2 and tax data on all workers. Of note, the Internal Revenue Service (IRS) 1099 form captures earnings from self-employed individuals. The Social Security Administration also retains W-2 and tax data.⁸ Each of the options reviewed below involve these various sources of wage data to a greater or lesser extent.

U.S. Census Bureau’s Longitudinal Employer-Household Dynamics program
The U.S. Census Bureau’s Longitudinal Employer-Household Dynamics (LEHD) program combines state UI wage data with other administrative data, and census and survey data to “create statistics on employment, earnings, and job flows at detailed levels of geography and industry.” The Census Bureau uses the data to provide state and local leaders with “more localized information about their economies to make informed decisions.”⁹
The Census Bureau receives UI quarterly wage data through its Local Employment Dynamics (LED) Partnership with each state. The District of Columbia and all states except Alaska participate. The LEHD also receives data from the IRS for the self-employed, and from OPM for most federal employees, but excludes those in high-level positions, and those who work in national security, military, and U.S. Postal Service operations. Still, LEHD covers 96 percent of the workforce.

LEHD has more than a decade’s worth of data from most states, and continues to accrue more recent data. The oldest records go back to 1990. The program’s mission and the comprehensiveness of data, in addition to the Census Bureau’s experience with managing research, make it an appealing option as the basis for a single federal source of wage information.

The voluntary nature of the agreements, however, means that states could eventually opt out of the program and create gaps in wage data. The LED Partnership agreements expire after five years. Renewal and possibly renegotiation of agreements remain necessary for data sharing to continue with each state. To be sure, states vary in their willingness to share data. For example, some states have consented to blanket agreements that allow researchers who receive special sworn status and Census approval of research projects to access their confidential state data (“microdata”) through Federal Statistical Research Data Centers, whereas other states require their consent for each project beyond the Census Bureau’s regular LEHD program products.

Although the Census Bureau already has high-level technology and exceptionally well-trained staff to conduct all types of data management and research, Congress should offer additional support if the Census Bureau expands substantially the use of LEHD. Additional federal action should prove unnecessary, however, if the Census Bureau manages the process. Given the recent partnership with the UT System (see box) and the Census Bureau’s invitation to other education systems to match postsecondary education with wage data across the country, the Census Bureau has set a precedent — establishing that connecting education to labor market outcomes aligns with improving its programs.

National Directory of New Hires through HHS

The Office of Child Support Enforcement (OCSE) within HHS uses the National Directory of New Hires (NDNH) to locate parents and check employment and earnings of people who owe child support. Federal law requires all states to send to the OCSE data from the NDNH, UI quarterly wage records, and Unemployment Compensation (UC) records. Federal agencies share employee data, including on military service members. The NDNH does not include data on the self-employed. Given the broad, mandatory submission of information, however, the NDNH could serve as a comprehensive and reliable source of employment and earnings data on the nation’s workforce.

Yet barriers exist to realizing this goal. Under the SSA Act, only certain agencies may access the NDNH and only for very restrictive purposes. In some instances, DOL and states have accessed NDNH for evaluations. The U.S. House of Representatives tried to expand access to the NDNH. H.R. 1896 in 2013 would have allowed multiple agencies, including the Census Bureau, DOL, and the U.S. Department of Education (ED), to have regular access to the NDNH for “evaluation or statistical purposes to assess the effectiveness of a federal program in achieving positive labor market outcomes.” The legislation passed the House, but not the Senate.

Presidents Barack Obama and Donald Trump have also proposed expanding access to the NDNH. Their proposals included measures to improve DOL and ED’s ability to conduct performance reporting and evaluation. The Administration’s Fiscal Year 2019 budget proposal specifically calls for allowing state agencies with WIOA responsibilities to match their data with the NDNH for program administration, including program oversight and evaluation of WIOA and other DOL and ED employment and training programs. The President’s budget analysis adds that authorization of data exchanges between state agencies that administer child support, workforce programs, and Adult Education and Vocational Rehabilitation could improve inter-program coordination.

House and Senate champions would need to agree on the value of those proposals and pass the President’s language in an authorization bill, or amend the SSA to enable expanded access to the NDNH — including performance reporting as well as evaluation. Moreover, because under current statutes HHS must destroy the NDNH data after two years, future legislative action should include extending the period that HHS may retain data from two to four or more years.

U.S. Department of Labor – creating a new database or expanding a wage interchange system

The relevance of wage record information for DOL’s work provides a strong rationale for creating a national data system within the department. DOL’s mission is to “foster, promote, and develop the welfare of the wage earners, job seekers, and retirees of the United States; improve working conditions; advance opportunities for profitable employment; and assure work-related benefits and rights,” yet it lacks a dedicated wage database like that envisioned by the Commission.
DOL does oversee programs that use wage information. The Bureau of Labor Statistics (BLS), DOL’s independent statistical agency, uses data from the Quarterly Census of Employment and Wages (QCEW), which in turn uses data from state UI quarterly wage systems. If the BLS could access state quarterly wage data directly, it could produce more timely and comprehensive information for its statistical programs.

In addition, DOL’s Employment and Training Administration (ETA) receives quarterly performance data on federally funded workforce programs via state agencies that retain responsibility for collecting, aggregating, and sending this information to ETA.

**DOL wage record database**

DOL faces challenges in creating a comprehensive database of wage records. State Workforce Agencies would need to create MOUs with DOL to allow for new management and use of their data. Developing new agreements with each state would take time, and some states might not agree to participate. A new system would need more resources to sustain privacy and security, and meet state-of-the-art requirements. Moreover, DOL would need federal employee wage data, including military and U.S. Postal worker data to complete the system. DOL previously enabled the exchange of federal employee wage data through the Federal Employment Data Exchange System (FEDES), but DOL has suspended the system since February 2018. The Department of the Treasury would also need to approve the storage of wage data on the self-employed to make the database complete. DOL would likely require additional funds to construct a new database, and Congress might need to provide additional funding to ensure state systems can transmit the requisite wage data to DOL under a new system.

**Expanding existing DOL wage record interchanges**

An alternative to a single federal database is a system like the Wage Record Interchange Systems (WRIS and WRIS2). WRIS facilitates the sharing of wage data for state and federal reporting and evaluation of DOL-funded programs, such as those under WIOA. State Unemployment Insurance Agencies and Performance Accountability and Customer Information Agencies (PACIAs) represent states in these systems. All states, the District of Columbia, and Puerto Rico have agreed to participate in WRIS. To meet greater demand for wage data from other agencies, DOL created WRIS2 for states to share their aggregated data with third party entities, defined as “any public body, agency, or private career school required by law to meet state and/or federal performance measures.” This has been a way for agencies running programs not funded by DOL to conduct performance reporting and evaluation. For example, Perkins Career and Technical Education (CTE), and Housing and Urban Development (HUD) employment and training programs may receive aggregated reports under WRIS2. Still, only state agencies responsible for oversight of WIOA programs may receive individual wage records, and only states that have agreed to participate can request and receive information through the WRIS2 arrangement. Forty-three states, the District of Columbia, and Puerto Rico participate in WRIS2.

The federal government does not currently require reporting on the employment or wage outcomes of bachelor degree programs, so if a higher-education organization wanted to use WRIS, the state would need to mandate the reporting first. Researchers and evaluators may not use WRIS data without the express approval of each state contributing data.

DOL could expand the allowable uses of WRIS and WRIS2 in its successor system, the State Wage Interchange System (SWIS), which is currently under negotiation. SWIS will still depend on each state’s voluntary agreement to provide UI wage data. Under a draft version of SWIS, states may access the system for the purposes of matching individual records for fulfilling DOL performance reporting requirements, such as for those programs that fall under WIOA and reporting by Eligible Training Providers (ETPs). Unlike WRIS, however, Adult Education and Family Literacy Act (AEFLA) programs authorized under WIOA Title II and administered by ED, as well as Vocational Rehabilitation programs, could also use SWIS. States could also access individual level data from SWIS for their state and local CTE programs under Perkins for purposes of federal or state-required performance reporting, and receive aggregated information from their PACIAs for research and evaluation of CTE programs. Temporary Assistance for Needy Families (TANF) programs and Supplemental Nutrition Assistance Programs (SNAP) could also benefit from access to aggregated data under SWIS. Higher education programs outside of CTE, however, would not be included, unless designated as ETPs.

Even if all states were to agree to a new wage interchange system going forward, there would remain challenges with this approach. WRIS, WRIS2 and the proposed SWIS arrangement require individual agencies to pull data from states as needed via multiple steps, making these types of systems more cumbersome than querying a single database. Moreover, DOL would still need to revive FEDES to provide information on federal government employees.

Whether or not DOL becomes the backbone of a federal source of wage data, Congress should consider amending WIOA to allow the Department to create a database with personally identifiable information on all program participants. DOL or other authorized agencies could more easily match workforce program-participant data with information from other systems, including wage record data. The eventual reduction in separate administrative steps would result in more comprehensive and timelier workforce program information. In conjunction with better access to wage data, this solution would also make it easier for DOL to create consumer reports for prospective workforce education participants and businesses across the nation.
## Elements relevant to developing a single federal resource with comprehensive wage data

<table>
<thead>
<tr>
<th>Agency and wage data sources</th>
<th>Employee coverage</th>
<th>Duration and industry/occupation</th>
<th>Current allowable uses</th>
<th>State action to improve source</th>
<th>Federal action to improve source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Census Bureau – LEHD</td>
<td>UI eligible employees from 49 states and D.C.</td>
<td>Data retained permanently. Some data go back to 1990. Includes industry codes.</td>
<td>For Census Bureau statistical research programs. Each external research and evaluation project must include a rationale based on its benefit to the Census Bureau.</td>
<td>All states and territories should agree to participate. (Agreements up for renewal every five years; MOUs refer to applicable laws of the state, and could change.)</td>
<td>Add the U.S. Postal Service and military personnel to wage data. Congress might need to amend Title 13 of the U.S. Code if wage system is accessed for reasons that surpass precedent.</td>
</tr>
<tr>
<td>HHS - NDNH</td>
<td>UI eligible employees from all states and territories. All federal employees, including military, except in cases of ongoing current investigation or intelligence mission. (Does not include information on self-employed.)</td>
<td>Retains data for two years. No industry codes.</td>
<td>Federal Parent Locator Service and administration of child support. Access by ED only for monitoring and recovering student loan repayment. States may access for assisting with SNAP administration, and Treasury administration of tax laws. NDNH used by other agencies for very limited evaluations.</td>
<td>None.</td>
<td>Congress and the President should amend the SSA Act to allow other federal agencies to access data for evaluation and performance reporting. Presidents have proposed expanding access to NDNH for purposes of evaluation and performance reporting on programs such as WIOA. Language in approved authorization bill could also implement President’s proposal. Add earnings from self-employed.</td>
</tr>
<tr>
<td>DOL</td>
<td>N/A for wage record source. (BLS manages occupational codes and Occupational Employment Statistics.)</td>
<td>N/A</td>
<td>UI agencies would need to agree to share data with DOL for purpose of creating a new database and allow access by other agencies.</td>
<td>OPM would need to share data on federal employees, and Treasury would need to agree to provide data on the self-employed. (DOL would likely need funding to create new database on wage records.)</td>
<td></td>
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<tr>
<td>DOL-ETA WRIS2 (Future: SWIS)</td>
<td>WRIS includes UI eligible employees from all states, D.C., and Puerto Rico. WRIS2 includes UI eligible employees from 43 states, D.C. and P.R. SWIS agreement still under negotiation. Number of states participating not yet determined.</td>
<td>WRIS2 data match can go back two years. Includes industry codes.</td>
<td>WRIS allows state agencies to request wage data for DOL-funded programs for state and federal reporting and evaluation. WRIS2: Provides aggregated data to third parties for approved research of specified non-DOL programs, such as those under Perkins CTE and HUD. SWIS would provide wage data for performance accountability and other administrative functions, as authorized under its agreements with states, and research and evaluation in pre-approved instances. Goes further than WRIS2 by allowing individual level matching by programs outside of WIDA, such as Perkins CTE, as long as mandated for federal and state reporting.</td>
<td>Acquire and sustain full participation through state-by-state agreements.</td>
<td>Revive FEDES, which included data on federal employees from OPM, and add military and Postal worker wages. Treasury would need to provide wage data on self-employed.</td>
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</table>

Sources: See text and endnotes 8, 10, 16, 24, 33, 38

### Going forward

All of these potential wage data sources have different strengths. The LEHD program at the Census Bureau may appear the most promising because it already has a system with extensive state, federal, and self-employment data, retains data indefinitely, conducts data matches, and regularly manages secure access for external inquiries. Yet under current practices, state participation in the LED Partnership is voluntary, which could jeopardize the proposed system’s long-term viability.

HHS has dedicated database facilities for the NDNH, which covers almost all workers because it requires state and federal reporting. However, HHS retains data for only two years, and other agencies have very limited access to the data. Although amending the SSA to allow access by more agencies has been challenging, a record of bi-partisan presidential support should motivate Congressional action to find a solution.
DOL seeks to improve worker and business outcomes, and BLS produces workforce statistics, yet DOL lacks its own dedicated wage database that it could use for multiple purposes. DOL ETA has overseen the creation of wage data exchanges. Given DOL’s remit and need for wage data, such exchanges, or a wage database, could become the basis for a more expanded effort to improve data access and efficiency.

With all of those options offering benefits, and given the lack of certainty as to which one would succeed in gaining political momentum, they should all remain on the table for now. Leaders who share a strong commitment to evidence-based policymaking and a well-informed public should support federal and state actions to create a comprehensive source of wage data, whether it would work with a dedicated national data matching service, or with existing systems and agencies.

Endnotes


3 The Commission on Evidence-Based Policymaking noted the relevance of certain privacy and confidentiality laws in shaping and limiting data sharing and use, in particular citing The Privacy Act of 1974, the Confidential Information Protection and Statistical Efficiency Act (CIPSEA) of 2002, and the Paperwork Reduction Act (PRA) of 1980. The Commission noted that, “Federal evaluation and policy research offices are more nascent in their development than the statistical agencies. As such, none of them are recognized under CIPSEA to employ the strong protections that statistical agencies can provide for confidential data.” (“The Promise of Evidence-Based Policymaking,” September 2017, p. 15, https://www.cep.gov/content/dam/cep/report/cep-final-report.pdf) CIPSEA, Part of Title V of the E-Government Act of 2002 (Pub. Law. 107–347, 116 Stat. 2899, 44 U.S.C. § 101), “permits wage records created for the UI system to be used for statistical and evaluation purposes. H.R.4174 — Foundations for Evidence-Based Policymaking Act of 2017, passed by the House of Representatives in November 2017, would provide clearer direction to allow for these data to be used for program evaluation purposes.” (CREC, “Legal Guide to Administrative Data Sharing for Economic and Workforce Development,” State Data Sharing Initiative, March 2018, p. 3). Other data that would be matched with wage data might be subject to additional laws and restrictions, such as education data under the Family and Educational Rights and Privacy Act (FERPA). Such laws could restrict the potential benefit of an improved federal wage system, and those laws may need to be changed or procedures adapted to make the most of various, relevant sources for postsecondary and workforce outcomes information.

4 For more information on the Commission’s proposed National Secure Data Service, see “The Promise of Evidence-Based Policymaking,” especially pp. 40-42, pp. 66-68, and p. 82.

5 The federal government requires employers to pay Federal Unemployment Tax (FUTA) for the UI program. These can be made through payroll services on the quarterly UI wage record electronic payroll submissions and then the payroll company uses that money to pay the federal government, but it is the state laws that govern the information that needs to be on the UI wage records. See CFR Title 20 Chapter V, Part 602, Subpart B, Section 602.10.

6 Federal law addresses the confidentiality of Unemployment Compensation wage information under 20 CFR § 603.2; §603.4.

7 WIOA requires reporting on the employment rate of program participants during the second and fourth quarter after exit, and median earnings of those participants the second quarter after exit.


9 Title 13 of the U.S. Code grants the Bureau the authority to receive and use the confidential data to conduct joint statistical projects with public and private entities, U.S. Census Bureau, https://lehd.census.gov/


12 See the University of Texas System’s dashboards at Seek UT: https://seekut.utsystem.edu/

13 Title 13 of the U.S. Code “permits access to data only for the narrow purpose of improving Census Bureau programs.” Noted in “The Promise of Evidence-Based Policymaking,” p. 43.

14 U.S. Census Bureau, Postsecondary Employment Outcomes, LEHD, https://lehd.census.gov/data/pseo_beta.html


17 “OCSE may disclose certain information contained in the NDNH to a requesting federal, state, or local agency for research likely to contribute to achieving the purposes of part A or part D of title IV of the SSA. Part A governs the federal Temporary Assistance for Needy Families (TANF) program. Part D governs the state-federal child support program.” HHS, OCSE, “NDNH Research Request,” January 9, 2017, https://www.acf.hhs.gov/sites/default/files/programs/css/ndnh_research_request_form_fillable.pdf; USDA, “SNAP Requirement for National Directory of New Hires Employment Verification and Annual Program Activity Reporting,” https://www.fns.usda.gov/snap/fr-012616. A limited number of workforce-related evaluations have been performed using NDNH wage data. For more information, see DOL’s Clearinghouse for Labor Evaluation and Research website: https://clear.dol.gov/topic-area


21 The data retention period is only two years, required by statute at 42 USC 653(i) (2). HHS administrative leads may retain some data for longer periods at their discretion for the purposes of monitoring program performance and improving administration. For more information on the law governing NDNH access visit: https://www.law.cornell.edu/uscode/text/42/653, last accessed April 5, 2018.

22 Previous legislation that failed to pass Congress included a stipulation to increase the period for data retention from two to four years. See p. 12 of H.R. 1896: https://www.congress.gov/113/bills/hr1896/BILLS-113hr1896rsf.pdf


24 BLS, Quarterly Census of Employment and Wages, https://www.bls.gov/cew/

25 Although BLS does not currently retain state UI wage records, it has been involved in developing pilot projects to receive them and share information with other states. Efforts were ongoing as of the writing of this report.

26 The Workforce Information Advisory Council (WIAC), an expert group under DOL, lists among its priorities for further exploration wider BLS and ETA access to state UI wage records for statistical purposes, and state access to other states’ wage records. See WIAC’s final draft report to the Secretary of Labor, January 25, 2018, p. 15, https://www.doleta.gov/wioa/wiac/docs/Second_Draft_of_the_WIAC_Final_Report.pdf

27 WIOA regulations require states to cooperate with contractors when conducting evaluations for DOL.


31 DOL-ETA, Wage Record Interchange System (WRIS) https://www.doleta.gov/performance/WRIS.cfm


35 WRIS and WRIS2’s legal authority to establish agreements came from Section 136(f) (2) of WIA, and continue under WIOA.

36 SWIS draft agreement obtained by WDQC, dated March 8, 2018.

37 Eligible Training Providers (ETPs) are those education and workforce training programs that meet approval for federal funding. States must maintain a public list of ETPs that meet criteria defined under WIOA. For example, trainees can receive funding to participate in a workforce program if they qualify and the program is on the ETP list.


39 Performance Accountability and Customer Information Agencies (PACIAs) evaluate the effectiveness of training programs under WIOA and ensure they meet requirements to be on the list of ETPs.

40 29 U.S. Code § 3341, see WIOA: “Title V—General Provisions Subtitle A—Workforce Investment SEC. 501. (b) Prohibition on Development of National Database. — (1) In General. —Nothing in this Act (including the amendments made by this Act) shall be construed to permit the development of a national database of personally identifiable information on individuals receiving services under Title I or under the amendments made by Title IV. (2) Limitation.—Nothing in paragraph (1) shall be construed to prevent the proper administration of national programs under subtitles C and D of Title I, or the amendments made by Title IV (as the case may be), or to carry out program management activities consistent with Title I or the amendments made by Title IV (as the case may be).” Public Law 113-128, Sec. 501 (b), https://www.congress.gov/113/bills/hr803/BILLS-113hr803enr.pdf

41 This chart builds upon information provided in the charts from the joint WDQC-Postsecondary Data Collaborative paper by Zinn, “Classroom to Career: Leveraging Employment Data to Measure Labor Market Outcomes,” http://www.ihep.org/sites/default/files/uploads/postsecdata/docs/resourc-es/leveraging_employment_data_0.pdf