



# Career Pathways Policy Scan

A host of factors, such as automation and the changing nature of work in the U.S. economy, have [increased emphasis](#) on people building skills that require some form of postsecondary education and training. To successfully enter the workforce, people need access to education and training that sets them on a path to [jobs and careers](#). Shifts in the nation's demographics suggest that relying solely on the education and development of K-12 students will not meet the skill demand in the labor market.

States see the average age of postsecondary students rising as adult learners look to build skills for workforce needs. Ensuring [educational pathways for adults](#) to access postsecondary education that develops skills for jobs that require more technical skills will be imperative to meet labor market demands. Establishing [career pathways](#) that allow for multiple entry and exit points to learners across K-12, postsecondary and workforce education and training systems will remain a primary focus of education and workforce policymakers.

The definition of a pathway has evolved as have the policies supporting access and opportunities to education and training. The federal government and states continue to build effective pathways for individuals to reach equitable economic mobility through different opportunities and experiences. What has not always been apparent in the past is how multiple pathways interact and build on one another to provide clear direction and flexibility for all [student populations](#).

Career pathways encompass multiple education and training programs and policies across K-12, postsecondary and workforce systems. This policy scan highlights current state approaches to education and training, funding for pathways and state policies identified as imperative to successful workforce pathways.

**Pathway:** A learner's route to gain training and experience for a career and upward economic mobility. A pathway is not linear in nature but rather provides on-and-off ramps, multiple ways to acquire learning, and stackability of skills and credentials aligned with workforce needs.

## State Approaches to Workforce and Education Pathways

Over the past few decades, pathways between education and the workforce have become more fluid and ever-changing. States have taken many approaches to create direct pathways between education and the workforce and to align training with employer needs. To do this, states found success in forming and leveraging strong collaboration across education and workforce stakeholders to build more robust pathways for learners.

Ultimately, states continue to seek alignment between learning and credential attainment, labor market demands and economic development goals. By advancing collaborative approaches to aligning policy and funding, states can support learners in pursuing pathways into the workforce.

## Training and Workforce Alignment

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States approach alignment of training and workforce in multiple ways. To support training and workforce alignment, states generally focus on policy that impacts funding, governance and data. Specific policies and funding are explored in-depth in the sections that follow. One common state effort to align training and workforce is through braiding funding from federal, state and local sources for further reach. Intentionally braiding funding requires strong collaboration across multiple federal, state and local agencies, including those outside traditional education and workforce agencies.

Governance models for workforce education and training vary across the states, which requires strong cross-agency coordination to create effective and equitable pathways for learners. A key component of stakeholder engagement and coordination is assessing who is at the table and who still needs to be invited.

In addition to K-12, postsecondary education and workforce offices, aligned pathways benefit from inclusion of stakeholders, including, offices of human services, economic development, unemployment and employers. Some states like [Vermont](#) and [Texas](#) require close coordination across K-12, postsecondary education and workforce departments to align training and education with workforce needs. [Missouri](#) combined its postsecondary education and workforce departments into one entity. There are multiple ways states can ensure key stakeholder engagement directly contributes to creating clear pathways for learners in K-12 and postsecondary education.

Data can be complicated for states to unpack. States tend to have a plethora of data across K-12, postsecondary education and the workforce. However, the ability to [connect](#) that data and the capacity to analyze it can be difficult and costly. The other component to effective data use is transparency for learners, employers and education systems.

Securely connecting data across these core systems allows states to identify gaps in current pathways and determine if all demographics of people in the state have access to [equitable economic pathways](#). While there are great opportunities to use longitudinal data for alignment and prioritization for funding for credential programs in high-demand occupations, issues around collecting and dispersing [timely and accurate data](#) can limit these benefits.

Funding, governance and data are critical pieces in states' work to create clear alignment between education outcomes and workforce needs. In the next section, state policies supporting aligned education and training pathways to workforce opportunities are explored in more detail.

## Policies Supporting Multiple Education and Training Pathways

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There is an increasing need for states to establish policies that provide education and career pathways that support the non-linear path most learners will take. States have established policies to support a range of educational and career pathways that reflect the different needs of learners and the skills they require to enter the workforce.

While many policies influence education and career pathways, states have prioritized policies and efforts in the following areas:

- Workforce Governance Structures and Collaboration.
- Dual Enrollment.
- Career and Technical Education (CTE) Diplomas and Diploma Designations.
- Apprenticeships and Work-Based Learning.
- Workforce and Education Data Dashboards.
- Alignment of Attainment Goals with Workforce and Economic Development Priorities.
- Alignment of Statewide Longitudinal Data Systems.

The [policy scan](#) in the conclusion provides a high-level overview of states that have policies in each of these areas. The following section provides additional context and information about these policies and examples of states that have enacted them.

## Workforce Governance Structures and Collaboration

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Training pathways for K-12 and postsecondary learners are governed and funded by a mix of federal, state and local entities. Connections across education and workforce systems and providers are key to supporting pathways for individuals to enter a competitive workforce.

The [Workforce Innovation and Opportunity Act](#) requires that each governor establish a state workforce development board to carry out the functions of the law. The law outlines the [composition of the board](#), but it does not explicitly require education agencies to serve on the board. However, most state policies establishing the state workforce board [require the membership](#) of a K-12 and/or postsecondary representative. Through membership requirements and calls for cross-agency collaboration in boards, states can leverage workforce boards to foster alignment of both programs and funding sources for career pathways.

### State Examples

In addition to including education policymakers and stakeholders, six states — [Alaska](#), [Delaware](#), [Idaho](#), [Michigan](#), [North Carolina](#) and [Virginia](#) — require the inclusion of **health and human services** departments or agencies. Including HHS provides the perspectives of individuals who need access to certain state services and who may run into roadblocks in the pathways to employment.

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## Dual Enrollment

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Dual enrollment courses allow high school students to earn college credit and meet diploma requirements. Dual enrollment programs offer students exposure to college-level courses, the ability to earn college credit while in high school and, in many cases, financial savings when course credit counts toward a college degree.

[Forty-eight states](#) and the District of Columbia have statewide dual enrollment programs. [At least 44 states](#) allow courses in CTE through dual enrollment programs. By providing students the option of CTE dual enrollment, states can provide advanced coursework in pathways to gain technical skills that are increasingly needed in the workforce.

States that provide students with opportunities to earn college credit in high school enable students to begin a pathway to degree attainment. A key component to ensure dual enrollment credit accelerates degree attainment is to require that the credit earned transfers to postsecondary institutions. [At least 16 states](#) with one or more dual enrollment programs have articulation agreements that enable dual enrollment credit to transfer to a four-year institution.

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## CTE Diplomas and Diploma Designations

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CTE provides high school pathways to the workforce by fostering the development of technical skills. To support students in building technical skills on a pathway to a career, states have considered a range of secondary [CTE policies](#), including opportunities to earn a CTE diploma or a diploma designation.

At [least 23 states](#) have a CTE diploma or a diploma designation provision. Dedicated CTE pathway programs establish a core set of courses as a condition of a special CTE diploma. Courses that are part of student attainment of CTE diplomas can provide students with a pathway to acquire the technical skills required in the workforce.

### State Example

In 2021, **Idaho** enacted [legislation](#) to create a new [Workforce Readiness and CTE Diploma](#) focusing on micro-certification and industry certification. The diploma allows students to meet core high school graduation requirements while earning an industry-relevant credential.

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## Work-Based Learning and Apprenticeships

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Similar to CTE activities, work-based learning offers individuals the opportunity to connect classroom learning with on-the-job experiences to develop academic and technical skills. Activities along the [work-based learning](#) continuum provide individuals with a range of educational opportunities to learn new skills directly aligned with career opportunities.

A growing number of states are connecting their secondary CTE students with work-based learning experiences through pre-apprenticeships and youth apprenticeships. Additionally, states have made considerable efforts to expand their registered apprenticeship programs as a career pathway. About half of the states have policies that establish a [statewide apprenticeship](#) program. Beyond program expansion, states have increasingly sought ways to connect apprenticeships with postsecondary education pathways.

### State Examples

**Colorado's** [CareerWise](#) program provides youth apprenticeships connected to a registered apprenticeship program and postsecondary education pathways.

**South Carolina's** [Apprenticeship Carolina](#) is a division of the SC Technical College System and connects apprenticeships to postsecondary education instruction and degree opportunities.

## Workforce Dashboards

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States have created workforce and education dashboards to help students and job seekers find information on education pathways that align with state workforce needs. Dashboards can provide valuable information for learners entering career pathways, particularly those that lead to high-demand and high-wage jobs. There are [at least 45 states](#) that have a dashboard detailing education, training and credentials that align with high-demand occupations.

### State Examples

**Connecticut's** [dashboard](#) provides information for multiple audiences, including businesses, job seekers, researchers and students. Each group will find information unique to their needs. For example, job seekers can find details on [in-demand occupations](#) while students can find information on [career paths](#).

States may also provide the data in a report like **Virginia's** [High Demand Occupations Report](#). Data dashboards allow job seekers and students to find occupations that fit their educational and employment goals.

## Attainment Goals and Connections to Workforce Outcomes

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In 2009, [Lumina Foundation](#) established a nationwide postsecondary attainment goal for 60% of American adults to have more than a high school diploma by 2025. The foundation encouraged states to set measurable and disaggregated postsecondary attainment goals.

Through collaborative processes, many states have created attainment goals that align workforce, economic and educational attainment priorities. Currently, 44 states have established goals connecting workforce to attainment, and at least 33 have set attainment goals between 55-66%.

### State Example

**Alabama's** [Success Plus plan](#) set an attainment goal to add 500,000 highly-skilled Alabamians to the workforce by 2025. The state uses labor market data to identify state and regional credentials of value that lead to jobs. The [Alabama Works!](#) website includes educational service provider listings, job search assistance and labor market information to guide people in selecting credential pathways aligned with jobs.

## Statewide Longitudinal Data Systems

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Statewide longitudinal data systems (SLDS) connect learner data that can stretch from early childhood education through the workforce. Longitudinal data can provide insights into student learning and outcomes that can inform policy changes. As noted earlier, it is difficult for states to leverage the benefits of longitudinal data without resources and alignment. [At least 17 states](#) have SLDS that include data from K-12, postsecondary and workforce systems.

### State Examples

**California** has the [Cradle-to-Career System](#), which includes data from early learning through K-12 and postsecondary education, as well as financial aid and social services.

**Virginia** used longitudinal data to determine if students who participated in CTE programs, specifically in advanced math courses, benefitted in postsecondary education and the [workforce](#) compared to those who did not take those courses. Through deeper dives into available, connected data, the state can assess what is currently working and what gaps might exist in policy and programs.

## Funding for Workforce Education and Training Pathways

A combination of federal, state and local funding is used to support the programs established and supported by state policy. A 2017 U.S. Government Accountability Office [report](#) found more than 40 federally-funded workforce education programs with total funding of more than \$14 billion. Most federal funding for workforce education is provided by the U.S. Departments of Labor, Education, and Health and Human Services. States also make considerable investments in supporting career pathways. In fiscal year 2020, [state funding](#) for workforce education in various career pathways totaled roughly \$1.75 billion.

A primary focus of states and the federal government is to fund pathways in programs formed through the aforementioned state policies. States and the federal government have made considerable investments in CTE, dual enrollment and apprenticeships and work-based learning in support of career pathways over the past decade.

Beyond identifying and understanding the different funding streams supporting career pathways, it is important to consider how states can align and coordinate the many funding streams across career pathways. As with policy and pathway alignment, these activities are a key component of effective use of various funding sources and collaboration across state agencies and stakeholders.

## Secondary Career and Technical Education Funding

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States leverage their resources along with federal sources to meet instructional costs and support the expansion of career and technical education pathways.

### State Funding

Generally, states take different approaches to bring state funds to career and technical education programs and pathways. Through state distribution of funds for K-12 education, there are [three approaches](#) states use to provide funding for secondary career and technical education instruction:

- **Student-Based Approach:** A distribution of funds to districts based on the number of CTE students enrolled in a local education agency.
- **Unit-Based Approach:** A distribution of funds based on a set of educational inputs needed to provide CTE instruction.
- **Cost-Based Approach:** A distribution of funds to districts for the cost of providing CTE services from the prior academic year.

In states with career and technical education centers, states use these sources and supplemental funding to support instruction at the centers. In addition to the three primary approaches, states often provide [additional or supplemental funding](#) for equipment, professional development and instructor training.

### Federal Funding

Federal funds are provided to states for CTE at both the K-12 and postsecondary level through [Perkins V](#). Each year, the U.S. Department of Education distributes roughly \$1.2 billion to states through [Basic State Grants](#), which are distributed to [state-designated](#) agencies to administer the funds.

The most common agency in charge of distributing funds is the state education agency, however, some states have designed postsecondary systems, standalone CTE agencies or workforce boards as the designee. The state agency distributes funds to local public and private schools, CTE-specific schools and postsecondary institutions. To receive funds, the CTE programs must meet the established state-determined indicators of [size, scope and quality](#).

Through Perkins plans, states set priorities and focus areas where they will concentrate the use of funds. Within the plan, states can set aside 15% of their funds to foster innovation and promote career pathways or programs of study. In 2021, [innovative aspects and priorities](#) in state plans for the use of Perkins V funds included an emphasis on expanding access to pathways in CTE, dual enrollment and work-based learning.

## Dual and Concurrent Enrollment Funding

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Dual and concurrent enrollment carries many costs, including tuition, books and fees. States and districts provide most of the funding for dual enrollment, but there are opportunities in Perkins V to use funds to support the [expansion of dual enrollment](#).

### State Funding

Student [tuition costs](#) are covered by a combination of funds from students and families, the state, school districts and postsecondary institutions or systems. In most states, tuition is covered by a combination of funding sources. Often, when the tuition costs are covered by the district and a postsecondary institution or system, there are agreements between the two entities on the [tuition rate](#) and who will pay the tuition costs.

States are less prescriptive in [policy](#) on the charging of fees and responsibility for paying them. Often the responsibility for paying fees falls to the school district, postsecondary institution, and students and families.

### State Example

**Wisconsin's** Start College Now Program requires that districts pay tuition, books and fees for students taking courses at a technical college. [State policy](#) caps tuition, books and fee payments at 18 credits.

## Apprenticeship and Work-Based Learning Funding

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In the past 10 years, with increased attention on apprenticeships and work-based learning, states and the federal government have contributed funds to support individuals entering apprenticeships and work-based learning pathways to careers. In addition to state funds, the U.S. Department of Labor has invested more than \$1 billion since 2015 to expand registered apprenticeships (RAPs), with funds going to states, workforce intermediaries and training providers.

### State Funding

Several states have implemented state-funded programs to complement federal investments. States directly or indirectly subsidize these programs through state funds. Additionally, some states offer grants to RAP sponsors to offset training costs, while other states have implemented tax credit programs for sponsors.

### Federal Funding

Numerous federal funding sources support apprentices and registered apprenticeship programs. Each year, the U.S. Department of Labor funds states to support apprenticeship programs through various [grants](#). Additionally, federal funds are available through other federal funding sources to support apprentices and apprenticeship programs, including:

- Workforce Innovation and Opportunity Act allowable uses for apprenticeships.
- Federal Student Aid Funds: Title IV Student Aid, including Pell Grants.



- Supplemental Nutrition Assistance Program: Employment and Training Programs (SNAP E&T).
- Federal Highway Administration On-the-Job Training.

### State Example

**Iowa** has made RAPs an integral part of the state's workforce education system and has implemented several initiatives with state dollars to support its expansion.

In 2014, the state passed the [Iowa Apprenticeship Act](#), which made \$3 million in non-competitive training grants available to employers and other RAP sponsors. Funds can be used to cover the cost of conducting and maintaining an apprenticeship training program. In 2018, the state launched the [Iowa Registered Apprenticeship Development Fund](#) to support new RAPs in the state's high-demand occupations. A total of \$1 million of funding is available for small- and medium-sized business sponsors. Applicants can receive up to \$25,000 per occupation with a cap of \$50,000 per fiscal year. Investments have supported [increased](#) access and participation in RAPs.

## State Collaborative Approaches to Coordinate and Align Funding for Career Pathways

Collaboration across state agencies and workforce stakeholders is key in aligning workforce and education funding streams for various career pathways. State leaders play an important role in [coordinating, leveraging and braiding](#) funding streams to deliver efficient and impactful workforce education services.

Some states have created a centralized office or entity that oversees all workforce education activities in the state. This can help support alignment and coordination of funding and enable the creation of centralized systems that provide information on education, training and job opportunities within career pathways.

### State Example

In 2019, **Alabama** created the Governor's Office of Education and Workforce Transformation ([GOEWT](#)). Staff report directly to the governor and work to ensure that more individuals have the education and skills they need to participate in the state's workforce. GOEWT's goals are to increase labor force participation, increase postsecondary credential attainment, and create career pathways for youth and adults.

The office is charged with aligning the state's federal funding for education and workforce development to support comprehensive education-to-workforce pathways to achieve these goals. Staff ensures alignment of the state's secondary and postsecondary CTE, adult education and workforce development programs and strategic plans. They also oversee the state's P-20W council and support registered apprenticeship activities.

## The Path Forward

States have taken significant steps to provide education and training opportunities for individuals on a path to a job and career. However, there are gaps that states can address to further align and support education and training opportunities that help individuals build skills and attain credentials progressively. Specifically, states can engage in work that addresses the following areas.

- At the state level, gaps still exist in governance, data and funding for career pathways. Looking across the various policies and related programs that support career pathways, states have opportunities to align governance, data and funding to support people in their development of skills and educational attainment.
- Disparities in postsecondary [enrollment](#), [retention](#) and [completion](#) indicate that students of color do not have the same opportunities to succeed along their educational pathway. Addressing inequities in access, participation and attainment for specific student populations, including historically underrepresented students, adult learners and [disconnected youth](#), is imperative.
- The workforce of today and tomorrow requires individuals to build skills and credentials over time. Ensuring that individuals can build on their education and credential attainment is important. States will need to continue working to provide opportunities for early career exploration, integrating pathways and stackability of credentials.



## State Career Pathways Policy Scan

The following information was gathered through a review of state policy and attainment goals.

State	Does state policy require membership of K-12 and/or postsecondary representatives on the workforce board or council?	Does the state have a statewide dual enrollment program?	Does the state have a CTE diploma or CTE diploma designation?	Is there a statewide apprenticeship program?	Does the state have a dashboard detailing education, training and credentials that align with high-demand occupations?	Does the state have an attainment goal that connects workforce and attainment?	Does the state connect early learning, K-12, postsecondary and workforce data in their SLDS?
Alabama	X	X	X	X	X	X	
Alaska	X	X				X	
Arizona		X		X	X	X	
Arkansas	X	X		X	X	X	
California	X	X			X		
Colorado	X	X	X		X	X	
Connecticut	X	X		X	X	X	X
Delaware	X	X					
District of Columbia	X	X			X		
Florida	X	X	X		X	X	X
Georgia		X	X		X	X	X
Hawaii	X	X	X			X	
Idaho	X	X	X		X	X	
Illinois	X	X		X	X	X	X
Indiana	X	X	X	X	X	X	X
Iowa	X	X		X	X	X	



State	Does state policy require membership of K-12 and/or postsecondary representatives on the workforce board or council?	Does the state have a statewide dual enrollment program?	Does the state have a CTE diploma or CTE diploma designation?	Is there a statewide apprenticeship program?	Does the state have a dashboard detailing education, training and credentials that align with high-demand occupations?	Does the state have an attainment goal that connects workforce and attainment?	Does the state connect early learning, K-12, postsecondary and workforce data in their SLDS?
Kansas		X		X	X	X	X
Kentucky	X	X		X	X	X	X
Louisiana	X	X	X	X	X	X	
Maine	X	X		X	X	X	
Maryland		X		X	X	X	X
Massachusetts	X	X	X		X	X	X
Michigan	X	X			X	X	
Minnesota	X	X		X	X	X	X
Mississippi	X	X	X	X	X	X	X
Missouri		X	X		X	X	
Montana		X		X		X	
Nebraska	X	X			X	X	
Nevada	X	X	X	X	X		X
New Hampshire		X	X	X	X	X	
New Jersey	X	X			X	X	
New Mexico		X			X	X	
New York	X		X		X		
North Carolina	X	X	X	X	X	X	



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North Dakota		X			X		
Ohio		X	X	X	X	X	
Oklahoma	X	X	X		X	X	
Oregon		X			X	X	
Pennsylvania	X				X		
Rhode Island	X	X	X		X	X	X
South Carolina		X	X	X	X	X	
South Dakota	X	X	X	X	X	X	
Tennessee	X	X			X	X	X
Texas	X	X		X	X	X	X
Utah	X	X			X	X	X
Vermont	X	X		X	X	X	
Virginia	X	X	X	X	X	X	X
Washington	X	X			X	X	X
West Virginia	X	X		X	X	X	
Wisconsin		X	X	X		X	
Wyoming	X	X				X	



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