Advancing the Education to Workforce System
Data Infrastructure Policy Brief

Data Infrastructure Overview:
Implementing Colorado House Bill 22-1349 and Beyond

Background
In the spring of 2022, The Attainment Network, with support of its funders, identified areas of further policy/regulatory support needed to advance the education to career ecosystem in Colorado. Based on multiple interviews with internal, external, and community partners, The Attainment Network presents a series of policy briefs with analysis of the issues, national best practices, current local best practices, and recommendations to accelerate learner success in Colorado.

Data Infrastructure
Building the proper infrastructure to support and enhance the alignment of the education-to-workforce system is critical. The second and third generations of state P20 longitudinal data systems will utilize new technology, be learner-centered by allowing data to follow the learner, and better align postsecondary and workforce systems to serve the learner, institutions, and industry. These data systems reflect the evolving and growing measures of success to include employment outcomes, such as wages, skills, and knowledge acquired in and out of the classroom. Colorado continues to have a strong data infrastructure, which was recently strengthened and expanded by the passage of CO HB22-1349 (Postsecondary Student Success Data System).

Goal
Support implementation of CO HB22-1349 and strategize the next-generation education-to-workforce data system in Colorado by ensuring the system:
→ captures alternative pathways to workforce apprenticeships, certifications, and upskilling/reskilling programs.
→ incorporates more effective success metrics, including work-based learning, short-term credentials, and competency-based education.
→ seamlessly tracks learner outcomes throughout the education-to-workforce journey.
→ adapts and connects to evolving measures of learner success.

Problem Statement
Accurately evaluating what works – and what doesn’t – to improve learners’ progression through their education/training and into the workforce requires the robust use of a reliable and connected data system. States play a pivotal role in collecting and using data to empower learner choice, to catalyze continuous institutional and programmatic improvement, and to
develop evidence-based solutions that promote postsecondary access, success, and career advancement for all learners. However, certain challenges have prevented states from fully leveraging education and workforce data, including difficulty matching and sharing data across agencies and organizations, investments in technological advancements and solutions, adequate funding for training and implementation, data governance issues, and legal and regulatory compliance barriers.

Solution
Improvements in data systems will drive transparency, alignment, and use, resulting in more focused solutions for improved outcomes for learners, especially for low-income and learners of color and adult learners. Integrated and accessible data systems can support and enable effective data use that can transform policies and practices to better serve learners whose opportunities to pursue and succeed in postsecondary education have historically been limited, including for low-income, learners of color, and adult learners. Public-facing state data systems made accessible through easy-to-use consumer tools provide learners and families an accurate picture of what to expect from different educational options, the costs and projected return on investment, enabling learners and families to make informed choices about postsecondary education. Quality data can:

→ support learner transitions into the workforce and along their career path.
→ help to identify and close equity gaps in postsecondary attainment.
→ support the development of education and training strategies that are responsive to workforce demand.

When connected, education and workforce data systems are readily available and accessible, learners can identify what skills and education are needed for the career of their choice, while wage transparency enables learners to better plan for their future.

Policy and Best Practices
→ Adequately fund the development, maintenance, staffing, and use of state educational and workforce data systems.
→ Drive an evidence-based culture that relies on and prioritizes data so that informed decisions can be made regarding competing demands.
→ Invest in the development of a quality user interface to support community, family, and learners in the use of public-facing data tools.
→ Adequately fund ongoing communications strategies and training around access and use of available public-facing tools.
→ Develop the integration and reporting of data on work-based learning and competency-based education.
Advancing the Education to Workforce System
Data Infrastructure Policy Brief

→ Craft a compelling message around the value of data and build an advocacy campaign through the help of a state data champion/s.
→ Prioritize security and privacy and ensure transparency about those measures.
→ Focus on accessibility to systems data for research and evaluation purposes to drive data informed civic and educational improvement strategies.
→ Lead with good data governance practices and ensure all partners are on board with their responsibilities and support.

In Colorado

→ Several years ago, Colorado state agency partners launched MyColoradoJourney, a centralized online platform expanding access to education and career information to help learners and job seekers create customized pathways to upgrade skills and credentials that lead to good jobs. Additionally, the tool streamlines services to be more cost-effective for the user and provides learning and skill development opportunities. The platform serves industry by matching skills needed for in-demand jobs with learners' experience and credentials. The platform is part of the Colorado Data Trust which includes many of the same partners and provides sound data governance, responsible data sharing, and technical infrastructure. Coloradofuturejobs.com is a new platform that provides county-level information to Colorado job seekers. While there is more work required, these platforms provide a foundation for building further alignment across the education-to-workforce ecosystem.

→ In 2022, Colorado passed HB22-1349 which requires the Colorado Department of Higher Education to develop learner success metrics that measure learner progressions through postsecondary education and the impact of postsecondary pathways on career opportunities and workforce success. The learner success metrics must include postsecondary success measures and workforce success measures. The bill requires the Colorado Department of Higher Education to create and maintain a statewide learner success data system that includes institution-specific interfaces and a public interface. While the passage of this bill continues to improve Colorado’s statewide longitudinal data system, our hope is the implementation of the bill will include additional success metrics like career and technical education, work-based learning experiences, and short-term credentials. Additionally, building the public interface with a learner-centered focus would allow the data to follow the learner, aiding in more seamless transfer between institutions and ensuring clear on and off ramps between postsecondary and workforce.

→ Forty states currently connect data between at least two of the four core systems (early learning, K-12, postsecondary, and workforce). Maryland’s P20 data system, a gold standard of a longitudinal data system – recently added corrections data, allowing for better tracking of education to employment programs shown to reduce recidivism.
Advancing the Education to Workforce System
Data Infrastructure Policy Brief

Hawaii, another model P20 data state, added in the requirement for career and technical education data to be included, allowing for better tracking and analyses of how career and technical education and other work-based learning programs impact education and workforce outcomes.

Several federal opportunities include creating a learner-focused longitudinal data system that would share program-level outcome information across state lines. This type of system could provide a comprehensive solution to answering many state-level questions around learner success, mobility, and workforce outcomes, while decreasing state-level reporting requirements. Until a federal data system exists, the Census Bureau’s recently launched the Postsecondary Employment Outcomes (PSEO) system can provide states with aggregate learner earning records based on school, degree level, and field of study. The Federal Employment Data Exchange System (FEDES), whose funding Department of Labor Employment Training Administration expired in 2018, was another system that provided states with earnings data on learners working in the federal government or the military. Reinstatement of FEDES is a possible solution to a federal longitudinal data system.

Pitfalls to Avoid

Not designing the system around the learner.

→ Systems need to reflect the individual journey of learners and be more fluid as they move in and out and around the education and workforce systems.

Not creating strong data governance.

→ These vital relationships across systems and state agencies need to be built on trust to ensure sustainability and data integrity.

Building a system that lacks accountability and funding mechanisms.

→ Sustainable, appropriated funding is necessary to continually upgrade platforms with emerging and improving technology. Accountability measures need to be embedded with data providers to ensure compliance with sharing and updating data and maintaining security measures.

Not investing in ongoing training and professional development to ensure the data systems are accessible, relevant, and can be utilized to make informed decisions.

→ User interface needs to be prioritized to ensure relevancy and functionality as the ultimate deliverable of the data system investment.

Not connecting data to workforce outcomes.

→ Employment and wage returns on educational investments must be seen as a core tenant of the system, with a focus on credentials and degrees that lead to earning a family-living wage.

Recommendations
Advancing the Education to Workforce System  
Data Infrastructure Policy Brief

- Infrastructure to support a seamless, learner-centered education-to-workforce system is a necessary component to accurately provide insight on the experience of a learner, and to determine what works, what doesn’t work, and what is needed in an evolving education-to-workforce system.

- Colorado needs this system to account for the true learner journey and not just traditional pathways. Work-based learning, earn-and-learn programs, short-term credentials, and postsecondary training programs all need to be captured as part of the learner’s story.

- Strong, dedicated funding is required to develop, maintain, staff, train, and use this state’s postsecondary data systems. Implementation of HB22-1349 presents the opportunity to build a dedicated, seamless, transparent, and usable data system.

Summary
The Attainment Network is piloting data projects to better understand the employment outcomes of learners who participate in career-connected pathways and directly enter the workforce, demonstrating how aligned data supports the learner journey as well as showcasing how multiple types of institutions and organizations use data together to evaluate and make decisions.

Many other states have demonstrated how quality data systems can be built and utilized. Colorado now has the opportunity through HB22-1349 to evolve its data system to better serve the needs of learners, families, institutions, and the workforce.