WHAT NOW?

States Must Act to Meet People's Data Access Needs

People need access to data. Individual students and job seekers, families, educators, communities, and policymakers must have the information they need to foster successful journeys through education and the workforce. While states have been building cross-agency, longitudinal data systems for decades and have made notable progress, today's state data systems, and the federal programs and funding streams that support them, are largely designed and used for system-level compliance and monitoring activities. The very design of these data systems and the policies that govern them are not oriented toward providing access to information that helps individuals, the public, and policymakers answer their questions and make decisions.

The data state agencies do collect is often defined, collected, linked, and stored in a way that, at best, serves those who need trend and aggregate data (e.g., researchers, legislators) rather than those looking to guide local decisions in schools, in workforce development offices, and at home. Existing analytic tools are clunky, out of date, or too static to be useful. As a result, leaders are unprepared to address emerging and long-standing cross-sector challenges. And communities lack the insights they need to address the problems they are charged with solving. **It's time to change this situation. Improving data availability and access must be at the top of every state's to-do list.**

Read this brief to understand the problem and the ways in which states must act. In this brief, we discuss the following areas:

- The historical context—because leaders can't move forward without understanding what has already happened;

- Data vocabulary to ensure that state and federal leaders, national and state policy partners, philanthropy, and communities are all speaking the same language about the changes that must happen;

- Who wants and needs better, more robust data systems and why;

- The roles of the state and federal government in achieving the vision to meet information needs; and

- Examples of how the vision of improved state data systems is grounded in reality.

Leaders Need Data to Answer Their Most Pressing Education through Workforce Questions

Policymakers at every level are making education and workforce policy decisions and allocating funding and resources across these sectors without being able to answer basic questions about how well investments in education and workforce are serving students and workers. These questions include:

- Which high school graduates are attending and completing college? Were there similarities in the courses those students took in high school? Which students are attending a two-year institution of higher education, and which are attending a four-year institution?

- What are the career outcomes of students who completed dual enrollment or career and technical education programs during high school?

- Are workforce development programs aligning to labor market needs and helping people get quality, family-sustaining jobs?

- What kinds of supplemental programs, interventions, or supports improved students' or job seekers' economic trajectory?

As these questions come to the forefront, so too do long-standing gaps in data access and use. The lack of integration among state agency data systems means that state leaders cannot easily access all of the data needed to answer the myriad questions that are critical to ensuring that economic mobility is within reach for everyone.

The time is right to set new goals for state data systems. These new goals must be ones that state and federal policymakers can get behind and drive innovation toward; that national and state policy partners and philanthropy can support because they are goals that they see their priorities reflected in; and foremost, that benefit students, workers, families, and communities. As a result of this shift:

- Individuals will be able to make informed decisions for themselves about everything from their courses in high school to their postsecondary and workforce preparation to the debt they're willing to take on for different school and career pathways;

- The broader community will benefit from increased access, improved outcomes, and leaders focused on the best way to improve education and workforce pathways; and

- Leaders will be able to make informed policy decisions and be held accountable for the decisions they make to improve schools and postsecondary options.

Robust statewide longitudinal data systems (SLDSs) designed to prioritize meaningful access to data and meet current and future information needs will not be easy to achieve—but they are possible. The bones of the infrastructure to provide tailored data access to different types of users exist in every state data system at varying degrees of quality. For years, the Data Quality Campaign (DQC) has been setting the vision for state data systems—and we know that states can develop the data systems that everyone from individuals to policymakers need and deserve.

CENTERING PRIVACY

Any vision for data use is incomplete without a plan to protect individuals' privacy. Data is a powerful tool to guide decisionmaking, and leaders must prioritize safeguarding data.

THE PAST IS PROLOGUE

2005–15

DQC was launched in 2005 by 14 advocacy and constituency organizations that recognized the need for a national, collaborative effort to encourage and support the use of high-quality data in education. In the wake of the passage of the No Child Left Behind Act (NCLB), DQC focused its work on advocating that states build systems for K–12 education data. As state leaders, advocates, and partners demanded more robust information, the systems had to become more robust to meet those demands. DQC's first flagship publications—which described the 10 Essential Elements of Statewide Longitudinal Data Systems and 10 State Actions to Ensure Effective Data Use—provided a common language for education data that was not technical or related to information technology (IT).

State policymakers now had clear, measurable policy roadmaps that provided actions required to build data systems and ensure that the conditions and capacity for data use were in place. DQC measured and celebrated state progress on the 10 Essential Elements and 10 State Actions and highlighted best practices in implementation. DQC also distilled the lessons learned so states could build on and improve their data infrastructures as they worked to become leading states.

To support states in building and using their SLDS, the American Recovery and Reinvestment Act of 2009 (ARRA) established three separate funding mechanisms. Most notably, ARRA included the Obama administration's signature education program, Race to the Top, which challenged states to think differently about how they would leverage their SLDS in support

of teaching and learning. Race to the Top also elevated the conversation about data systems and use beyond state education agency officials to governors and state legislatures. At the same time, new federal investments in the Workforce Data Quality Initiative (WDQI) helped states build new or expand existing workforce longitudinal data systems that linked to their education systems. The infusion of federal resources and incentives combined with new interest and support from philanthropy drove rapid data system development in states.

Also since 2005, the congressionally created Statewide Longitudinal Data Systems Grant Program has helped states build, improve, and use their data systems. Federal regulations in 2008 and 2011 clarifying NCLB and the Family Educational Rights and Privacy Act (FERPA) allowed states to continue to securely develop their data infrastructures to provide meaningful and useful data.

By 2011, 36 states had all 10 Essential Elements in place. By 2014—the final year DQC surveyed states on their progress toward the 10 State Actions—three states had implemented all of them: Arkansas, Delaware, and Kentucky.

2016–19

By 2016, 47 states and the District of Columbia had received more than $500 million in federal SLDS grant funds and had linked their K–12 data system with, at a minimum, a postsecondary data system (that number has climbed to 55 states and territories having received more than $800 million in federal SLDS grant funds in 2022). A number have gone further, linking their K–12 data system all the way from early childhood to the workforce. But while states were busy investing in data, they were not communicating about the value of data and earning the public's trust. A wave of backlash from parents and the public about the perceived government and big business intrusion into the lives of children through data—including the creation and demise of inBloom—prompted states and the federal government to introduce hundreds of pieces of legislation to protect student data privacy. Between 2013 and 2016, 410 bills were introduced in 49 states and the District of Columbia, resulting in 36 states passing 74 student

data privacy bills into law. At the federal level, a number of student data privacy bills were introduced, including a proposed update to the 40-year-old FERPA, but none resulted in changes to federal law.

The amount of public and state lawmaker attention to student privacy slowed the work of expanding and improving the quality of state data systems. Despite the less than hospitable policy climate, a few bright spots emerged over the next several years:

- The College Transparency Act, still active in Congress, would require institutions of higher education to collect and report disaggregated data regarding enrollment, persistence, transfer, and completion for all programs and degrees, attempting to undo the prohibition on creating a federal postsecondary data system.

- The Workforce Innovation and Opportunity Act introduced new performance measures, providing states a better understanding of the effectiveness of their workforce programs.

- The Strengthening Career and Technical Education for the 21st Century Act allocated specific funds for innovation and data related to different types of career preparation programs.

2020–22

Workforce development, readiness, and education took center stage in most state policy discussions during this period. Gaps in state workforce data as well as the weakness of the linkages among K–12, postsecondary, and workforce systems became more apparent when the COVID-19 pandemic and related economic crisis hit. State leaders were hamstrung in helping their residents in part because of the weaknesses of their data systems, and these leaders were unable to connect their residents to the resources they needed quickly. Since the latest federal infusion of funds (e.g., Coronavirus Aid, Relief, and Economic Security (CARES) Act; American Rescue Plan; Elementary and Secondary School Emergency Relief), anecdotal evidence shows that states are using these funds to provide access, but the new funding hasn't yet led to wholesale change.

Access to data should never again be a barrier to supporting individuals as they navigate their journeys through education into the workforce, whether during a crisis or during times of calm. **State leaders must ensure that future by reorienting their state's data system toward providing access to information that helps people answer their questions and take action.**

What Is an SLDS?

Data linked across sectors has many names, and sometimes those different names can lead to confusion about whether advocates and policymakers are talking about the same thing. A commonly used term is *statewide longitudinal data system* or *SLDS,* which is the type of system discussed in this resource and is defined as an integrated data system that connects individual-level data from participating state agencies over time. An SLDS is:

- **Statewide:** Brings together and links data or records from multiple state agencies. Most data is from early childhood, K–12 education, postsecondary education, and workforce data systems—sometimes called the P–20W agencies—but the SLDS itself is not owned by any of these agencies alone.

- **Individual level:** Includes data that is specific to individual people. An SLDS may contain identifiable information or be anonymized.

- **Longitudinal:** Captures data from the same population over multiple years and links over time individual-level data that is primarily from early childhood, K–12 education, postsecondary education, and the workforce. An SLDS might also have data contributed from other sectors like health, human services, or criminal justice. Though the federal SLDS program is often more closely associated with K–12 data infrastructure, that program has prioritized linking data to other agencies and sectors for a decade, aligning with a vision of an SLDS as a linked system that extends beyond K–12 education.

> You might have also heard the term ***integrated data system,*** which is any system that brings together information from different systems and sectors (e.g., education, health, workforce) at any level of government, including local, state, or federal, and can also include nongovernmental service providers.

What Changes with a More Robust SLDS?

As currently designed, SLDSs leave even their intended users frustrated about lack of access.

- Even in states with the best SLDSs, **state legislators** often have to get in the queue with everyone else to get their questions answered, regardless of how pressing their need for information is.

- **Researchers** may be required to drive to a specific physical location to access data and may have to pay a hefty price.

- The **public** has it even worse. Almost every state lacks a public dashboard with P–20W indicators that is easy find, use, and understand.

It isn't just policymakers and state leaders who have expressed concern about their lack of access to state data that they know exists. In DQC's 2021 and 2022 polls of superintendents,[1] principals,[2] parents,[3] and students,[4] conducted by The Harris Poll, we heard the following:

- **Superintendents:** 98 percent reported they would be more confident in their abilities to make decisions for their district with better data ***access,*** and 61 percent said they use data to make decisions about course offerings/curriculum aligned to postsecondary and workforce opportunities. Almost half (49 percent) said more useful tools and technology that allow for better analysis of the data are needed.

---

1   This survey was conducted online within the United States by The Harris Poll on behalf of DQC from June 6 to June 13, 2022, among 253 full-time superintendents in the United States, all of whom were currently employed in school districts featuring grades K–12.
2   This survey was conducted online within the United States by The Harris Poll on behalf of DQC from May 5 to May 11, 2021, among 504 full-time principals and administrators in the United States, all of whom were currently employed teaching grades K–12.
3   This survey was conducted online within the United States by The Harris Poll on behalf of DQC from April 29 to May 5, 2021, among 1,514 parents of children ages 5–17 whose children attend school.
4   This survey was conducted online within the United States by The Harris Poll on behalf of DQC from June 6 to June 13, 2022, among 1,007 high school students ages 14–18 in the United States who attend public school or public charter school.

- **Principals:** 94 percent said they would feel more confident in their leadership decisions with better *access* to their students' postsecondary and workforce outcomes.

- **Parents:** 93 percent said that easier *access* to information would help them feel more confident about their ability to support their child's post-high school decisionmaking.

- **Students:** 80 percent reported that they would feel more confident about the path they will take after high school if they had better *access* to information.

Everyone needs better access to data, and improvements to SLDSs should make that access possible. To make informed choices about education and workforce pathways, people need access to multiple agencies' data at once. An SLDS that brings together and links data across all the P–20W agencies and provides useful and timely data in a privacy-protected manner can fill that need.

Data Access Needs Are Different for Different Users

Addressing long-standing gaps in access to data requires reorienting state systems and the resources (e.g., reports, dashboards) that they enable toward points of access that allow individuals, the public, and system leaders to use data. No state has yet designed a data system that enables different types of access that are specific to users' needs. To be good stewards of people's data, states need to design systems that enable everyone from a student to a state legislator to access and act on information.

Individuals need access to secure dashboards that allow them to draw insights and view aggregate and trend information side by side with their own data pulled in from local or other sources. And people who work with individuals—including parents, counselors, one-stop or job center advisers, and student support mentors—need access that allows them to view the data of a specific cohort of people whom they are counseling or assisting.

The public—including individuals and organizations like local chambers of commerce, National Urban League affiliates, and community foundations—needs dashboards, reports, and open data tools that display at least all of the indicators the federal or state government requires to be reported and other indicators such as those recommended in the Education-to-Workforce Indicators Framework. These indicators should be shared in a user–

friendly format that can be disaggregated by populations (including all federally required student groups) and geographic region (e.g., counties). These resources should be dynamic and available in languages other than English.

Policymakers—including state legislators, local workforce board members, and school district superintendents—need functionality that allows them to investigate new policy questions that can help them direct the future of the state's education and workforce investments and programming.

By increasing the functionality of an SLDS to provide these kinds of access, everyone should have the information they need to make informed decisions about their own education and workforce pathways, support individuals navigating these pathways, and create policies that might help others navigate smoother pathways. In addition, increasing access could allow new voices to join the state policy conversation. For example, local, rural, or less well-resourced organizations could see and analyze information that is specific to their communities and could use this information to drive change in a way that they have not been able to in the past.

LEADING THE WAY IN SLDS GOVERNANCE AND INVESTMENT

Kentucky has been a long-time leader in building and managing a robust data system. The Kentucky Center for Statistics (KYSTATS) manages and governs the state's longitudinal data system. Importantly, KYSTATS has a board consisting of senior agency leaders who can set priorities and dedicated staffing to ensure that the work gets done. Kentucky's data system governance has allowed the state to focus on meeting the public's needs through tools designed for the public.

Maryland used legislation to create the Maryland Longitudinal Data System Center. This legislation also created a governance board, with some of its membership designated by statute. Maryland has continued to adapt and update its system to address new and emerging priorities.

LEADING THE WAY IN PROVIDING ACCESS

California College Guidance Initiative (CCGI): As part of building out its Cradle-to-Career System, California decided to scale its CCGI. CCGI works with individual K–12 districts and California's higher education systems to address disconnects among course-taking, college eligibility, and course placement for students, families, and educators, allowing them to make informed decisions about college and career pathways. Right now, districts that do not have the resources to pay for CCGI can't give their students access to the tool. When the work of pulling CCGI into a statewide office and scaling it across California is complete, all students, families, and districts will be able to freely access the data within CCGI to plan their college and career journeys.

Baltimore Youth Data Hub: Young people need cohesive support across the different parts of their lives to help them achieve their goals. In Baltimore, the numerous agencies and organizations that serve youth and families operate in siloes. A lack of coordination and information sharing make seeing the full picture of what young people need, identifying service gaps, or addressing historical disparities difficult. Much of the data that can provide a fuller picture comes from local branches of state agencies. The Baltimore Youth Data Hub enables these entities to securely access and share state data about the populations they serve, helping them to more effectively and equitably support Baltimore's children, youth, and families.

Georgia Information Tunnel: The Georgia "tunnel" links data from a single SLDS directly to district-level student information systems, allowing district administrators, principals, teachers, and parents to access state education data through their district's existing program. Local education agency officials can view and compare state and local performance information on specific schools or programs to identify best practices, while teachers and parents have access to detailed longitudinal data to support children in the classroom and at home. With this tunnel, Georgia has enabled educators to view local data side by side with state-level resources and made it easier to use education data in meaningful ways. In particular, smaller, less-resourced school districts can provide teachers and parents a rich amount of data on their children's academic achievement and well-being that they otherwise would not be able to access.

People Need Access to Data at Key Transition Points through Their Education and Workforce Journeys

States must reorient their SLDS toward access that enables people to use data to make informed decisions about education and workforce pathways. With a diverse set of partners, DQC has identified a set of transition points along the early childhood to workforce pathway where access to data from multiple systems is necessary to make decisions.[5] DQC and our partners focused on these transitions because they reflect data that states have long prioritized and have clear policy drivers, available funding streams, and legal frameworks that have been in place for a number of years. The work to ensure that everyone has access to the data they need to support the following five transition points can start *now*. **SLDSs must be designed to:**

- Help students seamlessly navigate transitions **from high school into two- and four-year college;**

- Enable students to seamlessly navigate transitions **from high school into quality jobs and career development programs** (e.g., nondegree credentials, industry-recognized credentials, apprenticeships);

- Connect students to the supports they need to **complete their postsecondary education;**

- Enable **job seekers to navigate education and career pathways** that lead to family-sustaining careers; and

- Allow **researchers to access the data they need** to produce timely, useful research that enables the field to understand transitions, outcomes, and what works.

Ensuring access to data to enable decisionmaking at two additional key transition points is further away but still necessary. The early childhood data ecosystem (including related legal and privacy frameworks) is not quite as mature as other data systems. In addition, K–12

---

5   See Appendix B.

leaders have been clear that they need data about their students who receive services outside of school. But more foundational work needs to be done on the ecosystem of K–12 and data privacy before states can address these transition points. As states make investments in improving their data systems, they should also consider designing their SLDS to:

- Illuminate the **experiences of young children** to support their kindergarten readiness and overall well-being; and

- Enable students to receive the **in- and out-of-school support** to meet their academic and nonacademic needs.

Of course, other transition points along the education and workforce pipeline need attention. But in addition to their prioritization based on maturity of data, relationships, and funding, these seven areas rose to the top during interviews and research with state data and program leaders, national and state research and

advocacy organizations, national constituent groups, and policymaker membership organizations.[6]

Based on their own state context, leaders should determine for themselves the best way to support data use during these transition points and which of these transition points they should address first. Seeking feedback from a range of voices from across the state—including community members, local leaders, education and workforce system leaders, state legislators, and advocacy organizations—will ensure that leaders are prioritizing their state's most pressing concerns. Together, this group can reach agreement on where to start to provide the greatest return on investment and where existing groundwork could support efforts to enable data use during one or more transition points. Although reaching this kind of agreement might take a significant amount of time, this step is critical to ensure that the next iteration of a state's SLDS is designed and functions as needed by individuals, communities, and leaders within the state. Taking this kind of engaged, thoughtful approach can also ensure that this new SLDS evolves with the needs of the state's residents and leaders.

To Provide Meaningful SLDS Access, States Must Act

States are best positioned to provide access to information at scale for the following reasons:

- States have access to the expertise and capacity (e.g., legal expertise) needed to deliver robust data and ensure that it's kept safe.

- The state's scale allows it to operate efficiently, enabling it to develop access tools and functionalities that work across school districts, local workforce boards, and local governments.

- States can maximize the value of the data they collect from local entities by linking data across systems and sectors and providing tools for use across the state.

Enhancing an SLDS in this way isn't about just investing in up-to-date IT or buying an off-the-shelf tool. States will fail if they build something without regard to how it will be used, by whom, and under what conditions or without first attending to the policy conditions necessary for success—privacy, security, training, and community engagement.

To ensure their SLDS delivers the intended impact for individuals, states must have the following enabling conditions in place:

- **Political will:** The hardest part about building data systems is not making technology decisions or creating business rules, it is getting leaders like governors and agency heads to decide that this issue is worth committing to. Investment from leaders at these levels provides systems with the needed resources and people, air cover for hard decisions, and the bully pulpit to push the work forward. The ultimate success and sustainability of any user-centered SLDS effort depends on intentional system design built from broad community engagement and trust, bolstered by executive-level leadership.

- **Governance:** A state-level governing body composed of leadership-level representatives from state agencies provides the necessary structure and accountability in which to define clear purposes, roles, and responsibilities for all participating agencies. These entities ensure strong processes for collecting and using data as well as accountability for data quality, privacy, and security. A cross-agency governing body also creates forums for communication and decisionmaking that are open to and include input from the public as well as local government. Legislation is the strongest path to sustainable, leadership-level governance.

---

6   See Appendices B and C.

An SLDS is ideally governed by a cross-agency body consisting of leadership-level representatives from the agencies that provide data to the system. This autonomy will enable the SLDS and its governing body to be "data Switzerland," with no agenda beyond creating data policy, while centering privacy, equity, and timely access.

- **Privacy:** Determining how to build out access while centering privacy is not an easy undertaking. As a data steward, the state has a responsibility to implement all the necessary policies and practices to keep people's data safe. This work should take place as decisions are being made about the design the state's data system, not as an afterthought. Creating clear rules and guidelines at the state level reduces the number of disparate and often conflicting interpretations of privacy laws that might pop up among different agencies or local governmental entities. The state must make transparent for data users what data is accessible under what circumstances.

- **Technology infrastructure:** States should invest in the infrastructure, technological ability, privacy and security practices, and functionality to allow users to securely access data. Local governments, workforce boards, school districts, and community organizations should not have to reinvent the wheel by constructing separate, expensive tools for accessing the state system—state data should be a value add enabled by technology implemented at scale.

- **Talent and human capacity:** Many states are just beginning to establish a robust SLDS and governing body; this is the time to think strategically about the human capacity needed to sustain the system. A chief data or information officer who can lead the SLDS work is important. Equally important is a chief privacy officer who can provide guidance, clarity, and uniform interpretations of privacy law for state agencies. In addition to these leaders, an SLDS governing body needs a cadre of diverse staff such as internal researchers, analysts, programmers, and IT technicians to support its work in the same way any state agency needs strong, qualified, committed staff. To attract and retain these individuals, states should create standardized job descriptions and career ladders for data personnel at all levels.

- **Investment:** Data systems, like all technology, are not stagnant. They need to evolve as technology and demand do, keeping pace with innovation. This work requires sustained funding such as line items in the state budget, dedicated grant programs, or blending and braiding of federal funding streams. Funding must include support for not only technology but also human capacity, training, and development to maintain and operate the system.

Attending to these conditions is as important as building a user-centered SLDS. Together, they allow states to design an SLDS that can help drive positive impacts for students, workers, and families. Governors, cabinet secretaries, and state legislators who understand the value strong data systems can play in changing people's life trajectories—be that helping students recover lost instruction, building a future-ready workforce, or increasing statewide college attainment—need to use their platforms to champion the creation of these enabling conditions. And even with these enabling conditions in place, states need to take action to create intentional, formal structures that can be sustained over the long term.
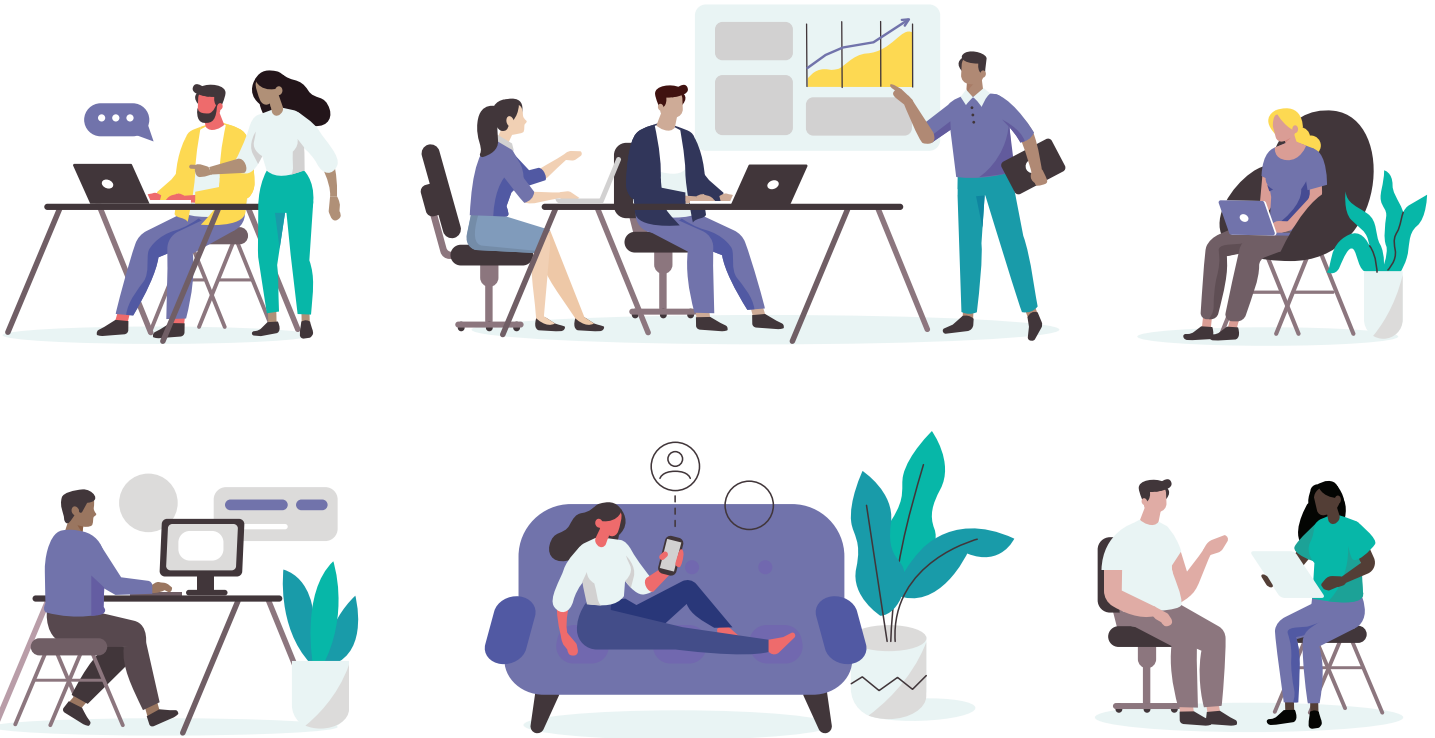
Federal Actions Can Support State Efforts

The federal government has the ability to both ease and expedite state efforts to improve their SLDS. The federal government created the Statewide Longitudinal Data Systems Grant Program in the Education Technical Assistance Act of 2002 and its expansion through ARRA, leading to the development of the K–12 data systems that exist across the country. This grant program is one of the primary reasons that state K–12 data and data systems are stronger than most other systems along the P–20W pipeline. So if past is prologue, federal government focus and support could lead to big movement once again. Federal leaders can support state efforts to improve their SLDS in the following ways:

- **Clarify how states can use federal funds.** State and local leaders continue to question how federal funds may be used to support data modernization efforts. Providing clear guidance and technical assistance (TA) on how funds may be used, braided, and blended to support SLDS modernization would eliminate the hurdles experienced by many entities. To that end, the Office of Management and Budget (OMB) should create a common-sense, simplified cost allocation approach to encourage states to use existing federal funding streams to build more efficient, robust SLDSs that incorporate education, workforce, health, human services, and other relevant data on populations served by multiple federal programs. This effort would overcome the unintended financial barriers that result from outdated, poorly aligned OMB and agency rules and guidance regarding permissible uses of grant funds for data-related activities.

- **Distribute federal funds in an integrated way.** Funding is currently spread across systems in ways that make data siloed and disparate. To create fully linked and functional data systems, the federal government should consider a new approach to funding. The administration should adopt the recommendation in the *Advisory Committee on Data for Evidence Building: Year 2 Report* to establish a new block grant to support cross-program data infrastructure improvements and data modernization. The Advisory Committee's recommendation recognizes the critical need to make significant investments that are not tied to a specific program but rather are designed and administered in a manner that requires collaboration in service of consolidating state data to support individual needs.

- **Fund source systems.** Congress should continue to support and grow programs that fund the SLDS source data systems like the Department of Education's Statewide Longitudinal Data Systems Grant Program and the WDQI, which is a joint program of the Departments of Education and Labor. An SLDS is only as strong as the data contributed to it, so resources to maintain robust participating agency data infrastructures are critical.

- **Expand privacy TA.** States consistently mention the lack of support and TA for privacy-related concerns. While the Privacy Technical Assistance Center (PTAC) exists, evolving state and local privacy needs overwhelm its current capacity. To provide leaders more direct, real-time TA and guidance, the federal government should make additional investments in the PTAC and consider additional federal privacy TA centers.

- **Enhance basic definitions and records.** A fully integrated P–20W system draws from individual state data systems like K–12 and postsecondary, many of which collect and report data in accordance with federal laws and regulations. Standardization of some basics like definitions, requirements, and standards (e.g., how race and ethnicity are defined, data privacy requirements) at the federal level is critical. States also need specific enhancements—including wage records and access to military enlistment data—to understand postsecondary outcomes, job and credential quality, and the myriad pathways to and through K–12 into the workforce. The federal government should make this information available to states in a manner that allows states to understand their residents' educational and career outcomes while preserving individual privacy.

- **Develop roadmaps and highlight best practices.** One of the primary roles the federal government plays for state and local governments is as an aggregator of research, evidence, and best practices. In this space, the Departments of Education and Labor, in particular the State Support Teams, already provide a great service individually. That work could be enhanced if they jointly identified some leading states with robust P–20W systems that have started or are interested in modernizing those systems to provide greater access. Even better, federal leaders could provide support to help those states in their efforts so that others have some examples to follow. Documenting the work of these best practices through short, easily accessible case studies, interviews with leaders, and roadmaps that provide a step-by-step process a state could follow would assist all states in starting down the modernization path.

The Time Is Now

States must act to orient SLDSs to meet the needs of *people*. Individuals, families, educators, communities, and policymakers must have access to the information they need to make decisions about their futures and support those navigating education and workforce transitions. Until access is a reality, too many states' investments in data systems will remain "on the shelf," oriented more toward compliance than toward the important work of solving problems and providing the information that helps individuals, the public, and policymakers answer their questions and make decisions. **The work must start now.**

Appendix A:
GLOSSARY

Administrative Data: Data that is collected during the routine process of administering programs and used to support evaluation, analysis, and research. Reusing administrative data is essential to support audit, evaluation, research, and evidence-based practice in public policy and programs.

Source: Actionable Intelligence for Social Policy, *Finding a Way Forward: How to Create a Strong a Legal Framework for Data Integration* (2022)

De-Identified Data: Records that have enough personally identifiable information removed or obscured so that the remaining information does not identify an individual and there is no reasonable basis to believe that the information can be used to identify an individual. These records have a re-identification code that may allow the recipient to match information received from the same source.

Source: National Center for Education Statistics, *SLDS Technical Brief: Guidance for Statewide Longitudinal Data Systems (SLDS)* (2010)

Directory Information: Information contained in the education record of a student that would not generally be considered harmful or an invasion of privacy if disclosed.

Source: National Center for Education Statistics, *SLDS Technical Brief: Guidance for Statewide Longitudinal Data Systems (SLDS)* (2010)

Early Childhood Integrated Data System (ECIDS): A system that collects, integrates, maintains, stores, and reports information from early childhood programs across multiple agencies within a state that serve children and families from birth to age eight. Typically, the data included in an ECIDS is related to the individual child, the child's family, the classroom, the program/providers, and other services that provide comprehensive care and education for young children.

Source: Cochenour, Missy, et al., Institute of Education Sciences Statewide Longitudinal Data Systems Grant Program State Support Team, *An Early Childhood Integrated Data System*

Integrated Data System: A system that connects data over time and across sectors to provide data insights that support leaders in answering policy questions, directing resources, and better supporting individuals.

Source: Data Integration Support Center at WestEd, *Understanding and Overcoming Regulatory Barriers for Integrated Data Systems* (forthcoming)

Interoperability: The quick and easy transfer of data between systems via a common set of data standards (e.g., definitions, codes, technical specifications).

Source: National Center for Education Statistics, *Traveling Through Time: The Forum Guide to Longitudinal Data Systems* (2010)

P–20W Data System: A subset of an SLDS that connects individual-level data from early childhood, K–12 education, postsecondary education, and workforce state agencies over time.

Source: DQC, *What Are P–20W Data Systems?* (2022)

Personally Identifiable Information: Under FERPA, refers to a student's name or identification number, as well as other information that can be used to distinguish or trace an individual's identity either directly or indirectly.

Source: National Center for Education Statistics, *SLDS Technical Brief: Guidance for Statewide Longitudinal Data Systems (SLDS)* (2010)

Postsecondary Data System: A state-level data system in which disaggregated student and institutional data is collected, stored, and secured by a state higher education agency for the purposes of policy development and evaluation (sometimes also called postsecondary student unit records systems).

Source: State Higher Education Executive Officers Association, *State Postsecondary Data Research Partnerships: Strong Foundations 2020* (2020)

Statewide Longitudinal Data System (SLDS): A subset of integrated data systems that connects individual-level data from participating state agencies over time. An SLDS is:

- STATEWIDE: Brings together and links data or records from multiple state agencies. Most data is from early childhood, K–12 education, postsecondary education, and workforce data systems—sometimes called the P–20W agencies—but the SLDS itself is not owned by any of these agencies alone.

- INDIVIDUAL LEVEL: Includes data that is specific to individual people. An SLDS may contain identifiable information or be anonymized.

- LONGITUDINAL: Captures data from the same population over multiple years and links over time individual-level data that is primarily from early childhood, K–12 education, postsecondary education, and the workforce.

Source: DQC, *What Are P–20W Data Systems?* (2022)

Workforce Data System: A longitudinal system that links workforce data, including:

- EMPLOYMENT DATA: Data collected through state agencies, most often on a quarterly basis, to inform the state and public about the employment status and wage records of citizens in the state or region.

- WORKFORCE PROGRAM DATA: Records from state or federal programs that have reporting requirements, as well as programs sponsored through different trade organizations, career and technical education, apprenticeships, and adult education services. These programs include those administered or funded through the federal Workforce Innovation and Opportunity Act.

- LABOR MARKET INFORMATION: The analysis of job markets by local areas, regions, or states based on real-time job postings of businesses and industries in the area. Companies such as Burning Glass are helping states and cities make these real-time analyses of labor market data.

Source: National Conference of State Legislatures, *A Legislator's Guide to Workforce Data* (2018)

Appendix B:
POLICY AND ADVOCACY PARTNERS

DQC thanks our policy and advocacy partners for their collaboration, including their insights, advice, and expertise, on this work. The views expressed in this brief are those of DQC and do not necessarily reflect the views of the organizations listed below.

- AASA, The School Superintendents Association
- Advance CTE
- All4Ed
- America Achieves
- America Forward
- American Federation of Teachers
- Chiefs for Change
- City Year
- Council of Chief State School Officers
- Credential Engine
- Data Foundation
- Data Funders Collaborative
- Education Commission of the States
- The Education Trust
- Excel*in*Ed
- First Five Years Fund
- Institute for Higher Education Policy
- Jobs for the Future
- Knowledge Alliance
- Leadership Conference for Civil and Human Rights
- MDRC
- National Association of State Boards of Education
- National Center for Learning Disabilities
- National Conference of State Legislatures
- National Governors Association
- National League of Cities
- National PTA
- National Skills Coalition
- National Urban League
- New America Foundation
- Results for America
- State Higher Education Executive Officers Association
- TeachPlus
- Third Way
- UnidosUs
- U.S. Chamber of Commerce

Appendix C:
INTERVIEWS CONDUCTED

DQC thanks the following state leaders and partners for their generosity in taking time to discuss the current state of SLDSs and potential opportunities for improvement. The views expressed in this brief are those of DQC and do not necessarily reflect the views of the state leaders listed below.

- Nate Barrett, Vice President of Programs and Development, Coleridge Initiative
- Sarah Bennett, Senior Program Manager, Partner Engagements and Special Projects, Jobs for the Future
- Amanda Bergson-Shilcock, Senior Fellow, National Skills Coalition
- Bridget Blount, Chief Impact Officer, Baltimore's Promise

- Heather Boughton, Director, Education Policy Implementation, Results for America
- Sarah Broome, School-Based Medicaid Consultant and Former School Founder, Thrive Academy
- Catherine Brown, Senior Director of Policy and Advocacy, National College Attainment Network
- Tyler Brown, Senior Director of Engagement and Analytics, Indiana Management Performance Hub
- Melissa Canney, Policy Director, Innovation, Excel*in*Ed
- Scott Cheney, Chief Executive Officer, Credential Engine
- Diane Cheng, Vice President of Research and Policy, Institute for Higher Education Policy
- Abby Cohen, Manager, Partner Engagement, District of Columbia Public Schools
- Catherine Davis, Director of Policy, Child Care Associates
- Bill DeBaun, Senior Director of Data and Strategic Initiatives, National College Attainment Network
- Eshwar Eswaran, Director, LEAD, JFF Labs, Jobs for the Future
- Robert Fisher, Senior Advisor, Results for America
- Dean Folkers, Director, Education Data and Technology, Council of Chief State School Officers
- Himani Gupta, Director for Research & Evaluation, ASAP | ACE, The City University of New York
- Daria Hall, Early Childhood Education Director, Milwaukee Succeeds
- Lesley Hirsch, Assistant Commissioner, Research & Information, New Jersey Department of Labor and Workforce Development
- Randy Hudgins, Director of Research & Policy Analysis, Georgia Department of Early Care and Learning
- Christopher D. Jones, Commissioner, North Dakota Department of Health and Human Services
- Erin Joyce, Associate Director, Ohio Education Research Center, The Ohio State University
- Sara Kerr, Vice President, Education Policy Implementation, Results for America
- Carlise King, Executive Director, Early Childhood Data Collaborative, Child Trends
- Carrie Klein, Senior Policy Analyst, State Higher Education Executive Officers Association
- Jim Kohlmoos, Principal, EDGE Consulting Partners
- Patrick Lane, Vice President, Policy Analysis and Research, Western Interstate Commission for Higher Education
- Carla Mike, Manager, Connected Schools Initiative, District of Columbia Public Schools
- Lisa Neilson, Research Scientist, Center for Human Resource Research, The Ohio State University
- Amelia Parnel, Vice President for Policy Research and Advocacy, National Association of Student Personnel Administrators
- Morgan Polikoff, Associate Professor of Education, University of Southern California Rossier School of Education
- Bentley Ponder, Deputy Commissioner, Quality Innovations and Partnerships, Georgia Department of Early Care and Learning
- Lee Rector, Director of the Texas Workforce Investment Council, Texas Workforce Commission
- Elliot Regenstein, Partner, Foresight Law + Policy
- Lizzette Reynolds, Vice President, Policy, Excel*in*Ed
- Karin Scott, Chief Performance Officer, Child Care Associates
- Nabil Shahin, Director, Integrated Data, Research and Evaluation, Santa Clara County Office of Education
- Austin Slaughter, Research Associate, Postsecondary Education, MDRC
- Meaghen Spencer, Manager, Data Services, Data Governance & DataZone, Santa Clara County Office of Education
- Rachael Stephens, Program Director, Workforce Development & Economic Policy, National Governors Association
- Paula Arce Trigatti, Director, National Network of Education Research-Practice Partnerships
- Rachel Vilsack, Strategic and Policy Engagement Manager, Credential Engine
- Steve Voytek, Policy Advisor, Foresight Law + Policy
- Ginger Walker, Senior Data Capability Specialist, StriveTogether
- Candace Williams, Data & Research Manager, Advance CTE
- Susan M. Williams, Director, Office of Data Services, Virginia Department of Education
- Amanda Winters, Program Director, Postsecondary Education, National Governors Association