JEDx

DATA AND APPLICATIONS TECHNICAL WORKGROUP REPORT

AUGUST 2022

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EXECUTIVE SUMMARY

The U.S. Chamber of Commerce Foundation (Chamber Foundation) and the T3 Innovation Network (T3 Network) established the Jobs and Employment Data Exchange (JEDx) initiative to develop a public-private approach for collecting and using standards-based jobs and employment data. JEDx builds on the Chamber Foundation's Job Data Exchange (JDX) initiative, to promote public-private standards for job descriptions and postings, and the T3 Network's Employment and Earnings Records Standards Project, to develop and use public-private standards for comprehensive employment and earnings records.

This report is a component of the design phase of JEDx Project 1: *Improving Federal/State Reporting, Starting with Unemployment Insurance*. This design phase has engaged a national steering committee and seven founding state coalitions (Arkansas, California, Colorado, Florida, Kentucky, New Jersey, and Texas) with stakeholders representing employers, vendors, and policy makers through two technical workgroups to explore a public-private, standards-based approach for collecting and using data on jobs and employment. Project 1 has the following objectives:

Primary Objectives

- Reduce federal and state reporting costs for employers and government agencies
- Improve data quality and timeliness in federal and state government reporting
- Provide better data for improved public and private workforce analytics and program administration applications

Secondary Objectives (connections to future projects)

- Ensure that employers and HR technology service providers take a consistent approach in:
  - Sharing and using job description data in career pathways (Project 2)
  - Improving job posting data for search (Project 3)
  - Providing workers/learners with their own LERs for job applications and government programs and benefits (Project 4)

In support of these objectives, the Chamber Foundation established the Data and Applications Technical Workgroup to:

- Identify initial priorities for jobs and employment data collection based on stakeholder needs for priority program applications, workforce analytics, and cost savings,
- Identify, based on those priorities, any necessary refinements to the data model and dictionary (developed in earlier efforts of the T3 Innovation Network[1]),
- Explore options for consolidating other data reporting systems in addition to UI reporting, and
- Recommend potential, high-priority applications/tools that demonstrate the value of a JEDx approach.

To ensure that the data priorities are based on stakeholder needs, the workgroup first developed categories of major stakeholders and a preliminary list of data uses considered to be high priority to each category of stakeholder.

Building on this foundation, the workgroup then identified the data believed to be required to address those high-priority use cases. Looking for opportunities to minimize costs to employers reporting those data, the workgroup also looked at what is currently collected by the Unemployment Insurance system and various other federal and state systems to identify possible opportunities for reporting consolidation.

The workgroup then arrayed the required data according to their place in a data model developed in previous Chamber Foundation work. The workgroup also identified characteristics of the data that might influence the methods used to collect them and the potential costs associated with reporting them.

The workgroup also drafted examples of potential products that could be developed from the data associated with each use case. These examples are intended to stimulate design and evaluation considerations during the testing phase of JEDx.

Finally, the workgroup submitted data-related recommendations for the subsequent phases of JEDx development, testing, and implementation.

[1] U.S. Chamber of Commerce Foundation, *Developing and Using Public-Private Data Standards for Employment and Earnings Records*, February 2021, pp. 10–12, https://tinyurl.com/yck23k32

BACKGROUND

The U.S. Chamber of Commerce Foundation (Chamber Foundation) and the T3 Innovation Network (T3 Network) established the Jobs and Employment Data Exchange (JEDx) Initiative to develop a public-private approach for collecting and using standards-based jobs and employment data. The JEDx initiative is intended to explore options for improving information about employment and jobs and access to that information, while reducing the overall burden and cost to employers and governments to produce it. JEDx is intended to be built upon open data and technology standards.

The JEDx Initiative is attempting to take a fresh look at what employer administrative data are collected, and how they are defined, processed, and used. The JEDx model is built on bringing stakeholders together to collaborate on solutions that better align data collection with user needs and do so more efficiently than current systems. Three questions needed to be addressed: 1) what critical uses require additional and/or better data, 2) what data improvements are needed to address those uses, and 3) what systems improvements can be realized to make the exchange and use of data more efficient through new technologies.

To begin exploring the answers to these questions, the Chamber Foundation, with input from a national advisory committee, identified four demonstration projects to pursue:

1. **Improving federal and state reporting**

2. **Improving job description data for sharing and use in Career Pathway Partnerships**

3. **Improving job posting data for search**

4. **Empowering workers/ learners to use employment records for jobs and government programs and benefit applications**

Initially, the Chamber Foundation chose to focus on Project 1, starting with improving reporting for the Unemployment Insurance (UI) Program. They sought interested partners and established a national, public-private JEDx Steering Committee comprised of regional, state, and national representatives of organizations with an interest in better workforce information.

They also invited interested parties in states to form coalitions that would partner with the JEDx team to explore the possibilities and, perhaps, participate in efforts to test different solutions. Coalitions from seven states stepped forward: Arkansas, California, Colorado, Florida, Kentucky, New Jersey, and Texas. These coalitions' memberships vary from state to state, including employers, business organizations, government administrators, educational organizations, workforce organizations, and consultants engaged by the states, among others.

Nearly 200 different systems collect employment and jobs data in the United States. Many of these systems have weaknesses that stymie important potential uses of the data, including inconsistent definitions, lack of timeliness, barriers to access, and inadequate geographic specificity, as well as some critical data simply not being available. Many of these systems are based on employer surveys, while a few are based on administrative record systems collecting data from virtually all employers.

Among these systems, redundancies in collection processes and out-of-date technologies impose higher costs than are necessary on the businesses that report the data and on governments that collect, clean, compile them. The 53 jurisdictions that administer UI programs represent about one quarter of the employment data collection systems in the country. Each one is unique and reflects many of the system shortcomings noted above. However, as they are administrative data systems, they offer advantages as starting points for exploring new approaches to data collection serving broad needs.

To better inform the Steering Committee and state coalitions about options for moving into the next phase of JEDx development, in early 2022 the Chamber Foundation formed two workgroups: a Data and Applications Technical Workgroup and a Systems Architecture Technical Workgroup. This report describes the activities and conclusions of the Data and Applications Technical Workgroup. The Systems Architecture Technical Workgroup report will be released in conjunction with this report.

The purpose of the Data and Applications Technical Workgroup was to involve stakeholders in decisions about which data uses were of highest priority, the data elements needed to address those uses, how those data should be defined, and how those data could be used for stakeholders' maximum benefit, while improving the quality of the data and minimizing costs of producing them. The workgroup included members of the state coalitions, federal agencies, state and local workforce associations, national economic research and education organizations, and employer service providers.

Previous Chamber Foundation efforts have stressed the importance of collaboration in improving government reporting. The workgroup was established to hear the voices and collect the perspectives of the people and organizations that provide and rely on jobs and employment data—to address their interests and concerns as systems are re-imagined.

The workgroup was given the following objectives:

1. **Establish initial priorities for jobs and employment data collection based on stakeholder needs for priority program applications, potential workforce analytics, and cost savings**

2. **Identify necessary refinements to the data model and dictionary based on those prioritiess**

3. **Explore options for consolidated data reporting in addition to UI reporting**

4. **Recommend high-priority applications that demonstrate value**

Four meetings of the workgroup were convened between April and July 2022.

PRINCIPLES GUIDING WORKGROUP EFFORTS

OPPORTUNITIES TO IMPROVE DATA QUALITY AND REDUCE COST

The JEDx Initiative and the broader T3 Innovation Network, from which JEDx evolved, share a set of principles that were important for the workgroup to keep in mind as they considered options for improving government reporting.

JEDx is founded on the belief that public-private partnerships are a more effective way to design, implement, and govern systems. JEDx promotes public and private collaboration and consensus to ensure that value is created for both public and private partners at the lowest costs possible. Employers, workers, governments, and the public all have interests and investments in how jobs and employment data are collected, compiled, accessed, and used. The workgroup was created to ensure that each of these stakeholders has a voice in the design and governance of reimagined reporting systems. No one entity was expected to carry all the responsibility or exert undue influence over decision making.

JEDx pursues strategies that create higher stakeholder value at lower costs by enhancing available data and their use while employing more efficient technologies and reducing redundancies in data collection and verification. The workgroup's efforts were expected to look for opportunities to reduce redundancies through consolidation of reporting across systems.

JEDx focuses on high-impact, public and private stakeholder use cases that provide the most value to stakeholders and improve the overall efficiency and equity of labor markets. These high-impact use cases have performance metrics that clearly define stakeholder value and expected improvements in the labor market. The data the workgroup identified for collection were to stem from priority use cases and enable future pilot testing to measure the value of the data and the systems for using them.

Finally, JEDx promotes and facilitates the development and use of public-private data and technology standards to improve the efficiency of data sharing, data quality, and timeliness. JEDx works with standards organizations and other partners that follow open voluntary consensus processes and make their standards openly available for public and private sector use and that enable the use of open competency and skill frameworks. The Chamber Foundation expected the workgroup to recommend data and applications priorities built on the open standards data dictionary and select a set of common data elements that could be collected across the test states.

While stakeholders' priority use cases will be the primary factor in identifying initial priorities for data collection, other factors can contribute to improving data quality and reducing the cost of data collection, including:

- Standardization of data elements, data definitions, methods, and technology

- Consolidation of reporting systems, reducing redundancy in reporting and collection

- Alignment of reporting frequency with employer pay periods

- Improved technology for efficient movement of data (to be addressed by the Systems Architecture Technical Workgroup)

Standardization

Key to improving data comparability across jurisdictions and programs, as well as to lowering costs to employers, is standardizing the data elements collected and their definitions. One of the shortcomings of existing UI data collection is that states do not collect the same data elements and the data elements are not consistently defined across states. As a result, employers or their service providers must customize the reports submitted to different agencies and jurisdictions, adding to reporting costs and increasing risk of errors. Furthermore, the data inconsistencies across jurisdictions reduces their geographic comparability and potential value for analysis. This is a problem not just for a few large multi-state employers but also for smaller employers that increasingly have remote workers across multiple states as well as service providers that serve employers in multiple states.
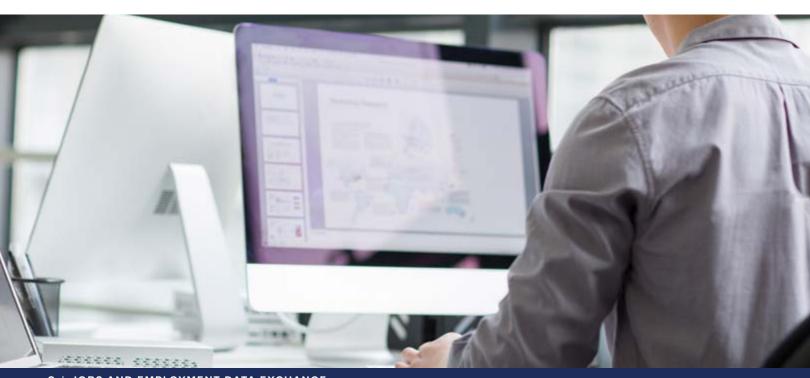
JEDx is based on using open data standards. Earlier efforts of the T3 Innovation Network and the HR Open Standards Consortium created an employment and jobs data dictionary[2] that contains standardized definitions for over 240 data elements. Recommendations in this report are based on those standardized definitions. Standardizing the data elements collected and their definitions will enhance the ability to make analytical comparisons across jurisdictions. It will also make it more likely that employers know what data are being requested and, hence, improve accuracy of the data reported.

The proposed approach is to select data elements that enhance available data and satisfy the UI system requirements of states that conduct JEDx pilot testing and enable reporting consolidation. The JEDx team believes this can be accomplished by collecting more granular data.

Recognizing the difficulty of getting the states to synchronize their Unemployment Insurance laws, and hence their data requirements, the JEDx team recommends a different approach to standardization. In cases where definitional conflicts among states are identified, the team recommends that the data reported be broken down to a level of granularity at which conflicts do not exist. These granular components can then be aggregated by each state in a manner that provides the data that align with their legal mandates.

For example, some states collect "work hours" using inconsistent definitions. Some define work hours to mean total hours paid (including paid leave hours). Others ask for only the hours actually worked (hours paid minus paid leave hours). One state defines "work hours" to mean total hours paid minus sick leave taken. At present, the employers or their service providers must calculate different figures to match each state's definition. A granular approach would have employers report three items to all states: total paid hours worked, total paid leave hours, and paid sick leave hours. These three components could be used to derive any of the three state working definitions. Employers would have a standardized report that includes the same three figures to every state and not need to customize the report for every state. And users would have access to the granular components should they wish to compare data across jurisdictions, or if they have their own "working" definition.

Another example of data that might benefit from standardization is reporting of tax-exempt compensation amounts. State laws vary in the types of compensation considered exempt from UI and other state taxes. Similarly, at the federal level, different exemptions apply to income tax withholding, social security taxes, and federal unemployment taxes. This requires employers and their providers to perform different calculations to provide each jurisdiction with the amount of taxable compensation after exemptions. A granular report would include each type of exempt compensation, enabling the employers to have a consistent report to all jurisdictions.

2   U.S. Chamber of Commerce Foundation, *Developing and Using Public-Private Data Standards for Employment and Earnings Records*, February 2021, pp. 33–38, https://tinyurl.com/yck23k32

OPPORTUNITIES TO IMPROVE DATA QUALITY AND REDUCE COST (CONTINUED)

The JEDx team discussed this approach with the National Payroll Reporting Consortium and the participating members were uncertain of the value of this approach. One suggestion several participants felt would be helpful and doable was the development of a unified table of tax exemptions across jurisdictions and programs. They reported examples of such tables from the Internal Revenue Service[3] and the California Employment Development Department[4]. They felt these types of tables made it easier to understand the legal requirements. Appendix D provides a mock-up of what such a table might look like for UI tax exemptions in the partner states.

There are a few other categories of data where this granular approach may prove useful, such as work location and occupational coding.

Consolidation

One of the major objectives of JEDx is to reduce the costs that employers and government incur for reporting and collecting employment and jobs data. When multiple entities collect the same data, not only do employers have more reports to submit, but each collection agency also needs similar systems and staff capacity for collection and validation. These redundancies can multiply the cost to taxpayers.

One possible approach to reducing costs is to look for opportunities to consolidate reporting across programs. If successful, consolidation would have the following advantages:

- Fewer reports would have to be compiled, submitted, collected, and reviewed.
- Inconsistencies between reports submitted to different agencies could be eliminated.
- Redundancies in the collection process could be eliminated or streamlined, including:
  - Fewer systems would be required to collect the data, resulting in lower costs for systems design and maintenance; and
  - Quality review of submitted data could be done once instead of by multiple agencies.

To be successful, consolidation must take several factors into account:

- The consolidated report would have to be collected frequently enough to meet the minimum timing requirements of the most frequent among the consolidated reports.
- Data elements collected would have to satisfy the requirements of the programs currently collecting data.
- Data elements would have to be defined in a manner that allows each separate program to derive the data they need (see granular approach above).
- The agencies currently collecting reports would have to be willing and able to merge collection efforts.
- Data sharing agreements would need to be established so that agencies could have appropriate access to the collected data.

The JEDx team reviewed the data requirements of the UI and New Hire Registry programs operated by states, as well as several federal data collection systems to identify the programs most easily consolidated. Some require only a few data elements beyond what is currently collected by the Unemployment Insurance system and the seven JEDx partner states. These are:

- New Hire Registry conducted by each state and the federal Department of Health and Human Services,
- Bureau of Labor Statistics' Annual Refile Survey, Multiple Worksite Report, and Occupational Employment and Wage Statistics Report,
- Census Bureau's Census of Public Employment and Payroll,
- Equal Employment Opportunity Commission's EEO-1, EEO-3, EEO-4, and EEO-5 reports, and the
- Department of Health and Human Services Hospital Wage Index Occupation Mix Survey.

For more information on the data requirements of these and other programs, see Appendix 3.

In developing recommendations for the initial priorities for jobs and employment data collection the workgroup factored in these opportunities, while recognizing that not all potential consolidations would need to occur immediately.

Reporting Frequency

Employment data are collected over widely varying periods. Some employer service providers share data in real time, as their separate systems must seamlessly integrate functionalities to meet employer needs. This is possible, in part, because of data standards set by the HR Open Standards Consortium.

For most states, employers submit quarterly UI reports providing tax and wage information needed for tax liability and unemployment benefits calculations. One state collects wage records monthly. Other government data systems' reporting periods range from a few weeks to monthly to annual, while some surveys can take multiple years to complete.

When long lags occur between when an activity/event happens and when information about that activity/event is available, the information is less valuable. Users routinely call for more timely information. So, making information timelier would significantly enhance information quality.

Some providers have indicated that aligning reporting with pay periods may have advantages. They feel that monthly or quarterly periods that do not align with pay periods cause additional workload. Australia has recently implemented a payroll reporting system[5] in this vein. Other providers indicate that pay period or monthly reporting would be onerous. More research into this critical topic is warranted.

Any recommendations regarding reporting frequency need to consider the stability/volatility of the data—how rapidly the information changes. It may be possible to differentiate collection systems based on these characteristics. The Systems Architecture Technical Workgroup will be exploring technological options that help address these factors.

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[3] Internal Revenue Service, Publication 15-B (2022), *Table 2-1. Special Rules for Various Types of Fringe Benefits*, p. 6, https://www.irs.gov/pub/irs-pdf/p15b.pdf

[4] California Employment Development Department, DE 231TP Rev. 1 (6–16) (INTERNET), *Information Sheet, Types of Payments*, https://edd.ca.gov/siteassets/files/pdf_pub_ctr/de231tp.pdf

[5] Single Touch Payroll, Australian Government Taxation Office, accessed August 2022, https://www.ato.gov.au/Business/Single-Touch-Payroll/
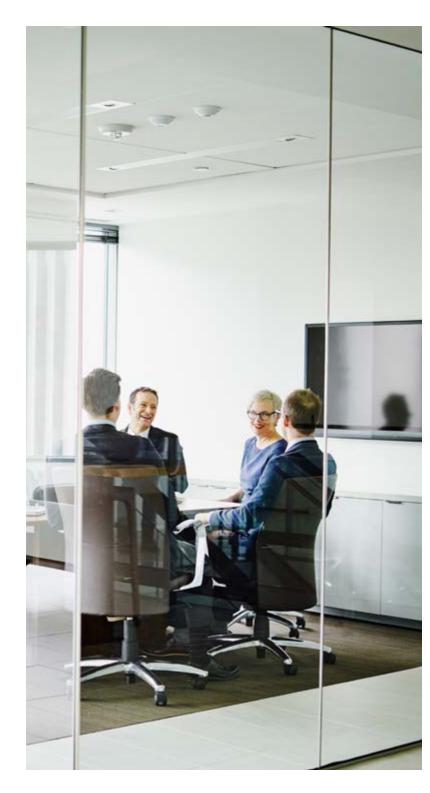
WHO ARE THE STAKEHOLDERS?

Information about employment and jobs is used by just about everyone. Individuals assess education and employment choices based on career opportunities, compensation, and location factors. Employers make hiring, compensation, and expansion decisions based on labor market factors. Government policy makers seek accurate and timely data for when considering legislative actions. Education and training providers measure program performance based on labor market outcomes. And many public benefit programs are allocated and awarded based economic conditions and individual circumstances.

The workgroup's first objective was to establish initial priorities for jobs and employment data collection **based on stakeholder needs**, so it was important to characterize who the stakeholders are. Those with a stake in future changes to information systems include both the producers and users of the data.

Information producers are generally the employers and their service providers that maintain and report information about their employees, and governments that collect that information through administrative records, reports, and surveys, and then compile, analyze, and summarize it for various applications. The producers are the ones that bear the greatest burden, from a cost and time perspective, to make the information available. They are also the most sensitive to potential costs associated with changes in existing systems. The use cases of these organizations should be considered primary in JEDx design efforts.

Users include all of those mentioned above and many more, including organized labor, economic development organizations, news media, business associations, research and statistical organizations, trade associations, and so on. Users often are the first to recognize limitations of existing data and to seek more, better, and more timely data. However, many users do not bear a direct cost, as much of the data is available from government agencies funded by tax dollars.

For purposes of considering priority of needs, the workgroup grouped the stakeholders into six broad categories:

01 | Unemployment Insurance Administration

02 | Employers, Employer Partnerships/Collaboratives, Employer/Industry Organizations, and HR and Payroll Service Providers

03 | Students, Workers, and Providers of Career Guidance and Employment Services

04 | Education and Training Providers

05 | Public Sector: Education, Economic and Workforce Development, and Workforce Information Agencies, and Elected Officials

06 | Research Organizations

STAKEHOLDERS' HIGH-PRIORITY USE CASES

To better align the initial data recommendations with stakeholders' priorities, the JEDx team solicited input from the Steering Committee, the Workgroup, and from various stakeholder organizations. To do this, the JEDx team shared a questionnaire (see Appendix A) with members of the Steering Committee and the Workgroup, requesting they distribute it to members of their coalitions. The questionnaire asked respondents to describe important uses that enhanced data could address. It also asked them to identify the specific data needed to address those uses.

The JEDx team also reviewed previous reports on data uses, collected input through discussions and interviews with various stakeholder groups, and in conversations with state coalition members. In-depth interviews were conducted with members of the research community as part of the Sloan Foundation-funded JEDx Research Enrichment Project (REP).

From the input received, the JEDx team distilled a set of what they believed were the highest priority uses and grouped them into the six user categories seen below. These use cases were then reviewed by the workgroup, members of the state coalitions, and selected stakeholder organizations. Continued conversations with stakeholders and expanded review of these use cases are warranted to confirm the validity of this set as the highest priorities.

We list these use cases below. See Appendix 2 for a listing of these high-priority use cases with more descriptive information and preliminary data requirements for each.

Unemployment Insurance Administration

- Improving the accuracy, effectiveness, efficiency, and integrity of initial and continuing UI benefit payments, including the prevention and detection of overpayment and fraud

- Improving the reemployment of UI benefit recipients: reduced time to reemployment, increased earnings, reduced program costs, and potential for reduced unemployment insurance taxes

- Improving equity in UI benefit administration from application and benefit determination to payment and reemployment

- Improving worker access to their learning and employment records (LERs) to improve UI claim processing and accelerate reemployment (related to Project 4)

Employers, Employer Partnerships/Collaboratives, Employer/Industry Organizations, and HR and Payroll Service Providers

- Improving state and regional benchmarking information for HR analytics and talent recruitment and management

- Improving access to data for workforce demand and labor supply analyses that support investment/location decisions, recruiting, and hiring

- Improving employer jobs data on skills requirements to expand the number of qualified job applicants

Students, Workers, and Career Guidance and Employment Services Providers

- Improving descriptive state and regional jobs data for benchmarking current compensation and providing career guidance and job search services

- Improving state and regional data on education and training program outcomes for career guidance services in evaluating education/training opportunities

- Improving the use of worker LERs in identifying job opportunities to pursue and accelerating reemployment (related to JEDx projects 2 and 3)

Education and Training Providers

- Improving employment outcomes data for managing and improving programs and providing information for recruiting students

- Improving jobs data to better align curriculum with available and emerging jobs and skill trends

Public Sector: Education, Economic and Workforce Development, Workforce Information

- Improving supply-demand analysis to align education and workforce investment to meet employer needs

- Providing more timely and thorough analyses of trends in sub-state labor markets

Research Community

- Improving the comprehensiveness and timeliness of government statistical reports and analysis for the nation, regions, states, and substate areas

- Improving the comprehensiveness and timeliness of social, economic, and policy research for the nation, regions, states and substate areas

- Improving the cost-effectiveness of employment, training, and education-related programs, for both ongoing programs and demonstrations

PROPOSED DATA CATEGORIES AND DATA ELEMENTS

Based on addressing the priority use cases above, but also keeping in mind the opportunities for potential report consolidation and the JEDx goal of standardization, this section describes the initial categories of data and data elements the workgroup proposes for further consideration in JEDx pilot testing.

The seven data categories presented apply to different topics, may come from different employer systems, and have different characteristics that may influence the manner and timing of reporting.

One important data characteristic is the degree to which the data change over time. Some data are relatively stable, while others change constantly. This "volatility" can be factored into how the data are collected, potentially reducing overall burden on employers and governments. Items that do not change frequently likely do not need to be reported on a regular schedule. For example, the name of the company is unlikely to change frequently. Once this information has been registered with the state, it only needs to be updated if there is a change.

Other data, like wages, change every payroll period for many employees. To be most useful for analytical purposes, these types of data need to be reported as frequently as is feasible. An important element in designing collection systems is to consider the degree of volatility inherent in the data.

The workgroup suggests that the employer administrative data needed to address the high-priority use cases can be divided into the seven categories of data indicated by red stars on Figure-1. Four of these seven are comprised of data elements thought to be relatively stable and, therefore, may be better suited for reporting on an as-needed basis as changes occur. These include:

- Employers' firm-level organizational descriptors,
- Employers' establishment-level (location) descriptors,
- Employers' jobs descriptors, and
- Workers' personal descriptors.

For these, the employer or their agent might establish and maintain these relatively stable data on a state's employer web portal. They would not need regularly scheduled reporting but would require update as changes occur. The Systems Architecture Technical Workgroup is exploring potential approaches for doing this.

The three other categories contain data elements that change frequently, if not continually. For these categories of data, regular reports are needed to facilitate timely action and analysis.

- Work relationship descriptors
- Workers' paid time
- Workers' compensation

Figure 1 also illustrates another consideration in designing collection systems—the employer systems from which the data are derived. Employers often have separate systems for different functions such as payroll, timekeeping, property management, human resources, etc. The workgroup proposes to collect data elements from three employer information systems broadly defined as Human Resources, Time and Labor, and Payroll. Depending on collection methods, data in these systems may need to be linked, which may occur automatically for some employers' systems but not for others. For example, if a report requires the worker's wages and job title, the wage data might be extracted from the payroll system, while the job title may need to be pulled from jobs data in the HR system. For some employers and service providers that's a relatively straightforward action, while for others it may require setting up new procedures.

Employers with different service providers, in different industry sectors, and of different sizes may have systems with different capabilities that will have to be considered in redesigning collection strategies. Some employers may not maintain certain categories of data at all and will need time to adjust their practices to provide such data.

On the following pages, we describe the seven categories and the specific data elements that would be needed to address the use cases discussed above. The workgroup recommends that JEDx pilot tests consider different methods of collecting these data to determine relevant considerations of feasibility and cost.

Items highlighted in yellow are required by the Unemployment Insurance system. Those highlighted in orange are required by at least one of the seven JEDx partner states.

**FIGURE 1
JEDx CONCEPTUAL
DATA MODEL**

PROPOSED DATA CATEGORIES
AND DATA ELEMENTS (CONTINUED)

01   Employer Organizational Descriptors

These data describe the nature of the company, its status, and business activities. Many states collect this type of information when the employer registers to conduct business in the state, and some is reported each quarter to UI. These data are typically relatively stable and do not need regular update. These data could be, and likely are in some states, stored on a state web portal and require employer update only as changes occur.

These data are useful in tracing firm ownership, classifying economic activities of the company, determining tax rates, and contacting the company.

- Federal Employer Identification Number
- Previous Federal Employer Identification Number
- State Unemployment Tax Account Number
- Legal Name
- Business Structure Type
- Operating Status
- Operating Status Date
- Trade Names
- Mailing Address
- Physical address
- Industry Code
- Principal Products & Services
- Contact Name
- Contact Phone
- Contact E-mail
- Parent Company Tax ID
- Parent Company Name

02   Employer Establishment Descriptors

These data describe the locations where the company conducts business and the type of economic activity at the site. Like the Employer Organizational Descriptors, these data are relatively stable and could be maintained in a table on a state web portal, with updates as necessary, rather than being reported on a schedule.

Establishment data are needed to better understand where work occurs and accurately classify the types of economic activity are occurring in labor markets. In addition, these data, when linked to the worker, provide geographic context for staffing patterns.

- Federal Employer Identification Number
- Establishment ID Number
- Establishment Name
- Establishment Status
- Establishment Status Date
- Establishment Business Functions
- Establishment Industry Code
- Establishment Principal Products & Services
- Establishment Physical Address
- Contact Name
- Contact Phone
- Contact E-mail

03   Employer Jobs Descriptors

These data are comprised of a list the types of jobs the employer utilizes, their titles, roles, and the skills and preparation the employer expects from workers in each job. They are essential in understanding the supply and demand for skills. Assigning a job code to each worker enables analysts to connect the worker's job to the descriptive information in this file. The information in this file also enables federal and state agencies to determine appropriate job classifications for analytical purposes.

- Federal Employer Identification Number
- Employer Job Code
- Employer Job Title
- Business Support Role
- Employer Job Duties
- Employer Job-Required Skills
- Employer Job-Required Education and Experience

04   Worker Personal Descriptors

These personal characteristics provide demographic information about workers. These data are important for use cases concerned with diversity of labor markets and equity in benefit programs. They are often collected as part of the New Hire Registries.

- Social Security Number
- Previous Social Security Number
- First Name
- Middle Name
- Last Name
- Previous Last Name
- Residence Address
- Birth Date
- Military Status
- Gender
- Ethnicity
- Race
- Disability

PROPOSED DATA CATEGORIES
AND DATA ELEMENTS (CONTINUED)

05   Work Relationship Descriptors

These data describe the nature of the relation between employer and worker, when the relationship started and ended, where they work, and the type of work they do. These data are likely to be more volatile and likely require regularly scheduled reporting. The Establishment ID and Job Codes enable states to link to the more detailed information in the establishment and jobs descriptor tables.

- Period Covered by Report
- Social Security Number
- Last Name
- Assigned Establishment ID #
- Assigned Employer Job Code
- Primary Work Location
- Officer Indicator
- Stock Owner Indicator
- Worker Type
- Work Status
- Work Status Reason
- Date of Hire
- Date of Termination
- Seasonal Work Beginning Date
- Seasonal Work Ending Date

06   Worker Paid Time

Along with compensation data, paid time data is the most volatile among the data proposed for collection, for many workers changing with each pay period. These data potentially provide the most immediate insights into shifts in economic trends.

- Period Covered by Report
- Social Security Number
- Last Name
- Worked in Payroll Period Including 12th of the Month
- Weeks Worked
- Regular Hours Worked
- Total Premium Hours Worked
- Total Hours of Paid Leave Taken (Paid Time Off)

07   Worker Compensation

Many of the priority use cases call for compensation data. Here we break compensation into two groups: one set of data used for economic analysis and one to determine employer tax obligations. The first includes data on when the compensation is earned, while the second includes data on compensation paid during a reporting period. This distinction is important for comparing compensation to the hours worked for the same time periods.

Part 1: Employee Earnings, Compensation Earned
- Period Covered by Report
- Social Security Number
- Last Name
- Period Covered by Report
- Salary Earned
- Regular Hourly Wages Earned
- Total Premium Hourly Wages Earned
- Total Leave Pay Earned
- Total Other Cash Compensation Earned

Part 2: UI Tax Calculation Factors, Compensation Paid
- Period Covered by Report
- Social Security Number
- Last Name
- Total Wages Paid Out of State
- Total Compensation Paid
- State Personal Income Tax Withheld
- Compensation Paid Subject to State Personal Income Tax
- Compensation Paid in Categories (to be determined) that are Used to Calculate Taxable UI Wages

POTENTIAL REFINEMENTS TO THE DATA MODEL AND DICTIONARY

DEVELOPING EXAMPLES OF PRODUCTS ADDRESSING USE CASES

During the workgroup's discussions, a few items were noticed that may require amendments to the data dictionary.

- If the states and the employers and their providers decide a granular approach to reporting tax exempt compensation is appropriate, more detailed categories would need to be added into the Discretionary Non-Cash Compensation category. These would include specific types of compensation such as employer contributions to various deferred compensation programs, adoption assistance, education assistance, and meals and lodging, etc. Determination on specific changes should await decisions on the approach to reporting these data.

- The Cash Compensation categories will need to be assessed to determine if changes are needed to distinguish between compensation earned and compensation paid. Currently, the dictionary seems to be oriented to only compensation paid.

- The dictionary will need to add employer contact information fields to both the Organizational and Establishment information. These fields are part of HR Open schemas.

- One partner state mentioned Days Worked as an element of interest. It is not currently on the list of proposed data elements. If that changes, it will need to be added to the Worker Paid Time category in the dictionary.

To help convey the value of addressing the priority use cases, the JEDx team has begun to develop examples of products/tools that could be produced if the data associated with use cases was available. The workgroup reviewed these examples briefly. More work is needed on these examples and further input from stakeholders is needed to refine them. The examples can be found under each use case in Appendix 2.

RECOMMENDATIONS FOR THE FUTURE

The workgroup has made good progress on defining priority use cases and the associated data needs. However, much work remains to confirm and refine that information to ensure that JEDx efforts find the highest value for stakeholders. Therefore, the workgroup submits the following recommendations in support of the search for collaborative and effective solutions.

- The Chamber Foundation should establish an ongoing committee for coordination, discussion, and oversight of data issues related to JEDx pilot testing and implementation with an initial focus on:
  - Refining the use cases and data requirements based on further conversations with stakeholders
  - Developing a consensus on a standard set of data to be collected in JEDx pilot testing that addresses priority use cases and offers opportunities for reporting consolidation
  - Which data elements best identify occupation (e.g., job title, job duties, SOC)
  - Standardization of earnings and work hours
  - Collection of location of work data
- The Chamber Foundation JEDx team and states should continue to solicit feedback from stakeholders on use case priorities, data requirements and specific products that would demonstrate value.
- The Chamber Foundation should clarify the value proposition to employers and conduct surveys and forums with employers and employer organizations on how to improve benefits and lower costs and address privacy concerns.
- The Chamber Foundation should identify model strategies for rolling out JEDx from successful similar efforts, e.g., SIDES, Single Touch Payroll.
- The Chamber Foundation JEDx team should work with partner states to develop a unified table of tax-exempt compensation types.

ACKNOWLEDGEMENTS

APPENDICES

APPENDIX A
Questionnaire About Stakeholder Use Cases and Data Needs

U.S Chamber of Commerce Foundation Jobs and Employment Data Exchange (JEDx)
Request for Stakeholder Input on High Priority Data Needs

JEDx is a new information infrastructure being designed through public/private collaboration for the efficient and secure exchange of information about employers, jobs, workers, and conditions of employment. The foundation of this system will be standardized data types and definitions, as well as well-organized systems for collecting and using the information. JEDx will be built around the capabilities and needs of its stakeholders, including employers, service providers, government program administrators, policy makers, education and training providers, and current and future workers.

To ensure JEDx is designed to optimize value (maximum usefulness at minimum cost), we are seeking input regarding the desired data and applications/uses that will have the greatest value to stakeholders, and that can be tested to measure system success.

To provide input on how this information could be useful to you and/or your organization, please complete the information below for each application you believe would add value. (For information on the types and definitions of data being considered, click here.)

A. **Description of need**—briefly describe the specific question or need you would like to address through improved jobs and employment data tools. (Click here for examples.)

_____

_____

_____

B. **Factors creating the need**—check all that apply.

❑ Information not currently available
❑ Available information not timely
❑ Available information too costly

❑ Available information not geographically specific
❑ Available information not reliable

❑ Available information difficult to access
❑ Other (please specify):

_____

C. **Data needed**—What specific data do you believe would be needed to address your question or need? Check all that apply.

❑ Industry
❑ Products & Services
❑ Work Location
❑ Job Title Job Duties
❑ Job-Required Skills
❑ Education & Experience
❑ Worker Age

❑ Military Status
❑ Gender
❑ Ethnicity/Race
❑ Disability
❑ Regular Hours Worked
❑ Premium Hours Worked
❑ Hours of Paid Leave

❑ Salary Paid
❑ Regular Hourly Wages Paid
❑ Premium Hourly Wages Paid
❑ Leave Paid
❑ Other Compensation Paid
❑ Benefits Offered
❑ Other (please specify):

_____

D. **Value added**—What benefits do you see if this need is met? How important is this to your organization?

_____

_____

_____

E. **Type of entity making this suggestion**—check one.

❑ Employer
❑ Business Association
❑ Employer HR Technology Provider
❑ Government Operations

❑ Government Policymaking
❑ Government Statistical
❑ Education Services
❑ Training Services
❑ Workforce Services

❑ Economic Development
❑ Labor Organization
❑ Trade Organization
❑ Other (please specify):

_____

F. **Contact information**—in case we need to clarify anything.

Name: _____

Organization: _____

Email: _____

Job Title: _____

APPENDIX B

**Draft High-Priority Use Cases with Related Activities, Preliminary
Worker-Specific Data Requirements, and Potential Product Examples**

1.	Unemployment Insurance Administration

1.1 Improving the accuracy, effectiveness, efficiency, and integrity of initial and continuing UI benefit payments, including the prevention and detection of overpayment and fraud.

Activities:	• Shortening time to detect claimant wages earned from jobs—catching sooner reduces the size of the overpayment and reduces collection costs and impact on trust fund
	• Confirming claimant wages earned and hourly rate of pay
	• Confirming employment separation and reason to determine benefit eligibility

Data Requirements:	• Employment start and end dates	• Hours worked
	• Work Status: Reason for end of employment	• Hourly rate of pay
	• More timely reporting (e.g., payroll period or monthly)	• Other contemporaneous jobs held and pay (reported by other employers)
	• Wages earned vs paid	• Worker type (employee, 1099 worker)

Examples of Potential Products Addressing the Use Case:	• Overpayment alert—reporting period listing of claimants with earned wages
	• Worker hiring and separation summary by reporting period
	• Dashboard of unemployment payment accuracy
	• Research studies that could aid in setting UI rates (e.g., analysis of impact of correlation between frequency of unemployment claims by wage or full-time/part-time status in certain industries)

1.2 Improving the reemployment of UI benefit recipients: reduced time to reemployment, increased earnings, reduced program costs, and potential for reduced unemployment insurance taxes).

Activities:	• Identifying potential reemployment opportunities by using job titles, duties, and skills required from previous employment
	• Assessing reemployment pathways of similar workers by industry and occupation and earnings to identify reemployment opportunities
	• Considering education to reemployment pathways of similar workers by industry and occupation and earnings employer administrative records and linked education and training records

Data Requirements:	• Job title	• Compensation
	• Job duties	• Work location
	• Employer job skills requirements	• Previous employment
	• Industry	• Reemployment pathways of similar workers

Examples of Potential Products Addressing the Use Case:	• Reemployment guidance bulletins for newly unemployed that highlight related jobs and careers—customized by the occupation of the benefit recipient
	• Projection of average time to reemployment customized by labor market and occupation to be used for caseload monitoring
	• Provide data that enables targeted services based on state workforce priorities (e.g., demand jobs, claimants likely to exhaust)

1.3 Improving equity in UI benefit administration from application and benefit determination to payment and reemployment.

Activities:	• Assessing program equity and close equity gaps by comparing application rates, recipiency/denial rates, accuracy rates of UC benefit determination, average review time, average time to first UC payment, and rates of fraud prevention, detection and recovery, and reemployment across demographic groups and other targeted groups

Data Requirements:	• Birth Date	• Disability
	• Military Status	• Work status
	• Gender	• Work status reason
	• Ethnicity	• Industry
	• Race	• Job title

Examples of Potential Products Addressing the Use Case:	• Report, by demographic group, job title and industry, comparing UI application rates among separated workers (comparing applicants to non-applicants)
	• Staff training material developed based on analyses of real and potential biases discovered in application reviews and dispositions
	• Average reemployment rates by key demographic characteristics to help develop more refined benchmarking of expected reemployment rates by demographic characteristic

1.4 Improving worker access to their learning and employment records (LERs) to improve UI claim processing and accelerate reemployment (related to Project 4).

Activities:	• Validating of claim information provided by employer and worker
	• Reducing time spent validating work history and compensation

Data Requirements:	• Data requirements:	• Employer job skills requirements
	• Employer name	• Hours worked
	• Industry	• Previous employment
	• Job title	• Compensation
	• Job duties	

Examples of Potential Products Addressing the Use Case:	• Enable claimant to bring electronic employment records to claim process to facilitate wage and work history validation
	• Pre-populated content about work history, skills, and education to be used in preparing automated on-line resumes for benefit recipients as an approach to overcoming barriers to applying for jobs

APPENDIX B (CONTINUED)

2. Employers, Employer Partnerships/Collaboratives, Employer/Industry Organizations, and HR and Payroll Service Providers

2.1 Improving state and regional benchmarking information for HR analytics and talent recruitment and management.

Activities:	• Ensuring company compensation and working conditions are competitive in the market
	• Recruiting, hiring, and retaining qualified labor
	• Assessing the diversity of employees and differences in compensation, advancement, and retention relative to the market

Data Requirements:	• Industry	• Job duties
	• Employment size	• Compensation amounts and types
	• Work location	• Hourly wages
	• Job title	• Demographics

Examples of Potential Products Addressing the Use Case:	• Continuously updated benchmark reports about pay, hours, certain benefits, and worker demographics by labor market area, industry, and occupation
	• Continuously updated tool to help employers match their job titles to Standard Occupation Classifications, to aid in benchmarking and local labor supply analysis

2.2 Improving access to data for projecting of workforce needs and analyzing labor supply to support investment/location decisions, recruiting, and hiring.

Activities:	• Estimating current and future employment demand within industries, occupations, and labor markets
	• Developing data for communicating job opportunities to identified talent sources
	• Providing input into government demand-supply analysis (See 5.1)
	• Identifying sources of supply based on industry and occupational employment of recent program completers and career pathways and job-to-job flows of existing workers and new entrants

Data Requirements:	• Industry	• Examples of Potential Products Addressing the Use Case
	• Job title	
	• Job duties	• Recent employment trends and projections data by labor market area, industry, occupation, and skill set
	• Work location	
	• Job pathways/progression within and across industries	• Periodically updated (and better quality) supply-demand reports of employed as well as unemployed workers
	• Education/training production data	
	• Workforce outcomes for education/training participants	• On-line access to education/training sources of recent hires by occupation
	• More timely data	

Examples of Potential Products Addressing the Use Case:	• Recent employment trends and projections data by labor market area, industry, occupation, and skill set
	• Periodically updated (and better quality) supply-demand reports of employed as well as unemployed workers
	• On-line access to education/training sources of recent hires by occupation

2.3 Improving employer data on skills requirements to expand the number of qualified job applicants.

Activities:	• Communicating timely information on changes in employer-required skills
	• Working with education/training entities to incorporate skill changes in curriculum

Data Requirements:	• Industry	• Employer job skills requirements
	• Job title	• Work location
	• Job duties	

Examples of Potential Products Addressing the Use Case:	• Periodic reports on changing skill requirements by industry and occupation
	• Reports identifying emerging occupations and/or emerging skills, including projections on demand based on more frequent (and less biased) data than that available through job postings

3. Students, Workers, and Career Guidance and Employment Services Providers

3.1 Improving descriptive state and regional jobs data for benchmarking current compensation and providing career guidance and job search services.

Activities:	• Comparing existing compensation and working conditions to other in the labor market
	• Identifying in-demand jobs/occupations for overall and for specific industries or industry sectors (e.g., critical economic development sectors) at sub-state regional level.
	• Identifying job duties, skill requirements, and education and work experience requirements
	• Identifying career pathways based on job-to-job flow data at state and sub-state levels
	• Providing better state and regional data on compensation—salaries, wage rates, benefits—for occupations including by industry and industry sector

Data Requirements:	• Industry	• Compensation amounts and types
	• Job title	• Job pathways/progression following program completion
	• Job duties	
	• Work location	

Examples of Potential Products Addressing the Use Case:	• More timely industry/occupational staffing patterns with more current wage data and more detailed occupations
	• Regional wage reports by job/skill area, especially for emerging skills
	• Regional career pathway reports

3.2 Improving state and regional data on education and training program outcomes for career guidance services in evaluating education/training opportunities.

Activities:	• Monitoring job progressions of program graduates	
Data Requirements:	• Employment start and stop dates	• Work location
	• Timely post-program earnings and hours data	• Job pathways/progression following program completion
	• Industry and occupation of employment	
Examples of Potential Products Addressing the Use Case:	• Program ratings report targeted to prospective students interested in different occupations based on trends in employment outcomes for past program graduates, including occupation and wage reports	

3.3 Improving the use of worker LERs in identifying job opportunities to pursue and accelerating reemployment.

Activities:	• Developing automated profiles for unemployed workers based on UI system-validated data	
Data Requirements:	• Employer name	• Employer job skills requirements
	• Industry	• Hours worked
	• Job title	• Compensation
	• Job duties	• Previous employment
Examples of Potential Products Addressing the Use Case:	• Automated beneficiary resumes	
	• Automated applications for relevant government services to provide wrap-around services to beneficiaries —both during unemployment and to ensure sustainable reemployment	

4. Education and Training Providers

4.1 Improving employment outcomes data for managing and improving programs and providing information for recruiting students.

Activities:	• Improving understanding of earnings	
	• Determining career pathways and compensation for program completers	
Data Requirements:	• Employment start and end dates	• Compensation amounts and types
	• Job duties and skill, education, and experiences requirements	• Demographic data to assess program equity and close equity gaps in employment outcomes
	• Employment location, including sub-state region of employment	• Job pathways/progression following program completion
Examples of Potential Products Addressing the Use Case:	• Employment outcomes for recent education and training program graduates, including occupation and wage reports to provide insights about relevance of program to career choice and wages for those staying in relevant fields	
	• Benchmark time series data to monitor progress over time	
	• Relevance assessment for skills required for the chosen occupation compared with skills taught in the education or training program	

4.2 Improving jobs data to better align curriculum with available and emerging jobs and skill trends.

Activities:	• Identifying relevant jobs opportunities at the regional level and their industry context	
	• Monitoring regional shifts in staffing patterns and skills	
Data Requirements:	• Industry	• Job skill, education, and experience requirements
	• Job title	• Work location
	• Job duties	
Examples of Potential Products Addressing the Use Case:	• Recent hiring by occupation, skill, and wage levels	
	• In-demand occupations and skills (by labor market area) aligned to different academic program areas	
	• Assessment of emerging skill requirements by occupation and industry	

APPENDIX B (CONTINUED)

5. Government: Education, Economic and Workforce Development, Workforce Information Agencies

5.1 Improving supply-demand analysis to align education and workforce investment to meet employer needs.

Activities:	• Identifying current and projected in-demand occupations (i.e., employment growth and job openings) overall and for specific industries or industry sectors (e.g., critical economic development sectors) at sub-state regional level
	• Identifying current and projected supply of workers entering these in-demand occupations for major industries or industry sectors at sub-state regional level
	• Determining whether current and projected supply is sufficient to meet employer needs for in-demand occupations for industries/sectors and regions and whether there is a need to change government investments and other incentives and supports

Data Requirements:	• Job title	• Enrollment and completion data from education and training program sources
	• Primary location of work	• Job pathways/progression following program completion
	• Establishment industry	
	• Employment start and stop dates	
	• Paid hours	• More timely reporting (e.g., payroll period or monthly)
	• Worker earnings	

Examples of Potential Products Addressing the Use Case:	• Regular reports of occupational employment trends by labor market
	• Timely employment projections by occupation, skills, and labor market area
	• Emerging skills report by occupation and industry
	• Available talent pool report that aggregates available talent with certain skills among (1) unemployed workers, (2) workers paid under certain wages (including less than average wage for their occupation)

5.2 Providing more timely and thorough analyses of trends in sub-state labor markets.

Activities:	• Monitoring shifts in industry and occupational employment, hours, and earnings
	• Comparing labor markets according to industry, occupational structure, compensation, demographics

Data Requirements:	• Employment level	• Demographics
	• Industry	• Paid hours
	• Work location	• Compensation amounts and types
	• Job title	• More timely reporting

Examples of Potential Products Addressing the Use Case:	• Dashboard displaying timely local employment and wage trends by industry, occupation, and demographic group
	• Up-to-date wage data by occupation, skill, and experience by labor market area
	• Labor market-specific talent pool reports that aggregate available workers that meet certain criteria (e.g., total number of workers in each occupation paid under certain wages)

6. Research Organizations

6.1 Improve the comprehensiveness and timeliness of Government statistical reports and analysis for the nation, regions, states, and local areas.

Activities:	• Add geographic, industry and occupation granularity to official measures of current job changes, labor turnover, wage trends and productivity
	• Improve accuracy and timeliness of statistical releases by industry and occupation, including growing/declining occupations and labor/multi-factor productivity

Data Requirements:	• Employment level	• Employment start and end dates
	• Industry	• More timely and frequent reporting (e.g., payroll period or monthly)
	• Work location	
	• Occupation and Job title	• Demographics
	• Establishment EIN	• Paid hours, by components
	• Worker status (regular, "1099")	• Compensation amounts and types

Examples of Potential Products Addressing the Use Case:	• Monthly job turnover measures (hires and separations) by state and metro area, industry, and occupation
	• Measure growth of contract work versus traditional employment
	• Produce timely state productivity growth indicators by industry

6.2   Improve the comprehensiveness and timeliness of social, economic, and policy research for the nation, regions and substate areas.

Activities:	• Investigate causes and consequences of key labor market conditions, such as unemployment, low earnings, high turnover rates, wage inequality and non-traditional employment
	• Study labor market consequences of non-labor policies, such as environmental, drug, criminal justice, immigration, public health, childcare, and trade policy
	• Track real-time and long-run impact of disruptions, such as climate events, trade patterns, and technological change
	• Link to data on human resource practices to study impact of practices on employer and worker outcomes

Data Requirements:	• Employment level	• Employment start and end dates
	• Industry	• Worker's schedule
	• Work location	• Demographics
	• Occupation and job title	• Location of worker's residence
	• Worker's receipt of training	• Compensation amounts and types
	• Worker's educational attainment	• Establishment EIN
	• Paid hours, by component	• Worker status (regular, "1099")
	• More timely and frequent reporting (e.g., payroll period or monthly)	

Examples of Potential Products Addressing the Use Case:	• Match data to criminal records to identify which career paths work best for formerly incarcerated people. How do demographics affect outcomes?
	• Match to survey data on technological adoption to see what happens to workers who are laid off after the adoption of robots or other technologies. How do demographics affect worker outcomes?
	• What is the impact of employee retention policies on employers and workers?
	• What is the impact of short hours programs versus temporary or permanent layoffs on employer and worker outcomes?

6.3   Improve the cost-effectiveness of employment, training, and education-related programs, for both ongoing programs and demonstrations.

Activities:	• Lower cost of performing workforce policy evaluations by increasing researcher access to high-quality comprehensive data on workers
	• Improve precision and relevance of results of evaluations by improving data
	• Facilitate linking worker record data over time (before and after participation) with evaluation surveys and program data to better measure long term effects

Data Requirements:	• Employment level	• Paid hours, by component
	• Industry	• More timely and frequent reporting (e.g., payroll period or monthly)
	• Work location	• Demographics
	• Occupation and job title	• Location of worker's residence
	• Worker's receipt of training	• Worker type (employee, 1099 worker)
	• Worker's educational attainment	• Establishment EIN
	• Employment start and end dates	
	• Worker's schedule	

Examples of Potential Products Addressing the Use Case:	• Study of characteristics of successful apprenticeship programs
	• Cost/benefit analysis of free community college education
	• Cost-effectiveness of programs to train entrepreneurs

APPENDIX C

Data Collected by Selected Federal and State Programs Considered Potential Consolidation Opportunities

HR Open Standards Data Dictionary Elements / **Job and Employment Data Collected by Selected Federal and State Programs that are Not Currently Required by UI or Collected by Any JEDx Test State ("X")**

Legend:
- UI Required / Also Collected By
- JEDx Test States' Additions / Also Collected By
- Use-Case Based Data Additions*

Column headers: BLS Multiple Worksite Report; Census Annual Survey of Public Employment and Payroll; DHHS Hospital Wage Index Occupational Mix Survey; BLS Job Openings and Labor Turnover Survey; BLS Occupational Employment Survey; EEO Commission EEO-1, EEO-3, EEO-4, EEO-5; BLS Annual Refiling Survey; BLS Current Employment Statistics; SSA-Annual Employee Wage and Tax Statement—Forms W-2 & W-3; New Hire Registry Required and State Additions; UI-Other-States' Additions; Use-Case Based Data Additions*; Number of Other States/Territories Currently Adding Item to UI

Employer Organizational Information

Element	BLS Multiple Worksite	Census Annual Survey	DHHS Hospital Wage	BLS JOLTS	BLS Occ Emp Survey	EEO Commission	BLS Annual Refiling	BLS Current Emp Stats	SSA W-2 & W-3	New Hire Registry	UI-Other States	Use-Case	Number
Organization Identification													0
Legal Name													All
Federal Employer Identification Number													All
Previous Federal Employer Identification Number										X	X		1
State Unemployment Tax Account Number													All
Business Structure Type						X			X	X			1
Business Revenue													0
Business Operating Status			X		X					X	X		15
Business Operating Status Date			X		X					X	X		15
Trade Names			X		X					X	X		4
Street Address													All
City													All
State													All
Zip Code													All
Country													All
Industry Code													
Principal Products & Services													
Parent Company Tax ID													
Parent Company Name													

Employer Establishments Information

Element													
Establishment ID Number													
Establishment Name				X						X	X		0
Federal Employer Identification Number													0
State Unemployment Tax Account Number													0
Establishment Status					X						X		0
Establishment Status Date					X						X		0
Establishment Operating Level													0
Establishment Business Functions					X	X					X		0
Establishment Principal Products & Services				X	X	X					X		0
Establishment Industry Code											X		0
Establishment Street Address				X	X	X	X		X	X	X		1
Establishment City				X	X	X	X		X	X	X		1
Establishment State				X	X	X	X		X	X	X		1
Establishment Zip Code				X	X	X	X		X	X	X		2

Employer Jobs Information

Element													
Employer Job Code											X		0
Employer Job Title				X	X					X	X		6
Job Category Code					X								0
Business Support Role							X			X			0
Employer Job Duties				X						X			0
Employer Job-Required Skills										X			0
Employer Job-Required Education and Experience										X			0
Standard Occupation Code									X				6
Management Role Indicator													0
Management Level													0
Wage Hour Law Coverage Indicator													0
Standard Hours													0
Wage Plan Code													0
Wage Grade Code													0
Wage Step Code													0

CHARTS FPO

Employer Positions Information

Element													Number
Position ID Number													0
Position Job Title													0
Position Remuneration Basis													0
Position Schedule Type													0
Position Type													0
Position Term													0
Position Status						X							0
Position Status Date						X							0
Job Identification													0

Work Assignments Information

Element													
Worker Identification													0
Assignment Description													0
Assignment Type													0
...													0
Probationary Status Ending Date													0
Seasonal Work Ending Date													0
Assigned Job Code													0
Position ID													0

Worker Personal Identification Information

Element													
Social Security Number													All
Previous Social Security Number												X	0
First Name													All
Middle Name													All
Last Name													All
Previous Last Name											X	X	0
Name Suffix											X		0
Birth Date										X	X	X	2
Residence Street Address										X	X	X	X	1
Residence City										X	X	X	X	1
Residence State										X	X	X	X	1
Residence Zip Code										X	X	X	X	1
Phone Number											X		0
Mother's Maiden Name											X		0
Driver's License											X		0
VISA Type											X		1
Citizenship											X		1
Military Status											X	X	1
Gender						X		X		X	X	X	3
Ethnicity						X					X	X	1
Race						X					X	X	1
Disability											X	X	

CHARTS FPO

CHARTS FPO

Left Table

HR Open Standards Data Dictionary Elements	Job and Employment Data Collected by Selected Federal and State Programs that are Not Currently Required by UI or Collected by Any JEDx Test State ("X")													Number of Other States/ Territories Currently Adding Item to UI
	BLS Multiple Worksite Report	Census Annual Survey of Public Employment and Payroll	DHHS Hospital Wage Index Occupational Mix Survey	BLS Job Openings and Labor Turnover Survey	BLS Occupational Employment Survey	EEO Commission- EEO-1, EEO-4, EEO-5	BLS Annual Refiling Survey	BLS Current Employment Statistics	SSA-Annual Employee Wage and Tax Statement—Forms W-2 & W-3	New Hire Registry Required and State Additions	UI—Other-States' Additions	Use-Case Based Data Additions*		
Total Holiday Leave Hours Used														0
Public Holiday Leave Hours Used														0
Floating Holiday Leave Hours Used														0
In-Lieu-of-Notice Leave Hours Used											X			1
Jury Duty Leave Hours Used														0
Military Duty Leave Hours Used														0
Sick Leave Hours Used											X			1
Vacation Leave Hours Used														0
Other Paid Personal Leave Hours Used														0
Worker Compensation Information														
Worker Identification														0
Compensation Time Period							X							0
Total Compensation														?
Total Cash (Direct) Compensation (Gross Pay)		X			X		X	X						0
Salary Paid	X	X		X					X	X	X			3
Total Hourly Wages Paid														0
Regular Hourly Wages Paid	X	X		X										
Total Premium Hourly Wages Paid	X	X		X										
Overtime Hourly Wages Paid														
Shift Differential Hourly Wages Paid														
Call-Back Hourly Wages Paid														
Holiday Hourly Wages Paid														
Hazardous Duty Hourly Wages Paid														0
Other Premium Hourly Wages Paid														0
Total Leave Paid		X									X			0
Administrative Leave Paid														0
Bereavement Leave Paid														0
Compensatory Time Off (CTO) Paid														0
Consolidated Paid Time Off (PTO) Leave Paid														0
Education Leave Paid														0
Family Leave Paid														0
Total Holiday Leave Paid														0
Public Holiday Leave Paid														0
Floating Holiday Leave Paid														0
In-Lieu-of-Notice Leave Paid														0
Jury Duty Leave Paid														0
Military Duty Leave Paid														0
Sick Leave Paid														0
Vacation Leave Paid														0
Other Personal Leave Paid														0
Total Other Cash Compensation Paid											X			0
Back Wages Paid														0
Total Bonuses Paid														0
Production Bonuses Paid														0
Other Bonuses Paid								X						0
Commissions Paid								X		X				1
Piecework, Performance-Based, or Contract Work Paid														0
Residuals Paid														0
Severance Paid								X						0
Tips Paid									X		X			3
All Other Cash Compensation Paid														0

Right Table

HR Open Standards Data Dictionary Elements	Job and Employment Data Collected by Selected Federal and State Programs that are Not Currently Required by UI or Collected by Any JEDx Test State ("X")													Number of Other States/ Territories Currently Adding Item to UI
	BLS Multiple Worksite Report	Census Annual Survey of Public Employment and Payroll	DHHS Hospital Wage Index Occupational Mix Survey	BLS Job Openings and Labor Turnover Survey	BLS Occupational Employment Survey	EEO Commission- EEO-1, EEO-3, EEO-4, EEO-5	BLS Annual Refiling Survey	BLS Current Employment Statistics	SSA-Annual Employee Wage and Tax Statement—Forms W-2 & W-3	New Hire Registry Required and State Additions	UI—Other-States' Additions	Use-Case Based Data Additions*		
Total Non-Cash (Indirect) Compensation											X	X		1
Total Legally Required Benefits Paid														0
Social Security Contributions Paid														0
Medicare Contributions Paid														0
Federal Unemployment Insurance Contributions Paid														0
State Unemployment Insurance Contributions Paid														0
Workers' Compensation Contributions Paid														0
Other Legally Required Contributions Paid														0
Total Discretionary Benefits Paid														0
Total Discretionary Insurance Benefits Paid											X			0
Total Discretionary Retirement and Savings Benefits														0
Total Other Discretionary Benefits Paid														0
Taxable Compensation														0
W-2 Wages, Tips, and Other Compensation										X		X		0
										X				0
										X				0
										X				0
														9
														All
State Disability Insurance Wages														0
W-2 Local Wages, Tips, Etc.										X				0
Other Programs Taxable Compensation														0
Total Wages Paid Out of State											X			7
Total Compensation Withheld														0
Total Taxes Withheld											X			1
Federal Income Tax Withheld										X		X		5
Federal Medicare Tax Withheld										X				0
Federal Social Security Tax Withheld										X				0
Local Taxes Withheld										X		X		2
State Income Tax Withheld														4
Unemployment Insurance Tax Withheld											X			2
Workers' Compensation Fees & Taxes Withheld											X			1
Other Taxes Withheld														0
Total Insurance Premiums Withheld														0
Health, Dental, Vision Insurance Premiums Withheld										X				0
Life Insurance Premiums Withheld														0
Other Insurance Premiums Withheld														0
Total Retirement Contributions Withheld										X				0
Defined Benefit Pension Plan Contributions Withheld										X		X		2
Other Retirement Plan Contributions Withheld										X		X		1
Total Other Withholding														0
Flexible Spending Account Withheld														0
Job-related Expenses Withheld														0
Wage Garnishments Withheld														0
All Other Withholding														0

Compensation Type	Arkansas State UI	California State UI	Colorado State UI	Florida State UI	Kentucky State UI	New Jersey State UI	Texas State UI
Salary Paid							
Regular Hourly Wages Paid							
Total Premium Hourly Wages Paid							
Total Paid for Leave Time Taken							
Total Other Cash Compensation Paid							
Accrued vacation, sick, and holiday pay paid out at termination of employment		X					
Board of Director Fees	X	X					
Dismissal or severance pay			X		X		
Employee achievement awards as defined in Section 74(c) of the IRC		X					
In-Lieu-of-Notice pay		X					
Jury duty pay							
Tips less than $20 per month		X			X		
Worker's compensation payments	X	X					
Total Non-cash Compensation Paid							
Accident and health insurance premiums covering dependents as defined in Section 152(f)(1) of the IRC	X	X		X	X		X
Accident and health insurance premiums covering employee	X	X		X	X		X
Family leave insurance benefits paid by the employer under an approved self-insured private plan					X	X	
Group legal insurance premiums					X		
Group-term life insurance premiums	X	X	X				
Insurance--Payments upon death or retirement for disability of an employee or an employee's dependent made under a plan providing for employees or a class or classes of employees		X					
Supplemental Unemployment Compensation Plan Benefits paid under an employer's plan.		X					
Employer contributions into IRC 219 simplified employee pension plan;							
Employer contributions to 401(k) plan			X				X
Employer contributions to 403(a) qualified annuity contract		X	X				X
Employer contributions to 403(b), including salary reductions		X	X				
Employer contributions under an exempt governmental deferred compensation plan as defined in Section 3121(v)(3) of the IRC		X	X				
Distributions from qualified retirement and pension plans and section 403(b) annuities		X					
Employer contributions to a 457(b) plan							
Qualified retirement/pension plan contributions	X		X	X	X		X
SARSEP plan contributions		X					
SEP plan contributions		X	X				
SIMPLE IRA contributions as defined in Section 408(p) of the IRC		X	X				
Health/Medical Savings Account contributions		X					
Medical and hospitalization expenses covered by employer in connection with sickness or accident disability	X	X		X			X
Sick leave payments and continuation pay paid by the employer under an approved self-insured private plan					X		

Compensation Type	Arkansas State UI	California State UI	Colorado State UI	Florida State UI	Kentucky State UI	New Jersey State UI	Texas State UI
Fringe benefits excluded from gross income pursuant to Section 132 of the IRC (e.g., services supplied to employees at no additional cost to the employer, discounts, parking, bus passes, rideshare, athletic facilities, free coffee, moving expenses, qualified retirement planning services, stand-by flights to airline employees, etc.).		X					
Gifts of nominal value given as an expression of goodwill and not based on the rate of pay, length or degree of prior personal service, or required under the union agreement or contract of hire		X					
Lodging as described in IRC 119				X	X	X	
Meals as described in IRC 119				X	X	X	
Payments for agricultural labor in any medium other than cash		X				X	
Quailified moving expenses pursuant to Sections 132 and 217 of the IRC		X					
Employer additional or matching contributions to Section 125 plan	X		X	X	X		
Disqualifying disposition of a statutory stock option		X					
[obscured] option		X					
[obscured] 37 of the IRC							
[obscured] Section 129 of the IRC		X	X				
[obscured] 127 of the IRC		X	X	X			
Scholarship Payments, fellowship grants, tuition reductions, or stipend award as defined in Section 117 of the IRC		X					
Employer-paid FICA and/or Medicare for domestic service in private home or agricultural labor		X				X	
FICA and/or Medicare taxes paid by employer	X			X			X

Employee Deferrals

Compensation Type	Arkansas State UI	California State UI	Colorado State UI	Florida State UI	Kentucky State UI	New Jersey State UI	Texas State UI
Cafeteria plan under Sec. 125 of the IRC	X	X	X	X			
Health/Medical Savings Account		X					
Education--529 Savings Plan		X					
Retirement--401(k)							
Retirement--SIMPLE IRA as defined in Section 408(p) of the IRC							
Retirment--SIMPLE retirement account							
Retirement--Employee salary reduction contributions to a 457(b) plan							

Reimbursements

Compensation Type	Arkansas State UI	California State UI	Colorado State UI	Florida State UI	Kentucky State UI	New Jersey State UI	Texas State UI
Reimbursement of business expenses	X	X	X	X	X	X	X
Reimbursement of long-term travel expenses pursuant to Section 162 of the IRC	X	X	X	X	X	X	X

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