

EXECUTIVE SUMMARY

# Fostering State-to-State Data Exchanges

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## Executive Summary

Gaps in information available from the nation's current data infrastructure about postsecondary education outcomes, including employment, have left policymakers inadequately informed about institutional performance and the effectiveness of the policies they put in place. These gaps also leave prospective students and their families in the dark about how best to make their educational investments pay off as they make life-altering decisions. Moreover, the gaps complicate the use of evidence to inform improvements in policies and practices that impact student success.

One potential solution that addresses many of these limitations is to forge linkages between existing state data systems in order to meet the differing education and employment data needs of diverse and varied stakeholders, including students and their families, institutions of higher education, workforce training providers, state policymakers, and the federal government. Such an exchange can be set up to be safe and secure and maintain privacy, using a limited set of data elements to unlock a huge range of potential analytical opportunities. Once in place, it could help states hold their postsecondary institutions (and workforce training providers) accountable; evaluate and improve policies and programs; provide more complete information to prospective students about their likelihood of succeeding in postsecondary education or training, and securing a paying job; and inform statewide and institutional strategic planning efforts.

Drawing from the experience the Western Interstate Commission for Higher Education (WICHE) has acquired in leading the Multistate Longitudinal Data Exchange, this paper describes how such a system might work, how it complements a more contemporary and effective data infrastructure for the nation, and what challenges must be addressed and surmounted for the vision of a sustainable data exchange among states to be realized. Lessons from the MLDE to date show that a cross-state data exchange is possible, that it provides additional information useful to the states that participate, and that, by leveraging federal and state investments already made, it can operate at a manageable ongoing cost. These elements provide the foundation on which to build a state data exchange, and it would be built with states' data needs foremost in mind.

But the experience to date shows that research using state data systems has led to new information about the impact of state policies, such as financial aid and remediation, and those insights have also featured prominently in national policy debates. A state-based resource that better captures

student outcomes—by making it possible for states to flexibly share individual-level data—can substantially build on that growing body of research while improving results. Even more, a state data exchange can provide states with the evidence base they need to operate institutions more efficiently and effectively, hold them accountable, address equity goals, improve policies and programs, and adopt and monitor strategic plans.

No matter the intended use for state and federal policymakers or institutional leaders, however, the most significant challenge faced by a state-to-state data exchange is incomplete geographic and institutional coverage arising out of the exchange's reliance on voluntary state participation. This lack of complete coverage constrains its utility for some purposes, such as holding private nonprofit and for-profit institutions accountable, particularly for federal financial aid programs. Getting to the point where all states and all students are accounted for will not happen overnight. Even well before it achieves that aim, a state data exchange will need to establish a sustainable state-led governance structure and business model that ensure both adequate voice and representation from all participating sectors (e.g., K–12 education, public and private postsecondary education, and labor market information providers), as well as adequate ongoing funding support.

Fortunately, the project has made substantial headway in addressing technical issues related to data sharing. It has done this in large part by adopting a federated data model that ensures participating states have maximum flexibility to obtain the data they need while incorporating robust protections for data security and individual privacy. As the project evolves, it will continue to adjust the configuration of the procedures to match records across states and systems. It is critical that the final approach is transparent to participating states. Once operational, states will have to “plug in,” but data pathways and data definitions are being standardized to help with those efforts.

A second important challenge to address as a state data exchange matures is the capacity within state agencies to focus on cross-state data and analyze data as they come in. States vary considerably in how much time and energy they have available to commit to longitudinal data systems' development, management, and use. (John Armstrong and Katie Zaback's paper, *Assessing and Improving State Postsecondary Data Systems*, provides an overview of state postsecond-

ary data systems.) A fully realized state data exchange will be able to provide data products and tools not just to help participating states, but also to enlist other analysts and researchers in ensuring effective use. WICHE's MLDE is expected to resume exchanging data within the coming year. After a suitable period for participating states to analyze the MLDE's products, they will start to wrestle with how and under what conditions to permit access to analyst contractors.

WICHE's MLDE project is currently in a second phase that will conclude by summer 2018 with expansion of the exchange to serve at least 10 participating states. By then, its version of a state data exchange is expected to be operational and both self-governed and self-sustaining by the participating states. Interest among states across the country has been high, however, and future prospects for the project improve as more states agree to join and share the costs of ongoing operations. Based on cost estimates that include relatively firm future expenses for software licensing and data storage needs, plus reasonable estimates for expenses related to governance, the MLDE projects to run \$500,000–\$600,000 annually. Because the costs of handling and storing data are so low, additional states will add only marginally to those estimates.

As at least a partial solution to bringing the nation's postsecondary data infrastructure in line with current and future needs, a state data exchange comes with intriguing political dimensions. Standing in its way is the need to attract individual states to the exchange by convincing them of its value and assuring them that its architecture and governance components will protect sensitive data and individual privacy. Meeting this challenge is not an insignificant task. However, with growing demands for flexible access to data for use in post-collegiate and employment outcomes along with support from state-based data architects, it has been manageable so far (albeit with less success among K–12 education agencies) in the MLDE. By contrast, a state data exchange can make significant headway without running afoul of two powerful interest groups that can be counted on to resist a federal solution: those who would claim federal overreach if the federal government issued a mandate that individual-level data on all students be collected by the federal government and those in the private-school lobby who have previously been resolutely opposed to a federal unit-record system. A state-based voluntary system may be an appealing alternative.

To advance the concept and value of a state data exchange, this paper includes several recommendations for federal and state policymakers and agency leaders. Those applicable recommendations for federal policymakers and officials include the following:

1. **Elevate the priority the federal government places on cross-state data partnerships.** This can be accomplished two ways. The first is to require cross-state data to be an essential part of any future competitions for the Statewide Longitudinal Data System and Workforce Data Quality Initiative programs. The second way to elevate cross-state data partnerships is for the federal government simply to mandate the use of a cross-state data exchange as part of the Higher Education Act or some other legislation. Such a step would instantly address the weakness of incomplete coverage of a voluntary data exchange, but it might be counterproductive if such a mandate is perceived to be an instance of the federal government overstepping its authority.
2. **Fund analytical work that demonstrates how mobile our society has become and the importance of accounting for such mobility in examining educational outcomes.** As the effort to examine employment outcomes for recent college graduates builds momentum, the federal government should fund more work that demonstrates how mobile our society has become and how that mobility must be accounted for in drawing conclusions about the value of various kinds of postsecondary credentials. Doing so with data linking education and employment records longitudinally would help flesh out how individuals with different academic and vocational backgrounds are finding success, or not, over a longer period than the current focus on short-term earnings permits and with a richer evidence base than snapshots taken at specified intervals provide.
3. **Make it possible for states to access and use information housed in federal data systems in order to more comprehensively and accurately analyze employment outcomes and evaluate educational policies and practices.** The federal government can work with states to provide access to the postcollegiate employment experiences they cannot access on their own, namely self-employment and federal and military employment, so that states have all the information they need to manage their institutions and provide useful information to consumers.
4. **Require submission of additional data elements to unemployment insurance wage records.** Expanding the minimum requirement of what must be reported in state's UI system by the addition of three data elements would greatly improve the information state data systems are able to provide to policymakers and the general public. Those elements are occupation, hours worked, and location of workplace.

Recommendations for state policymakers or agency leaders include the following:

- 1. Demand information that captures the outcomes of all students by joining a state data exchange like the MLDE and by using existing state data sharing resources.** State policymakers can take care to not be fully satisfied with incomplete information about postcollegiate outcomes that does not account for out-of-state mobility for employment or further schooling. One way they can do so is by insisting that their state be engaged in a state data exchange project like WICHE's MLDE.
- 2. Ensure that state data systems include elements needed to produce and use disaggregated results to improve equity in education and employment outcomes by program and for specific population groups.** State policymakers should note that wide disparities in institutional mission and program mix mean that aggregate data on postcollegiate outcomes at the institutional level may be misleading while also obscuring important differences in the experience of different groups of students. These conditions highlight the need for disaggregated data to ensure that they and the institutions themselves have the tools to make policy and program improvements.
- 3. Require additional data elements be submitted as part of employers' UI data submissions.** As demonstrated by states like Nebraska and Louisiana, which are asking employers to voluntarily submit new data, states do not have to wait for the federal government to add elements like occupation, hours worked, and workplace location to their data systems.
- 4. Ensure that data elements necessary to connect education and employment records are available for use.** State policymakers must recognize that they cannot obtain analyses of linked education and employment data without using Social Security Numbers. If they want information about the payoff to education, particularly for students who do not go to college, they can resist putting unnecessary restrictions on the collection of SSNs without jeopardizing data security and privacy, or facilitating linkages with data sources, such as those of state departments of motor vehicles, where SSNs are already collected.
- 5. Allow institutions to use employment data from state UI wage records at the unit level.** To foster the use of employment data for policy and program improvement, states can permit institutions to use unit-record employment data from the UI wage record files in a de-identified format.





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