SAYING YES TO STATE LONGITUDINAL DATA SYSTEMS:
Building and maintaining cross agency relationships

State longitudinal data systems match information about k-12 education, higher education, training, and employment to help stakeholders better understand how education and workforce training programs are preparing students to succeed in the workforce. They can be used to fulfill reporting requirements or to answer research questions of importance to state policymakers. They can also help institutions improve their programs, and assist students in making informed decisions about their education and training options.

In order to provide actionable information to stakeholders, state longitudinal data systems use administrative data that state agencies collect through administering programs. Thus, state longitudinal data systems must maintain strong working relationships with the state agencies collecting necessary administrative data. These state agencies can include K-12 and higher education agencies, workforce agencies, and those administering social service programs such as the Supplemental Nutrition Assistance Program or Temporary Assistance for Needy Families.

When state longitudinal data systems have strong relationships with agencies, agencies willingly and promptly share their data with the system, engage with data governance when needed, approve research requests in a timely manner, and continue to cooperate with the system over the long term. If state agencies do not participate with their state's longitudinal data system, the work of the system is put into jeopardy. States may find that research and performance reporting can be stalled or stopped outright.

Kentucky and Virginia have been able to build and maintain support for their systems among state agencies. Their example demonstrates how states can effectively utilize their state longitudinal data systems.

Case study: Kentucky

The Kentucky Longitudinal Data System (KLDS) is a centralized system maintained by the Kentucky Center for Statistics (KYSTATS). Current participating agencies include:

- Council on Postsecondary Education
- Education and Workforce Development Cabinet
- Education Professional Standards Board
- Kentucky Department of Education
- Kentucky Higher Education Assistance Authority

Initially, KLDS consisted of three state agencies, known as the "P-20 Data Collaborative." The initial participating agencies shared a key understanding about their agencies' data — while it was powerful information within their respective organizations, it could be exponentially more powerful if they shared data across agencies. The partnership was subsequently expanded through two executive orders and legislation which added two additional partner organizations, established an independent state office, and formalized the governance structure. Kentucky officials note that relationships with the two additional partner organizations were developed organically through personal relationship-building based upon a shared understanding of the value agencies could realize by engaging in this work.

KYSTATS staff attribute much of their continued strong relationship with the participating agencies to their governance structure and ability to increase agency capacity. Each participating agency is represented on the KLDS governing board, which is responsible for creating the KYSTATS research agenda. Since participating agencies determine the focus of the office, this fosters true ownership of the KYSTATS work and mission. Moreover, KYSTATS and the KLDS are able to provide agencies with expanded data and research capacity.

KYSTATS staff also attribute agency confidence in the system to KYSTATS' strong reputation within the state, likely resulting from its marketing and communication strategy. When first hired, KYSTATS staff are trained to understand KLDS, and to promote the system and the office to external stakeholders. At informal one-on-one meetings as well as at large events, staff often present customized pitches about how KLDS can promote informed decision-making. Custom presentations can focus on the reports, tools, and services most relevant to a particular audience. KYSTATS staff have also found success in presenting with a practitioner from the field that has used a KYSTATS tool successfully. For example, a former superintendent has provided actual examples of how she used KYSTATS data to get funding for an educational program she created.

In order to ensure that agencies are confident in the security, confidentiality, and privacy of the data they are responsible for, KYSTATS shares their data protection strategies. They note that they use a unique identifier to replace individual or agency identifiers (such as social security numbers) so that all data request fulfillment and reporting are performed with data that do not include Personally Identifiable Information. In addition, the state only shares data pursuant to a memorandum of understanding (MOU) that governs how the data can be used. These MOUs fully protect personally identifiable information by requiring adherence to state and federal privacy laws, and by placing tight restrictions on what data may be shared with collaborating agencies or external institutions. The required MOUs also provide guidance on sharing research outcomes and indicate that data may not be linked to any other system not already listed. Lastly, the MOUs provide terms and guidance on destroying the data after use.

Case study: **Virginia**

The Virginia Longitudinal Data System, VLDS, is built on a federated data system of equal partner agencies. VLDS participating state agencies currently include:

- Virginia Department of Education
- State Council of Higher Education for Virginia
- Virginia Employment Commission
- Virginia Community College System
- Virginia Department of Social Services
- Virginia Department for Aging and Rehabilitative Services
- Virginia Department of Health Professions
- Virginia Department for the Blind and Vision Impaired
- Virginia Department of Juvenile Justice
- Office of Children's Services

VLDS also includes two non-governmental organization members:

- Virginia Goodwill Network
- Virginia Early Childhood Foundation

Initially, VLDS consisted of four agencies, but has since expanded to ten participating state agencies including education, workforce, social services, healthcare, and other services. Agency participation is voluntary and driven by three key elements: autonomy of specific organizational data governance structures, data security measures which must meet or exceed the standards adopted by the state, and engagement in a cross-agency VLDS Data Governance Council. VLDS is, at its core, a partnership of participating agencies.

Members of the VDLS Data Governance Council meet with prospective agencies and address any concerns or discomfort around data sharing. To help assuage this discomfort, the Council invites prospective members to sit in on Council meetings to learn how VLDS operates and to develop trust in the process and the individuals involved. Further, agencies are often reassured to hear that they will maintain their own internal data governance, source systems, and data collections. When new agencies are taking their initial steps to on-board their data into the VLDS, one of their hesitations is often control over the data that will be shared. In a federated system, the agency maintains complete control of their data. Further, all research projects must be approved by all participating agencies.

Confidence of prospective agencies is further bolstered after the data security measures are reviewed. Data security has been the primary concern of the VLDS design architecture from the beginning. Specifically, within the VLDS, when a research project is approved, the system merges data across the participating state agencies in a complex double de-identifying hashing process that leaves private data behind the existing firewalls of the participating agencies, thereby providing agencies with greater confidence in data security.

Finally, each participating agency is an equal voting member of the VLDS Data Governance Council. The Council meets monthly to discuss emerging cross-agency research, data challenges, and growth of the system. VLDS policy and procedure decisions are made by the voting members of a Data Governance Council on a consensus basis (meaning agencies unanimously agree that they can "live with" the policy or procedure decision). Participation in the Council provides access to collaborative efforts and cross-agency data-focused relationships that are unprecedented in Virginia. Participation in the Council also introduces members to a lifestyle of enhanced sharing and trusted relationships.

State considerations

In order to function well, it is essential that state longitudinal data systems contain data from across the education and workforce spectrum. Acquiring this data requires a strong relationship with state agencies, including K-12, higher education, and workforce agencies. Both Kentucky and Virginia have done this successfully, and can serve as a model for other states looking to do the same. In order to build and maintain strong relationships with participating agencies, state longitudinal data system leaders could take the following actions:

- **Communicate tailored information about benefits:** In order to build support with participating agencies, state longitudinal data system staff can share tailored messages about how stakeholders can benefit from participating in the state longitudinal data system. Discussions could include details about available data tools, how data matching can make legally mandated reporting easier, or how participating can enable the agency to answer research questions of interest. State longitudinal data system leaders can also bolster their argument by providing examples of how other stakeholders have benefited from participating in the system.

- **Clearly explain privacy and security practices:** Many state agencies are concerned about privacy and security and the need to protect the data for which they are responsible. For that reason, some agencies may hesitate to share their data. By proactively providing detailed information about privacy and security practices, state longitudinal data system leaders can ease these concerns.

- **Ensure participation in data governance:** State longitudinal data system leaders can ensure continued support for the system by enabling the leaders of participating agencies to have a sense of ownership over the longitudinal data system. States may do this by creating a governance or advisory council with a representative from each participating agency. That council can set research agendas, decide what data is shared, with whom, and for what purposes, and set privacy and security measures. State longitudinal data system leaders may wish to invite representatives of prospective participating agencies to these meetings, so that they can better understand what participation entails.