



CONDITIONS FOR SUSTAINABLE AND EQUITABLE PATHWAYS SYSTEMS







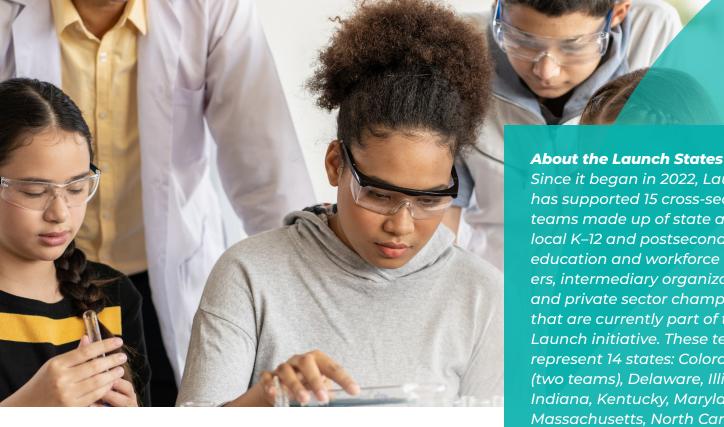






OVERVIEW

Launch: Equitable & Accelerated Pathways for All is a national initiative working to build sustainable education systems for every learner to have access to and succeed in high-quality and equitable college and career pathways. Launch is led by five 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, ExcelinEd, 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 (WBL) 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.



Since 2022, the Launch partners have worked with cross-sector teams from 14 states to identify and advance policies and strategies to tackle entrenched inequities in education and workforce systems, while also promoting greater scale and sustainability in states' college and career pathways systems. Given the extensive investments and policy developments in this area over the past decade, now is a critical time to make certain that the groundwork that has been laid can be sustained and scaled in the years ahead to ensure improved learner-level outcomes. To guide this work, the Launch partners identified a framework of five levers that are critical for driving lasting systems change: policy, funding, partnerships, data, and equity. These levers formed the foundation on which state teams assessed their existing capacity and around which partners designed much of the technical assistance they delivered.

Since it began in 2022, Launch has supported 15 cross-sector teams made up of state and local K-12 and postsecondary education and workforce leaders, intermediary organizations, and private sector champions that are currently part of the Launch initiative. These teams represent 14 states: Colorado (two teams), Delaware, Illinois, Indiana, Kentucky, Maryland, Massachusetts, North Carolina, Ohio, Rhode Island, Tennessee, Texas, Virginia, and Washington. Through the first phase of Launch, they 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 pursue more equitable, sustainable college and career pathways systems. This resource draws on their learnings and progress to date, as well as the Launch partners' observations about what conditions have been critical for their success.













Over the past two years of collaboration, Launch leaders and participants learned a great deal about the conditions related to each lever that must be in place to advance high-quality, equitable, and sustainable pathways systems. Drawing on that experience, as well as evidence from a national literature review and the expertise of the local, state, and national leaders involved in Launch, this brief synthesizes these conditions to provide a framework for college and career pathways system leaders to follow as they pursue accessible, sustainable highquality pathways systems at scale.

Each section in this document focuses on one of the five key levers undergirding the Launch initiative's work to date. For each lever, readers will find a description of its importance and common challenges; a list of conditions that must be met to achieve lasting impact; and examples from states that are advancing ambitious, effective strategies in each domain. It is important to note that no state has achieved all of the conditions laid out in this document. Likewise, many states that are not named in this brief have made progress on advancing these levers and their associated conditions.

For purposes of this resource, the five levers are presented individually. However, in reality they are part of an interconnected ecosystem and must be pursued and supported simultaneously and coherently. For example, while these conditions must be in place at the state level to provide infrastructure to support local implementation, most of these conditions also need to exist in some way at the local level for pathways implementation to lead to positive educational and economic outcomes for learners and their communities.



The pathways policy landscape is complex, encompassing policies that affect multiple systems, including K-12 and postsecondary education and the public workforce system, as well as both state and local agencies and institutions. Too often, policymakers create new policy without fully considering existing policies, potential barriers to downstream implementation, or how those policies might affect one system's ability to cooperate with other systems to create effective pathways opportunities. Pathways do not exist in a vacuum and must be considered within the context of the larger political environment.

Effective pathways policies must take a systemic approach; build on best practices in the field; and where possible, be informed by data. Outdated or ineffective policies should be removed to improve coherence. To support local policy implementation, resources and incentives should be provided. After all, state policy is only as effective as its ability to be adopted at the local level.

Key POLICY conditions to build pathways for scale and sustainability include:

A clear and shared vision: A shared vision for college and career pathways provides a "North Star" for policies and programs, establishes a framework for the state system that guides decision-making and action, and leads to more integrated and effective policies and implementation. To achieve this:

- Education, workforce, and policy stakeholders including governor's staff; system and agency leadership; and where appropriate, state legislators come together to understand one another's priorities and develop a set of shared, statewide priorities.
- ✓ Leaders communicate beliefs, values, and the mechanisms being put in place to activate this vision to explain policy motivations and build community support.
- ✓ Policy champions are cultivated and nurtured inside and outside the public sector and from across the political spectrum—to publicly support the shared vision.
- ✓ Effective policies, programs, and processes are codified into law to promote longevity and sustainability and to provide cover for state and local leaders to be ambitious, take risks, and aim for long-term outcomes.

A coherent policy landscape: Drawing on the shared vision, states are intentional about when and how new policies are adopted, taking into consideration existing laws and programs to remove duplication, avoid confusion, and ensure consistency and cohesiveness for their career pathways systems. To achieve this:

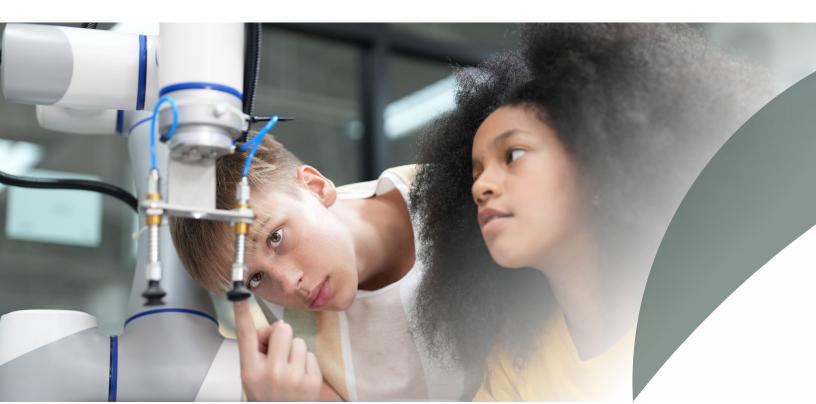
- ✓ Processes are in place to review new policies to understand how they intersect with existing policies and support larger goals around pathways, as well as to review existing policies to identify how they can be improved as the policy landscape evolves.
- ✓ Downstream implementation is a critical driver of policy development and review as new policies are developed, and outdated or ineffective policies are removed or phased out.

Aligned incentive structures: To build buy-in and commitment to the work, states ensure that incentives and priorities are aligned across learners, schools, districts, and the state to support coherence and effective policy implementation. As much as possible, policies must be a "win-win-win" for the state, local districts, and learners. To achieve this:

- Leaders interrogate and understand learner, school, district, and state policy incentives when a policy—financial or otherwise—is designed and implemented.
- State policies are translated to regional and local levels, and state guidance and models support district and school efforts to implement policies with fidelity.
- Policies encourage innovation and remove unnecessary barriers to implementation.
- State and local accountability measures recognize and reward progress to promote policy implementation, and support is provided to drive improvement as needed.

Equity-centered policymaking: To achieve scale in addition to sustainability, policies are designed to tackle the root causes of disparities in opportunities and outcomes and built to meet the needs of learners who have the greatest barriers to access and success. To achieve this:

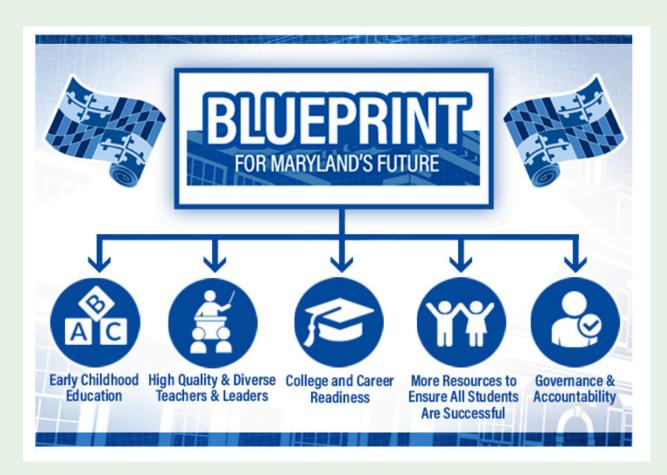
- Policy development takes into account the needs and experiences of communities furthest from the opportunities those policies seek to create, including family, learner, and educator perspectives.
- Comprehensive data collection supports the monitoring of equitable access and outcomes, progress toward equity goals, and the identification of targeted interventions to address inequities.



STATE HIGHLIGHTS

The Blueprint for Maryland's Future was developed from recommendations made by the Commission on Innovation and Excellence in Education, which met from 2017 to 2019.

Enacted into law in 2021, the Blueprint aims to provide equitable access to high-quality education to all Maryland learners, enhance learner outcomes, and strengthen the state's workforce. In 2023, the Maryland State Department of Education and each of the state's 24 local education agencies developed Blueprint Implementation Plans to chart a path toward meeting the goals articulated in the Blueprint's five pillars, including those in Pillar Three: College Career.



The Blueprint's <u>College and Career Readiness pillar</u> establishes a *clear, statewide vision* for college and career readiness. It promotes rigorous standards to ensure that learners are prepared for success after high school and calls for the expansion of dual enrollment, college and career pathways, and opportunities to earn industry-recognized credentials. For example, the Blueprint has set goals for expanding Career Technical Education (CTE) and ambitious targets for learner participation programs leading to an industry-recognized occupational credential, notably that 45% of public high school learners will graduate having completed the high school level of a Registered Apprenticeship or another industry-recognized credential. As implementation of the Blueprint continues over the next several years, district and state leaders will cooperate to ensure that learners across Maryland have equitable access to these and other high-quality pathways opportunities, with the ultimate goal of achieving a future of greater economic opportunity for all of the state's residents.

STATE HIGHLIGHTS

Colorado is approaching cross-sector priorities and challenges by aiming to build more policy coherence and alignment. Colorado's Secondary, Post-secondary and Work-Based Learning Integration Task Force ("1215 Task Force"), a 26-member task force established by 2022 legislation, was charged with developing and recommending policies to expand programs that integrate secondary, postsecondary, and WBL opportunities in every region of the state. The Colorado Department of Education, the Colorado Department of Higher Education, the Colorado Community College System, and the Colorado Workforce Development Council co-chaired the task force, which produced a final report in December 2023 with interconnected recommendations focused on program modernization, access, awareness and value, sustainable funding, and partnerships.

Specifically, the 1215 Task Force studied the impact and reach of Colorado's myriad Post-secondary & Workforce Readiness (PWR) programs and improvement opportunities. The task force found opportunities for greater policy coherence, including the need for the state's current accountability system to fully measure how schools and districts prepare their learners for postsecondary education and the workforce. In August 2023, H.B. 23-1241 formed the Accountability, Accreditation, Student Performance, and Resource Inequity Task Force. The 1241 Task Force work culminated in a November 2024 report detailing the recommended improvements to the way PWR opportunities are measured, recognized, rewarded, and incentivized within the accountability frameworks.



STATE HIGHLIGHTS

In 2015, the Illinois House of Representatives adopted a resolution calling for the development of the Illinois Pathways Interagency Committee, which included participation from the Illinois State Board of Education, Illinois Community College Board, Illinois Board of Higher Education, Illinois Student Assistance Commission, Illinois Department of Commerce and Economic Opportunity, and Illinois Department of Employment Security. The goal was for this body to develop a shared statewide strategy for better preparing high school graduates for success in college and career. The resolution led to the formation of four advisory committees focused on distinct strategy areas for improving learner outcomes, engaging more than 120 stakeholders to build consensus around a set of recommendations. In 2016, House Bill (H.B.) 5729 was introduced, which incorporated the work of the advisory committees and community feedback. The bill was passed and signed into law in July 2016, establishing the Postsecondary and Workforce Readiness (PWR) Act.

Critically, the PWR Act aims to require and support coordinated efforts among school districts, post-secondary education institutions, employers, and other public and private organizations to implement four aligned strategies to address key barriers to the successful transition of Illinois high school learners into college and careers.

These strategies include: a Postsecondary and Career Expectations (PaCE) framework; college and career pathway endorsements; a statewide system for transitional math instruction that increases college readiness for high school seniors and reduces remedial education needs; and a pilot program for voluntary school district participation in a competency-based education model, allowing learners more flexibility to progress as they demonstrate mastery of concepts. To further institutionalize a key aspect of this law and build more *policy cohesion*, in 2022, the state adopted a new policy requiring that school districts establish career pathway endorsement programs and adopt either the model Illinois PaCE Framework or a customized version during the coming years. Various agencies in the state have collaborated to develop joint implementation tools to both support and learn from local implementation efforts.



Delivering high-quality, equitable pathways requires consistent, longterm funding that can adapt to the fast-changing demands of industry and the varied needs of learners. Because college and career pathways span multiple systems, state and local leaders frequently braid a variety of state and federal funding streams, a necessary but complex process that requires creativity, expertise, and a shared commitment to aligned outcomes. Too often, these braided funding models rely on short-term dollars, including state and federal grants, which can undermine efforts to create sustainable pathways programs and systems.

For pathways to exist at scale and be sustainable, a strategic approach to funding that aligns and optimizes funding across K–12, postsecondary, and workforce systems—including a diversified mix of funding types—must be in place. Sufficient flexibility is needed to promote innovation, but programs must also be continuously monitored to ensure that resources support effective and equitable practices.

Key **FUNDING** conditions to build pathways for scale and sustainability include:

Dedicated and strategic funding: Having clearly defined and committed funding streams that support college and career pathways is paramount. States provide categorical funding to ensure that districts, institutions, and intermediaries have the resources they need to support pathways, prioritizing those that align with labor market demand and rewarding programs based on learner outcomes. To achieve this:

- State funding models include sufficient categorical, long-term funding to support the foundational aspects of pathways (e.g., CTE, data systems, state and local coordination capacity).
- ✓ Short-term funding exists to support innovation, including program start-up and pilots that test solutions to identified barriers in the system, but it is not the primary mode of funding college and career pathways.
- ✓ State and local leaders diversify their funding streams to avoid overreliance on one source of funding; federal funding (e.g., funding from the Carl D. Perkins Career and Technical Education Act [Perkins V]) is a supplemental, not primary, support mechanism for college and career pathways programs.
- ✓ State pathways funding is weighted to incentivize schools and institutions to support learners in persisting through pathways and/or to encourage local leaders to offer priority pathways (e.g., those aligned to particular quality standards or labor market needs) at a higher rate.
- ✓ Public-private partnerships exist and leverage a mix of funding sources to support and enhance cooperation, intermediary capacity, and shared accountability.

Intentionally aligned resources: To maximize the full range of potential dollars available to support the shared vision and goals for career pathways, states strategically draw on a wide range of resources (whether state, federal, or private) through braiding and blending strategies. Resource alignment mirrors and facilitates the established vision for cross-system cooperation. To achieve this:

- States assess all available career pathways-aligned federal, state, and local funding sources, including the populations they serve and their projected outcomes, eligibility requirements, and allowable uses.
- Stakeholders come together to collectively agree to braid or blend resources to advance a set of college and career pathways goals established through the shared vision.
- Cross-sector partners strategically align funds to better support the desired learner experience as learners transition across systems and sectors, such as K-12 to postsecondary, two-year to four-year institutions, and any educational experience to the workforce.
- ✓ Key barriers to braiding or blending funding (e.g., misaligned eligibility requirements or accountability indicators) are identified and mitigated proactively.

Optimized resources: Faced with finite resources, states leverage existing federal and state education and workforce resources for career pathways and integrate new resources into existing systems to fill gaps, rather than duplicate efforts. To achieve this:

- Existing infrastructure is leveraged in creative ways to maximize efficiency and expand access to pathways opportunities (e.g., leveraging buildings and classrooms to teach expanded time schedules, sharing instructors across learner levels).
- Resources are allocated to scale effective practices and address funding gaps within current programs, either before or instead of developing an alternative solution that may be duplicative.



Investments in capacity-building: Given pathways systems cannot be sustained without dedicated capacity to administer them, the state provides the necessary funding for state agencies, local institutions, and intermediaries to implement and support career pathways systems with fidelity. To achieve this:

- Investments are made in the human capital needed to implement pathways work at the state and local levels, including the administration and evaluation of programs by state agencies, local districts, postsecondary institutions, intermediary organizations, and other key entities.
- Capacity needs are identified prior to implementation, alongside a clear and coherent vision. of expectations across partners.
- ✓ Funding information is accessible and includes appropriate guidance from the outset of funding initiatives.

Equity-focused funding: To increase access and success for learners universally, funding models are designed and revised to direct funding to where it is needed most. To achieve this:

- New funding formulas are incubated, piloted, and scaled, moving away from funding structures that perpetuate inequities at both the learner and system levels and that contribute to different opportunities for learners, while limiting options for many.
- States, local agencies, and institutions identify and leverage flexibilities within funding streams to better target and braid resources for the wraparound supports and interventions necessary to achieve more equitable outcomes.
- / Funding decisions are informed by families and learners, rather than just by what schools, education providers, and training providers think is best for learners.

Delaware intentionally leverages and aligns federal, state, institutional, and private funding streams to support Delaware Pathways, officially created by executive order in 2016. The Delaware Pathways program is a statewide system of career pathways for youth, as well as training opportunities for educators and community-based partners. The state identified and implemented three major strategies to optimize and coordinate financial support for career pathways: developing a structure for philanthropic contributions and investment, coordinating state and federal supports to leverage additional resources, and developing a catalog of additional funding.

In 2021 the governor announced Delaware Pathways 2.0, a \$15.8 million expansion of the state initiative that has enabled the program to reach 6,000 middle school learners and more than 12,000 additional secondary learners. The expansion specifically targets career pathways in health care, information technology, finance, and engineering. The state has developed a new work plan and has mapped the various funding streams to the priorities to demonstrate areas of alignment and further fundraising.



Delaware Pathways 2.0 Braided Funding

	Total	Bloomberg Foundation	Walton Family Foundation	American Student Assistance	US Dept of Labor, Youth Apprentices hip	US Dept of Education, Institute for Educational Sciences	ECMC Foundation & Advance CTE	Secondary Reserve (Perkins)	Postsecond ary Reserve (Perkins)	DuPont & Discovery Education	DE Dept of Education, ESSER Funds	Office of the Governor, GEER Funds
	Fund Type	Private	Private	Private	Federal	Federal	Private	Federal	Federal	Private	Federal	Federal
Go Deeper on Pathways	13,471,495	2,531,610	1,027,320	1,400,335	2,500,000	0	0	900,000	300,000	800,000	4,000,000	12,230
Begin in Middle School	4,170,000	X	X	X				X		X	X	
Make pathways permeable	1,510,000	X		X				X	X	X		
WBL supports for learners	385,000			X						X		
Implement 1-plus-1 for CTE Students	6,500,000	X	X	X	X			X			X	X
Project management and technical expertise	906,495	X	X	X								X
Strengthen Employer Co-Ownership of Talent Pipeline	5,280,389	733,800	0	0	0	0	0	0	0	0	0	4,546,589
Deepen OWBL capacity	450,000	X										X
Grow Industry Councils	2,597,571	X										X
Scale WBL supports and systems for employers	135,000											X
Expand employer-driven training and apprenticeships	1,135,000											X
Project management and technical expertise	962,818	Х										X
Invest in Innovation and Scale	5,771,220	1,295,891	260,254	305,016	0	1,000,000	100,000	0	270,000	0	0	2,540,059
Build out a Delaware workforce delivery unit	1,110,000											X
Develop workforce data systems	420,000		X				X		X			
Establish long-term research agenda and advisory committee	1,405,000	x	x	x		x						X
Pathways outcomes surveys	750,000	X										X
Project management and technical expertise	516,245	X	X	X								X
Total	24,523,104	4,561,301	1,287,574	1,705,351	2,500,000	1,000,000	100,000	900,000	300,000	800,000	4,000,000	7,098,878

Starting in 2016, **Kentucky** began a multiyear effort to align 100% of career pathways offerings with high-skill, high-wage, and in-demand occupations, with the goal of being more strategic with its funding dedicated to state-approved career pathways.

The Kentucky Department of Education (KDE) first released a comprehensive list of career pathways programs aligned with the commonwealth's five priority industries and top occupations to help local leaders identify those programs in need of transformation. After taking an inventory of existing career pathways and leveraging enrollment and labor market data from the Kentucky Center for Statistics (KY STATS), KDE in 2017 began phasing out and transforming career pathways that did not meet alignment criteria. To ensure buy-in at all levels of the education system, members of KDE met with school administrators across the commonwealth to discuss the need for labor market alignment in educational programs. Plans to phase out and transform career pathways were met largely with approval by local school staff. By the end of 2020, KDE had phased out, adjusted, or realigned all of its career pathways that did not meet the state expectations.

In addition to providing schools with the guidance and technical assistance they need to align and phase out career pathways, Kentucky has put incentives in place to encourage participation in its vision for career readiness. For example, schools and districts can use state and federal funding, such as state CTE funding, Perkins V funding, and funding for Work-Ready Scholarships, to support CTE dual enrollment and career pathways—but only if their programs are aligned with priority industries or top occupations. KDE reviews the programs at least every three years to ensure that they are still aligned.

Through the <u>Tri-Agency Workforce Initiative</u>, **Texas** is prioritizing a **coordinated approach** to pathways funding across the state's K-12, higher education, and workforce development agencies to invest in statewide initiatives. Additionally, Texas is supporting regional pathways partnerships and **building the capacity** of regional intermediaries in 17 areas across the state in the Texas Regional Pathways Network through funding, technical assistance, and peer-learning opportunities.

The Texas Regional Pathways Network currently includes two initiatives. First, Tri-Agency Regional Convener grantees, funded through H.B. 1525, are developing regional pathways infrastructure and have goals to create systems that support scalable and sustainable pathways aligned with industry demand. These organizations are working toward being designated as the Regional Convener for their workforce development area. Second, Regional Pathway Teams, funded by federal Perkins CTE reserve funds, are focused on implementing pathways aligned to a specific industry and developing goals around learner outcomes. These efforts are complemented by outcomes-based funding that incentivizes postsecondary institutions to offer credentials of value and rewards school districts for improving learners' college, career, and military readiness (CCMR). The most recent CCMR Outcomes Bonus data shows an increase from 2021 to 2022 in graduates generating CCMR outcomes-based funding, with increases across all three measured groups: economically disadvantaged; non-economically disadvantaged; and learners served in special education programs. Career readiness improved across all groups. Overall funding for CCMR increased by more than \$11 million from 2021 to 2022.



A unique aspect of career pathways systems is the number and diversity of actors and stakeholders involved in the design and delivery of the programs and related experiences. To grow and withstand economic and political change, pathways systems require shared goals; clear roles and responsibilities across these partners; and systems and processes that facilitate new kinds of engagement and leadership, especially from the private sector.

Key PARTNERSHIPS conditions to build pathways for scale and sustainability include:

Clear governance and roles: Given the complexity of career pathways systems, well-defined governance structures, roles, and responsibilities exist for all partners to ensure consistent leadership with decision-making authority. To achieve this:

- ✓ Legislation or directives from the legislature or governor's office mandate collaboration among system stakeholders in a manner that clarifies roles and responsibilities and fosters effective partnership.
- ✓ System leader(s) convene decision-makers to advance a work plan designed to further a shared vision and goals. Key stakeholders have an established forum to meet regularly, plan for, implement, and sustain career pathways.
- ✓ Strong partnerships among K–12, postsecondary, workforce, community-based organizations, and private sector entities are fostered and formalized, with an established intermediary or other entity in place for strategic coordination and execution of pathways-related work.

Shared system-level accountability: The ultimate success of a career pathways system cannot rest on the shoulders of one agency or stakeholder. All system actors feel both individual and collective responsibility for progress toward a shared goal and align resources in support of its pursuit. To achieve this:

- ✓ Formalized partnerships (e.g., with memoranda of understanding) between K–12 and postsecondary and workforce partners are in place.
- Partners report on outcomes for which they are responsible and understand how those outcomes are part of achieving shared goals.
- ✓ Feedback loops inform partners what is or is not working across the career pathways system.
- ✓ System leaders convene partners on a regular basis to assess collective progress; troubleshoot; identify goals for continuous improvement; and realign priorities, as needed.



Cross-sector ownership of local delivery programs: At the local level, multiple agencies, institutions, and stakeholders are also responsible for the success of career pathways programs. As such, K–12, postsecondary, workforce, and private sector partners at the state and local levels have clear roles and expectations in the design and delivery of high-quality and equitable pathways. To achieve this:

- ✓ Formal and informal networks exist to facilitate effective collaboration and build trust among state, regional, and local actors across the public and private sectors (e.g., regional and/or sector-based networks). Key individuals within local agencies and institutions are empowered (by state policy or guidance) to leverage their relationships and authority to drive innovation beyond compliance.
- Resources exist to support neutral conveners or intermediaries to provide strategic coordination across cross-sector partners.

Industry champions: Business and workforce communities are actively engaged and have multiple ways to contribute to the development and growth of the career pathways system and feel co-ownership of its success. To achieve this:

- Employer and industry voices are engaged early in system design and take an active role in shaping aspects of program design and delivery, including standards development, WBL, and advising systems.
- Employers and industry associations understand the value of career pathways and see them as a viable way to train and attract future talent.
- ✓ Business champions maintain momentum behind career pathways during periods of political transition.

Transition and succession planning: College and career pathways systems are not immune from turnover. To mitigate the impact of political and economic change, system leaders take steps to prevent disruption, with an eye toward maintaining progress and sustaining effective partnerships and programs. To achieve this:

- ✓ Partnership roles, responsibilities, and key processes are transparent, well documented, and accessible
- Knowledge management systems and structures exist to document key processes, onboard staff, and support transitions, including succession and sustainability plans that document progress toward clear shared system goals and work left to accomplish.
- New policymakers or career staff are encouraged or directed to build and improve upon career pathways work, rather than starting anew.

Equity-focused partnerships: Partnerships are grounded in a shared understanding of equity and the partners' roles and responsibilities for promoting greater access to and outcomes from pathways opportunities. To achieve this:

- Partners have individual and shared goals for closing access and outcomes gaps within the pathways system and can speak openly about progress, key barriers, and capacity or resource needs.
- Partners make intentional efforts to understand and navigate each other's cultural dynamics to foster effective collaboration and communication and are inclusive of organizations with expertise addressing and advocating for community needs, including civil rights and religious organizations.
- Partnerships focus on human-centered approaches and prioritize input and perspectives from those closest to the work, including learners, families, and communities.

Massachusetts' Connecting Activities (CA) is a Department of Elementary and Secondary Education initiative that leverages a statewide infrastructure to support college and career readiness for all learners by advancing cross-sector ownership for the locally delivered program. The CA line item has been in the state budget since 1998, first incubated during the school-to-work era. CA supports public-private partnerships through the 16 local MassHire Workforce Boards to connect schools and businesses by providing structured WBL and career development experiences for learners that support both their academic and employability skill attainment.

A self-described "state-funded intermediary system," CA enables local workforce board staff to recruit employers, prepare and place learners in brokered WBL opportunities, and structure those experiences through the use of the Massachusetts Work-Based Learning Plan. In 2023, more than 4,000 Massachusetts employers provided WBL experiences for more than 12,000 learners through the CA initiative. The return on investment from CA is very high: All told, employer-paid wages for placements with WBL plans and/or classroom and workshop instruction represented an investment of approximately \$18,935,000 in WBL, more than two-and-a-half times the state's most recent investment in the program.

Career Connect Washington (CCW) was established in 2019 through the state's Workforce Education Investment Act. Since its launch, CCW has developed partnerships to increase coordination among the public and private sectors, creating an equitable career-connected learning system that benefits Washington's learners and employers. Key to CCW's success has been its unique and *multilayered public-private partnership model*. At the state level, CCW is led by a team of four public and private entities: Washington's Employment and Security Department; the Washington Roundtable; the Washington STEM Association; and the lead implementation partner, the Washington Student Achievement Council.

Across the state, nine regional networks serve as convening points for leaders from K-12 systems, apprenticeship programs, higher education institutions, and private sector partners to cooperate to scale career-connected learning and meet regional workforce demand. Each of these nine areas also has a career connected learning coordinator, funded through CCW, to provide additional capacity to support implementation of career-connected learning activities. Operating at the regional and local levels, Program Builders create and scale existing career-connected learning programs, often accessing grant funding from CCW funding to support activities. Private sector leaders also have a defined role to play, driving collaboration among employers and serving as champions for careerconnected learning statewide.

In CCW's first five years, its dynamic partnerships have led to the creation of more than 115 Career Launch programs, enabled nearly 10,000 young people to complete earn-and-learn programs, and attracted more than \$30 million in federal grants to further scale and build a statewide system of career pathways.

In 2017, Rhode Island launched PrepareRI, an umbrella organization uniting multiple state and local agencies for career pathways systems, including the Governor's Office, Rhode Island Department of Education, Governor's Workforce Board, Office of the Postsecondary Commissioner, and Rhode Island Commerce Corporation. This effort stands as a very strong example of *clear governance* and roles supporting shared accountability. During their planning, the convening authority, partners, and cross-sector agencies identified their roles and responsibilities for service delivery to expand access for learners. In 2022, the PrepareRI 2.0 Action Plan was adopted by the Rhode Island Board of Education as the state's preK-20 strategic plan for education. Rhode Island is now once again in the process of updating its state PrepareRI plan to align to the governor's 2030 plan, known as the RI2030 plan.

A key initiative of PrepareRI is the PrepareRI Internship Program, which places 300-500 high school juniors into paid internships each summer. The program is funded by both the Governor's Workforce Board and the Partnership for Rhode Island (a nonprofit CEO roundtable) and is managed by Skills for Rhode Island's Future (a statewide workforce intermediary organization), demonstrating the role of industry champions. The number of interns participating in a PrepareRI summer high school internship program has increased from 162 in 2018 to 348 in 2023.



Building, refining, and continuously improving college and career pathways systems requires data systems that connect K-12, higher education, and workforce data, including learner outcomes, employer feedback, and program data. Siloed data systems make tracking outcomes and knowing whether policies and programs are having their intended effects difficult. Even in cases in which states have the right data, local leaders sometimes do not have access to or know how to use the information effectively for improvement.

Sustainable career pathways systems rely on a set of shared, readily available metrics identified across education systems and workforce and economic development agencies, including labor market data. Leaders use these metrics to support both real-time and long-term decisions. State and local data cultures should focus on assessment, evaluation, and continuous improvement, rather than being driven by compliance requirements.

Key DATA conditions to build pathways for scale and sustainability include:

Integrated state data system: Given that career pathways span multiple systems, states use integrated data systems to track shared metrics, including employment and wage records, to identify outcomes, and support coordination across K-12, postsecondary, and the workforce. To achieve this:

- ✓ States invest in full P-20W data systems that collect and coordinate career pathways data across programs, agencies, and learner levels.
- ✓ Agencies use common indicators and business rules to measure outcomes and align their goals and performance targets.
- ✓ Learner-level records are reliably linked across agencies, including with employment and wage data.

Clear roles and responsibilities for data use:

States have established and defined roles and responsibilities for collecting, evaluating, and using data to ensure consistency and accountability, effectively measure outcomes, and reduce duplication. To achieve this:

- Roles and responsibilities for collecting, validating, and/or reporting data are clearly laid out in statute or policy.
- ✓ Data-sharing agreements across K-12, higher education, workforce agencies, and regional intermediaries are in place at the state and local levels.
- ✓ Cross-sector data governance structures define key statewide research questions, including questions that focus on closing equity gaps through targeted interventions
- Routines and processes are in place to review which data are essential and which are duplicative or no longer useful.



Data for real-time and long-term decision-making: A mix of short-term and long-term data points are critical to making real-time and reflective decisions about funding, policies, and interventions. As such, states collect and provide timely data for both long-term and/or immediate decision-making. To achieve this:

- States have established structures and systems in place to collaboratively assess the availability, sources, and quality of data that exist for current pathway opportunities and use the data to monitor the implementation and impact of the pathways work.
- Clear, shared success metrics for pathways exist and include goals and targets for closing access and outcomes gaps.
- ✓ Data systems answer the key questions of state, district, and local leaders about the extent to which policies and programs are working.
- Data are defined and systems are in place for tracking inputs and outcomes along the way, reducing the burden of grant-writing, reporting, and compliance activities for schools and implementers.
- Feedback loops (e.g., regular data review protocols, support for program evaluation) are in place to inform policy and funding decisions, fostering a culture of learning and responsiveness.

Data access and literacy: Key stakeholders must have the ability to access and make sense of the data improved systems collect and generate. Local leaders, policymakers, and the public understand and leverage education and workforce data to assess performance, track progress, and continuously improve career pathways programs. To achieve this:

- Reports and dashboards are differentiated by user—depending on their need and understanding of the data—and are supported by clear guidance that explains who has access to which data and when. Reports are accessible and easy to understand.
- Data definitions have been codified and are shared across sectors and systems; they include caveats, assumptions, and limitations. Data are contextualized to provide a clear understanding of the pathways system.
- Accessible communications and training materials exist to make data more digestible for local leaders, policymakers, and the public.

Economic and labor market data integration: Beyond learner-level data, decisions about college and career pathways also rely on economic and labor market data. States provide access to and ensure integration of economic development and labor market data to inform decision-making. To achieve this:

- Data are used to demonstrate impact and return on investment and to shape priorities and incentives, such as priority funding for pathways that lead to good jobs, based on labor market information.
- Labor market data sources and definitions around "high skill," "high wage," and "in demand" are aligned across K-12, postsecondary, and workforce systems to ensure consistent signals and decision-making about pathways and credentials,

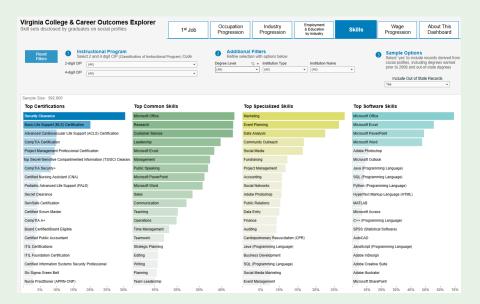
Data for equitable outcomes: State and local leaders consistently leverage the power of data to identify access and outcomes gaps, set ambitious goals for improving access and outcomes, and track progress toward reaching them. To achieve this:

- States and local agencies publicly report participation and outcomes data disaggregated by gender, race/ethnicity, special population status, and other key demographic or programmatic factors.
- State and local leaders prioritize closing access and outcomes gaps as a primary goal in designing and delivering programs, not as an afterthought.
- State and local leaders collect and value qualitative data, including learner voice and empathy research, in addition to quantitative data.
- State and local leaders are intentional about who collects data, the methodologies they use, and how data are reported, taking into account issues of language accessibility and cultural relevance.

The **Tennessee** Board of Regents (TBR) partnered with the Tennessee Department of Labor and Workforce Development to launch a new Careers Start Here dashboard that shows trends in employment for graduates of the state's community and technical colleges.

The dashboard aims to arm users with accessible data to inform decision-making. It allows TBR colleges, including Tennessee Colleges of Applied Technology, to deepen their understanding of employment patterns and wage outcomes for their learners. Colleges can track outcomes for graduates and nongraduates of TBR colleges between 2013 and 2023 and examine employment in Tennessee, average wages, and industry trends. The dashboard is meant to be user friendly and enables users to explore the data based on region of residence, award type, industry, career cluster, program of study, race/ethnicity, gender, year of exit, and graduation status. All data can be disaggregated by learner demographics, and the data are updated quarterly.

The Virginia Office of Education Economics (VOEE), created by legislation and established in 2021, informs policy and practice at the intersection of education and workforce development. VOEE data and analyses inform a diverse group of stakeholders as they make data-driven decisions for programs and policy related to workforce education and training, leveraging economic, labor market, and learner-level data. These stakeholders include the governor and members of the General Assembly, who look to VOEE as a guide as they make strategic investments in current and future education and workforce training programs. The office works closely with key partners across the state, including the Virginia Department of Labor, the Virginia Secretary of Commerce & Trade, the State Council of Higher Education for Virginia, the Virginia Community College System, higher education institutions, the Virginia Department of Education, the Virginia Employment Commission, GO Virginia, the Virginia Board of Workforce Development, and other workforce partners.



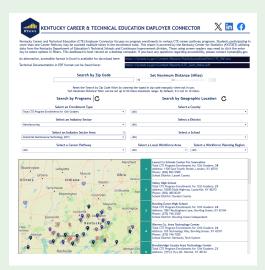
Using comprehensive datasets, VOEE reports on the alignment of higher education with workforce needs and tracks emerging labor market trends across Virginia. Recent data products include Program-to-Skills Mapping, College and Career Outcomes Explorer, High Demand Occupations, and Education and Workforce Alignment Dashboards.

North Carolina has made the attainment of industry-recognized credentials for high school graduates a statewide priority, with a focus on ensuring that learners earn true credentials of value. However, despite supportive policy and investments, the state identified that many more learners could and should be earning credentials, or what the state is calling their "credential potential." This concept aims to close the gap between the number of learners eligible to earn a credential and those who do, using data to drive equitable outcomes. For example, 50% of CTE learners identified as economically disadvantaged had the opportunity to earn credentials, yet only 43% did so in 2022–23. This effort is driven by meaningful goal setting and data collected on credential attainment (largely sourced from credentialing agencies).

The state's Board of Education and Department of Public Instruction deliver an annual Credential Report to the North Carolina General Assembly. The report analyzes data in many robust ways, including credential tier, equity and access, and trends over time. CTE learners achieved a 41% credential attainment rate for the 2022–23 school year, a substantial increase from 28% in 2021–22. Additionally, there was a 44% increase in attainment of credentials that align with the North Carolina Workforce Credentials partners list created in partnership with employers and workforce development organizations. North Carolina will develop a CTE dashboard to assist district and school leaders with data analysis to identify gaps and missed opportunities to credential learners, particularly for those who are from underrepresented populations.

KYSTATS is a state office housed within the **Kentucky** Education and Workforce Development Cabinet. It is tasked with collecting and linking learner-level data across the commonwealth in an *integrated data system* to evaluate education and workforce programs. This work includes

developing reports and data dashboards, responding to research requests, and providing statistical analysis to help policymakers, practitioners, and the general public make data-informed **decisions.** Tools such as the Kentucky CTE Employer Connector help employers and educators find the CTE programs closest to them. Reports such as the CTE Feedback Report examine high school CTE trends and their association with employment and postsecondary outcomes later in life. They also display training locations and future demand for employment. The 2023-25 Research Agenda focuses on expanding data usage to inform policy, programs, and equity in the evolving commonwealth. KYSTATS is focusing on equitable access and broader use of its products by a large and diverse audience and prioritizing an equity focus in its data reporting and analysis.





College and career pathways strategies have proven effective at improving learner outcomes, but access to high-quality programs remains uneven, especially for learners of color, learners from lowincome communities, and learners with special population status. Even for those who graduate from high school and earn postsecondary credentials, substantial inequities in labor market opportunities affect long-term economic outcomes. Too often, learners lack awareness about what professional opportunities exist and what those opportunities require and offer in terms of career advancement.

Pathways systems must be deliberately designed to provide equitable access and outcomes, and barriers to doing so should be attended to from the outset of system design efforts. Clear strategies should be in place to ensure that pathways are flexible and portable and that targeted supports address systemic barriers and individuals' needs. Labor market barriers need to be examined and mitigated through intentionally designed strategies, such as WBL, which can help young people start to build professional networks and social capital.

Key EQUITABLE conditions to build pathways for scale and sustainability include:

Flexible and portable pathways: To maximize opportunity for learners and respond to rapidly evolving labor market needs, pathways have multiple entry and exit points. These multiple points allow learners to pursue a range of career options in a given pathway and provide them with options to return to education in the future, building on prior learning and experience. To achieve this:

- Pathways are based on a clear progression of learning, starting at the broader industry level and getting more occupationally specific over time.
- ✓ Pathways include credentials of value and lead to employment and career advancement.
- ✓ Statewide credit for prior learning (CPL) policies and practices are transparent and learner centered to facilitate the seamless transfer of credits for prior professional experience and learning.

Processes for identifying and addressing barriers: States have clear and ongoing mechanisms for uncovering and addressing barriers to access and success, ensuring equitable outcomes for all learners. To achieve this:

- Ongoing reviews of policies and processes are conducted at the state, local, and institutional levels to identify barriers preventing the success of learners, especially those who are underrepresented in pathways programs or industries.
- ✓ State and local leaders, practitioners, and partners receive sufficient training and support in culturally competent pedagogy and bias-free advising, hiring, and support systems for learners.

Formalized systems for learner, community, and institutional input: Effective college and career pathways systems actively seek and capture input from learners, families, communities, and educational institutions to continuously inform and improve implementation, creating time and space for meaningful dialogue. To achieve this:

- State and local agencies and institutions have capacity for authentically engaging families and learners in the design and improvement of pathways systems, as well as in data collection.
- Ongoing structures are in place to collect input from families, learners, and community members, and feedback loops ensure that those giving input know how it is being used to inform changes.

Targeted supports for marginalized learners: State and local agencies and institutions provide necessary supports early and often, ensuring that programs are culturally relevant and designed to serve individuals facing the greatest barriers to success, while ultimately benefiting all learners. To achieve this:

- Career pathways partners provide accommodations to promote accessibility to pathways opportunities, including (but not limited to) financial, logistical, and socio-emotional wraparound supports.
- Career navigation and advising systems are robust, aligned to pathways and related experiences, and free from bias.
- Leaders and practitioners are intentional about the social capital conversations and learners' building of professional networks.

Routine equity monitoring, reporting, and communications: Clear processes, routines, and reporting protocols and designated personnel exist to monitor progress toward state and local targets for closing access and outcomes gaps, ensuring that equity remains a priority throughout implementation. To achieve this:

- State, district, and institutional leaders set clear and measurable goals for eliminating equity gaps and are equipped to lead data-driven conversations about equity, both internally and externally.
- Progress toward equity goals is monitored through the analysis of disaggregated data and reported publicly at regular intervals.
- Advocacy and community-based organizations, including civil rights groups, are invited to support monitoring efforts and to contribute ideas for reducing persistent barriers.
- The state invests in research and evaluation to identify significant access and outcomes gaps, barriers to improvement, and best practices to support equity, disseminating findings publicly to support transparency, action, and improvement.

In Ohio, the Office of Career-Technical Education has made ensuring an equitable education for each learner a priority by funding Equity Labs since 2019. Every local education agency that receives Perkins funding must participate in Equity Labs every two years. This requirement aligns with the Perkins-required Comprehensive Local Needs Assessment, which guides key stakeholders through a process of identifying gaps in access to or success in CTE programs using data provided in reports from the state. Specifically, local districts review and analyze data organized in three major categories: meaningful access, engagement and enrollment, and learner outcomes. The data in the report are disaggregated by race/ethnicity, gender, migrant status, and special population status.

Through these state-facilitated workshops, local leaders identify the largest or most pressing gap to be addressed and perform a root cause analysis, while clearly articulating a commitment to advancing equity with a plan to specifically address and continually make meaningful progress toward improving the performance of special populations. The state also launched an Equity Ambassador program, which offers individuals—be they classroom teachers, counselors, local administrators, or other district- or building-level individuals—additional professional development to position them as local equity experts within their home districts.

The **Delaware** Department of Education has made learner voice a priority in the design and delivery of its career pathways system. Starting in 2023, Delaware worked to formalize a number of processes and programs to center learners in the state's decision-making processes, as well as develop learner-led professional development to build learner leadership skills. The state began by establishing a Student Leadership Advisory Committee, a diverse group of 16 learners from across the state and program areas. These learners guided the statewide plan and activities for identifying the best ways to systemize learner voice.

An early activity was engaging a group of learners in the education program to co-redesign the Teacher Academy's curriculum and co-develop instructor training focused on equity, inclusivity, and workforce readiness skills identified by learners as critical gaps. The lessons learned from their work to update this program are being scaled into the statewide practice of embedding learner-led program revisions for all other CTE programs. Building upon the Teacher Academy as a pilot, Delaware has made learner input mandatory for all program revisions. This work includes the recruitment of new cohorts of learners to participate in the redesign process, which four to five programs are currently undergoing.

The state also expanded WBL opportunities by requiring vendors on CTE projects to provide immersive experiences for learners, giving them real-world career exposure. Additionally, Delaware involves learners in contracted—and paid—employment, such as learner-led catering for CTE/Career Technical Student Organization events, enhancing learner agency and supporting local businesses that hire learner workers.

The Washington Office of Equity was created in 2020 to change the way the government develops and implements its policies, practices, and processes to ensure consistent equity monitoring, reporting, and communications across the state. The office promotes equitable access to opportunities and resources that reduce disparities across state government and improve outcomes statewide. State law also requires state agencies to have an equity plan and a professional development plan, and it requires that school board members participate in equity training. In 2023-24, the office grew from 12 team members to 40; developed a strategic plan; and through a combination of traditional and digital communication, reached more than 6 million people. The office is funded through the Central Services Model, meaning the Office of Equity's allocated budget will be met by receiving a portion of each agency's budget.

Indiana has a robust CPL infrastructure to support learners as they come in and out of formal education pathways, enabling *flexible on- and off-ramps*. CPL refers to the various processes for recognizing and awarding credit for college-level learning gained outside the classroom and may often be referred to as prior learning assessment. The state's CPL Clearinghouse provides a searchable database of all CPL options including Advanced Placement and College-Level Examination Program exams, early postsecondary opportunities, and every public and independent postsecondary institution in the state's individual policies and CPL offerings. For example, Ivy Tech offers a "Training and Certification Crosswalk," while other institutions rely on portfolio-based approaches.

With awareness of CPL growing and more options for awarding prior credit, the state saw a need to provide more consistent support and guidance. In 2024, the Indiana Commission for Higher Education released statewide policy guidance for CPL to support more consistent use of CPL across Indiana's higher education institutions. The state CPL model policy guidance aims to increase statewide consistency of values and practices in five key areas including the CPL value statement; program and service design; transcriptions and transferability; standards for assessing CPL; and community, workforce, and employer partnerships. The model policy guidance offers minimum program standards and was developed within input from higher education, workforce development, and community partners.

APPENDIX A: RESOURCES



- Ensuring Equitable Postsecondary Transitions: A Policy Benchmarking **Tool for State Leaders**
- Rethinking High School Graduation Requirements: A Strategic Imperative for State Policy Leaders
- State Policy Assessment Tool for Building Equitable Pathways
- State Policy Framework for Building Equitable Pathways
- Unlocking Pathways State Policy Heatmap



- Braiding Funding to Support Equitable Career Pathways
- State of Career Technical Education: An Analysis of State Secondary CTE Funding Models
- Unraveling the Finance Models of Work-Based Learning Intermediaries



- Building Cross-Sector Partnerships to Support Career and Technical Education Pathways
- Intermediary Functions and Features in Pathways Systems
- Keys to Scale: How to Grow the Impact of Education-to-Career Pathway Intermediaries
- Planning Tool for Building Equitable Pathways
- Strengthening Career Pathways Through the Power of State and Local Partnerships



- Career Readiness Data Quality and Use Policy Benchmark Tool
- Data Enablers: Critical Conditions to Design, Deliver, and Evaluate Equitable Pathways
- Education-to-Workforce Indicator Framework
- Measurement for Mobility: How States Can Use Data to Incentivize Postsecondary and Workforce Success in Public Education
- Visualizing the Pipeline: The Importance of Cross-Sector Data



- Achieving Inclusive CTE Goal-Setting Tool
- Equity in Youth Apprenticeship Programs
- The Fruit and Root Analysis: A Framework for Examining and Addressing Racism in Workforce and Pathway Ecosystems
- With Learners, Not for Learners: A Toolkit for Elevating Learner Voice in CTE

APPENDIX B: SELF-ASSESSMENT

LEVER	TO WHAT DEGREE DOES YOUR STATE HAVE:	NOTES
POLICY	Clear and shared vision	
	Coherent policy landscape	
	Aligned incentive structures	
	Equity-centered policymaking	
FUNDING	Dedicated and strategic funding	
	Intentionally aligned resources	
	Optimized resources	
	Investments in capacity-building	
	Equity-focused funding	
PARTNERSHIPS	Clear governance and roles	
	Shared system-level accountability	
	Cross-sector ownership of local delivery programs	
	Industry champions	
	Transition and succession planning	
	Equity-focused partnership	
DATA	Integrated state data system	
	Clear roles and responsibilities for data use	
	Data for real-time and long-term decision-making	
	Data access and literacy	
	Economic and labor market data integration	
	Data for equitable outcomes	
EQUITY	Flexible and portable pathways	
	Processes for identifying and addressing barriers	
	Formalized systems for learner, community, and institutional input	
	Targeted supports for marginalized learners	
	Routine equity monitoring, reporting, and communications	



WHAT'S NEXT?

This brief highlights the critical conditions necessary to build and sustain high-quality, equitable college and career pathways systems. By focusing on the five key levers policy, funding, partnerships, data, and equity—state and local leaders can create interconnected systems that remove barriers, improve quality, and ensure accessibility and success for all learners. The experiences of the cross-sector teams participating in the Launch initiative demonstrate the importance of aligning efforts across agencies and sectors; fostering collaboration; and committing focus, attention, and resources to long-term systemic change.

As Launch continues to support pathways leaders nationwide, the lessons and strategies presented in this resource offer a valuable, field-informed roadmap for transforming education and workforce systems. By addressing systemic inequities and scaling sustainable pathways, we can ensure that every learner has the opportunity to succeed in their chosen college and career paths. Together, we can create systems that close equity gaps, empower diverse talents, and position young people and communities to thrive in a fast-changing economy—laying the foundation for a more inclusive and prosperous future.