LAUNCH

# Smarter Systems, Stronger States:

## Opportunities to Improve State Data Systems Based on Insights and Learning from the Launch Initiative

ADVANCE CTE
State Leaders Connecting Learning to Work

ESG Education Strategy Group

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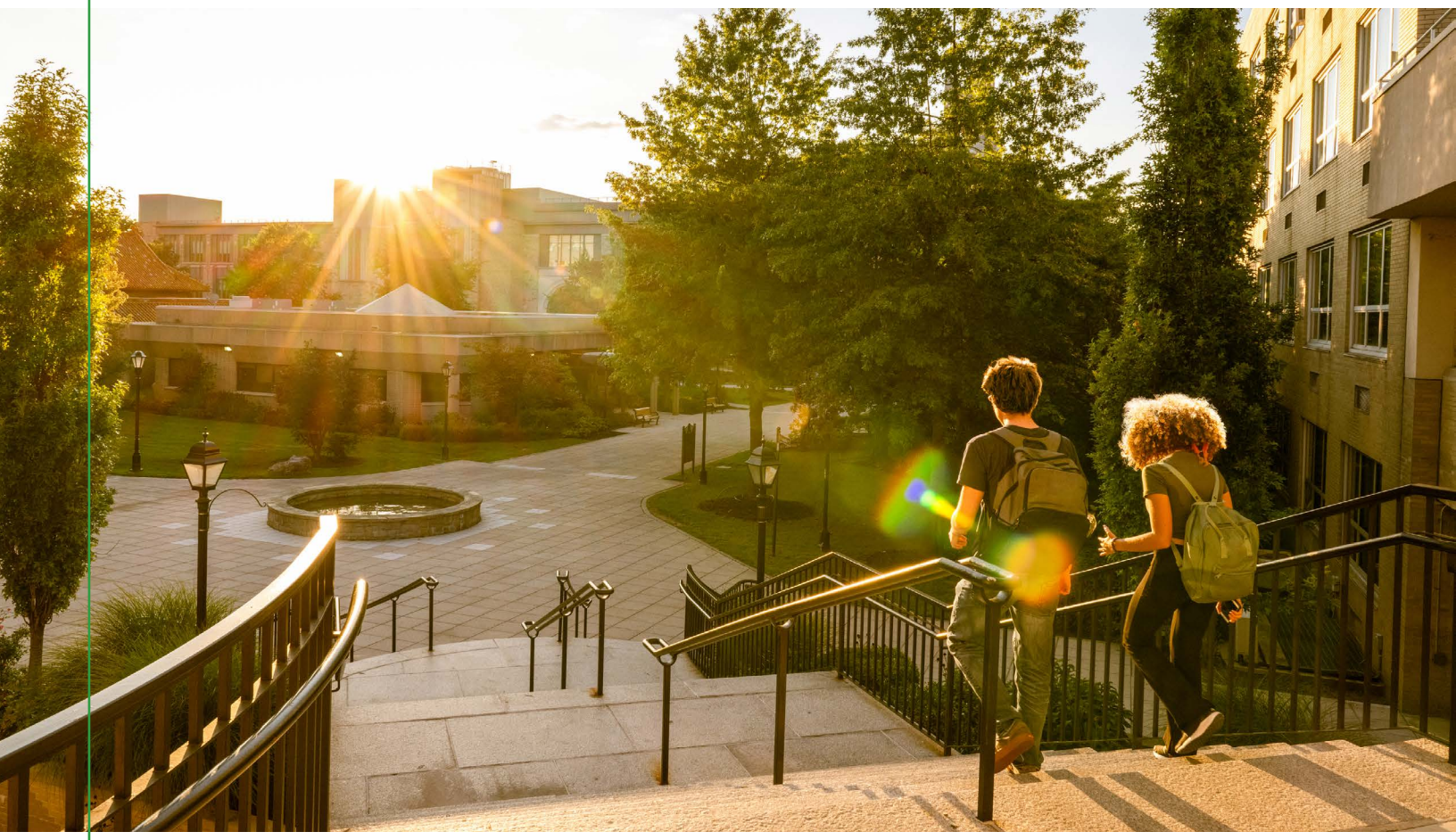

# Overview of Launch Initiative

Launch is a national initiative working to build sustainable education systems for every learner to have access to and succeed in high-quality college and career pathways. Launch is led by four national organizations that represent a unique combination of expertise and experience in advancing college and career pathways efforts at the national, state, and local levels: Advance CTE, Education Strategy Group, Jobs for the Future, and New America. Together, these organizations believe that when college and career pathways provide intentional, career-aligned courses that span secondary and postsecondary education, embed work-based learning experiences, and lead to credentials of value—and when these pathways are accessible to all learners—the education and workforce systems can be powerful drivers of economic opportunity.

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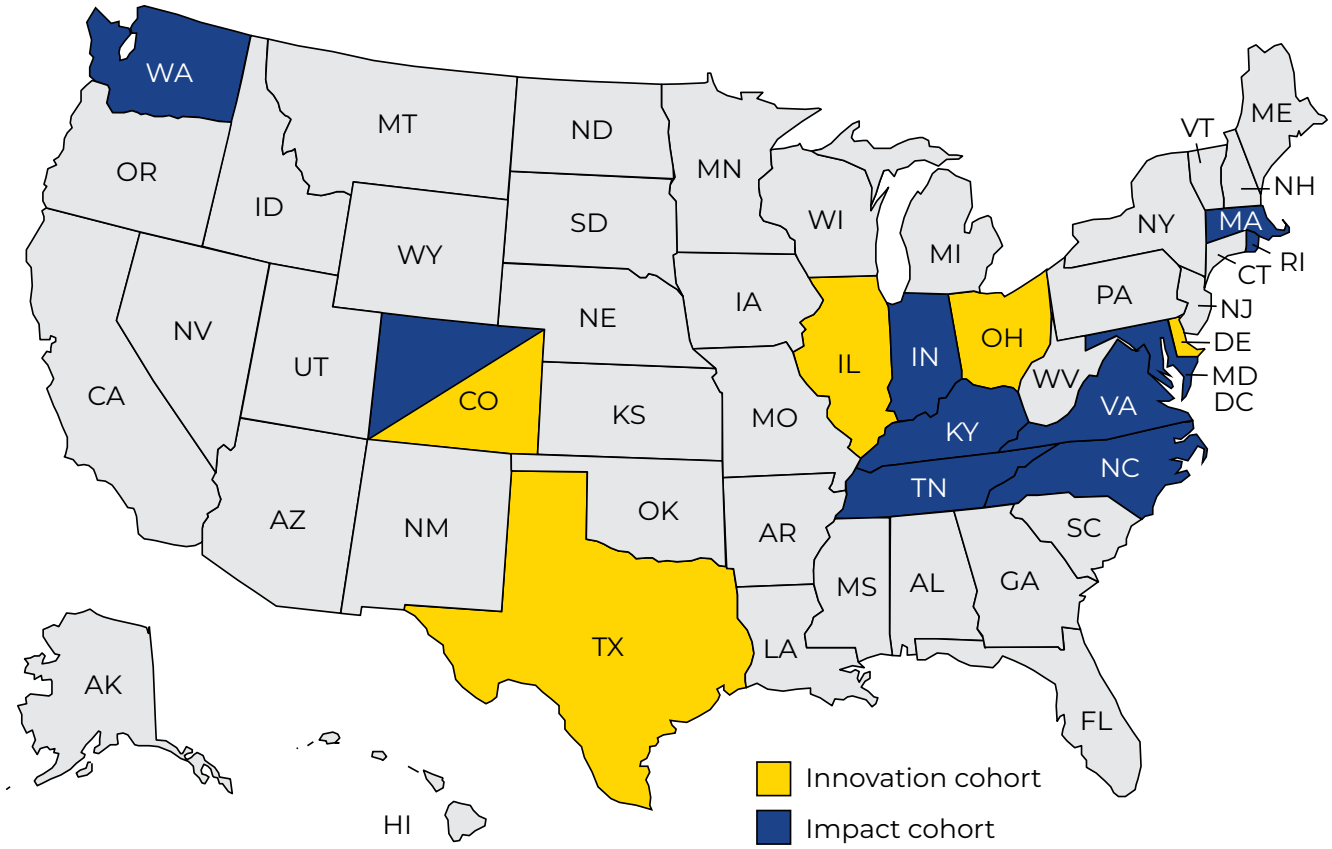
# About the Launch States

Since it began in 2022, Launch has supported 15 cross-sector site teams from 14 states made up of state and local K–12, postsecondary, and workforce leaders; intermediary organizations; and private sector champions. In the first 2 years of the Launch initiative, site teams participated in one of two cohorts: an Impact Cohort focused on interrogating and improving existing state systems and an Innovation Cohort focused on designing new systemic improvements that were responsive to user empathy research.




Through the first phase of Launch, sites assessed their existing college and career pathways systems; examined enrollment and outcomes data to identify access and achievement gaps; and developed plans and pilot concepts to remove barriers, improve quality, and increase access to sustainable college and career pathways systems, grounded in several pillars—funding/resources, policy and programming, partnerships, and data.

## How can states boldly reimagine data systems that drive alignment, innovation, and improved outcomes in pathways?

As states continue to build more sophisticated pathways systems, data systems and their use have not kept pace. Given increasing calls for tighter alignment across K–12, postsecondary, and the workforce, state leaders should be thinking smarter about the way they are designing and strengthening pathways and the data systems they are building to support them. States must cast an ambitious vision for learner success and map the course for getting there. What do they want to be true for all learners? How will they know they are being successful? How must their systems evolve from monitoring for federal compliance to measuring their learners' success?

**Data systems can drive the questions and provide the answers, becoming the tool to help inform strategy and practice and serve as a conduit for innovation and success.** Pathways leaders know and recognize the value of a strong data system that connects across sectors. Solid and reliable data infrastructure that provides state and local decision-makers the information needed at key decision points is crucial to identifying barriers to access, shining a light on best practices to grow and scale, and locating disconnects that hinder learner persistence and completion.

Yet, data collection and analysis has taken on an unfortunate reputation and is often viewed as a laborious and compliance-driven necessity, rather than a tool for continuous and meaningful improvement. In other words, state leaders have to think about data but may not necessarily see data as an essential tool for tracking progress, identifying gaps, and achieving their goals for learner success. They have a good reason: Systems have been developed piecemeal to address reporting requirements of individual funding streams, and these silos make tracking outcomes across institutions and programs difficult. Knowing whether policies and programs are having their intended effects involves the herculean task of connecting disparate systems while navigating complicated privacy and governance challenges.

**As part of their participation in Launch, Impact Cohort sites completed a data capacity assessment that allowed them to dig deeply into how they currently gather, analyze, and share learner data.** In aggregating results across the seven original Impact Cohort sites, the national partners noted that when sites struggled to identify and address specific learner barriers, the cause was often a limitation in their available data or ineffective data sharing. These challenges hindered the programmatic decision-making necessary to remove obstacles in a learner's path—such as course access or credit articulation—and design the appropriate interventions and supports.

The high-level takeaways from the data capacity assessment during the early work of Launch are presented here in this report as five *smart opportunities* that states should take advantage of to build stronger data systems.

### SMART OPPORTUNITY #1:

**Strengthen state infrastructure to connect across systems.**

Connecting data across state education and workforce systems is critical to monitoring learner transitions between programs to strengthen pathways and success.

### SMART OPPORTUNITY #2:

**Use disaggregated data to better serve learners.**

Disaggregating data helps illuminate disparities and gaps in learners' experiences within pathways to target resources, interventions, and policy changes where they are most needed.

### SMART OPPORTUNITY #3:

**Build data capacity among leaders at all levels.**

Supporting strong data systems requires offering professional development and ongoing support for the people expected to contribute to, and use information from, the state's systems.

### SMART OPPORTUNITY #4:

**Evolve from compliance reporting to strategic quality assurance.**

The why matters. Shifting mindsets around data to move from an association with compliance reporting to more strategic efforts to ensure pathway quality for learners will help prioritize the most important work—and help cut costs and effort on the rest.

### SMART OPPORTUNITY #5:

**Invest in tools that make data usable and accessible for all stakeholders.**

Identifying and investing in the tools necessary to better collect, track, and communicate data will increase buy-in and use of data to inform decision-making at all levels—from learners and families all the way to the statehouse.

The self-assessment tool included as an appendix will help states interrogate their current data system and practices, including what *smart opportunities* they are already leveraging and where else they can strengthen their efforts.

# SMART OPPORTUNITY #1:

## Strengthen state infrastructure to connect across systems

### LEARNING FROM LAUNCH

Sites in the Launch Impact Cohort reported a gap in connecting priority learner-level data—including learners' postsecondary choices and outcomes or where learners were awarded articulated postsecondary credit—across the education and workforce sectors. Five out of seven Impact Cohort sites reported having no capacity or low capacity to share college and career pathways enrollment data among institutions and systems. This finding points to a blind spot for states, which likely lack the insight to know whether and how learners are benefiting from Career Technical Education (CTE) coursework, participation in work-based learning opportunities, or completion of early postsecondary opportunities as they transition into postsecondary programs and the workforce.

- **60%** of states reported having the capacity to collect or link in-state postsecondary transition data at the learner level.
- **24%** of states reported having the capacity to collect or link qualified AND awarded articulated postsecondary credit.
- **12%** of states reported having the capacity to follow learners across systems to determine whether they are continuing on and completing the pathway they began in high school.

Cross-sector **collaboration** is a **cornerstone** for strong pathways. K–12, postsecondary, and workforce systems need to come together to set a common vision, identify shared priorities, and agree on mutual metrics of success. Without this alignment, learners are forced to navigate disjointed and fragmented pathways that lack the rigor and quality necessary to facilitate their transition into the workforce. Having a complete and accurate picture of pathways, as laid out by data, allows for more effective and efficient conversations about where the opportunities and barriers lie for learners. Data systems offer the starting point and the sustaining force, yet aligning across systems is, to put it mildly, not easy.

## A shared vision and mutual metrics defined across systems

States often lack the infrastructure necessary to make data sharing seamless, resulting in an arduous process to collect and link data. Even when data may be shared across systems, lengthy and complicated review, approval, and reporting procedures can result in lagging information that may not be available on the right timeline to influence programmatic, budgetary, or policy decisions meant to remove barriers and increase opportunities for learners currently moving through the pipeline. Developing a shared vision and common metrics of success ensures consistent and tight collaboration across systems when working to meet mutual goals and fulfill a commitment to working through barriers such as lagging data.

## Formal agreements that guide data sharing and accountability

Bolstering current infrastructure to better connect across K–12, postsecondary, and the workforce will require eliminating silos that exist across these systems to more seamlessly track learners through their education and their entry into the workforce. Effective data systems require formalized roles and responsibilities (whether in

statute, policy, or formal agreements across institutions) for how data are collected, evaluated, and used to maintain consistency and accountability, effectively measure outcomes, and reduce duplication. Formalizing these expectations supports long-term sustainability and often starts with establishing cross-sector data sharing agreements at the state and local levels and developing routines and processes to regularly analyze data and communicate with stakeholders.

### STATE SPOTLIGHT

**North Carolina's** Launch work emphasizes equitable access to career-connected learning. The North Carolina Longitudinal Data System (NCLDS) is a cross-agency data exchange and research partnership that links K–12, community college, and workforce data through formal memoranda of understanding between agencies. These agreements enable secure data sharing to support regional and state-level analysis of pathway outcomes. NCLDS is governed by a statewide board and multiple data governance committees.

## Cross-sector governance structures that support collaboration and data use

Cross-sector governance structures facilitate better data sharing, establish key statewide definitions, name quality indicators, and develop timelines and routines for using data to make decisions. Leaders should also center research questions that focus on identifying and closing disparities across learner groups through targeted interventions. The answers to these questions should inform what programs are offered and how they are funded.

Solving the challenge is hard but well worth the effort. When cross-sector stakeholders can align priorities and measures of success, the result is buy-in, ownership, and shared accountability. It also results in cost saving and improvements to pathways that better ensure a greater return on investment for learners.

# SMART OPPORTUNITY #2:

## Use disaggregated data to better serve learners

### LEARNING FROM LAUNCH

Even with the capacity to collect and use most pathways metrics, the state-level members of the Launch network reported not having the infrastructure to answer more sophisticated questions that require disaggregated data. While some data are required to be disaggregated (e.g., CTE data required for compliance with the Carl D. Perkins Career and Technical Education Act [Perkins V]), linkages across systems do not always allow for a more nuanced understanding of the full scope of learner groups' experiences with pathways (including work-based learning, advising, and transitions into postsecondary and the workforce) and for informed decision-making.

Although most state actors within the Launch network reported having some capacity to collect college and career pathways data, less than half (45 percent) of state actors have the capacity to disaggregate these data. States reported limited ability to disaggregate college and career pathways enrollment, persistence, and completion data by learner group.

Strong data infrastructure allows for matching individual records across disparate systems to better understand key trends within programs, especially how different learner groups are navigating their pathways. States can use this information to be more strategic in their allocation of resources, leveraging and braiding their funding sources to improve learner outcomes. This level of intentionality requires a strong understanding of the current state, a willingness to ask tough questions, and the courage to do things differently. Effective resource allocation requires a reliable and accurate data system that allows for drilling down into the available opportunities and outcomes of learners and communities.

## Disaggregated data used to evaluate and identify gaps in program outcomes

Leveraging data to understand the outcomes of their current policies and programs in different communities or learner populations will position states to make more informed decisions. The disaggregation of data by demographic (e.g., gender, race/ethnicity, socioeconomic status, special population status, military impacted), geographic, and/or programmatic factors allows for deeper insights into who is benefitting from current programs and practices and who needs additional support. State and local leaders should use these data to both report pathways participation and outcomes and **prioritize eliminating disparities** across learners and communities as they are designing and delivering programs.

### STATE SPOTLIGHT

The **Kentucky Center for Statistics** (KYSTATS) uses the Kentucky Longitudinal Data System to produce interactive reports that disaggregate learner outcomes by race and ethnicity, gender, socioeconomic status, and special populations. KYSTATS incorporates both quantitative data (e.g., longitudinal tracking of education and workforce outcomes) and qualitative insights (e.g., stakeholder feedback, community partner input, and regional context). Examples of reports include the **Dual Credit Feedback Report**, which shows participation and success metrics by subgroup, and the **Career and Technical Education Employer Connector**, which allows filtering by region and program enrollment. The state also uses return-on-investment metrics to help local leaders prioritize funding for programs that improve outcomes for underserved groups.

## Quantitative and qualitative data used to identify and address differences in learner outcomes

States can take additional steps to deepen their understanding of the barriers some learners or communities face and begin to unpack root causes of these disparities. Informed by what the data show at a high level, states can conduct qualitative research to contextualize the quantitative data. Research methods such as focus groups, interviews, and learner journey mapping elevate stakeholder and learner voice, allowing personal experiences to give context to the data, provide insight into the challenges, and inspire new and targeted solutions.

# SMART OPPORTUNITY #3:

## Build data capacity among leaders at all levels

### LEARNING FROM LAUNCH

Although work-based learning and advising are important elements of a learner's pathway experience, state leaders reported limited and differing capacity to collect and link metrics that provide insights into these components.

#### *Work-Based Learning*

- **71%** of state leaders reported having capacity to collect work-based learning completion data at the local level, compared to 41% reporting capacity at the state level.
- **33%** of state actors reported having a high capacity to share work-based learning completion data among agencies.
- **29%** of state actors reported having a high capacity to use work-based learning completion data to make programmatic decisions.

#### *Advising*

- **51%** of state leaders reported having capacity to collect advising participation data at the local level, compared to 8% reporting capacity at the state level.
- **17%** of state actors reported having a high capacity to share advising participation data among agencies.
- **17%** of state actors reported having a high capacity to use advising participation data to make programmatic decisions.

States reported having greater capacity at the local level to collect participation data, but capacity seems to diminish at both the district and state levels for more complex data processes, including data sharing and use across systems. This diminished capacity could be due to a variety of reasons, ranging from time and personnel constraints to the lack of professional development and training.

Having the right data takes states only so far if the intended users are not able to make sense of the information. Data fluency is a skill set that must be developed among leaders across roles and levels to ensure ownership and buy-in around data (e.g., Why is this important?), prioritization in data collection (e.g., What information do we need, and how do we get it?), and data-driven decision-making (e.g., What do the data tell us, and how do we move forward?). These conversations should be contextualized and made relevant to leaders, emphasizing the importance of data for meeting their respective goals and addressing their unique challenges.

## Leaders across roles and levels trained and supported to collect, use, and report data consistently

States should avoid making assumptions about what leaders know (even at the highest ranks) and instead build in expectations and guidance to make sure data are a consistent thread across all aspects of pathways work. Inconsistent data collection may signal a need to better train teams on how to gather and report data. To drive effective use, state and district leaders can make data fluency, especially the ability

to use the information effectively for improvement, a **priority in staff training and professional development**. Leader training should focus not just on collecting and reporting required data but also on building capacity for leveraging data holistically for decision-making. Leaders should also create timelines and routines to regularly review data on predictable cycles to build a culture of data use and inform key activities such as program improvements, budget allocations, and technical assistance. States might also consider investing in additional state or district-level staff dedicated to collecting, analyzing, and communicating data to strengthen capacity and ensure prioritization.

### STATE SPOTLIGHT

**Colorado** is working to build a more robust culture of data use. In 2024, the state hosted its first Career Technical Education Data Summit, bringing together more than 100 educators, leaders, and stakeholders to strengthen data capacity across the state's CTE ecosystem. The summit emphasized cross-sector collaboration, equity-focused data tools, and leadership development. It also modeled how states can build data literacy, foster strategic alignment, and empower leaders to use data for continuous improvement. By investing in shared learning and practical tools, Colorado is building the infrastructure needed to use data more effectively for continuous improvement and increase access to high-quality CTE programs statewide.

## Expectations for data use embedded in leadership position descriptions and evaluations

Building data capacity at all levels can drive improvements in system inputs and outputs. Data are the tool, not the outcome. Effective use of data for programmatic decisions should be a requirement of a leader's role, with evaluations partly based on how leaders leverage data to improve learner performance over time. At the same time, these leaders should be given the necessary support to build and continually flex this muscle to create greater responsiveness to learner needs and pathway quality throughout the system.

# SMART OPPORTUNITY #4:

## Evolve from compliance reporting to strategic quality assurance

### LEARNING FROM LAUNCH

States do not always have the information they need for a holistic picture of their pathways. Less than half of the state actors in the Impact Cohort reported the capacity to collect learner-level college and career pathways participation data beyond course enrollment. Although state and local systems track learner course-taking with relative ease, challenges arise when they must also collect information such as whether learners achieved qualified college credit through assessments or course completions, how aligned postsecondary course-taking is to learners' high school pathway, and which qualified credits articulated into transcripted college credit once learners enrolled. Putting these pieces of the learner experience together is necessary to measure the success of a pathway and target resources to improve learners' early college opportunities.

State-level conversations around data have often centered on compliance, but leaders should leverage the flexibility they have to make the shift from collecting data largely for the sake of fulfilling a mandate to leveraging data and aligning them to the state goal and vision. Data collection evolved in part because of requirements of federal laws such as Perkins V, but states can and should collect more than just CTE course enrollment to understand their larger pathways programs. While focusing limited capacity on compliance-driven requirements makes sense, states should consider the big questions they have about their pathways and frameworks and what data they need to answer those questions. How can they move beyond data points such as participation numbers to paint a more complete picture of the quality of learner pathways in their state?

## Metrics that go beyond compliance to reflect quality, access, and effectiveness

Compliance-related data collection in pathways continues to be important and necessary, but other metrics can give insight into new areas of opportunity and alignment. Strong guidance on **education-to-workforce indicators** already exists to help leaders make decisions about the data they should be collecting. Some opportunity areas include the following:

- **Credential attainment that is tracked and linked to workforce outcomes.** Nondegree credential attainment should be incorporated into state accountability systems, linking to both high school and workforce outcomes data to evaluate whether these credentials have had and continue to have value in the job market.
- **Work-based learning data that include experience type, participation, and outcomes.** A more systematic data collection should be established that defines quality experiences and includes experience type, participation, and outcomes

data to create more consistency in data collection and drive decisions around pathways systems and program quality.

- **Transition metrics that are collected and used by both K-12 and postsecondary.** Data metrics that make facilitating a seamless transition easier for districts and postsecondary institutions should be included—e.g., dual enrollment; early postsecondary opportunities; articulated credits; summer bridge program participation; engagement with summer outreach; and enrollment in postsecondary institutions, apprenticeships, and training programs.
- **Workforce outcomes that are linked to learner data.** Information such as wages, industry, and apprenticeship participation and completion should be linked to learners' high school data to evaluate the effectiveness of pathways programs.

Few states have meaningfully included these metrics in their accountability systems and, as a result, likely have not dedicated the capacity to collect the data. As they continue to strengthen their pathways, states need to be prioritizing the questions and metrics that can best inform progress toward their vision and guide their investments across the pathways ecosystem.

## STATE SPOTLIGHT

**Virginia** is shifting from compliance-based reporting to a strategic quality assurance model through its 3E Readiness Framework, which evaluates learner preparedness for enrollment, employment, and enlistment. This framework tracks multiple indicators—including credential attainment, work-based learning participation, and postsecondary transitions—using real-time data to assess quality, access, and effectiveness. It also links credentials to workforce outcomes and includes six types of work-based learning experiences in school performance metrics, ensuring that learner data inform continuous improvement across education and workforce systems.

# SMART OPPORTUNITY #5:

## Invest in tools that make data usable and accessible for all stakeholders

To build a smarter data system, state leaders should think about who needs the data; where the data should live; and how and when the data should be accessed to inform changes to policies, program design, and implementation efforts to support the learners who stand to benefit the most. A state's ability to use data to make real-time and long-term decisions greatly depends on the tools and systems it has built to make this information usable and accessible across different agencies and collaborators. Data are of little value if they cannot be used by the leaders to develop strategies for enhancing quality and ensuring learner access.

### Longitudinal data systems that track shared metrics across K–12, postsecondary, and the workforce

States can make data accessible in a number of ways. While quality and functionality varies, **most states already have a longitudinal P–20 data system** that tracks shared metrics from different agencies to understand outcomes and **support coordination** across K–12, postsecondary, and the workforce. These systems present a starting point in conversations around how to strengthen existing data collection efforts to better capture the quality of learner experiences.

### Public dashboards and reports that are differentiated, digestible, and easy to use

Key stakeholders such as local leaders, policymakers, and families must have the ability to access and make sense of the data that systems collect and generate to assess performance, track progress, and continuously improve career pathways programs. Existing systems should provide insights into what data might need to be better communicated to stakeholders and how it should be communicated, such as through public reports and **dashboards** that are differentiated by user, **accessible, and easy to use**. Communications and training materials should make data more digestible for local leaders, policymakers, and the public.

## STATE SPOTLIGHT

The **Indiana Graduates Prepared to Succeed** dashboard offers a user-friendly interface that visualizes learner progress across academic mastery, career readiness, and civic literacy. It is designed for families, educators, and policymakers to explore school-level data in digestible formats. The dashboard is updated regularly and includes tools for schools to monitor learner progress and compare performance across cohorts. It also aligns data definitions across agencies and uses consistent business rules to ensure coherence.

### Real-time data platforms used to monitor learner progress and inform interventions

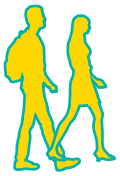
States should leverage platforms they are already using, such as Naviance or SchooLinks, to supply local and state leaders with more real-time data on how learners are engaging with and making progress on milestone advising activities. Connecting these data to student information systems can provide schools greater insights into whether and which learners are on track and how to design the necessary and most effective interventions.

### Common indicators, business rules, and definitions aligned across systems and sectors

Regardless of the tool, states should take steps to align across agencies, systems, and sectors. Common indicators and business rules should be developed to measure outcomes and track progress toward goals and performance targets. Data definitions should also be codified and shared across sectors and systems.

## User Stories: How Data Inform Decisions

State-level data, when made accessible and actionable, empower families, educators, and policymakers to make informed decisions that improve learner outcomes and strengthen education-to-workforce pathways.



### Family

*Which high school pathway option is right for my learner?*

When a rising ninth grader begins exploring high school pathway options, their family turns to the state's public data dashboard to guide their decision. They review statewide metrics on credential attainment, postsecondary enrollment, and workforce outcomes—disaggregated by region, learner demographics, and program type. The dashboard shows which pathways lead to high-value credentials and strong employment outcomes. With access to clear, comparative data from the state, the learner and their parents can choose a pathway that is aligned with the learner's interests and has strong outcomes.

### District Leader

*Which programs should we offer?*

A district leader reviewing state-level data notices that learners in neighboring regions are earning high-value credentials in advanced manufacturing and securing well-paying jobs within a year of graduation. The leader's own district shows low participation and limited credential offerings in that sector. Using disaggregated data on learner outcomes and workforce demand, the leader identifies an opportunity to launch a new pathway program aligned with regional labor market needs. With this evidence, they can build a case for reallocating resources, securing industry partnerships, and expanding access to underserved learner groups.

### State Policymaker

*Should I implement a rule change to benefit more learners?*

A state policymaker analyzing longitudinal data sees that learners who participate in dual enrollment and summer bridge programs are significantly more likely to enroll in and persist through postsecondary education, especially first-generation and rural learners. However, access to these programs varies widely across districts. Armed with this insight, the policymaker can propose a rule change to expand funding eligibility and require districts to report participation and outcomes with the goal of scaling what works, reducing disparities, and ensuring that more learners benefit from proven transition supports.

# CONCLUSION

## Building stronger data systems requires jumping on smart opportunities

Informed by insights from the Launch initiative, this brief highlights the *smart opportunities* states should invest in to improve their data systems and realize the vision they have for all learners. These opportunities include strengthening infrastructure, choosing the right tools, building state and local expertise, and pushing for quality.

Data are frequently cited as both a challenge for education leaders and a critical area of opportunity. With a renewed commitment to creating smart data systems, states can build toward the higher quality pathways system that will help them achieve their goals and ensure that all learners have a path to economic mobility. If states stay

complacent, their limited data capacity will continue to challenge them as they work to address gaps within their college and career pathways.

Maintaining the status quo has consequences. If districts and postsecondary partners do not leverage data to understand whether and how learners are persisting, then proactive supports for learners (both before and after high school graduation) will be ill informed or not built at all. When districts and employers cannot use data to assess the effectiveness of pathway programs to actually prepare learners for the workforce, learners may complete pathways that do not meet the standards and expectations of employers, slowing a state's economic growth and challenging individual learners' economic mobility.

The national movement around college and career pathways has the potential to create seamless transitions for learners from high school to college and beyond. With a unifying vision, collaboration across cross-sector partners, and a plan for quality data collection, state leaders can leverage *smart opportunities* to build on their momentum, ensuring not only smarter pathways systems but economically stronger states.

## Resources

- Advance CTE and Education Strategy Group. ***"Strengthening Career Pathways Through the Power of State and Local Partnerships"***
- Data Quality Campaign. ***10 Essential Elements of Statewide Longitudinal Data Systems***
- Data Quality Campaign. ***What Are Statewide Longitudinal Data Systems?***
- Education Commission of the States. ***50-State Comparison: Statewide Longitudinal Data Systems***
- Education Strategy Group and Data Quality Campaign. ***Visualizing the Pipeline: The Importance of Cross-Sector Data***
- Education Strategy Group. ***Building Better Outcomes: A District Playbook for Effective Postsecondary Data Practice***
- ExcelinEd. ***"Building Cross-Sector Partnerships to Support Career and Technical Education Pathways: A Playbook For State Policymakers"***
- ExcelinEd. ***"Governance Strengthens Pathways"***
- Launch. ***Conditions for Sustainable and Equitable Pathways Systems***

This publication was authored by Dr. Samantha Perez, associate director, **Education Strategy Group** as part of the Launch Initiative.

To learn about Launch visit **www.launchpathways.org**.

# APPENDIX

## Self-Assessment Tool: Smart Opportunities in State Data Systems

This tool helps state teams assess their progress across five *smart opportunities* for building strong, equitable education-to-workforce pathways. Use it to identify strengths, gaps, and next steps.

### Instructions:

For each *smart opportunity,* rate your state's progress using the following scale. Then use the reflection questions to identify strengths, gaps, and next steps.

### Rating Scale:

**1**

**Getting Started**
We are just beginning or have not started work in this area yet.

**2**

**Making Progress**
We have started work and have some pieces in place, but this area is not consistent or fully developed.

**3**

**Well Established**
This area is strong and consistently supports better outcomes for learners and systems.

## SMART OPPORTUNITY #1:

### Strengthen state infrastructure to connect across systems

Cross-sector collaboration is essential for building coherent pathways. K–12, postsecondary, and workforce systems must align on a shared vision, define mutual priorities, and agree on common metrics of success. Robust data systems are the foundation for this work.

| Indicator | Rating (1–3) | Notes & Evidence |
|---|---|---|
| A shared vision and mutual metrics of success are defined across K–12, postsecondary, and workforce systems. | | |
| Cross-agency data reporting timelines account for timely delivery of data to influence necessary decisions and prevent lagging indicators. | | |
| Formal agreements (e.g., memoranda of understanding, statutes, policies) guide data sharing and accountability. | | |
| Cross-sector governance structures support collaboration and data use. | | |

### Reflection Questions:

- Where have we aligned vision and metrics across systems?
- What formal structures support collaboration?
- How do we track learner transitions?
- What challenges remain in eliminating silos?

## SMART OPPORTUNITY #2:

### Use disaggregated data to better serve learners

States must be intentional in how they allocate resources to better serve learners. Disaggregated data reveal who benefits from current programs and who needs more support.

| Indicator | Rating (1–3) | Notes & Evidence |
|---|---|---|
| Resource allocation decisions are informed by data insights. | | |
| Disaggregated data are used to evaluate and identify gaps in program outcomes. | | |
| Quantitative and qualitative data are used to identify and address differences in learner outcomes. | | |

### Reflection Questions:

- Where are we using disaggregated data to inform decisions?
- What populations are underserved—and how do we know?
- How do we evaluate program impact?
- What qualitative methods have we used?
- How do we ensure that our resources are allocated in a way that addresses identified challenges toward improved learner outcomes?

## SMART OPPORTUNITY #3:

### Build data capacity among leaders at all levels

Data fluency must be developed across roles and levels to ensure ownership, prioritization, and effective decision-making. Leaders need support to build and flex this muscle.

| Indicator | Rating (1–3) | Notes & Evidence |
|---|---|---|
| Leaders across roles and levels are trained and supported to collect, use, and report data consistently. | | |
| Expectations for data use are embedded in leadership position descriptions and evaluations. | | |

### Reflection Questions:

- Where have we built data fluency among leaders?
- What assumptions do we make about leaders' data skills?
- How do we make data relevant to their goals?
- What routines support data-informed decisions?
- Where might we invest in additional staff or supports?

## SMART OPPORTUNITY #4:

### Evolve from compliance reporting to strategic quality assurance

States must move beyond compliance to collect data that reflect quality, access, and effectiveness. This shift enables smarter decisions and better outcomes.

| Indicator | Rating (1–3) | Notes & Evidence |
|---|---|---|
| Metrics go beyond compliance to reflect quality, access, and effectiveness. | | |
| Credential attainment is tracked and linked to workforce outcomes. | | |
| Work-based learning data include experience type, participation, and outcomes. | | |
| Transition metrics (e.g., dual enrollment, summer bridge, postsecondary entry) are collected and used. | | |
| Workforce outcomes (e.g., wages, industry, apprenticeship completion) are linked to learner data. | | |

### Reflection Questions:

- Where have we shifted from compliance to strategic data use?
- What questions do we want to answer—and what data do we need?
- How are we tracking credential value and workforce relevance?
- What systems support work-based learning and transitions?
- How are workforce outcomes used to evaluate effectiveness?

## SMART OPPORTUNITY #5:

### Invest in tools that make data usable and accessible for all stakeholders

Data must be usable and accessible to drive change. States should invest in tools that support real-time and long-term decision-making across stakeholder groups.

| Indicator | Rating (1–3) | Notes & Evidence |
|---|---|---|
| Longitudinal data systems track shared metrics across K–12, postsecondary, and the workforce. | | |
| Public dashboards and reports are differentiated, digestible, and easy to understand. | | |
| Real-time data platforms are used to monitor learner progress and inform interventions. | | |
| Common indicators, business rules, and definitions are aligned across systems and sectors. | | |

### Reflection Questions:

- What tools are currently used to make data usable and accessible across stakeholder groups?
- How do we ensure accessibility for different stakeholders?
- Where have we leveraged platforms for real-time insights?
- What gaps exist in tracking progress and quality?
- How aligned are our indicators and definitions?